

This document was too large to scan as a single document; therefore, it has been divided into smaller sections.

Section 1 of 7

Document Information			
Document #	HNF-1661	Revision	0
Title	TANK 241U107 CORES 242 & 242R & 245 ANALYTICAL RESULTS FOR THE FINAL REPORT		
Date	02/01/99		
Originator	STEEN FH	Originator Co.	WMH
Recipient		Recipient Co.	
References	EDT-626133		
Keywords	PUSH MODE,CHARACTERIZATION,U FARM		
Projects	TWRS		
Other Information			

FEB 01 1999

ENGINEERING DATA TRANSMITTAL

Page 1 of 1  
1. EDT 626133

2. To: (Receiving Organization) <b>Distribution</b>		3. From: (Originating Organization) <b>Waste Management Laboratory</b>		4. Related EDT No.: <b>N/A</b>	
5. Proj./Prog./Dept./Div.: <b>Tank 241-U-107 Core/Waste Management/PPC/WML</b>		6. Design Authority/ Design Agent/Cog. Engr.: <b>Franciska H. Steen</b>		7. Purchase Order No.: <b>N/A</b>	
8. Originator Remarks: This document is being released into the supporting document system for retrievability purposes.				9. Equip./Component No.: <b>N/A</b>	
				10. System/Bldg./Facility: <b>241-U-107</b>	
11. Receiver Remarks: For release.		11A. Design Baseline Document? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		12. Major Assm. Dwg. No.: <b>N/A</b>	
				13. Permit/Permit Application No.: <b>N/A</b>	
				14. Required Response Date: <b>01/29/99</b>	

15. DATA TRANSMITTED					(F)	(G)	(H)	(I)
(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	Approval Designator	Reason for Transmittal	Originator Disposition	Receiver Disposition
1	HNF-1661	N/A	0	Tank 241-U-107, Core 242, 242R, and 245 Analytical Results for the Final Report	Q	2	1	1

16. KEY					
Approval Designator (F)		Reason for Transmittal (G)		Disposition (H) & (I)	
E, S, Q, D or N/A (see WHC-CM-3-5, Sec.12.7)	1. Approval 2. Release 3. Information Required	4. Review 5. Post-Review 6. Dist. (Receipt Acknow. Required)		1. Approved 2. Approved w/comment 3. Disapproved w/comment	4. Reviewed no/comment 5. Reviewed w/comment 6. Receipt acknowledge

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# Tank 241-U-107, Cores 242, 242R and 245 Analytical Results for the Final Report

**Franciska H. Steen**

Waste Management of Hanford, Inc., Richland, WA 99352  
U.S. Department of Energy Contract DE-AC06-96RL13200

EDT/ECN: EDT-626133 UC: 2070  
Org Code: 31B00 Charge Code: LC087  
B&R Code: EW 3120074 Total Pages: ~~52~~ 1941  
*2/12/99*

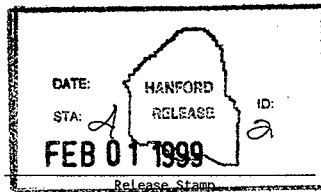
Key Words: U-107, Tank U-107, 241-U-107, U Farm, Characterization, TWRS, Cores, Push Mode, Analytical Results, Final Reports

Abstract: N/A

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**WASTE MANAGEMENT LABORATORY**

**TANK 241-U-107, CORES 242, 242R and 245  
ANALYTICAL RESULTS FOR THE FINAL REPORT**

**Project Coordinator: Franciska H. Steen**

**Prepared for the U.S. Department of Energy  
Office of Environmental Restoration  
and Waste Management**

**by**

**222-S Laboratory  
Waste Management of Hanford, Inc.  
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Richland, Washington**

**HNF-1661 REV. 0**

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**WASTE MANAGEMENT LABORATORY  
TANK 241-U-107, CORES 242, 242R AND 245,  
ANALYTICAL RESULTS FOR THE FINAL REPORT**

This document is the analytical laboratory report for tank 241-U-107 rotary mode core segments collected between June 11, 1998 and July 15, 1998. The segments were subsampled and analyzed in accordance with the *Tank 241-U-107 Rotary Mode Core Sampling and Analysis Plan* (TSAP) (Wilkins, 1998), the *Safety Screening Data Quality Objective* (DQO) (Dukelow, et al., 1995), the *Data Quality Objective to Support Resolution of the Organic Complexant Safety Issue* (Organic DQO) (Schreiber, 1998) and the *Flammable Gas Data Quality Objective* (DQO) (Benar, 1995). The analytical results are included in the data summary table (Table 1).

None of the samples submitted for Differential Scanning Calorimetry (DSC), Total Alpha Activity (AT) and Total Organic Carbon (TOC) exceeded notification limits as stated in the TSAP (Wilkins, 1998). The statistical results of the 95% confidence interval on the mean calculations are provided by the Tank Waste Remediation Systems Technical Basis Group in accordance with the Memorandum of Understanding (Schreiber, 1997) and not considered in this report.

The TSAP (Wilkins, 1998) required viscosity, shear strength, particle size distribution and settling behavior analyses be performed on the lower half portion of each segment. The flammable gas program rescinded the requirement for the settling behavior study (Attachment 2). The results for the remaining analyses will be issued in a separate report.

**Appearance and Sample Handling**

Attachment 1 is a cross reference to relate the tank farm identification numbers to the 222-S Laboratory LabCore/LIMS sample numbers. The subsamples generated in the laboratory for analyses are identified in these diagrams with their sources shown.

Two core samples were expected to be taken from tank 241-U-107. However, due to poor sample recovery a third core was taken and identified as 242R.

**Core 242**

Eight rotary mode core segments were removed from tank 241-U-107 riser 2 between June 11, 1998 and June 30, 1998. Segments were received by the 222-S Laboratory between June 12, 1998 and July 15, 1998. Tank farm sampling operations were unsuccessful in obtaining segment 3.

The TSAP (Wilkins, 1998) states the core samples should be transported to the laboratory within three calendar days from the time each segment is removed from the tank, this requirement was not met for the segments from core 242. Table 2 summarizes the extrusion information.

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### **Core 242R**

Nine rotary mode core segments were removed from tank 241-U-107 riser 2 between June 30, 1998 and July 3, 1998. Segments were received by the 222-S Laboratory between July 9, 1998 and August 5, 1998. Due to poor sample recovery an additional segment was taken and identified as 6A.

The TSAP (Wilkins, 1998) states the core samples should be transported to the laboratory within three calendar days from the time each segment is removed from the tank, this requirement was not met for the segments from core 242R. Table 3 summarizes the extrusion information.

### **Core 245**

Ten rotary mode core segments were removed from tank 241-U-107 riser 7 between July 9, 1998 and July 15, 1998. Segments were received by the 222-S Laboratory between July 27, 1998 and August 5, 1998. Seven segments were expected to be taken from riser 11. However, due to poor sample recovery additional segments were taken and identified as 2R, 5A, 5R and 6R.

The TSAP (Wilkins, 1998) states the core samples should be transported to the laboratory within three calendar days from the time each segment is removed from the tank, this requirement was not met for the segments from core 245. Table 4 summarizes the extrusion information.

### **Field Blank**

A field blank was provided to the 222-S laboratory with core 245. It underwent the same analysis as the drainable liquid as instructed by the TSAP (Wilkins, 1998).

### **Hydrostatic Head Fluid**

A sample of the hydrostatic head fluid (HHF) lithium bromide solution was provided with core 245 and was submitted to the laboratory for IC (bromide) and ICP (lithium) analyses.

### **Stratum Composites**

Since there was insufficient material to form complete stratum composites for each core, the liquid and solid stratum composites were prepared per instruction from the customer (Attachment 2). The stratum composite worksheets are included in this document.

In addition, the "stratum composite" analyses (TOC, Hydroxide, Chromium VI, Strontium 90, Cesium 137) were requested for subsamples from the following segments: Segments 1 and 2 from core 242 and segments 1, 5A and 6 from core 245.

Table 2. Sample Receipt and Extrusion Information for 241-U-107, Core 242.

Customer ID	Sample Number	Date Received	Date Emitted	Index Extruded	Liquid Retained (g)	Solids Retained (g)	Sample Description
242-01	1	06/12/98	06/23/98	0.0	126.4-Drainable	0.0	The liquid was yellow in color and clear. Collected 110 mL of liquid. No organic layer was observed.
242-02	2	06/12/98	06/25/98	3.0	155.8-Drainable	171.6-Lower half	The solids were white and black in color and resembled a salt slurry. The liquid was dark brown in color and opaque. Collected 125 mL of liquid. No organic layer was observed.
242-02A	2A	06/12/98	06/25/98	0.0	44.3-Drainable	0.0	The liquid was dark brown in color and opaque. Collected 25 mL of liquid. No organic layer was observed.
242-04	4	06/24/98	07/10/98	<0.5	0.0	0.0	The solids were gray in color and the texture resembled a salt slurry. The sample was not retained.
242-5	5	06/25/98	07/15/98	1.0	0.0	16.5-Lower half	The solids were light brown in color and resembled a dry salt.
242-06	6	06/26/98	07/10/98	4.0	0.0	17.9-Upper half 94.7-Lower half	The upper two inches were dark brown in color and the texture resembled a moist salt. The lower two inches were light brown in color and the texture resembled a dry salt.
242-07	7	06/29/98	07/15/98	1.0	0.0	39.7-Lower half	The solids were black in color and resembled a dry salt.
242-08	8	06/30/98	07/15/98	<1.0	0.0	0.0	The solids were dark brown in color. The sample was not retained.

Table 3. Sample Receipt and Extrusion Information for 241-U-107, Core 242R.

Container ID	Segment	Date Sampled	Date Received	Date Embled	Extruder Extruded	Liquid Recovered (g)	Solids Recovered (g)	Sample Description
242R-01	1	06/30/98	07/10/98	07/27/98	0.0	238.1-Drainable	0.0	The liquid was yellow in color and clear. Collected 175 mL of liquid. No organic layer was observed.
242R-02	2	07/01/98	07/09/98	07/27/98	0.0	396.2-Drainable	0.0	The liquid was yellow in color and opaque. Collected 270 mL of liquid. No organic layer was observed.
242R-03	3	07/01/98	07/09/98	07/27/98	0.0	364.4-Drainable	0.0	The liquid was amber in color and opaque. Collected 250 mL of liquid. No organic layer was observed.
242R-04	4	07/01/98	07/15/98	07/27/98	0.0	366.0-Drainable	0.0	The liquid was dark brown in color and opaque. Collected 250 mL of liquid. No organic layer was observed.
242R05	5	07/01/98	07/15/98	07/27/98	14.0	58.9-Drainable	235.4-Upper half 200.7-Lower half	The solids were dark brown in color and resembled a moist ash. The liquid was dark brown in color and opaque. Collected 40 mL of liquid. No organic layer was observed.
242R-06	6	07/02/98	07/27/98	08/02/98	14.0	<5.0-Drainable	202.0-Upper half 209.7-Lower half	The solids were brown in color and resembled a wet ash. The liquid was dark brown in color and opaque. The liquid was subsampled with the solids.
242R-06A	6A	07/02/98	07/27/98	08/02/98	10.0	0.0	359.4-Lower half	The solids were dark-brown in color and resembled a wet ash.
242R-07	7	07/05/98	07/27/98	08/02/98	15.0	<10.0-Drainable	235.4-Upper half 200.7-Lower half	The solids were brown in color and resembled a wet ash. The liquid was dark brown in color and opaque. The liquid was subsampled with the solids.
242R-08	8	07/03/98	08/05/98	08/12/98	2.5	0.0	36.5-Lower half	The solids were brown in color and resembled a moist ash.



Table 4. Sample Receipt and Extrusion Information for 241-U-107, Core 245.

Customer ID	Sample ID	Date Sampled	Date Received	Date Sampled	Inches Extruded	Length Recovered (ft)	Solids Recovered (g)	Sample Description
245-01	1	07/09/98	08/05/98	08/12/98	2.0	308.6-Drainable	92.5-Lower half	The solids were gray and white in color and resembled a silt slurry. The liquid was brown in color and opaque. Collected 230 mL of liquid. No organic layer was observed.
245-02R	2R	07/15/98	08/05/98	08/12/98	0.0	384.4-Drainable	0.0	The liquid was amber in color and opaque. Collected 250 mL of liquid. No organic layer was observed.
245-03	3	07/09/98	08/05/98	08/12/98	15.0	0.0	224.6-Upper half 149.3-Lower half	The solids were gray in color and resembled a wet silt.
245-04	4	07/10/98	08/05/98	08/13/98	17.0	0.0	242.4-Upper half 167.0-Lower half	The solids were gray in color and resembled a dry silt.
245-5A	5A	07/13/98	08/05/98	08/13/98	3.0	0.0	54.2-Lower half	The solids were gray in color and resembled a dry silt.
245-03R	5R	07/15/98	07/27/98	08/02/98	0.0	386.7-Drainable	0.0	The liquid was brown in color and opaque. Collected 250 mL of liquid. No organic layer was observed.
245-06	6	07/13/98	08/05/98	08/13/98	4.0	0.0	80.1-Lower half	The solids were white in color and resembled a dry silt.
245-06R	6R	07/15/98	07/27/98	08/02/98	0.0	360.7-Drainable	0.0	The liquid was dark brown in color and opaque. Collected 250 mL of liquid. No organic layer was observed.
245-07	7	07/14/98	08/05/98	08/15/98	0.0	0.0	0.0	Sampler empty.
245-07R	7R	07/15/98	07/27/98	08/02/98	0.0	53.4-Drainable 83.6-Liner	0.0	The liquid was black in color and opaque. Collected 35 mL of liquid. No organic layer was observed.

**Analytical Results Summary**

The data summary report (Table 1) compiles the analytical results that satisfy all applicable DQOs.

As noted in the extrusion information in Tables 2, 3 and 4, the solid material collected from Tank 241-U-107 was primarily a dry salt and salt slurry. There were various colors of material present black, gray, brown and white. It was impossible to separate the different colored material. Obtaining reproducible results with this non-homogenous material was very difficult and may have been the main reason for the large difference between the sample, duplicate and triplicate (where applicable) measurements for many of the analyses. In many cases reanalyses did not improve the results.

**Inorganic Analyses****Differential Scanning Calorimetry (DSC)**

The DSC analysis was performed in duplicate on direct subsamples. The exothermic energy based on the dry weight of the subsample was calculated for all subsamples. The average of the TGA results for each subsample was used in the dry weight correction for that subsample. More information may be obtained by examining the raw data.

Relative percent differences (RPDs) outside of the required range (30% for solids, 20% for liquids) were reported for seven of the thirty-four subsamples submitted for analysis. The nonhomogeneous material and small sample size required for this analysis made it difficult to obtain reproducible results. The chemist noted the high RPDs were due to sample inhomogeneity and no reanalyses were performed. However, one sample had a triplicate analysis performed. The results are presented in Table 5.

**Table 5. Triplicate Results for DSC Analysis**

Labcore ID	Sample Result Joules/gram	Duplicate Result Joules/gram	Triplicate Result Joules/gram
S98T002559	30.69	17.35	20.64

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For the samples that did not exhibit exothermic energy, the calculation for the RPD is indeterminate because of the division by zero. Due to the way the database performs calculations, zero divided by zero is reported as "0.0". The standard recoveries for this analysis were within the required limits of 80%-120%.

### Thermogravimetric Analysis (TGA)

The TGA analysis was performed in duplicate on direct subsamples. Typically TGA results are determined by summing the weight loss steps which occurred below 250°C; weight loss steps above this are not used to determine the result. However, for tank 241-U-107 approximately 26% of the thermograms showed weight loss beyond 250°C. The results for eight of the thirty-four subsamples were the sum of two or more weight loss steps. More information may be obtained by examining the raw data.

The RPDs were less than 30% for solids and less than 20% for liquids. The chemist requested a triplicate analysis be performed on one solid subsample. The results are presented in Table 3 and are included for informational purposes only.

**Table 6. Triplicate Results for TGA Analysis**

Labcore ID	Sample Result	Duplicate Result	Triplicate Result
S98T002543	46.36	36.40	45.19

The standard recoveries for this analysis were within the required limits of 80%-120%.

### Bulk Density

Bulk density was performed on the solid subsamples as required by the TSAP (Wilkins, 1998), the exceptions are noted below. The TSAP (Wilkins, 1998) stated the bulk density analysis be performed by procedure number LO-160-104. This method number is incorrect. With approval from the customer (Attachment 2) the bulk density was performed by procedure numbers LO-160-103 and LA-519-132.

The results of the bulk density test ranged from 1.27 g/mL to 1.85 g/mL. The bulk density results were greater than the 1.5 g/mL used to determine the solid total alpha activity notification limit stated in the TSAP (Wilkins, 1998). Therefore the bulk density result of 1.85 g/mL was used to recalculate the solid total alpha notification limit for the tank.

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There was insufficient sample material to perform the bulk density analysis on segment 5 from core 242. The bulk density analysis was attempted for segment 8 from core 242 and segment 6 from core 245. These samples were very dry and accurate volumes could not be measured due to the void spaces in the material. No results were obtained as indicated by the "dry" in the results column of Table 1. There were no quality control (QC) parameters stated in the TSAP (Wilkins, 1998) for these samples..

### Specific Gravity (SpG)

Specific gravity analysis was performed in duplicate on the direct liquid subsamples. The results for this analyses are provided in Table 1. The RPDs were less than 10%. The standard recoveries were within the control limits of the laboratory.

### Hydroxide (OH)

The OH analysis was performed on direct subsamples of liquid as indicated by a blank in the A# column in Table 1. The solid subsamples were prepared for analysis by performing a water digest. This is indicated with a "W" in the A# column in Table 1.

The standard recoveries were within the required limits of 90% - 110% and the RPDs were less than 10%.

### Ammonia (NH<sub>3</sub>)

The NH<sub>3</sub> analysis was performed in duplicate on direct liquid subsamples as indicated by a blank in the A# column in Table 1.

High RPDs (>10%) were reported for three of the fourteen subsamples submitted for analysis and were attributed to sample inhomogeneity. No reanalyses were requested. The standard recoveries were within the required range of 90% - 110% and the spike recoveries were within the required limits of 75%-125%.

### Chromium VI (CrVI)

Chromium VI analysis was performed in duplicate direct liquid subsamples. Solid subsamples were prepared for analysis by performing a water digest in duplicate. The water digest is indicated with an "W" in the A# column in Table 1.

The RPDs were less than 20%, the standard recoveries were within the required limits of 80%-120% and the spike recoveries were within the required limits of 75%-125%.

### **Ion Chromatography (IC)**

The IC analyses were performed on direct subsamples of liquid as indicated by a blank in the aliquot class (A#) column in Table 1. The solid subsamples were prepared for analysis by performing a water digest. This is indicated with a "W" in the A# column in Table 1.

The required analytes were bromide (Br<sup>-</sup>), fluoride (F<sup>-</sup>), chloride (Cl<sup>-</sup>), nitrate (NO<sub>3</sub><sup>-</sup>), nitrite (NO<sub>2</sub><sup>-</sup>), phosphate (PO<sub>4</sub><sup>-3</sup>), sulfate (SO<sub>4</sub><sup>-2</sup>), oxalate and formate. All other analyte results are presented in Appendix A. These results are considered "opportunistic" and do not have customer defined QC parameters. Therefore, any anomalies in those results are not discussed in this report.

High RPDs (>20%) were reported for a small percentage of samples analyzed for the following: Cl<sup>-</sup>, F<sup>-</sup>, formate, NO<sub>2</sub><sup>-</sup>, NO<sub>3</sub><sup>-</sup>, oxalate, PO<sub>4</sub><sup>-3</sup> and SO<sub>4</sub><sup>-2</sup>. Selected samples were reanalyzed with some improvement in the RPDs. The high RPDs were attributed to sample inhomogeneity and no further reanalyses were requested. More information may be obtained by examining the raw data.

Spike recoveries outside of the required range (75%-125%) were reported for a small percentage of samples analyzed for the following: Cl<sup>-</sup>, F<sup>-</sup>, formate, NO<sub>3</sub><sup>-</sup> and NO<sub>2</sub><sup>-</sup>. The spike failures for Cl<sup>-</sup>, NO<sub>3</sub><sup>-</sup> and NO<sub>2</sub><sup>-</sup> were attributed sample inhomogeneity and to the high concentration of these analytes in the samples with respect to the amount of spike standard added. The spike failures for F<sup>-</sup> were attributed to matrix interferences from small organic acids. The spike failures for formate were attributed to matrix interferences from metals. Since these interfering analytes could be removed from the matrix no reanalyses were requested. The standard recoveries were within the required limits of 80%-120%.

### **Inductively Coupled Plasma Spectrophotometry (ICP)**

The liquid subsamples were prepared for analysis by an acid adjustment of the direct subsample. This is indicated by a "D" in the A# column in Table 1. The solid subsamples were prepared for analysis by performing both an acid digest as indicated by an "A" and a fusion as indicated by an "F" in the A# column in Table 1.

The required analytes were aluminum (Al), boron (B), barium (Ba), bismuth (Bi), calcium (Ca), chromium (Cr), iron (Fe), lithium (Li), manganese (Mn), sodium (Na), nickel (Ni), potassium (K), silicon (Si), uranium (U), zinc (Zn) and zirconium (Zr). All other analyte results are presented in Appendix A. These results are considered "opportunistic" and do not have customer defined QC parameters. Therefore, any anomalies in those results are not discussed in this report.

The fusion digestion process is performed using potassium hydroxide as a reagent and a nickel crucible for the digestion vessel. Therefore, for the samples requiring fusion digestion, results for K are not available. The results for Ni are biased high due to leaching from the crucible. The

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results for K and more accurate results for Ni may be obtained from the acid digestion portion of the samples.

High RPDs (>20%) were reported for a small percentage of samples analyzed for the following: Al, Ca, Cr, Fe, Li, Mn, K, Si, Zn and Zr. It should be noted that most of the failures occurred on the acid digested sample aliquots. In certain matrices, some metals may not have been completely or uniformly dissolved by the acid digestion process. However, the concentration of many of these analytes were less than ten times the detection limit and the precision of the analysis was decreased. No reparation or reanalysis was requested.

High RPDs (>20%) were reported for approximately 50% of the samples analyzed for B and Ni. These two analytes in particular had high RPDs due to non-uniform leaching from the digestion vessels used for the sample and duplicate aliquots. Since this leaching could not be avoided, no reanalyses were requested.

Matrix spike recoveries outside of the 75% to 125% control limits as set by the TSAP (Wilkins, 1998) were reported for a small percentage of samples analyzed for the following: Cr, Fe and K. In addition, spike failures were noted for approximately 50% of the samples analyzed for Al and Na. The spike failures were attributed to the high concentration of these analytes in the samples with respect to the amount of spike standard added. A post digestion spike analysis was performed as an additional instrument performance check. The post digestion spike recoveries were within the required limits. More information may be obtained by examining the raw data.

Typically, with high concentrations of analytes, it is difficult to add sufficient spike to perform a meaningful analysis. Therefore, the assessment of the accuracy of the measurement for these analytes were also made by comparison of the sample results to those of a serial dilution of the sample. The serial dilution was performed by preparing and analyzing an additional five-fold dilution of the sample. The result obtained from this analysis should be within  $\pm 10\%$  of the undiluted sample result. The results of this comparison are presented in Table 7 and indicate the accuracy of this analysis was acceptable for all but three samples analyzed for K. The undiluted results were already near the detection limit and an additional five-fold dilution decreased the precision of the analysis even further. The standard recoveries were within the required limits of 80%-120%.

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**Table 7: ICP Serial Dilution Results for Tank 241-U-107**

Sample ID	Analyte	Undiluted Sample Result ( $\mu\text{g/mL}$ )	Serial Dilution Result ( $\mu\text{g/mL}$ )	Percent Difference (%)
S98T002032	Al	2.19E+04	2.24E+04	2.3
S98T002032	K	3.05E+03	3.49E+03	14.3
S98T002032	Na	2.10E+05	2.21E+05	5.2
S98T002036	Al	2.11E+04	2.15E+04	2.0
S98T002036	Cr	6.85E+02	6.90E+02	0.7
S98T002036	Na	2.07E+05	2.18E+05	5.5
S98T002236	Al	2.08E+04	2.10E+04	0.8
S98T002236	Na	2.07E+05	2.12E+05	2.3
S98T002248	Al	2.78E+04	2.86E+04	2.7
S98T002248	Na	2.28E+05	2.39E+05	5.0
S98T002252	Al	3.52E+04	3.56E+04	1.0
S98T002252	Na	2.30E+05	2.37E+05	3.3
S98T002275	Cr	1.30E+01	1.36E+01	5.1
S98T002275	Na	9.57E+02	1.03E+03	7.3
S98T002435	Al	5.52E+01	5.74E+01	4.0
S98T002435	Na	1.13E+03	1.19E+03	5.4
S98T002521	Al	8.38E+01	8.78E+01	4.9
S98T002521	Cr	6.53E+00	6.91E+00	5.9
S98T002521	Fe	5.13E+00	5.46E+00	6.4
S98T002521	Na	1.11E+03	1.19E+03	7.0
S98T002530	Al	6.34E+01	6.63E+01	4.4
S98T002530	Cr	3.73E+00	3.86E+00	3.3
S98T002530	K	9.12E+00	8.09E+00	11.3
S98T002530	Na	8.83E+02	9.48E+02	7.4
S98T002534	Al	2.23E+04	2.27E+04	1.9
S98T002534	K	3.08E+03	3.54E+03	14.7
S98T002534	Na	2.08E+05	2.17E+05	4.5
S98T002573	Al	7.39E+00	7.65E+00	3.5
S98T002573	Na	9.85E+02	1.01E+03	2.2
S98T002976	Al	2.28E+04	2.32E+04	1.7
S98T002976	K	3.14E+03	2.95E+03	6.2
S98T002976	Na	2.26E+05	2.36E+05	4.5

$$\% \text{ Difference} = (\text{ABS}(\text{Sample} - \text{Serial})) / \text{Sample} \times 100$$

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### **Total Inorganic/Organic Carbon Persulfate (TIC/TOC)**

TIC/TOC analyses by persulfate oxidation/coulometry were performed in duplicate on direct subsamples. None of the results exceeded the TOC notification limit of 30,000  $\mu\text{gC/g}$  for solids and 30,000  $\mu\text{gC/mL}$  for liquids. The results are included in Table 1.

For all TIC and TOC analyses, an Analysis Report worksheet is included for each sample as raw data. Due to programming limitations with the instrument software, the sample size listed on the worksheet is incorrect. This value was not used in the final calculations and had no bearing on the results in Table 1. The blank is considered a reagent blank. The value was within the acceptance limits and all results were corrected for the concentration found in the blank.

High RPDs (>20%) were reported for one subsample on both the TIC and TOC analyses. These samples were reanalyzed. The results showed little improvement in the RPDs. The high RPDs were attributed to sample inhomogeneity and no further reanalyses were requested.

Spike recoveries outside of the 75% to 125% range were reported for two subsamples analyzed for TIC and one subsample analyzed for TOC. These spike failures were due the high concentration of these analytes with respect to the amount of spike standard added. No reanalyses were requested. The standard recoveries were within the required limits of 80%-120%.

### **Radionuclide Analyses**

#### **Total Alpha (AT)**

The total alpha (AT) analysis was performed in duplicate on direct subsamples for the liquids as indicated by a blank in the A# column in Table 1. Solid subsamples were prepared for analysis by performing a fusion digest in duplicate. The fusion digest is indicated with an "F" in the A# column in Table 1.

All liquid AT results were below the total alpha activity action limit of 61.5  $\mu\text{Ci/mL}$ . All solid AT results were below the total alpha activity limit of 33.24  $\mu\text{Ci/g}$  (based on a bulk density of 1.85  $\text{g/mL}$ ).

High RPDs (>20%) were reported for four of the twenty-eight subsamples submitted for analysis. Selected samples were reanalyzed. The raw data for the initial analyses have been included in the data package for informational purposes only and stamped as "data not used". The high RPDs were attributed to sample inhomogeneity and no further reanalyses were requested. More information may be obtained by examining the raw data.



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Spike recoveries outside of the required range (75% to 125%) were reported for three subsamples. The spike recoveries were within the laboratory statistical control limits for the QC standard and no rerun was requested. The standard recoveries were within the required limits of 70%-130%.

### Gamma Energy Analysis (GEA)

Gamma energy analyses were performed in duplicate on direct liquid subsamples. The solid subsamples were prepared for analysis by performing a fusion digest in duplicate. The fusion digest is indicated with an "F" in the A# column in Table 1.

The QC review discussed in this report is limited to  $^{137}\text{Cs}$ . The results for  $^{60}\text{Co}$  are considered "opportunistic" and do not have customer defined QC parameters. Therefore, any anomalies in those results are not discussed in this report and the results are presented in Appendix A.

Actual detection limits for GEA analytes are not currently available. The latest GEA software does not report a minimum detectable activity (MDA). If an analyte is reported as "less than", the value reported is the detection limit.

For the GEA analysis some radionuclides have peak energies that are very close together and cannot always be separated. When this occurs most software will report all isotopes with an energy near the found peak energy. The chemist eliminates the data from the radionuclides that are not present by crossing-out the unused peaks.

A small amount of contamination was found in the preparation blank. However, the levels of contamination are insignificant when compared to the sample results and do not affect the useability of the data.

A high RPD (>20%) was reported for one of the nine subsamples submitted for analysis and was attributed to sample inhomogeneity. No reanalysis was requested. The standard recoveries were within the required limits of 80%-120%.

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### Strontium 90 (<sup>90</sup>Sr)

<sup>90</sup>Sr was performed in duplicate on direct liquid subsamples. The solid subsamples were prepared for analysis by performing a fusion digest in duplicate. The fusion digest is indicated with an "F" in the A# column in Table 1.

A high RPD (>20%) was reported for two of the five samples submitted for analysis. Selected samples were reanalyzed. The raw data for the initial analyses have been included in the data package for informational purposes only and stamped as "data not used". The high RPDs were attributed to sample inhomogeneity and no further reanalyses were requested. More information may be obtained by examining the raw data. The standard recoveries were within the required limits of 80% - 120%.

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Procedures

Table 8 lists the analytical procedures used for performing the sample analyses. Abbreviations for analyses are defined in the table notes.

<b>Table 8. Analytical Procedures</b>			
<b>Analysis</b>	<b>Sample Portion</b>	<b>Preparation Procedure +</b>	<b>Analysis Procedure</b>
DSC	Solid/Liquid	N/A	LA-514-114 Rev. D-1
TGA	Solid/Liquid	N/A	LA-514-114 Rev. D-1
Bulk Density	Solid	N/A	LO-160-103 Rev. B-0 LA-519-132 Rev. B-0
Sp.G.	Liquid	N/A	LA-510-112 Rev. E-0
OH	Solid Liquid	LA-504-101 Rev. F-0 N/A	LA-211-102 Rev. D-0
IC	Solid Liquid	LA-504-101 Rev. F-0 N/A	LA-533-105 Rev. E-0 LA-533-105 Rev. F-0
ICP	Solid  Liquid	LA-505-163 Rev. B-0 LA-549-141 Rev. G-0  N/A	LA-505-161 Rev. C-3
NH3	Solid Liquid	LA-504-101 Rev. F-0 N/A	LA-631-001 Rev. C-0

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Table 8. Analytical Procedures			
Analysis	Sample Portion	Preparation Procedure +	Analysis Procedure
TICTOC	Solid/Liquid	N/A	LA-342-100 Rev. F-1
CrVI	Solid Liquid	LA-504-101 Rev. F-0 N/A	LA-265-101 Rev. C-0
GEA	Solid Liquid	LA-549-141 Rev. F-0 N/A	LA-548-121 Rev. F-0
Sr90	Solid Liquid	LA-549-141 Rev. F-0 N/A	LA-220-101 Rev. E-3
AT	Solid Liquid	LA-549-141 Rev. F-0 N/A	LA-508-101 Rev. G-0

Abbreviations:

N/A = not applicable (these are direct samples)  
 DSC = differential scanning calorimetry  
 TGA = thermogravimetric analysis  
 OH = hydroxide  
 NH3 = ammonia  
 Sp.G. = specific gravity  
 IC = ion chromatography  
 ICP = inductively coupled plasma  
 TIC/TOC= total inorganic/organic carbon  
 Sr90 = strontium 90  
 AT = total alpha  
 GEA = gamma energy analysis

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U-107 BREAKDOWN

ATTACHMENT 1

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U-107

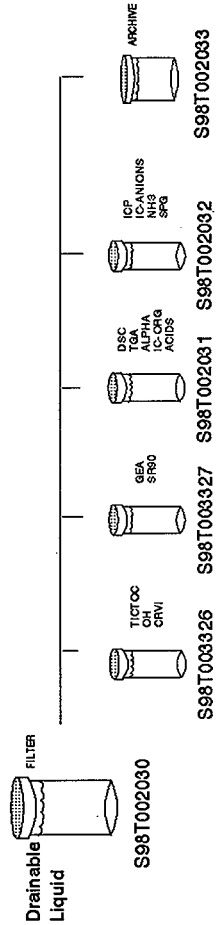
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S98T001888

# Attachment 1

HNF-1661 REV. 0



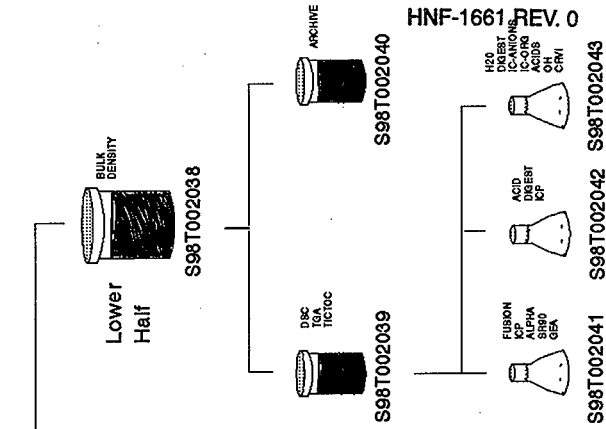
U-107

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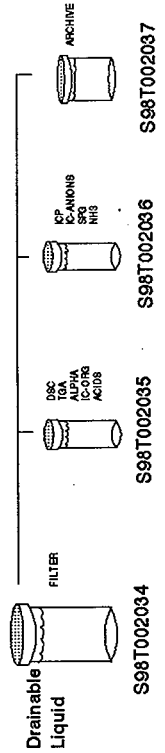
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S98T001889

# Attachment 1



HNF-1661 REV. 0



U-107

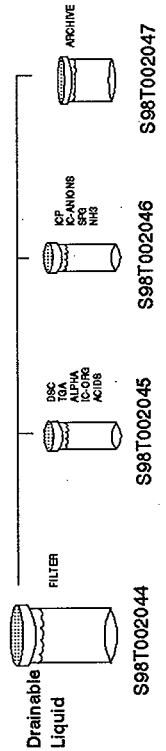
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Seg: 2A

S98T001890

# Attachment 1

HNF-1661 REV. 0



# Attachment 1

U-107  
Core:242  
Seg: 4  
S98T002085

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Sampler  
Empty

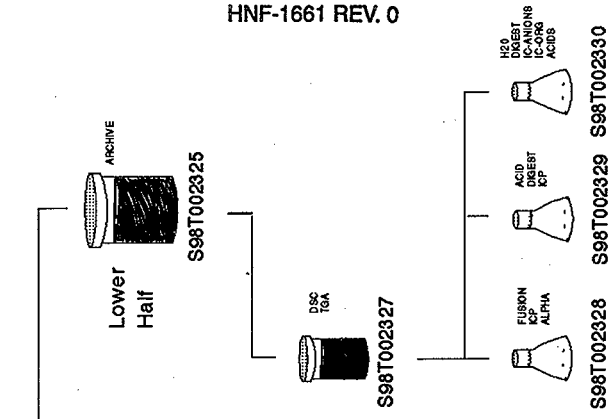
U-107

Core:242

Seg: 5

S98T002087

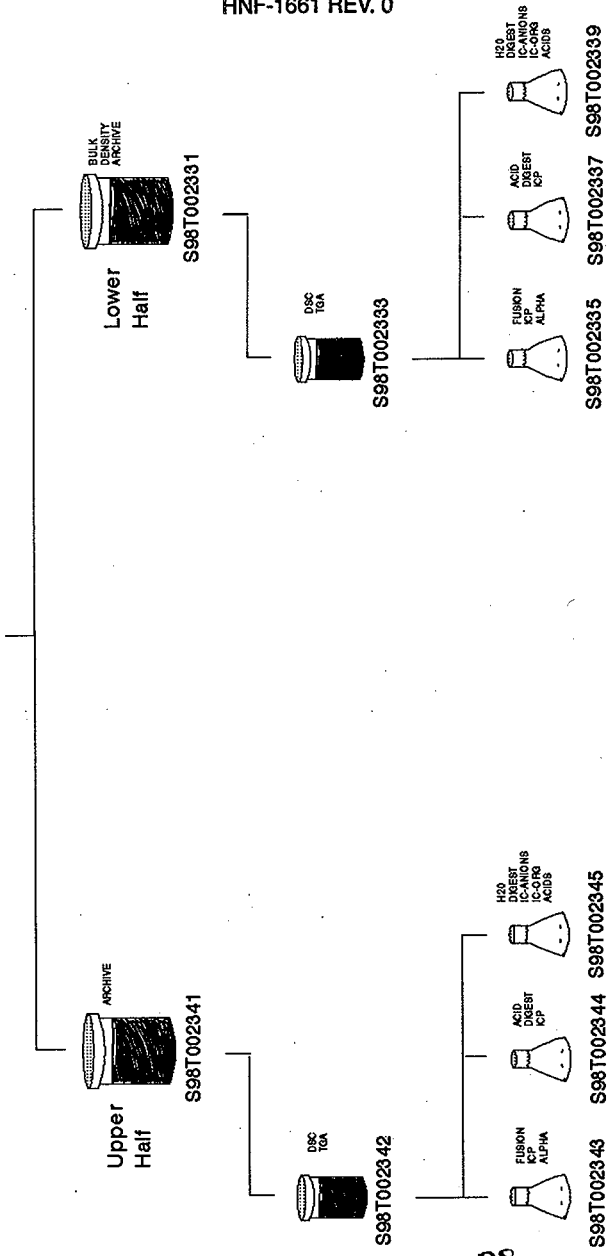
# Attachment 1



U-107  
Core:242  
Seg: 6  
S98T002086

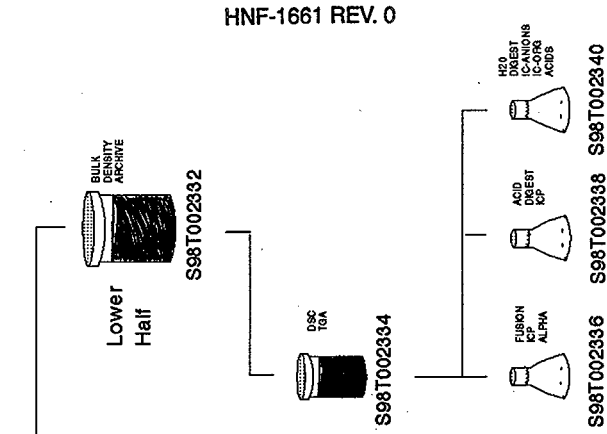
# Attachment 1

HNF-1661 REV. 0



U-107  
Core:242  
Seg: 7  
S98T002088

# Attachment 1



# Attachment 1

U-107  
Core:242  
Seg: 8  
S98T002101

|

Sampler  
Empty



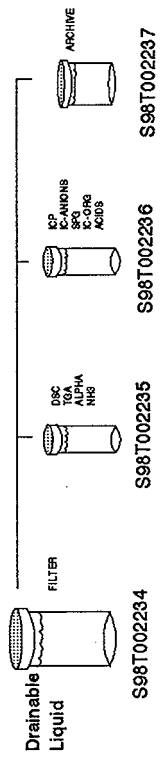
U-107

Core:242R

Seg: 1

S98T002082

# Attachment 1



U-107

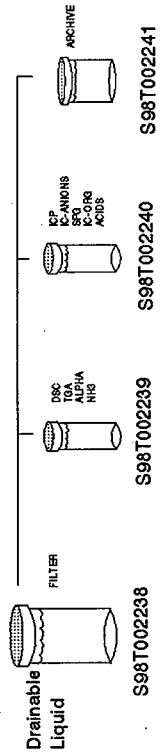
Core:242R

Seg: 2

S98T002083

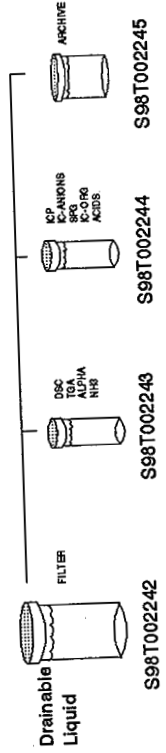
# Attachment 1

HNF-1661 REV. 0



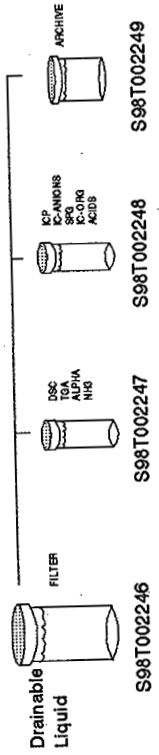
U-107  
Core:242R  
Seg: 3  
S98T002084

# Attachment 1



U-107  
Core:242R  
Seg: 4  
S98T002099

# Attachment 1





U-107

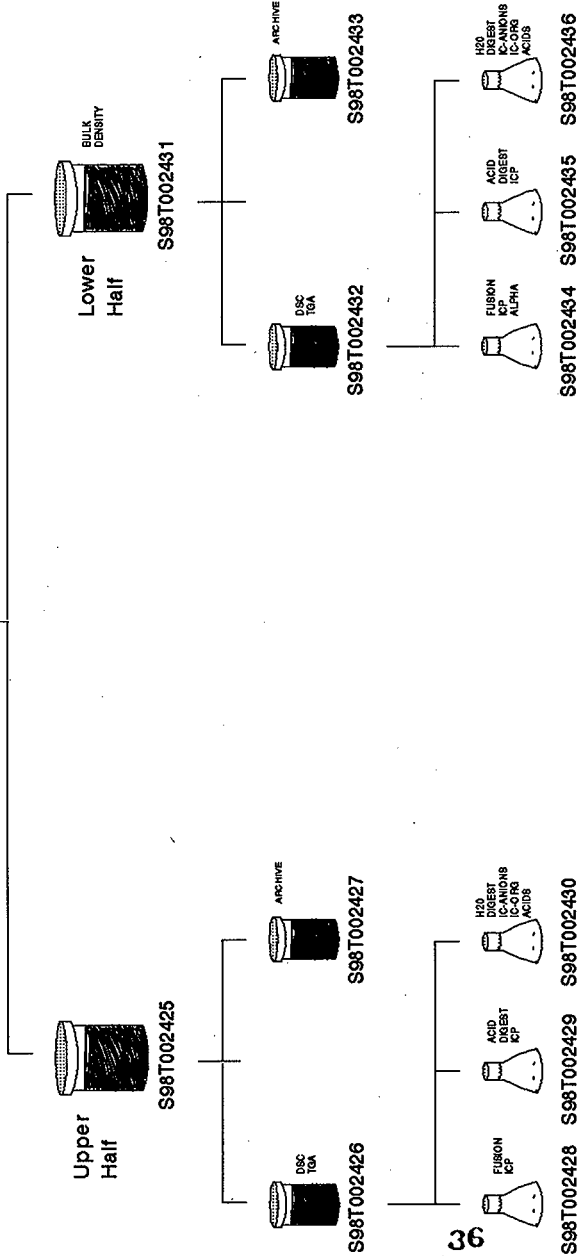
Core:242R

Seg: 6

S98T002227

# Attachment 1

HNF-1661 REV. 0



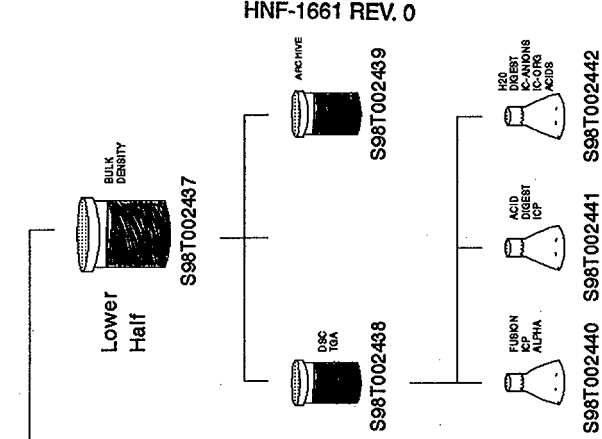
U-107

Core:242R

Seg: 6A

S98T002228

# Attachment 1



U-107

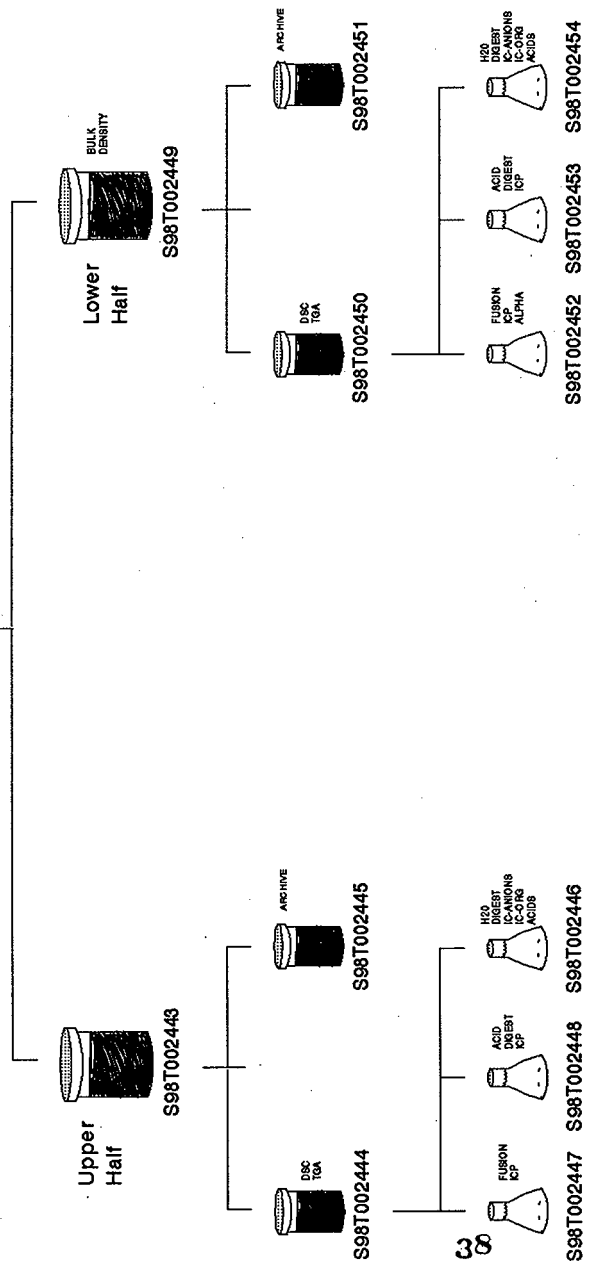
Core:242R

Seg: 7

S98T002229

# Attachment 1

HNF-1661 REV. 0



38



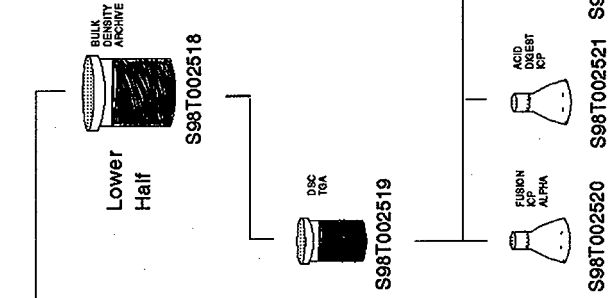
U-107

Core:242R

Seg: 8

S98T002408

# Attachment 1



HNF-1661 REV. 0

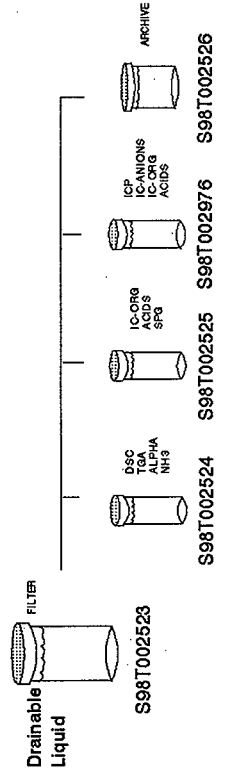
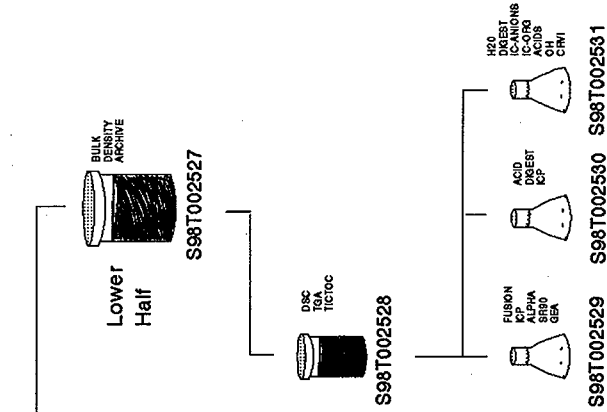
U-107

Core:245

Seg: 1

S98T002409

# Attachment 1



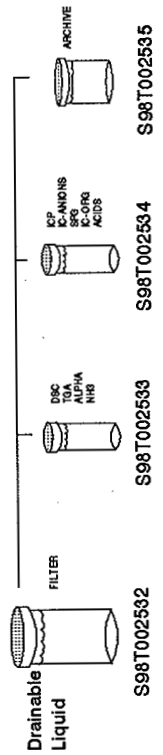
U-107

Core:245

Seg: 2R

S98T002414

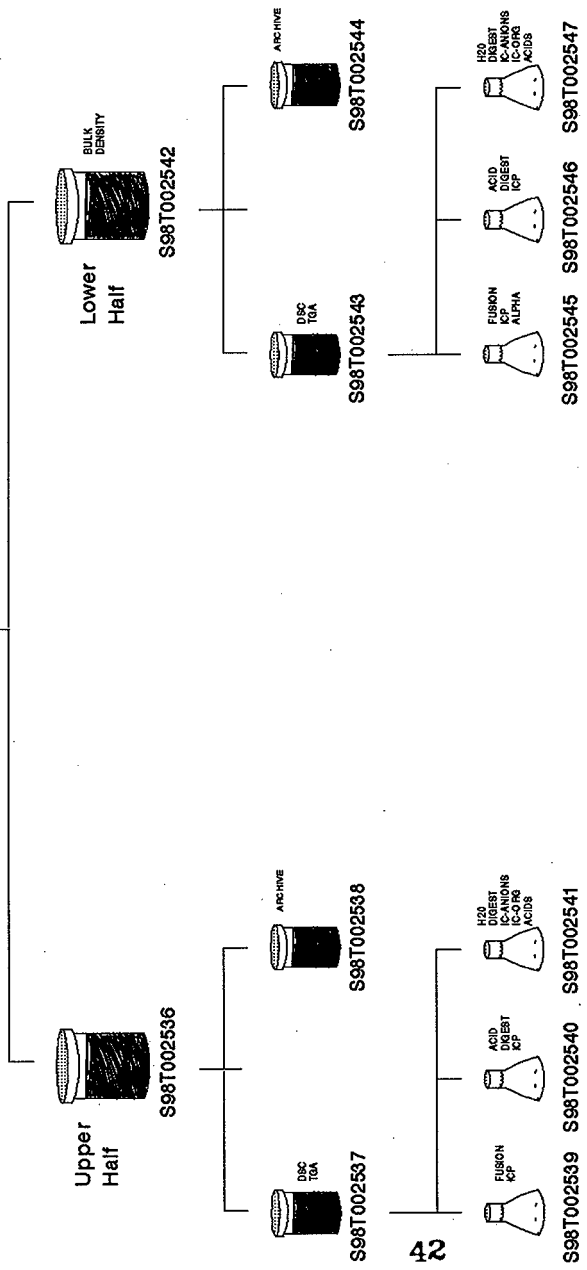
# Attachment 1



U-107  
Core:245  
Seg: 3  
S98T002410

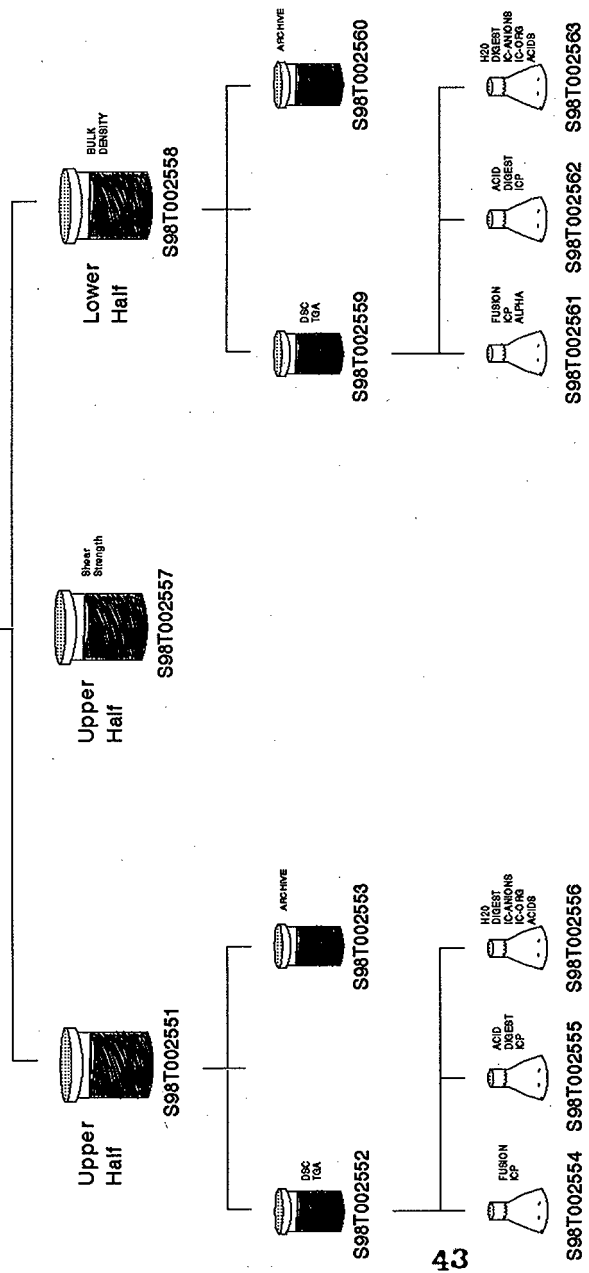
# Attachment 1

HNF-1661 REV. 0



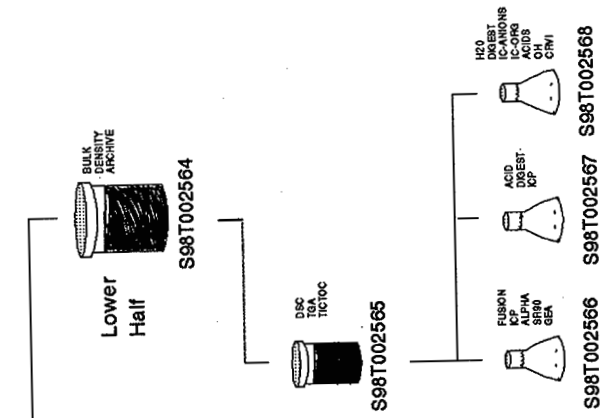
U-107  
 Core:245  
 Seg: 4  
 S98T002415

# Attachment 1



U-107  
Core:245  
Seg: 5A  
S98T002411

# Attachment 1



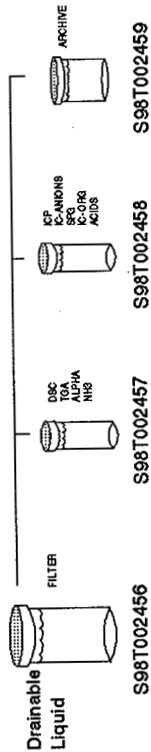
# Attachment 1

U-107

Core:245

Seg: 5R

S98T002224



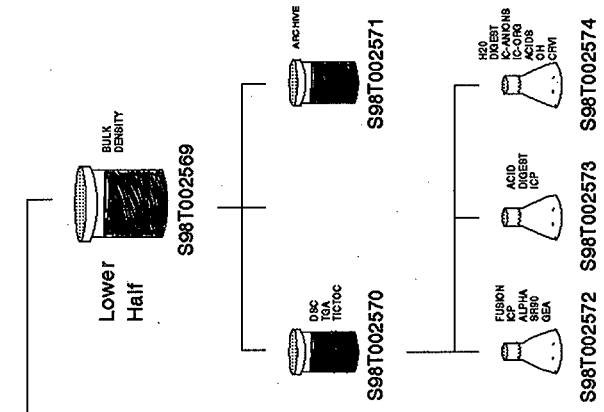
U-107

Core:245

Seg: 6

S98T002412

# Attachment 1





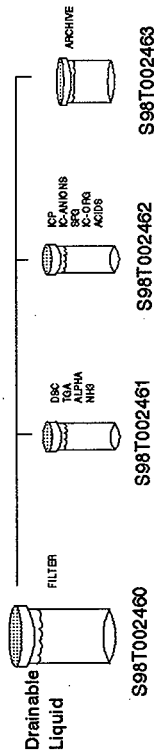
# Attachment 1

U-107

Core:245

Seg: 6R

S98T002225



# Attachment 1

U-107  
Core:245  
Seg: 7  
S98T002413

—

Sampler  
Empty

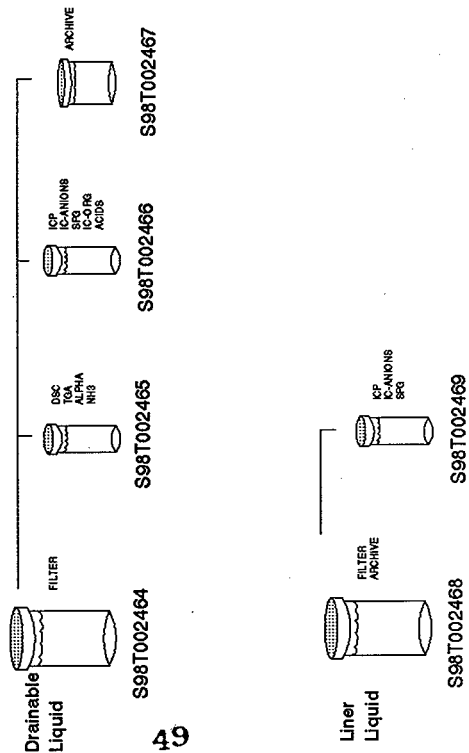
# Attachment 1

U-107

Core:245

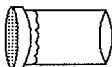
Seg: 7R

S98T002226



# Attachment 1

U-107  
Core:245  
Seg: FB  
S98T002114



Drainable  
Liquid

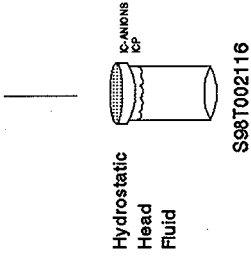
DSC  
TGA  
NH3

ALPHA  
CATIONS  
ANIONS  
ACIDS  
PCP  
SPG

S98T002114

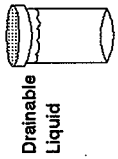
# Attachment 1

U-107  
Core:245  
Seg: LiBr  
S98T002116



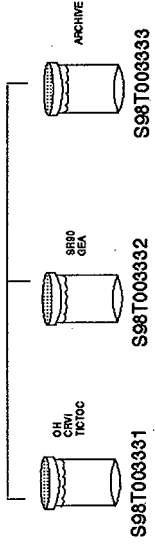
U-107  
Core:242R  
Composite:  
Drainable Liquid

Composited:	
Segment	Grams
1 DL	25.0
2 DL	25.0
3 DL	25.0
4 DL	25.0



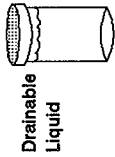
Drainable  
Liquid

S98T003330

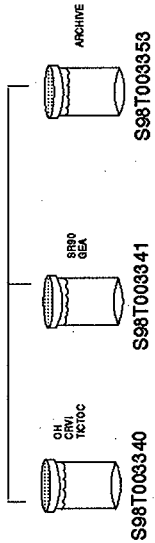


Composited.  
 Segment - Grams  
 1 DL 50.0  
 2R DL 50.0

U-107  
 Core:245  
 Composite:  
 Drainable Liquid



S98T003339



OH  
 CRUI  
 TICROC

S98T003340

SFR0  
 GEA

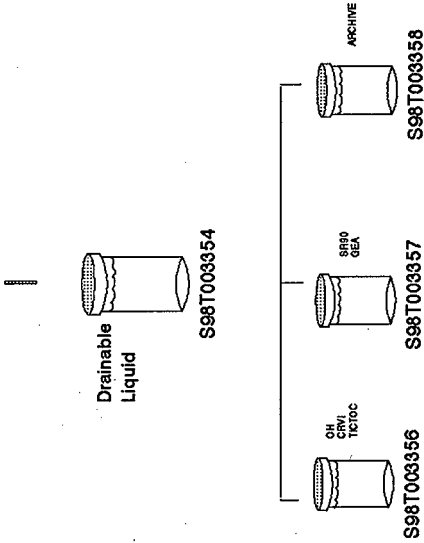
S98T003341

ARCHIVE

S98T003353

U-107  
Core:245  
Composite:  
Drainable Liquid

<b>Composited:</b>	
Segment:	Grams
5R DL	50.0
6R DL	50.0

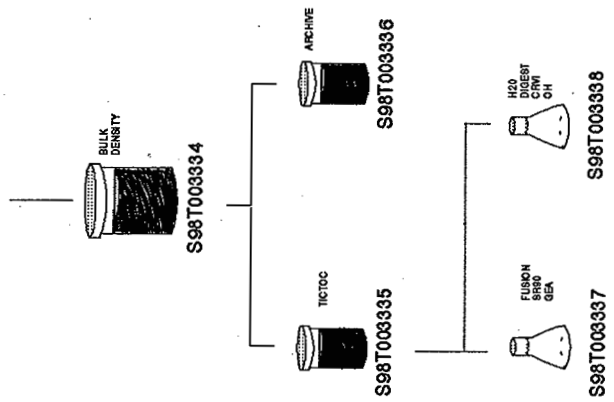




# Attachment 1

<b>Composited:</b>	
Segment:	Grams
3 UH	25.0
3 LH	25.0
4 UH	25.0
4 LH	25.0

U-107  
 Core:245  
 Composite:Solids



HNF-1661 REV. 0

CORRESPONDENCE

ATTACHMENT 2

HNF-1661 REV. 0

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## INTEROFFICE MEMO

LOCKHEED MARTIN 

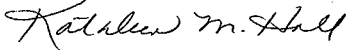
From: Data Assessment and Interpretation  
 Phone: 376-5029 R2-12  
 Date: October 19, 1998  
 Subject: SETTLING RATE STUDY

74B20-98-049

To: F. H. Steen T6-12

cc: T. M. Brown R2-12 *TB*  
 J. M. Conner R2-11 *JAC*  
 D. B. Hardy T6-12  
 D. J. McCain R2-12 *Jme*  
 K. L. Powell S3-30  
 J. H. Rasmussen R2-12  
 C. M. Seidel S3-30  
 B. C. Simpson R2-12 *BCS*  
 KMH File/LB

The flammable gas program is in the process of revising the data quality objective to clarify the requirements for the settling rate study. The program has determined that the requirement does not apply to 241-S-111, 241-SX-102, 241-TX-113, 241-TX-116, 241-U-107, or 241-U-109. Please cancel the settling rate studies for these tank samples.



K. M. Hall,  
 Manager

ldf

**Steen, Franciska H**

---

**From:** Nguyen, Duc M  
**Sent:** Thursday, January 28, 1999 2:24 PM  
**To:** Steen, Franciska H  
**Cc:** Hall, Kathleen M; Sasaki, Leela M  
**Subject:** Tank U-107 Core Sample Analysis

The "Tank 241-U-107 Rotary Mode Core Sampling and Analysis Plan" specifies an incorrect laboratory procedure number for measuring bulk density. The correct number is LO-160-103 (instead of LO-160-104). Please proceed with the density analysis using the procedure numbered LO-160-103.

**Steen, Franciska H**

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**From:** Nguyen, Duc M  
**Sent:** Monday, December 07, 1998 9:00 AM  
**To:** Steen, Franciska H  
**Cc:** Hall, Kathleen M  
**Subject:** Tank U-105 Core Sample Analysis

Fran,

Attached are some clarifications regarding the core sample analyses. The scheme for preparing stratum composite samples has been modified slightly based on our discussion this morning. Please give me a call if you have any questions or comments.

Duc  
372-3042



Analysis of U-107  
Corea.doc

Clarification for Analyses of Tank U-107 Core Samples

- Core 242 – Riser #2

Solids: Only Segment #2 contains some solids (171.6 g). The solids sample can be considered as both a “stratum composite sample” and a “half-segment sample.” In other words, analyze the solids for all parameters specified for both types of sample.

Liquids: Perform analyses specified in the TSAP for segments with sufficient sample material. Also, all drainable liquids in Segments 1, 2, and 2A seem to originate from a single stratum. Since there is insufficient sample material for making a composite sample and for archiving, drainable liquid from Segment 1 will be used for analyses specified for stratum composites.

- Core 242R – Riser #2

Solids: Perform “half-segment sample” analyses for Segment #5 as directed in the TSAP. A stratum composite sample will be prepared by mixing equal weights of solids from each half-segment. Analyze the composite samples as directed by the TSAP.

Liquids: Perform analyses specified in the TSAP for segments with sufficient sample material. Also, all drainable liquids in this core sample seem to originate from a single stratum. A stratum composite sample will be prepared by mixing equal amounts of liquids from Segments 1 – 4. Analyze the composite as directed by the TSAP.

- Core 245 – Riser #7

Solids: Perform “half-segment sample” analyses for Segments #3 and #4 as directed in the TSAP. A stratum composite sample will be prepared for these two segments by mixing equal weights of solids from the four half-segments. Analyze the composite samples as directed by the TSAP.

*Segments #1, 5A, and 6 should be treated as if they are both “stratum composite samples” and a “half-segment samples.”* In other words, analyze the solids from each segment for all parameters specified for both types of sample.

Liquids: Perform analyses specified in the TSAP for segments with sufficient sample material. Two stratum composite samples will be prepared by mixing equal volumes of sample material taken from each segment. The first composite will be prepared from Segments #1 and # 2R and the second from Segments #5R, 6R, and 7R. Analyze these composite samples in accordance with the TSAP.

**HNF-1661 REV. 0**

**SAMPLE DATA SUMMARY**



HNF-1661 REV. 0

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25-Jan-1999 07:16:25  
A-0002-1

Table 1. Data Summary Report.

CORE NUMBER: 242  
SEGMENT #: 1

SEGMENT PORTION: Drainable Liquid

Sample#	R#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec. %	Det. Limit	Count	Err%
S981002031	D	DSC Exotherm Dry. Calculated	Joules/g Dry	N/A	N/A	37.39	37.95	37.67	1.49	N/A	N/A	N/A	N/A
S981002031	D	DSC Exotherm on Perkin Elmer	Joules/g	99.33	N/A	19.51	19.80	19.66	1.48	N/A	N/A	N/A	N/A
S981002031	D	2. Water by IGA on Perkin Elmer	%	98.42	N/A	45.94	49.71	47.83	7.88	N/A	N/A	N/A	N/A
S981002031	D	Formate by IGA on Perkin Elmer	ug/mL	95.18	< 2.10e-02	3.01e+03	3.12e+03	3.07e+03	3.57	117.4	1.80e-02	5.00E+02	5.00E+02
S981002031	D	Albina In Light Scintilates	ug/mL	95.00	< 1.01e-02	< 7.55E-3	< 7.55E-3	N/A	N/A	97.26	1.80e-02	5.00E+02	5.00E+02
S981002032	D	Ammonia by ISS-KD Additions	SP.G.	99.22	< 5.000	< 5.000	5.180	N/A	N/A	100.0	5.00E-03	N/A	N/A
S981002032	D	Specific Grav. by D Dil.	ug/mL	98.99	N/A	1.410	1.441	1.425	2.17	17.0	1.00e-03	N/A	N/A
S981002032	D	Aluminum-IC-Acid Dill.	ug/mL	98.60	< 5.00e-02	2.19e+04	2.18e+04	2.18e+04	0.46	97.0	3.0	N/A	N/A
S981002032	D	Boron-IC-Acid Dill.	ug/mL	101.0	< 5.00e-02	96.70	93.30	95.00	3.58	92.0	3.0	N/A	N/A
S981002032	D	Baryum-IC-Acid Dill.	ug/mL	99.40	< 5.00e-02	< 3.0	< 3.01e1	N/A	N/A	95.50	60.0	N/A	N/A
S981002032	D	Bismuth-IC-Acid Dill.	ug/mL	100.2	< 1.00e-01	< 6.0	< 6.01e1	N/A	N/A	95.70	60.0	N/A	N/A
S981002032	D	Calcium-IC-Acid Dill.	ug/mL	100.2	< 1.00e-01	97.60	88.40	93.00	9.89	94.10	60.0	N/A	N/A
S981002032	D	Chromium-IC-Acid Dill.	ug/mL	99.20	< 1.00e-02	6.95e+02	691.0	695.0	0.58	94.10	60.0	N/A	N/A
S981002032	D	Cobalt-IC-Acid Dill.	ug/mL	97.80	< 5.00e-02	< 3.0	< 3.01e1	N/A	N/A	96.20	30.0	N/A	N/A
S981002032	D	Copper-IC-Acid Dill.	ug/mL	99.60	< 5.00e-01	3.05e+03	2.94e+03	3.00e+03	3.67	64.60	300.0	N/A	N/A
S981002032	D	Fluorine-IC-Acid Dill.	ug/mL	98.40	< 1.00e-02	< 6.0	< 6.01e1	N/A	N/A	94.70	6.010	N/A	N/A
S981002032	D	Gamma-IC-Acid Dill.	ug/mL	98.50	< 1.00e-02	< 6.0	< 6.01e1	N/A	N/A	94.70	6.010	N/A	N/A
S981002032	D	Iron-IC-Acid Dill.	ug/mL	103.0	< 1.00e-02	< 12.00	< 12.00e1	N/A	N/A	44.57e2	60.0	N/A	N/A
S981002032	D	Nickel-IC-Acid Dill.	ug/mL	99.60	< 2.00e-02	1.85e+02	174.0	179.2	6.13	97.00	30.0	N/A	N/A
S981002032	D	Silicon-IC-Acid Dill.	ug/mL	98.60	< 5.00e-02	< 3.0	< 3.01e2	N/A	N/A	96.50	300.0	N/A	N/A
S981002032	D	Sulfur-IC-Acid Dill.	ug/mL	97.30	< 5.00e-01	< 3.0	< 3.01e2	N/A	N/A	95.90	6.010	N/A	N/A
S981002032	D	Uranium-IC-Acid Dill.	ug/mL	96.20	< 1.00e-02	< 6.0	< 6.01e1	N/A	N/A	95.90	6.010	N/A	N/A
S981002032	D	Zinc-IC-Acid Dill.	ug/mL	97.00	< 1.00e-02	< 6.0	< 6.01e1	N/A	N/A	60.00	61.81	N/A	N/A
S981002032	D	Zirconium-IC-Acid Dill.	ug/mL	105.9	< 1.20e-02	< 6.0	< 6.01e1	N/A	N/A	88.44	87.57	N/A	N/A
S981002032	D	Fluoride-IC-Dionex 4000/4500	ug/mL	99.58	1.38e-01	9.55e+04	9.68e+04	9.59e+04	0.83	98.53	556.3	N/A	N/A
S981002032	D	Chloride-IC-Dionex 4000/4500	ug/mL	98.67	1.38e-01	4.44e+02	4.44e2	2.37e+05	0.00	95.99	716.9	N/A	N/A
S981002032	D	Nitrate by Ion Chromatograph	ug/mL	109.7	1.69e-01	2.57e+03	2.57e+03	3.05e+03	8.52	82.44	618.1	N/A	N/A
S981002032	D	Nitrate by IC-Dionex 4000/4500	ug/mL	97.94	< 1.20e-01	3.18e+03	2.92e+03	3.05e+03	0.39	91.13	710.8	N/A	N/A
S981002032	D	Phosphate-IC-Dionex 4000/4500	ug/mL	98.86	< 1.89e-01	5.11e+03	5.11e+03	5.12e+03	0.51	93.73	540.9	N/A	N/A
S981002032	D	Sulfate by IC-Dionex 4000/4500	ug/mL	98.67	< 1.05e-01	7.59e+02	651.0	618.2	0.00	99.30	1.00e-02	N/A	N/A
S981002032	D	Oxalate-IC-Dionex 4000/450	ug/mL	100.0	< 2.98e-01	3.72e+02	3.72e+02	3.40e+04	5.60	91.0	5.00e+03	N/A	N/A
S981003326	D	Chromium (VI) by Spec.	ug/mL	105.2	< 5000.0	< 4.69e+04	3.20e+04	3.40e+04	11.5	131.0	5.000	N/A	N/A
S981003326	D	OH- by Pot. Titration	ug/mL	95.69	4.900	5.59e+03	6.25e+03	5.93e+03	4.00	94.90	4.000	N/A	N/A
S981003326	D	IOC by Acid/Coulometry	ug/mL	98.38	6.40e-03	4.11e+03	4.09e+03	4.10e+03	0.49	94.90	4.000	N/A	N/A
S981003326	D	IOC by Persulfate/Coulometry	ug/mL	91.03	1.00e-03	3.59e-01	3.69e-01	3.84e-01	7.81	91.0	4.00e-03	3.44E+00	3.44E+00
S981003327	D	Strontium-89/90 High Level	uc/L	108.0	< 48.48e-03	2.84e+02	285.0	283.5	0.35	N/A	N/A	N/A	0.0900
S981003327	D	Cesium-137 by GEA	uc/L	108.0	< 48.48e-03	2.84e+02	285.0	283.5	0.35	N/A	N/A	N/A	0.0900

Table 1. Data Summary Report.  
U-107 (2)

SEGMENT PORTION: L Lower Half of Segment

Sample#	R#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk	Rec %	Det Limit	Count	Err%
S981002038		Bulk Density of Sample	g/mL	n/a	n/a	1.750	n/a	n/a	n/a	n/a	n/a	5.00e-01	n/a	n/a
S981002039		DSC Exotherm Dry Calculated	Joules/g Dry	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a	n/a	n/a
S981002039		DSC Exotherm on Perkin Elmer	Joules/g	92.86	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a	n/a	n/a
S981002039		% Water by TGA on Perkin Elmer	%	98.89	n/a	51.06	50.14	50.60	1.82	n/a	n/a	n/a	n/a	n/a
S981002039		TIC by Acto/Coulometry	ug/g	95.52	8.400	2.13e+03	2.08e+03	2.10e+03	2.38	88.30	88.30	5.000	n/a	n/a
S981002039		TOC by Persulfate/Coulometry	ug/g	98.00	6.300	1.85e+03	1.71e+03	1.78e+03	7.87	88.10	88.10	40.00	n/a	n/a
S981002041	F	Strontium-89/90 High Level	uCi/g	95.96	3.000	5.670	6.120	5.895	7.65	n/a	n/a	1.00e+03	6.02E-01	n/a
S981002041	F	Aluminum - ICP-Fusion	ug/g	96.60	<5.00e-02	7.68e+03	9.37e+03	8.52e+03	19.8	n/a	n/a	1.00e+03	n/a	n/a
S981002041	F	Boron - ICP-Fusion	ug/g	96.20	<5.00e-02	<1.00e+03	<9.88e2	n/a	n/a	n/a	n/a	1.00e+03	n/a	n/a
S981002041	F	Barium - ICP-Fusion	ug/g	96.80	<5.00e-02	<1.00e+03	<9.88e2	n/a	n/a	n/a	n/a	1.00e+03	n/a	n/a
S981002041	F	Bismuth - ICP-Fusion	ug/g	98.00	<1.00e-01	<2.01e+03	<1.98e3	n/a	n/a	n/a	n/a	2.00e+03	n/a	n/a
S981002041	F	Calcium - ICP-Fusion	ug/g	98.40	<1.00e-01	<2.01e+03	<1.98e3	n/a	n/a	n/a	n/a	2.00e+03	n/a	n/a
S981002041	F	Chromium - ICP-Fusion	ug/g	97.00	<1.00e-02	1.67e+03	2.21e+03	2.09e+03	11.5	n/a	n/a	200.0	n/a	n/a
S981002041	F	Iron - ICP-Fusion	ug/g	95.40	<5.00e-02	9.65e+02	<9.88e2	n/a	n/a	n/a	n/a	1.00e+03	n/a	n/a
S981002041	F	Lithium - ICP-Fusion	ug/g	98.00	<1.00e-02	<2.01e+02	<1.98e2	n/a	n/a	n/a	n/a	200.0	n/a	n/a
S981002041	F	Manganese - ICP-Fusion	ug/g	96.60	<1.00e-02	2.27e+02	234.0	230.5	3.04	n/a	n/a	200.0	n/a	n/a
S981002041	F	Sodium - ICP-Fusion	ug/g	99.60	<1.00e-02	1.14e+03	2.04e+03	2.09e+03	4.78	n/a	n/a	2.00e+03	n/a	n/a
S981002041	F	Silicon - ICP-Fusion	ug/g	95.20	<5.00e-02	1.14e+03	1.29e+03	1.22e+03	12.3	n/a	n/a	1.00e+03	n/a	n/a
S981002041	F	Uranium - ICP-Fusion	ug/g	94.70	<5.00e-01	<1.00e+04	<9.88e3	n/a	n/a	n/a	n/a	1.00e+04	n/a	n/a
S981002041	F	Zinc - ICP-Fusion	ug/g	92.00	<1.00e-02	<2.01e+02	<1.98e2	n/a	n/a	n/a	n/a	200.0	n/a	n/a
S981002041	F	Zirconium - ICP-Fusion	ug/g	96.40	<1.00e-02	<2.01e+02	<1.98e2	n/a	n/a	n/a	n/a	200.0	n/a	n/a
S981002041	F	Cesium-137 by GEA	uCi/g	102.2	4.90e-02	61.18	65.60	62.39	3.85	n/a	n/a	200.0	0.370	n/a
S981002042	F	Alpha of Digested Solid	ug/g	89.44	<1.65e-03	7.59e-02	8.44e-02	8.01e-02	10.6	n/a	n/a	3.00e-03	1.16E+01	n/a
S981002042	F	Aluminum - ICP-Acid Digest	ug/g	92.80	1.02e-01	6.69e+03	6.94e+03	7.82e+03	22.4	n/a	n/a	1.00e+03	n/a	n/a
S981002042	F	Boron - ICP-Acid Digest	ug/g	101.6	4.35e-01	1.27e+02	127.0	127.0	0.00	n/a	n/a	29.50	n/a	n/a
S981002042	F	Barium - ICP-Acid Digest	ug/g	95.80	<5.00e-02	<2.01e+02	<2.01e+02	n/a	n/a	n/a	n/a	29.50	n/a	n/a
S981002042	F	Bismuth - ICP-Acid Digest	ug/g	88.00	<1.00e-01	<35.90	<5.97e1	n/a	n/a	n/a	n/a	58.80	n/a	n/a
S981002042	F	Calcium - ICP-Acid Digest	ug/g	94.60	<1.00e-02	1.46e+02	118.0	132.0	21.4	n/a	n/a	58.80	n/a	n/a
S981002042	F	Chromium - ICP-Acid Digest	ug/g	91.20	<5.00e-02	3.11e+03	1.75e+03	2.10e+03	21.4	n/a	n/a	5.880	n/a	n/a
S981002042	F	Iron - ICP-Acid Digest	ug/g	97.60	<5.00e-02	8.13e+02	744.0	778.5	8.86	n/a	n/a	29.50	n/a	n/a
S981002042	F	Potassium - ICP-Acid Digest	ug/g	90.60	<1.00e-02	<5.890	<5.97e0	n/a	n/a	n/a	n/a	295.0	n/a	n/a
S981002042	F	Lithium - ICP-Acid Digest	ug/g	90.40	<1.00e-02	2.15e+02	161.0	188.0	0.00	n/a	n/a	5.880	n/a	n/a
S981002042	F	Manganese - ICP-Acid Digest	ug/g	117.2	7.08e-01	2.07e+05	2.07e+05	2.07e+05	0.00	n/a	n/a	5.880	n/a	n/a
S981002042	F	Nickel - ICP-Acid Digest	ug/g	89.20	<2.00e-02	27.20	31.60	24.35	23.4	n/a	n/a	11.80	n/a	n/a
S981002042	F	Silicon - ICP-Acid Digest	ug/g	130.2	6.68e-01	4.14e+02	216.0	365.0	26.8	n/a	n/a	29.50	n/a	n/a
S981002042	F	Uranium - ICP-Acid Digest	ug/g	93.00	<5.00e-02	<2.99e2	<2.99e2	n/a	n/a	n/a	n/a	295.0	n/a	n/a
S981002042	F	Zinc - ICP-Acid Digest	ug/g	82.00	<1.00e-02	14.60	9.670	12.13	40.6	n/a	n/a	5.880	n/a	n/a
S981002043	W	Chromium (VI) by Spec.	ug/g	90.40	<1.00e-02	6.560	<5.97e0	n/a	n/a	n/a	n/a	5.880	n/a	n/a
S981002043	W	OH- by Pot. Titration	ug/g	100.6	<51.60	1.92e+02	213.0	206.0	6.80	116.1	116.1	1.00e+02	n/a	n/a
S981002043	W	Formate by IC-Dionex 4000/4500	ug/g	99.24	<2.10e-02	<8.33e+03	<8.33e+03	n/a	n/a	n/a	n/a	8.33e+03	n/a	n/a
S981002043	W	Fluoride-IC-Dionex 4000/4500	ug/g	100.5	<1.20e-02	<1.62e+02	<1.62e+02	n/a	n/a	n/a	n/a	162.4	n/a	n/a
S981002043	W	Chloride-IC-Dionex 4000/4500	ug/g	102.3	<1.70e-02	<2.17e+03	<2.28e+03	2.22e+03	4.94	n/a	n/a	250.1	n/a	n/a

Sample#	R#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count	Err%
S9810020143	W	Nitrite-IC - Dionex 4000/4500	ug/g	96.32	3.1E-01	2.51E+04	45.99	27.22	5.21	n/a	n/a	n/a	n/a
S9810020143	W	Bromide by Ion Chromatograph	ug/g	101.9	<1.65E-01	<1.69E+03	23.24	52.63	3.21	n/a	n/a	1.46E+03	n/a
S9810020143	W	Nitrate by Ion Chromatograph	ug/g	106.2	<1.25E-01	5.36E+05	51.94	52.03	0.37	n/a	n/a	1.59E+03	n/a
S9810020143	W	Phosphate-IC-Dionex 4000/4500	ug/g	106.2	<1.25E-01	5.36E+05	51.94	52.03	0.37	n/a	n/a	1.59E+03	n/a
S9810020143	W	Sulfate by Ion Chromatograph	ug/g	99.85	<1.20E-01	1.12E+04	1.09E+04	1.09E+04	6.43	n/a	n/a	1.62E+03	n/a
S9810020143	W	Sulfate by IC-Dionex 4000/4500	ug/g	99.85	<1.38E-01	2.44E+03	1.90E+03	2.11E+03	24.9	n/a	n/a	1.87E+03	n/a
S9810020143	W	Oxalate-IC-Dionex 4000/4500	ug/g	104.3	<1.03E-01	1.83E+03	2.03E+03	1.93E+03	10.4	n/a	n/a	1.42E+03	n/a

Drainable Liquid

Sample#	R#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count	Err%
S981002035	D	DSC Exotherm Dry, Calculated	Joules/g DRY	n/a	n/a	48.45	45.99	47.22	5.21	n/a	n/a	n/a	n/a
S981002035	D	% Water by TGA on Perkin Elmer	Joules/g	99.33	n/a	23.24	23.24	23.24	5.21	n/a	n/a	n/a	n/a
S981002035	F	Fumes by Ion Chromatograph	ug/mL	98.42	n/a	52.13	51.94	52.03	0.37	n/a	n/a	n/a	n/a
S981002035	A	Alumina by ISE-STD Additions	ug/mL	93.18	<2.10E-02	2.91E+02	2.94E+03	2.92E+03	1.03	100.0	151.5	n/a	n/a
S981002036	D	Specific Gravity	Sp. G.	99.22	<9.000	5.780	<5.00E+00	n/a	n/a	n/a	1.80E-02	5,00E+02	n/a
S981002036	D	Aluminum-IC-Acid Dil.	ug/mL	98.99	<5.00E-02	1.312	1.304	1.308	0.61	n/a	1,00E-03	n/a	n/a
S981002036	D	Boron-IC-Acid Dil.	ug/mL	98.60	<5.00E-02	2.11E+04	2.12E+04	2.12E+04	0.47	n/a	30.10	n/a	n/a
S981002036	D	Barium-IC-Acid Dil.	ug/mL	101.0	<5.00E-02	90.20	89.90	90.05	0.53	96.90	30.10	n/a	n/a
S981002036	D	Bismuth-IC-Acid Dil.	ug/mL	99.40	<5.00E-02	30.10	<3.01E1	n/a	n/a	94.90	30.10	n/a	n/a
S981002036	D	Calcium-IC-Acid Dil.	ug/mL	100.2	<1.00E-01	60.10	<6.01E1	n/a	n/a	97.10	60.10	n/a	n/a
S981002036	D	Chromium-IC-Acid Dil.	ug/mL	99.20	<1.00E-01	95.80	84.70	90.25	17.4	101.0	60.10	n/a	n/a
S981002036	D	Iron-IC-Acid Dil.	ug/mL	97.80	<5.00E-02	6.88E+02	680.0	682.5	0.73	151.0	6.010	n/a	n/a
S981002036	D	Potassium-IC-Acid Dil.	ug/mL	99.60	<5.00E-01	2.92E+03	2.91E+03	2.92E+03	0.8	105.0	30.10	n/a	n/a
S981002036	D	Lithium-IC-Acid Dil.	ug/mL	100.8	<1.00E-02	6.010	<6.01E0	6.010	0.34	92.70	300.0	n/a	n/a
S981002036	D	Sodium-IC-Acid Dil.	ug/mL	98.40	<1.00E-02	2.07E+05	<6.01E0	n/a	n/a	94.80	6.010	n/a	n/a
S981002036	D	Nickel-IC-Acid Dil.	ug/mL	103.0	<1.00E-01	2.08E+05	2.08E+05	2.08E+05	0.48	97.80	6.010	n/a	n/a
S981002036	D	Silicon-IC-Acid Dil.	ug/mL	99.60	<2.00E-02	12.00	<1.20E1	11.0	3.6	94.0	30.10	n/a	n/a
S981002036	D	Uranium-IC-Acid Dil.	ug/mL	97.30	<5.00E-01	<5.01E+02	<3.01E2	108.0	0.72	97.00	300.0	n/a	n/a
S981002036	D	Zinc-IC-Acid Dil.	ug/mL	96.20	<1.00E-02	6.010	<6.01E0	n/a	n/a	96.70	6.010	n/a	n/a
S981002036	F	Zirconium-IC-Acid Dil.	ug/mL	97.90	<1.00E-02	<1.22E2	<6.01E0	n/a	n/a	93.70	6.010	n/a	n/a
S981002036	F	Fluoride-IC-Dionex 4000/4500	ug/mL	97.90	<1.20E-02	7.67E+02	<1.22E2	n/a	n/a	131.0	122.4	n/a	n/a
S981002036	F	Chloride-IC-Dionex 4000/4500	ug/mL	100.0	7.60E-02	7.88E+03	7.88E+03	7.78E+03	2.70	95.2	173.4	n/a	n/a
S981002036	F	Bromide by Ion Chromatograph	ug/mL	99.45	<1.05E-01	9.92E+04	1.02E+05	1.01E+05	2.78	102.8	1.09E+03	n/a	n/a
S981002036	F	Nitrate by Ion Chromatograph	ug/mL	100.8	<1.28E-01	<1.28E+03	<1.28E3	n/a	n/a	96.16	1.28E+03	n/a	n/a
S981002036	F	Phosphate-IC-Dionex 4000/4500	ug/mL	105.1	<1.39E-01	2.34E+05	2.34E+05	2.34E+05	0.00	93.16	1.42E+03	n/a	n/a
S981002036	F	Sulfate by IC-Dionex 4000/4500	ug/mL	101.1	<1.20E-01	4.08E+02	3.79E+03	3.94E+03	7.37	97.62	1.22E+03	n/a	n/a
S981002036	F	Sulfate by IC-Dionex 4000/4500	ug/mL	98.28	<1.38E-01	4.90E+03	5.47E+03	5.18E+03	11.0	97.49	1.41E+03	n/a	n/a
S981002036	F	Oxalate-IC-Dionex 4000/4500	ug/mL	101.1	1.29E-01	<1.07E+03	<1.07E3	n/a	n/a	100.0	1.07E+03	n/a	n/a

Table 1. Data Summary Report.  
U-107 (2)

CORE NUMBER: 242  
 SEGMENT #: 2A  
 SEGMENT PORTION: Drainable Liquid

Sample#	R #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD % Spk. Rec. %	Det Limit	Count	Err%
S981002045		DSC Exotherm DRY Calculated	Joules/g Dry	n/a	n/a	40.32	45.90	43.11	12.9	n/a	n/a	n/a
S981002045		DSC Exotherm on Perkin Elmer	Joules/g	100.4	n/a	19.58	22.29	20.93	12.9	n/a	n/a	n/a
S981002045		% Water by TGA on Perkin Elmer	Joules/g	98.52	n/a	51.60	51.27	51.44	0.64	n/a	n/a	n/a
S981002045		Formate by Ion Chromatograph	ug/ml	93.18	< 2.10e-02	2.46e+03	2.45e+03	2.46e+03	0.41	n/a	131.5	n/a
S981002045		Alpha In Liquid Samples	uCi/ml	95.00	< 1.01e-02	< 7.59e-03	< 7.59e-03	n/a	n/a	n/a	1.80e-02	5.00E+02
S981002046		Ammonia by ISE-std Additions	ug/ml	99.22	< 5.000	30.80	51.00	50.90	0.39	n/a	5.000	n/a
S981002046		Specific Gravity	Sp.G.	98.99	n/a	1.335	1.337	1.336	0.15	n/a	1.00e-03	n/a
S981002046		D Aluminum-ICP-Acid Dil.	ug/ml	98.60	< 5.00e-02	2.03e+04	2.05e+04	2.04e+04	0.98	n/a	30.10	n/a
S981002046		D Boron-ICP-Acid Dil.	ug/ml	101.0	< 5.00e-02	89.10	91.60	90.35	2.77	n/a	30.10	n/a
S981002046		D Barium-ICP-Acid Dil.	ug/ml	99.40	< 5.00e-02	< 30.10	< 30.10	n/a	n/a	n/a	30.10	n/a
S981002046		D Bismuth-ICP-Acid Dil.	ug/ml	100.2	< 1.00e-01	60.10	< 60.10	n/a	n/a	n/a	60.10	n/a
S981002046		D Calcium-ICP-Acid Dil.	ug/ml	100.2	< 1.00e-01	83.60	79.40	81.50	5.15	n/a	60.10	n/a
S981002046		D Chromium-ICP-Acid Dil.	ug/ml	99.20	< 1.00e-02	6.41e+02	638.0	639.5	0.47	n/a	6.010	n/a
S981002046		D Iron-ICP-Acid Dil.	ug/ml	97.80	< 5.00e-02	< 30.10	< 30.10	n/a	n/a	n/a	300.0	n/a
S981002046		D Potassium-ICP-Acid Dil.	ug/ml	99.60	< 5.00e-01	2.81e+03	2.73e+03	2.77e+03	2.89	n/a	300.0	n/a
S981002046		D Lithium-ICP-Acid Dil.	ug/ml	100.8	< 1.00e-02	< 6.010	< 6.010	n/a	n/a	n/a	6.010	n/a
S981002046		D Manganese-ICP-Acid Dil.	ug/ml	98.40	< 1.00e-02	< 2.09e+05	< 2.14e+05	2.12e+05	2.36	n/a	60.10	n/a
S981002046		D Sodium-ICP-Acid Dil.	ug/ml	103.0	< 1.00e-01	12.00	< 1.20e1	n/a	n/a	n/a	12.00	n/a
S981002046		D Nickel-ICP-Acid Dil.	ug/ml	99.60	< 2.00e-02	3.24e+02	323.0	323.5	0.31	n/a	30.10	n/a
S981002046		D Silicon-ICP-Acid Dil.	ug/ml	98.60	< 5.00e-01	< 5.01e+02	< 5.01e2	n/a	n/a	n/a	300.0	n/a
S981002046		D Uranium-ICP-Acid Dil.	ug/ml	97.30	< 5.00e-01	< 6.010	< 6.010	n/a	n/a	n/a	6.010	n/a
S981002046		D Zinc-ICP-Acid Dil.	ug/ml	96.20	< 1.00e-02	< 6.010	< 6.010	n/a	n/a	n/a	6.010	n/a
S981002046		D Zirconium-ICP-Acid Dil.	ug/ml	97.00	< 1.00e-02	< 1.22e+02	< 1.22e+02	n/a	n/a	n/a	173.4	n/a
S981002046		Fluoride-IC-Dionex 4000/4500	ug/ml	100.0	< 7.60e-02	7.51e+03	7.61e+03	7.59e+03	0.53	n/a	1.10e+03	n/a
S981002046		Chloride-IC-Dionex 4000/4500	ug/ml	101.1	< 1.59e-01	9.78e+04	9.82e+04	9.80e+04	0.41	n/a	1.28e+03	n/a
S981002046		Nitrate-IC - Dionex 4000/4500	ug/ml	99.45	< 1.08e-01	< 1.28e+03	< 1.28e+03	n/a	n/a	n/a	1.28e+03	n/a
S981002046		Bromide by Ion Chromatograph	ug/ml	105.2	< 1.59e-01	3.52e+05	2.31e+05	2.32e+05	0.43	n/a	1.42e+03	n/a
S981002046		Nitrate by IC-Dionex 4000/4500	ug/ml	101.1	< 1.59e-01	3.58e+03	3.70e+03	3.64e+03	3.30	n/a	1.22e+03	n/a
S981002046		Phosphate-IC-Dionex 4000/4500	ug/ml	98.28	< 1.58e-01	5.02e+03	4.61e+03	4.81e+03	8.52	n/a	1.41e+03	n/a
S981002046		Sulfate by IC-Dionex 4000/4500	ug/ml	101.1	< 1.59e-01	< 1.07e+03	< 1.07e+03	n/a	n/a	n/a	1.07e+03	n/a

Table 1. Data Summary Report.  
U-107 (2)

CORE NUMBER: 242  
SEGMENT #: 5

SEGMENT PORTION: L Lower Half of Segment

Sample#	R#	Analyte	Unit	Standard	Blank	Result	Duplicate	Average	RPB %	Spk. Rec. %	Det Limit	Count
S981002327		DSC Exotherm DRY Calculated	Joules/g DRY	N/A	N/A	7.540	6.640	7.000	12.7	N/A	N/A	N/A
S981002327		DSC Exotherm on Perkin Elmer	Joules/g	99.162	N/A	6.800	5.990	6.395	12.7	N/A	N/A	N/A
S981002327		% Water by IGA on Perkin Elmer	%	98.62	N/A	9.800	9.850	9.825	0.51	N/A	N/A	N/A
S981002328	F	Aluminum - ICP-Fusion	ug/g	100.2	<5.00e-02	1.75e+04	1.66e+04	1.70e+04	5.28	N/A	1.01e+03	N/A
S981002328	F	Boron - ICP-Fusion	ug/g	100.2	<5.00e-02	<1.01e+03	<1.02e3	N/A	N/A	N/A	1.01e+03	N/A
S981002328	F	Barium - ICP-Fusion	ug/g	100.2	<5.00e-02	<2.02e+03	<2.04e3	N/A	N/A	N/A	1.01e+03	N/A
S981002328	F	Bismuth - ICP-Fusion	ug/g	100.2	<5.00e-02	<2.02e+03	<2.04e3	N/A	N/A	N/A	1.01e+03	N/A
S981002328	F	Calcium - ICP-Fusion	ug/g	99.40	<1.00e-01	<2.02e+03	<2.04e3	N/A	N/A	N/A	2.02e+03	N/A
S981002328	F	Chromium - ICP-Fusion	ug/g	98.60	<1.00e-02	1.32e+03	1.30e+03	1.31e+03	1.53	N/A	202.0	N/A
S981002328	F	Iron - ICP-Fusion	ug/g	98.00	<5.00e-02	<1.01e+03	<1.02e3	N/A	N/A	N/A	1.01e+03	N/A
S981002328	F	Lithium - ICP-Fusion	ug/g	103.4	<5.00e-02	<2.02e+02	<2.04e2	N/A	N/A	N/A	202.0	N/A
S981002328	F	Manganese - ICP-Fusion	ug/g	98.20	<1.00e-02	<2.02e+02	<2.04e2	N/A	N/A	N/A	202.0	N/A
S981002328	F	Sodium - ICP-Fusion	ug/g	105.8	<1.00e-01	2.35e+05	2.25e+05	2.30e+05	4.35	N/A	2.02e+03	N/A
S981002328	F	Silicon - ICP-Fusion	ug/g	97.80	<5.00e-02	<1.01e+03	<1.02e4	N/A	N/A	N/A	1.01e+04	N/A
S981002328	F	Uranium - ICP-Fusion	ug/g	98.90	<5.00e-01	<1.01e+02	<2.04e2	N/A	N/A	N/A	202.0	N/A
S981002328	F	Zinc - ICP-Fusion	ug/g	94.40	<1.00e-02	<2.02e+02	<2.04e2	N/A	N/A	N/A	202.0	N/A
S981002328	F	Zirconium - ICP-Fusion	ug/g	97.40	<1.41e-03	4.90e-02	4.74e-02	4.82e-02	3.32	N/A	3.00e-03	1.65E+01
S981002329	F	Alpha of Digested Solid	uCi/g	87.78	<1.41e-03	1.43e+04	1.68e+04	1.56e+04	16.1	N/A	31.20	N/A
S981002329	F	Aluminum - ICP-Acid Digest	ug/g	96.00	1.07e-01	1.50e+02	143.0	146.5	4.78	N/A	31.20	N/A
S981002329	A	Boron - ICP-Acid Digest	ug/g	105.8	5.19e-01	<31.10	<3.05e1	N/A	N/A	N/A	31.20	N/A
S981002329	A	Barium - ICP-Acid Digest	ug/g	97.00	<5.00e-02	<62.20	<6.10e1	N/A	N/A	N/A	62.10	N/A
S981002329	A	Bismuth - ICP-Acid Digest	ug/g	90.40	<1.00e-01	1.32e+02	147.0	139.5	10.8	N/A	62.10	N/A
S981002329	A	Calcium - ICP-Acid Digest	ug/g	98.20	<1.32e-01	1.22e+03	1.27e+03	1.24e+03	4.02	N/A	31.20	N/A
S981002329	A	Chromium - ICP-Acid Digest	ug/g	95.40	<5.00e-02	5.41e+02	614.0	577.5	12.6	N/A	31.20	N/A
S981002329	A	Iron - ICP-Acid Digest	ug/g	93.20	<5.00e-01	9.40e+02	806.0	875.0	15.3	N/A	312.0	N/A
S981002329	A	Potassium - ICP-Acid Digest	ug/g	98.20	<1.00e-02	<6.220	<6.10e0	N/A	N/A	N/A	6.210	N/A
S981002329	A	Lithium - ICP-Acid Digest	ug/g	93.60	<1.00e-02	97.50	109.0	103.2	11.1	N/A	6.210	N/A
S981002329	A	Manganese - ICP-Acid Digest	ug/g	122.8	7.39e-01	2.24e+05	2.27e+05	2.26e+05	1.33	N/A	62.10	N/A
S981002329	A	Sodium - ICP-Acid Digest	ug/g	94.80	<2.00e-02	14.60	15.20	14.90	4.03	N/A	12.40	N/A
S981002329	A	Nickel - ICP-Acid Digest	ug/g	95.90	8.82e-01	6.51e+02	656.0	653.5	0.77	N/A	31.20	N/A
S981002329	A	Uranium - ICP-Acid Digest	ug/g	99.50	<5.00e-01	<3.11e+02	<3.05e2	N/A	N/A	N/A	312.0	N/A
S981002329	A	Zinc - ICP-Acid Digest	ug/g	86.40	<1.00e-02	15.90	19.30	17.60	19.3	N/A	6.210	N/A
S981002329	A	Zirconium - ICP-Acid Digest	ug/g	93.60	<1.00e-02	<6.220	<6.10e0	N/A	N/A	N/A	6.210	N/A
S981002330	W	Formate by IC-Dionex 4000/4500	ug/g	86.56	<2.10e-02	4.49e+02	484.0	466.6	7.50	N/A	132.7	N/A
S981002330	W	Fluoride-IC-Dionex 4000/4500	ug/g	109.5	<1.20e-02	2.13e+02	255.0	234.1	17.9	N/A	158.0	N/A
S981002330	W	Chloride-IC-Dionex 4000/4500	ug/g	105.8	<1.70e-02	2.28e+03	2.41e+03	2.35e+03	5.54	N/A	223.9	N/A
S981002330	W	Nitrite-IC-Dionex 4000/4500	ug/g	101.1	<3.35e-01	1.28e+04	2.36e+04	2.32e+04	3.45	N/A	1.42e+03	N/A
S981002330	W	Bromide by Ion Chromatograph	ug/g	107.3	<1.25e-01	6.81e+03	<1.71e3	N/A	N/A	N/A	1.65e+03	N/A
S981002330	W	Nitrate by IC-Dionex 4000/4500	ug/g	99.49	<1.39e-01	5.60e+05	5.81e+05	5.71e+05	3.68	N/A	1.58e+03	N/A
S981002330	W	Phosphate-IC-Dionex 4000/4500	ug/g	98.72	<1.20e-01	6.24e+03	6.37e+03	6.49e+03	7.56	N/A	1.82e+03	N/A
S981002330	W	Sulfate by IC-Dionex 4000/4500	ug/g	105.3	<1.35e-01	<1.82e+03	<1.89e3	N/A	N/A	N/A	1.38e+03	N/A
S981002330	W	Oxalate-IC-Dionex 4000/4500	ug/g	101.5	<1.05e-01	<1.31e+03	<1.44e3	N/A	N/A	N/A	1.38e+03	N/A

Table 1. Data Summary Report.  
U-107 (2)

CORE NUMBER: 242  
SEGMENT #: 0

SEGMENT PORTION: U Upper Half of Segment

Sample ID	R #	Analyte	Unit	Standard	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S981002342		DSC Exotherm Dry Calculated	koules/g Dry	N/A	N/A	2.310	0.00e+00	1.155	200	N/A	N/A	N/A
S981002342		DSC Exotherm on Perkin Elmer	koules/g	100.2	N/A	2.130	0.00e+00	1.065	200	N/A	N/A	N/A
S981002342		% Water by TGA on Perkin Elmer	%	99.16	N/A	8.200	7.550	7.875	200	N/A	N/A	N/A
S981002343	F	Aluminum - ICP-Fusion	ug/g	100.8	< 5.00e-02	5.85e+03	6.19e+03	6.02e+03	5.65	N/A	1.02e+03	N/A
S981002343	F	Boron - ICP-Fusion	ug/g	100.4	< 1.00e-02	< 1.02e+03	< 1.01e3	N/A	N/A	N/A	1.02e+03	N/A
S981002343	F	Barium - ICP-Fusion	ug/g	102.8	< 5.00e-02	< 1.03e+03	< 1.01e3	N/A	N/A	N/A	1.02e+03	N/A
S981002343	F	Bismuth - ICP-Fusion	ug/g	102.0	< 1.00e-01	< 2.03e+03	< 2.02e3	N/A	N/A	N/A	2.03e+03	N/A
S981002343	F	Calcium - ICP-Fusion	ug/g	103.8	< 1.00e-01	< 2.03e+03	< 2.02e3	N/A	N/A	N/A	2.03e+03	N/A
S981002343	F	Chromium - ICP-Fusion	ug/g	101.8	< 1.00e-02	< 2.39e+03	< 2.38e+03	2.38e+03	15.1	N/A	203.0	N/A
S981002343	F	Iron - ICP-Fusion	ug/g	101.4	< 5.00e-02	< 1.02e+03	1.04e+03	N/A	N/A	N/A	1.02e+03	N/A
S981002343	F	Lithium - ICP-Fusion	ug/g	101.6	< 1.00e-02	< 2.03e+02	< 2.02e2	N/A	N/A	N/A	203.0	N/A
S981002343	F	Manganese - ICP-Fusion	ug/g	101.0	< 1.00e-02	< 2.32e+02	300.0	265.0	25.6	N/A	203.0	N/A
S981002343	F	Sodium - ICP-Fusion	ug/g	104.4	< 1.00e-01	< 2.49e+05	2.46e+05	2.48e+05	1.21	N/A	2.03e+03	N/A
S981002343	F	Nickel - ICP-Fusion	ug/g	99.80	< 2.78e-01	8.65e+03	5.94e+03	7.30e+03	37.1	N/A	406.0	N/A
S981002343	F	Silicon - ICP-Fusion	ug/g	100.0	< 5.00e-02	< 1.02e+03	< 1.01e3	N/A	N/A	N/A	1.02e+03	N/A
S981002343	F	Uranium - ICP-Fusion	ug/g	97.60	< 5.00e-01	< 1.02e+04	< 1.01e4	N/A	N/A	N/A	1.02e+04	N/A
S981002343	F	Zinc - ICP-Fusion	ug/g	100.0	< 1.00e-02	< 2.03e+02	< 2.02e2	N/A	N/A	N/A	203.0	N/A
S981002343	F	Zirconium - ICP-Fusion	ug/g	99.40	< 1.06e-01	4.46e+03	4.58e+03	4.52e+03	2.65	N/A	203.0	N/A
S981002344	A	Aluminum - ICP-Acid Digest	ug/g	106.4	4.97e-01	97.30	71.20	84.25	31.0	N/A	28.90	N/A
S981002344	A	Boron - ICP-Acid Digest	ug/g	99.60	< 5.00e-02	< 28.90	< 2.98e1	N/A	N/A	N/A	28.90	N/A
S981002344	A	Barium - ICP-Acid Digest	ug/g	95.80	< 1.00e-01	< 57.80	< 5.97e1	N/A	N/A	N/A	57.90	N/A
S981002344	A	Bismuth - ICP-Acid Digest	ug/g	104.0	< 1.24e-01	67.10	76.70	71.90	13.4	N/A	57.90	N/A
S981002344	A	Calcium - ICP-Acid Digest	ug/g	99.00	< 1.00e-02	1.72e+03	2.03e+03	1.88e+03	16.5	N/A	28.90	N/A
S981002344	A	Chromium - ICP-Acid Digest	ug/g	96.00	< 5.00e-02	5.30e+02	553.0	541.5	4.25	N/A	28.90	N/A
S981002344	A	Iron - ICP-Acid Digest	ug/g	100.2	< 5.00e-01	6.27e+02	605.0	616.0	3.57	N/A	289.0	N/A
S981002344	A	Potassium - ICP-Acid Digest	ug/g	100.2	< 1.00e-02	< 5.760	< 5.97e0	N/A	N/A	N/A	5.790	N/A
S981002344	A	Lithium - ICP-Acid Digest	ug/g	97.40	< 1.00e-02	< 1.20e+02	121.0	120.5	0.83	N/A	5.790	N/A
S981002344	A	Manganese - ICP-Acid Digest	ug/g	122.0	< 7.38e-01	2.31e+05	2.29e+05	2.30e+05	0.87	N/A	57.90	N/A
S981002344	A	Nickel - ICP-Acid Digest	ug/g	99.00	< 2.00e-02	12.80	< 1.19e1	N/A	N/A	N/A	11.60	N/A
S981002344	A	Silicon - ICP-Acid Digest	ug/g	97.30	< 5.00e-01	1.95e+02	203.0	198.0	5.05	N/A	28.90	N/A
S981002344	A	Uranium - ICP-Acid Digest	ug/g	90.60	< 1.00e-02	< 2.89e+02	< 2.98e2	N/A	N/A	N/A	289.0	N/A
S981002344	A	Zinc - ICP-Acid Digest	ug/g	94.80	< 1.00e-02	9.450	10.00	9.725	5.66	N/A	5.790	N/A
S981002345	U	Formate by IC-Dionex 4000/4500	ug/g	89.92	< 2.10e-02	4.84e+02	457.0	470.4	5.74	N/A	259.3	N/A
S981002345	U	Fluoride by IC-Dionex 4000/4500	ug/g	106.6	< 1.20e-02	98.37	108.0	103.2	9.30	N/A	97.95	N/A
S981002345	U	Chloride by IC-Dionex 4000/4500	ug/g	108.2	< 1.70e-02	1.25e+03	1.21e+03	1.23e+03	3.25	N/A	138.8	N/A
S981002345	U	Nitrite by Ion Chromatograph	ug/g	101.5	< 3.11e-01	1.52e+04	1.47e+04	1.49e+04	3.34	N/A	881.9	N/A
S981002345	U	Bromide by Ion Chromatograph	ug/g	105.1	< 1.25e-01	< 1.02e+03	< 1.02e3	N/A	N/A	N/A	1.02e+03	N/A
S981002345	U	Nitrate by IC-Dionex 4000/4500	ug/g	99.09	< 1.64e-01	5.60e+05	5.71e+05	5.66e+05	1.95	N/A	1.1e+03	N/A
S981002345	U	Phosphate by IC-Dionex 4000/4500	ug/g	100.2	< 1.20e-01	1.63e+04	1.78e+04	1.70e+04	8.80	N/A	979.5	N/A
S981002345	U	Sulfate by IC-Dionex 4000/4500	ug/g	102.5	< 1.38e-01	< 1.35e3	< 1.35e3	N/A	N/A	N/A	1.3e+03	N/A
S981002345	U	Oxalate by IC-Dionex 4000/4500	ug/g	101.7	< 1.05e-01	1.40e+03	976.0	1.19e+03	35.7	N/A	857.3	N/A

25-Jan-1999 07:18:50  
A-0002-1

L Lower Half of Segment: L Lower Half of Segment

Sample#	R #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count	Err%
S981002331		Bulk Density of Sample	g/cm	N/A	N/A	1.690	N/A	N/A	N/A	N/A	5.00E-01		N/A
S981002332		Bulk Density of Sample	g/cm	N/A	N/A	0.00E+00	0.00E+00	0.00E+00	0.00	N/A	N/A		N/A
S981002333		ASC Exotherm DRY - Calculated	calories/g DRY	N/A	N/A	0.00E+00	0.00E+00	0.00E+00	0.00	N/A	N/A		N/A
S981002334		ASC Exotherm on Perkin Elmer	calories/g	93.71	N/A	0.00E+00	0.00E+00	0.00E+00	0.00	N/A	N/A		N/A
S981002335		% Water by IGA on Perkin Elmer	%	100.2	N/A	39.48	35.02	37.25	12.0	N/A	N/A		N/A
S981002336		F Aluminum - ICP-Fusion	ug/g	100.8	<5.00E-02	2.44E+04	2.35E+04	2.40E+04	3.76	N/A	1.01E+08		N/A
S981002337		F Boron - ICP-Fusion	ug/g	100.8	<5.00E-02	<1.01E+03	<1.00E3	N/A	N/A	N/A	1.01E+08		N/A
S981002338		F Barium - ICP-Fusion	ug/g	102.8	<5.00E-01	<2.02E+03	<2.00E3	N/A	N/A	N/A	1.01E+08		N/A
S981002339		F Calcium - ICP-Fusion	ug/g	103.8	<1.00E-01	<2.02E+03	<2.00E3	N/A	N/A	N/A	1.01E+08		N/A
S981002340		F Chromium - ICP-Fusion	ug/g	103.8	<1.00E-01	<2.02E+03	<2.00E3	N/A	N/A	N/A	2.02E+08		N/A
S981002341		F Iron - ICP-Fusion	ug/g	101.8	<1.00E-02	8.34E+03	8.12E+03	8.35E+03	0.24	N/A	2.02E+08		N/A
S981002342		F Lithium - ICP-Fusion	ug/g	101.4	<1.00E-02	<2.02E+02	<2.00E2	N/A	N/A	N/A	1.01E+08		N/A
S981002343		F Manganese - ICP-Fusion	ug/g	101.6	<1.00E-01	1.27E+03	1.26E+03	1.26E+03	N/A	N/A	2.02E+08		N/A
S981002344		F Sodium - ICP-Fusion	ug/g	104.4	<1.00E-01	2.08E+03	2.06E+03	2.06E+03	1.45	N/A	2.02E+08		N/A
S981002345		F Silicon - ICP-Fusion	ug/g	99.80	<5.00E-01	1.50E+03	1.89E+03	1.70E+03	23.0	N/A	1.01E+08		N/A
S981002346		F Uranium - ICP-Fusion	ug/g	100.0	<5.00E-01	<1.01E+04	<1.00E4	N/A	N/A	N/A	1.01E+08		N/A
S981002347		F Zinc - ICP-Fusion	ug/g	97.60	<1.00E-02	<2.02E+02	<2.00E2	N/A	N/A	N/A	2.02E+08		N/A
S981002348		F Zirconium - ICP-Fusion	ug/g	99.60	<2.68E-02	5.25E-01	4.72E-01	4.98E-01	0.6	N/A	1.50E+08		N/A
S981002349		F Alpha of Digested Solid	ug/g	106.4	4.97E-01	66.10	161.0	113.5	85.6	N/A	5.00E+08		N/A
S981002350		F Aluminum - ICP-Acid Digest	ug/g	106.4	4.97E-01	66.10	161.0	113.5	85.6	N/A	5.00E+08		N/A
S981002351		F Boron - ICP-Acid Digest	ug/g	99.60	<5.00E-02	< 29.30	<3.06E1	N/A	N/A	N/A	5.00E+08		N/A
S981002352		F Barium - ICP-Acid Digest	ug/g	95.80	<1.00E-01	1.51E+02	152.0	151.5	0.66	N/A	5.00E+08		N/A
S981002353		F Bismuth - ICP-Acid Digest	ug/g	104.0	1.24E-01	3.86E+02	360.0	373.0	6.97	N/A	5.00E+08		N/A
S981002354		F Calcium - ICP-Acid Digest	ug/g	99.00	<1.00E-02	7.53E+03	8.15E+03	7.84E+03	7.91	N/A	5.00E+08		N/A
S981002355		F Chromium - ICP-Acid Digest	ug/g	96.00	<5.00E-02	5.57E+03	5.79E+03	5.68E+03	5.87	N/A	5.00E+08		N/A
S981002356		F Iron - ICP-Acid Digest	ug/g	100.2	<5.00E-01	1.14E+03	1.26E+03	1.20E+03	10.0	N/A	5.00E+08		N/A
S981002357		F Potassium - ICP-Acid Digest	ug/g	97.40	<1.00E-02	< 5.860	<6.1260	N/A	N/A	N/A	5.00E+08		N/A
S981002358		F Lithium - ICP-Acid Digest	ug/g	97.40	<1.00E-02	1.08E+03	1.20E+03	1.14E+03	10.5	N/A	5.00E+08		N/A
S981002359		F Manganese - ICP-Acid Digest	ug/g	122.0	7.38E-01	1.74E+05	1.97E+05	1.86E+05	12.4	N/A	5.00E+08		N/A
S981002360		F Sodium - ICP-Acid Digest	ug/g	99.00	<2.00E-01	81.80	75.90	78.95	7.48	N/A	5.00E+08		N/A
S981002361		F Nickel - ICP-Acid Digest	ug/g	97.30	<5.00E-01	6.20E+02	709.0	431.5	5.62	N/A	2.02E+08		N/A
S981002362		F Silicon - ICP-Acid Digest	ug/g	142.0	1.190	4.20E+02	443.0	65.05	4.77	N/A	5.00E+08		N/A
S981002363		F Uranium - ICP-Acid Digest	ug/g	90.60	<1.00E-02	63.50	66.60	65.05	4.77	N/A	5.00E+08		N/A
S981002364		F Zinc - ICP-Acid Digest	ug/g	94.80	<1.00E-02	25.40	11.50	18.45	75.3	N/A	2.02E+08		N/A
S981002365		F Zirconium - ICP-Acid Digest	ug/g	89.92	<2.10E-02	1.50E+03	1.65E+03	1.58E+03	9.52	N/A	2.02E+08		N/A
S981002366		F Formate by IC-Dionex 4000/4500	ug/g	106.6	<1.20E-02	2.70E+02	280.0	275.2	3.64	N/A	5.00E+08		N/A
S981002367		F Chloride by IC-Dionex 4000/4500	ug/g	108.2	<1.70E-02	3.78E+03	3.64E+03	3.71E+03	3.77	N/A	5.00E+08		N/A
S981002368		F Nitrate by IC-Dionex 4000/4500	ug/g	101.5	<3.11E-01	4.04E+04	3.89E+04	3.96E+04	3.78	N/A	5.00E+08		N/A
S981002369		F Bromide by Ion Chromatograph	ug/g	105.1	<1.26E-01	<1.03E+03	<1.02E3	N/A	N/A	N/A	1.03E+08		N/A
S981002370		F Nitrate by IC-Dionex 4000/4500	ug/g	100.2	<1.64E-01	2.90E+05	2.91E+05	2.90E+05	0.34	N/A	1.03E+08		N/A
S981002371		F Nitrate by IC-Dionex 4000/4500	ug/g	102.5	<1.38E-01	5.75E+04	5.70E+04	5.73E+04	0.87	N/A	1.03E+08		N/A
S981002372		F Phosphate by IC-Dionex 4000/4500	ug/g	102.5	<1.38E-01	1.68E+03	1.57E+03	1.63E+03	6.77	N/A	1.03E+08		N/A
S981002373		F Sulfate by IC-Dionex 4000/4500	ug/g	101.7	<1.03E-01	1.00E+04	1.06E+04	1.03E+04	5.85	N/A	1.03E+08		N/A
S981002374		F Oxalate-IC-Dionex 4000/4500	ug/g	101.7	<1.03E-01	1.00E+04	1.06E+04	1.03E+04	5.85	N/A	1.03E+08		N/A



Table 1. Data Summary Report.  
U-107 (2)

CORE NUMBER: 242  
SEGMENT #: 7

SEGMENT PORTION: L Lower Half of Segment

Sample #	R #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S981002332		Bulk Density	g/mL		N/A	1.770	N/A	N/A	N/A	N/A	5.00e-01	N/A
S981002333		DSC Exotherm Dry Calculated	Joules/g DRY	N/A	N/A	0.00e+00	0.00e+00	0.00e+00	0.00	N/A	N/A	N/A
S981002334		DSC Exotherm on Perkin Elmer	Joules/g	93.71	N/A	0.00e+00	0.00e+00	0.00e+00	0.00	N/A	N/A	N/A
S981002335		% Water by IGA on Perkin Elmer	Joules/g	100.2	N/A	27.07	25.99	26.53	4.07	N/A	N/A	N/A
S981002336	F	Aluminum - ICP-Fusion	ug/g	100.2	<5.00e-02	2.52e+04	5.61e+04	4.05e+04	76.0	N/A	1.03e+03	N/A
S981002336	F	Boron - ICP-Fusion	ug/g	100.4	<5.00e-02	<1.03e+03	<1.04e3	N/A	N/A	N/A	1.03e+03	N/A
S981002336	F	Barium - ICP-Fusion	ug/g	102.8	<5.00e-02	<1.03e+03	<1.04e3	N/A	N/A	N/A	1.03e+03	N/A
S981002336	F	Bismuth - ICP-Fusion	ug/g	102.0	<1.00e-01	<2.07e+03	<2.08e3	N/A	N/A	N/A	2.07e+03	N/A
S981002336	F	Calcium - ICP-Fusion	ug/g	103.8	<1.00e-01	4.96e+03	3.98e+03	4.46e+03	22.4	N/A	2.07e+03	N/A
S981002336	F	Chromium - ICP-Fusion	ug/g	101.8	<1.00e-02	9.70e+03	9.83e+03	9.76e+03	1.33	N/A	207.0	N/A
S981002336	F	Iron - ICP-Fusion	ug/g	100.6	<5.00e-02	1.36e+04	1.29e+04	1.34e+04	6.74	N/A	1.03e+03	N/A
S981002336	F	Lithium - ICP-Fusion	ug/g	101.4	<1.00e-02	<2.07e+02	<2.08e2	N/A	N/A	N/A	207.0	N/A
S981002336	F	Manganese - ICP-Fusion	ug/g	104.4	<1.00e-01	7.21e+03	6.71e+03	6.96e+03	7.18	N/A	207.0	N/A
S981002336	F	Sodium - ICP-Fusion	ug/g	99.80	<5.00e-02	1.93e+05	1.77e+05	1.85e+05	8.65	N/A	2.07e+03	N/A
S981002336	F	Silicon - ICP-Fusion	ug/g	100.0	<5.00e-02	2.88e+03	2.43e+03	2.66e+03	16.9	N/A	1.03e+03	N/A
S981002336	F	Uranium - ICP-Fusion	ug/g	97.60	<1.00e-01	<1.03e+04	<1.04e4	N/A	N/A	N/A	1.03e+04	N/A
S981002336	F	Zinc - ICP-Fusion	ug/g	99.80	<1.00e-02	<2.07e+02	<2.08e2	3.64e+0	4.40	N/A	207.0	N/A
S981002336	F	Zirconium - ICP-Fusion	ug/g	99.80	<1.00e-02	<2.07e+02	<2.08e2	N/A	N/A	N/A	207.0	N/A
S981002336	F	Alpha of Digested Solid	uCi/g	86.11	<2.88e-02	2.190	1.920	2.055	13.1	N/A	3.80e-02	7.18E+00
S981002338	A	Aluminum - ICP-Acid Digest	ug/g	99.40	4.96e-01	2.35e+04	2.40e+04	2.38e+04	2.11	N/A	30.30	N/A
S981002338	A	Boron - ICP-Acid Digest	ug/g	106.4	1.07e-01	118.0	134.0	118.0	27.1	N/A	30.30	N/A
S981002338	A	Barium - ICP-Acid Digest	ug/g	99.60	<5.00e-02	30.80	34.50	32.65	11.3	N/A	30.30	N/A
S981002338	A	Bismuth - ICP-Acid Digest	ug/g	95.80	<1.00e-01	3.42e+02	3.77e+02	359.5	9.74	N/A	60.60	N/A
S981002338	A	Calcium - ICP-Acid Digest	ug/g	104.0	<1.24e-01	4.32e+03	5.23e+03	4.78e+03	19.1	N/A	60.60	N/A
S981002338	A	Chromium - ICP-Acid Digest	ug/g	99.00	<1.00e-02	9.49e+03	9.60e+03	9.54e+03	1.15	N/A	6.060	N/A
S981002338	A	Iron - ICP-Acid Digest	ug/g	96.00	<5.00e-02	1.38e+04	1.55e+04	1.46e+04	11.6	N/A	303.0	N/A
S981002338	A	Potassium - ICP-Acid Digest	ug/g	100.2	<5.00e-01	<6.070	1.73e+03	1.58e+03	18.3	N/A	303.0	N/A
S981002338	A	Lithium - ICP-Acid Digest	ug/g	100.0	<1.00e-02	7.45e+03	<5.79e0	7.92e+03	N/A	N/A	6.060	N/A
S981002338	A	Manganese - ICP-Acid Digest	ug/g	122.0	<7.36e-01	1.87e+05	1.82e+05	1.84e+05	2.71	N/A	60.60	N/A
S981002338	A	Sodium - ICP-Acid Digest	ug/g	99.00	<2.00e-02	1.59e+02	1.45e+02	1.62e+02	4.23	N/A	12.10	N/A
S981002338	A	Nickel - ICP-Acid Digest	ug/g	142.0	1.150	1.17e+03	1.29e+03	1.20e+03	9.76	N/A	30.30	N/A
S981002338	A	Uranium - ICP-Acid Digest	ug/g	97.30	<5.00e-01	9.20e+02	1.08e+03	1.00e+03	16.0	N/A	303.0	N/A
S981002338	A	Zirconium - ICP-Acid Digest	ug/g	90.60	<1.00e-02	3.98e+02	441.0	418.5	10.8	N/A	6.060	N/A
S981002338	A	Zinc - ICP-Acid Digest	ug/g	94.80	<1.00e-02	29.80	29.20	29.50	2.03	N/A	6.060	N/A
S981002340	W	Formate by IC-Dionex 4000/4500	ug/g	89.92	<2.10e-02	1.90e+03	1.67e+03	1.78e+03	12.9	N/A	253.7	N/A
S981002340	W	Fluoride by IC-Dionex 4000/4500	ug/g	106.6	<2.10e-02	1.16e+03	1.36e+03	1.26e+03	15.9	N/A	95.90	N/A
S981002340	W	Chloride by IC-Dionex 4000/4500	ug/g	108.2	<3.11e-01	4.28e+03	3.91e+03	4.09e+03	9.04	N/A	135.8	N/A
S981002340	W	Nitrate by IC-Dionex 4000/4500	ug/g	101.5	3.11e-01	4.44e+04	4.01e+04	4.23e+04	10.2	N/A	863.1	N/A
S981002340	W	Bromide by Ion Chromatograph	ug/g	105.1	<1.25e-01	<9.59e+02	<1.03e3	N/A	N/A	N/A	998.8	N/A
S981002340	W	Nitrate by IC-Dionex 4000/4500	ug/g	100.2	<1.64e-01	2.68e+05	2.63e+05	2.66e+05	1.88	N/A	1.1e+03	N/A
S981002340	W	Phosphate by IC-Dionex 4000/4500	ug/g	99.09	<1.20e-01	5.01e+04	3.18e+04	4.10e+04	44.7	N/A	959.0	N/A
S981002340	W	Sulfate by IC-Dionex 4000/4500	ug/g	102.5	<1.38e-01	1.73e+03	<1.14e3	N/A	N/A	N/A	1.1e+03	N/A
S981002340	W	Oxalate by IC-Dionex 4000/4500	ug/g	101.7	<1.05e-01	3.07e+03	2.82e+03	2.95e+03	8.49	N/A	838.9	N/A

Table 1. Data Summary Report.  
U-107 (2)

Sample#	R AM	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S98T002235	D	DSC Exotherm Dry	Joules/g DRY	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S98T002235	D	DSC Exotherm on Perkin Elmer	Joules/g	93.71	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S98T002235	D	Alumina by ISE-Std Additions	ug/ml	99.22	< 5.000	53.80	55.50	54.65	3.11	108.7	5.000	n/a
S98T002235	D	% Water by TGA on Perkin Elmer	%	100.2	n/a	46.48	51.76	49.12	10.7	n/a	n/a	n/a
S98T002235	D	Alpha in Liquid Samples	CGI/ml	91.11	< 1.30E-03	< 1.39E-03	< 1.30E-3	n/a	n/a	88.02	3.00E-03	5.00E+02
S98T002235	D	Specific Gravity	SP.G.	98.63	n/a	1.254	1.261	1.257	0.56	n/a	1.00E-03	n/a
S98T002235	D	Aluminum-ICP-Acid DIL.	ug/ml	96.20	< 5.00E-02	2.08E+04	2.06E+04	2.07E+04	0.97	18.80	30.10	n/a
S98T002235	D	Boron-ICP-Acid DIL.	ug/ml	99.60	< 5.00E-02	71.40	72.20	71.80	1.11	96.30	30.10	n/a
S98T002235	D	Barium-ICP-Acid DIL.	ug/ml	95.40	< 5.00E-02	< 30.10	< 5.01E1	n/a	n/a	90.60	30.10	n/a
S98T002235	D	Bismuth-ICP-Acid DIL.	ug/ml	98.60	< 1.00E-01	< 60.10	< 6.01E1	n/a	n/a	100.0	60.10	n/a
S98T002235	D	Calcium-ICP-Acid DIL.	ug/ml	102.0	< 1.00E-01	6.40E+02	634.0	637.0	0.94	96.30	60.10	n/a
S98T002235	D	Chromium-ICP-Acid DIL.	ug/ml	98.60	< 5.00E-02	< 30.10	< 3.01E1	n/a	n/a	96.30	30.10	n/a
S98T002235	D	Iron-ICP-Acid DIL.	ug/ml	98.80	< 5.00E-01	2.81E+03	2.68E+03	2.74E+03	4.74	108.0	300.0	n/a
S98T002235	D	Potassium-ICP-Acid DIL.	ug/ml	98.20	< 1.00E-02	< 6.010	< 6.01E0	n/a	n/a	92.90	60.10	n/a
S98T002235	D	Lithium-ICP-Acid DIL.	ug/ml	96.80	< 1.00E-02	< 6.010	< 6.01E0	n/a	n/a	92.90	60.10	n/a
S98T002235	D	Manganese-ICP-Acid DIL.	ug/ml	97.40	< 1.00E-01	2.07E+05	2.09E+05	2.06E+05	0.97	119.63	60.10	n/a
S98T002235	D	Sodium-ICP-Acid DIL.	ug/ml	98.20	< 2.00E-02	16.30	14.00	14.00	15.15	107.0	12.00	n/a
S98T002235	D	Nickel-ICP-Acid DIL.	ug/ml	103.2	< 5.00E-02	1.40E+02	159.0	149.5	12.1	107.0	30.10	n/a
S98T002235	D	Silicon-ICP-Acid DIL.	ug/ml	95.40	< 5.00E-01	< 5.01E+02	< 5.01E2	n/a	n/a	94.90	300.0	n/a
S98T002235	D	Uranium-ICP-Acid DIL.	ug/ml	93.40	< 1.00E-02	< 6.010	< 6.01E0	n/a	n/a	94.30	60.10	n/a
S98T002235	D	Zirconium-ICP-Acid DIL.	ug/ml	108.3	< 2.00E-02	3.09E+03	3.02E+03	3.06E+03	2.62	102.4	60.10	n/a
S98T002235	D	Formate by Ion Chromatograph	ug/ml	103.2	< 1.20E-02	< 61.81	< 6.18E1	n/a	n/a	106.9	61.81	n/a
S98T002235	D	Fluoride-IC-0 Ionex 4000/4500	ug/ml	101.2	< 1.70E-02	8.08E+03	8.40E+03	8.24E+03	3.68	95.12	87.57	n/a
S98T002235	D	Chloride-IC-0 Ionex 4000/4500	ug/ml	98.34	< 1.08E-01	9.82E+04	1.01E+05	9.96E+04	2.81	103.8	556.3	n/a
S98T002235	D	Nitrite-IC-0 Ionex 4000/4500	ug/ml	101.9	< 1.29E-01	< 6.44E+02	< 6.44E2	n/a	n/a	92.32	643.9	n/a
S98T002235	D	Bromide by Ion Chromatograph	ug/ml	102.7	< 1.29E-01	2.46E+05	2.46E+05	2.46E+05	0.0	96.79	716.0	n/a
S98T002235	D	Nitrate by IC-0 Ionex 4000/4500	ug/ml	99.63	< 1.20E-01	3.21E+03	3.21E+03	3.16E+03	2.80	91.41	618.1	n/a
S98T002235	D	Phosphate-IC-0 Ionex 4000/4500	ug/ml	99.43	< 1.38E-01	5.32E+03	5.39E+03	5.35E+03	3.51	97.65	710.8	n/a
S98T002235	D	Sulfate by IC-0 Ionex 4000/4500	ug/ml	98.10	< 1.05E-01	5.78E+02	662.0	619.8	13.5	93.35	540.9	n/a
S98T002235	D	Oxalate-IC-0 Ionex 4000/4500	ug/ml									

Table 1. Data Summary Report.  
U-107 (2)

SEGMENT PORTION: Drainable Liquid

Sample #	R #	Analyte	Unit	Standard %	Blank %	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S281002239	D	BSC Exotherm Dry, Calculated	joules/g Dry	93.71	N/A	0.00e+00	0.00e+00	0.00e+00	0.00	N/A	N/A	N/A
S281002239	D	BSC Exotherm on Perkin Elmer	joules/g	99.22	N/A	0.00e+00	0.00e+00	0.00e+00	0.00	N/A	N/A	N/A
S281002239	D	Ammonia by ISF-Std Additions	ug/mL	100.2	-5.000	48.80	50.30	49.55	3.03	N/A	5.000	N/A
S281002239	D	% Water by IGA on Perkin Elmer	%	100.2	N/A	51.88	51.74	51.81	0.27	N/A	N/A	N/A
S281002239	D	Alpha In Liquid Samples	cc/L	91.11	<1.30e-03	<2.20e-03	<2.50E-3		N/A	N/A	3.00e-03	5.00E+02
S281002240	D	Specific Gravity	kg/L	98.63	N/A	1.397	1.381	1.386	0.72	N/A	1.00e-03	N/A
S281002240	D	Aluminum-ICP-Acid Dil.	ug/mL	96.20	<5.00e-02	2.12e+04	2.12e+04	2.12e+04	0.00	N/A	30.10	N/A
S281002240	D	Barium-ICP-Acid Dil.	ug/mL	95.40	<5.00e-02	69.70	65.70	67.70	5.91	N/A	30.10	N/A
S281002240	D	Bismuth-ICP-Acid Dil.	ug/mL	98.60	<1.00e-01	<30.10	<30.01e1		N/A	N/A	30.10	N/A
S281002240	D	Cadmium-ICP-Acid Dil.	ug/mL	102.0	<1.00e-01	60.10	<60.01e1		N/A	N/A	60.10	N/A
S281002240	D	Chromium-ICP-Acid Dil.	ug/mL	94.80	<1.00e-02	6.33e+02	6.57e0	89.20	5.83	N/A	60.10	N/A
S281002240	D	Iron-ICP-Acid Dil.	ug/mL	94.80	<5.00e-02	<30.10	<30.01e1	635.01	0.63	N/A	6.010	N/A
S281002240	D	Potassium-ICP-Acid Dil.	ug/mL	98.80	<5.00e-01	2.92e+03	3.06e+03	2.99e+03	4.68	N/A	300.0	N/A
S281002240	D	Lithium-ICP-Acid Dil.	ug/mL	98.20	<1.00e-02	<6.010	<6.01e0		N/A	N/A	6.010	N/A
S281002240	D	Manganese-ICP-Acid Dil.	ug/mL	96.80	<1.00e-02	<6.010	<6.01e0		N/A	N/A	6.010	N/A
S281002240	D	Nickel-ICP-Acid Dil.	ug/mL	97.40	<1.00e-01	2.09e+05	2.07e+05	2.08e+05	0.96	N/A	60.10	N/A
S281002240	D	Sodium-ICP-Acid Dil.	ug/mL	98.20	<2.00e-02	13.40	15.10	14.25	11.9	N/A	12.00	N/A
S281002240	D	Silicon-ICP-Acid Dil.	ug/mL	103.2	<5.00e-02	1.14e+02	122.0	118.0	6.78	N/A	30.10	N/A
S281002240	D	Uranium-ICP-Acid Dil.	ug/mL	95.40	<5.00e-01	<3.01e+02	<3.01e2		N/A	N/A	300.0	N/A
S281002240	D	Zinc-ICP-Acid Dil.	ug/mL	93.00	<1.00e-02	<6.010	<6.01e0		N/A	N/A	6.010	N/A
S281002240	D	Zirconium-ICP-Acid Dil.	ug/mL	96.20	<1.00e-02	<6.010	<6.01e0		N/A	N/A	6.010	N/A
S281002240	D	Formate by Ion Chromatograph	ug/mL	108.3	<2.10e-02	3.10e+03	3.12e+03	3.11e+03	0.64	N/A	37.57	N/A
S281002240	D	Fluoride-IC-Dionex 4000/4500	ug/mL	103.0	<1.20e-02	<61.81	<61.81e1		N/A	N/A	61.81	N/A
S281002240	D	Chloride-IC-Dionex 4000/4500	ug/mL	101.2	<1.70e-02	7.71e+03	8.00e+03	7.86e+03	3.69	N/A	87.57	N/A
S281002240	D	Nitrite-IC - Dionex 4000/4500	ug/mL	98.34	<1.25e-01	9.57e+04	9.88e+04	9.73e+04	3.19	N/A	556.3	N/A
S281002240	D	Bromide by Ion Chromatograph	ug/mL	101.9	<1.25e-01	<6.44e+02	<6.44e2		N/A	N/A	643.9	N/A
S281002240	D	Nitrate by IC-Dionex 4000/4500	ug/mL	102.7	<1.39e-01	2.35e+05	2.38e+05	2.36e+05	1.27	N/A	716.0	N/A
S281002240	D	Phosphate-IC-Dionex 4000/4500	ug/mL	97.63	<1.20e-01	3.07e+03	3.02e+03	3.04e+03	1.64	N/A	618.1	N/A
S281002240	D	Sulfate by IC-Dionex 4000/4500	ug/mL	99.43	<1.36e-01	5.58e+03	5.57e+03	5.33e+03	9.20	N/A	710.8	N/A
S281002240	D	Oxalate-IC-Dionex 4000/4500	ug/mL	98.10	<1.05e-01	5.05e+02	5.68e0	5.61e6	2.32	N/A	540.9	N/A

Table 1. Data Summary Report.  
U-107 (2)

CORE NUMBER: 242R  
SEGMENT #: 3

SEGMENT PORTION: Drainable Liquid

Sample #	R #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPB %	Rec %	Det Limit	Count	Err%
S98T002243		DSC Exotherm Dry Calculated	Acoules/g Dry		N/A	75.60	82.90	79.25	9.21	N/A	N/A	N/A	N/A
S98T002243		DSC Exotherm on Perkin Elmer	Acoules/g	98.14	N/A	38.94	42.70	40.82	9.21	N/A	N/A	N/A	N/A
S98T002243		Ammonia by ISF-Std Additions	ug/ml	99.22	<5.000	27.80	27.80	27.80	0.00	N/A	5.000	N/A	N/A
S98T002243		% Water by TGA on Perkin Elmer	wt %	98.03	N/A	50.80	46.19	48.49	9.51	N/A	N/A	N/A	N/A
S98T002243		Alpha In Liquid Samples	cc/ml	91.11	<1.30e-03	2.33e-03	<2.70E-3	N/A	N/A	N/A	3.00e-03	N/A	1.06E+02
S98T002244		Specific Gravity	Sp.G.	98.63	N/A	1.385	1.425	1.405	2.85	N/A	1.00e-03	N/A	N/A
S98T002244		Aluminum-ICP-Acid Dil.	ug/ml	100.0	<5.00e-02	2.23e+04	2.21e+04	2.22e+04	0.90	N/A	30.10	N/A	N/A
S98T002244		Boron-ICP-Acid Dil.	ug/ml	98.20	<5.00e-02	74.30	76.80	75.55	3.31	N/A	30.10	N/A	N/A
S98T002244		Barium-ICP-Acid Dil.	ug/ml	99.20	<1.00e-01	60.10	<6.01e1	N/A	N/A	N/A	60.10	N/A	N/A
S98T002244		Bismuth-ICP-Acid Dil.	ug/ml	98.20	<1.00e-01	83.30	84.30	83.80	1.19	N/A	60.10	N/A	N/A
S98T002244		Calcium-ICP-Acid Dil.	ug/ml	97.40	<1.00e-02	6.44e+02	638.0	641.0	0.94	N/A	6.010	N/A	N/A
S98T002244		Iron-ICP-Acid Dil.	ug/ml	96.40	<5.00e-02	<30.10	<3.01e1	N/A	N/A	N/A	30.10	N/A	N/A
S98T002244		Chromium-ICP-Acid Dil.	ug/ml	101.0	<5.00e-01	3.06e+03	3.04e+03	3.05e+03	0.66	N/A	300.0	N/A	N/A
S98T002244		Potassium-ICP-Acid Dil.	ug/ml	101.8	<1.00e-02	<6.010	<6.01e0	N/A	N/A	N/A	6.010	N/A	N/A
S98T002244		Lithium-ICP-Acid Dil.	ug/ml	97.00	<1.00e-02	<6.010	<6.01e0	N/A	N/A	N/A	6.010	N/A	N/A
S98T002244		Manganese-ICP-Acid Dil.	ug/ml	103.6	<1.00e-01	2.22e+02	2.18e+02	2.20e+02	1.82	N/A	60.10	N/A	N/A
S98T002244		Nickel-ICP-Acid Dil.	ug/ml	97.20	<5.00e-02	13.50	14.50	14.00	7.14	N/A	12.00	N/A	N/A
S98T002244		Sodium-ICP-Acid Dil.	ug/ml	97.00	<5.00e-01	<3.01e+02	<3.01e2	112.0	0.00	N/A	30.10	N/A	N/A
S98T002244		Uranium-ICP-Acid Dil.	ug/ml	94.00	<1.00e-02	<6.010	<6.01e0	N/A	N/A	N/A	6.010	N/A	N/A
S98T002244		Zinc-ICP-Acid Dil.	ug/ml	96.00	<1.00e-02	<6.010	<6.01e0	N/A	N/A	N/A	6.010	N/A	N/A
S98T002244		Zirconium-ICP-Acid Dil.	ug/ml	93.18	<2.10e-02	3.26e+03	3.29e+03	3.28e+03	0.92	N/A	37.57	N/A	N/A
S98T002244		Fluoride-IC-Dionex 4000/4500	ug/ml	105.8	<1.20e-02	8.37e+03	8.40e+03	8.38e+03	0.36	N/A	61.81	N/A	N/A
S98T002244		Chloride-IC-Dionex 4000/4500	ug/ml	102.4	<1.70e-02	6.181	6.181	6.181	0.00	N/A	87.57	N/A	N/A
S98T002244		Nitrite-IC - Dionex 4000/4500	ug/ml	99.63	<1.08e-01	1.03e+05	1.05e+05	1.04e+05	1.92	N/A	556.3	N/A	N/A
S98T002244		Bromide by Ion Chromatograph	ug/ml	102.1	<1.25e-01	<6.44e2	<6.44e2	N/A	N/A	N/A	643.9	N/A	N/A
S98T002244		Nitrate by IC-Dionex 4000/4500	ug/ml	107.2	<1.39e-01	2.53e+05	2.48e+05	2.50e+05	2.00	N/A	716.0	N/A	N/A
S98T002244		Phosphate-IC-Dionex 4000/4500	ug/ml	97.78	<1.20e-01	3.30e+03	3.44e+03	3.37e+03	4.15	N/A	618.1	N/A	N/A
S98T002244		Sulfate by IC-Dionex 4000/4500	ug/ml	100.1	<1.38e-01	5.79e+03	6.24e+03	6.01e+03	7.48	N/A	710.8	N/A	N/A
S98T002244		Oxalate-IC-Dionex 4000/4500	ug/ml	100.2	<1.05e-01	6.12e+02	672.0	641.8	9.55	N/A	540.9	N/A	N/A

Table 1. Data Summary Report.  
U-107 (2)

Sample#	R/M#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD % Spk Rec %	Det Limit	Count	Err%
S981002247		DSC Exotherm DRY	Joules/g DRY	n/a	n/a	1.32e+02	146.4	139.4	10.0	n/a	n/a	n/a
S981002247		DSC Exotherm DRY	Joules/g	98.14	n/a	66.28	73.25	69.77	9.99	n/a	n/a	n/a
S981002247		Wt % by ISE-Std Additions	ug/ml	100.3	<5.000	5.650	12.50	8.975	74.1	110.9	5.000	n/a
S981002247		Wt % by TGA on Perkin Elmer	%	98.03	n/a	48.32	51.58	49.95	6.53	n/a	n/a	n/a
S981002247		Aluminum Liquid Samples	ug/ml	91.11	<1.30e-03	3.94e-03	4.80e-03	4.37e-03	19.7	83.41	3.00e-03	7.30e+01
S981002248		Specific Gravity	Sp.G.	98.63	n/a	1.393	1.434	1.413	2.90	n/a	1.00e-03	n/a
S981002248		Aluminum (CP-Acid Dil.	ug/ml	98.60	<5.00e-02	2.78e+04	2.75e+04	2.76e+04	1.08	-6.850e1	30.10	n/a
S981002248		Boron (CP-Acid Dil.	ug/ml	100.0	<5.00e-02	82.70	81.90	82.30	0.97	97.50	30.10	n/a
S981002248		Barium (CP-Acid Dil.	ug/ml	98.20	<5.00e-02	< 30.10	<3.01e1	n/a	n/a	93.40	30.10	n/a
S981002248		Bismuth (CP-Acid Dil.	ug/ml	99.20	<1.00e-01	< 60.10	<6.01e1	n/a	n/a	94.80	60.10	n/a
S981002248		Calcium (CP-Acid Dil.	ug/ml	98.20	<1.00e-01	1.02e+02	96.90	99.45	5.13	97.00	60.10	n/a
S981002248		Chromium (CP-Acid Dil.	ug/ml	97.40	<1.00e-02	5.08e+02	501.0	504.5	1.39	97.70	6.010	n/a
S981002248		Iron (CP-Acid Dil.	ug/ml	96.40	<5.00e-02	< 30.10	<3.01e1	n/a	n/a	94.80	30.10	n/a
S981002248		Potassium (CP-Acid Dil.	ug/ml	101.0	<1.00e-01	3.49e+03	3.45e+03	3.47e+03	1.15	80.40	300.0	n/a
S981002248		Lithium (CP-Acid Dil.	ug/ml	97.00	<1.00e-02	< 6.010	<6.01e0	n/a	n/a	97.30	6.010	n/a
S981002248		Manganese (CP-Acid Dil.	ug/ml	97.80	<2.00e-02	29.30	18.60	23.95	44.7	89.50	6.010	n/a
S981002248		Sodium (CP-Acid Dil.	ug/ml	103.6	<1.00e-01	2.28e+05	2.25e+05	2.26e+05	1.32	-1.200e3	60.10	n/a
S981002248		Nickel (CP-Acid Dil.	ug/ml	96.80	<2.00e-02	18.30	20.70	19.50	12.3	94.50	12.00	n/a
S981002248		Silicon (CP-Acid Dil.	ug/ml	97.20	<5.00e-01	<5.01e+02	<5.01e2	127.5	2.35	95.20	30.10	n/a
S981002248		Zinc (CP-Acid Dil.	ug/ml	94.00	<1.00e-01	< 6.010	<6.01e0	n/a	n/a	94.00	300.0	n/a
S981002248		Uranium (CP-Acid Dil.	ug/ml	96.00	<1.00e-02	< 6.010	<6.01e0	n/a	n/a	94.40	6.010	n/a
S981002248		Zirconium (CP-Acid Dil.	ug/ml	93.18	<2.0e-02	3.88e+03	3.96e+03	3.92e+03	2.04	100.8	6.010	n/a
S981002248		Formate by Ion Chromatograph	ug/ml	105.8	<1.20e-02	< 61.81	<6.18e1	n/a	n/a	92.71	61.81	n/a
S981002248		Fluoride (C-D) onex 4000/4500	ug/ml	102.4	<1.01e-04	1.01e+04	9.89e+03	1.00e+04	2.10	158.8	87.57	n/a
S981002248		Chloride (C-D) onex 4000/4500	ug/ml	109.65	<1.70e-01	1.21e+05	1.20e+05	1.20e+05	0.83	227.1	556.3	n/a
S981002248		Nitrite by Ion Chromatograph	ug/ml	102.1	<1.25e-01	<6.44e+02	<6.44e2	n/a	n/a	90.44	643.9	n/a
S981002248		Bromide by Ion Chromatograph	ug/ml	107.2	<1.39e-01	2.35e+05	2.36e+05	2.35e+05	0.42	346.3	716.0	n/a
S981002248		Nitrate by IC-D) onex 4000/4500	ug/ml	97.78	<1.38e-01	2.85e+03	3.10e+03	2.92e+03	5.13	101.5	618.1	n/a
S981002248		Phosphate (C-D) onex 4000/4500	ug/ml	101.1	<1.38e-01	4.98e+03	4.37e+03	4.78e+03	8.59	111.1	710.8	n/a
S981002248		Sulfate by IC-D) onex 4000/4500	ug/ml	100.2	<1.0e-01	<5.41e+02	<5.41e2	n/a	n/a	96.58	540.9	n/a

Table 1. Data Summary Report.  
U-102 (12)

CORE NUMBER: 262R  
SEGMENT #: 5

SEGMENT PORTION: U Upper half of segment

Sample#	R #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD % Spk Rec	Det Limit	Count	Err%
S981002265		DSC Exotherm DRY	Joules/g Dry	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S981002266		DSC Exotherm on Perkin Elmer	Joules/g	92.86	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S981002267		% Water by TGA on Perkin Elmer	%	98.89	n/a	49.19	49.74	49.47	7.79	n/a	n/a	n/a
S981002268	F	Aluminum - ICP-Fusion	ug/g	100.2	< 5.00e-02	1.11e+04	1.20e+04	1.16e+04	7.79	n/a	996.0	n/a
S981002268	F	Boron - ICP-Fusion	ug/g	102.0	< 5.00e-02	9.96e+02	< 9.88e2	n/a	n/a	n/a	996.0	n/a
S981002268	F	Barium - ICP-Fusion	ug/g	100.2	< 5.00e-02	9.96e+02	< 9.88e2	n/a	n/a	n/a	996.0	n/a
S981002268	F	Bismuth - ICP-Fusion	ug/g	100.2	< 1.00e-01	1.19e+03	< 1.98e3	n/a	n/a	n/a	1,996+03	n/a
S981002268	F	Calcium - ICP-Fusion	ug/g	99.40	< 1.00e-01	4.19e+03	< 1.98e3	n/a	n/a	n/a	1,996+03	n/a
S981002268	F	Chromium - ICP-Fusion	ug/g	98.60	< 1.00e-02	1.75e+03	1.83e+03	1.79e+03	4.47	n/a	199.0	n/a
S981002268	F	Iron - ICP-Fusion	ug/g	98.00	< 5.00e-02	9.96e+02	< 9.88e2	n/a	n/a	n/a	996.0	n/a
S981002268	F	Lithium - ICP-Fusion	ug/g	103.4	< 1.00e-02	1.19e+02	< 1.98e2	n/a	n/a	n/a	199.0	n/a
S981002268	F	Manganese - ICP-Fusion	ug/g	98.20	< 1.00e-02	2.07e+05	2.00.0	n/a	n/a	n/a	199.0	n/a
S981002268	F	Sodium - ICP-Fusion	ug/g	105.8	< 1.00e-01	2.07e+05	2.08e+05	2.08e+05	0.96	n/a	1,996+03	n/a
S981002268	F	Nickel - ICP-Fusion	ug/g	98.60	< 3.99e-01	4.42e+03	5.68e+03	5.05e+03	25.0	n/a	399.0	n/a
S981002268	F	Silicon - ICP-Fusion	ug/g	97.80	< 5.00e-02	9.96e+02	< 9.88e2	n/a	n/a	n/a	996.0	n/a
S981002268	F	Uranium - ICP-Fusion	ug/g	98.90	< 5.00e-01	1.59e+02	< 1.98e2	n/a	n/a	n/a	199.0	n/a
S981002268	F	Zinc - ICP-Fusion	ug/g	94.40	< 1.00e-02	1.14e+04	< 1.98e2	n/a	n/a	n/a	199.0	n/a
S981002268	F	Zirconium - ICP-Fusion	ug/g	97.40	< 1.00e-02	1.14e+04	1.12e+04	1.13e+04	1.77	n/a	199.0	n/a
S981002269	A	Aluminum - ICP-Acid Digest	ug/g	96.00	1.07e-01	1.35e+02	146.0	140.5	7.83	n/a	28.30	n/a
S981002269	A	Boron - ICP-Acid Digest	ug/g	105.8	5.19e-01	< 28.30	< 3.02e1	n/a	n/a	n/a	28.30	n/a
S981002269	A	Barium - ICP-Acid Digest	ug/g	97.00	< 5.00e-02	< 28.30	< 6.04e1	n/a	n/a	n/a	28.30	n/a
S981002269	A	Bismuth - ICP-Acid Digest	ug/g	90.40	< 1.00e-01	56.60	< 162.5	n/a	n/a	n/a	56.70	n/a
S981002269	A	Calcium - ICP-Acid Digest	ug/g	98.20	< 1.32e-01	1.67e+02	1.51.0	162.5	14.2	n/a	56.70	n/a
S981002269	A	Chromium - ICP-Acid Digest	ug/g	95.40	< 1.00e-02	4.56e+02	1.57e+03	1.62e+03	6.17	n/a	28.30	n/a
S981002269	A	Iron - ICP-Acid Digest	ug/g	93.20	< 5.00e-01	1.31e+02	4.04.0	430.0	12.1	n/a	283.0	n/a
S981002269	A	Potassium - ICP-Acid Digest	ug/g	93.20	< 5.00e-01	< 5.660	1.33e+03	1.32e+03	1.52	n/a	283.0	n/a
S981002269	A	Lithium - ICP-Acid Digest	ug/g	98.60	< 1.00e-02	1.52e+02	138.0	145.0	9.66	n/a	5.670	n/a
S981002269	A	Manganese - ICP-Acid Digest	ug/g	93.60	< 1.00e-02	1.82.0	2.16e+05	2.04e+05	11.8	n/a	56.70	n/a
S981002269	A	Sodium - ICP-Acid Digest	ug/g	122.8	7.39e-01	1.92e+02	18.20	18.00	2.22	n/a	11.30	n/a
S981002269	A	Nickel - ICP-Acid Digest	ug/g	94.80	< 2.00e-02	1.71e+02	171.0	171.0	0.00	n/a	28.30	n/a
S981002269	A	Uranium - ICP-Acid Digest	ug/g	95.90	< 5.00e-01	2.83e+02	< 3.02e2	n/a	n/a	n/a	283.0	n/a
S981002269	A	Zinc - ICP-Acid Digest	ug/g	86.40	< 1.00e-02	16.10	14.00	15.05	14.0	n/a	5.670	n/a
S981002269	A	Zirconium - ICP-Acid Digest	ug/g	93.60	< 1.00e-02	< 5.660	< 6.04e0	n/a	n/a	n/a	5.670	n/a
S981002270	W	Fluoride by IC-Dioxex 4000/4500	ug/g	86.56	< 2.10e-02	5.75e+02	665.0	619.8	14.5	n/a	137.3	n/a
S981002270	W	Mercury by IC-Dioxex 4000/4500	ug/g	109.5	< 1.20e-02	2.32e+02	256.0	394.1	82.2	n/a	163.5	n/a
S981002270	W	Chloride by IC-Dioxex 4000/4500	ug/g	105.8	< 1.70e-02	3.48e+03	3.44e+03	3.46e+03	1.16	n/a	231.6	n/a
S981002270	W	Nitrate by IC-Dioxex 4000/4500	ug/g	101.3	< 1.33e-01	3.72e+04	3.66e+04	3.70e+04	1.89	n/a	1.47e+03	n/a
S981002270	W	Bromide by Ion Chromatograph	ug/g	107.3	< 1.25e-01	< 1.70e+03	< 1.7e3	n/a	n/a	n/a	1.70e+03	n/a
S981002270	W	Nitrate by IC-Dioxex 4000/4500	ug/g	99.49	< 1.39e-01	4.33e+05	4.37e+05	4.36e+05	0.46	n/a	1.89e+03	n/a
S981002270	W	Phosphate by IC-Dioxex 4000/4500	ug/g	98.72	< 1.39e-01	7.52e+03	1.05e+04	9.01e+03	33.1	n/a	1.64e+03	n/a
S981002270	W	Sulfate by IC-Dioxex 4000/4500	ug/g	105.3	< 1.39e-01	2.59e+03	2.68e+03	2.64e+03	3.42	n/a	1.88e+03	n/a
S981002270	W	Oxalate by IC-Dioxex 4000/4500	ug/g	101.5	< 1.09e-01	< 1.43e+03	< 1.44e3	n/a	n/a	n/a	1.43e+03	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R#	Analyte	Unit	Standard	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err#
S98T002271		Bulk Density of Sample	g/mL	N/A	N/A	1.720	N/A	N/A	N/A	N/A	5.00E-01	N/A
S98T002272		DSC Exotherm Dry	Joules/g Dry	N/A	N/A	0.00E+00	0.00E+00	0.00E+00	0.00	N/A	N/A	N/A
S98T002273		DSC Exotherm on Perkin Elmer	Joules/g	99.16	N/A	0.00E+00	0.00E+00	0.00E+00	0.00	N/A	N/A	N/A
S98T002274		% Water by IGA on Perkin Elmer	%	98.62	N/A	32.38	33.57	32.98	3.61	N/A	N/A	N/A
S98T002275		Aluminum - ICP-Fusion	ug/g	<5.00E-02	<1.21E+04	1.19E+04	1.19E+04	1.20E+04	1.67	N/A	1.02E+03	N/A
S98T002276		Boron - ICP-Fusion	ug/g	<5.00E-02	<1.02E+03	<1.02E+03	<1.02E+03	<1.02E+03	N/A	95.80	1.02E+03	N/A
S98T002277		Barium - ICP-Fusion	ug/g	<5.00E-02	<1.02E+03	<1.02E+03	<1.02E+03	<1.02E+03	N/A	91.20	1.02E+03	N/A
S98T002278		Bismuth - ICP-Fusion	ug/g	<5.00E-02	<2.05E+03	<2.05E+03	<2.05E+03	<2.05E+03	N/A	94.80	2.05E+03	N/A
S98T002279		Calcium - ICP-Fusion	ug/g	<5.00E-02	<2.05E+03	<2.05E+03	<2.05E+03	<2.05E+03	N/A	102.0	2.05E+03	N/A
S98T002280		Chromium - ICP-Fusion	ug/g	<5.00E-02	<3.00E+03	<3.00E+03	<3.00E+03	<3.00E+03	1.00	96.90	203.0	N/A
S98T002281		Cobalt - ICP-Fusion	ug/g	<5.00E-02	<1.02E+03	<1.02E+03	<1.02E+03	<1.02E+03	N/A	98.10	1.02E+03	N/A
S98T002282		Manganese - ICP-Fusion	ug/g	<5.00E-02	<2.05E+02	<2.05E+02	<2.05E+02	<2.05E+02	N/A	91.40	203.0	N/A
S98T002283		Mercury - ICP-Fusion	ug/g	<5.00E-02	<3.65E+02	<3.65E+02	<3.65E+02	<3.65E+02	2.01	93.70	203.0	N/A
S98T002284		Nickel - ICP-Fusion	ug/g	<5.00E-02	<1.08E+03	<1.08E+03	<1.08E+03	<1.08E+03	0.58	100.0	2.05E+03	N/A
S98T002285		Silicon - ICP-Fusion	ug/g	<5.00E-02	<1.09E+03	<1.09E+03	<1.09E+03	<1.09E+03	0.91	96.40	1.02E+03	N/A
S98T002286		Zinc - ICP-Fusion	ug/g	<5.00E-02	<1.02E+04	<1.02E+04	<1.02E+04	<1.02E+04	N/A	90.50	1.02E+04	N/A
S98T002287		Iron - ICP-Fusion	ug/g	<5.00E-02	<2.05E+02	<2.05E+02	<2.05E+02	<2.05E+02	N/A	95.10	203.0	N/A
S98T002288		Alpha of Digested Solid	ug/g	87.78	<1.41E-03	1.16E-01	1.08E-01	1.12E-01	7.84	91.80	203.0	N/A
S98T002289		Aluminum - ICP-Acid Digest	ug/g	96.00	<1.07E+01	1.07E+04	1.05E+04	1.05E+04	1.05E+04	66.50	3.00E-03	1.03E+01
S98T002290		Boron - ICP-Acid Digest	ug/g	105.8	<5.19E-01	1.39E+02	139.0	139.0	0.60	109.2	29.60	N/A
S98T002291		Barium - ICP-Acid Digest	ug/g	97.00	<5.00E-02	<2.90E+01	<3.02E+01	<3.02E+01	N/A	96.00	29.60	N/A
S98T002292		Calcium - ICP-Acid Digest	ug/g	90.40	<1.00E-01	<5.90E+01	<6.05E+01	<6.05E+01	N/A	104.6	59.10	N/A
S98T002293		Chromium - ICP-Acid Digest	ug/g	98.20	<1.32E-01	<2.24E+02	2.08E+02	2.16E+02	7.41	108.6	59.10	N/A
S98T002294		Iron - ICP-Acid Digest	ug/g	95.40	<1.00E-02	<2.58E+03	2.64E+03	2.60E+03	3.41	108.6	59.10	N/A
S98T002295		Lead - ICP-Acid Digest	ug/g	93.20	<5.00E-02	<6.38E+02	6.99E+02	6.68E+02	5.17	154.2	5.90E+01	N/A
S98T002296		Potassium - ICP-Acid Digest	ug/g	98.20	<5.00E-01	<1.03E+03	1.11E+03	1.07E+03	7.12	122.8	29.60	N/A
S98T002297		Lithium - ICP-Acid Digest	ug/g	98.20	<1.00E-02	<5.920E+01	<6.03E+01	<6.03E+01	4.48	106.6	29.60	N/A
S98T002298		Sodium - ICP-Acid Digest	ug/g	99.60	<1.00E-02	<2.35E+02	2.61E+02	2.48E+02	10.8	94.20	5.90E+01	N/A
S98T002299		Nickel - ICP-Acid Digest	ug/g	122.8	<7.39E-01	<1.89E+05	1.76E+05	1.81E+05	8.65	107.6	5.90E+01	N/A
S98T002300		Uranium - ICP-Acid Digest	ug/g	14.6	<8.82E-01	<2.21E+02	2.12E+02	2.16E+02	2.37	101.4	11.80	N/A
S98T002301		Zinc - ICP-Acid Digest	ug/g	95.90	<5.00E-01	<2.98E+02	<3.02E+02	<3.02E+02	N/A	118.8	29.60	N/A
S98T002302		Iron - ICP-Acid Digest	ug/g	86.40	<1.00E-02	<2.20E+01	<2.20E+01	<2.20E+01	0.00	98.90	29.60	N/A
S98T002303		Fluoride by IC-Dioxin 4000/4500	ug/g	93.60	<1.00E-02	<5.920E+01	<6.03E+01	<6.03E+01	N/A	97.20	5.90E+01	N/A
S98T002304		Fluoride by IC-Dioxin 4000/4500	ug/g	86.56	<1.00E-02	<6.87E+02	6.55E+02	6.71E+02	4.78	93.40	5.90E+01	N/A
S98T002305		Chloride by IC-Dioxin 4000/4500	ug/g	109.5	<1.20E-02	<6.05E+02	6.02E+02	6.03E+02	0.50	104.2	152.8	N/A
S98T002306		Nitrate by IC-Dioxin 4000/4500	ug/g	105.8	<1.70E-02	<3.51E+03	3.28E+03	3.40E+03	6.77	106.2	228.9	N/A
S98T002307		Bromide by Ion Chromatograph	ug/g	107.3	<1.35E-01	<1.58E+04	1.45E+04	1.51E+04	3.70	104.0	1.42E+03	N/A
S98T002308		Nitrate by IC-Dioxin 4000/4500	ug/g	99.47	<1.39E-01	<3.72E+05	3.69E+05	3.71E+05	0.8	105.1	1.69E+03	N/A
S98T002309		Sulfate by IC-Dioxin 4000/4500	ug/g	88.92	<1.20E-01	<3.40E+04	3.85E+04	3.65E+04	2.61	93.75	1.85E+03	N/A
S98T002310		Sulfate by IC-Dioxin 4000/4500	ug/g	105.3	<1.38E-01	<2.63E+03	2.52E+03	2.57E+03	2.37	102.1	1.50E+03	N/A
S98T002311		Oxalate by IC-Dioxin 4000/4500	ug/g	101.5	<1.05E-01	<3.27E+03	2.42E+03	2.85E+03	29.9	101.1	1.38E+03	N/A

Drainable Liquid: Drainable Liquid

Sample#	R #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S98T002251		DSC Exotherm DRY Calculated	Joules/g DRY	N/A	N/A	1.98e+02	167.7	182.7	16.4	N/A	N/A	N/A
S98T002251		DSC Exotherm Dry Perkin Elmer	Joules/g	99.86	N/A	1.01e+02	85.81	93.45	16.4	N/A	N/A	N/A
S98T002251		Ammonia by ISE-Std Additions	ug/mL	100.3	< 5.000	48.90	48.90	47.15	7.42	111.4	5.000	N/A
S98T002251		% Water by TGA on Perkin Elmer	%	99.16	N/A	48.60	49.08	48.84	0.98	N/A	N/A	N/A
S98T002251		Alpha In Liquid Samples	uCi/mL	91.11	< 1.30e-03	9.38e-03	5.67e-03	7.52e-03	49.3	87.56	3.00e-03	3.99E+01
S98T002252		Specific Gravity	Sp.G.	98.63	N/A	1.304	1.410	1.357	7.81	N/A	1.00e-03	N/A
S98T002252		Aluminum-ICP-Acid Dil.	ug/mL	98.60	< 5.00e-02	3.52e+04	3.66e+04	3.59e+04	3.90	342.0	30.10	N/A
S98T002252		Boron-ICP-Acid Dil.	ug/mL	100.0	< 5.00e-02	97.70	101.0	99.35	3.32	98.60	30.10	N/A
S98T002252		Barium-ICP-Acid Dil.	ug/mL	98.20	< 5.00e-02	< 30.10	< 5.01e1	N/A	N/A	95.00	30.10	N/A
S98T002252		Bismuth-ICP-Acid Dil.	ug/mL	99.20	< 1.00e-01	< 60.10	< 6.01e1	N/A	N/A	96.20	60.10	N/A
S98T002252		Calcium-ICP-Acid Dil.	ug/mL	98.20	< 1.00e-01	1.49e+02	132.0	140.5	12.1	95.90	60.10	N/A
S98T002252		Chromium-ICP-Acid Dil.	ug/mL	97.40	< 1.00e-02	7.42e+02	620.0	681.0	17.9	78.80	6.010	N/A
S98T002252		Iron-ICP-Acid Dil.	ug/mL	96.40	< 5.00e-02	1.50e+02	103.0	126.5	37.2	86.30	30.10	N/A
S98T002252		Potassium-ICP-Acid Dil.	ug/mL	101.0	< 5.00e-01	3.91e+03	4.01e+03	3.96e+03	2.53	125.0	300.0	N/A
S98T002252		Lithium-ICP-Acid Dil.	ug/mL	101.8	< 1.00e-02	< 6.010	< 6.01e0	N/A	N/A	97.70	6.010	N/A
S98T002252		Manganese-ICP-Acid Dil.	ug/mL	97.00	< 1.00e-02	80.60	59.90	70.25	29.5	88.20	6.010	N/A
S98T002252		Sodium-ICP-Acid Dil.	ug/mL	103.6	< 1.00e-01	2.30e+05	2.39e+05	2.34e+05	3.84	1.59e+03	60.10	N/A
S98T002252		Nickel-ICP-Acid Dil.	ug/mL	96.80	< 2.00e-02	26.80	27.90	27.35	4.02	94.10	12.00	N/A
S98T002252		Silicon-ICP-Acid Dil.	ug/mL	97.20	< 5.00e-02	2.36e+02	235.0	235.5	0.42	98.90	30.10	N/A
S98T002252		Uranium-ICP-Acid Dil.	ug/mL	97.00	< 5.00e-01	< 5.01e+02	< 5.01e2	N/A	N/A	95.50	300.0	N/A
S98T002252		Zinc-ICP-Acid Dil.	ug/mL	94.00	< 1.00e-02	8.740	7.330	8.035	17.5	93.70	6.010	N/A
S98T002252		Zirconium-ICP-Acid Dil.	ug/mL	96.00	< 1.00e-02	< 6.010	< 6.01e0	N/A	N/A	95.40	6.010	N/A
S98T002252		Formate by Ion Chromatograph	ug/mL	90.15	< 2.10e-02	4.50e+03	6.71e+03	4.61e+03	4.56	102.4	37.57	N/A
S98T002252		Fluoride-IC-Dionex 4000/4500	ug/mL	106.7	< 1.20e-02	< 61.81	< 6.18e1	N/A	N/A	95.95	61.81	N/A
S98T002252		Chloride-IC-Dionex 4000/4500	ug/mL	99.89	< 1.70e-02	1.11e+04	1.09e+04	1.10e+04	1.82	86.50	87.57	N/A
S98T002252		Nitrite-IC - Dionex 4000/4500	ug/mL	95.03	< 1.08e-01	1.29e+05	1.30e+05	1.29e+05	0.77	103.2	556.3	N/A
S98T002252		Bromide by Ion Chromatograph	ug/mL	98.57	< 1.25e-01	< 6.44e+02	< 6.44e2	N/A	N/A	94.03	643.9	N/A
S98T002252		Nitrate by IC-Dionex 4000/4500	ug/mL	102.3	< 1.59e-01	1.89e+05	1.89e+05	1.89e+05	0.00	106.9	716.0	N/A
S98T002252		Phosphate-IC-Dionex 4000/4500	ug/mL	95.57	< 1.20e-01	2.84e+03	2.78e+03	2.81e+03	2.14	90.13	618.1	N/A
S98T002252		Sulfate by IC-Dionex 4000/4500	ug/mL	97.71	< 1.38e-01	4.12e+03	4.02e+03	4.07e+03	2.46	98.12	710.8	N/A
S98T002252		Oxalate-IC-Dionex 4000/4500	ug/mL	97.91	< 1.09e-01	< 5.41e+02	< 5.41e2	N/A	N/A	95.63	540.9	N/A

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Table 1. Data Summary Report.  
U-107 (2)

CORE NUMBER: 242R  
SEGMENT #: 6

SEGMENT PORTION: U Upper; Half of Segment

Sample #	R. #	Analyte	Unit	Standard	Blank	Result	Duplicate	Average	RPD, %	Spk Rec, %	Det Limit	Count	Err%
S981002426		BSC Exotherm Dry, Calculated	Joules/g Dry	N/A	N/A	0.00e+00	0.00e+00	0.00e+00	0.00	N/A	N/A	N/A	N/A
S981002426		DSC Exotherm on Perkin Elmer	Joules/g	100.0	N/A	0.00e+00	0.00e+00	0.00e+00	0.00	N/A	N/A	N/A	N/A
S981002426		% Water by TGA on Perkin Elmer	%	99.23	N/A	16.03	20.38	18.20	23.9	N/A	N/A	N/A	N/A
S981002428	F	Aluminum - ICP-Fusion	ug/g	98.60	< 5.00e-02	1.04e+04	1.08e+04	1.06e+04	3.77	N/A	N/A	N/A	N/A
S981002428	F	Boron - ICP-Fusion	ug/g	98.60	< 5.00e-02	1.04e+04	< 1.01e+03	N/A	N/A	N/A	N/A	1.01e+03	N/A
S981002428	F	Barium - ICP-Fusion	ug/g	99.00	< 5.00e-02	1.04e+03	< 1.00e+03	N/A	N/A	N/A	N/A	1.01e+03	N/A
S981002428	F	Bismuth - ICP-Fusion	ug/g	100.0	< 5.00e-02	1.01e+03	< 2.01e+03	N/A	N/A	N/A	N/A	2.01e+03	N/A
S981002428	F	Calcium - ICP-Fusion	ug/g	99.00	< 5.00e-02	1.05e+03	< 2.01e+03	N/A	N/A	N/A	N/A	2.01e+03	N/A
S981002428	F	Chromium - ICP-Fusion	ug/g	98.20	< 5.00e-02	1.05e+03	1.15e+03	1.10e+03	9.09	N/A	N/A	201.0	N/A
S981002428	F	Iron - ICP-Fusion	ug/g	96.80	< 5.00e-02	1.01e+03	< 1.00e+03	N/A	N/A	N/A	N/A	1.01e+03	N/A
S981002428	F	Lithium - ICP-Fusion	ug/g	101.0	< 5.00e-02	2.01e+02	< 2.01e+02	N/A	N/A	N/A	N/A	201.0	N/A
S981002428	F	Manganese - ICP-Fusion	ug/g	97.80	< 5.00e-02	2.95e+02	305.0	N/A	3.33	N/A	N/A	201.0	N/A
S981002428	F	Sodium - ICP-Fusion	ug/g	103.4	1.20e-01	2.10e+05	2.11e+05	2.10e+05	0.48	N/A	N/A	2.01e+03	N/A
S981002428	F	Nickel - ICP-Fusion	ug/g	98.80	2.39e-01	2.38e+03	3.04e+03	2.71e+03	26.4	N/A	N/A	403.0	N/A
S981002428	F	Silicon - ICP-Fusion	ug/g	97.80	< 5.00e-02	1.01e+03	< 1.00e+03	N/A	N/A	N/A	N/A	1.01e+03	N/A
S981002428	F	Uranium - ICP-Fusion	ug/g	97.00	< 5.00e-01	1.01e+04	< 2.01e+04	N/A	N/A	N/A	N/A	1.01e+04	N/A
S981002428	F	Zinc - ICP-Fusion	ug/g	94.80	< 5.00e-02	2.01e+02	< 2.01e+02	N/A	N/A	N/A	N/A	201.0	N/A
S981002429	F	Aluminum - ICP-Acid Digest	ug/g	96.60	1.21e-01	1.08e+04	1.21e+04	1.14e+04	11.4	N/A	N/A	201.0	N/A
S981002429	F	Boron - ICP-Acid Digest	ug/g	100.6	5.58e-01	1.41e+02	183.0	162.0	25.9	N/A	N/A	28.80	N/A
S981002429	F	Barium - ICP-Acid Digest	ug/g	95.00	< 5.00e-02	< 28.80	< 57.60	< 6.16e1	N/A	N/A	N/A	28.80	N/A
S981002429	F	Bismuth - ICP-Acid Digest	ug/g	89.20	< 5.00e-01	2.00e+02	183.0	191.5	8.88	N/A	N/A	57.60	N/A
S981002429	F	Calcium - ICP-Acid Digest	ug/g	94.00	1.68e-01	1.03e+03	1.07e+03	1.05e+03	3.81	N/A	N/A	57.60	N/A
S981002429	F	Chromium - ICP-Acid Digest	ug/g	91.00	< 5.00e-02	6.63e+02	614.0	638.5	7.67	N/A	N/A	28.80	N/A
S981002429	F	Iron - ICP-Acid Digest	ug/g	91.00	< 5.00e-02	1.14e+03	1.16e+03	1.15e+03	1.74	N/A	N/A	288.0	N/A
S981002429	F	Potassium - ICP-Acid Digest	ug/g	90.00	< 5.00e-02	< 5.760	< 6.16e0	N/A	N/A	N/A	N/A	5.760	N/A
S981002429	F	Lithium - ICP-Acid Digest	ug/g	99.20	< 5.00e-02	2.43e+02	243.0	250.5	5.99	N/A	N/A	5.760	N/A
S981002429	F	Manganese - ICP-Acid Digest	ug/g	90.60	< 5.00e-01	1.98e+02	2.15e+05	2.04e+05	10.3	N/A	N/A	57.60	N/A
S981002429	F	Sodium - ICP-Acid Digest	ug/g	114.8	8.04e-01	5.98e+02	17.10	16.15	11.50	N/A	N/A	11.50	N/A
S981002429	F	Nickel - ICP-Acid Digest	ug/g	89.80	< 2.00e-02	4.02e+02	411.0	406.5	2.21	N/A	N/A	28.80	N/A
S981002429	F	Silicon - ICP-Acid Digest	ug/g	94.60	1.550	< 2.88e+02	< 3.08e2	20.80	N/A	N/A	N/A	288.0	N/A
S981002429	F	Uranium - ICP-Acid Digest	ug/g	83.20	< 1.00e-02	23.00	< 23.00	21.90	10.0	N/A	N/A	5.760	N/A
S981002429	F	Zinc - ICP-Acid Digest	ug/g	94.120	< 1.00e-02	< 5.760	< 6.16e0	N/A	N/A	N/A	N/A	5.760	N/A
S981002430	A	Formate by IC-Dioxin 4000/4500	ug/g	94.120	< 1.00e-02	9.25e+02	1.08e+03	1.00e+03	15.5	N/A	N/A	74.94	N/A
S981002430	W	Fluoride by IC-Dioxin 4000/4500	ug/g	103.6	< 1.20e-02	< 1.20e2	< 1.20e2	2.94e+03	7.13	N/A	N/A	123.3	N/A
S981002430	W	Chloride by IC-Dioxin 4000/4500	ug/g	106.0	< 2.60e-02	2.84e+03	3.05e+03	2.94e+03	8.87	N/A	N/A	1.11e+03	N/A
S981002430	W	Nitrite by IC-Dioxin 4000/4500	ug/g	101.8	3.90e-01	1.28e+03	3.65e+04	3.50e+04	8.87	N/A	N/A	1.28e+03	N/A
S981002430	W	Bromide by Ion Chromatograph	ug/g	98.12	< 1.25e-01	< 1.25e+03	< 1.25e3	N/A	N/A	N/A	N/A	1.28e+03	N/A
S981002430	W	Nitrate by IC-Dioxin 4000/4500	ug/g	101.7	< 1.39e-01	5.26e+05	5.15e+05	5.21e+05	2.11	N/A	N/A	2.88e+03	N/A
S981002430	W	Phosphate by IC-Dioxin 4000/4500	ug/g	103.8	< 1.20e-01	4.18e+03	9.36e+03	6.77e+03	76.5	N/A	N/A	2.44e+03	N/A
S981002430	W	Sulfate by IC-Dioxin 4000/4500	ug/g	103.8	< 1.38e-01	1.94e+03	2.12e+03	2.03e+03	8.87	N/A	N/A	1.42e+03	N/A
S981002430	W	Oxalate by IC-Dioxin 4000/4500	ug/g	104.3	< 1.05e-01	2.48e+03	2.59e+03	2.75e+03	18.6	N/A	N/A	1.08e+03	N/A

L Lower Half of Segment: L Lower Half of Segment

Sample#	R#	R#	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count	Err%
S981002431		Bulk Density of Sample	g/ml	n/a	n/a	1.85 g/M	n/a	n/a	n/a	n/a	5.00e-01	n/a	n/a
S981002432		DSC Exotherm Dry Calculated	Joules/g Dry	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a	n/a
S981002433		DSC Exotherm on Perkin Elmer	Joules/g	100.0	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a	n/a
S981002434		% Water by TGA on Perkin Elmer	%	99.23	n/a	19.58	19.00	19.59	3.01	n/a	n/a	n/a	n/a
S981002435		F Aluminum - ICP-Fusion	ug/g	98.40	< 5.00e-02	1.04e+03	9.52e+03	9.56e+03	8.84	96.80	1.01e+03	n/a	n/a
S981002436		F Boron - ICP-Fusion	ug/g	98.60	< 5.00e-02	< 1.01e-03	< 1.04e+3	n/a	n/a	95.80	1.01e+03	n/a	n/a
S981002437		F Barium - ICP-Fusion	ug/g	99.00	< 5.00e-02	< 1.01e-03	< 1.04e+3	n/a	n/a	95.80	1.01e+03	n/a	n/a
S981002438		F Bismuth - ICP-Fusion	ug/g	100.0	< 1.00e-01	< 2.02e-03	< 2.08e+3	n/a	n/a	99.90	2.02e+03	n/a	n/a
S981002439		F Calcium - ICP-Fusion	ug/g	99.00	< 1.00e-01	< 2.02e-03	< 2.08e+3	n/a	n/a	102.0	2.02e+03	n/a	n/a
S981002440		F Chromium - ICP-Fusion	ug/g	98.20	< 1.00e-01	0.99e+02	827.0	868.0	9.45	97.90	202.0	n/a	n/a
S981002441		F Iron - ICP-Fusion	ug/g	96.30	< 5.00e-02	< 1.01e-03	< 1.04e+3	n/a	n/a	98.90	1.01e+03	n/a	n/a
S981002442		F Lithium - ICP-Fusion	ug/g	101.0	< 1.00e-02	< 2.02e-02	< 2.08e+2	n/a	n/a	95.30	202.0	n/a	n/a
S981002443		F Manganese - ICP-Fusion	ug/g	97.80	< 1.00e-02	< 2.02e-02	272.0	279.5	5.37	95.30	202.0	n/a	n/a
S981002444		F Sodium - ICP-Fusion	ug/g	103.4	2.09e-01	2.16e+05	2.18e+05	2.17e+05	0.92	95.30	2.02e+03	n/a	n/a
S981002445		F Silicon - ICP-Fusion	ug/g	98.30	< 5.00e-02	1.23e+03	3.00e+03	3.04e+03	2.96	98.70	404.0	n/a	n/a
S981002446		F Uranium - ICP-Fusion	ug/g	97.00	< 5.00e-02	< 1.01e-04	< 1.04e+4	n/a	n/a	91.50	1.01e+04	n/a	n/a
S981002447		F Vanadium - ICP-Fusion	ug/g	94.80	< 1.00e-02	< 2.02e-02	< 2.08e+2	n/a	n/a	96.70	202.0	n/a	n/a
S981002448		F Zirconium - ICP-Fusion	ug/g	96.60	< 1.00e-02	< 2.02e-02	< 2.08e+2	n/a	n/a	96.70	202.0	n/a	n/a
S981002449		F Alpha of Digested Solid	ug/g	95.60	1.21e-01	1.05e+04	7.04e+02	7.58e+02	14.1	75.06	1.00e+03	7.24e+00	n/a
S981002450		F Aluminum - ICP-Acid Digest	ug/g	93.60	< 1.00e-02	1.08e+02	134.0	121.0	21.5	101.4	28.60	n/a	n/a
S981002451		F Boron - ICP-Acid Digest	ug/g	100.6	< 5.50e-01	< 28.60	< 83e+1	n/a	n/a	95.80	28.60	n/a	n/a
S981002452		F Calcium - ICP-Acid Digest	ug/g	89.20	< 1.00e-02	< 57.20	< 5.66e+1	n/a	n/a	100.4	57.30	n/a	n/a
S981002453		F Bismuth - ICP-Acid Digest	ug/g	94.00	1.68e-01	1.86e+02	158.0	172.0	16.3	96.40	57.30	n/a	n/a
S981002454		F Chromium - ICP-Acid Digest	ug/g	91.40	< 1.00e-02	8.90e+02	795.0	837.5	12.5	87.20	57.30	n/a	n/a
S981002455		F Iron - ICP-Acid Digest	ug/g	91.00	< 5.00e-02	7.06e+02	597.0	651.5	16.7	92.20	28.60	n/a	n/a
S981002456		F Lithium - ICP-Acid Digest	ug/g	99.20	< 1.00e-02	< 1.0e+03	< 1.0e+03	1.20e+03	16.7	83.60	286.0	n/a	n/a
S981002457		F Potassium - ICP-Acid Digest	ug/g	99.00	< 5.00e-02	< 5.720	< 5.66e0	n/a	n/a	97.20	57.30	n/a	n/a
S981002458		F Manganese - ICP-Acid Digest	ug/g	90.60	< 1.00e-02	2.25e+02	235.0	248.5	10.9	94.00	57.30	n/a	n/a
S981002459		F Sodium - ICP-Acid Digest	ug/g	114.8	8.04e-01	2.16e+05	2.16e+05	2.15e+05	0.93	-3.14	57.30	n/a	n/a
S981002460		F Silicon - ICP-Acid Digest	ug/g	89.80	< 2.00e-02	15.30	17.90	16.00	15.7	95.00	11.40	n/a	n/a
S981002461		F Uranium - ICP-Acid Digest	ug/g	94.60	1.550	2.29e+02	348.0	288.5	41.2	121.0	28.60	n/a	n/a
S981002462		F Vanadium - ICP-Acid Digest	ug/g	93.40	< 5.00e-01	< 2.86e+02	< 2.83e+2	n/a	n/a	94.70	286.0	n/a	n/a
S981002463		F Zinc - ICP-Acid Digest	ug/g	85.00	1.10e-02	< 25.00	< 22.60	23.80	10.1	95.00	57.30	n/a	n/a
S981002464		F Zirconium - ICP-Acid Digest	ug/g	91.20	< 1.00e-02	< 5.720	< 5.66e0	n/a	n/a	96.40	57.30	n/a	n/a
S981002465		F Formate by IC-Dionex 4000/4500	ug/g	94.12	< 1.00e-02	< 72.50	< 23e+1	n/a	n/a	155.5	72.48	n/a	n/a
S981002466		F Fluoride-IC-Dionex 4000/4500	ug/g	116.6	< 2.00e-02	< 3.66e+02	421.0	n/a	n/a	97.80	256.2	n/a	n/a
S981002467		F Chloride-IC-Dionex 4000/4500	ug/g	106.0	< 2.00e-02	3.00e+03	2.95e+03	3.39	97.75	139.0	n/a	n/a	n/a
S981002468		F Nitrate-IC - Dionex 4000/4500	ug/g	101.8	3.90e-01	3.69e+04	3.42e+04	5.55e+04	7.59	96.72	1.07e+03	n/a	n/a
S981002469		F Bromide by Ion Chromatograph	ug/g	98.12	< 1.25e-01	< 1.26e+3	n/a	n/a	n/a	93.17	1.24e+03	n/a	n/a
S981002470		F Phosphate by IC-Dionex 4000/4500	ug/g	101.7	< 1.20e-01	5.46e+05	5.33e+05	5.39e+05	2.41	93.41	2.74e+03	n/a	n/a
S981002471		F Phosphate-IC-Dionex 4000/4500	ug/g	104.2	< 1.00e-01	6.13e+03	6.13e+03	5.73e+03	14.1	101.6	1.19e+03	n/a	n/a
S981002472		F Sulfate by IC-Dionex 4000/4500	ug/g	105.6	< 1.38e-01	< 2.72e+03	< 2.72e+3	n/a	n/a	103.8	2.72e+03	n/a	n/a
S981002473		F Oxalate-IC-Dionex 4000/4500	ug/g	104.3	< 1.09e-01	< 1.04e+03	< 1.04e+3	n/a	n/a	104.3	1.04e+03	n/a	n/a

Table 1. Data Summary Report.  
U-107 (2)

SEGMENT PORTION: L Lower: Half of Segment

Sample #	R #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det. Limit	Count	Err%
S981002437		Bulk Density	g/ml	N/A	N/A	1.82 g/ml	N/A	N/A	N/A	N/A	5.00e-01	N/A	N/A
S981002438		DSC Exotherm Dry Calculated	Joules/g Dry	N/A	N/A	0.00e+00	0.00e+00	0.00e+00	0.00	N/A	N/A	N/A	N/A
S981002438		DSC Exotherm on Perkin Elmer	Joules/g	100.0	N/A	0.00e+00	0.00e+00	0.00e+00	0.00	N/A	N/A	N/A	N/A
S981002438		*Water by IGA on Perkin Elmer*	Joules/g	99.23	N/A	24.41	25.82	25.12	12.4	N/A	N/A	N/A	N/A
S981002440	F	Aluminum - ICP-Fusion	ug/g	98.40	< 5.00e-02	1.06e+04	1.20e+04	1.13e+04	12.4	N/A	1.00e+03	N/A	N/A
S981002440	F	Boron - ICP-Fusion	ug/g	98.60	< 1.00e-02	4.10e+03	4.10e+03	4.10e+03	N/A	N/A	1.00e+03	N/A	N/A
S981002440	F	Barium - ICP-Fusion	ug/g	99.00	< 5.00e-02	4.10e+03	4.10e+03	4.10e+03	N/A	N/A	1.00e+03	N/A	N/A
S981002440	F	Bismuth - ICP-Fusion	ug/g	100.0	< 1.00e-01	2.01e+03	2.04e+03	N/A	N/A	N/A	1.00e+03	N/A	N/A
S981002440	F	Calcium - ICP-Fusion	ug/g	99.00	< 1.00e-01	2.01e+03	2.04e+03	N/A	N/A	N/A	2.01e+03	N/A	N/A
S981002440	F	Chromium - ICP-Fusion	ug/g	98.80	< 1.00e-02	8.29e+02	932.0	880.5	11.7	N/A	201.0	N/A	N/A
S981002440	F	Iron - ICP-Fusion	ug/g	96.80	< 5.00e-02	4.10e+03	4.10e+03	4.10e+03	N/A	N/A	1.00e+03	N/A	N/A
S981002440	F	Lithium - ICP-Fusion	ug/g	101.0	< 1.00e-02	2.79e+02	2.79e+02	2.79e+02	N/A	N/A	201.0	N/A	N/A
S981002440	F	Manganese - ICP-Fusion	ug/g	97.80	< 1.00e-02	2.04e+03	310.0	294.5	10.5	N/A	201.0	N/A	N/A
S981002440	F	Sodium - ICP-Fusion	ug/g	103.4	1.20e-01	1.90e+05	2.04e+05	2.07e+05	2.90	N/A	2.01e+05	N/A	N/A
S981002440	F	Nickel - ICP-Fusion	ug/g	98.80	2.39e-01	2.76e+03	2.81e+03	2.78e+03	1.80	N/A	4.02e+02	N/A	N/A
S981002440	F	Silicon - ICP-Fusion	ug/g	97.00	< 5.00e-02	4.10e+04	1.17e+03	N/A	N/A	N/A	1.00e+04	N/A	N/A
S981002440	F	Uranium - ICP-Fusion	ug/g	97.00	< 1.00e-01	4.10e+04	4.10e+04	N/A	N/A	N/A	1.00e+04	N/A	N/A
S981002440	F	Zinc - ICP-Fusion	ug/g	94.80	< 1.00e-02	2.01e+02	2.04e+02	N/A	N/A	N/A	201.0	N/A	N/A
S981002440	F	Zirconium - ICP-Fusion	ug/g	96.60	< 1.00e-02	7.19e+02	8.41e+02	7.80e+02	15.6	N/A	1.00e+03	N/A	N/A
S981002440	F	Alpha of Digested Solid	ug/g	95.00	< 1.09e-03	7.19e+02	9.11e+03	1.00e+04	17.9	N/A	28.90	N/A	N/A
S981002444	A	Aluminum - ICP-Acid Digest	ug/g	96.20	1.27e-01	1.64e+02	101.0	132.5	47.5	N/A	28.90	N/A	N/A
S981002444	A	Boron - ICP-Acid Digest	ug/g	105.4	6.32e-01	< 28.90	< 28.86e1	N/A	N/A	N/A	28.90	N/A	N/A
S981002444	A	Barium - ICP-Acid Digest	ug/g	96.20	< 5.00e-02	< 57.70	< 57.71e1	N/A	N/A	N/A	57.60	N/A	N/A
S981002444	A	Bismuth - ICP-Acid Digest	ug/g	99.40	< 1.00e-01	1.90e+02	166.0	178.0	13.5	N/A	57.60	N/A	N/A
S981002444	A	Calcium - ICP-Acid Digest	ug/g	99.40	< 1.00e-01	922.5	835.0	922.5	19.0	N/A	57.60	N/A	N/A
S981002444	A	Chromium - ICP-Acid Digest	ug/g	94.00	< 5.00e-02	8.35e+02	684.0	759.5	19.9	N/A	28.90	N/A	N/A
S981002444	A	Iron - ICP-Acid Digest	ug/g	94.00	< 5.00e-02	1.24e+03	1.01e+03	1.12e+03	20.4	N/A	289.0	N/A	N/A
S981002444	A	Potassium - ICP-Acid Digest	ug/g	98.40	< 1.00e-02	< 5.770	< 5.771e1	N/A	N/A	N/A	5.760	N/A	N/A
S981002444	A	Lithium - ICP-Acid Digest	ug/g	98.40	< 1.00e-02	3.26e+02	264.0	295.0	21.0	N/A	5.760	N/A	N/A
S981002444	A	Manganese - ICP-Acid Digest	ug/g	120.8	9.96e-01	2.22e+05	2.24e+05	2.23e+05	0.90	N/A	57.60	N/A	N/A
S981002444	A	Sodium - ICP-Acid Digest	ug/g	93.00	< 2.00e-01	17.40	17.30	17.35	0.58	N/A	11.60	N/A	N/A
S981002444	A	Nickel - ICP-Acid Digest	ug/g	105.4	1.530	2.36e+02	191.0	213.5	21.1	N/A	28.90	N/A	N/A
S981002444	A	Uranium - ICP-Acid Digest	ug/g	93.70	< 5.00e-01	< 28.90	< 28.86e2	N/A	N/A	N/A	289.0	N/A	N/A
S981002444	A	Zinc - ICP-Acid Digest	ug/g	87.00	< 1.00e-02	28.00	23.60	28.80	17.1	N/A	5.760	N/A	N/A
S981002444	A	Zirconium - ICP-Acid Digest	ug/g	99.00	< 1.00e-02	< 5.770	< 5.771e1	N/A	N/A	N/A	5.760	N/A	N/A
S981002442	W	Formate by IC-Dionex 4000/4500	ug/g	83.92	< 2.10e-02	1.09e+03	1.07e+03	1.08e+03	1.85	N/A	74.70	N/A	N/A
S981002442	W	Fluoride by IC-Dionex 4000/4500	ug/g	99.49	< 1.20e-02	2.95e+02	3.02e+02	2.98e+02	3.35	N/A	251.2	N/A	N/A
S981002442	W	Chloride by IC-Dionex 4000/4500	ug/g	100.0	2.20e-02	2.95e+02	3.02e+02	2.98e+02	3.35	N/A	631.1	N/A	N/A
S981002442	W	Nitrate by Ion Chromatograph	ug/g	99.45	5.62e-01	3.42e+04	3.48e+04	3.45e+04	1.74	N/A	1.47e+03	N/A	N/A
S981002442	W	Bromide by Ion Chromatograph	ug/g	98.64	< 1.25e-01	4.17e+03	4.17e+03	4.17e+03	N/A	N/A	1.70e+03	N/A	N/A
S981002442	W	Nitrate by IC-Dionex 4000/4500	ug/g	94.93	2.09e-01	5.64e+03	5.74e+03	5.69e+03	1.76	N/A	1.89e+03	N/A	N/A
S981002442	W	Phosphate by IC-Dionex 4000/4500	ug/g	102.0	< 1.20e-01	4.13e+03	4.04e+03	4.08e+03	2.20	N/A	1.65e+03	N/A	N/A
S981002442	W	Sulfate by IC-Dionex 4000/4500	ug/g	99.69	< 1.38e-01	< 1.88e+03	< 1.84e3	N/A	N/A	N/A	1.88e+03	N/A	N/A

Sample#	P. A#	AnalYTE	Unit	Standard %	Blank	Result	Duplicate	Average	RPD	% Spk Rec.	Det Limit	Count Err%
S98102242	U	Oxalate-IC-Dionez	ug/g	102.2	<1.05e-01	<1.43e+03	<1.40e3	U/a	U/a	U/a	1.43e+03	U/a

Table 1. Data Summary Report.  
U-107 (2)

25-Jan-1999 07:25:40  
A-0002-1

SECRET PORTION: U Upper Half of Segment

Sample#	R #	Analyte	Unit	Standard	Blank	Result	Duplicate	Average	RPD, %	Spk Rec, %	Det Limit	Count	Err%
S981002444		DSC Exotherm DRY - Calculated	Joules/g DRY	N/A	N/A	1.19e+02	134.5	126.8	12.1	N/A	N/A	N/A	N/A
S981002444		DSC Exotherm on Perkin Elmer	Joules/g	100.0	N/A	64.30	72.65	12.2	N/A	N/A	N/A	N/A	
S981002444		% Water by TGA on Perkin Elmer	%	99.23	N/A	65.29	46.70	46.00	3.07	N/A	N/A	N/A	N/A
S981002446		W Formate by IC-Dionex 4000/4500	ug/g	96.64	<1.00e-02	1.38e+03	1.48e+03	1.43e+03	6.99	N/A	N/A	257.7	N/A
S981002446		W Fluoride by IC-Dionex 4000/4500	ug/g	111.4	<1.20e-02	<1.61e+02	<1.61e+02	<1.61e+02	1.60	N/A	N/A	160.7	N/A
S981002446		W Chloride by IC-Dionex 4000/4500	ug/g	104.8	<1.70e-02	4.20e+03	5.30e+03	4.86e+03	27.3	N/A	N/A	222.7	N/A
S981002446		W Nitrite by IC-Dionex 4000/4500	ug/g	108.6	3.50e-01	4.67e+04	6.30e+04	5.49e+04	29.7	N/A	N/A	1.45e+03	N/A
S981002446		W Bromide by Ion Chromatograph	ug/g	98.29	<1.25e-01	<1.67e+03	<1.66e+03	<1.66e+03	18.9	N/A	N/A	1.67e+03	N/A
S981002446		W Nitrate by IC-Dionex 4000/4500	ug/g	93.92	<1.39e-01	4.97e+03	5.57e+03	5.09e+03	18.9	N/A	N/A	1.86e+03	N/A
S981002446		W Phosphate by IC-Dionex 4000/4500	ug/g	102.4	<1.20e-01	4.87e+03	3.38e+03	4.34e+03	28.8	N/A	N/A	1.61e+03	N/A
S981002446		W Sulfate by IC-Dionex 4000/4500	ug/g	100.4	<1.38e-01	4.97e+03	2.38e+03	4.34e+03	28.8	N/A	N/A	1.85e+03	N/A
S981002447		F Aluminum - ICP-Fusion	ug/g	101.3	<1.05e-01	1.94e+04	<1.40e+03	2.14e+04	18.3	N/A	N/A	1.41e+03	N/A
S981002447		F Boron - ICP-Fusion	ug/g	99.00	<5.00e-02	<1.01e+03	<1.02e3	N/A	N/A	N/A	N/A	1.01e+03	N/A
S981002447		F Barium - ICP-Fusion	ug/g	99.20	<5.00e-02	<1.01e+03	<1.02e3	N/A	N/A	N/A	N/A	2.01e+03	N/A
S981002447		F Bismuth - ICP-Fusion	ug/g	100.2	<1.00e-01	<2.01e+03	<2.04e3	N/A	N/A	N/A	N/A	2.01e+03	N/A
S981002447		F Calcium - ICP-Fusion	ug/g	100.6	<1.00e-01	<2.01e+03	<2.04e3	N/A	N/A	N/A	N/A	2.01e+03	N/A
S981002447		F Chromium - ICP-Fusion	ug/g	99.40	<1.00e-02	8.54e+02	951.0	902.5	10.7	N/A	N/A	201.0	N/A
S981002447		F Iron - ICP-Fusion	ug/g	98.40	<5.00e-02	<1.01e+03	<1.02e3	N/A	N/A	N/A	N/A	1.01e+03	N/A
S981002447		F Lithium - ICP-Fusion	ug/g	100.0	<1.00e-02	<2.01e+02	<2.04e2	N/A	N/A	N/A	N/A	201.0	N/A
S981002447		F Manganese - ICP-Fusion	ug/g	99.40	<1.00e-02	3.22e+02	379.0	390.5	16.3	N/A	N/A	201.0	N/A
S981002447		F Sodium - ICP-Fusion	ug/g	103.6	1.09e-01	1.87e+05	1.80e+05	1.84e+05	3.81	N/A	N/A	2.01e+03	N/A
S981002447		F Nickel - ICP-Fusion	ug/g	99.80	1.67e-01	3.15e+03	2.82e+03	2.98e+03	11.1	N/A	N/A	403.0	N/A
S981002447		F Silicon - ICP-Fusion	ug/g	99.00	<5.00e-02	1.60e+03	<1.02e3	N/A	N/A	N/A	N/A	1.01e+03	N/A
S981002447		F Uranium - ICP-Fusion	ug/g	97.30	<5.00e-01	<1.01e+04	<1.02e4	N/A	N/A	N/A	N/A	201.0	N/A
S981002447		F Zinc - ICP-Fusion	ug/g	96.40	<1.00e-02	<2.01e+02	<2.04e2	N/A	N/A	N/A	N/A	201.0	N/A
S981002447		F Zirconium - ICP-Fusion	ug/g	97.20	<1.00e-01	1.44e+04	1.67e+04	1.54e+04	17.6	N/A	N/A	29.00	N/A
S981002448		A Aluminum - ICP-Acid Digest	ug/g	104.0	5.33e-01	1.44e+04	98.90	121.5	37.1	N/A	N/A	29.00	N/A
S981002448		A Boron - ICP-Acid Digest	ug/g	93.60	<5.00e-02	< 28.90	< 29.961	N/A	N/A	N/A	N/A	29.00	N/A
S981002448		A Barium - ICP-Acid Digest	ug/g	88.00	<5.00e-02	< 57.90	< 5.8561	N/A	N/A	N/A	N/A	57.90	N/A
S981002448		A Bismuth - ICP-Acid Digest	ug/g	94.20	1.31e-01	1.74e+02	197.0	185.5	12.4	N/A	N/A	57.90	N/A
S981002448		A Calcium - ICP-Acid Digest	ug/g	91.80	<1.00e-02	6.69e+02	668.0	668.0	0.15	N/A	N/A	5.790	N/A
S981002448		A Chromium - ICP-Acid Digest	ug/g	89.60	<5.00e-02	5.61e+02	555.0	558.0	1.08	N/A	N/A	29.00	N/A
S981002448		A Iron - ICP-Acid Digest	ug/g	93.40	<5.00e-01	1.59e+03	1.84e+03	1.72e+03	14.6	N/A	N/A	290.0	N/A
S981002448		A Potassium - ICP-Acid Digest	ug/g	94.00	<1.00e-02	< 5.790	< 5.8560	N/A	N/A	N/A	N/A	5.790	N/A
S981002448		A Lithium - ICP-Acid Digest	ug/g	90.40	<1.00e-02	2.28e+02	223.0	225.5	2.22	N/A	N/A	5.790	N/A
S981002448		A Manganese - ICP-Acid Digest	ug/g	118.6	7.36e-01	1.90e+05	2.09e+05	2.00e+05	9.52	N/A	N/A	57.90	N/A
S981002448		A Sodium - ICP-Acid Digest	ug/g	91.20	<2.00e-02	13.70	13.70	13.70	0.00	N/A	N/A	11.60	N/A
S981002448		A Nickel - ICP-Acid Digest	ug/g	141.2	6.65e-01	<2.89e+02	235.0	254.0	15.0	N/A	N/A	29.00	N/A
S981002448		A Uranium - ICP-Acid Digest	ug/g	92.40	<5.00e-01	<2.89e+02	<2.93e2	N/A	N/A	N/A	N/A	290.0	N/A
S981002448		A Zinc - ICP-Acid Digest	ug/g	83.20	<1.00e-02	26.50	27.85	27.85	9.69	N/A	N/A	5.790	N/A
S981002448		A Zirconium - ICP-Acid Digest	ug/g	90.60	<1.00e-02	< 5.790	< 5.8560	N/A	N/A	N/A	N/A	5.790	N/A

L Lower Half of Segment: L Lower Half of Segment

Sample#	RAM Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err#
5981002450	Bulk Density of Sample	g/mL	N/A	N/A	1.770	N/A	N/A	N/A	N/A	5.00E-01	N/A
5981002450	Ascorbic Acid Dry	Ascorbic Acid Dry	N/A	N/A	0.00E+00	0.00E+00	0.00E+00	0.00	N/A	N/A	N/A
5981002450	DSC Exotherm on Perkin Elmer	Joules/g	99.40	N/A	0.00E+00	0.00E+00	0.00E+00	0.00	N/A	N/A	N/A
5981002450	A Water by TGA on Perkin Elmer	%	99.69	N/A	20.97	24.27	22.62	14.6	N/A	N/A	N/A
5981002450	F Aluminum - ICP-Fusion	ug/g	99.00	<5.00E-02	1.36E+04	1.36E+04	1.34E+04	2.99	N/A	1.02E+03	N/A
5981002452	F Boron - ICP-Fusion	ug/g	99.00	<5.00E-02	<1.02E+03	<1.01E3	N/A	N/A	N/A	1.02E+03	N/A
5981002452	F Barium - ICP-Fusion	ug/g	99.20	<5.00E-02	<1.02E+03	<1.01E3	N/A	N/A	N/A	1.02E+03	N/A
5981002452	F Barium - ICP-Fusion	ug/g	100.2	<1.00E-01	<2.08E+03	<2.01E3	N/A	N/A	N/A	2.03E+03	N/A
5981002452	F Calcium - ICP-Fusion	ug/g	100.6	<1.00E-01	<2.08E+03	<2.01E3	N/A	N/A	N/A	2.03E+03	N/A
5981002452	F Chromium - ICP-Fusion	ug/g	99.40	<1.00E-02	1.31E+03	1.42E+03	1.36E+03	8.06	N/A	203.0	N/A
5981002452	F Iron - ICP-Fusion	ug/g	98.40	<1.00E-02	<1.02E+03	<1.01E3	N/A	N/A	N/A	1.02E+03	N/A
5981002452	F Lithium - ICP-Fusion	ug/g	100.0	<1.00E-02	3.04E+02	<2.01E2	<2.01E2	N/A	N/A	203.0	N/A
5981002452	F Manganese - ICP-Fusion	ug/g	99.40	<1.00E-02	3.70E+02	335.0	319.5	9.70	N/A	203.0	N/A
5981002452	F Sodium - ICP-Fusion	ug/g	103.6	1.09E-01	2.11E+05	2.11E+05	2.11E+05	0.00	N/A	2.03E+03	N/A
5981002452	F Nickel - ICP-Fusion	ug/g	99.80	1.67E-01	1.68E+03	<1.01E3	1.84E+03	19.6	N/A	407.0	N/A
5981002452	F Uranium - ICP-Fusion	ug/g	99.00	<5.00E-02	<1.02E+03	<1.01E3	N/A	N/A	N/A	1.02E+03	N/A
5981002452	F Zinc - ICP-Fusion	ug/g	97.30	<5.00E-01	<1.02E+04	<1.01E4	N/A	N/A	N/A	1.02E+04	N/A
5981002452	F Zirconium - ICP-Fusion	ug/g	96.40	<1.00E-02	<2.08E+02	<2.01E2	N/A	N/A	N/A	203.0	N/A
5981002452	F Alpha of Digested Solid	uCi/g	97.20	<1.00E-02	<2.08E+02	<2.01E2	N/A	N/A	N/A	203.0	N/A
5981002453	A Aluminum - ICP-Acid Digest	ug/g	90.56	<7.97E-03	1.02E-01	9.75E-02	9.98E-02	4.51	N/A	7.00E-03	1.62E+01
5981002453	A Boron - ICP-Acid Digest	ug/g	104.0	5.33E-01	1.05E+02	107.0	106.0	1.89	N/A	28.30	N/A
5981002453	A Barium - ICP-Acid Digest	ug/g	93.60	<5.00E-02	<28.30	<2.84E1	N/A	N/A	N/A	28.30	N/A
5981002453	A Bismuth - ICP-Acid Digest	ug/g	88.00	<1.00E-01	56.60	<5.68E1	N/A	N/A	N/A	56.70	N/A
5981002453	A Calcium - ICP-Acid Digest	ug/g	94.20	1.31E-01	1.88E+02	164.0	175.0	12.6	N/A	5.670	N/A
5981002453	A Chromium - ICP-Acid Digest	ug/g	91.80	<1.00E-02	1.12E+03	920.0	1.02E+03	13.6	N/A	5.670	N/A
5981002453	A Iron - ICP-Acid Digest	ug/g	89.60	<5.00E-02	6.72E+02	587.0	629.5	19.5	N/A	28.30	N/A
5981002453	A Potassium - ICP-Acid Digest	ug/g	93.40	<5.00E-01	1.20E+03	1.23E+03	1.22E+03	2.47	N/A	283.0	N/A
5981002453	A Lithium - ICP-Acid Digest	ug/g	94.00	<1.00E-02	<5.660	<5.68E0	N/A	N/A	N/A	5.670	N/A
5981002453	A Manganese - ICP-Acid Digest	ug/g	90.40	<1.00E-02	2.74E+02	236.0	255.0	14.9	N/A	5.670	N/A
5981002453	A Sodium - ICP-Acid Digest	ug/g	118.6	7.36E-01	2.10E+05	1.92E+05	2.02E+05	8.44	N/A	56.70	N/A
5981002453	A Nickel - ICP-Acid Digest	ug/g	91.20	<2.00E-02	13.10	12.00	12.35	8.76	N/A	11.30	N/A
5981002453	A Silicon - ICP-Acid Digest	ug/g	141.2	6.65E-01	2.09E+02	222.0	213.5	7.96	N/A	28.30	N/A
5981002453	A Uranium - ICP-Acid Digest	ug/g	92.40	<5.00E-01	<2.85E+02	<2.84E2	N/A	N/A	N/A	283.0	N/A
5981002453	A Zinc - ICP-Acid Digest	ug/g	83.20	<1.00E-02	26.00	23.40	24.70	10.5	N/A	5.670	N/A
5981002453	A Zirconium - ICP-Acid Digest	ug/g	90.60	<1.00E-02	<5.660	<5.68E0	N/A	N/A	N/A	5.670	N/A
5981002454	V Formate by IC-Dioxex 4000/4500	ug/g	96.64	<2.10E-02	1.48E+03	1.27E+03	1.37E+03	15.3	N/A	292.4	N/A
5981002454	V Fluoride by IC-Dioxex 4000/4500	ug/g	111.4	<1.20E-02	3.03E+02	284.0	293.4	6.47	N/A	173.5	N/A
5981002454	V Chloride by IC-Dioxex 4000/4500	ug/g	104.8	<1.70E-02	3.57E+03	3.44E+03	3.44E+03	4.35	N/A	257.1	N/A
5981002454	V Nitrate by IC-Dioxex 4000/4500	ug/g	98.6	3.50E-01	3.77E+04	3.69E+04	3.73E+04	2.14	N/A	1.42E+03	N/A
5981002454	V Bromide by Ion Chromatograph	ug/g	108.29	<1.20E-01	<1.67E3	<1.67E3	N/A	N/A	N/A	1.64E+03	N/A
5981002454	V Nitrate by IC-Dioxex 4000/4500	ug/g	95.92	<1.39E-01	4.88E+05	4.35E+05	4.62E+05	11.5	N/A	1.82E+03	N/A
5981002454	V Phosphate by IC-Dioxex 4000/4500	ug/g	100.4	<1.20E-01	1.04E+04	1.30E+04	1.17E+04	22.2	N/A	1.58E+03	N/A
5981002454	V Sulfate by IC-Dioxex 4000/4500	ug/g	102.4	<1.38E-01	<1.81E+03	<2.02E+03	N/A	N/A	N/A	1.81E+03	N/A
5981002454	V Oxalate by IC-Dioxex 4000/4500	ug/g	101.3	<1.05E-01	<1.38E+03	<1.41E3	N/A	N/A	N/A	1.38E+03	N/A

Table 1. Data Summary Report.  
U-107 (2)

SEGMENT PORTION: L Lower Half of Segment

Sample#	R #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err#
S981002518		Bulk Density of Sample	g/ml	n/a	n/a	DRY	n/a	n/a	n/a	n/a	5.00e-01	n/a
S981002519		DSC Exotherm Dry Calculated	Joules/g Dry	n/a	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S981002519		DSC Exotherm on Perkin Elmer	Joules/g	99.40	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S981002519		% Water By TGA on Perkin Elmer	Joules/g	99.69	n/a	18.24	18.24	18.71	5.08	n/a	n/a	n/a
S981002520	F	Aluminum - ICP-Fusion	ug/g	99.00	55.00e-02	7.50e+04	2.80e+04	5.15e+04	91.3	98.10	1.01e+03	n/a
S981002520	F	Boron - ICP-Fusion	ug/g	99.00	45.00e-02	1.01e+03	<1.03e3	n/a	n/a	97.40	1.01e+03	n/a
S981002520	F	Barium - ICP-Fusion	ug/g	99.20	45.00e-02	<1.01e+03	<1.03e3	n/a	n/a	97.00	2.03e+03	n/a
S981002520	F	Bismuth - ICP-Fusion	ug/g	100.2	41.00e-01	<2.03e+03	<2.05e3	n/a	n/a	104.0	2.03e+03	n/a
S981002520	F	Calcium - ICP-Fusion	ug/g	99.60	41.00e-01	<2.03e+03	<2.05e3	n/a	n/a	98.30	203.0	n/a
S981002520	F	Chromium - ICP-Fusion	ug/g	98.40	45.00e-02	2.37e+03	2.47e+03	n/a	n/a	101.0	1.01e+03	n/a
S981002520	F	Iron - ICP-Fusion	ug/g	100.0	41.00e-02	<1.01e+03	<1.03e3	n/a	n/a	94.10	203.0	n/a
S981002520	F	Lithium - ICP-Fusion	ug/g	99.40	41.00e-02	3.63e+02	<2.05e2	n/a	n/a	95.90	203.0	n/a
S981002520	F	Manganese - ICP-Fusion	ug/g	99.40	41.00e-02	1.27e+03	2.08e+03	348.5	8.32	95.90	203.0	n/a
S981002520	F	Sodium - ICP-Fusion	ug/g	103.6	1.09e-01	2.29e+03	2.08e+03	1.91e+05	17.8	100.0	2.03e+03	n/a
S981002520	F	Nickel - ICP-Fusion	ug/g	99.80	45.00e-02	1.84e+03	1.84e+03	2.06e+03	21.8	98.80	405.0	n/a
S981002520	F	Silicon - ICP-Fusion	ug/g	97.30	45.00e-02	1.01e+04	1.03e4	1.22e+03	8.20	99.30	1.01e+03	n/a
S981002520	F	Uranium - ICP-Fusion	ug/g	96.40	41.00e-02	<2.03e+02	<2.05e2	n/a	n/a	92.40	1.01e+04	n/a
S981002520	F	Zirconium - ICP-Fusion	ug/g	97.20	41.00e-02	<2.03e+02	<2.05e2	n/a	n/a	95.10	203.0	n/a
S981002520	F	Alpha of Digested Solid	uCi/g	90.56	47.97e-03	1.63e+01	1.32e+01	1.48e-01	21.0	74.81	7.00e-03	1.30E+01
S981002521	A	Aluminum - ICP-Acid Digest	ug/g	92.00	1.10e-01	1.61e+04	3.10e+04	2.36e+04	63.3	4.36e+03	28.90	n/a
S981002521	A	Boron - ICP-Acid Digest	ug/g	93.60	45.00e-02	< 28.90	< 3.04e1	54.45	47.0	105.8	28.90	n/a
S981002521	A	Bismuth - ICP-Acid Digest	ug/g	88.00	41.00e-01	< 57.70	< 6.09e1	n/a	n/a	96.40	28.90	n/a
S981002521	A	Calcium - ICP-Acid Digest	ug/g	94.20	1.31e-01	2.80e+02	295.0	287.5	5.22	117.2	57.60	n/a
S981002521	A	Chromium - ICP-Acid Digest	ug/g	91.80	45.00e-02	1.26e+03	2.79e+03	2.02e+03	75.6	378.0	5.760	n/a
S981002521	A	Iron - ICP-Acid Digest	ug/g	89.60	45.00e-02	9.88e+02	1.26e+03	1.12e+03	24.2	149.4	28.90	n/a
S981002521	A	Potassium - ICP-Acid Digest	ug/g	93.40	45.00e-02	8.89e+02	1.05e+03	969.5	16.6	99.60	289.0	n/a
S981002521	A	Lithium - ICP-Acid Digest	ug/g	94.00	41.00e-02	< 5.770	< 6.09e0	n/a	n/a	96.00	5.760	n/a
S981002521	A	Manganese - ICP-Acid Digest	ug/g	118.6	7.35e-01	3.90e+02	390.0	390.0	0.00	114.6	5.760	n/a
S981002521	A	Sodium - ICP-Acid Digest	ug/g	91.20	42.00e-02	13.90	29.10	2.11e+05	2.84	-1.90e+03	57.60	n/a
S981002521	A	Nickel - ICP-Acid Digest	ug/g	94.40	6.65e-01	<2.89e+02	416.0	321.0	59.2	114.0	11.60	n/a
S981002521	A	Uranium - ICP-Acid Digest	ug/g	92.00	41.00e-02	<2.89e+02	<3.04e2	n/a	n/a	107.0	28.90	n/a
S981002521	A	Zinc - ICP-Acid Digest	ug/g	83.20	41.00e-02	< 33.80	< 38.70	36.25	13.5	98.20	5.760	n/a
S981002522	W	Formate by IC-Dionex 4000/4500	ug/g	90.60	41.00e-02	< 1.770	< 10.30	1.29e+03	8.89	83.60	5.760	n/a
S981002522	W	Fluoride by IC-Dionex 4000/4500	ug/g	96.64	42.10e-02	1.41e+03	1.29e+03	1.25e+03	8.89	96.64	253.1	n/a
S981002522	W	Chloride by IC-Dionex 4000/4500	ug/g	111.4	41.20e-02	1.53e+02	595.0	n/a	n/a	121.7	157.7	n/a
S981002522	W	Nitrite by IC-Dionex 4000/4500	ug/g	108.8	3.50e-01	3.43e+04	3.05e+03	3.18e+03	8.48	104.2	223.5	n/a
S981002522	W	Bromide by Ion Chromatograph	ug/g	98.92	41.20e-01	<1.66e+03	<1.70e3	2.81e+05	4.47	113.3	1.42e+03	n/a
S981002522	W	Nitrate by IC-Dionex 4000/4500	ug/g	93.20	1.39e-01	1.53e+05	2.81e+05	2.81e+05	91.1	108.3	1.83e+03	n/a
S981002522	W	Phosphate by IC-Dionex 4000/4500	ug/g	100.4	41.20e-01	8.04e+03	3.36e+04	2.08e+04	123	105.1	1.58e+03	n/a
S981002522	W	Sulfate by IC-Dionex 4000/4500	ug/g	102.4	41.38e-01	<1.81e+03	2.18e+03	n/a	n/a	103.9	1.81e+03	n/a

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Sample#	P. A#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det. Limit	Count	Err%
S981002322	M	Oxalate-IC-Dioxex	ug/g	101.3	<1.05e-01	<1.38e+03	<1.42e3	17.8	17.8	105.6	1.36e+03	572	572



25-Jan-1999 07:20:48  
A-0002-1

Table 1. Data Summary Report.  
U-107 (2)

CORE NUMBER: 242R  
SEGMENT #: Composite

SEGMENT PORTION: Drainable Liquid

Sample#	R #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S98T003331		Chromium (VI) by Spec.	ug/mL	100.0	<2.58e-01	5.42e+02	547.0	544.5	0.92	100.2	1.00e-02	n/a
S98T003331		OH- by Pot. Titration	ug/mL	105.2	<5000.0	3.35e+04	3.47e+04	3.41e+04	3.52	n/a	5.00e+03	n/a
S98T003331		TIC by Acid/Coulometry	ug/mL	93.69	4.900	6.31e+03	6.17e+03	6.24e+03	2.24	95.00	5.000	n/a
S98T003331		TIC by Persulfate/Coulometry	ug/mL	91.33	14.50	4.49e+03	4.34e+03	4.42e+03	3.40	87.00	40.00	n/a
S98T003332		Strontium-89/90 Rn. Level	ug/mL	99.04	1.00e-03	3.85e-01	3.91e-01	3.88e-01	1.55	n/a	1.00e-03	2.13E+00
S98T003332		Cesium-137 by GEA	ug/mL	108.0	<4.48e-03	3.03e+02	308.0	305.5	1.64	n/a	n/a	0.160

25-Jan-1999 07:30:43  
A-0002-1

CORE NUMBER: 245  
SEGMENT #: 1

Table 1. Data Summary Report.  
U-107 (2)

SEGMENT PORTION: L Lower Half of Segment

Sample#	R #/AF	Unit	Standard %	Blank	Result	Duplicate	Average	RPD % Spk Rec %	Det. Limit	Count Err%
S981002527		g/mL	n/a	n/a	1.520	n/a	n/a	n/a	5.00e-01	n/a
S981002528		Bulk Density of Sample	n/a	n/a	79.38	63.96	71.67	21.5	n/a	n/a
S981002528		DSC Exotherm Dry Calculated	n/a	n/a	38.41	30.95	34.68	21.5	n/a	n/a
S981002528		DSC Exotherm on Perkin Elmer	99.79	n/a	51.47	51.75	51.61	10.5	n/a	n/a
S981002528		% Water by TGA on Perkin Elmer	99.00	n/a	3.92e+03	4.01e+03	3.70e+03	16.8	259.0	5.000
S981002528		TIC by Acid/Coulometry	85.00	8.00e-01	2.34e+03	2.74e+03	2.54e+03	15.7	173.0	40.00
S981002528		TOC by Persulfate/Coulometry	101.0	5.00e-03	1.210	1.460	1.335	18.7	n/a	3.00e-03
S981002528		F Strontium-89/90 High Level	98.40	5.00e-02	1.35e+04	1.38e+04	1.26e+04	19.9	97.00	1.00e-03
S981002529		F Aluminum - ICP-Fusion	99.40	5.00e-02	1.00e+03	1.09e+03	n/a	n/a	95.90	1.00e-03
S981002529		F Boron - ICP-Fusion	98.40	5.00e-02	1.00e+03	1.09e+03	n/a	n/a	93.30	1.00e-03
S981002529		F Barium - ICP-Fusion	100.0	1.00e-01	2.01e+03	2.09e+03	n/a	n/a	96.00	2.01e-03
S981002529		F Bismuth - ICP-Fusion	99.40	1.00e-01	2.01e+03	2.09e+03	n/a	n/a	100.0	2.01e-03
S981002529		F Calcium - ICP-Fusion	98.40	1.00e-02	8.31e+02	9.05e+02	880.5	11.2	98.00	201.0
S981002529		F Chromium - ICP-Fusion	97.80	5.00e-02	1.00e+03	1.05e+03	n/a	n/a	96.20	1.00e-03
S981002529		F Iron - ICP-Fusion	99.00	1.00e-02	2.01e+02	2.09e+02	n/a	n/a	94.00	201.0
S981002529		F Lithium - ICP-Fusion	98.20	1.00e-02	2.01e+02	2.09e+02	n/a	n/a	95.50	201.0
S981002529		F Manganese - ICP-Fusion	102.0	1.00e-01	1.55e+05	1.45e+05	1.50e+05	6.67	99.60	2.01e+03
S981002529		F Nickel - ICP-Fusion	98.80	5.00e-01	1.32e+03	1.50e+03	n/a	n/a	101.0	1.00e+03
S981002529		F Uranium - ICP-Fusion	96.60	5.00e-02	1.00e+04	1.05e+04	n/a	n/a	92.00	1.00e+04
S981002529		F Silicon - ICP-Fusion	95.00	1.00e-02	2.01e+02	2.09e+02	n/a	n/a	96.10	201.0
S981002529		F Uranium - ICP-Fusion	96.20	1.00e-02	2.01e+02	2.09e+02	n/a	n/a	93.50	201.0
S981002529		F Zinc - ICP-Fusion	101.7	5.92e-01	1.50e+02	1.84e+02	166.8	20.4	n/a	n/a
S981002529		F Zirconium - ICP-Fusion	100.6	5.00e-02	6.60e+01	7.91e+01	n/a	n/a	88.42	3.73e-01
S981002529		F Cesium-137 by BEA	90.56	2.15e-01	43.18e-01	2.95e-01	n/a	n/a	17.1	1.490e2
S981002529		F Alpha of Digested Solid	99.00	1.29e-01	1.33e+04	1.72e+04	1.22e+04	17.1	-1.490e2	31.50
S981002530		A Aluminum - ICP-Acid Digest	106.8	6.68e-01	1.96e+02	1.78e+02	187.0	9.63	99.60	31.50
S981002530		A Boron - ICP-Acid Digest	100.6	5.00e-02	6.60e+01	8.91e+01	n/a	n/a	96.60	31.50
S981002530		A Barium - ICP-Acid Digest	94.20	1.00e-01	6.60e+01	8.91e+01	n/a	n/a	98.80	62.70
S981002530		A Bismuth - ICP-Acid Digest	99.20	1.00e-01	90.30	90.40	90.35	10.1	102.0	62.70
S981002530		A Calcium - ICP-Acid Digest	96.40	1.00e-02	7.82e+02	870.0	826.0	0.77	127.0	6.270
S981002530		A Chromium - ICP-Acid Digest	94.80	8.60e-02	54.00	85.30	69.65	44.9	104.0	31.50
S981002530		A Iron - ICP-Acid Digest	95.60	5.00e-01	1.91e+03	1.49e+03	1.70e+03	24.7	48.00	315.0
S981002530		A Potassium - ICP-Acid Digest	104.0	1.00e-02	6.280	5.83e0	n/a	n/a	102.6	6.270
S981002530		A Lithium - ICP-Acid Digest	95.20	1.00e-02	16.10	27.10	21.60	50.9	98.80	6.270
S981002530		A Manganese - ICP-Acid Digest	129.8	1.040	1.56e+05	1.70e+05	17.0	-2.200e3	12.60	62.70
S981002530		A Sodium - ICP-Acid Digest	96.80	2.00e-02	12.60	11.7e1	n/a	n/a	102.2	12.60
S981002530		A Nickel - ICP-Acid Digest	131.6	7.59e-01	2.44e+02	247.0	245.5	1.22	112.0	31.50
S981002530		A Silicon - ICP-Acid Digest	99.70	5.00e-01	33.14e+02	2.91e2	n/a	n/a	98.00	315.0
S981002530		A Uranium - ICP-Acid Digest	87.20	1.00e-02	6.280	5.83e0	n/a	n/a	95.60	6.270
S981002530		A Zinc - ICP-Acid Digest	94.60	1.00e-02	6.280	5.83e0	n/a	n/a	97.60	1.00e-02
S981002531		A Zirconium (VI) by Spec.	100.6	53.880	3.45e+02	355.0	1.78e+04	2.86	97.60	8.69e-03
S981002531		W Ohm by Pot. Titration	100.0	48760.0	1.76e+04	1.79e+04	1.69	n/a	113.4	142.1
S981002531		W Formate by IC-Dionex 4000/4500	90.76	2.10e-02	1.32e+03	1.49e+03	1.40e+03	12.1	113.4	142.1
S981002531		W Fluoride-IC-Dionex 4000/4500	107.3	1.20e-02	3.72e+02	367.0	369.2	1.35	120.7	169.3

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Sample#	R #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	Rpd. %	Spk Rec. %	Det. Limit	Count	Err%
S981002531	W	IC-10hex-IC-Dioxex 4000/4500	ug/g	102.6	2.50e-02	4.13e+03	4.46e+03	4.31e+03	7.20	110.8	239.8	n/a	n/a
S981002531	W	TC-10hex-Dioxex 4000/4500	ug/g	102.6	3.80e-02	2.06e+04	3.39e+04	3.20e+04	5.97	115.1	1.52e+03	n/a	n/a
S981002531	W	Bromide by Ion Chromatograph	ug/g	99.74	1.25e-01	1.17e+03	1.87e+03	n/a	n/a	100.2	1.76e+03	n/a	n/a
S981002531	W	Nitrate by IC-Dioxex 4000/4500	ug/g	99.74	1.25e-01	6.31e+02	1.16e+03	1.16e+03	6.62	105.4	1.96e+03	n/a	n/a
S981002531	W	Phosphate by IC-Dioxex 4000/4500	ug/g	103.3	1.30e-01	3.75e+02	6.97e+02	7.83e+02	17.6	108.4	1.69e+03	n/a	n/a
S981002531	W	Sulfate by IC-Dioxex 4000/4500	ug/g	102.4	1.30e-01	3.75e+02	6.97e+02	3.04e+03	6.50	103.9	1.53e+03	n/a	n/a
S981002531	W	Oxalate-IC-Dioxex 4000/4500	ug/g	99.63	<1.05e-01	<1.46e+03	<1.46e+03	n/a	n/a	103.7	1.46e+03	n/a	n/a

Drainable Liquid: Drainable Liquid

Sample#	R #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	Rpd. %	Spk Rec. %	Det. Limit	Count	Err%
S981002524	D	DSC Exotherm DTY	Joules/g DTY	n/a	n/a	1.22e+02	144.2	133.7	16.7	n/a	n/a	n/a	n/a
S981002524	D	DSC Exotherm on Perkin Elmer	Joules/g	97.5	n/a	59.08	69.80	64.44	16.6	n/a	n/a	n/a	n/a
S981002524	D	Ammonia by ISE-Std Additions	ug/ml	100.3	<5.000	1.34e+02	117.0	125.5	33.5	104.4	5.000	n/a	n/a
S981002524	D	% Water by TGA on Perkin Elmer	%	98.89	n/a	51.57	51.59	51.58	0.04	n/a	n/a	n/a	n/a
S981002524	D	Alpha in Liquid Samples	uCi/ml	97.22	<5.68e-03	<1.15e-02	<3.92E-3	n/a	n/a	94.48	1.10e-02	2.55E+02	n/a
S981002525	D	Specific Gravity	Sp.G.	98.92	n/a	1.395	1.421	1.408	1.85	n/a	1.00e-03	n/a	n/a
S981002526	D	Aluminum-ICP-Acid Dil.	ug/ml	99.80	<5.00e-02	2.28e+04	2.26e+04	2.26e+04	1.77	4.63061	1.00e-03	n/a	n/a
S981002527	D	Boron-ICP-Acid Dil.	ug/ml	100.4	<5.00e-02	< 30.10	<3.01e1	73.05	3.15	99.20	30.10	n/a	n/a
S981002527	D	Barium-ICP-Acid Dil.	ug/ml	99.60	<5.00e-02	< 60.10	<6.01e1	n/a	n/a	93.30	30.10	n/a	n/a
S981002527	D	Bismuth-ICP-Acid Dil.	ug/ml	99.40	<1.00e-01	95.60	95.60	94.30	2.76	98.00	60.10	n/a	n/a
S981002527	D	Calcium-ICP-Acid Dil.	ug/ml	97.80	<1.00e-01	95.60	665.0	675.0	2.96	90.70	6.010	n/a	n/a
S981002527	D	Chromium-ICP-Acid Dil.	ug/ml	97.60	<1.00e-02	< 30.10	<3.01e1	n/a	n/a	93.60	30.10	n/a	n/a
S981002527	D	Iron-ICP-Acid Dil.	ug/ml	96.80	<5.00e-01	3.14e+03	3.04e+03	3.09e+03	3.24	64.70	300.0	n/a	n/a
S981002527	D	Lithium-ICP-Acid Dil.	ug/ml	103.2	<1.00e-02	< 6.010	<6.01e0	n/a	n/a	99.40	6.010	n/a	n/a
S981002527	D	Manganese-ICP-Acid Dil.	ug/ml	97.60	<1.00e-02	< 6.010	<6.01e0	n/a	n/a	99.30	6.010	n/a	n/a
S981002527	D	Sodium-ICP-Acid Dil.	ug/ml	104.8	<1.00e-02	2.26e+05	2.25e+05	2.26e+05	0.44	1.38063	60.10	n/a	n/a
S981002527	D	Nickel-ICP-Acid Dil.	ug/ml	96.80	<5.00e-02	15.30	15.30	15.25	0.65	95.30	12.00	n/a	n/a
S981002527	D	Nitric-ICP-Acid Dil.	ug/ml	97.80	<2.00e-02	2.46e+02	148.0	197.0	49.7	97.70	30.10	n/a	n/a
S981002527	D	Uranium-ICP-Acid Dil.	ug/ml	99.00	<5.00e-02	<3.01e-02	<3.01e-02	n/a	n/a	94.50	300.0	n/a	n/a
S981002527	D	Zinc-ICP-Acid Dil.	ug/ml	93.00	<1.00e-02	< 6.010	<6.01e0	n/a	n/a	92.90	6.010	n/a	n/a
S981002527	D	Zirconium-ICP-Acid Dil.	ug/ml	90.76	<2.00e-02	3.08e+03	3.22e+03	3.15e+03	4.44	96.00	6.010	n/a	n/a
S981002527	D	Formate by Ion Chromatograph	ug/ml	109.7	<1.20e-02	<1.22e2	<1.22e2	n/a	n/a	116.6	122.4	n/a	n/a
S981002527	D	Fluoride-IC-Dioxex 4000/4500	ug/ml	104.0	<1.70e-02	8.00e+03	7.17e+03	7.58e+03	10.9	106.5	1.10e+03	n/a	n/a
S981002527	D	Chloride-IC-Dioxex 4000/4500	ug/ml	99.65	<1.08e-01	9.98e+04	9.10e+04	9.54e+04	9.22	108.9	1.42e+03	n/a	n/a
S981002527	D	Nitrate by Ion Chromatograph	ug/ml	103.1	<1.25e-01	2.26e+05	2.12e+05	2.19e+05	9.74	117.4	1.28e+03	n/a	n/a
S981002527	D	Bromide by Ion Chromatograph	ug/ml	103.7	<1.35e-01	2.26e+05	2.08e+05	2.16e+05	9.74	117.4	1.42e+03	n/a	n/a
S981002527	D	Nitrate by IC-Dioxex 4000/4500	ug/ml	105.1	<1.20e-01	3.88e+03	3.56e+03	3.72e+03	8.60	101.3	1.22e+03	n/a	n/a
S981002527	D	Phosphate-IC-Dioxex 4000/4500	ug/ml	104.9	<1.38e-01	6.56e+03	5.86e+03	6.20e+03	11.0	103.1	1.41e+03	n/a	n/a
S981002527	D	Sulfate by IC-Dioxex 4000/4500	ug/ml	101.3	<1.03e-01	<1.07e+03	<1.07e+03	n/a	n/a	100.0	1.07e+03	n/a	n/a

Table 1. Data Summary Report.  
U-107 (2)

CORE NUMBER: 245  
SEGMENT #: 28

SEGMENT PORTION: Drainable Liquid

Sample#	R #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD, % Spk Rec. %	Det Limit	Count Err%
S98T002533		DSC Exotherm Dry Calculated	joules/g Dry	N/A	N/A	54.54	45.37	49.95	18.4	N/A	N/A
S98T002533		DSC Exotherm on Perkin Elmer	joules/g	99.86	<10.00	26.58	22.11	24.34	18.4	N/A	N/A
S98T002533		Ammonia by ISF-Std Additions	ug/mL	100.8	<10.00	1.22e+02	121.0	121.5	89.10	10.00	N/A
S98T002533		% Water by TGA on Perkin Elmer	%	102.3	N/A	51.62	50.91	51.27	1.38	N/A	N/A
S98T002533		Alpha in Liquid Samples	uCi/mL	97.22	<5.68e-03	<6.84e-03	1.90e-02	N/A	95.07	1.10e-02	5.00e+02
S98T002534		Specific Gravity	Sp.6	98.92	N/A	1.399	1.425	1.412	1.84	1.00e-03	N/A
S98T002534		Aluminum-ICP-Acid Dil.	ug/mL	98.60	<5.00e-02	2.23e+04	2.25e+04	2.24e+04	0.89	138.0	30.10
S98T002534		Boron-ICP-Acid Dil.	ug/mL	99.40	<5.00e-02	77.90	77.10	77.50	1.03	93.20	30.10
S98T002534		Barium-ICP-Acid Dil.	ug/mL	98.00	<5.00e-02	< 60.10	<6.01e1	N/A	N/A	96.90	60.10
S98T002534		Bismuth-ICP-Acid Dil.	ug/mL	99.60	<1.00e-01	< 91.30	85.80	88.55	6.21	99.20	60.10
S98T002534		Calcium-ICP-Acid Dil.	ug/mL	98.60	<1.00e-02	6.82e+02	688.0	685.0	0.88	98.60	6.010
S98T002534		Chromium-ICP-Acid Dil.	ug/mL	100.0	<5.00e-02	< 30.10	<3.01e1	N/A	N/A	95.70	30.10
S98T002534		Iron-ICP-Acid Dil.	ug/mL	99.80	<1.00e-02	3.08e+03	3.10e+03	3.04e+03	2.63	68.30	300.0
S98T002534		Lithium-ICP-Acid Dil.	ug/mL	98.00	<1.00e-02	< 6.010	<6.01e0	N/A	N/A	94.00	6.010
S98T002534		Manganese-ICP-Acid Dil.	ug/mL	98.00	<1.00e-02	< 6.010	<6.01e0	N/A	N/A	94.70	6.010
S98T002534		Sodium-ICP-Acid Dil.	ug/mL	102.2	<1.00e-02	2.08e+05	2.09e+05	2.08e+05	0.43	271.0	60.10
S98T002534		Nickel-ICP-Acid Dil.	ug/mL	99.00	<2.00e-02	15.10	17.00	16.05	11.8	97.00	12.00
S98T002534		Silicon-ICP-Acid Dil.	ug/mL	98.00	<5.00e-02	<1.67e+02	<1.67e02	167.0	0.00	99.30	30.10
S98T002534		Uranium-ICP-Acid Dil.	ug/mL	96.30	<5.00e-01	< 6.010	<6.01e0	N/A	N/A	96.50	300.0
S98T002534		Zinc-ICP-Acid Dil.	ug/mL	95.20	<1.00e-02	< 6.010	<6.01e0	N/A	N/A	95.50	6.010
S98T002534		Zirconium-ICP-Acid Dil.	ug/mL	96.20	<1.00e-02	< 6.010	<6.01e0	N/A	N/A	94.90	6.010
S98T002534		Formate by Ion Chromatograph	ug/mL	90.91	<2.10e-02	3.01e+03	3.08e+03	3.05e+03	2.30	120.5	37.57
S98T002534		Fluoride-IC-Dionex 4000/4500	ug/mL	100.3	<1.20e-02	2.24e+02	552.0	387.8	84.5	90.51	61.81
S98T002534		Chloride-IC-Dionex 4000/4500	ug/mL	102.2	<1.70e-02	6.77e+03	8.31e+03	7.54e+03	20.4	94.12	87.57
S98T002534		Nitrite-IC - Dionex 4000/4500	ug/mL	93.99	<1.08e-01	8.04e+04	9.78e+04	8.91e+04	19.5	89.91	556.3
S98T002534		Bromide by Ion Chromatograph	ug/mL	102.5	<1.25e-01	<6.44e02	<6.44e2	N/A	N/A	96.08	643.9
S98T002534		Nitrate by IC-Dionex 4000/4500	ug/mL	100.3	<1.25e-01	1.95e+05	2.16e+05	2.16e+05	19.4	73.82	716.0
S98T002534		Phosphate-IC-Dionex 4000/4500	ug/mL	100.3	<1.25e-01	2.58e+03	2.80e+03	2.69e+03	8.18	90.49	618.1
S98T002534		Sulfate by IC-Dionex 4000/4500	ug/mL	100.4	<1.38e-01	4.81e+03	6.43e+03	5.62e+03	28.8	93.42	710.8
S98T002534		Oxalate-IC-Dionex 4000/4500	ug/mL	100.9	<1.05e-01	<5.41e02	<5.41e2	N/A	N/A	99.28	540.9

Table 1. Data Summary Report.  
U-107 (2)

CORE NUMBER: 245  
SEGMENT #: 3

SEGMENT PORTION: U Upper Half of Segment

Sample#	R #	ANLYT	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err#
S98T002537		DSC Exotherm DRY Calculated	Joules/g DRY	N/A	N/A	1.1e+02	174.9	144.3	42.3	N/A	N/A	N/A
S98T002537		DSC Exotherm on Perkin Elmer	Joules/g	97.79	N/A	82.42	126.7	104.6	42.3	N/A	N/A	N/A
S98T002537		% Water by IGA on Perkin Elmer	%	99.21	N/A	25.90	29.25	27.57	12.1	N/A	N/A	N/A
S98T002539	F	Aluminum - ICP-Fusion	ug/g	98.40	<5.00e-02	9.56e+03	9.92e+03	9.74e+03	3.70	N/A	1.01e+03	N/A
S98T002539	F	Barium - ICP-Fusion	ug/g	99.40	<5.00e-02	<1.01e+03	<1.02e3	N/A	N/A	N/A	1.01e+03	N/A
S98T002539	F	Bismuth - ICP-Fusion	ug/g	98.40	<5.00e-02	<1.01e+03	<1.02e3	N/A	N/A	N/A	1.01e+03	N/A
S98T002539	F	Calcium - ICP-Fusion	ug/g	100.0	<1.00e-01	<2.02e+03	<2.03e3	N/A	N/A	N/A	2.02e+03	N/A
S98T002539	F	Chromium - ICP-Fusion	ug/g	99.40	<1.00e-02	6.81e+02	662.0	671.5	2.83	N/A	2.02e+03	N/A
S98T002539	F	Iron - ICP-Fusion	ug/g	97.80	<5.00e-02	<1.01e+03	<1.02e3	N/A	N/A	N/A	1.01e+03	N/A
S98T002539	F	Lithium - ICP-Fusion	ug/g	99.00	<1.00e-02	<2.02e+02	<2.03e2	N/A	N/A	N/A	202.0	N/A
S98T002539	F	Manganese - ICP-Fusion	ug/g	98.20	<1.00e-01	1.98e+05	1.98e+05	1.98e+05	0.00	N/A	2.02e+03	N/A
S98T002539	F	Nickel - ICP-Fusion	ug/g	102.0	<1.00e-01	1.98e+03	1.40e+03	1.84e+03	48.2	N/A	403.0	N/A
S98T002539	F	Sodium - ICP-Fusion	ug/g	98.80	<5.00e-02	<1.01e+03	<1.02e3	N/A	N/A	N/A	1.01e+03	N/A
S98T002539	F	Silicon - ICP-Fusion	ug/g	96.60	<5.00e-01	<2.02e+02	<2.03e2	N/A	N/A	N/A	1.01e+04	N/A
S98T002539	F	Uranium - ICP-Fusion	ug/g	95.00	<1.00e-02	<2.02e+02	<2.03e2	N/A	N/A	N/A	202.0	N/A
S98T002539	F	Zinc - ICP-Fusion	ug/g	96.20	<1.00e-02	9.80e+03	1.06e+04	1.02e+04	7.84	N/A	202.0	N/A
S98T002540	A	Aluminum - ICP-Acid Digest	ug/g	99.00	1.29e-01	1.72e+02	93.70	132.8	58.9	N/A	29.00	N/A
S98T002540	A	Boron - ICP-Acid Digest	ug/g	106.8	6.68e-01	<2.99e0	<2.94e1	N/A	N/A	N/A	29.00	N/A
S98T002540	A	Barium - ICP-Acid Digest	ug/g	100.6	<5.00e-02	<57.90	<5.88e1	N/A	N/A	N/A	57.90	N/A
S98T002540	A	Bismuth - ICP-Acid Digest	ug/g	94.20	<1.00e-01	74.80	70.10	72.45	6.49	N/A	57.90	N/A
S98T002540	A	Calcium - ICP-Acid Digest	ug/g	99.20	1.04e-01	7.28e+02	665.0	696.5	9.05	N/A	5.790	N/A
S98T002540	A	Chromium - ICP-Acid Digest	ug/g	96.40	8.60e-02	1.04e+02	86.40	95.20	18.5	N/A	29.00	N/A
S98T002540	A	Iron - ICP-Acid Digest	ug/g	95.60	<5.00e-01	1.24e+03	1.25e+03	1.25e+03	1.60	N/A	290.0	N/A
S98T002540	A	Potassium - ICP-Acid Digest	ug/g	104.0	<1.00e-02	<5.790	<5.88e0	N/A	N/A	N/A	5.790	N/A
S98T002540	A	Lithium - ICP-Acid Digest	ug/g	95.20	<1.00e-02	29.00	25.10	27.05	14.4	N/A	5.790	N/A
S98T002540	A	Manganese - ICP-Acid Digest	ug/g	129.8	1.040	2.10e+05	2.17e+05	2.14e+05	3.28	N/A	57.90	N/A
S98T002540	A	Nickel - ICP-Acid Digest	ug/g	96.80	<2.00e-02	12.50	<1.18e1	N/A	N/A	N/A	11.60	N/A
S98T002540	A	Silicon - ICP-Acid Digest	ug/g	131.6	7.59e-01	1.74e+02	158.0	166.0	9.64	N/A	29.00	N/A
S98T002540	A	Uranium - ICP-Acid Digest	ug/g	87.20	<5.00e-02	<2.94e2	<2.94e2	N/A	N/A	N/A	290.0	N/A
S98T002540	A	Zinc - ICP-Acid Digest	ug/g	99.70	<1.00e-02	<5.790	<5.88e0	N/A	N/A	N/A	5.790	N/A
S98T002541	A	Formate by ICP-Acid Digest	ug/g	94.60	<1.00e-02	5.790	<5.88e0	N/A	N/A	N/A	5.790	N/A
S98T002541	A	Formate by IC-Dioxin 4000/4500	ug/g	107.3	<1.20e-02	1.20e+03	1.08e+03	1.14e+03	10.5	N/A	72.84	N/A
S98T002541	W	Fluoride-IC-Dioxin 4000/4500	ug/g	90.76	<2.00e-02	3.19e+02	291.0	304.9	9.18	N/A	259.1	N/A
S98T002541	W	Chloride-IC-Dioxin 4000/4500	ug/g	102.8	<2.00e-02	3.58e+03	3.45e+03	3.50e+03	2.86	N/A	1.43e+03	N/A
S98T002541	W	Nitrite-IC-Dioxin 4000/4500	ug/g	103.5	5.83e-01	4.06e+04	3.83e+04	3.95e+04	5.83	N/A	1.43e+03	N/A
S98T002541	W	Bromide by Ion Chromatograph	ug/g	99.15	<1.20e-01	<1.70e3	<1.70e3	N/A	N/A	N/A	1.66e+03	N/A
S98T002541	W	Nitrate by IC-Dioxin 4000/4500	ug/g	95.44	1.63e-01	4.27e+05	4.13e+05	4.20e+05	3.33	N/A	1.84e+03	N/A
S98T002541	W	Phosphate-IC-Dioxin 4000/4500	ug/g	103.3	<1.20e-01	2.98e+04	3.08e+04	3.09e+04	3.30	N/A	1.59e+03	N/A
S98T002541	W	Sulfate by IC-Dioxin 4000/4500	ug/g	102.4	<1.38e-01	2.24e+03	2.31e+03	2.27e+03	3.08	N/A	1.83e+03	N/A
S98T002541	W	Oxalate-IC-Dioxin 4000/4500	ug/g	99.63	<1.05e-01	<1.39e+03	<1.43e3	N/A	N/A	N/A	1.39e+03	N/A

L Lower Half of Segment; L Lower Half of Segment

Sample#	Rt #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S981002542		Bulk Density of Sample	g/ml	N/A	N/A	1.780	N/A	N/A	N/A	N/A	5.00e-01	N/A
S981002543		DSC Exotherm Dry Calculated	Joules/g Dry	N/A	N/A	1.68e+02	158.2	163.3	6.25	N/A	N/A	N/A
S981002543		DSC Exotherm on Perkin Elmer	Joules/g	97.79	N/A	96.58	30.71	93.64	6.27	N/A	N/A	N/A
S981002543		% Water by TGA on Perkin Elmer	%	102.3	N/A	46.36	36.40	41.38	24.1	N/A	N/A	N/A
S981002545	F	Aluminum - ICP-Fusion	ug/g	98.40	< 5.00e-02	1.29e+04	1.29e+04	1.27e+04	3.15	N/A	1.00e+03	N/A
S981002545	F	Boron - ICP-Fusion	ug/g	99.40	< 1.00e-02	1.00e+03	< 1.02e3	N/A	N/A	N/A	1.00e+03	N/A
S981002545	F	Berium - ICP-Fusion	ug/g	98.40	< 5.00e-02	2.01e+03	< 2.02e3	N/A	N/A	N/A	1.00e+03	N/A
S981002545	F	Bismuth - ICP-Fusion	ug/g	100.0	< 1.00e-01	2.01e+03	< 2.01e3	N/A	N/A	N/A	2.01e+03	N/A
S981002545	F	Calcium - ICP-Fusion	ug/g	99.60	< 1.00e-01	1.64e+03	< 2.04e3	N/A	N/A	N/A	2.01e+03	N/A
S981002545	F	Chromium - ICP-Fusion	ug/g	97.80	< 5.00e-02	1.00e+03	1.56e+03	1.60e+03	5.00	N/A	201.0	N/A
S981002545	F	Lithium - ICP-Fusion	ug/g	97.80	< 1.00e-02	2.01e+02	< 2.04e2	N/A	N/A	N/A	201.0	N/A
S981002545	F	Manganese - ICP-Fusion	ug/g	98.20	< 1.00e-02	2.05e+02	< 2.04e2	N/A	N/A	N/A	201.0	N/A
S981002545	F	Sodium - ICP-Fusion	ug/g	102.0	< 1.00e-01	2.05e+02	< 2.05e2	N/A	N/A	N/A	2.01e+03	N/A
S981002545	F	Nickel - ICP-Fusion	ug/g	98.80	< 5.00e-02	1.28e+03	1.00e+03	1.14e+03	0.97	N/A	402.0	N/A
S981002545	F	Uranium - ICP-Fusion	ug/g	96.60	< 5.00e-01	1.00e+03	< 1.02e3	N/A	N/A	N/A	1.00e+03	N/A
S981002545	F	Zinc - ICP-Fusion	ug/g	95.00	< 1.00e-02	2.01e+02	< 2.04e2	N/A	N/A	N/A	1.00e+04	N/A
S981002545	F	Zirconium - ICP-Fusion	ug/g	96.20	< 1.00e-02	2.01e+02	< 2.04e2	N/A	N/A	N/A	201.0	N/A
S981002545	F	Alpha of Digested Solid	uCi/g	99.00	< 2.15e-01	2.50e-01	< 2.54E-1	N/A	N/A	N/A	201.0	N/A
S981002546	A	Aluminum - ICP-Acid Digest	ug/g	99.00	1.29e-01	1.44e+04	1.29e+04	1.36e+04	11.0	N/A	3.73e-01	1.17E+02
S981002546	A	Boron - ICP-Acid Digest	ug/g	106.8	6.68e-01	< 29.70	< 28.61	N/A	N/A	N/A	29.70	N/A
S981002546	A	Berium - ICP-Acid Digest	ug/g	100.6	< 5.00e-02	< 59.50	< 58.61	N/A	N/A	N/A	29.70	N/A
S981002546	A	Bismuth - ICP-Acid Digest	ug/g	99.20	< 1.04e-01	1.57e+02	101.0	129.0	43.4	N/A	59.40	N/A
S981002546	A	Calcium - ICP-Acid Digest	ug/g	96.40	< 1.00e-02	2.13e+03	1.22e+03	1.68e+03	54.3	N/A	5.940	N/A
S981002546	A	Iron - ICP-Acid Digest	ug/g	94.80	8.60e-02	2.70e+02	1.73.0	221.5	43.8	N/A	29.70	N/A
S981002546	A	Potassium - ICP-Acid Digest	ug/g	95.60	< 5.00e-01	1.60e+03	1.47e+03	1.54e+03	8.47	N/A	297.0	N/A
S981002546	A	Lithium - ICP-Acid Digest	ug/g	104.0	< 1.00e-02	16.20	9.190	12.70	55.2	N/A	5.940	N/A
S981002546	A	Manganese - ICP-Acid Digest	ug/g	129.8	< 1.040	2.22e+02	2.01e+02	2.12e+02	9.93	N/A	5.940	N/A
S981002546	A	Sodium - ICP-Acid Digest	ug/g	96.80	< 2.00e-02	25.90	15.70	20.80	49.0	N/A	59.40	N/A
S981002546	A	Nickel - ICP-Acid Digest	ug/g	131.6	7.59e-01	< 2.71e+02	< 287.0	279.0	5.73	N/A	11.90	N/A
S981002546	A	Uranium - ICP-Acid Digest	ug/g	99.70	< 5.00e-01	< 9.90	< 8.840	N/A	N/A	N/A	29.70	N/A
S981002546	A	Zinc - ICP-Acid Digest	ug/g	87.20	< 1.00e-02	< 5.950	< 5.6860	N/A	N/A	N/A	5.940	N/A
S981002547	W	Formate by IC-Dionex 4000/4500	ug/g	90.76	< 2.10e-02	1.36e+03	1.38e+03	1.37e+03	1.46	N/A	5.940	N/A
S981002547	W	Fluoride-IC-Dionex 4000/4500	ug/g	107.3	< 1.00e-02	6.00e+02	383.0	491.7	44.2	N/A	74.28	N/A
S981002547	W	Chloride-IC-Dionex 4000/4500	ug/g	102.8	2.50e-02	3.58e+03	3.58e+03	3.76e+03	9.83	N/A	162.2	N/A
S981002547	W	Nitrite-IC-Dionex 4000/4500	ug/g	103.5	3.89e-01	4.53e+04	4.58e+04	4.36e+04	8.04	N/A	229.7	N/A
S981002547	W	Bromide by Ion Chromatograph	ug/g	99.14	< 1.25e-01	1.69e+03	< 1.64e3	N/A	N/A	N/A	1.46e+03	N/A
S981002547	W	Nitrate by IC-Dionex 4000/4500	ug/g	95.44	< 1.65e-01	3.96e+05	4.07e+05	4.02e+05	2.74	N/A	1.69e+03	N/A
S981002547	W	Phosphate-IC-Dionex 4000/4500	ug/g	103.3	< 1.20e-01	1.93e+04	1.77e+04	1.85e+04	8.65	N/A	1.62e+03	N/A
S981002547	W	Sulfate by IC-Dionex 4000/4500	ug/g	102.4	< 1.38e-01	4.68e+03	4.27e+03	4.48e+03	9.16	N/A	1.86e+03	N/A
S981002547	W	Oxalate-IC-Dionex 4000/4500	ug/g	99.63	< 1.05e-01	2.22e+03	1.72e+03	1.97e+03	25.4	N/A	1.42e+03	N/A

Table 1. Data Summary Report.  
U-107 (2)

CORE NUMBER: 245  
SEGMENT #: 4

SEGMENT PORTION: U Upper Half of Segment

Sample#	R #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPB %	Spk	Rec %	Det Limit	Count	Err%
S98T002552		DSC Exotherm DTY Calculated	Joules/g DTY	N/A	N/A	39.11	54.45	46.78	N/A	N/A	N/A	N/A	N/A	N/A
S98T002552		DSC Exotherm on Perkin Elmer	Joules/g	97.79	N/A	26.30	31.45	31.45	N/A	N/A	N/A	N/A	N/A	N/A
S98T002552		% Water by IGA on Perkin Elmer	%	102.3	N/A	35.72	29.80	32.76	N/A	N/A	N/A	N/A	N/A	N/A
S98T002554	F	Aluminum - ICP-Fusion	ug/g	96.60	<5.00e-02	1.56e+04	1.46e+04	1.51e+04	6.62	N/A	N/A	1.00e+03	N/A	N/A
S98T002554	F	Boron - ICP-Fusion	ug/g	99.60	<5.00e-02	<1.00e+03	<1.00e+03	N/A	N/A	N/A	N/A	1.00e+03	N/A	N/A
S98T002554	F	Barium - ICP-Fusion	ug/g	99.60	<5.00e-02	<1.00e+03	<1.00e+03	N/A	N/A	N/A	N/A	1.00e+03	N/A	N/A
S98T002554	F	Bismuth - ICP-Fusion	ug/g	99.20	<1.00e-01	<2.00e+03	<2.00e+03	N/A	N/A	N/A	N/A	2.00e+03	N/A	N/A
S98T002554	F	Calcium - ICP-Fusion	ug/g	105.0	<1.00e-01	<2.00e+03	<2.00e+03	N/A	N/A	N/A	N/A	2.00e+03	N/A	N/A
S98T002554	F	Chromium - ICP-Fusion	ug/g	99.20	<1.00e-02	4.06e+03	4.01e+03	4.04e+03	1.24	N/A	N/A	200.0	N/A	N/A
S98T002554	F	Iron - ICP-Fusion	ug/g	95.20	<5.00e-02	<1.00e+03	<1.00e+03	N/A	N/A	N/A	N/A	1.00e+03	N/A	N/A
S98T002554	F	Lithium - ICP-Fusion	ug/g	97.60	<1.00e-02	<2.00e+02	<2.00e+02	N/A	N/A	N/A	N/A	200.0	N/A	N/A
S98T002554	F	Manganese - ICP-Fusion	ug/g	97.60	<1.00e-02	2.25e+02	2.29.0	2.27.0	1.76	N/A	N/A	200.0	N/A	N/A
S98T002554	F	Sodium - ICP-Fusion	ug/g	96.40	1.04e-01	2.08e+05	2.04e+05	2.06e+05	1.94	N/A	N/A	2.00e+03	N/A	N/A
S98T002554	F	Nickel - ICP-Fusion	ug/g	99.20	<5.00e-02	6.07e+03	6.07e+03	4.42e+03	7.5.0	N/A	N/A	401.0	N/A	N/A
S98T002554	F	Uranium - ICP-Fusion	ug/g	104.6	<5.00e-02	<1.00e+03	<1.00e+03	N/A	N/A	N/A	N/A	1.00e+03	N/A	N/A
S98T002554	F	Vanadium - ICP-Fusion	ug/g	95.10	<5.00e-01	<1.00e+04	<1.00e+04	N/A	N/A	N/A	N/A	1.00e+04	N/A	N/A
S98T002554	F	Zinc - ICP-Fusion	ug/g	94.40	<1.00e-02	<2.00e+02	<2.00e+02	N/A	N/A	N/A	N/A	200.0	N/A	N/A
S98T002554	F	Zirconium - ICP-Fusion	ug/g	96.40	1.31e-01	1.53e+04	1.56e+04	1.54e+04	1.94	N/A	N/A	300.0	N/A	N/A
S98T002555	A	Aluminum - ICP-Acid Digest	ug/g	99.40	5.99e-01	1.34e+02	97.00	115.5	32.0	N/A	N/A	300.0	N/A	N/A
S98T002555	A	Boron - ICP-Acid Digest	ug/g	95.60	<5.00e-02	<30.00	<2.87e+01	N/A	N/A	N/A	N/A	300.0	N/A	N/A
S98T002555	A	Barium - ICP-Acid Digest	ug/g	89.60	<1.00e-01	<60.00	<5.75e+1	N/A	N/A	N/A	N/A	60.00	N/A	N/A
S98T002555	A	Bismuth - ICP-Acid Digest	ug/g	98.80	1.50e-01	1.84e+02	159.0	171.5	14.6	N/A	N/A	60.00	N/A	N/A
S98T002555	A	Calcium - ICP-Acid Digest	ug/g	93.80	<5.00e-02	4.07e+03	3.74e+03	3.90e+03	8.45	N/A	N/A	6.000	N/A	N/A
S98T002555	A	Chromium - ICP-Acid Digest	ug/g	91.40	<5.00e-02	4.10e+02	366.0	388.0	11.3	N/A	N/A	300.0	N/A	N/A
S98T002555	A	Iron - ICP-Acid Digest	ug/g	95.80	<5.00e-01	1.57e+03	1.55e+03	1.56e+03	1.28	N/A	N/A	300.0	N/A	N/A
S98T002555	A	Potassium - ICP-Acid Digest	ug/g	97.00	<1.00e-02	15.70	14.00	14.85	11.4	N/A	N/A	6.000	N/A	N/A
S98T002555	A	Lithium - ICP-Acid Digest	ug/g	92.20	<1.00e-02	1.84e+02	169.0	176.5	8.50	N/A	N/A	6.000	N/A	N/A
S98T002555	A	Manganese - ICP-Acid Digest	ug/g	118.2	8.42e-01	2.03e+05	2.02e+05	2.02e+05	0.49	N/A	N/A	60.00	N/A	N/A
S98T002555	A	Sodium - ICP-Acid Digest	ug/g	93.40	<2.00e-02	44.40	45.60	45.00	2.67	N/A	N/A	12.00	N/A	N/A
S98T002555	A	Nickel - ICP-Acid Digest	ug/g	141.8	1.740	2.06e+02	195.0	200.5	5.49	N/A	N/A	300.0	N/A	N/A
S98T002555	A	Silicon - ICP-Acid Digest	ug/g	94.10	<5.00e-01	<3.00e+02	<2.87e+2	N/A	N/A	N/A	N/A	300.0	N/A	N/A
S98T002555	A	Uranium - ICP-Acid Digest	ug/g	84.40	1.10e-02	17.50	15.20	16.35	14.1	N/A	N/A	6.000	N/A	N/A
S98T002555	A	Zinc - ICP-Acid Digest	ug/g	90.60	<1.00e-02	5.75e+0	N/A	N/A	N/A	N/A	N/A	6.000	N/A	N/A
S98T002555	A	Zirconium - ICP-Acid Digest	ug/g	89.60	<2.00e-02	2.11e+02	411.0	311.2	64.3	N/A	N/A	6.000	N/A	N/A
S98T002556	W	Formate by IC-Dionex 4000/4500	ug/g	102.9	<1.00e-02	<1.21e+02	<1.21e+02	N/A	N/A	N/A	N/A	123.7	N/A	N/A
S98T002556	W	Fluoride-IC-Dionex 4000/4500	ug/g	96.7	<1.70e-02	4.37e+03	4.46e+03	4.42e+03	2.04	N/A	N/A	175.2	N/A	N/A
S98T002556	W	Chloride-IC-Dionex 4000/4500	ug/g	101.6	<1.50e-01	5.05e+04	5.20e+04	5.13e+04	2.93	N/A	N/A	1.11e+03	N/A	N/A
S98T002556	W	Nitrite-IC-Dionex 4000/4500	ug/g	95.90	<1.25e-01	<1.29e+03	<1.26e+3	N/A	N/A	N/A	N/A	1.29e+03	N/A	N/A
S98T002556	W	Bromide by Ion Chromatograph	ug/g	95.78	1.80e-01	3.53e+05	3.63e+05	3.58e+05	2.79	N/A	N/A	1.42e+03	N/A	N/A
S98T002556	W	Nitrate by IC-Dionex 4000/4500	ug/g	98.90	<1.20e-01	2.19e+04	2.08e+04	2.15e+04	5.15	N/A	N/A	1.26e+03	N/A	N/A
S98T002556	W	Phosphate-IC-Dionex 4000/4500	ug/g	99.53	<1.38e-01	3.16e+03	3.09e+03	3.05e+03	7.21	N/A	N/A	1.42e+03	N/A	N/A
S98T002556	W	Sulfate by IC-Dionex 4000/4500	ug/g	100.9	<1.05e-01	2.67e+03	2.88e+03	2.77e+03	7.57	N/A	N/A	1.08e+03	N/A	N/A
S98T002556	W	Oxalate-IC-Dionex 4000/4500	ug/g											

L Lower Half of Segment: L Lower Half of Segment

Sample#	R #/NF	Blank Density	Unit	Standard %	Blank	Result	Duplicate	Average	RPB % Spk. Rec.	Det Limit	Count Err%
S981002558		Bulk Density	g/mL	N/A	N/A	1.780	N/A	N/A	N/A	5.00E-01	N/A
S981002559		ASC Exotherm Dry Calculated	Joules/g Dry	N/A	N/A	47.04	28.59	36.81	33.3	N/A	N/A
S981002559		DSC Exotherm on Perkin Elmer	Joules/g	97.7	N/A	30.69	17.35	24.02	25.3	N/A	N/A
S981002559		% Water by TGA on Perkin Elmer	%	99.21	N/A	35.71	31.80	34.75	34.75	N/A	N/A
S981002561	F	Aluminum - ICP-Fusion	ug/g	96.60	<5.00E-02	2.99E+04	2.77E+04	2.85E+04	9.82	N/A	1.00E+03
S981002561	F	Boron - ICP-Fusion	ug/g	99.60	<5.00E-02	<1.00E+03	<1.01E3	N/A	N/A	N/A	1.00E+03
S981002561	F	Barium - ICP-Fusion	ug/g	99.60	<5.00E-02	<1.00E+03	<1.01E3	N/A	N/A	N/A	1.00E+03
S981002561	F	Bismuth - ICP-Fusion	ug/g	99.20	<1.00E-01	<2.00E+03	<2.02E3	N/A	N/A	N/A	2.00E+03
S981002561	F	Calcium - ICP-Fusion	ug/g	103.0	<1.00E-01	<2.00E+03	<2.02E3	N/A	N/A	N/A	2.00E+03
S981002561	F	Chromium - ICP-Fusion	ug/g	99.20	<5.00E-02	1.12E+04	1.01E+04	1.08E+04	10.3	N/A	2.00E+03
S981002561	F	Iron - ICP-Fusion	ug/g	99.20	<5.00E-02	6.97E+03	6.25E+03	6.60E+03	11.2	N/A	1.00E+03
S981002561	F	Lithium - ICP-Fusion	ug/g	97.60	<1.00E-02	<2.00E+02	<2.02E2	N/A	N/A	N/A	200.0
S981002561	F	Manganese - ICP-Fusion	ug/g	97.60	<1.00E-01	1.76E+03	1.84E+03	1.84E+03	8.70	N/A	200.0
S981002561	F	Sodium - ICP-Fusion	ug/g	96.40	1.04E-01	1.81E+05	1.84E+05	1.84E+05	1.64	N/A	2.00E+03
S981002561	F	Nickel - ICP-Fusion	ug/g	99.20	9.68E-01	1.23E+03	1.04E+04	8.32E+03	50.2	N/A	400.0
S981002561	F	Silicon - ICP-Fusion	ug/g	104.6	<5.00E-02	<1.00E+03	<1.01E3	N/A	N/A	N/A	1.00E+03
S981002561	F	Uranium - ICP-Fusion	ug/g	96.40	<1.00E-02	<2.00E+02	<2.02E2	N/A	N/A	N/A	200.0
S981002561	F	Zirconium - ICP-Fusion	ug/g	96.40	<1.00E-02	<2.00E+02	<2.02E2	N/A	N/A	N/A	200.0
S981002561	F	Alpha D digested Solid	uCi/g	88.89	<2.71E-01	5.83E-01	7.78E-01	6.80E-01	28.7	N/A	2.56E-01
S981002562	A	Aluminum - ICP-Acid Digest	ug/g	94.40	5.99E-01	1.58E+02	96.90	127.5	47.9	N/A	29.60
S981002562	A	Barium - ICP-Acid Digest	ug/g	95.60	<5.00E-02	< 29.60	<3.02E1	N/A	N/A	N/A	29.60
S981002562	A	Bismuth - ICP-Acid Digest	ug/g	89.60	<1.00E-01	2.12E+02	209.0	210.5	1.43	N/A	59.40
S981002562	A	Calcium - ICP-Acid Digest	ug/g	93.80	<1.50E-01	3.99E+02	418.0	408.5	4.65	N/A	59.40
S981002562	A	Chromium - ICP-Acid Digest	ug/g	95.80	<1.00E-02	8.89E+03	9.23E+03	9.06E+03	6.75	N/A	5.940
S981002562	A	Iron - ICP-Acid Digest	ug/g	91.40	<5.00E-02	5.45E+03	5.81E+03	5.65E+03	3.99	N/A	29.60
S981002562	A	Potassium - ICP-Acid Digest	ug/g	95.80	<5.00E-01	1.43E+03	1.41E+03	1.42E+03	1.41	N/A	296.0
S981002562	A	Lithium - ICP-Acid Digest	ug/g	97.00	<1.00E-02	7.950	7.920	7.935	0.38	N/A	5.940
S981002562	A	Manganese - ICP-Acid Digest	ug/g	92.20	<1.00E-02	1.59E+03	1.59E+03	1.59E+03	5.16	N/A	5.940
S981002562	A	Sodium - ICP-Acid Digest	ug/g	118.2	8.42E-01	1.89E+05	1.91E+05	1.90E+05	1.05	N/A	59.40
S981002562	A	Nickel - ICP-Acid Digest	ug/g	93.40	<2.00E-02	92.80	91.30	92.05	1.63	N/A	11.90
S981002562	A	Silicon - ICP-Acid Digest	ug/g	94.80	<5.00E-01	5.40E+02	544.0	542.0	4.74	N/A	29.60
S981002562	A	Uranium - ICP-Acid Digest	ug/g	94.10	<5.00E-01	4.62E+02	481.0	471.5	4.03	N/A	296.0
S981002562	A	Zinc - ICP-Acid Digest	ug/g	80.40	<1.00E-02	82.50	82.50	82.50	8.24	N/A	5.940
S981002563	M	Formate by IC-Dionex 4000/4500	ug/g	99.60	<1.00E-02	25.80	25.80	25.80	0.00	N/A	5.940
S981002563	M	Fluoride-IC-Dionex 4000/4500	ug/g	89.08	<1.20E-02	4.19E+03	4.19E+03	4.19E+03	3.26	N/A	168.4
S981002563	M	Fluoride-IC-Dionex 4000/4500	ug/g	102.9	<1.70E-02	4.36E+03	4.22E+03	4.29E+03	4.27	N/A	18.8
S981002563	M	Nitrite-IC - Dionex Chromatograph	ug/g	101.6	5.30E-01	5.02E+04	4.81E+04	4.91E+04	4.27	N/A	1.07E+03
S981002563	M	Bromide by Ion Chromatograph	ug/g	95.90	<1.25E-01	<1.24E3	<1.24E3	N/A	N/A	N/A	1.84E+03
S981002563	M	Nitrate by IC-Dionex 4000/4500	ug/g	103.0	<1.89E-01	3.05E+05	3.05E+05	3.06	N/A	1.89E+03	N/A
S981002563	M	Phosphate-IC-Dionex 4000/4500	ug/g	98.90	<1.20E-01	3.21E+04	3.40E+04	3.30E+04	5.75	N/A	1.31E+03
S981002563	M	Sulfate by IC-Dionex 4000/4500	ug/g	99.53	<1.58E-01	2.30E+03	2.36E+03	2.35E+03	2.58	N/A	1.37E+03
S981002563	M	Oxalate-IC-Dionex 4000/4500	ug/g	105.0	<1.05E-01	1.12E+04	8.08E+03	9.63E+03	32.6	N/A	1.38E+03



Table 1. Data Summary Report.  
U-107 (2)

SEGMENT PORTION: L Lower Half of Segment

CORE NUMBER: 245  
SEGMENT #: 5A

Sample#	R.#	Analyte	Unit	Standard	Blank	Result	Duplicate	Average	RPB. %	Spk Rec. %	Det Limit	Count	Err%
S98T002564		Bulk Density of Sample	g/mL	N/A	N/A	1.270	N/A	N/A	N/A	N/A	5.00e-01	N/A	N/A
S98T002565		DSC Exotherm Dry Calculated	Joules/g DRY	N/A	N/A	18.32	27.56	22.94	40.3	N/A	N/A	N/A	N/A
S98T002565		DSC Exotherm on Perkin Elmer	Joules/g	97.75	N/A	16.69	25.11	20.90	40.3	N/A	N/A	N/A	N/A
S98T002565		% Water by TGA on Perkin Elmer	ug/g	99.21	N/A	8.310	9.440	8.875	12.7	N/A	N/A	N/A	N/A
S98T002565		TIC by Acid/Coulometry	ug/g	98.50	5.600	5.27e+02	5.28	5.275	0.19	N/A	5.000	N/A	N/A
S98T002565		TOC by Persulfate/Coulometry	ug/g	94.33	1.700	1.17e+03	1.15e+03	1.16e+03	1.72	N/A	40.00	N/A	N/A
S98T002565		F Strontium-89/90 High Level	uCi/g	92.98	5.40e-02	2.070	1.650	1.860	22.6	N/A	2.00e-03	1.01E+00	N/A
S98T002566		F Aluminum - ICP-Fusion	ug/g	96.60	5.00e-02	4.97e+02	4.78e+03	4.88e+03	3.90	N/A	996.0	N/A	N/A
S98T002566		F Boron - ICP-Fusion	ug/g	99.60	5.00e-02	9.94e+02	1.02e3	N/A	N/A	N/A	996.0	N/A	N/A
S98T002566		F Barium - ICP-Fusion	ug/g	99.60	5.00e-02	9.94e+02	1.02e3	N/A	N/A	N/A	996.0	N/A	N/A
S98T002566		F Bismuth - ICP-Fusion	ug/g	99.20	1.00e-01	1.99e+03	2.05e3	N/A	N/A	N/A	1.99e+03	N/A	N/A
S98T002566		F Calcium - ICP-Fusion	ug/g	103.0	4.00e-02	1.99e+03	2.05e3	N/A	N/A	N/A	1.99e+03	N/A	N/A
S98T002566		F Chromium - ICP-Fusion	ug/g	99.20	1.00e-02	7.57e+02	826.0	791.5	8.72	N/A	199.0	N/A	N/A
S98T002566		F Iron - ICP-Fusion	ug/g	95.20	5.00e-02	9.94e+02	1.02e3	N/A	N/A	N/A	996.0	N/A	N/A
S98T002566		F Lithium - ICP-Fusion	ug/g	97.60	1.00e-02	1.99e+02	2.05e2	N/A	N/A	N/A	199.0	N/A	N/A
S98T002566		F Manganese - ICP-Fusion	ug/g	97.60	1.00e-02	2.16e+02	2.05e2	N/A	N/A	N/A	199.0	N/A	N/A
S98T002566		F Sodium - ICP-Fusion	ug/g	96.40	1.04e-01	2.40e+05	2.36e+05	2.38e+05	1.68	N/A	1.99e+03	N/A	N/A
S98T002566		F Nickel - ICP-Fusion	ug/g	99.20	9.68e-01	2.70e+03	2.05e+03	2.38e+03	27.4	N/A	399.0	N/A	N/A
S98T002566		F Silicon - ICP-Fusion	ug/g	104.6	5.00e-02	1.18e+03	1.28e+03	1.23e+03	8.13	N/A	996.0	N/A	N/A
S98T002566		F Uranium - ICP-Fusion	ug/g	95.10	5.00e-01	9.94e+02	1.02e4	N/A	N/A	N/A	9.96e+03	N/A	N/A
S98T002566		F Zinc - ICP-Fusion	ug/g	94.40	1.00e-02	1.99e+02	2.05e2	N/A	N/A	N/A	199.0	N/A	N/A
S98T002566		F Zirconium - ICP-Fusion	ug/g	96.40	3.73e-01	44.81	43.70	44.26	2.49	N/A	199.0	N/A	N/A
S98T002566		F Cesium-137 by GEA	uCi/g	88.89	2.71e-01	1.86e-1	1.86E-1	N/A	N/A	N/A	2.35e-01	0.410	N/A
S98T002566		F Alpha of Digested Solid	ug/g	94.40	1.31e-01	4.26e+03	6.61e+03	4.44e+03	7.89	N/A	30.30	N/A	N/A
S98T002567		A Aluminum - ICP-Acid Digest	ug/g	99.40	5.99e-01	99.60	78.90	89.25	23.2	N/A	30.30	N/A	N/A
S98T002567		A Boron - ICP-Acid Digest	ug/g	95.60	5.00e-02	< 30.40	< 30.0e1	N/A	N/A	N/A	30.30	N/A	N/A
S98T002567		A Barium - ICP-Acid Digest	ug/g	89.60	1.50e-01	60.80	60.0e1	N/A	N/A	N/A	60.90	N/A	N/A
S98T002567		A Bismuth - ICP-Acid Digest	ug/g	98.80	1.00e-01	1.29e+02	109.0	119.0	16.8	N/A	60.90	N/A	N/A
S98T002567		A Calcium - ICP-Acid Digest	ug/g	93.80	4.00e-02	7.83e+02	715.0	749.0	9.08	N/A	6.090	N/A	N/A
S98T002567		A Chromium - ICP-Acid Digest	ug/g	91.40	5.00e-02	2.63e+02	268.0	265.5	1.88	N/A	30.30	N/A	N/A
S98T002567		A Iron - ICP-Acid Digest	ug/g	91.00	5.00e-01	6.79e+02	522.0	600.5	26.1	N/A	303.0	N/A	N/A
S98T002567		A Potassium - ICP-Acid Digest	ug/g	95.80	1.00e-02	< 6.080	< 6.01e0	N/A	N/A	N/A	6.090	N/A	N/A
S98T002567		A Lithium - ICP-Acid Digest	ug/g	97.00	1.00e-02	1.21e+02	122.0	121.5	0.82	N/A	6.090	N/A	N/A
S98T002567		A Manganese - ICP-Acid Digest	ug/g	118.2	8.42e-01	2.32e+05	2.35e+05	2.34e+05	1.28	N/A	60.90	N/A	N/A
S98T002567		A Sodium - ICP-Acid Digest	ug/g	93.40	2.00e-02	< 12.20	< 12.0e1	N/A	N/A	N/A	12.10	N/A	N/A
S98T002567		A Silicon - ICP-Acid Digest	ug/g	94.10	1.740	9.57e+02	1.02e+03	988.5	6.37	N/A	30.30	N/A	N/A
S98T002567		A Strontium - ICP-Acid Digest	ug/g	84.40	5.00e-01	< 5.00e0	< 5.00e2	N/A	N/A	N/A	303.0	N/A	N/A
S98T002567		A Zinc - ICP-Acid Digest	ug/g	94.10	1.0e-02	< 6.080	< 6.01e0	N/A	N/A	N/A	6.090	N/A	N/A
S98T002568		A Zirconium - ICP-Acid Digest	ug/g	100.8	< 51.61	2.55e+02	257.0	256.0	0.78	N/A	1.00e-02	N/A	N/A
S98T002568		W Ohm - by Pot. Titration	ug/g	89.08	< 2.10e-02	48.58	48.60	48.09	2.08	N/A	12.40	N/A	N/A
S98T002568		W Formate by IC-Dionex 4000/4500	ug/g	96.78	< 1.20e-02	< 1.62e+02	< 1.63e2	N/A	N/A	N/A	162.3	N/A	N/A
S98T002568		W Fluoride by IC-Dionex 4000/4500	ug/g	96.78	< 1.20e-02	< 1.62e+02	< 1.63e2	N/A	N/A	N/A	162.3	N/A	N/A

Sample#	P. #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count	Err%
S981002568	W	Chloride-IC-Dionex 4000/4500	uM/g	102.9	<1.70e-02	1.65e+03	1.74e+03	1.70e+03	3.31	N/A	230.0		N/A
S981002568	W	Nitrite-IC - Dionex 4000/4500	uM/g	101.6	5.30e-01	1.98e+04	2.06e+04	2.02e+04	3.95	N/A	1.46e+03		N/A
S981002568	W	Bromide by Ion Chromatograph	uM/g	95.90	<1.25e-01	<1.59e+03	<1.70e+3		N/A	N/A	1.69e+03		N/A
S981002568	W	Nitrate by IC-Dionex 4000/4500	uM/g	95.78	1.80e-01	6.48e+05	6.08e+05	6.28e+05	6.37	N/A	1.88e+03		N/A
S981002568	W	Phosphate-IC-Dionex 4000/4500	uM/g	102.0	<1.20e-01	1.20e+04	1.80e+04	1.50e+04	40.0	N/A	1.62e+03		N/A
S981002568	W	Sulfate by IC-Dionex 4000/4500	uM/g	99.53	<1.38e-01	<1.87e+03	<1.89e+3		N/A	N/A	1.87e+03		N/A
S981002568	W	Oxalate-IC-Dionex 4000/4500	uM/g	100.9	<1.05e-01	<1.42e+03	<1.43e+3		N/A	N/A	1.42e+03		N/A

Table 1. Data Summary Report.  
U-107 (2)

CORE NUMBERS: 245  
SEGMENT #: 5R

SEGMENT POSITION: Drainable Liquid

Sample#	R #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	spk Rec %	Det. Limit	Count Err%
S981002457		DSC Exotherm Dry	Joules/g Dry	N/A	N/A	1.22e+02	94.87	108.4	24.9	N/A	N/A	N/A
S981002457		DSC Exotherm on Perkin Elmer	Joules/g	99.40	N/A	54.45	50.16	57.30	24.9	N/A	N/A	N/A
S981002457		Ammonia by ISE-Std Additions	ug/mL	95.77	< 5.000	2.70e+02	272.0	271.0	0.74	88.73	5.000	N/A
S981002457		% Water by TGA on Perkin Elmer	%	98.89	N/A	47.10	47.15	47.12	0.11	N/A	N/A	N/A
S981002457		Alpha in Liquid Samples	UCI/mL	98.89	< 1.18e-02	2.46e-02	1.88e-02	2.17e-02	26.7	92.36	1.70e-02	7.11E+01
S981002458		Specific Gravity	Sp. G.	99.28	N/A	1.459	1.451	1.473	2.92	N/A	1.00e-03	N/A
S981002458		D Aluminum-ICP-Acid Dil.	ug/mL	98.60	< 5.00e-02	4.49e+04	4.60e+04	4.54e+04	2.42	N/A	30.10	N/A
S981002458		D Boron-ICP-Acid Dil.	ug/mL	99.40	< 5.00e-02	1.09e+02	115.0	112.0	5.36	N/A	30.10	N/A
S981002458		D Barium-ICP-Acid Dil.	ug/mL	98.00	< 5.00e-02	< 30.10	< 30.10	N/A	N/A	N/A	30.10	N/A
S981002458		D Bismuth-ICP-Acid Dil.	ug/mL	99.60	< 1.00e-01	< 60.10	< 60.10	N/A	N/A	N/A	60.10	N/A
S981002458		D Calcium-ICP-Acid Dil.	ug/mL	99.20	< 1.00e-01	< 60.10	< 60.10	N/A	N/A	N/A	60.10	N/A
S981002458		D Chromium-ICP-Acid Dil.	ug/mL	98.60	< 1.00e-02	44.40	43.70	44.05	1.59	N/A	6.010	N/A
S981002458		D Iron-ICP-Acid Dil.	ug/mL	97.20	< 5.00e-02	< 30.10	< 30.10	N/A	N/A	N/A	30.10	N/A
S981002458		D Potassium-ICP-Acid Dil.	ug/mL	100.0	< 5.00e-01	4.40e+03	4.58e+03	4.49e+03	4.01	N/A	300.0	N/A
S981002458		D Lithium-ICP-Acid Dil.	ug/mL	99.80	< 1.00e-02	< 6.010	< 6.010	N/A	N/A	N/A	6.010	N/A
S981002458		D Manganese-ICP-Acid Dil.	ug/mL	98.00	< 1.00e-02	13.50	7.680	10.59	55.0	N/A	6.010	N/A
S981002458		D Sodium-ICP-Acid Dil.	ug/mL	102.2	< 1.00e-01	2.33e+05	2.39e+05	2.36e+05	2.54	N/A	60.10	N/A
S981002458		D Nickel-ICP-Acid Dil.	ug/mL	99.00	< 2.00e-02	20.80	22.10	21.45	6.06	N/A	12.00	N/A
S981002458		D Silicon-ICP-Acid Dil.	ug/mL	98.00	< 5.00e-02	1.79e+02	185.0	182.0	3.30	N/A	30.10	N/A
S981002458		D Uranium-ICP-Acid Dil.	ug/mL	95.20	< 1.00e-01	< 6.010	< 6.010	N/A	N/A	N/A	300.0	N/A
S981002458		D Zinc-ICP-Acid Dil.	ug/mL	96.50	< 5.00e-01	< 6.010	< 6.010	N/A	N/A	N/A	6.010	N/A
S981002458		D Zirconium-ICP-Acid Dil.	ug/mL	96.20	< 1.00e-02	< 6.010	< 6.010	N/A	N/A	N/A	6.010	N/A
S981002458		Format by Ion Chromatograph	ug/mL	92.42	< 2.10e-02	4.83e+03	4.89e+03	4.86e+03	1.23	103.1	37.57	N/A
S981002458		Fluoride-IC-Dionex 4000/4500	ug/mL	102.5	< 1.00e-02	2.78e+02	264.0	271.1	5.17	93.90	122.4	N/A
S981002458		Chloride-IC-Dionex 4000/4500	ug/mL	106.2	< 1.70e-02	1.58e+04	1.55e+04	1.37e+04	2.20	105.6	173.4	N/A
S981002458		Nitrite-IC-Dionex 4000/4500	ug/mL	95.21	< 1.08e-01	1.54e+05	1.52e+05	1.53e+05	1.31	98.14	1.10e+03	N/A
S981002458		Bromide by Ion Chromatograph	ug/mL	104.4	< 1.20e-01	< 1.28e+03	< 1.28e+03	N/A	N/A	101.7	1.28e+03	N/A
S981002458		Nitrate by IC-Dionex 4000/4500	ug/mL	106.3	< 1.59e-01	1.49e+05	1.45e+05	1.47e+05	2.72	100.7	1.42e+03	N/A
S981002458		Phosphate-IC-Dionex 4000/4500	ug/mL	100.3	< 1.20e-01	2.99e+03	2.97e+03	2.98e+03	0.67	96.34	1.22e+03	N/A
S981002458		Sulfate by IC-Dionex 4000/4500	ug/mL	102.3	< 1.38e-01	3.07e+03	2.87e+03	2.97e+03	6.73	99.84	1.41e+03	N/A
S981002458		Oxalate-IC-Dionex 4000/4500	ug/mL	106.2	< 1.05e-01	< 1.07e+03	< 1.07e+03	N/A	N/A	102.9	1.07e+03	N/A

Table 1. Data Summary Report.  
U-107 (2)

CORE NUMBER: 245  
SEGMENT #: 6

SEGMENT PORTION: L Lower Half of Segment

Sample#	R #	A#	Unit	Standard %	Blank	Result	Duplicate	Average	RPB %	Spk Rec %	Det Limit	Count	Err%
S981002569			Bulk Density of Sample	N/A	N/A	dry	N/A	N/A	N/A	N/A	5.00e-01		N/A
S981002570			DSC Exotherm DRY	N/A	N/A	0.00e+00	0.00e+00	0.00e+00	0.00	N/A	N/A		N/A
S981002570			DSC Exotherm on Perkin Elmer	100.2	N/A	0.00e+00	0.00e+00	0.00e+00	0.00	N/A	N/A		N/A
S981002570			% Water by IGA on Perkin Elmer	99.16	5.000	44.72	51.43	48.08	33.9	N/A	N/A		N/A
S981002570			TIC by Acid/Coulometry	94.35	5.000	5.4e+02	542.0	544.0	0.74	86.50	5.000		N/A
S981002570			TOC by Persulfate/Coulometry	92.33	5.800	3.1e+02	239.0	277.5	27.7	80.50	40.00		N/A
S981002572			F Strontium-89/90 High Level	99.04	<1.13e-03	1.010	1.370	1.190	30.3	N/A	2.00e-03	1.41E+00	N/A
S981002572			F Aluminum - ICP-Fusion	97.40	<5.00e-02	3.60e+03	2.97e+03	3.28e+03	19.2	96.30	1.02e+03		N/A
S981002572			F Boron - ICP-Fusion	97.80	<5.00e-02	<1.03e+03	<1.04e3	N/A	N/A	94.70	1.02e+03		N/A
S981002572			F Barium - ICP-Fusion	97.40	<5.00e-02	<1.03e+03	<1.04e3	N/A	N/A	92.70	1.02e+03		N/A
S981002572			F Bismuth - ICP-Fusion	98.80	<1.00e-01	<2.09e+03	<2.07e3	N/A	N/A	98.00	2.05e+03		N/A
S981002572			F Calcium - ICP-Fusion	99.20	<1.00e-01	<2.09e+03	<2.07e3	N/A	N/A	103.0	2.05e+03		N/A
S981002572			F Chromium - ICP-Fusion	98.00	<1.00e-01	<2.09e+02	<2.07e2	N/A	N/A	98.30	205.0		N/A
S981002572			F Iron - ICP-Fusion	96.00	<5.00e-02	<1.03e+03	<1.04e3	N/A	N/A	99.40	1.02e+03		N/A
S981002572			F Lithium - ICP-Fusion	98.60	<1.00e-02	<2.09e+02	<2.07e2	N/A	N/A	92.50	205.0		N/A
S981002572			F Manganese - ICP-Fusion	97.20	<1.00e-01	<2.09e+02	<2.07e2	N/A	N/A	94.60	205.0		N/A
S981002572			F Sodium - ICP-Fusion	100.8	<1.00e-01	1.77e+05	1.77e+05	1.76e+05	1.14	109.0	2.05e+03		N/A
S981002572			F Nickel - ICP-Fusion	98.00	3.26e-01	2.13e+03	2.59e+03	2.36e+03	19.5	98.20	410.0		N/A
S981002572			F Silicon - ICP-Fusion	97.40	<5.00e-02	8.48e+03	6.14e+03	7.31e+03	32.0	98.80	1.02e+03		N/A
S981002572			F Uranium - ICP-Fusion	95.60	<5.00e-01	<1.03e+04	<1.04e4	N/A	N/A	91.00	1.02e+04		N/A
S981002572			F Zinc - ICP-Fusion	99.00	<1.00e-02	<2.09e+02	<2.07e2	N/A	N/A	96.10	205.0		N/A
S981002572			F Zirconium - ICP-Fusion	95.60	<1.00e-02	<2.09e+02	<2.07e2	N/A	N/A	93.20	205.0		N/A
S981002572			F Desum-137 by GEA	105.8	2.60e-02	18.88	15.50	17.19	19.8	N/A	N/A	0.360	N/A
S981002572			F Alpha of Digested Solid	95.00	<7.30e-04	1.83e+03	8.92e+03	8.88e+03	1.01	67.65	2.00e-03	2.42e+01	N/A
S981002573			A Aluminum - ICP-Acid Digest	86.20	1.27e-01	1.39e+03	351.0	870.5	119	33.00	47.10		N/A
S981002573			A Boron - ICP-Acid Digest	105.4	6.32e-01	< 47.10	112.0	N/A	N/A	N/A	67.10		N/A
S981002573			A Barium - ICP-Acid Digest	96.20	<5.00e-02	< 47.10	<4.97e1	N/A	N/A	96.40	47.10		N/A
S981002573			A Bismuth - ICP-Acid Digest	91.80	<1.00e-01	< 47.10	<9.94e1	N/A	N/A	101.8	94.00		N/A
S981002573			A Calcium - ICP-Acid Digest	99.40	<1.00e-01	1.17e+02	<9.94e1	N/A	N/A	99.80	94.00		N/A
S981002573			A Chromium - ICP-Acid Digest	94.20	<1.00e-02	92.60	19.60	56.10	130	94.60	9.400		N/A
S981002573			A Iron - ICP-Acid Digest	94.00	<5.00e-02	3.03e+02	<4.97e1	N/A	N/A	83.20	47.10		N/A
S981002573			A Potassium - ICP-Acid Digest	98.40	<5.00e-01	< 47.10	<4.97e2	N/A	N/A	97.80	47.10		N/A
S981002573			A Lithium - ICP-Acid Digest	98.00	<1.00e-02	< 47.10	<9.94e0	N/A	N/A	97.80	9.400		N/A
S981002573			A Manganese - ICP-Acid Digest	93.40	<1.00e-02	9.950	9.510	<9.94e0	N/A	N/A	9.400		N/A
S981002573			A Sodium - ICP-Acid Digest	620.8	9.96e-01	1.86e+05	1.86e+05	1.86e+05	0.00	<9.66e2	94.00		N/A
S981002573			A Silicon - ICP-Acid Digest	93.00	<2.00e-02	< 18.80	<1.99e1	N/A	N/A	98.40	18.90		N/A
S981002573			A Zinc - ICP-Acid Digest	109.4	1.530	3.0e+02	274.0	289.0	10.4	80.80	47.10		N/A
S981002573			A Uranium - ICP-Acid Digest	97.00	<5.00e-01	< 47.10	<4.97e2	N/A	N/A	93.30	47.10		N/A
S981002573			A Zirconium - ICP-Acid Digest	67.00	<1.00e-02	< 47.10	<9.94e0	N/A	N/A	95.80	9.400		N/A
S981002574			A Fine - ICP-Acid Digest	98.00	<1.00e-02	< 47.10	<9.94e0	N/A	N/A	91.00	9.400		N/A
S981002574			A Zirconium - ICP-Acid Digest	100.8	<1.00e-02	< 47.10	<9.94e0	N/A	N/A	N/A	1.00e-02		N/A
S981002574			A Zirconium (VI) by Spec.	100.8	<1.00e-02	< 47.10	<9.94e0	N/A	N/A	N/A	8.27e+03		N/A
S981002574			A Zirconium by ICP-Acid Digest	100.8	<1.00e-02	< 47.10	<9.94e0	N/A	N/A	N/A	8.27e+03		N/A
S981002574			A Zirconium by ICP-Acid Digest	89.26	<2.10e-02	75.24	47.44e1	N/A	N/A	80.34	75.26		N/A
S981002574			A Fluoride - IC-Dioxmex	99.49	<1.20e-02	2.31e+03	1.19e+03	1.75e+03	64.0	88.81	120.3		N/A

Sample#	R #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk. Rec. %	Det Limit	Count	Err%
S981002574	W	Chloride-IC-Dionex 4000/4500	ug/g	100.0	2.20e-02	3.97e+02	493.0	444.9	21.6	101.2	170.7		N/A
S981002574	W	Nitrite-IC - Dionex 4000/4500	ug/g	99.45	5.62e-01	3.74e+03	4.35e+03	4.04e+03	15.1	97.64	1.08e+03		N/A
S981002574	W	Bromide by Ion Chromatograph	ug/g	98.64	<1.25e-01	<1.26e+03	<1.27e3	N/A	N/A	96.27	1.26e+03		N/A
S981002574	W	Nitrate by IC-Dionex 4000/4500	ug/g	94.93	2.09e-01	1.03e+04	1.07e+04	1.02e+04	1.79	93.21	1.20e+03		N/A
S981002574	W	Phosphate-IC-Dionex 4000/4500	ug/g	102.0	<1.20e-01	2.71e+03	2.76e+03	2.74e+03	1.83	98.39	1.30e+03		N/A
S981002574	W	Sulfate by IC-Dionex 4000/4500	ug/g	99.69	<1.38e-01	<1.39e+03	<1.41e3	N/A	N/A	100.3	1.32e+03		N/A
S981002574	W	Oxalate-IC-Dionex 4000/4500	ug/g	102.2	<1.05e-01	1.37e+03	<1.07e3	N/A	N/A	101.3	1.05e+03		N/A

Table 1. Data Summary Report.  
U-107 (2)

CORE NUMBER: 245  
SEGMENT #: 6R

SEGMENT PORTION: Drainable Liquid

Sample#	R #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S98T002461		DSC Exotherm DRY	Joules/g Dry	n/a	n/a	1.37e-02	126.0	131.7	8.58	n/a	n/a	n/a
S98T002461		DSC Exotherm on Perkin Elmer	Joules/g	99.40	n/a	71.38	65.51	68.44	8.58	n/a	n/a	n/a
S98T002461		Ammonia by ISE-Std Additions	ug/mL	104.7	<10.00	4.03e+02	386.0	394.5	4.31	n/a	10.00	n/a
S98T002461		% Water by IGA on Perkin Elmer	ug/mL	98.89	n/a	48.00	48.00	48.00	0.00	n/a	n/a	n/a
S98T002461		Alpha in Liquid Samples	uCi/mL	99.28	<1.18e-02	1.07e-02	<1.24E-2	n/a	n/a	n/a	1.70e-02	1.40E+02
S98T002462		Specific Gravity	SP.6.	99.28	n/a	1.472	1.476	1.474	0.27	n/a	1.00e-03	n/a
S98T002462		D Aluminum-ICP-Acid Dil.	ug/mL	98.60	<5.00e-02	4.05e+04	4.05e+04	4.05e+04	0.00	n/a	30.10	n/a
S98T002462		D Boron-ICP-Acid Dil.	ug/mL	99.40	<5.00e-02	1.02e+02	105.0	103.5	2.90	n/a	30.10	n/a
S98T002462		D Barium-ICP-Acid Dil.	ug/mL	98.00	<5.00e-02	<30.10	<3.01e1	n/a	n/a	n/a	30.10	n/a
S98T002462		D Bismuth-ICP-Acid Dil.	ug/mL	99.60	<1.00e-01	<60.10	<6.07e1	n/a	n/a	n/a	60.10	n/a
S98T002462		D Calcium-ICP-Acid Dil.	ug/mL	99.20	<1.00e-01	<60.10	<6.07e1	n/a	n/a	n/a	60.10	n/a
S98T002462		D Chromium-ICP-Acid Dil.	ug/mL	97.20	<5.00e-02	1.75e+02	173.0	173.0	0.00	n/a	30.10	n/a
S98T002462		D Iron-ICP-Acid Dil.	ug/mL	97.20	<5.00e-02	<30.10	<3.01e1	n/a	n/a	n/a	30.10	n/a
S98T002462		D Potassium-ICP-Acid Dil.	ug/mL	100.0	<5.00e-01	4.16e+03	4.19e+03	4.18e+03	0.72	n/a	300.0	n/a
S98T002462		D Lithium-ICP-Acid Dil.	ug/mL	99.80	<1.00e-02	<6.010	<6.01e0	n/a	n/a	n/a	6.010	n/a
S98T002462		D Manganese-ICP-Acid Dil.	ug/mL	98.00	<1.00e-02	6.600	7.710	7.155	15.5	n/a	6.010	n/a
S98T002462		D Sodium-ICP-Acid Dil.	ug/mL	102.2	<1.00e-01	2.31e+05	2.30e+05	2.30e+05	0.43	n/a	60.10	n/a
S98T002462		D Nickel-ICP-Acid Dil.	ug/mL	99.00	<2.00e-02	23.40	19.90	21.65	16.2	n/a	12.00	n/a
S98T002462		D Silicon-ICP-Acid Dil.	ug/mL	98.00	<5.00e-02	1.88e+02	197.0	192.5	4.68	n/a	30.10	n/a
S98T002462		D Zinc-ICP-Acid Dil.	ug/mL	96.50	<5.00e-01	<3.01e+02	<3.01e2	n/a	n/a	n/a	300.0	n/a
S98T002462		D Zirconium-ICP-Acid Dil.	ug/mL	95.20	<1.00e-02	<6.010	<6.01e0	n/a	n/a	n/a	6.010	n/a
S98T002462		D Formate by Ion Chromatograph	ug/mL	96.20	<1.00e-02	4.23e+02	4.38e+02	4.30e+02	3.48	n/a	6.010	n/a
S98T002462		D Fluoride-IC-Dionex 4000/4500	ug/mL	102.5	<1.20e-02	2.25e+02	240.0	247.7	6.06	n/a	37.57	n/a
S98T002462		D Chloride-IC-Dionex 4000/4500	ug/mL	106.2	<1.70e-02	1.25e+04	1.22e+04	1.29e+04	5.45	n/a	122.4	n/a
S98T002462		D Nitrite-IC-Dionex 4000/4500	ug/mL	95.21	<1.00e-01	1.40e+05	1.45e+05	1.42e+05	3.51	n/a	1.0e+03	n/a
S98T002462		Bromide by Ion Chromatograph	ug/mL	104.4	<1.25e-01	<1.28e+03	<1.28e3	n/a	n/a	n/a	1.28e+03	n/a
S98T002462		Nitrate by IC-Dionex 4000/4500	ug/mL	106.3	<1.39e-01	1.57e+05	1.55e+05	1.56e+05	1.28	n/a	1.28e+03	n/a
S98T002462		Phosphate-IC-Dionex 4000/4500	ug/mL	100.3	<1.20e-01	2.16e+03	3.23e+03	2.70e+03	39.7	n/a	1.22e+03	n/a
S98T002462		Sulfate by IC-Dionex 4000/4500	ug/mL	102.3	<1.38e-01	4.28e+03	3.66e+03	3.97e+03	15.6	n/a	1.41e+03	n/a
S98T002462		Oxalate-IC-Dionex 4000/4500	ug/mL	106.2	<1.05e-01	<1.07e+03	<1.07e3	<1.07e3	n/a	n/a	1.07e+03	n/a

CORE NUMBER: 245  
SECRET #: 78

Table 1. Data Summary Report.  
U-107 (2)

SEGMENT PORTION: Linear Liquid

Sample#	R #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S98T002469	D	Aluminum-ICP-Acid Dil.	ug/mL	98.60	<5.00e-02	4.51e+04	4.49e+04	4.50e+04	0.22	N/A	30.10	N/A
S98T002469	D	Boron-ICP-Acid Dil.	ug/mL	99.40	<5.00e-02	1.10e+02	119.0	110.0	0.00	N/A	30.10	N/A
S98T002469	D	Barium-ICP-Acid Dil.	ug/mL	98.00	<5.00e-02	< 30.10	<3.01e-01	N/A	N/A	N/A	30.10	N/A
S98T002469	D	Bismuth-ICP-Acid Dil.	ug/mL	99.60	<1.00e-01	67.10	66.01e1	N/A	N/A	N/A	60.10	N/A
S98T002469	D	Calcium-ICP-Acid Dil.	ug/mL	99.20	<1.00e-01	67.10	66.60	66.85	0.75	N/A	60.10	N/A
S98T002469	D	Chromium-ICP-Acid Dil.	ug/mL	98.60	<1.00e-02	30.10	90.70	93.45	5.89	N/A	6.010	N/A
S98T002469	D	Iron-ICP-Acid Dil.	ug/mL	97.20	<5.00e-02	< 30.10	<4.54e+03	4.48e+03	2.45	N/A	300.0	N/A
S98T002469	D	Potassium-ICP-Acid Dil.	ug/mL	100.0	<5.00e-01	< 6.010	<6.01e0	N/A	N/A	N/A	6.010	N/A
S98T002469	D	Lithium-ICP-Acid Dil.	ug/mL	99.80	<1.00e-02	2.37e+05	2.36e+05	2.36e+05	0.42	N/A	6.010	N/A
S98T002469	D	Sodium-ICP-Acid Dil.	ug/mL	102.2	<1.00e-02	25.10	27.10	26.10	0.42	N/A	60.10	N/A
S98T002469	D	Nickel-ICP-Acid Dil.	ug/mL	99.00	<2.00e-02	1.85e+02	178.0	181.5	3.86	N/A	12.00	N/A
S98T002469	D	Silicon-ICP-Acid Dil.	ug/mL	98.00	<5.00e-02	<3.01e+02	<3.01e2	N/A	N/A	N/A	300.0	N/A
S98T002469	D	Uranium-ICP-Acid Dil.	ug/mL	96.50	<5.00e-01	52.10	51.50	51.80	1.16	N/A	6.010	N/A
S98T002469	D	Zinc-ICP-Acid Dil.	ug/mL	96.20	<1.00e-02	< 6.010	<6.01e0	N/A	N/A	N/A	6.010	N/A
S98T002469	D	Zirconium-ICP-Acid Dil.	ug/mL	102.2	<1.00e-02	6.84e+02	657.0	670.4	4.03	N/A	70.40	N/A
S98T002469	D	Fluoride-IC-Dioxex 4000/4500	ug/mL	100.3	<1.70e-02	1.47e+04	1.48e+04	1.47e+04	0.68	N/A	70.40	N/A
S98T002469	D	Chloride-IC-Dioxex 4000/4500	ug/mL	102.2	<1.70e-02	1.55e+05	1.55e+05	1.55e+05	0.00	N/A	447.2	N/A
S98T002469	D	Nitrite-IC - Dioxex 4000/4500	ug/mL	93.99	<1.08e-01	1.25e+01	<5.18e2	N/A	N/A	N/A	517.6	N/A
S98T002469	D	Bromide by Ion Chromatograph	ug/mL	102.5	<1.25e-01	<5.18e+02	<5.18e2	N/A	N/A	N/A	517.6	N/A
S98T002469	D	Nitrate by IC-Dioxex 4000/4500	ug/mL	107.9	<1.25e-01	1.63e+05	1.63e+05	1.63e+05	0.00	N/A	575.6	N/A
S98T002469	D	Phosphate-IC-Dioxex 4000/4500	ug/mL	100.3	<1.20e-01	3.78e+03	3.79e+03	3.75e+03	2.41	N/A	496.9	N/A
S98T002469	D	Sulfate by IC-Dioxex 4000/4500	ug/mL	100.4	<1.38e-01	2.79e+03	2.85e+03	2.82e+03	2.13	N/A	571.5	N/A
S98T002469	D	Oxalate-IC-Dioxex 4000/4500	ug/mL	100.9	<1.05e-01	<4.35e+02	<4.35e2	N/A	N/A	N/A	434.8	N/A

Drainable Liquid: Drainable Liquid

Sample#	R #	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S98T002465	D	DSC Exotherm DTY	Calculated	n/a	n/a	36.78	32.53	34.66	12.3	N/A	N/A	N/A
S98T002465	D	DSC Exotherm on Perkin Elmer	Joules/g	97.75	<5.00	19.31	17.08	18.20	12.3	N/A	N/A	N/A
S98T002465	D	Ammonia by ISE-Strk Additions	ug/mL	100.3	<5.00	2.02e+02	194.0	198.0	4.04	N/A	5.000	N/A
S98T002465	D	% Water by TGA on Perkin Elmer	%	98.89	n/a	47.92	47.07	47.50	1.79	N/A	1.0e-02	6.28E+01
S98T002465	D	Alpha In Liquid Samples	uCi/mL	97.22	<5.68e-03	1.61e-02	1.38e-02	1.49e-02	15.4	N/A	1.0e-02	6.28E+01
S98T002466	D	Specific Gravity	Sp.G.	98.92	n/a	1.427	1.469	1.448	2.90	N/A	1.00e-03	N/A
S98T002466	D	Aluminum-ICP-Acid Dil.	ug/mL	98.60	<5.00e-02	4.20e+04	3.85e+04	4.02e+04	8.70	N/A	30.10	N/A
S98T002466	D	Boron-ICP-Acid Dil.	ug/mL	99.40	<5.00e-02	1.13e+02	97.10	105.0	15.1	N/A	30.10	N/A
S98T002466	D	Barium-ICP-Acid Dil.	ug/mL	98.00	<5.00e-02	< 30.10	<3.01e-01	N/A	N/A	N/A	30.10	N/A
S98T002466	D	Bismuth-ICP-Acid Dil.	ug/mL	99.60	<1.00e-01	60.10	60.01e1	N/A	N/A	N/A	60.10	N/A
S98T002466	D	Calcium-ICP-Acid Dil.	ug/mL	99.20	<1.00e-01	78.90	86.80	82.85	9.54	N/A	60.10	N/A
S98T002466	D	Chromium-ICP-Acid Dil.	ug/mL	98.60	<1.00e-02	2.26e+02	247.0	236.5	8.88	N/A	6.010	N/A
S98T002466	D	Iron-ICP-Acid Dil.	ug/mL	97.20	<5.00e-02	< 30.10	47.56	N/A	N/A	N/A	30.10	N/A
S98T002466	D	Potassium-ICP-Acid Dil.	ug/mL	100.0	<5.00e-01	4.35e+03	4.07e+03	4.20e+03	6.19	N/A	300.0	N/A
S98T002466	D	Lithium-ICP-Acid Dil.	ug/mL	98.80	<1.00e-02	< 6.010	<6.01e0	N/A	N/A	N/A	6.010	N/A
S98T002466	D	Manganese-ICP-Acid Dil.	ug/mL	98.00	<1.00e-02	52.40	31.30	41.85	50.4	N/A	6.010	N/A

Sample#	R#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk. Rec. %	Det Limit	Count	Err%
S98T002466	D	Sodium-IC-Acid D11	ug/mL	102.2	<1.00e-01	2.44e+05	2.24e+05	2.34e+05	8.55	n/a	60.10	D/A	
S98T002466	D	Nickel-IC-Acid D11	ug/mL	99.00	<2.00e-02	22.80	19.10	20.95	17.7	n/a	12.00	D/A	
S98T002466	D	Silicon-ICP-Acid D11	ug/mL	98.00	<5.00e-02	4.04e+02	3.670	385.5	9.60	n/a	30.10	D/A	
S98T002466	D	Uranium-ICP-Acid D11	ug/mL	96.50	<5.00e-01	<3.01e+02	<3.01e+02	n/a	n/a	n/a	300.0	D/A	
S98T002466	D	Zinc-ICP-Acid D11	ug/mL	95.20	<1.00e-02	6.250	6.510	6.380	4.08	n/a	6.010	D/A	
S98T002466	D	Zirconium-ICP-Acid D11	ug/mL	92.42	<2.10e-02	<37.57	<37.661	n/a	n/a	n/a	6.010	D/A	
S98T002466	D	Formate by Ion Chromatograph	ug/mL	101.4	<1.20e-02	2.34e+02	221.0	227.3	5.71	96.78	61.81	D/A	
S98T002466	D	Fluoride-IC-Dioxex 4000/4500	ug/mL	103.2	<1.70e-02	1.09e+04	1.11e+04	1.10e+04	1.82	95.38	87.57	D/A	
S98T002466	D	Nitrite-IC - Dioxex 4000/4500	ug/mL	103.7	<1.08e-01	1.85e+05	1.85e+05	1.85e+05	0.00	100.2	1.10e+03	D/A	
S98T002466	D	Bromide by Ion Chromatograph	ug/mL	105.7	<1.25e-01	<6.44e+02	<6.44e+02	n/a	n/a	101.7	643.9	D/A	
S98T002466	D	Nitrate by IC-Dioxex 4000/4500	ug/mL	103.7	<1.29e-01	1.40e+05	1.40e+05	1.40e+05	0.00	100.0	716.0	D/A	
S98T002466	D	Phosphate-IC-Dioxex 4000/4500	ug/mL	100.0	<1.20e-01	2.72e+03	2.72e+03	2.72e+03	0.37	98.72	618.1	D/A	
S98T002466	D	Sulfate by IC-Dioxex 4000/4500	ug/mL	101.4	<1.38e-01	2.86e+03	2.87e+03	2.87e+03	0.35	100.9	710.8	D/A	
S98T002466	D	Oxalate-IC-Dioxex 4000/4500	ug/mL	103.2	<1.05e-01	<5.41e+02	<5.41e+02	n/a	n/a	101.6	540.9	D/A	



Table 1. Data Summary Report.  
U-107 (2)

CORE NUMBER: 245  
SEGMENT #: Composite

SEGMENT PORTION: Core Composite

Sample#	R #/Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD, % Spk Rec. %	Det Limit	Count Errz
S98T003334	Bulk Density of Sample	g/ml		Blank	1.490					
S98T003335	TIC by Acid/Coulometry	ug/g	95.02	2.500	4.24e+03	5.55e+03	4.90e+03	26.8	5.00e-01	D/A
S98T003335	TOC by Persulfate/Coulometry	ug/g	89.00	20.30	5.26e+03	4.67e+03	4.96e+03	11.5	5.000	D/A
S98T003337	F Strontium-89/90 High Level	uCi/g	102.9	1.19e-02	11.50	11.30	11.40	1.75	40.00	D/A
S98T003337	F Cesium-137 by BEA	uCi/g	105.9	1.00e-01	1.48e+02	148.0	148.2	0.00	9.00e-03	1.18E+00
S98T003338	W Chromium (VI) by Spec.	ug/g	101.6	<20.43	82.30	51.50	51.90	1.54	1.00e-02	0.260
S98T003338	W OH- by Pot. Titration	ug/g	100.6	<372.0	1.30e+04	1.27e+04	1.28e+04	2.33	8.37e+03	D/A

Drainable Liquid: Drainable Liquid

Sample#	R #/Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD, % Spk Rec. %	Det Limit	Count Errz
S98T003340	Chromium (VI) by Spec.	ug/ml	104.3	<2.58e-01	5.360	5.410	5.395	0.93	100.8	1.00e-02
S98T003340	OH- by Pot. Titration	ug/ml	101.2	<2500.0	3.06e+04	3.04e+04	3.05e+04	0.66	2.50e+03	D/A
S98T003340	TIC by Acid/Coulometry	ug/ml	97.51	3.500	6.59e+03	6.45e+03	6.50e+03	1.08	84.90	5.000
S98T003340	TOC by Persulfate/Coulometry	ug/ml	96.33	0.00e+00	4.39e+03	4.32e+03	4.36e+03	1.61	82.10	40.00
S98T003341	Strontium-89/90 High Level	uCi/ml	98.08	6.00e-03	3.76e-01	4.08e-01	3.92e-01	8.16	4.00e-03	3.44E+00
S98T003341	Cesium-137 by BEA	uCi/ml	108.0	<4.48e-03	2.84e+02	283.0	283.5	0.35	n/a	0.160
S98T003356	Chromium (VI) by Spec.	ug/ml	104.3	<2.58e-01	7.75e-01	7.75e-01	7.75e-01	0.00	100.8	1.00e-02
S98T003356	OH- by Pot. Titration	ug/ml	101.2	<2500.0	4.50e+04	4.44e+04	4.57e+04	3.06	5.00e+03	D/A
S98T003356	TIC by Acid/Coulometry	ug/ml	97.51	3.500	3.00e+03	3.33e+03	3.16e+03	10.4	106.0	5.000
S98T003356	TOC by Persulfate/Coulometry	ug/ml	96.33	0.00e+00	5.92e+03	6.50e+03	6.21e+03	9.34	106.0	40.00
S98T003357	Strontium-89/90 High Level	uCi/ml	98.08	6.00e-03	4.73e-01	4.74e-01	4.74e-01	0.21	n/a	4.00e-03
S98T003357	Cesium-137 by BEA	uCi/ml	108.0	<4.48e-03	4.59e+02	455.0	457.0	0.88	n/a	0.130

Table 1. Data Summary Report.  
U-102

CORE NUMBER: 245  
SEGMENT #: DE-1 WATER  
SEGMENT PORTION: Field Blank

Sample #	R#	Analyte	Unit	Standard %	Blank	Duplicate	Average	RPD %	Spk Rec %	Det. Limit	Count Err%
S981002114	D	DSC Exotherm Dry	1000es/g Dry	95.73	N/A	0.00e+00	0.00e+00	0.00	N/A	N/A	N/A
S981002114	D	DSC Exotherm	1000es/g	97.74	<0.00e+00	0.00e+00	0.00e+00	0.00	N/A	N/A	N/A
S981002114	D	Ammonia by IS-STD	SP-G.	98.77	N/A	9.97e-01	9.92e-01	1.11	N/A	1.00e-03	N/A
S981002114	D	% Water by Gravimetry	SP-G.	98.45	N/A	98.94	98.99	0.10	N/A	1.00e-03	N/A
S981002114	D	Aluminum-ICP-ASD DIL.	ug/ml	99.00	<5.00e-02	5.19e-02	N/A	N/A	N/A	5.00e-02	N/A
S981002114	D	Boron-ICP-ASD DIL.	ug/ml	104.0	<5.00e-02	5.10e-02	N/A	N/A	N/A	5.00e-02	N/A
S981002114	D	Barium-ICP-ASD DIL.	ug/ml	97.80	<5.00e-02	5.10e-02	N/A	N/A	N/A	5.00e-02	N/A
S981002114	D	Bismuth-ICP-ASD DIL.	ug/ml	102.0	<1.00e-01	4.69e-01	N/A	N/A	N/A	1.00e-01	N/A
S981002114	D	Calcium-ICP-ASD DIL.	ug/ml	104.8	<1.00e-01	4.68e-01	N/A	N/A	N/A	1.00e-01	N/A
S981002114	D	Chromium-ICP-ASD DIL.	ug/ml	101.6	<1.00e-02	4.68e-02	4.48e-01	0.67	N/A	1.00e-01	N/A
S981002114	D	Cobalt-ICP-ASD DIL.	ug/ml	98.20	<5.00e-02	5.10e-02	N/A	N/A	N/A	5.00e-02	N/A
S981002114	D	Copper-ICP-ASD DIL.	ug/ml	98.60	<5.00e-01	5.10e-01	N/A	N/A	N/A	5.00e-01	N/A
S981002114	D	Lithium-ICP-ASD DIL.	ug/ml	100.5	<1.00e-02	4.69e-02	N/A	N/A	N/A	1.00e-02	N/A
S981002114	D	Manganese-ICP-ASD DIL.	ug/ml	100.2	<1.00e-02	4.69e-02	N/A	N/A	N/A	1.00e-02	N/A
S981002114	D	Nickel-ICP-ASD DIL.	ug/ml	100.0	<1.00e-01	1.590	1.520	4.50	N/A	1.00e-01	N/A
S981002114	D	Selenium-ICP-ASD DIL.	ug/ml	101.2	<2.00e-02	2.760	2.750	2.20	N/A	2.00e-02	N/A
S981002114	D	Strontium-ICP-ASD DIL.	ug/ml	96.80	<5.00e-02	5.10e-01	5.00e-01	2.20	N/A	5.00e-01	N/A
S981002114	D	Zinc-ICP-ASD DIL.	ug/ml	99.00	<1.00e-02	4.69e-02	N/A	N/A	N/A	1.00e-02	N/A
S981002114	D	Zirconium-ICP-ASD DIL.	ug/ml	105.0	<1.00e-02	4.69e-02	N/A	N/A	N/A	1.00e-02	N/A
S981002114	D	Formate by Ion Chromatograph	ug/ml	100.0	<2.10e-02	2.10e-02	2.10e-02	0.82	N/A	1.70e-02	N/A
S981002114	D	Fluoride-IC-Dionex 4000/4500	ug/ml	105.3	<1.20e-02	1.20e-02	1.20e-02	0.82	N/A	1.20e-02	N/A
S981002114	D	Chloride-IC-Dionex 4000/4500	ug/ml	99.82	<1.70e-02	1.70e-02	1.70e-02	0.82	N/A	1.70e-02	N/A
S981002114	D	Nitrate-IC-Dionex 4000/4500	ug/ml	97.78	<1.08e-01	1.21e-01	1.21e-01	0.82	N/A	1.08e-01	N/A
S981002114	D	Bromide by Ion Chromatograph	ug/ml	109.0	<1.25e-01	1.25e-01	1.25e-01	0.82	N/A	1.25e-01	N/A
S981002114	D	Triurate by IC-Dionex 4000/4500	ug/ml	88.30	<1.20e-01	1.20e-01	1.20e-01	2.22	N/A	1.20e-01	N/A
S981002114	D	Phosphate-IC-Dionex 4000/4500	ug/ml	97.65	<1.38e-01	1.38e-01	1.38e-01	2.22	N/A	1.38e-01	N/A
S981002114	D	Sulfate by IC-Dionex 4000/4500	ug/ml	93.77	<1.05e-01	1.05e-01	1.05e-01	2.22	N/A	1.05e-01	N/A
S981002114	D	Oxalate-IC-Dionex 4000/4500	ug/ml	89.66	<3.23e-07	3.23e-07	3.23e-07	5.00	N/A	6.70e-07	5.00e+02
S981002114	D	Alpha in Liquid Samples	uCi/ml						N/A		

Table 1. Data Summary Report.  
U-107 (2)

CORE NUMBER: 245  
SEGMENT #: LIBR

SEGMENT PORTION: Hydrostatic Head Fluid

Sample#	R #	Analyte	Unit	Standard %	Blanks	Result	Duplicate	Average	RPD % Spk Rec %	Det Limit	Count Err%
S98T002116	0	Aluminum-ICP-Acid DIL	ug/mL	99.00	< 5.00e-02	6.65e-01	6.34e-01	6.49e-01	4.77	N/A	5.00e-01
S98T002116	0	Boron-ICP-Acid DIL	ug/mL	94.30	< 5.00e-02	< 2.00e-01	< 2.00e-01	N/A	N/A	N/A	5.00e-01
S98T002116	0	Barium-ICP-Acid DIL	ug/mL	77.80	< 5.00e-02	< 3.00e-01	< 3.00e-01	N/A	N/A	N/A	5.00e-01
S98T002116	0	Bismuth-ICP-Acid DIL	ug/mL	102.0	< 1.00e-01	< 8.350	< 8.350	8.428	1.64	N/A	1.00e-01
S98T002116	0	Calcium-ICP-Acid DIL	ug/mL	104.2	< 1.00e-02	< 1.00e-01	< 1.00e-01	N/A	N/A	N/A	1.00e-01
S98T002116	0	Chromium-ICP-Acid DIL	ug/mL	99.30	< 5.00e-02	< 5.00e-01	< 5.00e-01	N/A	N/A	N/A	5.00e-01
S98T002116	0	Iron-ICP-Acid DIL	ug/mL	99.40	< 5.00e-01	< 5.00e-01	< 5.00e-01	N/A	N/A	N/A	5.00e-01
S98T002116	0	Potassium-ICP-Acid DIL	ug/mL	100.2	< 1.00e-02	1.91e+03	1.91e+03	1.90e+03	0.52	N/A	1.00e-01
S98T002116	0	Lithium-ICP-Acid DIL	ug/mL	100.6	< 1.00e-02	< 1.00e-01	< 1.00e-01	N/A	N/A	N/A	1.00e-01
S98T002116	0	Manganese-ICP-Acid DIL	ug/mL	101.2	< 2.00e-02	< 2.00e-01	< 2.00e-01	19.70	1.02	N/A	1.00e-01
S98T002116	0	Sodium-ICP-Acid DIL	ug/mL	105.1	< 5.00e-02	< 46.60	< 47.40	47.00	1.70	N/A	5.00e-01
S98T002116	0	Strontium-ICP-Acid DIL	ug/mL	105.0	< 5.00e-02	< 5.000	< 5.00e-01	N/A	N/A	N/A	5.00e-01
S98T002116	0	Titanium-ICP-Acid DIL	ug/mL	98.80	< 1.00e-02	< 1.00e-01	< 1.00e-01	N/A	N/A	N/A	1.00e-01
S98T002116	0	Zinc-ICP-Acid DIL	ug/mL	99.00	< 1.00e-02	< 1.00e-01	< 1.00e-01	N/A	N/A	N/A	1.00e-01
S98T002116	0	Fluoride-IC-Dioxex 4000/4500	ug/mL	105.3	< 1.20e-02	< 1.22e+02	< 1.22e+02	N/A	N/A	N/A	1.72e-4
S98T002116	0	Chloride-IC-Dioxex 4000/4500	ug/mL	101.8	< 1.08e-02	< 1.73e+02	< 1.72e+02	N/A	N/A	N/A	1.72e-4
S98T002116	0	Bromide by Ion Chromatograph	ug/mL	97.78	< 1.25e-01	2.19e+04	2.16e+04	2.17e+04	1.38	N/A	120.0
S98T002116	0	Nitrate by Ion Chromatograph	ug/mL	109.0	< 1.39e-01	< 1.42e+03	< 1.42e+03	N/A	N/A	N/A	1.28e+03
S98T002116	0	Phosphate-IC-Dioxex 4000/4500	ug/mL	88.30	< 1.20e-01	< 1.22e+03	< 1.22e+03	N/A	N/A	N/A	1.22e+03
S98T002116	0	Sulfate by IC-Dioxex 4000/4500	ug/mL	97.65	< 1.38e-01	< 1.67e+03	< 1.41e+03	N/A	N/A	N/A	1.41e+03
S98T002116	0	Oxalate-IC-Dioxex 4000/4500	ug/mL	93.77	< 1.05e-01	< 1.07e+03	< 1.07e+03	N/A	N/A	N/A	1.07e+03

HNF-1661 REV. 0

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HNF-1661 REV. 0

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# CHAIN-OF-CUSTODY RECORD FOR CPO

HNF-1661 REV. 0

BC-6001-326 (07/87)

(1) Sample Number <b>242-01</b>	(2) Supervisor/Sampler <i>M. S. Jones</i>	(3) Tank <b>U-107</b>	(4) Riser <b>2</b>	(5) Seal No. <b>14-6</b>	(6) Shipment, Description: <b>WS-97-00231</b>	(7) Sampling Date - Lithium Bromide Amount Concentration - X-Ray - Partial Samples - Retrieved Partial Sample Stroke Length Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A N/A <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> 8	(8) Field Comments:  	(9) Seal Intact Upon Release? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(10) Seal Intact Upon Receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(11) Seal Number AND Case/Pig SERIAL Number consistent with this record (Block 5 & 6b) (12) Laboratory Comments:  
5085001001888						(13) Date/Time <b>6-12-98</b>	(16) Receiver Comments  			
107						(14) Relinquished By (Sign and PRINT) <i>James R. [Signature]</i>	(15) Date/Time <b>10-20</b>	(20) Receiver Comments  		
107						(17) Relinquished By (Sign and PRINT) <i>John [Signature]</i>	(18) Date/Time <b>6-12-98</b>	(24) Receiver Comments  		
107						(19) Relinquished By (Sign and PRINT) <i>James R. [Signature]</i>	(21) Date/Time  	(28) Receiver Comments  		

CHAIN-OF-CUSTODY RECORD FOR CPO

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(1) Sample Number <u>242-02</u>		(2) Supervisor/Sampler <u>MIC. JONES</u>		(9) Seal Intact Upon Release? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
(3) Tank <u>U-107</u>		(4) Rise <u>2</u>		(10) Seal Intact Upon Receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
(5) Cask/Pig Serial No. <u>C-1049</u>		(7) Sampling Date - Lithium Bromide <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <u>N/A</u>		(11) Seal Number AND Cask/Pig SERIAL Number consistent with this record* (Block 5 & 6b) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
(6) Shipment Description: A. Work Package Number <u>WS-97-00231</u>		Amount <u>N/A</u>		(12) Laboratory Comments: <u>SP8870101889</u>	
B. Cask/Pig Seal Number <u>3409</u>		Concentration <u>N/A</u>			
C. Date Sample Collected <u>6-11-98</u>		X-Ray <input type="checkbox"/> Y <input checked="" type="checkbox"/> N			
D. Time Sample Collected <u>1908</u>		Partial Sample <input type="checkbox"/> Y <input checked="" type="checkbox"/> N			
		Retrieved Partial Sample Stroke Length <u>9</u>			
(8) Field Comments: <u>Sample was only pushed 9" before hitting high down force</u>					

108

(13) Relinquished By (Sign and PRINT) <u>Walter Roberto Anzani</u>	(14) Received By (Sign and PRINT) <u>James Edwards</u>	(15) Date/Time <u>09/16 6:13:28</u>	(18) Receiver Comments 
(17) Relinquished By (Sign and PRINT) <u>Walter Roberto Anzani</u>	(16) Received By (Sign and PRINT) <u>RLC Johnson / Ruchambes</u>	(19) Date/Time <u>10/20 6-12-98</u>	(20) Receiver Comments 
(21) Relinquished By (Sign and PRINT) 	(22) Received By (Sign and PRINT) 	(23) Date/Time 	(24) Receiver Comments 
(25) Relinquished By (Sign and PRINT) 	(26) Received By (Sign and PRINT) 	(27) Date/Time 	(28) Receiver Comments 

CHAIN-OF-CUSTODY RECORD FOR CPO

(1) Sample Number 242-02A (2) Supervisor/Sampler M.C. JONES (9) Seal Intact Upon Release?  Yes  No

(3) Tank U-107 (4) Riser 2 (5) Clask/Fig Serial No. SN-23-G (10) Seal Intact Upon Receipt?  Yes  No

(6) Shipment Description: WS-97-00231 (11) Seal Number AND Clask/Fig SERIAL Number consistent with this record (Block 5 & 6)  Yes  No

(7) Sampling Date 6-11-98 (12) Laboratory Comments: 9

A. Work Package Number 3410 Y  N   
 - Lithium Bromide N/A

B. Clask/Fig Seal Number 6-11-98 Amount N/A  
 Concentration N/A

C. Date Sample Collected 2010 X-Ray  Partial Sample

D. Time Sample Collected 2010 Retrieved Partial Sample Stroke Length 9

(8) Field Comments: 06/11/1890

(13) Relinquished By (Sign and PRINT) <u>M.C. Jones</u>	(14) Received By (Sign and PRINT) <u>M.C. Jones</u>	(15) Date/Time <u>6-12-98</u>	(16) Receiver Comments
(17) Relinquished By (Sign and PRINT) <u>M.C. Jones</u>	(18) Received By (Sign and PRINT) <u>M.C. Jones</u>	(19) Date/Time <u>6-12-98</u>	(20) Receiver Comments
(21) Relinquished By (Sign and PRINT) <u>M.C. Jones</u>	(22) Received By (Sign and PRINT) <u>M.C. Jones</u>	(23) Date/Time <u>6-12-98</u>	(24) Receiver Comments
(25) Relinquished By (Sign and PRINT) <u>M.C. Jones</u>	(26) Received By (Sign and PRINT) <u>M.C. Jones</u>	(27) Date/Time	(28) Receiver Comments

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# CHAIN-OF-CUSTODY RECORD FOR CPPO

(1) Sample Number <b>242 04</b>	(2) Supervisor/Sampler <b>R. F. ...</b>	(3) Tank <b>11-107</b>	(4) Risor <b>2</b>	(5) Seal Intact Upon Release? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(6) Shipping Description: <b>11-107</b>		(7) Sampling Data Lithium Bromide Amount: <b>NA</b> Concentration: <b>NA</b> X-Ray: <input checked="" type="checkbox"/> Partial Sample: <input checked="" type="checkbox"/> Retrieved Partial Sample Stroke Length: <b>NA</b>		
(8) Work Package Number <b>115-97-00231</b>		(9) Seal Number AND Cast/Pkg SERIAL Number consistent with this record (Block 5 & 6b) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
(10) Cast/Pkg Seal Number <b>11393</b>		(11) Seal Intact Upon Receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
(11) Date Sample Collected <b>6-24-98</b>		(12) Laboratory Comments: <b>98100 2085</b>		
(12) Time Sample Collected <b>1412</b>				

(8) Field Comments:  
 Bottom of sampler clean, small amount of liquid rotary sampler (churns)  
 X - raged = 1/2" of liquid above bell valve

(13) Relinquished By (Sign and PRINT)  Julie Roberts-Arenick	(14) Received By (Sign and PRINT)  SA Robert ...	(15) Date/Time <b>1:30 PM</b>	(17) Receiver Comments NA
(17) Relinquished By (Sign and PRINT)  SA Robert ...	(18) Received By (Sign and PRINT)  SA Robert ...	(19) Date/Time <b>7:10 PM</b>	(20) Receiver Comments NA
(21) Relinquished By (Sign and PRINT)  SA Robert ...	(22) Received By (Sign and PRINT)  SA Robert ...	(23) Date/Time <b>13:40</b>	(24) Receiver Comments NA
(25) Relinquished By (Sign and PRINT)	(26) Received By (Sign and PRINT)	(27) Date/Time	(28) Receiver Comments

CHAIN-OF-CUSTODY RECORD FOR CPO

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(9) Seal Intact Upon Release?  Yes  No

(10) Seal Intact Upon Receipt?  Yes  No

(11) Seal Number AND Case/Pkg SERIAL Number consistent with this receipt (Block 6 & 6b)  Yes  No

(12) Laboratory Comments:

S08T002087

1-30-91  
1-16

(1) Sample Number  
242-5

(2) Expeditor/Sampler  
K. Blanton

(3) Fork  
4-107

(4) Rider  
2

(5) Shipment Description:  
WS-97-00231

(6) Case/Pkg Serial No.  
1-18 1158 C-2011

(7) Sampling Data

Y N  
 Y  N

Liithium Bromide

Amount  
N/A

Concentration  
N/A

X-Ray

Partial Sample

Received Partial Sample Stroke Length  
N/A

(8) Field Comments:

X-Ray of sample shows waste only in Ball valve area.

111

(13) Relinquished By (Sign and PRINT)  
K. Blanton

(14) Received By (Sign and PRINT)  
Blanton

(17) Relinquished By (Sign and PRINT)  
Blanton

(18) Received By (Sign and PRINT)  
Blanton

(21) Relinquished By (Sign and PRINT)  
Blanton

(22) Received By (Sign and PRINT)  
Blanton

(26) Relinquished By (Sign and PRINT)

(126) Received By (Sign and PRINT)

(15) Date/Time  
12-15-98

(16) Receiver Comments  
7-15-98

(19) Date/Time  
7-15-98

(20) Receiver Comments

(23) Date/Time

(24) Receiver Comments

(27) Date/Time

(28) Receiver Comments

# CHAIN-OF-CUSTODY RECORD FOR CPO

(1) Sample Number <b>242-06</b>	(2) Supervisor/Sampler <b>R. Frank Frost</b>	(3) Tank <b>11-107</b>	(4) Riser <b>2</b>	(5) Cask/Pig Serial No. <b>C-2002</b>	(6) Shipment Description: (7) Sampling Date - Lithium Bromide Amount Concentration X-Ray Partial Sample Retained Portial Sample Stroke Length	Y N <input type="checkbox"/> <input checked="" type="checkbox"/>	(8) Seal Intact Upon Release? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
A. Work Package Number <b>MS-97-00231</b>	B. Cask/Pig Seal Number <b>10161</b>	C. Date Sample Collected <b>6-26-98</b>	D. Time Sample Collected <b>1059</b>	(9) Seal Intact Upon Receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				(10) Seal Intact Upon Receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(11) Field Comments: <b>Rotary sampler 19", small amount of liquid on bottom of sampler - 320 MP dose rate, no x-ray tech available on 6-26-98 days.</b>				(11) Seal Number AND Cask/Pig SERIAL Number consistent with this record (Block 5 & 6a) (12) Laboratory Comments: <b>Received the Cask at the lab for the second time on 7-13-98 @ 14:30 hrs. Seal was unbroken and cask # was correct. Sample inadvertently picked up by Tank Farms and returned on 7-13-98. S98100 2086 7/13/98</b>				(11) Seal Number AND Cask/Pig SERIAL Number consistent with this record (Block 5 & 6a) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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28  
7-9-98  
7-9-98

(14) Relinquished By (Sign and PRINT) <b>AM Robert Paznik</b>	(14) Received By (Sign and PRINT) <b>R. Frank Frost</b>	(15) Date/Time <b>7-10-98</b>	(15) Receiver Comments (16) Date/Time <b>7-10-98</b>
(17) Relinquished By (Sign and PRINT) <b>R. Frank Frost</b>	(17) Received By (Sign and PRINT) <b>R. Frank Frost</b>	(18) Date/Time <b>7-10-98</b>	(18) Receiver Comments (19) Date/Time <b>7-10-98</b>
(21) Relinquished By (Sign and PRINT)	(21) Received By (Sign and PRINT)	(22) Date/Time	(22) Receiver Comments
(25) Relinquished By (Sign and PRINT)	(25) Received By (Sign and PRINT)	(26) Date/Time	(26) Receiver Comments

CHAIN-OF-CUSTODY RECORD FOR CPO

(1) Sample Number 242-06 (2) Supervisor/Sampler R. Frank Faust (3) Tank 11-107 (4) Risor 2 (5) Seal Intact Upon Release?  No  Yes

(6) Shipment Description: C-2002 (7) Sampling Data Y N  
 - Ublum Bromide    
 Amount NA  
 Concentration NA  
 - X-Ray    
 - Partial Sample NA  
 - Retrieverd Partial Sample Stroke Length NA

(8) Work Package Number WS-97-00231  
 (9) Cask/Pig Serial No. 10161  
 (10) Seal Intact Upon Receipt?  No  Yes  
 (11) Seal Number AND Cask/Pig SERIAL Number consistent with this record (Block 5 & 6) 16-26-98  
 (12) Laboratory Comments: 1059

See previous page for comments regarding this sample  
 1/29/99

(B) Field Comments:  
 Rotary sampler 19", small amount of liquid on bottom of sampler - 320 MB dose rate, No x-ray tech available on 6-26-98 days.

113  
 22  
 7-12-00  
 11

(13) Relinquished By (Sign and PRINT) <u>AM Robert Prznik</u>	(14) Received By (Sign and PRINT) <u>[Signature]</u>	(15) Date/Time <u>7/10/98</u>	(16) Receiver Comments
(17) Relinquished By (Sign and PRINT) <u>[Signature]</u>	(18) Received By (Sign and PRINT) <u>[Signature]</u>	(19) Date/Time <u>1340</u>	(20) Receiver Comments
(21) Relinquished By (Sign and PRINT)	(22) Received By (Sign and PRINT) <u>[Signature]</u>	(23) Date/Time <u>7-10-98</u>	(24) Receiver Comments
(25) Relinquished By (Sign and PRINT)	(26) Received By (Sign and PRINT)	(27) Date/Time	(28) Receiver Comments

CHAIN-OF-CUSTODY RECORD FOR CPO

(1) Sample Number: 247207  
 (2) Tank: W-107  
 (3) Shipments Description: 2  
 (4) Riser: 2  
 (5) Supervising Sampling: DeAnthony  
 (6) Cask/Pig Serial No.: #57  
 (7) Sampling Date: W 8-97-0023/0  
 (8) Shipment Description: 13019  
 (9) Seal Number AND Cask/Pig SERIAL Number consistent with this receipt (Block 5 & 6b): 6-29-98  
 (10) Seal Intact Upon Receipt?: Yes  
 (11) Seal Number AND Cask/Pig SERIAL Number consistent with this receipt (Block 5 & 6b): 0847  
 (12) Laboratory Comments: 598T002088

(13) Sampling Date: Y N  
 - Lithium Bromide:  Y  N  
 Amount: N/A  
 Concentration: N/A  
 - X-Ray:    
 - Partial Sample:    
 - Retrieved Partial Sample Stroke Length: 1/4"

(14) Field Comments: X-Ray shows 1/4" of water

(14) Received By (Sign and PRINT)	(15) Date/Time	(16) Receiver Comments
<u>Edm Roberto Puzosch</u>	<u>8-15-98</u>	
<u>Edm Roberto Puzosch</u>	<u>7-15-98</u>	
<u>Edm Roberto Puzosch</u>	<u>7-15-98</u>	
<u>Edm Roberto Puzosch</u>		
<u>Edm Roberto Puzosch</u>		

5987002101

CHAIN-OF-CUSTODY RECORD FOR CPO

(1) Sample Number  
242-08

(2) Supervisor/Sampling  
D. Hartung

(3) Tank  
14-107

(4) Biber  
2

(5) Casing/Sig Seal No.  
C 1053

(6) Shipper's Description:

A. Work Package Number  
WS-99-002310

B. Cask/Pig Seal Number  
13020

C. Data Sample Collected  
6-30-98

D. Time Sample Collected  
1011

(7) Sampling Data

Y N

Lithium Bromide  
 Y  N

Amount  
N/A

Concentration  
N/A

X-Ray  
 Y  N

Partial Sample  
 Y  N

Retrieved Partial Sample Stroke Length  
111

(11) Seal Number AND Cask/Pig SERIAL Number consistent with this record? (Block 6 & 6b)  
 Yes  No

(12) Laboratory Comments:

(8) Seal Intact Upon Release?  
 Yes  No

(10) Seal Intact Upon Receipt?  
 Yes  No

(6) Field Comments:

(13) Relinquished By (Sign and PRINT) <i>Ally Robert Pruznik</i>	(15) Date/Time 7-15-98	(16) Receiver Comments
(17) Relinquished By (Sign and PRINT) <i>Jamie Hensley</i>	(19) Date/Time 14:50	(20) Receiver Comments
(14) Relinquished By (Sign and PRINT) <i>Jamie Hensley</i>	(18) Date/Time 7-15-98	(21) Receiver Comments
(16) Relinquished By (Sign and PRINT) <i>Robert Pruznik</i>	(23) Date/Time 14:50	(24) Receiver Comments
(18) Relinquished By (Sign and PRINT)	(27) Date/Time	(28) Receiver Comments

115

CHAIN-OF-CUSTODY RECORD FOR CPO

No  
 Yes  
 No  
 Yes  
 No  
 Yes

(10) Seal Intact Upon Receipt?  
 (11) Seal Number AND Cask/Pig SERIAL Number consistent with this record? (Block 5 & 6b)  
 (12) Laboratory Comments:

5987002082

(2) Supervisor/Sampler  
 DC Hestley  
 (5) Cask/Pig Serial No.  
 C 2001

(7) Sampling Data  
 Lithium Bromide  
 Amount  
 Concentration  
 X-Ray  
 Perbal Sample  
 Retrieved Perbal Sample Stroke Length

A. Work Package Number  
 B. Cask/Pig Seal Number  
 C. Date Sample Collected  
 D. Time Sample Collected

(8) Field Comments:  
 (14) Received By (Sign and PRINT)  
 (16) Received By (Sign and PRINT)  
 (18) Received By (Sign and PRINT)  
 (22) Received By (Sign and PRINT)  
 (26) Received By (Sign and PRINT)

(16) Receiver Comments  
 (20) Receiver Comments  
 (24) Receiver Comments  
 (28) Receiver Comments

(15) Date/Time  
 (19) Date/Time  
 (23) Date/Time  
 (27) Date/Time

(17) Relinquished By (Sign and PRINT)  
 (21) Relinquished By (Sign and PRINT)  
 (25) Relinquished By (Sign and PRINT)

116

CHAIN-OF-CUSTODY RECORD FOR CPO

(1) Sample Number: 242R-02  
 (2) Supervisor/Sampler: Blinn Hall  
 (3) Tank: 2  
 (4) Riser: #7  
 (5) Case/Pig Serial No.: WS-97-0023  
 (6) Shipment Description: 1302 / 7-1-98 / 0919

(7) Sampling Date: N/A  
 Lithium Bromide:  Y  N  
 Amount: N/A  
 Concentration: N/A  
 X-Ray:  Y  N  
 Partial Sample:  Y  N  
 Retrieved Partial Sample Stroke Length: 19"

(8) Field Comments: Sample Reads 1.3 R/AR x 13 g  
 base 19" Sample  
 117

(9) Relinquished By (Sign and PRINT): James Sicketts	(14) Received By (Sign and PRINT): SWATSONS	(15) Date/Time: 7-9-98	(16) Receiver Comments:
(17) Relinquished By (Sign and PRINT): [Signature]	(18) Received By (Sign and PRINT): [Signature]	(19) Date/Time: 7-7-98	(20) Receiver Comments:
(21) Relinquished By (Sign and PRINT): [Signature]	(22) Received By (Sign and PRINT): [Signature]	(23) Date/Time:	(24) Receiver Comments:
(25) Relinquished By (Sign and PRINT):	(26) Received By (Sign and PRINT):	(27) Date/Time:	(28) Receiver Comments:

(11) Seal Number AND Case/Pig SERIAL Number consistent with this record? (Block 5 & 6b):  Yes  
 (12) Laboratory Comments: S981002083



CHAIN-OF-CUSTODY RECORD FOR CPO

(1) Sample Number: 242R-03  
 (2) Supervisor/Sampler: DC Hartung, DeHartung  
 (3) Cask/Pig Serial No.: 229  
 (4) Riser: 2  
 (5) Shipment Description: U-107  
 (6) Work Package Number: WS-97-0023/0  
 (7) Cask/Pig Seal Number: 1302 Z  
 (8) Date Sample Collected: 7-1-98  
 (9) Time Sample Collected: 1016

(7) Sampling Data

Lithium Bromide  
 Amount: N/A  
 Concentration: N/A  
 X-Ray:   
 Partial Sample:   
 Retrieved Partial Sample Stroke Length: 194

(8) Field Comments:  
Sampler full & reads 1.2 R/HR,

(9) Seal Intact Upon Release?  Yes  No  
 (10) Seal Intact Upon Receipt?  Yes  No  
 (11) Seal Number AND Cask/Pig SERIAL Number consistent with this record? (Block 5 & 6)  Yes  No  
 (12) Laboratory Comments:  
598700 2084

(13) Relinquished By (Sign and PRINT) <u>James Sicksel</u>	(14) Received By (Sign and PRINT) <u>IZWATSONS</u>	(15) Date/Time <u>1015</u>	(16) Receiver Comments
(17) Relinquished By (Sign and PRINT) <u>James Sicksel</u>	(18) Received By (Sign and PRINT) <u>Jim King</u>	(19) Date/Time <u>1045am</u>	(20) Receiver Comments
(21) Relinquished By (Sign and PRINT) <u>James Sicksel</u>	(22) Received By (Sign and PRINT) <u>Jim King</u>	(23) Date/Time <u>7-9-98</u>	(24) Receiver Comments
(25) Relinquished By (Sign and PRINT)	(26) Received By (Sign and PRINT)	(27) Date/Time	(28) Receiver Comments

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CHAIN-OF-CUSTODY RECORD FOR CPO

(1) Sample Number <b>442R-04</b>	(2) Supervisor/Supplier <i>Dr. Hartley</i>	(8) Seal Intact Upon Release? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(9) Seal Intact Upon Receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(3) Tank <b>U-107</b>	(4) Rise <b>2</b>	(10) Seal Intact Upon Receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(11) Seal Number AND Case/Pig SERIAL Number consistent with this recorder (Block 6 & 6B) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(5) Case/Pig Seal No. <b>C1029</b>	(6) Slip/Unit Description <b>US-97-002310</b>	(12) Laboratory Comments:  	
(7) Sampling Date - Lithium Bromide Amount Concentration - X-Ray - Penial Sample - Retrieved Partial Sample Stroke Length	Y N <input type="checkbox"/> Y <input checked="" type="checkbox"/> N N/A N/A <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	(13) Laboratory Comments:  	
A. Work Package Number <b>13088</b>	B. Case/Pig Seal Number <b>9-1-98</b>	(14) Received By (Sign and PRINT) <i>James Kennedy, Jamie Hensley</i>	
C. Date Sample Collected <b>1108</b>	D. Time Sample Collected  	(15) Date/Time <b>7-15-98</b>	
(8) Field Comments: <b>Sampler reads 1.4 R/hr xx-ray</b> <b>showed 15 1/2"</b> <b>119</b>		(16) Receiver Comments  	
(20) Relinquished By (Sign and PRINT) <i>Dr. Hartley</i>		(21) Date/Time <b>7-15-98</b>	
(21) Relinquished By (Sign and PRINT) <i>James Kennedy, Jamie Hensley</i>		(22) Date/Time <b>1430</b>	
(22) Relinquished By (Sign and PRINT)  		(23) Receiver Comments  	
(23) Relinquished By (Sign and PRINT)  		(24) Receiver Comments  	
(24) Relinquished By (Sign and PRINT)  		(25) Receiver Comments  	

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598T002099

CHAIN-OF-CUSTODY RECORD FOR CPO

(9) Seal Intact Upon Receipt?  Yes  No

(10) Seal Intact Upon Receipt?  Yes  No

(11) Seal Number AND Case/Pig SERIAL Number consistent with this record? (Block 9 & 6B)  Yes  No

(12) Laboratory Comments:

(13) Date/Time

(14) Receiver Comments

(15) Date/Time

(16) Receiver Comments

(17) Date/Time

(18) Receiver Comments

(19) Date/Time

(20) Receiver Comments

(21) Date/Time

(22) Receiver Comments

(23) Date/Time

(24) Receiver Comments

(25) Date/Time

(26) Receiver Comments

(27) Date/Time

(28) Receiver Comments

(29) Date/Time

(30) Receiver Comments

(31) Date/Time

(32) Receiver Comments

(33) Date/Time

(34) Receiver Comments

(35) Date/Time

(36) Receiver Comments

(37) Date/Time

(38) Receiver Comments

(39) Date/Time

(40) Receiver Comments

(41) Date/Time

(42) Receiver Comments

(43) Date/Time

(44) Receiver Comments

(45) Date/Time

(46) Receiver Comments

(47) Date/Time

(48) Receiver Comments

(49) Date/Time

(50) Receiver Comments

(51) Date/Time

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(85) Date/Time

(86) Receiver Comments

(87) Date/Time

(88) Receiver Comments

(89) Date/Time

(90) Receiver Comments

(91) Date/Time

(92) Receiver Comments

(93) Date/Time

(94) Receiver Comments

(95) Date/Time

(96) Receiver Comments

(97) Date/Time

(98) Receiver Comments

(99) Date/Time

(100) Receiver Comments

(101) Date/Time

(102) Receiver Comments

(103) Date/Time

(104) Receiver Comments

(105) Date/Time

(106) Receiver Comments

(107) Date/Time

(108) Receiver Comments

(109) Date/Time

(110) Receiver Comments

(111) Date/Time

(112) Receiver Comments

(113) Date/Time

(114) Receiver Comments

(115) Date/Time

(116) Receiver Comments

(117) Date/Time

(118) Receiver Comments

(119) Date/Time

(120) Receiver Comments

(121) Date/Time

(122) Receiver Comments

(123) Date/Time

(124) Receiver Comments

(125) Date/Time

(126) Receiver Comments

(127) Date/Time

(128) Receiver Comments

(129) Date/Time

(130) Receiver Comments

(131) Date/Time

(132) Receiver Comments

(133) Date/Time

(134) Receiver Comments

(135) Date/Time

(136) Receiver Comments

(137) Date/Time

(138) Receiver Comments

(139) Date/Time

(140) Receiver Comments

(141) Date/Time

(142) Receiver Comments

(143) Date/Time

(144) Receiver Comments

(145) Date/Time

(146) Receiver Comments

(147) Date/Time

(148) Receiver Comments

(149) Date/Time

(150) Receiver Comments

(151) Date/Time

(152) Receiver Comments

(153) Date/Time

(154) Receiver Comments

(155) Date/Time

(156) Receiver Comments

(157) Date/Time

(158) Receiver Comments

(159) Date/Time

(160) Receiver Comments

(161) Date/Time

(162) Receiver Comments

(163) Date/Time

(164) Receiver Comments

(165) Date/Time

(166) Receiver Comments

(167) Date/Time

(168) Receiver Comments

(169) Date/Time

(170) Receiver Comments

(171) Date/Time

(172) Receiver Comments

(173) Date/Time

(174) Receiver Comments

(175) Date/Time

(176) Receiver Comments

(177) Date/Time

(178) Receiver Comments

(179) Date/Time

(180) Receiver Comments

(181) Date/Time

(182) Receiver Comments

(183) Date/Time

(184) Receiver Comments

(185) Date/Time

(186) Receiver Comments

(187) Date/Time

(188) Receiver Comments

(189) Date/Time

(190) Receiver Comments

(191) Date/Time

(192) Receiver Comments

(193) Date/Time

(194) Receiver Comments

(195) Date/Time

(196) Receiver Comments

(197) Date/Time

(198) Receiver Comments

(199) Date/Time

(200) Receiver Comments

(201) Date/Time

(202) Receiver Comments

(203) Date/Time

(204) Receiver Comments

(205) Date/Time

(206) Receiver Comments

(207) Date/Time

(208) Receiver Comments

(209) Date/Time

(210) Receiver Comments

(211) Date/Time

(212) Receiver Comments

(213) Date/Time

(214) Receiver Comments

(215) Date/Time

(216) Receiver Comments

(217) Date/Time

(218) Receiver Comments

(219) Date/Time

(220) Receiver Comments

(221) Date/Time

(222) Receiver Comments

(223) Date/Time

(224) Receiver Comments

(225) Date/Time

(226) Receiver Comments

(227) Date/Time

(228) Receiver Comments

(229) Date/Time

(230) Receiver Comments

(231) Date/Time

(232) Receiver Comments

(233) Date/Time

(234) Receiver Comments

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(250) Receiver Comments

(251) Date/Time

(252) Receiver Comments

(253) Date/Time

(254) Receiver Comments

(255) Date/Time

(256) Receiver Comments

(257) Date/Time

(258) Receiver Comments

(259) Date/Time

(260) Receiver Comments

(261) Date/Time

(262) Receiver Comments

(263) Date/Time

(264) Receiver Comments

(265) Date/Time

(266) Receiver Comments

(267) Date/Time

(268) Receiver Comments

(269) Date/Time

(270) Receiver Comments

(271) Date/Time

(272) Receiver Comments

(273) Date/Time

(274) Receiver Comments

(275) Date/Time

(276) Receiver Comments

(277) Date/Time

(278) Receiver Comments

(279) Date/Time

(280) Receiver Comments

(281) Date/Time

(282) Receiver Comments

(283) Date/Time

(284) Receiver Comments

(285) Date/Time

(286) Receiver Comments

(287) Date/Time

(288) Receiver Comments

(289) Date/Time

(290) Receiver Comments

(291) Date/Time

(292) Receiver Comments

(293) Date/Time

(294) Receiver Comments

(295) Date/Time

(296) Receiver Comments

(297) Date/Time

(298) Receiver Comments

(299) Date/Time

(300) Receiver Comments

(301) Date/Time

(302) Receiver Comments

(303) Date/Time

(304) Receiver Comments

(305) Date/Time

(306) Receiver Comments

(307) Date/Time

(308) Receiver Comments

(309) Date/Time

(310) Receiver Comments

(311) Date/Time

(312) Receiver Comments

(313) Date/Time

(314) Receiver Comments

(315) Date/Time

(316) Receiver Comments

(317) Date/Time

(318) Receiver Comments

(319) Date/Time

**CHAIN-OF-CUSTODY RECORD FOR CPO**

003

(1) Sample Number <b>242 R-06</b>	(2) Supervisor/Sampler <b>Blinn L Hall</b>	(9) Seal Intact Upon Release? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(3) Tank <b>107-U</b>	(5) Case/Pkg Serial No. <b>2</b>	(10) Seal Intact Upon Receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(6) Shipment Description: <b>C-1030</b>		(11) Seal Number AND Case/Pkg SERIAL Number consistent with this record (Block 9 & 6b) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

(7) Sampling Data	Y N	(12) Laboratory Comments:
A. Work Package Number <b>WS-98-00231/D</b>	Lithium Bromide <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<b>598700 2027</b>
B. Case/Pkg Seal Number <b>11956</b>	Amount <b>N/A</b>	
C. Date Sample Collected <b>7-2-98</b>	Concentration <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
D. Time Sample Collected <b>0912</b>	X-Ray <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
	Partial Sample <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Retrieved Partial Sample Stroke Length <b>12"</b>		

(8) Field Comments:  
**X-Ray Showed 16" of sample.  
1000 M/R through wire string.**

(13) Relinquished By (Sign and PRINT) <b>James Sicks</b>	(14) Received By (Sign and PRINT) <b>Blair</b>	(15) Date/Time <b>7-27-98</b>	(16) Receiver Comments
(17) Relinquished By (Sign and PRINT) <b>Blair</b>	(18) Received By (Sign and PRINT) <b>Blair</b>	(19) Date/Time <b>7-27-98</b>	(20) Receiver Comments
(21) Relinquished By (Sign and PRINT) <b>Blair</b>	(22) Received By (Sign and PRINT) <b>Blair</b>	(23) Date/Time <b>7-27-98</b>	(24) Receiver Comments
(25) Relinquished By (Sign and PRINT)	(26) Received By (Sign and PRINT)	(27) Date/Time	(28) Receiver Comments

CHAIN-OF-CUSTODY RECORD FOR CPO

(1) Sample Number: 242R-06A (4) Riser: 2 (8) Seal Intact Upon Release?  Yes  No

(2) Tank: 107-U (5) Cask/Pig Serial No.: C-1007 (10) Seal Intact Upon Receipt?  Yes  No

(6) Shipment Description: VS-97-00231/0 (11) Seal Number AND Cask/Pig SERIAL Number consistent with this record? (Block 5 & 6b)  Yes  No

(7) Sampling Date: 11/27/98 (12) Laboratory Comments: S 2187002228

(9) Analyte(s)/Sample(s): Blinn L Hall (13) Receiver Comments: 10:55 AM 7-27-98

(10) Lithium Bromide: N/A (14) Received By (Sign and PRINT): James Sickle

(11) Amount: N/A (15) Received By (Sign and PRINT): James Sickle

(12) Concentration: N/A (16) Received By (Sign and PRINT): James Sickle

(13) X-Ray:  (17) Received By (Sign and PRINT): James Sickle

(14) Perital Sample:  (18) Received By (Sign and PRINT): James Sickle

(15) Retrieved Partial Sample Stroke Length: 7" (19) Received By (Sign and PRINT): James Sickle

(8) Field Comments: X-Ray Showed 13" sample inside sampler  
700 M/R through  
dried string.

(20) Relinquished By (Sign and PRINT): James Sickle (21) Receiver Comments: 11:10 7-27-98

(21) Relinquished By (Sign and PRINT): James Sickle (22) Receiver Comments: 7:27-98

(22) Relinquished By (Sign and PRINT): James Sickle (23) Receiver Comments: 7:27-98

(23) Relinquished By (Sign and PRINT): James Sickle (24) Receiver Comments: 7:27-98

(24) Relinquished By (Sign and PRINT): James Sickle (25) Receiver Comments: 7:27-98

**CHAIN-OF-CUSTODY RECORD FOR CPO**

(1) Sample Number <b>242R-07</b>	(2) Supervisor/Sampler <b>David L. Gage</b>	(8) Seal Intact Upon Release? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(9) Seal Intact Upon Receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(10) Seal Intact Upon Receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(11) Seal Number AND Casting SERIAL Number consistent with this receipt? (Block 5 & 6b) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(3) Tank <b>107-U</b>	(4) Riser <b>2</b>	(5) Casting Serial No. <b>C-2000</b>	(12) Laboratory Comments:  <div style="text-align: center; font-size: 2em; font-weight: bold;">                     598T002229                 </div>		
(6) Shipment Description:  A. Work Package Number <b>WS-97-00231</b> B. Casting Seal Number <b>4010</b> C. Date Sample Collected <b>07-03-98</b> D. Time Sample Collected <b>0956</b>		(7) Sampling Data - Lithium Borate Y <input type="checkbox"/> N <input checked="" type="checkbox"/> <b>N/A</b> Amount <b>N/A</b> Concentration <input checked="" type="checkbox"/> <b>N/A</b> <input type="checkbox"/> - K-Ray <input checked="" type="checkbox"/> <input type="checkbox"/> - Partial Sample <input checked="" type="checkbox"/> <input type="checkbox"/> - Released Partial Sample Stroke Length <b>N/A</b>			
(13) Field Comments:  <div style="font-size: 2em; font-weight: bold;">                     1.2 R/hr.                 </div>					

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(16) Relinquished By (Sign and PRINT) <i>James Sichel</i>	(17) Relinquished By (Sign and PRINT) <i>James Sichel</i>	(18) Received By (Sign and PRINT) <i>BRUCE BATTIERS</i>	(19) Date/Time <b>10:55 AM</b>	(20) Receiver Comments (21) Receiver Comments (22) Receiver Comments
(23) Relinquished By (Sign and PRINT) <i>BRUCE BATTIERS</i>	(24) Relinquished By (Sign and PRINT) <i>BRUCE BATTIERS</i>	(25) Received By (Sign and PRINT) <i>Jim Knight</i>	(26) Date/Time <b>11:10 am</b>	(27) Receiver Comments (28) Receiver Comments
(29) Relinquished By (Sign and PRINT)	(30) Relinquished By (Sign and PRINT)	(31) Received By (Sign and PRINT)	(32) Date/Time	(33) Receiver Comments

# CHAIN-OF-CUSTODY RECORD FOR CPO

HNF-1661 REV. 0

(9) Seal Intact Upon Release?  Yes  No

(10) Seal Intact Upon Receipt?  Yes  No

(11) Seal Number AND Cask/Pig SERIAL Number consistent with this record? (Block 5 & 6b)  Yes  No

(12) Laboratory Comments:

598700 2408

(1) Sample Number  
**2 92R-08**

(2) Supervisor/Sampler  
**Daniel Guss Daniel Doy**

(3) Tank  
**107-4**

(4) Riser  
**2**

(5) Cask/Pig Serial No.  
**C-1041**

(6) Shipment Description:

(7) Sampling Data

(8) Field Comments:

(9) Relinquished By (Sign and PRINT)

(10) Relinquished By (Sign and PRINT)

(11) Relinquished By (Sign and PRINT)

(12) Relinquished By (Sign and PRINT)

(13) Relinquished By (Sign and PRINT)

(14) Relinquished By (Sign and PRINT)

(15) Relinquished By (Sign and PRINT)

(16) Relinquished By (Sign and PRINT)

(17) Relinquished By (Sign and PRINT)

(18) Relinquished By (Sign and PRINT)

(19) Relinquished By (Sign and PRINT)

(20) Relinquished By (Sign and PRINT)

(21) Relinquished By (Sign and PRINT)

(22) Relinquished By (Sign and PRINT)

(1) Sampling Date  
**Y N**  
 Y  N

- Lithium Bromide  
**N/A**

Amount  
**N/A**

Concentration  
 Y  N

- X-Ray  
 Y  N

- Partial Sample  
 Y  N

- Retrieved Partial Sample Stroke Length  
**2 1/2"**

Max Down Force (HDD) only a 2 1/2" stroke.

250 mpm.

124

(15) Receiver Comments

(16) Receiver Comments

(17) Receiver Comments

(18) Receiver Comments

(19) Receiver Comments

(20) Receiver Comments

(21) Receiver Comments

(22) Receiver Comments

# CHAIN-OF-CUSTODY RECORD FOR CPO

HNF-1661 REV. 0

(9) Seal Intact Upon Release?  Yes  No  
 (10) Seal Intact Upon Receipt?  Yes  No  
 (11) Seal Number AND Cask/Pig SERIAL Number consistent with this record? (Block 5 & 6b)  Yes  No

(12) Laboratory Comments:

5985002409

(1) Sample Number: 245-01  
 (2) Supervisor/Sampler: M.C. Jones  
 (3) Tank: 11-107  
 (4) Riser: 7  
 (5) Cask/Pig Serial No.: 1002-C  
 (6) Shipment Description:

(7) Sampling Data

- Lithium Bromide Amount: <u>N/A</u> Concentration: <u>N/A</u> - X-Ray: <input type="checkbox"/> - Partial Sample: <input checked="" type="checkbox"/> - Retrieved Partial Sample Stroke Length: <u>1174"</u>	Y N <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
--	--

(8) Field Comments:  
X-Shock 18 1/2" of Liquid in Sampler

125

(13) Relinquished By (Sign and PRINT) <u>William Robert F. Ruznik</u>	(14) Received By (Sign and PRINT) <u>[Signature]</u>	(15) Date/Time <u>10:40am</u>	(16) Receiver Comments
(17) Relinquished By (Sign and PRINT) <u>[Signature]</u>	(18) Received By (Sign and PRINT) <u>[Signature]</u>	(19) Date/Time <u>8:51PM</u>	(20) Receiver Comments
(21) Relinquished By (Sign and PRINT) <u>[Signature]</u>	(22) Received By (Sign and PRINT) <u>[Signature]</u>	(23) Date/Time <u>11:00am</u>	(24) Receiver Comments
(25) Relinquished By (Sign and PRINT)	(26) Received By (Sign and PRINT)	(27) Date/Time	(28) Receiver Comments



**CHAIN-OF-CUSTODY RECORD FOR CPO**

HNF-1661 REV. 0

(1) Sample Number 245-D2A (2) Supervisor/Sampler MICHAEL JAMES McEgan

(3) Tank U-107 (4) Rise 7 (5) Cask/Pig Serial No. C-2004

(6) Shipment Description:

(7) Sampling Data

Y	N
<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lithium Bromide	
Amount	<u>14 GAL</u>
Concentration	<u>0.3</u>
- X-Ray	<input type="checkbox"/>
- Partial Sample	<input type="checkbox"/>
- Retrieved Partial Sample Stroke Length	<u>N/A</u>

(8) Field Comments:  
X-RAY SHOWED SAMPLER WAS FULL PART LIQUID AND PART SLUDGE.

(9) Seal Intact Upon Release?  Yes  No

(10) Seal Intact Upon Receipt?  Yes  No

(11) Seal Number AND Cask/Pig SERIAL Number consistent with this record? (Block 5 & 6b)  Yes  No

(12) Laboratory Comments:  
5987002414

126

(11) Relinquished By (Sign and PRINT) <u>Robert J Paznik</u>	(15) Date/Time <u>2:05 pm</u>	(16) Receiver Comments
(12) Relinquished By (Sign and PRINT) <u>Robert J Paznik</u>	(15) Date/Time <u>8:5:26</u>	(17) Receiver Comments
(13) Relinquished By (Sign and PRINT) <u>Robert J Paznik</u>	(15) Date/Time <u>14:15</u>	(18) Receiver Comments
(14) Relinquished By (Sign and PRINT) <u>Robert J Paznik</u>	(15) Date/Time <u>8:5:26</u>	(19) Receiver Comments
(16) Relinquished By (Sign and PRINT)	(15) Date/Time	(20) Receiver Comments
(17) Relinquished By (Sign and PRINT)	(15) Date/Time	(21) Receiver Comments
(18) Relinquished By (Sign and PRINT)	(15) Date/Time	(22) Receiver Comments

# CHAIN-OF-CUSTODY RECORD FOR CPO

HNF-1661 REV. 0

5995002410

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(1) Sample Number <b>245-03</b>	(2) Supervisor/Sampler <b>M.C. Jones</b>	(3) Tank <b>W-107</b>	(4) Riser <b>7</b>	(5) Seal Intact Upon Release? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(6) Shipment Description: <b>C-1022</b>		(10) Seal Intact Upon Receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

(11) Seal Number AND Cask/Pig SERIAL Number consistent with this record? (Block 5 & 6b)  
 Yes  No

(12) Laboratory Comments:

(7) Sampling Data

Lithium Bromide	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
Amount	<b>N/A</b>
Concentration	<b>N/A</b>
X-Ray	<input checked="" type="checkbox"/> <input type="checkbox"/>
Partial Sample	<input type="checkbox"/> <input checked="" type="checkbox"/>
Retrieved Partial Sample Stroke Length	<b>N/A</b>

(8) Field Comments:  
**X-RAY showed sampler was full.**

(13) Relinquished By (Sign and PRINT) <i>[Signature]</i>	(14) Received By (Sign and PRINT) <i>[Signature]</i>	(15) Date/Time <b>10:42 am</b>	(16) Receiver Comments
(17) Relinquished By (Sign and PRINT) <i>[Signature]</i>	(18) Received By (Sign and PRINT) <i>[Signature]</i>	(19) Date/Time <b>11:00</b>	(20) Receiver Comments
(21) Relinquished By (Sign and PRINT) <i>[Signature]</i>	(22) Received By (Sign and PRINT) <i>[Signature]</i>	(23) Date/Time <b>8:50 PM</b>	(24) Receiver Comments
(25) Relinquished By (Sign and PRINT)	(26) Received By (Sign and PRINT)	(27) Date/Time	(28) Receiver Comments

CHAIN-OF-CUSTODY RECORD FOR CPO

(1) Sample Number <b>245-04</b>	(2) Supervisor/Sampler <i>R. Smith</i>	(3) Tank <b>7</b>	(4) Riser <b>7</b>	(5) Cask/Pig Serial No. <b>10810</b>	(6) Seal Intact Upon Release? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(7) Sampling Data • Lithium Bromide Amount <i>NA</i> Concentration <i>off 98</i> • X-Ray <input checked="" type="checkbox"/> <input type="checkbox"/> • Partial Sample <input type="checkbox"/> <input checked="" type="checkbox"/> • Retrieved Partial Sample Stroke Length <i>NA</i>					(10) Seal Intact Upon Receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(8) Work Package Number <b>W.S-97-00130</b> (9) Cask/Pig Seal Number <b>10153</b> (10) Date Sample Collected <b>7-10-98</b> (11) Time Sample Collected <b>0938</b>					(11) Seal Number AND Cask/Pig SERIAL Number consistent with this record? (Block 5 & 10) (12) Laboratory Comments: <b>S98T002415</b>
(13) Field Comments <i>Push samples, 1.18 dose rate, 16 1/4" soft mush. Liquid drops on bottom of samples. X-rayed.</i>					(16) Date/Time <b>2:05 PM</b>
(14) Received By (Sign and PRINT) <i>Robert J. Prznik</i>					(17) Receiver Comments (20) Receiver Comments
(15) Relinquished By (Sign and PRINT) <i>Robert J. Prznik</i>					(18) Date/Time <b>14:00</b>
(16) Relinquished By (Sign and PRINT) <i>Robert J. Prznik</i>					(19) Date/Time <b>8:52 PM</b>
(17) Relinquished By (Sign and PRINT) <i>Robert J. Prznik</i>					(21) Receiver Comments (24) Receiver Comments
(18) Relinquished By (Sign and PRINT)					(27) Date/Time (28) Receiver Comments

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1-90-97  
16

CHAIN-OF-CUSTODY RECORD FOR CPO

(1) Sample Number 245-5A (2) Supervisor/Sampler R. Frank Feost (9) Seal Intact Upon Release?  Yes  No  
 (3) Tank 7 (4) Riser 2-1043 (5) Cask/Pig Serial No. 15-97-00230 (10) Seal Intact Upon Receipt?  Yes  No  
 (6) Shipment Description: 1.1396 (11) Seal Number AND Cask/Pig SERIAL Number consistent with this receipt (Block 5 & 6B) 7-13-98  Yes  No  
 (7) Sampling Data  
 - Lithium Bromide  Y  N  
 - Amount NA  
 - Concentration NA  
 - X-Ray   
 - Partial Sample   
 - Retrieved Partial Sample Stroke Length NA

(12) Laboratory Comments:

(8) Field Comments:  
*natory samples, 150 ml dose rate, sampler had liquids drops on bottom, X-rayed sampler 3' of material.*

*59800 JH11*

129

(13) Relinquished By (Sign and PRINT) <i>R. Frank Feost</i>	(14) Received By (Sign and PRINT) <i>R. Frank Feost</i>	(15) Date/Time <u>11:30 AM</u>	(17) Receiver Comments <u>59800 JH11</u>
(16) Relinquished By (Sign and PRINT) <i>R. Frank Feost</i>	(18) Received By (Sign and PRINT) <i>R. Frank Feost</i>	(19) Date/Time <u>11:50</u>	(20) Receiver Comments
(21) Relinquished By (Sign and PRINT) <i>R. Frank Feost</i>	(22) Received By (Sign and PRINT) <i>R. Frank Feost</i>	(23) Date/Time	(24) Receiver Comments
(25) Relinquished By (Sign and PRINT)	(26) Received By (Sign and PRINT)	(27) Date/Time	(28) Receiver Comments

CHAIN-OF-CUSTODY RECORD FOR CPO

Yes  No   
Yes  No   
Yes  No

(9) Seal Intact Upon Release?  
(10) Seal Intact Upon Receipt?  
(11) Seal Number AND Case/Pig SERIAL Number consistent with this record (Block 5 & 6B)  
(12) Laboratory Comments:

5085002224

(1) Sample Number  
245-05R  
(2) Supervisor/Sampler  
M.C. Jones  
(3) Tank  
K-101  
(4) Riser  
7  
(5) Case/Pig Serial No.  
C-1025  
(6) Shipment Description:  
A. Work Package Number  
WS-21-00230  
B. Case/Pig Seal Number  
3456  
C. Date Sample Collected.  
7-15-98  
D. Time Sample Collected  
1015

(7) Sampling Data  
- Unblurs Beomide  
Y N  
   
Amount  
14 g/mL  
Concentration  
0.3  
- X-Ray  
   
- Partial Sample  
   
- Recieved Partial Sample Stroke Length  
N/A

(8) Field Comments:  
X-RAY showed sampler was full of liquid.

130

(13) Relinquished By (Sign and PRINT) <i>James Jackson James Sicker</i>	(14) Received By (Sign and PRINT) <i>Shelby BATTIONS</i>	(15) Date/Time 7:45 AM 7-27-98	(16) Receiver Comments
(17) Relinquished By (Sign and PRINT) <i>Shelby BATTIONS</i>	(18) Received By (Sign and PRINT) <i>Shelby BATTIONS</i>	(19) Date/Time 10:10a 7-27-98	(20) Receiver Comments
(21) Relinquished By (Sign and PRINT)	(22) Received By (Sign and PRINT)	(23) Date/Time	(24) Receiver Comments
(25) Relinquished By (Sign and PRINT)	(26) Received By (Sign and PRINT)	(27) Date/Time	(28) Receiver Comments

# CHAIN-OF-CUSTODY RECORD FOR CPO

HNF-1661 REV. 0

(1) Sample Number 245-06

(2) Supervisor/Sampler R. Frank Frost R. Leuchs Lead

(3) Tank 11-107

(4) Riser 7

(5) Cask/Pig Serial No. C-1049

(6) Shipment Description:

A. Work Package Number 115-97-20330

B. Cask/Pig Seal Number 10169

C. Date Sample Collected 7-13-98

D. Time Sample Collected 1937

(7) Sampling Data

Y N

- Lithium Bromide  Y  N

Amount NA

Concentration NA

- X-Ray

- Partial Sample

- Retrieved Partial Sample Stroke Length NA

(8) Field Comments: rotary sampler (Chevron), 30MR above rate, x-rayed = 6" of material, sampler had liquid drops on bottom.

298100 JHJ

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(13) Relinquished By (Sign and PRINT) <u>Robert Pincik</u>	(14) Received By (Sign and PRINT) <u>[Signature]</u>	(15) Date/Time <u>11-17-98</u>	(17) Receiver Comments <u>30 97 JH</u>
(17) Relinquished By (Sign and PRINT) <u>[Signature]</u>	(18) Received By (Sign and PRINT) <u>[Signature]</u>	(19) Date/Time <u>8-5-98</u>	(20) Receiver Comments
(21) Relinquished By (Sign and PRINT) <u>[Signature]</u>	(22) Received By (Sign and PRINT) <u>[Signature]</u>	(23) Date/Time <u>8-5-98</u>	(24) Receiver Comments
(25) Relinquished By (Sign and PRINT)	(26) Received By (Sign and PRINT)	(27) Date/Time	(28) Receiver Comments

CHAIN-OF-CUSTODY RECORD FOR CPO

(1) Sample Number: 245-06R  
 (2) Supervisor/Sampler: Mike Spivey  
 (3) Tank: U-107 (4) Riser: 7 (5) Casting Serial No.: MIC. JONES  
 (6) Shipment Description: MIC. JONES 5-G  
 (7) Sampling Date: 7-15-88

(8) Field Comments: X-RAY showed sampler was full of liquid.

(9) Seal Number AND Cast/Pig SERIAL Number consistent with this record? (Block 5 & 6B):  Yes  No

(10) Seal Intact Upon Receipt?  Yes  No

(11) Seal Number AND Cast/Pig SERIAL Number consistent with this record? (Block 5 & 6B):  Yes  No

(12) Laboratory Comments:

(13) Date/Time: 9:45 am  
 (14) Date/Time: 7-27-98  
 (15) Date/Time: 10/10/00  
 (16) Date/Time: 7-27-98

(17) Sampling Date	Y	N
A. Work Package Number	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B. Cast/Pig Seal Number	<u>146AL</u>	
C. Date Sample Collected	<u>0.3</u>	
D. Time Sample Collected	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<u>MB</u>	
(18) Field Comments:	<u>X-RAY showed sampler was full of liquid.</u>	
(19) Relinquished By (Sign and PRINT)	(20) Received By (Sign and PRINT)	(21) Receiver Comments
<u>James Sickel</u>	<u>James Sickel</u>	
(22) Relinquished By (Sign and PRINT)	(23) Received By (Sign and PRINT)	(24) Receiver Comments
<u>James Sickel</u>	<u>James Sickel</u>	
(25) Relinquished By (Sign and PRINT)	(26) Received By (Sign and PRINT)	(28) Receiver Comments
<u>James Sickel</u>	<u>James Sickel</u>	

5985002225

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# CHAIN-OF-CUSTODY RECORD FOR CPO

HNF-1661 REV. 0

SAS1002413

(9) Seal Intact Upon Release?  Yes  No

(10) Seal Intact Upon Receipt?  Yes  No

(11) Seal Number AND Cask/Pig SERIAL Number consistent with this record? (Block 5 & 6b)  Yes  No

(12) Laboratory Comments:

(9) Seal Intact Upon Release?

(10) Seal Intact Upon Receipt?

(11) Seal Number AND Cask/Pig SERIAL Number consistent with this record? (Block 5 & 6b)

(12) Laboratory Comments:

(16) Receiver Comments

(15) Date/Time

(14) Received By (Sign and PRINT)

(13) Relinquished By (Sign and PRINT)

(20) Receiver Comments

(19) Date/Time

(18) Received By (Sign and PRINT)

(17) Relinquished By (Sign and PRINT)

(24) Receiver Comments

(23) Date/Time

(22) Received By (Sign and PRINT)

(21) Relinquished By (Sign and PRINT)

(28) Receiver Comments

(27) Date/Time

(26) Received By (Sign and PRINT)

(25) Relinquished By (Sign and PRINT)

(1) Sample Number 245-07

(2) Supervisor/Sampler M.C. Jones

(3) Tank U-107 (4) Riser Z

(5) Cask/Pig Serial No. SU-23-6

(6) Shipment Description:

(7) Sampling Data

Y N

Lithium Bromide   N/A

Amount N/A

Concentration N/A

X-Ray

Partial Sample

Retrieved Partial Sample Stroke Length N/A

A. Work Package Number WS-97-00290

B. Cask/Pig Seal Number 34254

C. Date Sample Collected 7-14-98

D. Time Sample Collected 1000

(8) Field Comments:

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CHAIN-OF-CUSTODY RECORD FOR CPO

(1) Sample Number: **245-01R** (2) Supervisor/Sampler: **M.C. Jones**

(3) Tank: **U-107** (4) Risk: **7** (5) Seal Intact Upon Receipt?:  Yes  No

(6) Shipment Description: **SN-17-G** (10) Seal Intact Upon Receipt?:  Yes  No

(7) Sampling Data: Y  N

(8) Field Comments: **LiThium Bromide**

(9) Seal Intact Upon Release?:  Yes  No

(11) Seal Number AND Case/Pig SERIAL Number consistent with this record (Block 5 & 6b): **3458**

(12) Laboratory Comments: **2-15-98**

(13) Work Package Number: **WSP-97-00230**

(14) Case/Pig Serial No.: **3458**

(15) Amount: **234**

(16) Concentration: **0.3**

(17) X-Ray:

(18) Partial Sample:

(19) Retrieved Partial Sample Stroke Length: **234**

(18) Field Comments:  
 X-RAY showed 2 3/4" of sample in sampler.  
 The HDS went off 2 3/4" into the stroke.  
 Draw rate 2R. At 7-15-98  
 Sampler has liquid drops on sampler ballone 2-15-98

(20) Relinquished By (Sign and PRINT): <i>James Sichel</i>	(14) Received By (Sign and PRINT): <i>J. HATTINGS</i>	(15) Date/Time: <b>9:50 am</b>	(16) Receiver Comments:
(21) Relinquished By (Sign and PRINT): <i>J. HATTINGS</i>	(18) Received By (Sign and PRINT): <i>J. HATTINGS</i>	(19) Date/Time: <b>7-27-98</b>	(20) Receiver Comments:
(22) Relinquished By (Sign and PRINT): <i>J. HATTINGS</i>	(21) Received By (Sign and PRINT): <i>J. HATTINGS</i>	(22) Date/Time: <b>7-27-98</b>	(24) Receiver Comments:
(23) Relinquished By (Sign and PRINT):	(23) Received By (Sign and PRINT):	(27) Date/Time:	(26) Receiver Comments:

## CHAIN-OF-CUSTODY RECORD FOR CPO

(1) Sample Number <b>DE-I WATER</b>		(2) Supervisor/Sampler <b>M.C. JONES</b>		(3) Seal Intact Upon Release? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(3) Tank <b>U-107</b>	(4) Flow <b>7</b>	(5) Cask/Plg. Serial No. <b>N/A</b>		(10) Seal Intact Upon Receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(6) Shipment Description: A. Work Package Number <b>WS-97-00230</b> B. Cask/Plg. Seal Number <b>3424</b> C. Date Sample Collected <b>7-10-98</b> D. Time Sample Collected <b>1100</b>				(11) Seal Number AND Cask/Plg. SERIAL-Numbers consistent with this receipt? (Block 5 & 6) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(7) Sampling Data - Lithium Bromide - Amount - Concentration - X-Ray - Partial Sample - Retrieved Partial Sample Stack Length				(12) Laboratory Comments:  <b>598T002114</b>
(8) Fluid Comments: <b>DE-Ionized WATER Field Blank</b>				
(14) Relinquished By (Sign and PRINT) <b>James Pickel</b>	(14) Received By (Sign and PRINT) <b>Jarvis Hendley</b>	(15) Date/Time <b>1230</b>	(16) Receiver Comments	
(17) Relinquished By (Sign and PRINT) <b>Jarvis Hendley</b>	(17) Received By (Sign and PRINT) <b>PLC Mendenhall</b>	(18) Date/Time <b>1310</b>	(20) Receiver Comments	
(21) Relinquished By (Sign and PRINT) <b>Jarvis Hendley</b>	(21) Received By (Sign and PRINT)	(22) Date/Time <b>7-16-98</b>	(24) Receiver Comments	
(25) Relinquished By (Sign and PRINT)	(25) Received By (Sign and PRINT)	(27) Date/Time	(28) Receiver Comments	

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**CHAIN-OF-CUSTODY RECORD FOR CPO**

(1) Sample Number LIBR -	(2) Supervisor/Sampler M.C. Jones <i>[Signature]</i>	(5) Seal Intact Upon Release? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
(3) Tank U-107	(6) Cask/Pkg Serial No. N/A	(10) Seal Intact Upon Receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(11) Seal Number AND Case/Kit/SERIAL Number consistent with this record? (Block 5 & 6b) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(4) Shipment Description: A. Work Package Number <u>WS-97-00230</u> B. Cask/Pkg Seal Number <u>3459</u> C. Date Sample Collected <u>7-15-98</u> D. Time Sample Collected <u>0940</u>		(7) Sampling Data - Lithium Bromide Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Amount <u>100 ml</u> Concentration <u>0.3</u> - X-Ray <input checked="" type="checkbox"/> - Partial Sample <input type="checkbox"/> - Retrieved Feral Sample Stroke Length: <u>N/A</u>	
(8) Field Comments: Libc field blank.		(12) Laboratory Comments: S98T002116	

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(13) Relinquished By (Sign and PRINT) <i>James Sicked James Sicked</i>	(14) Received By (Sign and PRINT) <i>Janie Hensley</i>	(16) Receiver Comments 1205	
(17) Relinquished By (Sign and PRINT) <i>Janie Hensley</i>	(18) Received By (Sign and PRINT) <i>Richardson</i>	(20) Receiver Comments 1310	(22) Receiver Comments 7-16-98
(19) Relinquished By (Sign and PRINT) (Blank)	(21) Received By (Sign and PRINT) (Blank)	(23) Receiver Comments (Blank)	(24) Receiver Comments (Blank)
(25) Relinquished By (Sign and PRINT) (Blank)	(26) Received By (Sign and PRINT) (Blank)	(27) Receiver Comments (Blank)	(28) Receiver Comments (Blank)

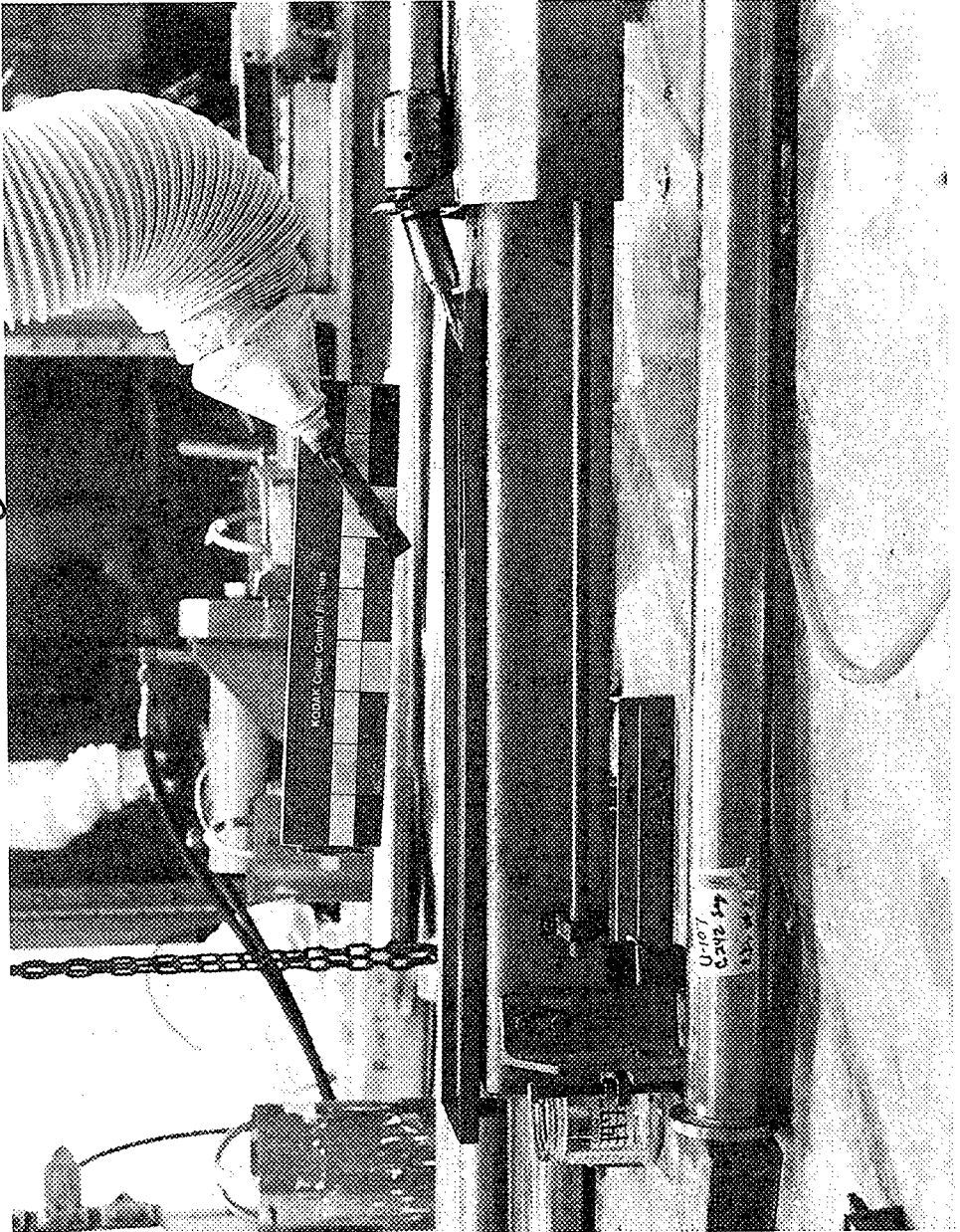
HNF-1661 REV. 0

PHOTOGRAPHS

**HNF-1661 REV. 0**

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U-107 (242 Seg)

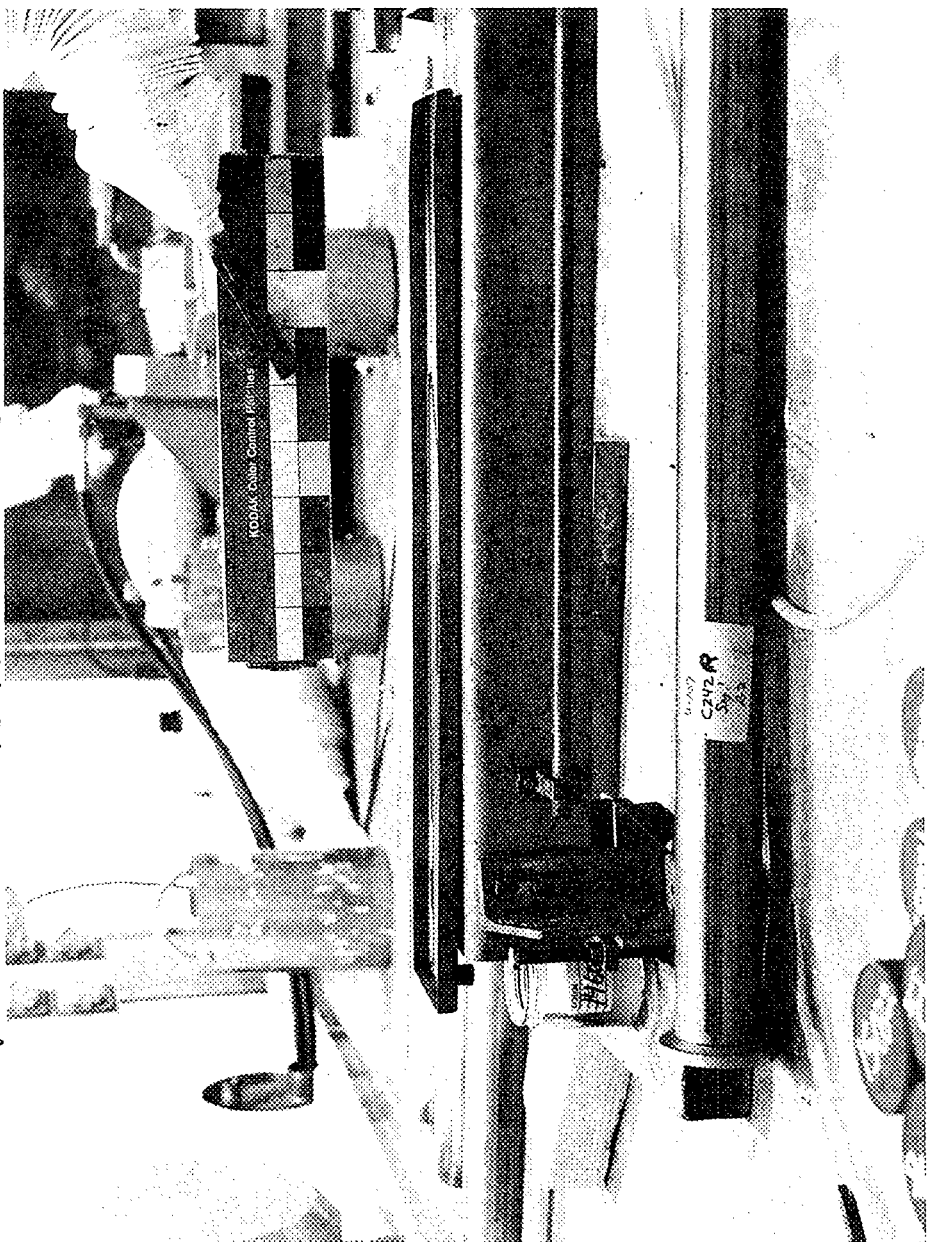


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220

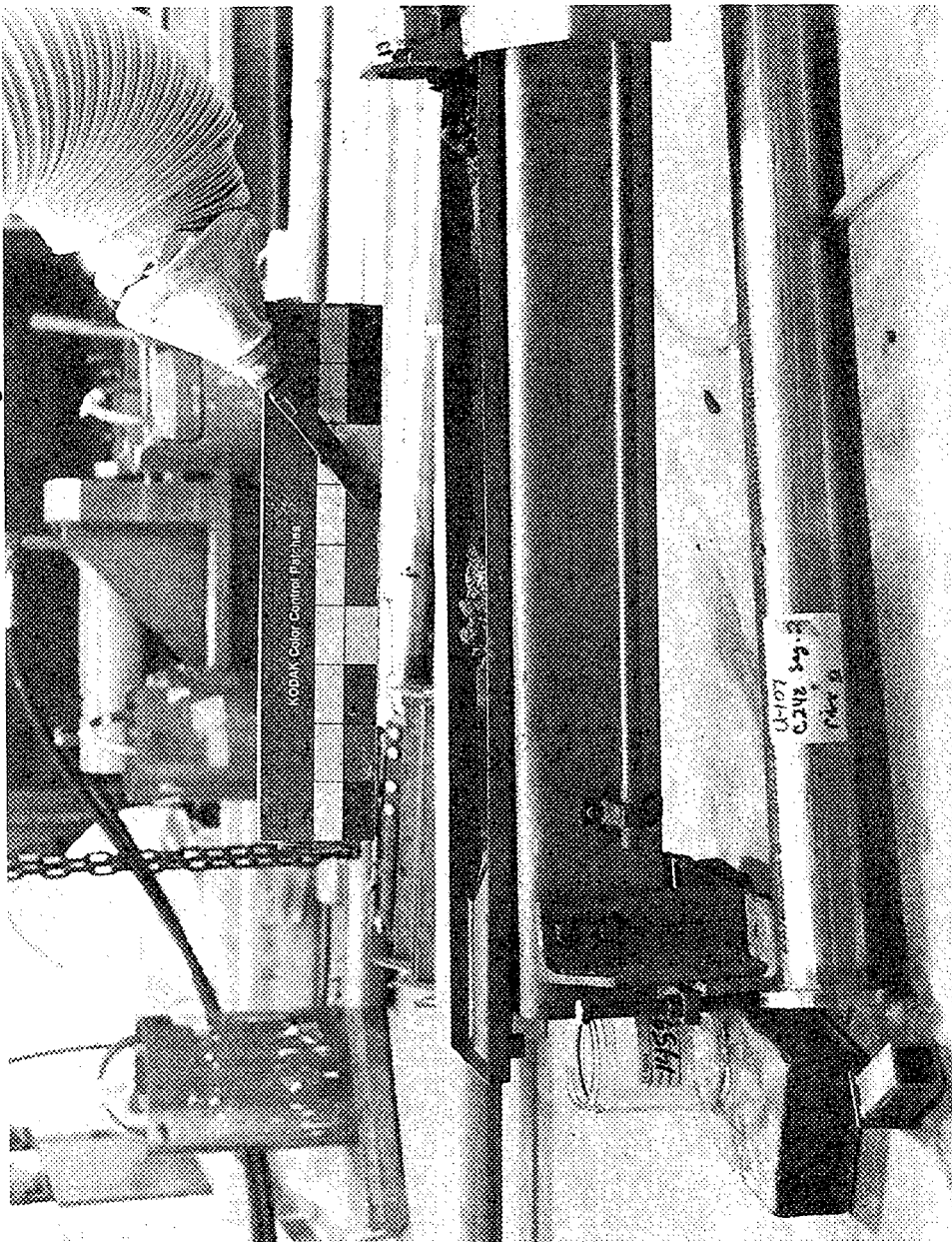
U-107 CORE 242R Seg. # 1

1/23/98

HNF-1667  
NW 8



U-107  
C242  
Seg 2

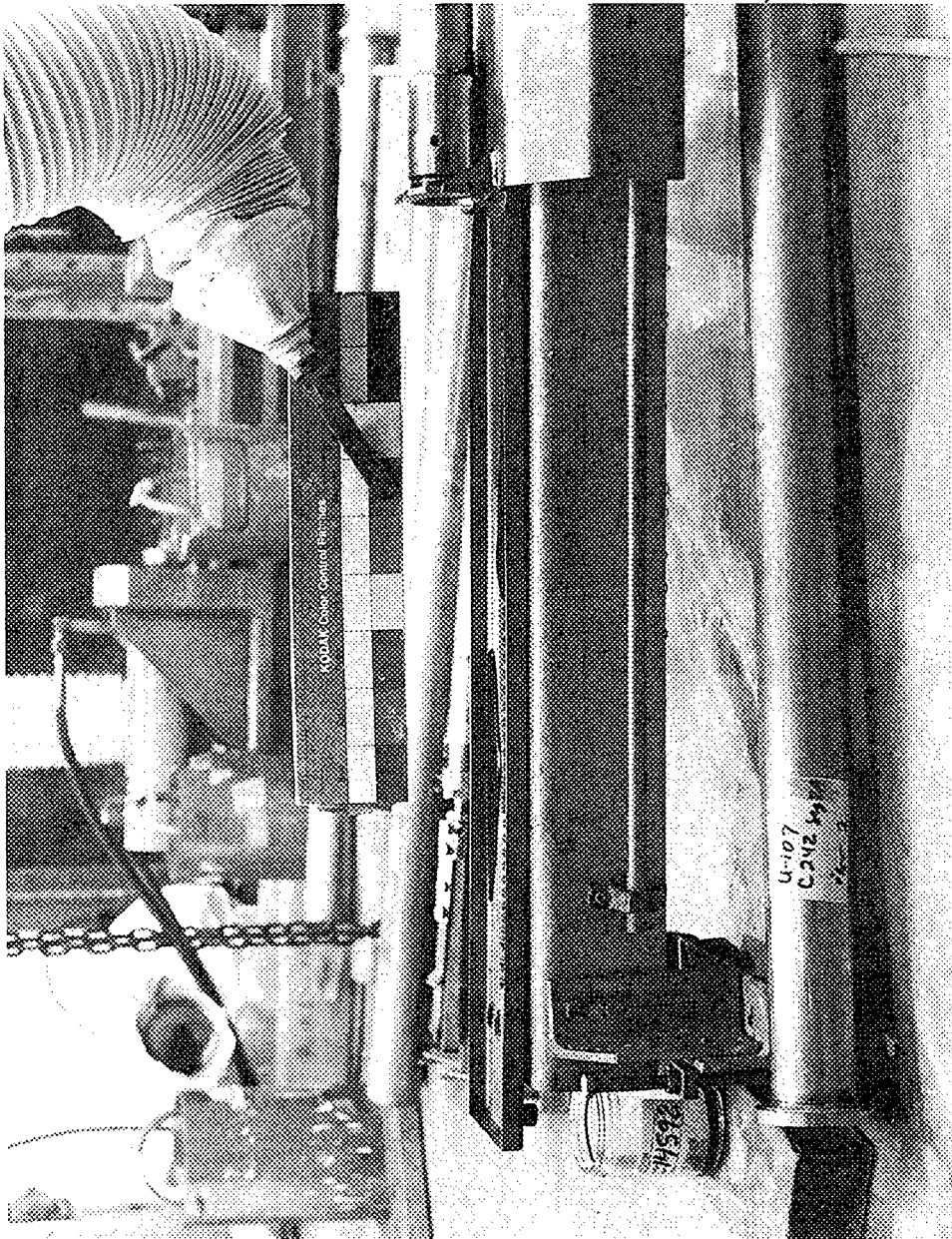


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RWD



HNF-1661  
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U-181 2342 1.01-10



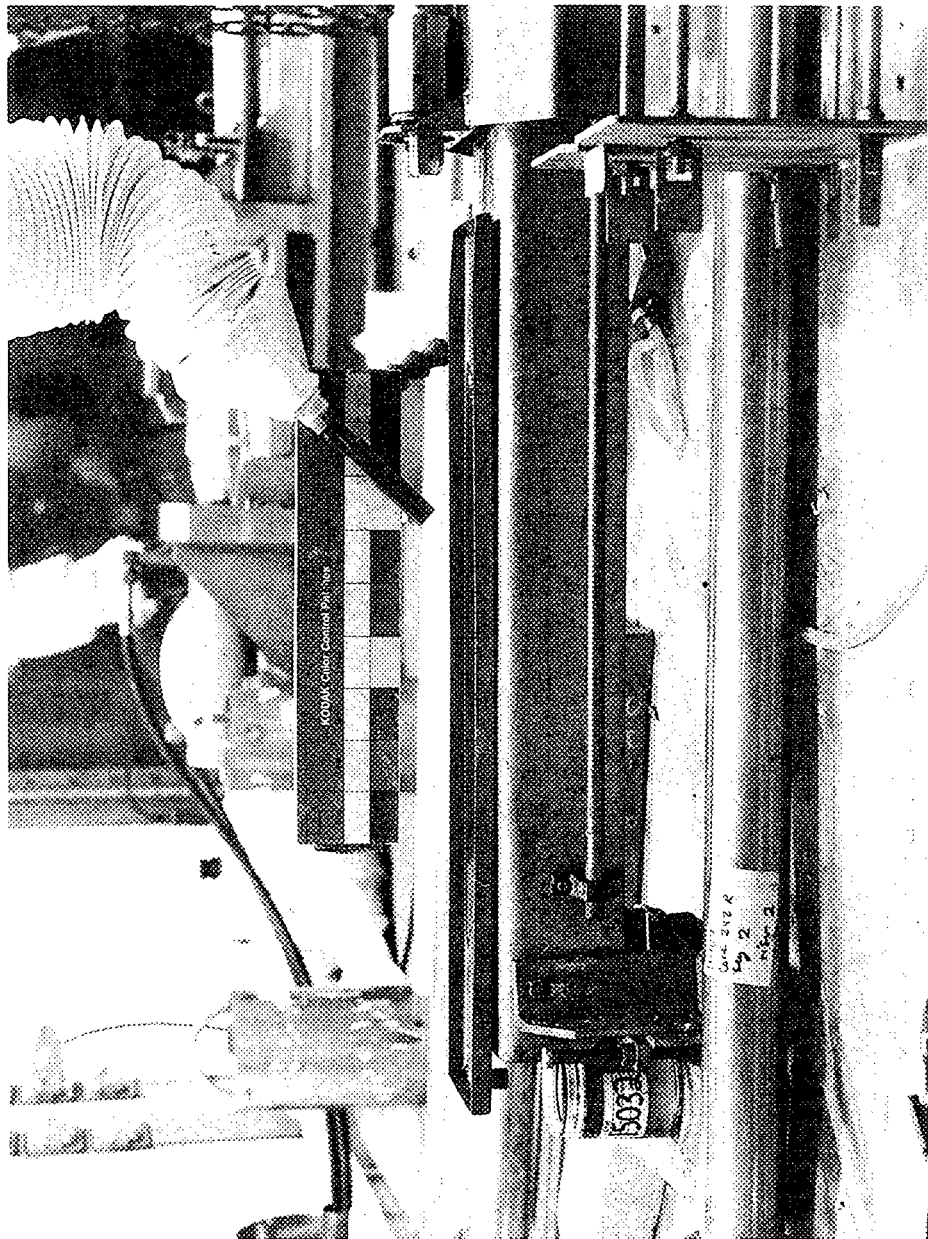
U-107

Cove 242R

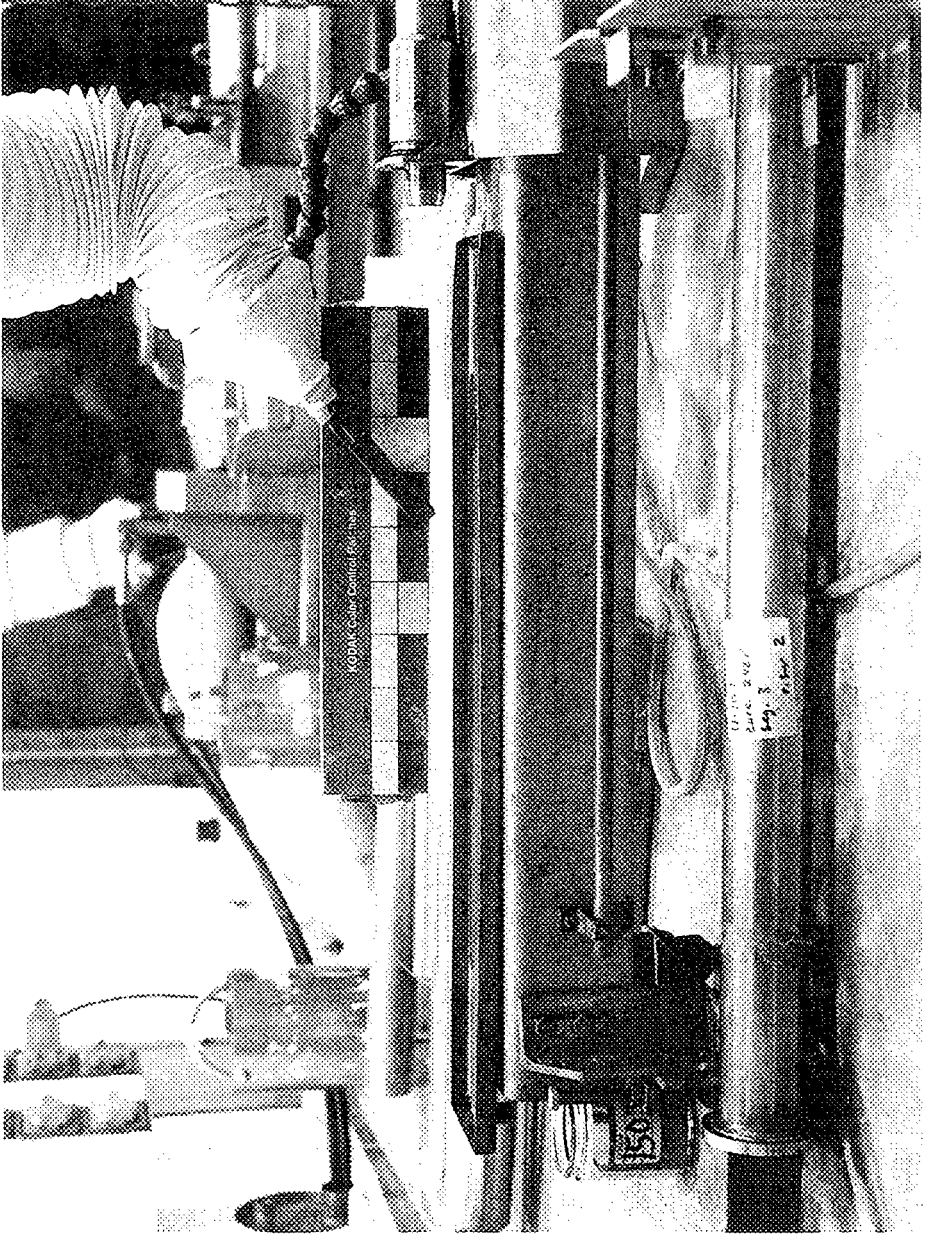
Seg # 2

1/27/69

HNF-1661  
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ART-1667  
rw 9



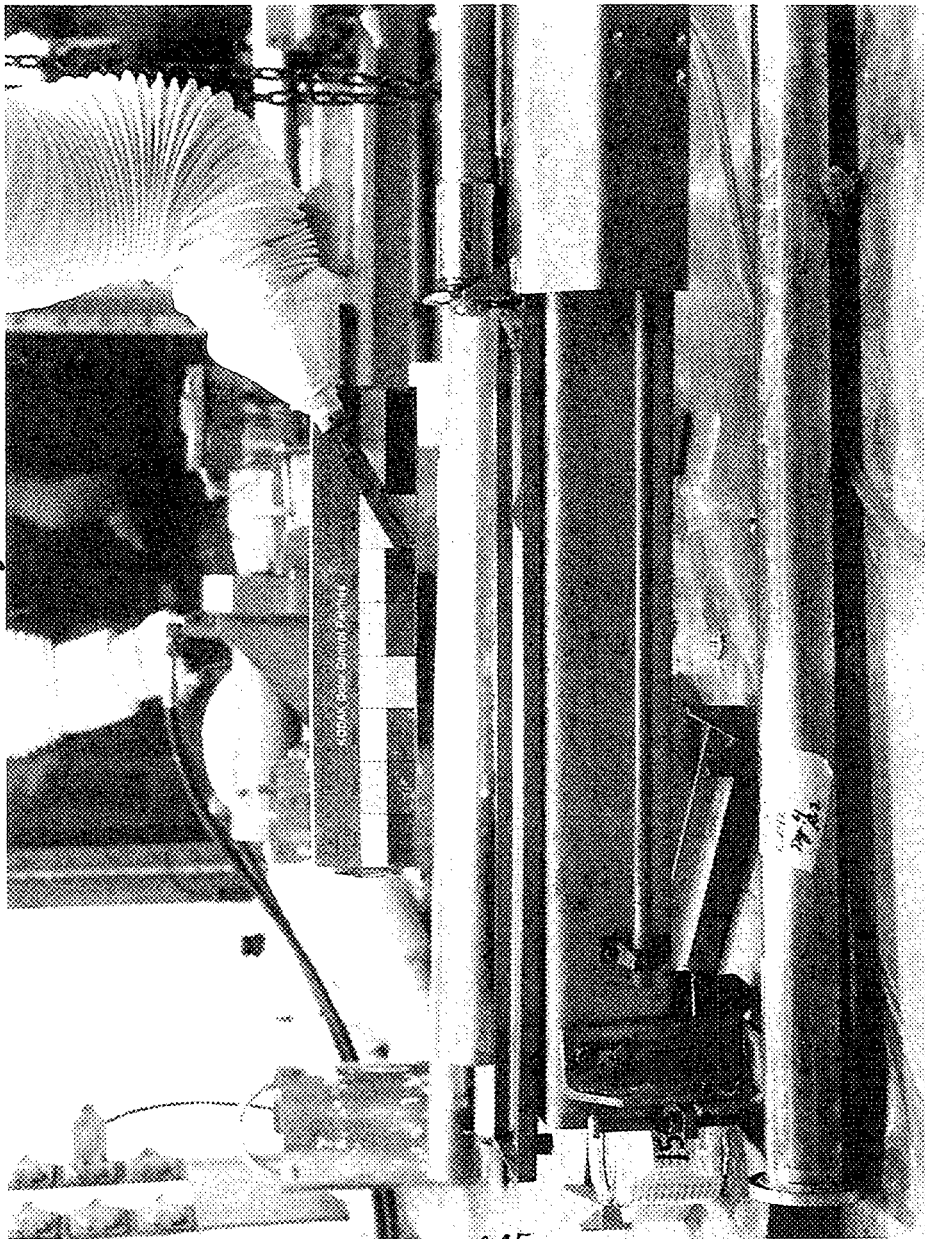
U-107

Core 242

Seq. 4

Run 2

1/2/58



HP-1001  
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U-107

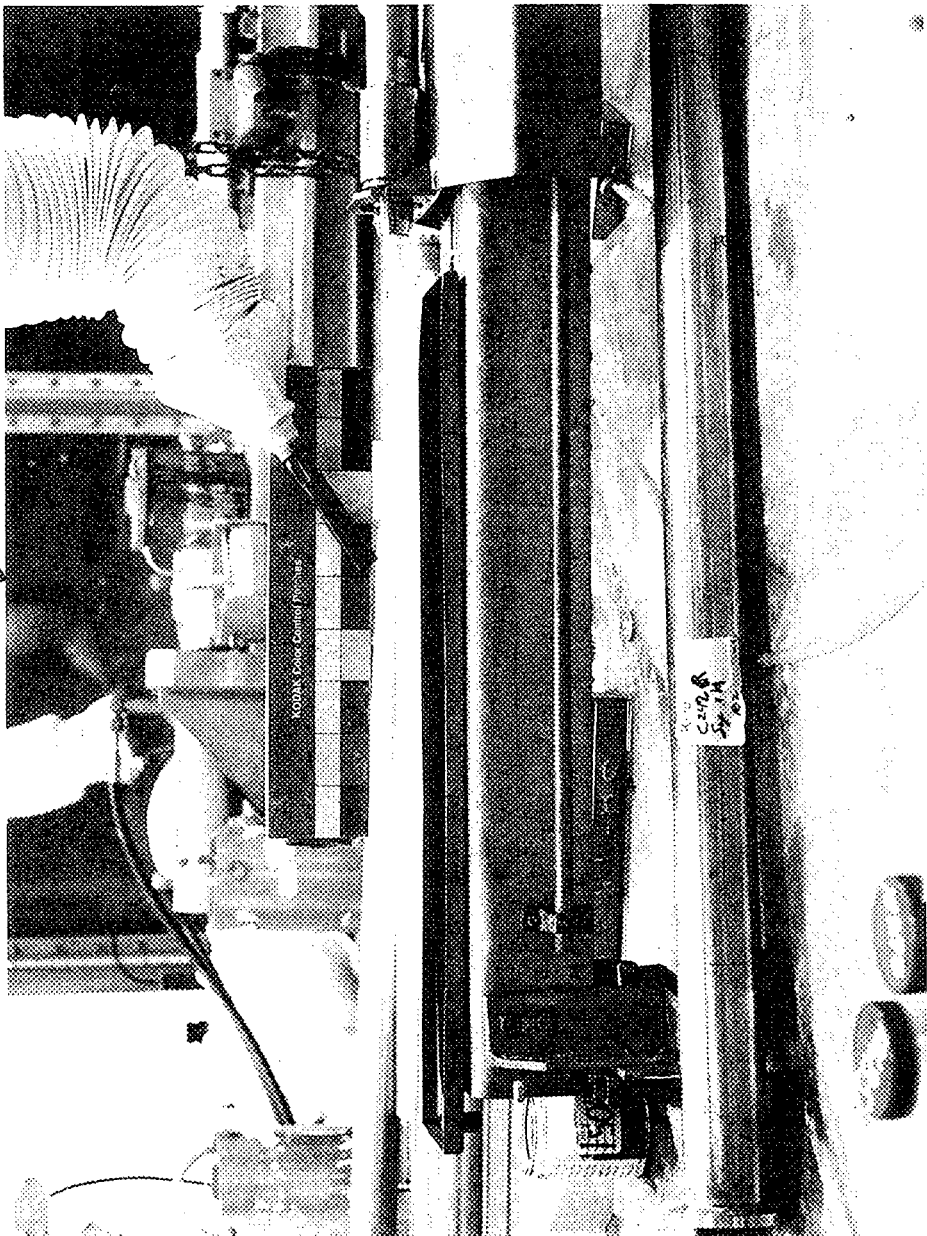
CRE 240R

SF. 4

R-2

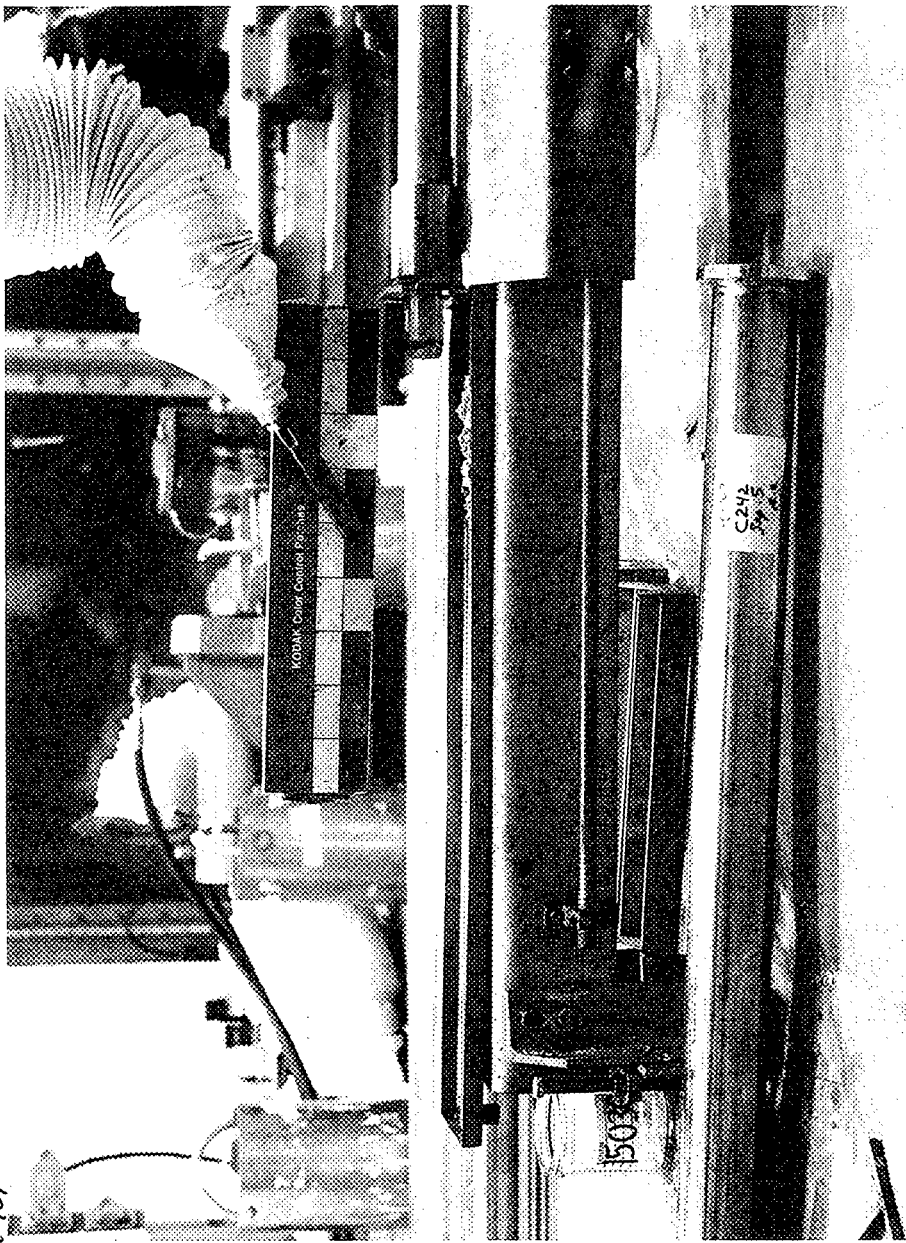
7/27/98

HNF-1661  
RWQ



1/28/90

ANF-1661  
rwφ



4-107

U-107

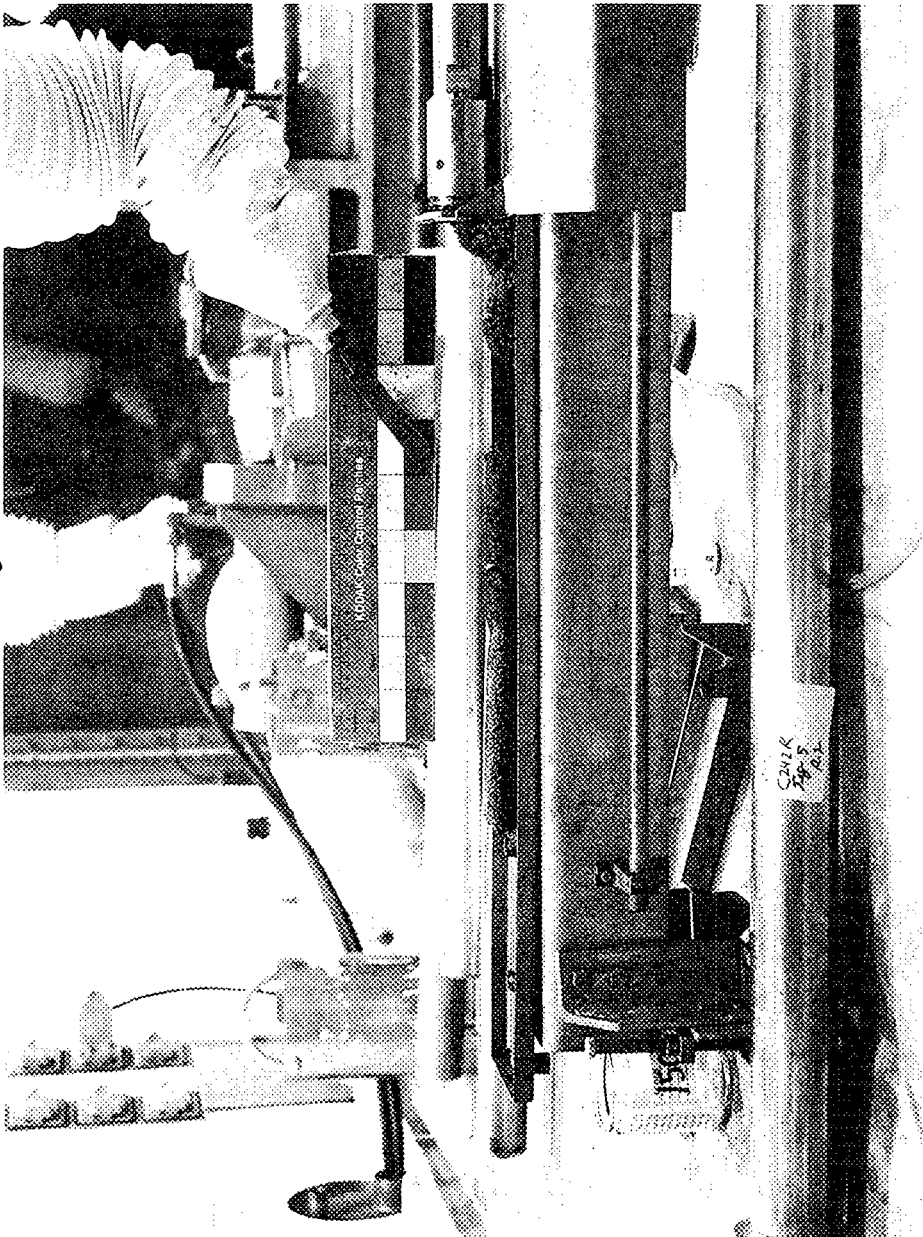
Core 242R

Seq. 5

R. 2

7/07/98

HNF-1661  
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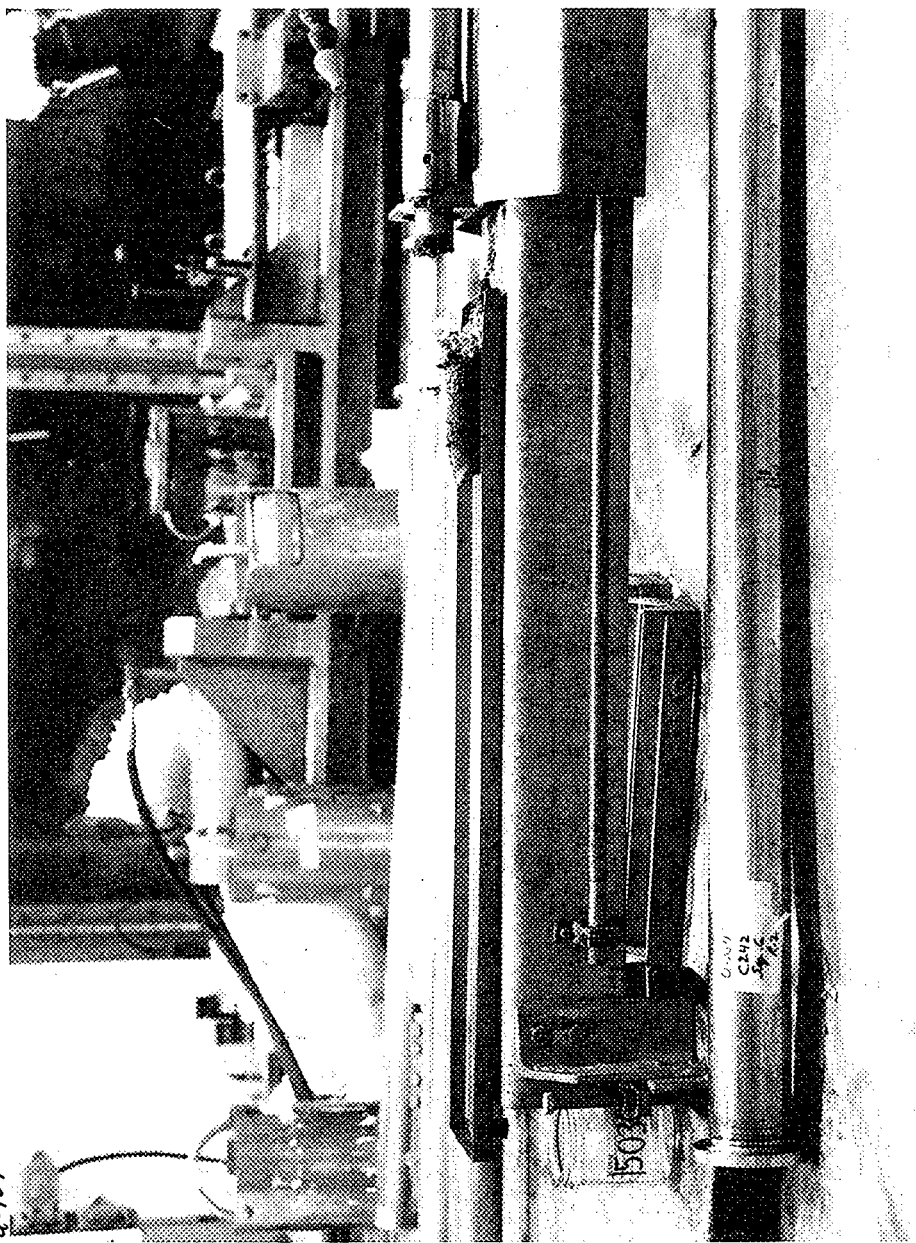




HNF-1667  
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7/28/98

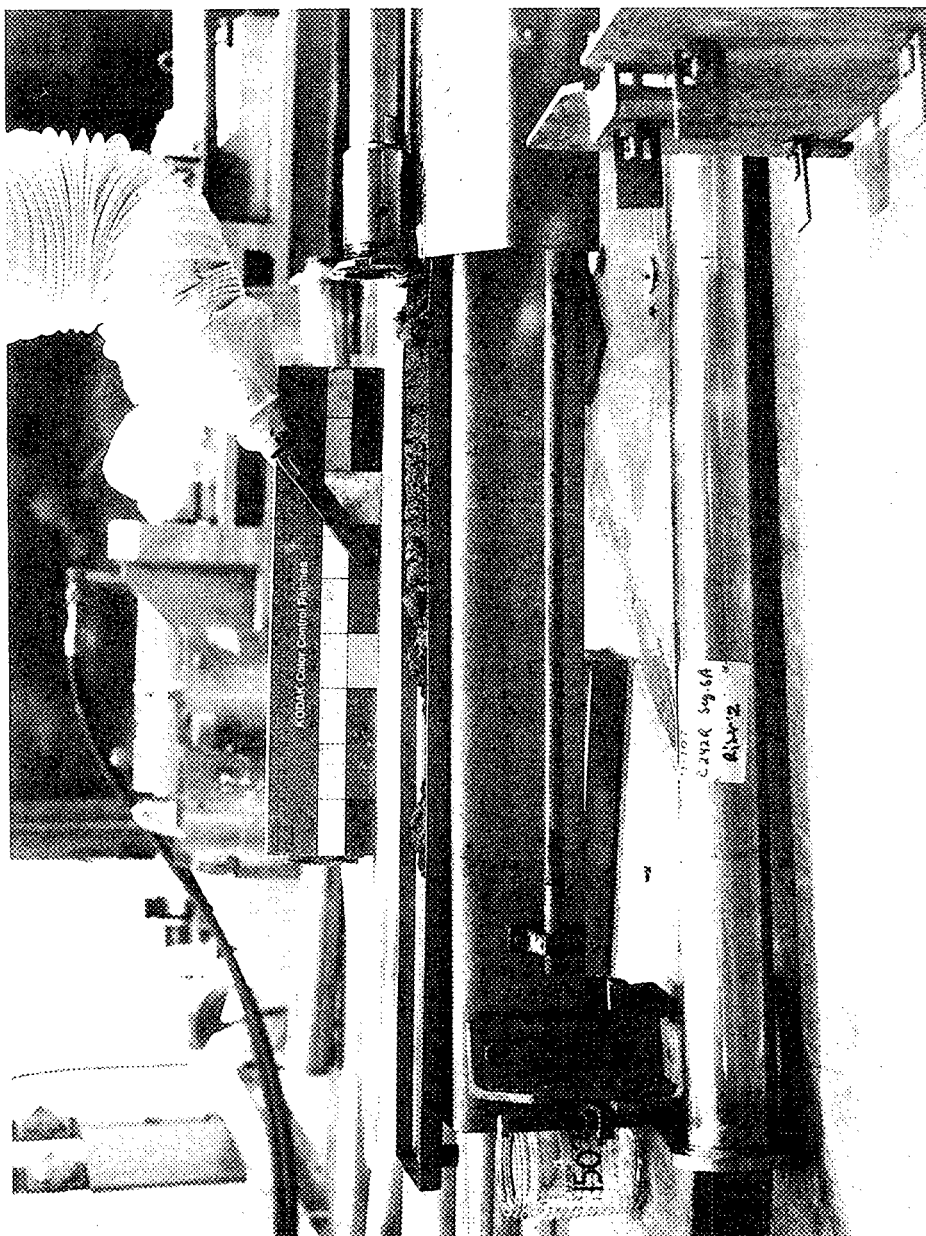
4-107





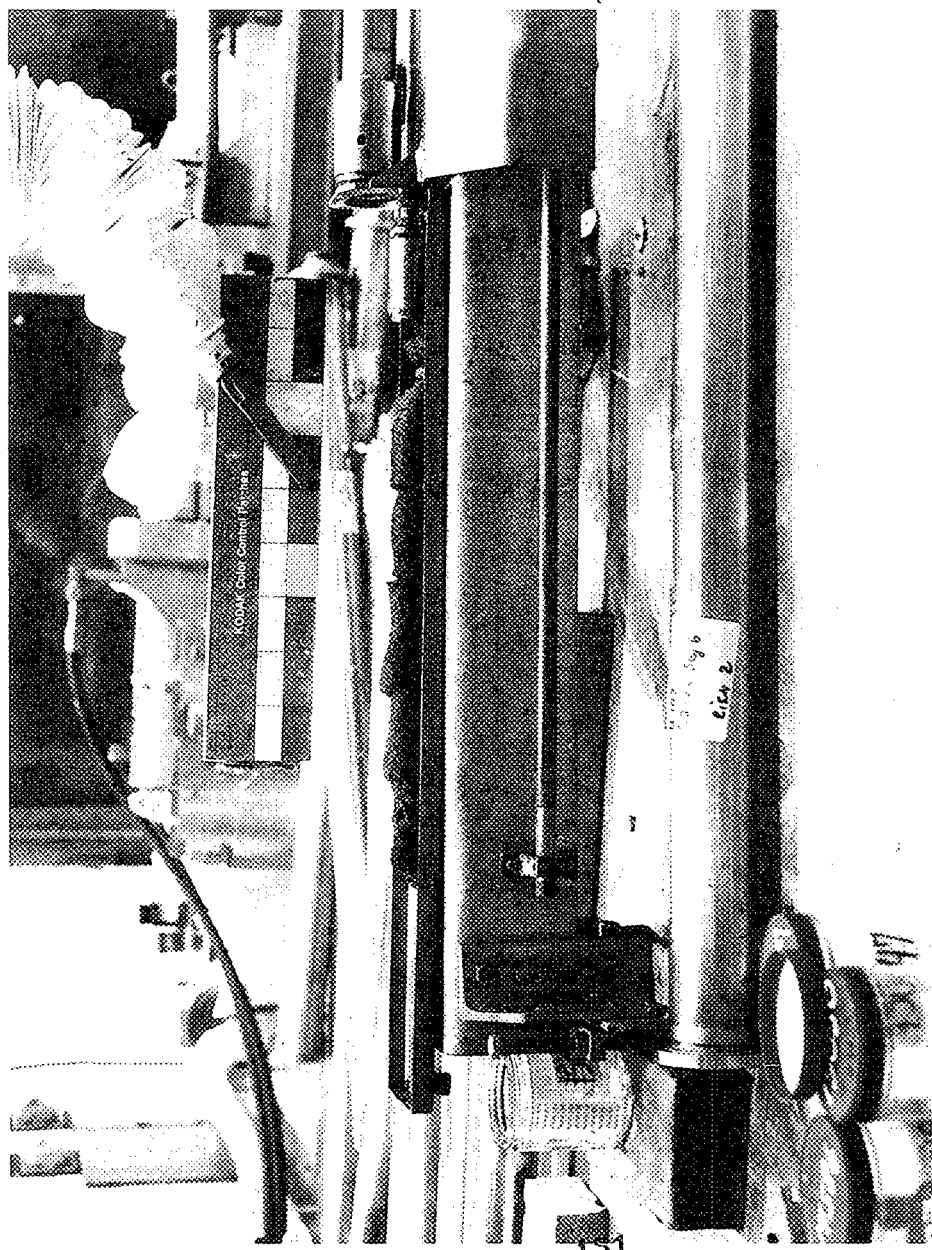
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86/2/8



U-107  
CASE 242R  
segment 6  
Riv 2

HNF-1661  
rv 8

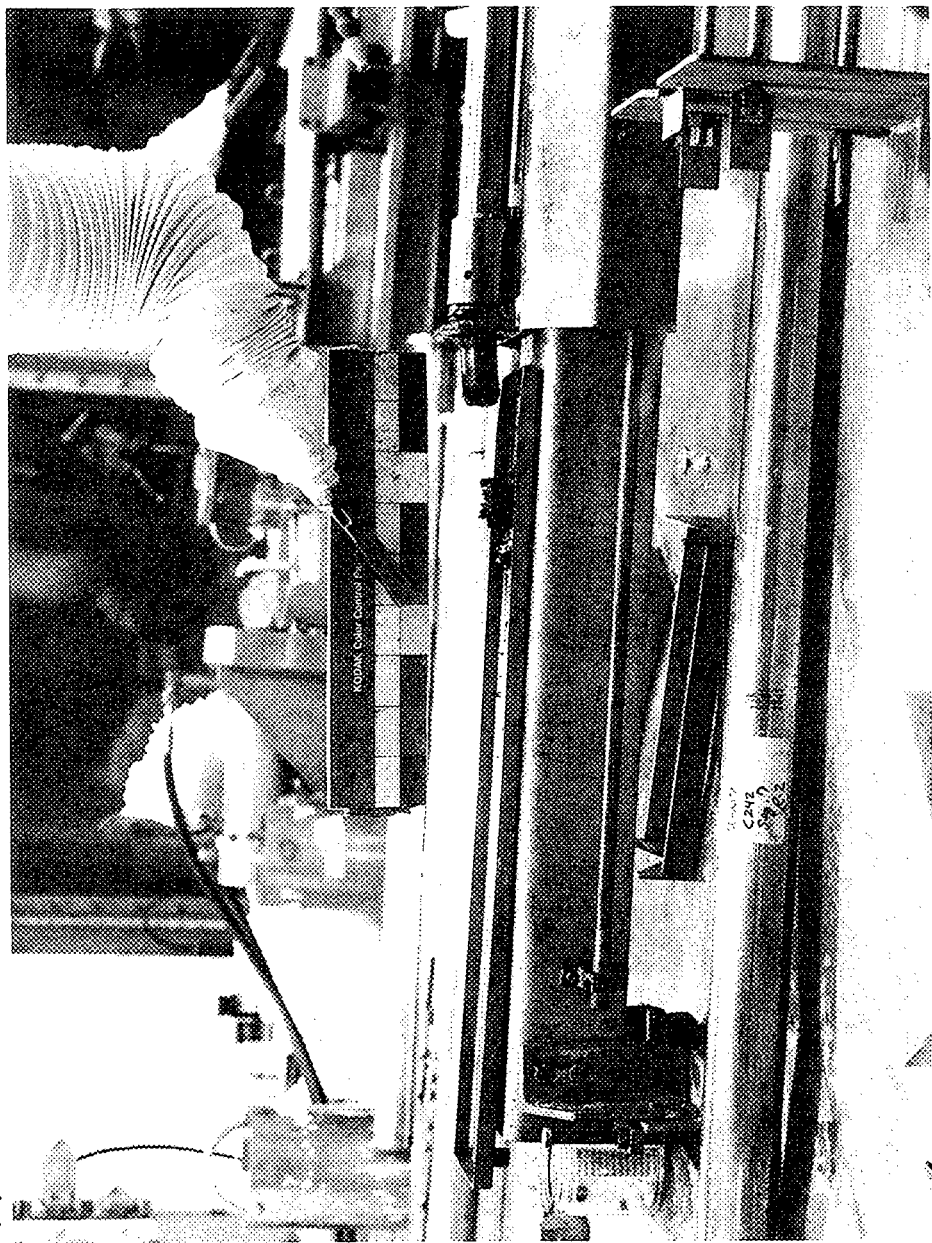


131

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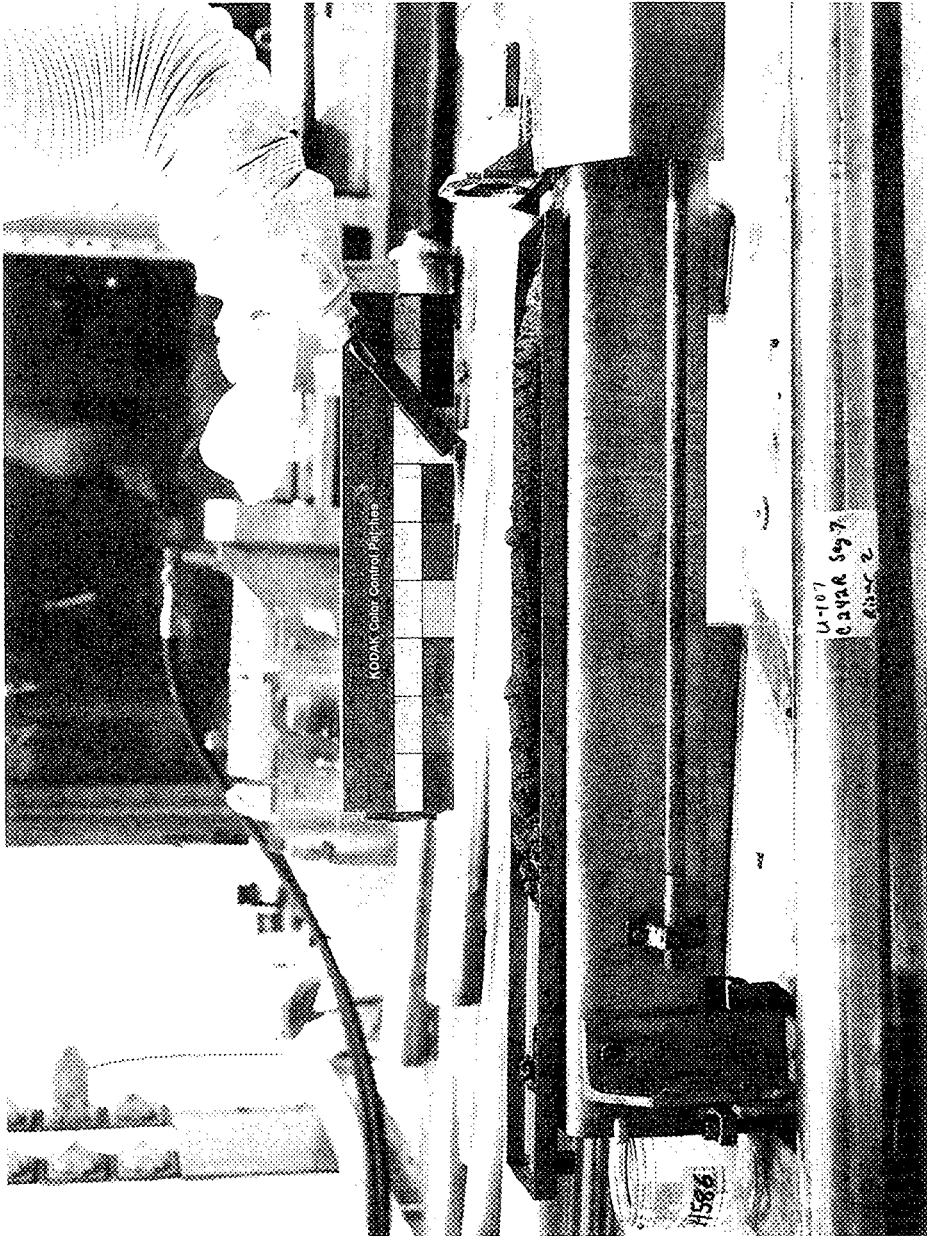
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PA/PA/PA



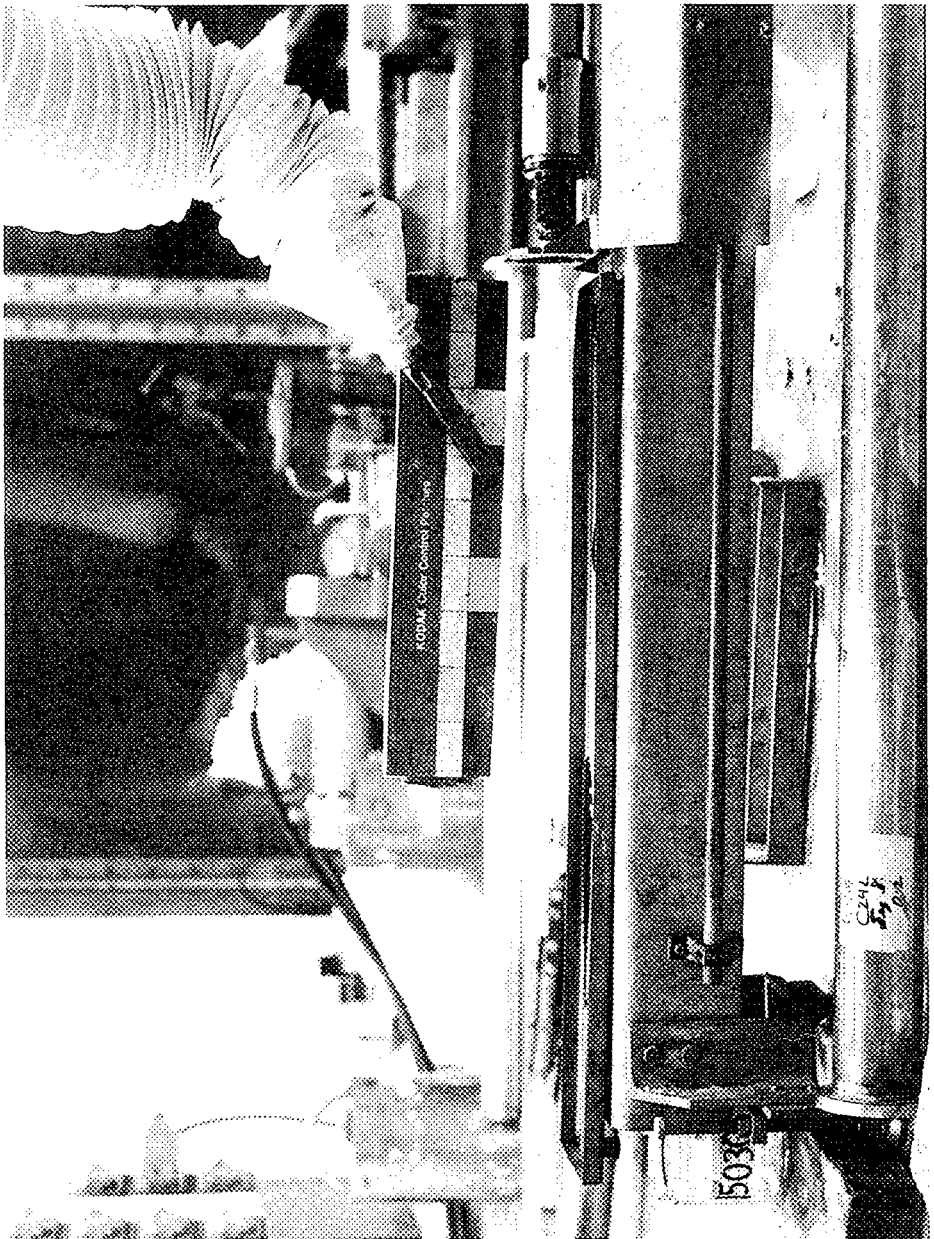
401-21

HNF-1661  
REV 0



HNF-1661  
rw φ

86/102/1



100Mk Counter Control Panel

247  
5/2/72

5030

4-107

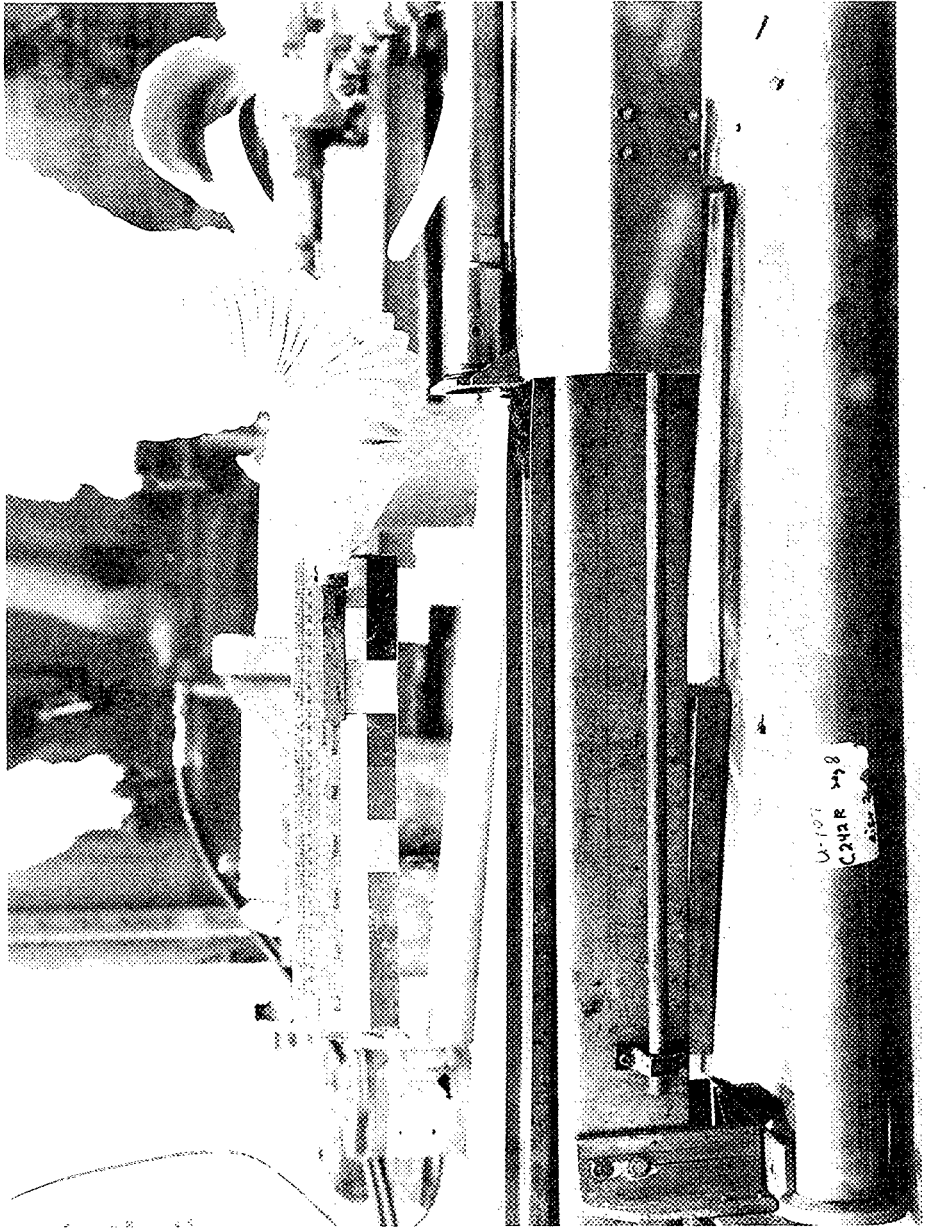
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Cove 242R

Seq. 8

Riser 2

5/12/88



ADP-1001  
M.A.

U-107  
C242R Seq. 8  
Riser 2

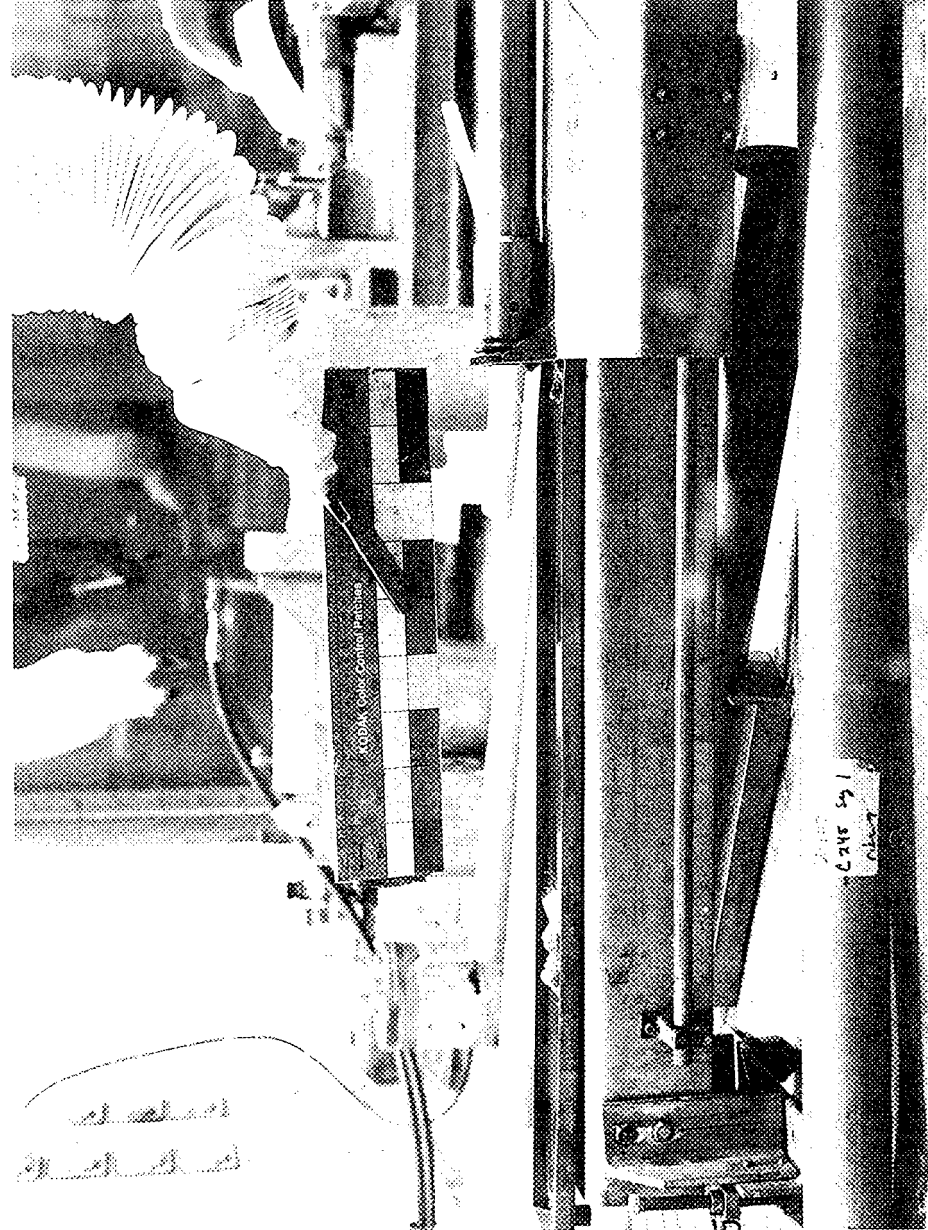
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Core 245

Seg. 1

Griser 7

1/11/67



HNF-1661  
209

8/12/98

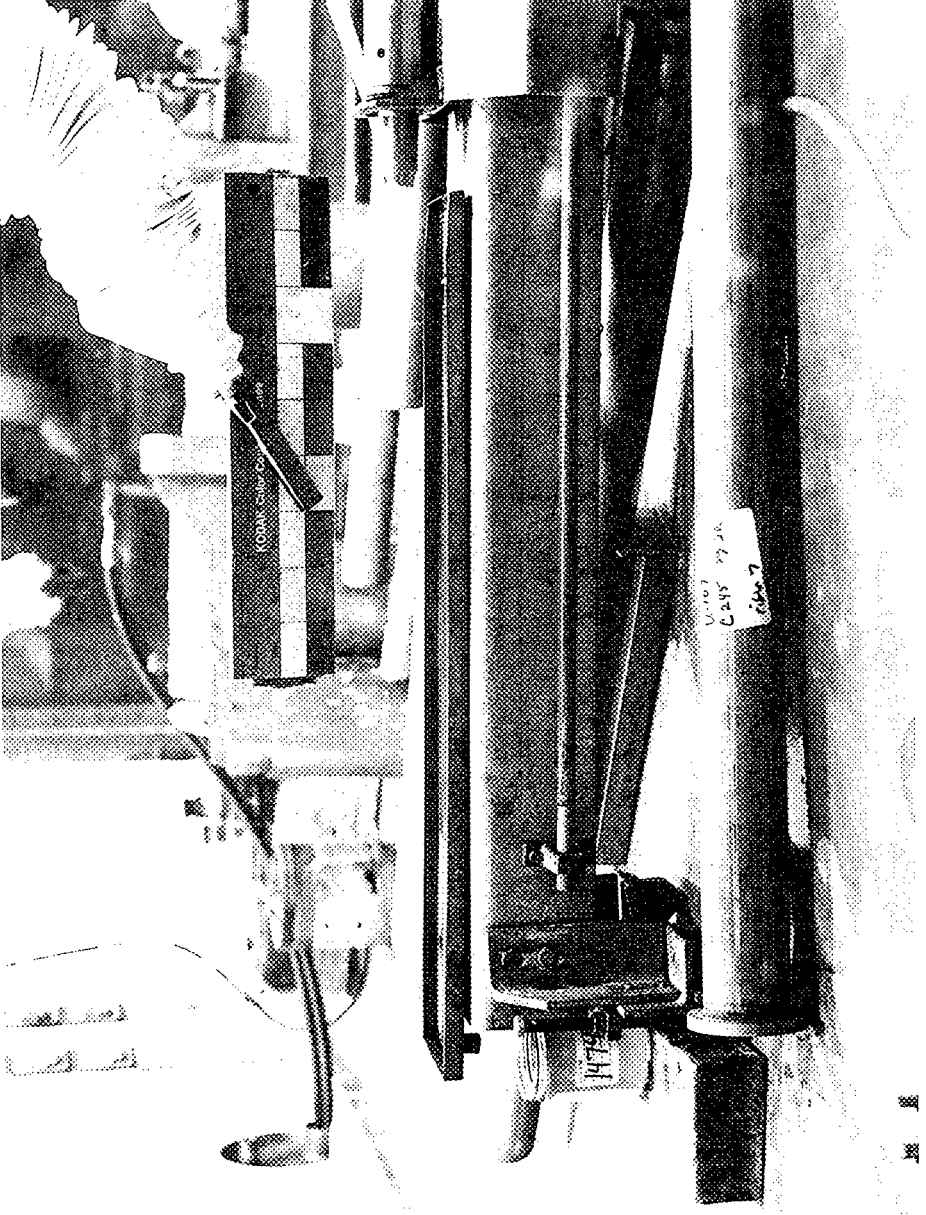
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Seq. 2 R

Core 245

U-107

HNF-1001  
rev 0





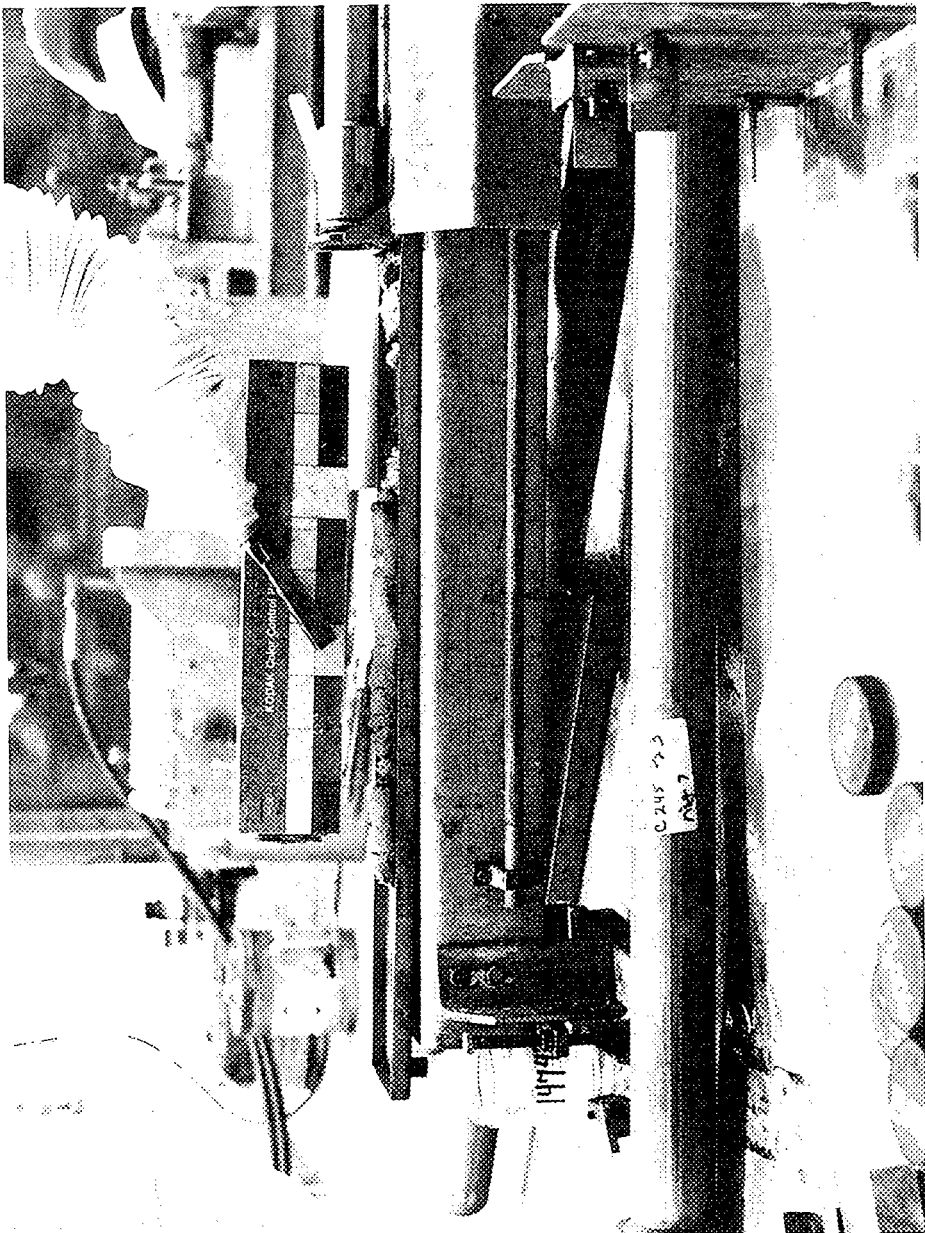
U-107

Core 245

Seg. 3

Wiser 7

8/12/20



HNF-1661  
rev 0

U-107

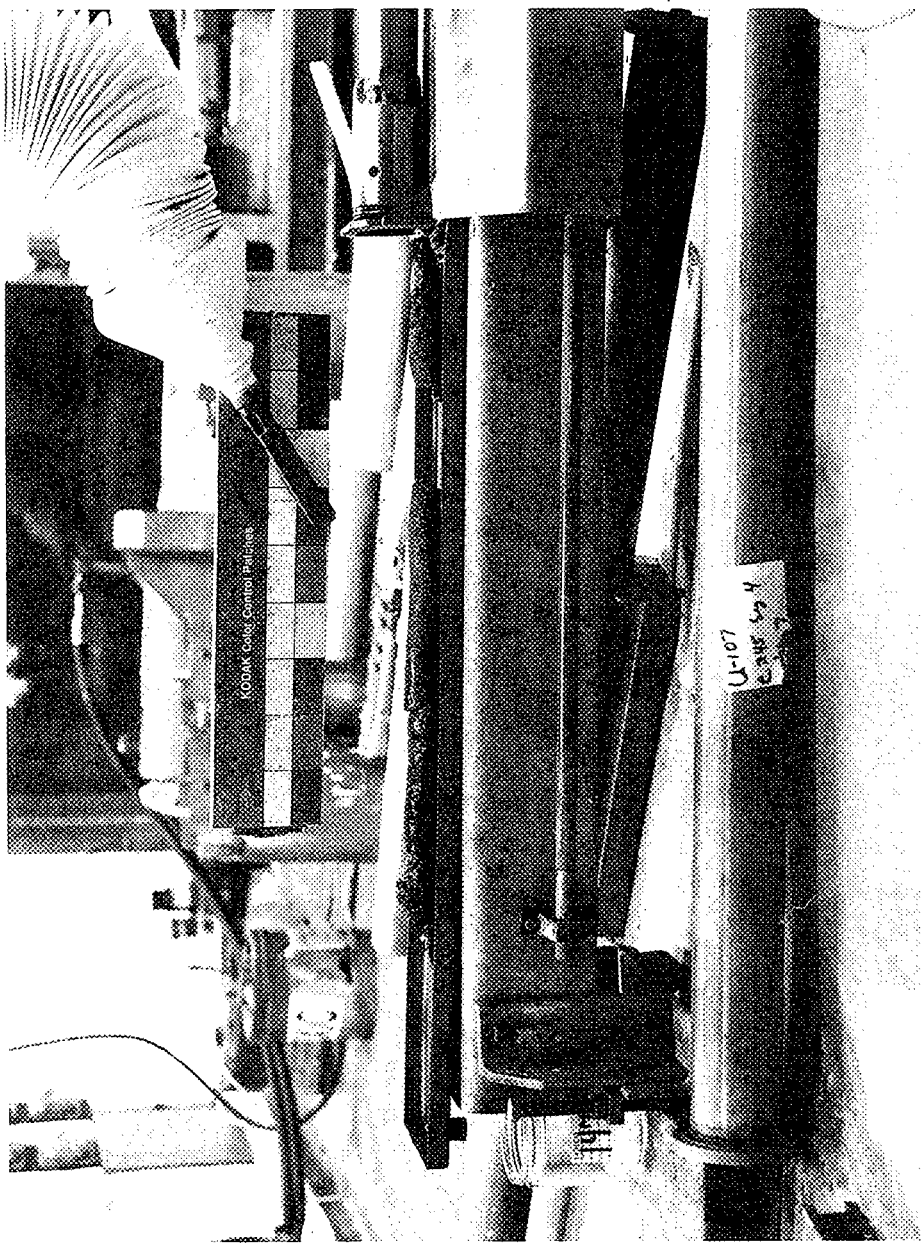
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Seg 4

Riser 7

8/13/98

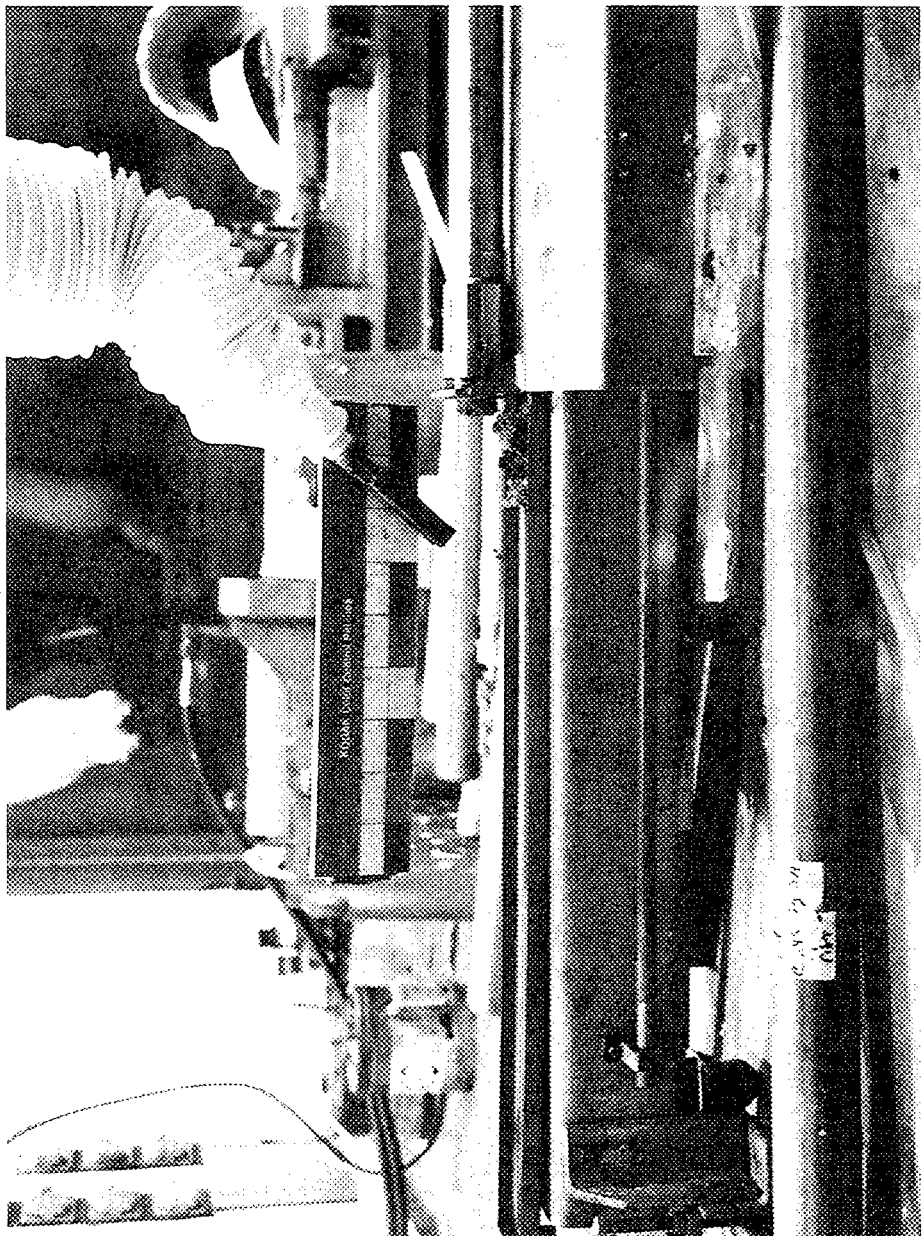
AXF-1681  
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U-107  
Core 245  
Seg 4

U-107 Core 245 Seg 5A Riser 7 8/13/98

HPT-1661  
rev 0



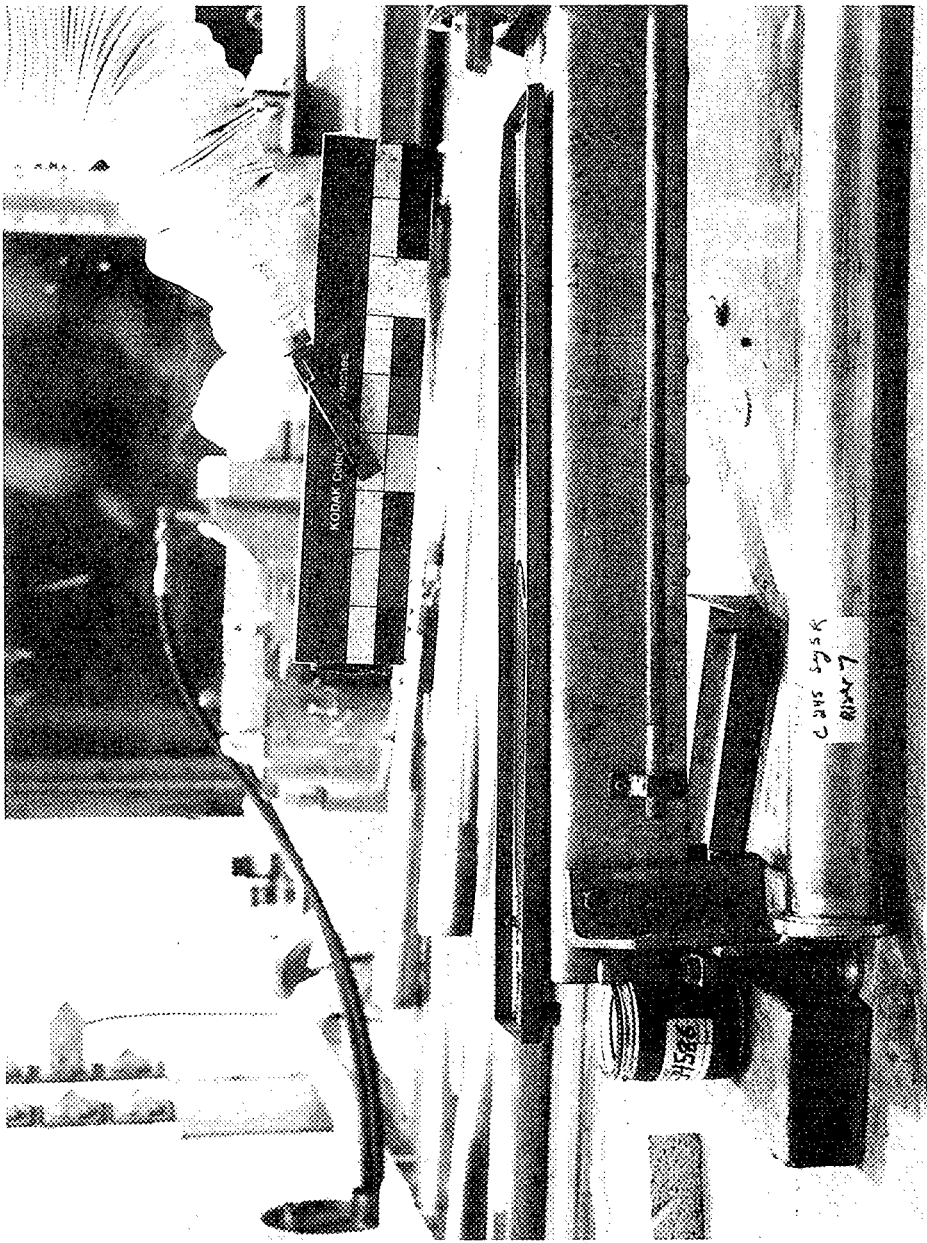
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Core 245  
Seg 5A

208/17

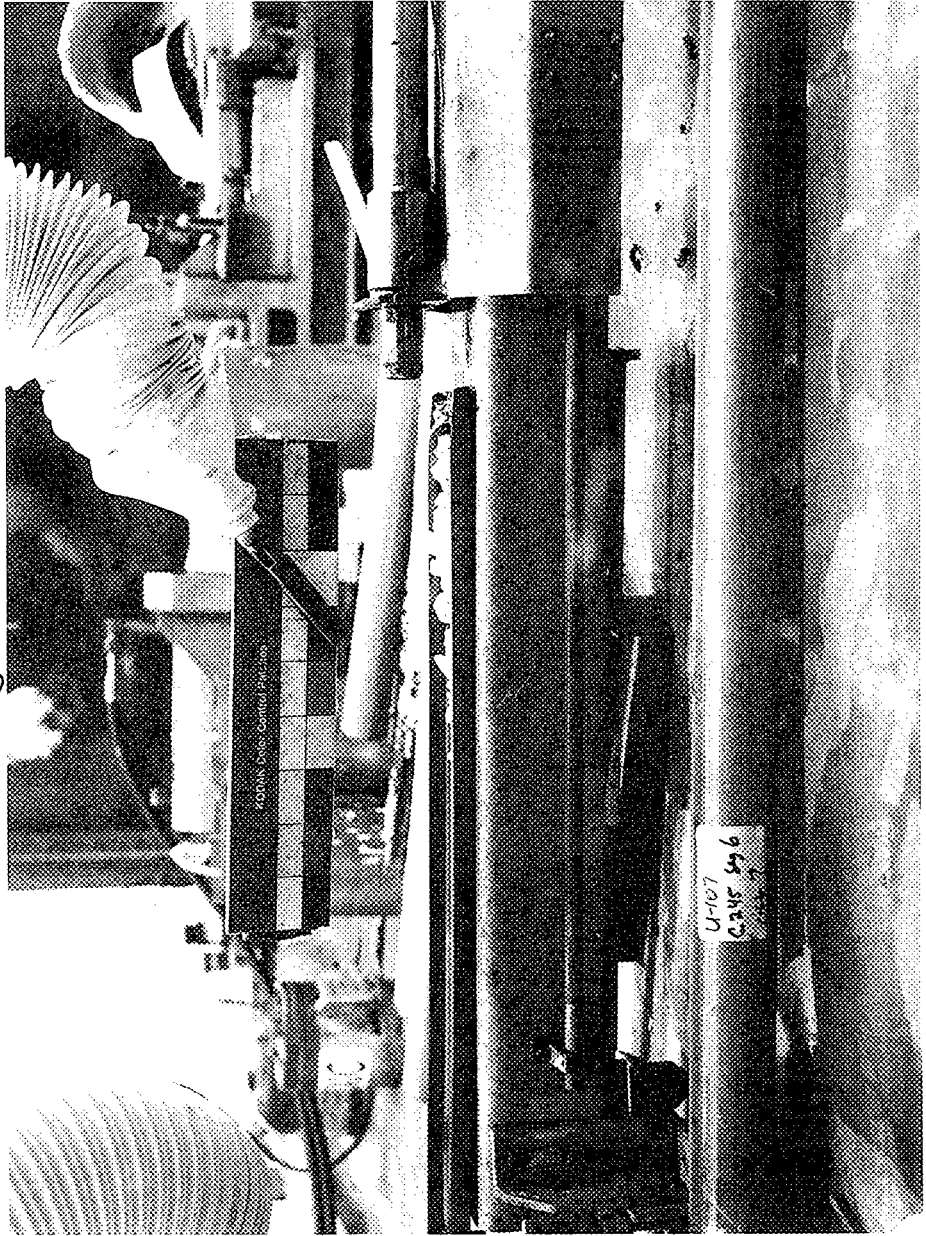
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rev 0

4-107



HNF-1661  
rev9

U-107 Core 245 Seg6 Riser 7 8/13/98



U-107

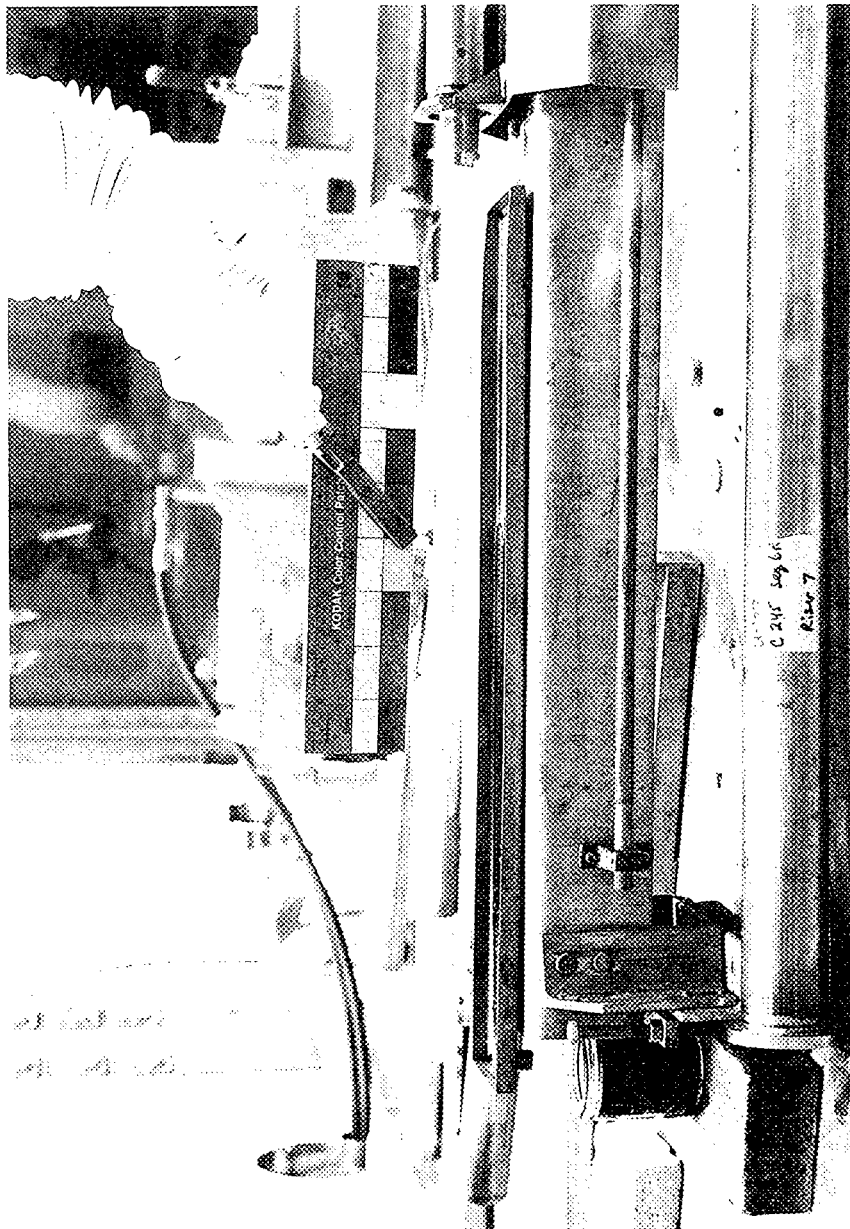
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Seg. 6R

Riser 7

8/2/98

HNF-1661  
rev 9



U-107

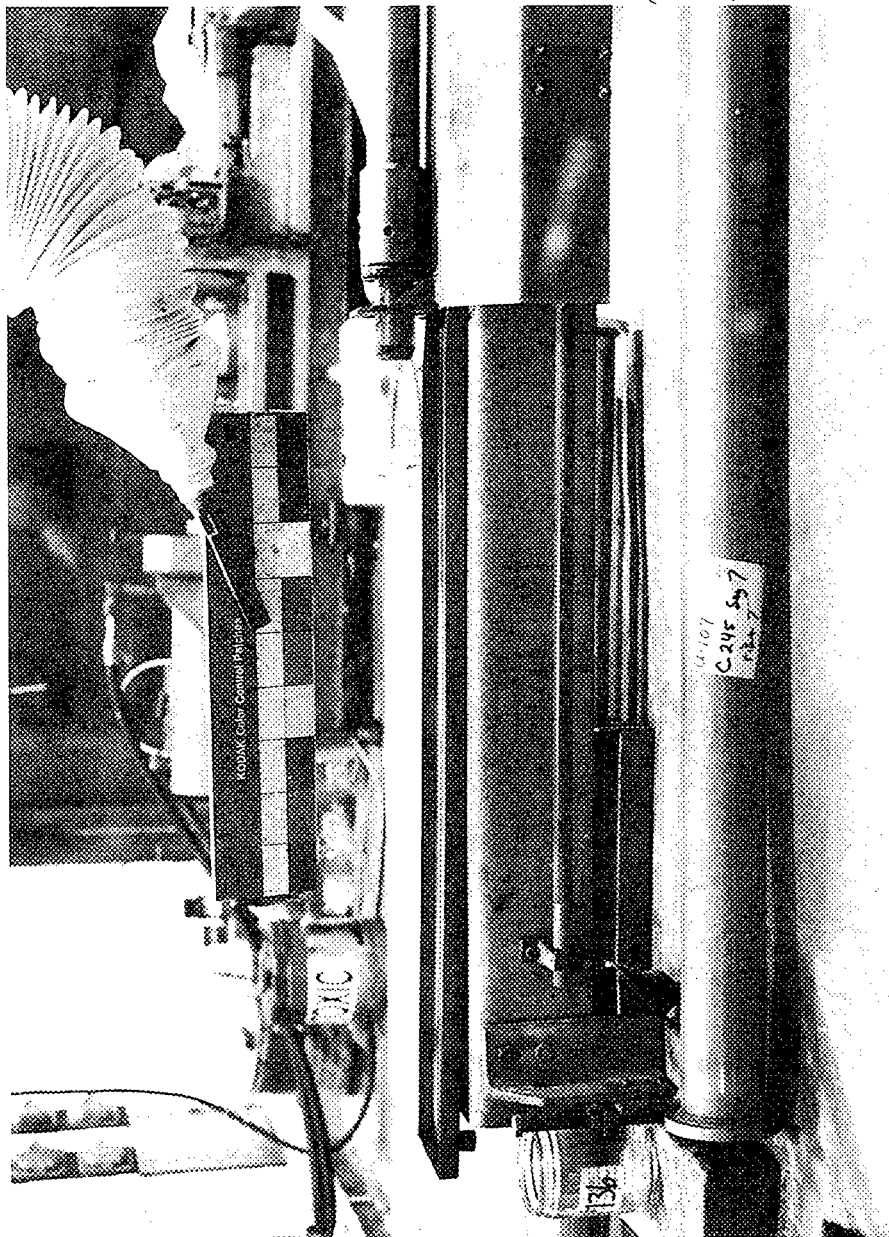
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Seg 7

Riser 7

8/15/98

ERT-1601  
rev 0



8/2/98

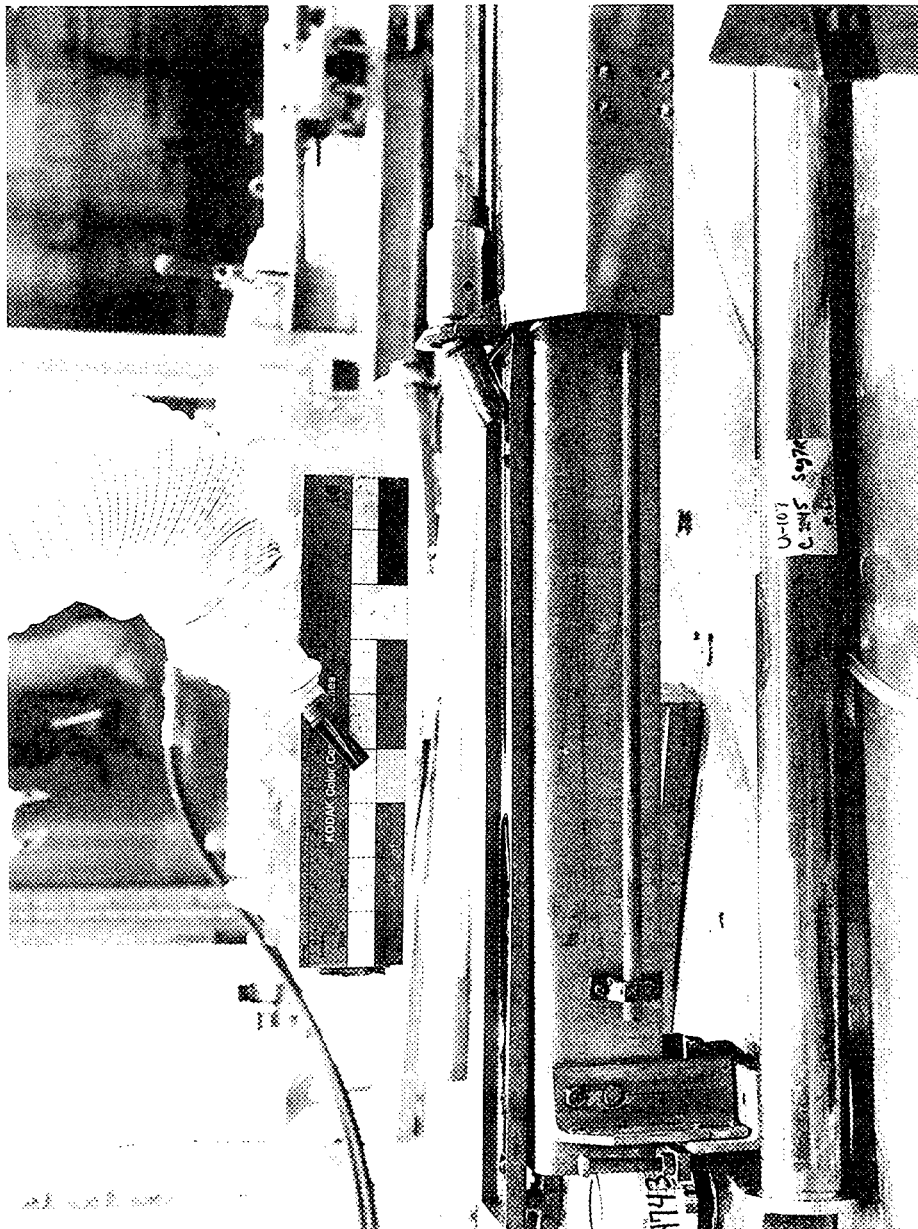
Riser 7

Seq. 7K

Core 245

U-107

HNF-1661  
200





**HNF-1661 REV. 0**

**SAMPLE HANDLING**

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**HNF-1661 REV. 0**

**CORE COMPOSITE WORKSHEETS**

HNF-1661 REV. 0

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# Composite Worksheet

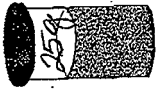
P.C.: Star


Phone #: 372-2495

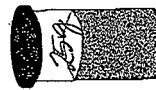
Group # 9800359


Date: 12/08/98

Tank: 11-107

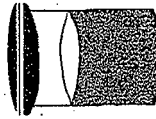

 Samp. ID: 4880027  
 Aug/Core: 242R  
 Segment: 4DL  
 Jar #: 15046 (part)  
 Jar Size: 250 mL  
 Initial Wgt.: 417.7 g  
 Final Wgt.: 391.2 g  
 Net Wgt.: 26.5 g


 Samp. ID: 4880027  
 Aug/Core: 242R  
 Segment: 3DL  
 Jar #: 15027 (part)  
 Jar Size: 250 mL  
 Initial Wgt.: 446.5 g  
 Final Wgt.: 421.2 g  
 Net Wgt.: 25.3 g


 Samp. ID: 4880027  
 Aug/Core: 242R  
 Segment: 2DL  
 Jar #: 15032 (part)  
 Jar Size: 250 mL  
 Initial Wgt.: 405.9 g  
 Final Wgt.: 380.1 g  
 Net Wgt.: 25.8 g


 Samp. ID: 4880027  
 Aug/Core: 242R  
 Segment: 1DL  
 Jar #: 14650 (part)  
 Jar Size: 4250 mL  
 Initial Wgt.: 182.9 g  
 Final Wgt.: 153.3 g  
 Net Wgt.: 29.6 g

HNF-1661 REV. 0


 Jar #: 15606  
 Jar Size: 125 mL  
 Final Wgt.: 224.0 g  
 Initial Wgt.: 122.8 g  
 Net wgt: 101.2g

Samp. ID: 488003320

Tests: Qual 10501

Special Instructions: Make composite using weights listed

# Composite Worksheet

P.C.: Stun  
Phone #: 372-2499

Date: 12/08/98  
Tank: 4107



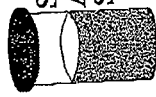
Samp. ID: 598100523  
Aug/Core: 245  
Segment: (Bin 70)

Jar #: 13955  
Jar Size: 46 mL  
Initial Wgt.: 83.1 g  
Final Wgt.: 32.9 g  
Net Wgt.: 50.2 g



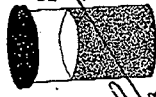
Samp. ID: 598100532  
Aug/Core: 245  
Segment: 2R

Jar #: 14741 (quart)  
Jar Size: 250 mL  
Initial Wgt.: 507.4 g  
Final Wgt.: 456.0 g  
Net Wgt.: 51.4 g



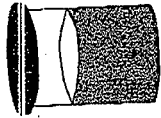
Samp. ID: \_\_\_\_\_  
Aug/Core: \_\_\_\_\_  
Segment: \_\_\_\_\_

Jar #: \_\_\_\_\_  
Jar Size: \_\_\_\_\_ mL  
Initial Wgt.: \_\_\_\_\_ g  
Final Wgt.: \_\_\_\_\_ g  
Net Wgt.: \_\_\_\_\_ g



Samp. ID: \_\_\_\_\_  
Aug/Core: \_\_\_\_\_  
Segment: \_\_\_\_\_

Jar #: \_\_\_\_\_  
Jar Size: \_\_\_\_\_ mL  
Initial Wgt.: \_\_\_\_\_ g  
Final Wgt.: \_\_\_\_\_ g  
Net Wgt.: \_\_\_\_\_ g



Samp. ID: 598100339

Tests: Carbosal

Jar #: 14889  
Jar Size: 125 mL  
Final Wgt.: 222.4 g  
Initial Wgt.: 122.2 g  
Net Wgt.: 100.2 g

Special Instructions: Make composite using weights listed.



# Composite Worksheet

P.C.: Star  
Phone #: 372-2495

Date: 12/8/98  
Tank: 11-10-7

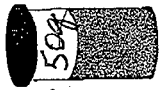
Group 28000401



Samp. ID: 509  
Aug/Core: 245  
Segment: 5R

6R 137

Jar #: 14586 (prev) mL  
Jar Size: 250 mL  
Initial Wgt.: 494.9 g  
Final Wgt.: 442.5 g  
Net Wgt.: 52.4 g



Samp. ID: 509  
Aug/Core: 245  
Segment: 6R

6R 137

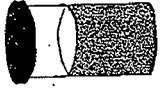
Jar #: 14742 (prev) mL  
Jar Size: 250 mL  
Initial Wgt.: 464.3 g  
Final Wgt.: 413.9 g  
Net Wgt.: 50.4 g



Samp. ID: 509  
Aug/Core: 245  
Segment: 6R

6R 137

Jar #: \_\_\_\_\_ mL  
Jar Size: \_\_\_\_\_ mL  
Initial Wgt.: \_\_\_\_\_ g  
Final Wgt.: \_\_\_\_\_ g  
Net Wgt.: \_\_\_\_\_ g

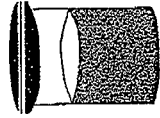


Samp. ID: 509  
Aug/Core: 245  
Segment: 6R

6R 137

Jar #: \_\_\_\_\_ mL  
Jar Size: \_\_\_\_\_ mL  
Initial Wgt.: \_\_\_\_\_ g  
Final Wgt.: \_\_\_\_\_ g  
Net Wgt.: \_\_\_\_\_ g

Samp. ID: 598T003354



Jar #: 13598  
Jar Size: 125 mL  
Final Wgt.: 223.9 g  
Initial Wgt.: 123.4 g  
Net Wgt.: 100.5 g

Tests:  
COMBOS1

Used

Special Instructions: Make composite using weights listed.



# LABCORE Data Entry Template for Worklist# 24604

Analyst: SC Instrument: BA000 Book # NA

Method: LO-160-103 Rev/Mod 120

Worklist Comment: U-107 C242 SIEG #1 RISER #2 EXTRUSION

GROUP	PROJECT	S TYPE	SAMPLE #	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 INSTCHK01			EXTRUD01	SOLID	<u>20</u>	<u>19.99</u>	<u>N/A</u>	
		2 INSTCHK02			EXTRUD01	SOLID	<u>500</u>	<u>500.01</u>	<u>N/A</u>	
98000358	U-107 (2)	3 SAMPLE	S98T011888	0	DLIQVOL1	SOLID	<u>N/A</u>	<u>110</u>		ml
98000358	U-107 (2)	4 SAMPLE	S98T011888	0	DLIQWT01	SOLID	<u>N/A</u>	<u>126.4</u>		g
98000358	U-107 (2)	5 SAMPLE	S98T011888	0	EST.G/ML	SOLID	<u>N/A</u>	<u>1.15</u>		g/ml
98000358	U-107 (2)	6 SAMPLE	S98T011888	0	EXTRUD01	SOLID	<u>N/A</u>	<u>complete</u>		
98000358	U-107 (2)	7 SAMPLE	S98T011888	0	LLIQWT01	SOLID	<u>N/A</u>	<u>0</u>		g
98000358	U-107 (2)	8 SAMPLE	S98T011888	0	NOTEBOOK	SOLID	<u>N/A</u>	<u>N-1004</u>		
98000358	U-107 (2)	9 SAMPLE	S98T011888	0	SLDVOL01	SOLID	<u>N/A</u>	<u>NA</u>		ml
98000358	U-107 (2)	10 SAMPLE	S98T011888	0	SLDWT-01	SOLID	<u>N/A</u>	<u>0</u>		g
98000358	U-107 (2)	11 SAMPLE	S98T011888	0	APPEAR01	SOLID	<u>N/A</u>	<u>complete</u>		
98000358	U-107 (2)	12 SAMPLE	S98T011888	0	ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>		ml

**Final page for worklist # 24604**

SC 7/7/98  
Analyst Signature Date

SC 7/7/98  
Analyst Signature Date  
SC 7-7-98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 24605

Analyst: CL Instrument: BA000 Book # NA

Method: LO-160-103 Rev/Mod D-0

Worklist Comment: U-107 C242 SIEG #2 RISER #2 EXTRUSION

GROUP	PROJECT	S TYPE	SAMPI #	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 INSTCHK01			EXTRUDD1	SOLID	<u>20</u>	<u>19.99</u>	<u>N/A</u>	
		2 INSTCHK02			EXTRUDD1	SOLID	<u>500</u>	<u>499.98</u>	<u>N/A</u>	
98000358	U-107 (2)	3 SAMPLE	S98TC01889	0	DLTQVOL1	SOLID	<u>N/A</u>	<u>125</u>		ml
98000358	U-107 (2)	4 SAMPLE	S98TC01889	0	DLTQW01	SOLID	<u>N/A</u>	<u>155.8</u>		g
98000358	U-107 (2)	5 SAMPLE	S98TC01889	0	EST.G/ML	SOLID	<u>N/A</u>	<u>1.25</u>		g/ml
98000358	U-107 (2)	6 SAMPLE	S98TC01889	0	EXTRUDD1	SOLID	<u>N/A</u>	<u>complete</u>		
98000358	U-107 (2)	7 SAMPLE	S98TC01889	0	LLTQW01	SOLID	<u>N/A</u>	<u>0</u>		g
98000358	U-107 (2)	8 SAMPLE	S98TC01889	0	NOTEBOOK	SOLID	<u>N/A</u>	<u>N-1004</u>		
98000358	U-107 (2)	9 SAMPLE	S98TC01889	0	SLDVOL01	SOLID	<u>N/A</u>	<u>NA</u>		ml
98000358	U-107 (2)	10 SAMPLE	S98TC01889	0	SLDWT-01	SOLID	<u>N/A</u>	<u>171.6</u>		g
98000358	U-107 (2)	11 SAMPLE	S98TC01889	0	APPEAR01	SOLID	<u>N/A</u>	<u>complete</u>		
98000358	U-107 (2)	12 SAMPLE	S98TC01889	0	ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>		ml

Final page for worklist # 24605

CL 7/7/98  
Analyst Signature Date

CL 7/7/98  
Analyst Signature Date  
Aut Dir 7-7-98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

## LABCORE Data Entry Template for Worklist# 24606

Analyst: EC Instrument: BA000 Book # NAMethod: LO-160-103 Rev/Mod 20

Worklist Comment: U-107 C242 SEG #2A RISER #2 EXTRUSION

GROUP	PROJECT	S TYPE	SAMPLE #	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	INSTCHK01		EXTRUD01	SOLID	<u>20</u>	<u>20.01</u>	<u>N/A</u>	
		2	INSTCHK02		EXTRUD01	SOLID	<u>500</u>	<u>499.98</u>	<u>N/A</u>	
98000358	U-107 (2)	3	SAMPLE	S98T011890	0	DLIQVOL1	SOLID	<u>N/A</u>	<u>25</u>	ml
98000358	U-107 (2)	4	SAMPLE	S98T011890	0	DLIQWT01	SOLID	<u>N/A</u>	<u>44.3</u>	g
98000358	U-107 (2)	5	SAMPLE	S98T011890	0	EST.G/ML	SOLID	<u>N/A</u>	<u>1.77</u>	g/ml
98000358	U-107 (2)	6	SAMPLE	S98T011890	0	EXTRUD01	SOLID	<u>N/A</u>	<u>complete</u>	
98000358	U-107 (2)	7	SAMPLE	S98T011890	0	LLIQWT01	SOLID	<u>N/A</u>	<u>0</u>	g
98000358	U-107 (2)	8	SAMPLE	S98T011890	0	NOTEBOOK	SOLID	<u>N/A</u>	<u>N-1004</u>	
98000358	U-107 (2)	9	SAMPLE	S98T011890	0	SLDVOL01	SOLID	<u>N/A</u>	<u>0</u>	ml
98000358	U-107 (2)	10	SAMPLE	S98T011890	0	SLDWT-01	SOLID	<u>N/A</u>	<u>0</u>	g
98000358	U-107 (2)	11	SAMPLE	S98T011890	0	APPEAR01	SOLID	<u>N/A</u>	<u>complete</u>	
98000358	U-107 (2)	12	SAMPLE	S98T011890	0	ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>	ml

Final page for worklist # 24606

EC 7/7/98  
Analyst Signature Date

EC 7/7/98  
Analyst Signature Date

Aut Dic 7-7-98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 24932

Analyst: ck Instrument: BA000 Book # \_\_\_\_\_

Method: LO-160-103 Rev/Mod DO

Worklist Comment: U-107 CORE 342 SEG #4 RISER #2 EXTRUSION

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 INSTCHK01			EXTRUD01	SOLID	<u>20.00</u>	<u>2000</u>	<u>N/A</u>	
		2 INSTCHK02			EXTRUD01	SOLID	<u>500.00</u>	<u>500.08</u>	<u>N/A</u>	
98000358	U-107 (2)	3 SAMPLE	S98T102085	0	DL1QVOL1	SOLID	<u>N/A</u>	<u>0</u>		ml
98000358	U-107 (2)	4 SAMPLE	S98T102085	0	DL1QWT01	SOLID	<u>N/A</u>	<u>0</u>		g
98000358	U-107 (2)	5 SAMPLE	S98T102085	0	EST.G/ML	SOLID	<u>N/A</u>	<u>0</u>		g/ml
98000358	U-107 (2)	6 SAMPLE	S98T102085	0	EXTRUD01	SOLID	<u>N/A</u>	<u>complete</u>		
98000358	U-107 (2)	7 SAMPLE	S98T102085	0	LL1QWT01	SOLID	<u>N/A</u>	<u>0</u>		g
98000358	U-107 (2)	8 SAMPLE	S98T102085	0	NOTEBOOK	SOLID	<u>N/A</u>	<u>WHC-N1004</u>		
98000358	U-107 (2)	9 SAMPLE	S98T102085	0	SLDWT-01	SOLID	<u>N/A</u>	<u>0</u>		g
98000358	U-107 (2)	10 SAMPLE	S98T102085	0	APPEAR01	SOLID	<u>N/A</u>	<u>Complete</u>		
98000358	U-107 (2)	11 SAMPLE	S98T102085	0	ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>		ml

**Final page for worklist # 24932**

[Signature]  
Analyst Signature Date 8/3/98

[Signature]  
Analyst Signature Date 8/3/98  
8-4-98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 24933

Analyst: Dvj Instrument: BA000 Book # NA

Method: LO-160-103 Rev/Mod f1-0

Worklist Comment: U-107 CORE 342 SEG #6 RISER #2 EXTRUSION

GROUP	PROJECT	S TYPE	SAMPLE #	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 INSTCHK01			EXTRUD01	SOLID	<u>20.00</u>	<u>20.01</u>	<u>N/A</u>	
		2 INSTCHK02			EXTRUD01	SOLID	<u>500.01</u>	<u>500.08</u>	<u>N/A</u>	
98000358	U-107 (2)	3 SAMPLE	S98T012086	0	DLIQVOL1	SOLID	<u>N/A</u>	<u>0</u>		ml
98000358	U-107 (2)	4 SAMPLE	S98T012086	0	DLIQWT01	SOLID	<u>N/A</u>	<u>0</u>		g
98000358	U-107 (2)	5 SAMPLE	S98T012086	0	EST.G/ML	SOLID	<u>N/A</u>	<u>0</u>		g/ml
98000358	U-107 (2)	6 SAMPLE	S98T012086	0	EXTRUD01	SOLID	<u>N/A</u>	<u>complete</u>		
98000358	U-107 (2)	7 SAMPLE	S98T012086	0	LLIQWT01	SOLID	<u>N/A</u>	<u>0</u>		g
98000358	U-107 (2)	8 SAMPLE	S98T012086	0	NOTEBOOK	SOLID	<u>N/A</u>	<u>WTC-N-1004</u>		
98000358	U-107 (2)	9 SAMPLE	S98T012086	0	SLDWT-01	SOLID	<u>N/A</u>	<u>112.6</u>		g
98000358	U-107 (2)	10 SAMPLE	S98T012086	0	APPEAR01	SOLID	<u>N/A</u>	<u>complete</u>		
98000358	U-107 (2)	11 SAMPLE	S98T012086	0	ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>		ml

Final page for worklist # 24933

Dvj 7-28-98  
Analyst Signature Date

R. Schneider 7/28/98  
Analyst Signature Date  
AB 8-3-98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 24935


Analyst: ch Instrument: BA000 Book # \_\_\_\_\_


Method: LO-160-103 Rev/Mod D-0

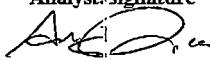
Worklist Comment: U-107 CORE 242R SEG #1 RISER #2 EXTRUSION

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 INSTCHK01			EXTRUDD1	SOLID	<u>212.00</u>	<u>20.00</u>	<u>N/A</u>	
		2 INSTCHK02			EXTRUDD1	SOLID	<u>520.00</u>	<u>900.08</u>	<u>N/A</u>	
98000359	U-107 (2)	3 SAMPLE	S98T002082	0	DLIQVOL1	SOLID	<u>N/A</u>	<u>175</u>		ml
98000359	U-107 (2)	4 SAMPLE	S98T002082	0	DLIQWT01	SOLID	<u>N/A</u>	<u>238.1</u>		g
98000359	U-107 (2)	5 SAMPLE	S98T002082	0	EST.G/ML	SOLID	<u>N/A</u>	<u>1.36</u>		g/ml
98000359	U-107 (2)	6 SAMPLE	S98T002082	0	EXTRUDD1	SOLID	<u>N/A</u>	<u>Complete</u>		
98000359	U-107 (2)	7 SAMPLE	S98T002082	0	LLIQWT01	SOLID	<u>N/A</u>	<u>25</u>		g
98000359	U-107 (2)	8 SAMPLE	S98T002082	0	NOTEBOOK	SOLID	<u>N/A</u>	<u>WAC-10-1004</u>		
98000359	U-107 (2)	9 SAMPLE	S98T002082	0	SLDWT-01	SOLID	<u>N/A</u>	<u>0</u>		g
98000359	U-107 (2)	10 SAMPLE	S98T002082	0	APPEAR01	SOLID	<u>N/A</u>	<u>Complete</u>		
98000359	U-107 (2)	11 SAMPLE	S98T002082	0	ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>		ml

**Final page for worklist # 24935**

  
Analyst Signature \_\_\_\_\_ Date 7/18/98

  
Analyst Signature \_\_\_\_\_ Date 7/27/98

  
Analyst Signature \_\_\_\_\_ Date 8.4.98

Data Entry Comments:

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Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 24936

Analyst: \_\_\_\_\_ Instrument: BA000 \_\_\_\_\_ Book # \_\_\_\_\_

Method: LO-160-103 Rev/Mod D-O

Worklist Comment: U-107 CORE #42 SEG #7 RISER #2 EXTRUSION

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 INSTCHK01			EXTRUD01	SOLID	<u>20.00</u>	<u>20.01</u>	N/A	
		2 INSTCHK02			EXTRUD01	SOLID	<u>520.00</u>	<u>500.08</u>	N/A	
98000358	U-107 (2)	3 SAMPLE	S98T012088	0	DLIQVOL1	SOLID	N/A	<u>0</u>		ml
98000358	U-107 (2)	4 SAMPLE	S98T012088	0	DLIQWT01	SOLID	N/A	<u>0</u>		g
98000358	U-107 (2)	5 SAMPLE	S98T012088	0	EST.G/ML	SOLID	N/A	<u>0</u>		g/ml
98000358	U-107 (2)	6 SAMPLE	S98T012088	0	EXTRUD01	SOLID	N/A	<u>Complete</u>		
98000358	U-107 (2)	7 SAMPLE	S98T012088	0	LLIQWT01	SOLID	N/A	<u>0</u>		g
98000358	U-107 (2)	8 SAMPLE	S98T012088	0	NOTEBOOK	SOLID	N/A	<u>WHC-N-1004</u>		
98000358	U-107 (2)	9 SAMPLE	S98T012088	0	SLDWT-01	SOLID	N/A	<u>39.7</u>		g
98000358	U-107 (2)	10 SAMPLE	S98T012088	0	APPEAR01	SOLID	N/A	<u>Complete</u>		
98000358	U-107 (2)	11 SAMPLE	S98T012088	0	ORGVOL01	SOLID	N/A	<u>0</u>		ml

Final page for worklist # 24936

David R. Jackson 7-28-98  
Analyst Signature Date

Robert W. Schuch 7/28/98  
Analyst Signature Date

ASJ 8-3-98

Data Entry Comments:

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Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 24941

Analyst: rh Instrument: BA000 Book # \_\_\_\_\_

Method: LO-160-103 Rev/Mod D-0

Worklist Comment: U-107 CORE 242R SEG #3 RISER #2 EXTRUSION

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	INSTCHK01		EXTRUD01	SOLID	<u>20.00</u>	<u>20.00</u>	N/A	
		2	INSTCHK02		EXTRUD01	SOLID	<u>50.00</u>	<u>50.08</u>	N/A	
98000359	U-107 (2)	3	SAMPLE	S98T002084	0	DLIQVOL1	N/A	<u>250</u>		ml
98000359	U-107 (2)	4	SAMPLE	S98T002084	0	DLIQWT01	N/A	<u>36.4</u>		g
98000359	U-107 (2)	5	SAMPLE	S98T002084	0	EST.G/ML	N/A	<u>1.46</u>		g/ml
98000359	U-107 (2)	6	SAMPLE	S98T002084	0	EXTRUD01	N/A	<u>Complete</u>		
98000359	U-107 (2)	7	SAMPLE	S98T002084	0	LLIQWT01	N/A	<u>&lt;5</u>		g
98000359	U-107 (2)	8	SAMPLE	S98T002084	0	NOTEBOOK	N/A	<u>WPC-N-1004</u>		
98000359	U-107 (2)	9	SAMPLE	S98T002084	0	SLDWT-01	N/A	<u>0</u>		g
98000359	U-107 (2)	10	SAMPLE	S98T002084	0	APPEAR01	N/A	<u>Complete</u>		
98000359	U-107 (2)	11	SAMPLE	S98T002084	0	ORGVOL01	N/A	<u>0</u>		ml

Final page for worklist # 24941

[Signature] 8/18/98  
Analyst Signature Date

[Signature] 7/27/98  
Analyst Signature Date  
[Signature] 8/4/98

Data Entry Comments:

\_\_\_\_\_  
\_\_\_\_\_

Units shown for QC (SPK & STD) may not reflect the actual units, DL = Detection Limit, N = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



# LABCORE Data Entry Template for Worklist# 24942

Analyst: ch Instrument: BA000 Book # \_\_\_\_\_

Method: LO-160-103 Rev/Mod D-0

Worklist Comment: U-107 CORE 242R SEG #4 RISER #2 EXTRUSION

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 INSTCHK01			EXTRUD01	SOLID	<u>20.00</u>	<u>20.00</u>	<u>N/A</u>	
		2 INSTCHK02			EXTRUD01	SOLID	<u>500.00</u>	<u>500.08</u>	<u>N/A</u>	
98000359	U-107 (2)	3 SAMPLE	S98T002099	0	DLIQVOL1	SOLID	<u>N/A</u>	<u>250</u>		ml
98000359	U-107 (2)	4 SAMPLE	S98T002099	0	DLIQWT01	SOLID	<u>N/A</u>	<u>366.0</u>		g
98000359	U-107 (2)	5 SAMPLE	S98T002099	0	EST. G/ML	SOLID	<u>N/A</u>	<u>1.46</u>		g/ml
98000359	U-107 (2)	6 SAMPLE	S98T002099	0	EXTRUD01	SOLID	<u>N/A</u>	<u>Complete</u>		
98000359	U-107 (2)	7 SAMPLE	S98T002099	0	LLIQWT01	SOLID	<u>N/A</u>	<u>45</u>		g
98000359	U-107 (2)	8 SAMPLE	S98T002099	0	NOTEBOOK	SOLID	<u>N/A</u>	<u>WTC-N-1004</u>		
98000359	U-107 (2)	9 SAMPLE	S98T002099	0	SLDWT-01	SOLID	<u>N/A</u>	<u>0</u>		g
98000359	U-107 (2)	10 SAMPLE	S98T002099	0	APPEAR01	SOLID	<u>N/A</u>	<u>Complete</u>		
98000359	U-107 (2)	11 SAMPLE	S98T002099	0	ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>		ml

**Final page for worklist # 24942**

  
Analyst Signature \_\_\_\_\_  
Date \_\_\_\_\_

8/18/98

  
Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

8-4-98

Data Entry Comments:

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Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, " " = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for: Worklist# 24943

Analyst: rh Instrument: BA000 Book # \_\_\_\_\_

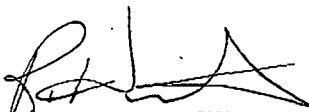
Method: LO-160-103 Rev/Mod D-0


Worklist Comment: U-107 CORE 242R SEG #5 RISER #2 EXTRUSION

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	INSTCHK01				EXTRUD01	SOLID	<u>0.00</u>	<u>20.00</u>	<u>N/A</u>	
		2	INSTCHK02				EXTRUD01	SOLID	<u>510.00</u>	<u>500.08</u>	<u>N/A</u>	
98000359	U-107 (2)	3	SAMPLE	S98T002100	0		DLIQVOL1	SOLID	<u>N/A</u>	<u>40</u>		ml
98000359	U-107 (2)	4	SAMPLE	S98T002100	0		DLIQWT01	SOLID	<u>N/A</u>	<u>58.9</u>		g
98000359	U-107 (2)	5	SAMPLE	S98T002100	0		EST.G/ML	SOLID	<u>N/A</u>	<u>1.47</u>		g/ml
98000359	U-107 (2)	6	SAMPLE	S98T002100	0		EXTRUD01	SOLID	<u>N/A</u>	<u>Complete</u>		
98000359	U-107 (2)	7	SAMPLE	S98T002100	0		LLIQWT01	SOLID	<u>N/A</u>	<u>35.0</u>		g
98000359	U-107 (2)	8	SAMPLE	S98T002100	0		NOTEBOOK	SOLID	<u>N/A</u>	<u>WTC-N1004</u>		
98000359	U-107 (2)	9	SAMPLE	S98T002100	0		SLDWT-01	SOLID	<u>N/A</u>	<u>12.0</u>	<u>436.1</u>	g
98000359	U-107 (2)	10	SAMPLE	S98T002100	0		APPEAR01	SOLID	<u>N/A</u>	<u>Complete</u>		
98000359	U-107 (2)	11	SAMPLE	S98T002100	0		ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>		ml

Final page for worklist # 24943

5/18/98

  
Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

  
Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_  
AC De Bito 98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 24953

Analyst: LR Instrument: BA000 Book # NA

Method: LO-160-103 Rev/Mod D-0

Worklist Comment: U-107 CORE #42 SEG #5 RISER #2 EXTRUSION

GROUP	PROJECT	S	TYPE	SAMPL #	R	A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	INSTCHK01				EXTRUD01	SOLID	<u>20.00</u>	<u>20.01</u>	N/A	
		2	INSTCHK02				EXTRUD01	SOLID	<u>500.00</u>	<u>500.08</u>	N/A	
98000358	U-107 (2)	3	SAMPLE	S98T012087	0		DLIQVOL1	SOLID	N/A	<u>0</u>		mL
98000358	U-107 (2)	4	SAMPLE	S98T012087	0		DLIQWT01	SOLID	N/A	<u>0</u>		g
98000358	U-107 (2)	5	SAMPLE	S98T012087	0		EST.G/ML	SOLID	N/A	<u>0</u>		g/mL
98000358	U-107 (2)	6	SAMPLE	S98T012087	0		EXTRUD01	SOLID	N/A	<u>Complete</u>		
98000358	U-107 (2)	7	SAMPLE	S98T012087	0		LLIQWT01	SOLID	N/A	<u>0</u>		g
98000358	U-107 (2)	8	SAMPLE	S98T012087	0		NOTEBOOK	SOLID	N/A	<u>WHC-D-1004</u>		
98000358	U-107 (2)	9	SAMPLE	S98T012087	0		SLDWT-01	SOLID	N/A	<u>16.5</u>		g
98000358	U-107 (2)	10	SAMPLE	S98T012087	0		APPEAR01	SOLID	N/A	<u>Complete</u>		
98000358	U-107 (2)	11	SAMPLE	S98T012087	0		ORGVOL01	SOLID	N/A	<u>0</u>		mL

Final page for worklist # 24953

LR 7-28-98  
Analyst Signature Date

RW Schrock 7/29/98  
Analyst Signature Date  
LR 8-3-98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 24954


Analyst: ph Instrument: BA000 Book # \_\_\_\_\_


Method: LO-160-103 Rev/Mod D-0

Worklist Comment: U-107 CORE 242R SEG #2 RISER #2 EXTRUSION

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	INSTCHK01			EXTRUD01	SOLID	<u>1.000</u> <u>20.00</u>	<u>N/A</u>	
		2	INSTCHK02			EXTRUD01	SOLID	<u>510.00</u> <u>500.08</u>	<u>N/A</u>	
98000359	U-107 (2)	3	SAMPLE	S98T002083	0	DLIQVOL1	SOLID	<u>N/A</u> <u>270</u>		ml
98000359	U-107 (2)	4	SAMPLE	S98T002083	0	DLIQWT01	SOLID	<u>N/A</u> <u>396.2</u>		g
98000359	U-107 (2)	5	SAMPLE	S98T002083	0	EST.G/ML	SOLID	<u>N/A</u> <u>1.47</u>		g/ml
98000359	U-107 (2)	6	SAMPLE	S98T002083	0	EXTRUD01	SOLID	<u>N/A</u> <u>Complete</u>		
98000359	U-107 (2)	7	SAMPLE	S98T002083	0	LLIQWT01	SOLID	<u>N/A</u> <u>&lt;5</u>		g
98000359	U-107 (2)	8	SAMPLE	S98T002083	0	NOTEBOOK	SOLID	<u>N/A</u> <u>w/c-N-1004</u>		
98000359	U-107 (2)	9	SAMPLE	S98T002083	0	SLDWT-01	SOLID	<u>N/A</u> <u>0</u>		g
98000359	U-107 (2)	10	SAMPLE	S98T002083	0	APPEAR01	SOLID	<u>N/A</u> <u>Complete</u>		
98000359	U-107 (2)	11	SAMPLE	S98T002083	0	ORGVOL01	SOLID	<u>N/A</u> <u>0</u>		ml

Final page for worklist # 24954

  
Analyst Signature \_\_\_\_\_ Date 8/9/98

  
Analyst Signature \_\_\_\_\_ Date 7/27/98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 25164

Analyst: dfj Instrument: BA000 Book # ALA

Method: LO-160-103 Rev/Mod D-0

Worklist Comment: TANK 107-U CORE 242R SEGMENT 6 RISER # 2 EXTRUSION

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	INSTCRK01				EXTRUD01	SOLID	<u>10.00</u>	<u>20.00</u>	<u>N/A</u>	
		2	INSTCRK02				EXTRUD01	SOLID	<u>20.00</u>	<u>50.00</u>	<u>N/A</u>	
98000359	U-107 (2)	3	SAMPLE	S98T002227	0		DLIQVOL1	SOLID	<u>N/A</u>	<u>&lt;5</u>		ml
98000359	U-107 (2)	4	SAMPLE	S98T002227	0		DLIANT01	SOLID	<u>N/A</u>	<u>0</u>		g
98000359	U-107 (2)	5	SAMPLE	S98T002227	0		EST.G/ML	SOLID	<u>N/A</u>	<u>0</u>		g/ml
98000359	U-107 (2)	6	SAMPLE	S98T002227	0		EXTRUD01	SOLID	<u>N/A</u>	<u>Complete</u>		
98000359	U-107 (2)	7	SAMPLE	S98T002227	0		LLIANT01	SOLID	<u>N/A</u>	<u>0</u>		g
98000359	U-107 (2)	8	SAMPLE	S98T002227	0		NOTEBOOK	SOLID	<u>N/A</u>	<u>WBC-N-107</u>		
98000359	U-107 (2)	9	SAMPLE	S98T002227	0		SLDWT-01	SOLID	<u>N/A</u>	<u>411.7</u>		g
98000359	U-107 (2)	10	SAMPLE	S98T002227	0		APPEAR01	SOLID	<u>N/A</u>	<u>Complete</u>		
98000359	U-107 (2)	11	SAMPLE	S98T002227	0		ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>		ml

Final page for worklist # 25164

D. DeLube 8-3-98  
Analyst Signature Date

D. DeLube 8-3-98  
Analyst Signature Date

Approved R. W. Schmitt 8/3/98

Data Entry Comments:

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Units shown for QC (SPK & STD) may not reflect the actual units, DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 25168

Analyst: Dr Instrument: BA000 Book # NA

Method: LO-160-103 Rev/Mod D-0

Worklist Comment: Tank U-107 Core 242R Seg# 6A Riser 2

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	INSTCHK01				EXTRUD01	SOLID	<u>21.00</u>	<u>20.00</u>	N/A	
		2	INSTCHK02				EXTRUD01	SOLID	<u>50.00</u>	<u>50.00</u>	N/A	
98000359	U-107 (2)	3	SAMPLE	S98T002228	0		DLIQVOL1	SOLID	<u>1/A</u>	<u>0</u>		ml
98000359	U-107 (2)	4	SAMPLE	S98T002228	0		DLIQVT01	SOLID	<u>1/A</u>	<u>0</u>		g
98000359	U-107 (2)	5	SAMPLE	S98T002228	0		EST.G/ML	SOLID	<u>1/A</u>	<u>0</u>		g/ml
98000359	U-107 (2)	6	SAMPLE	S98T002228	0		EXTRUD01	SOLID	<u>1/A</u>	<u>Complete</u>		
98000359	U-107 (2)	7	SAMPLE	S98T002228	0		LLIQHT01	SOLID	<u>1/A</u>	<u>0</u>		g
98000359	U-107 (2)	8	SAMPLE	S98T002228	0		NOTEBOOK	SOLID	<u>1/A</u>	<u>WHC-N-1004</u>		
98000359	U-107 (2)	9	SAMPLE	S98T002228	0		SLDWT-01	SOLID	<u>1/A</u>	<u>35.0</u> <u>35.4</u>		g
98000359	U-107 (2)	10	SAMPLE	S98T002228	0		APPEAR01	SOLID	<u>1/A</u>	<u>Complete</u>		
98000359	U-107 (2)	11	SAMPLE	S98T002228	0		ORGVOL01	SOLID	<u>1/A</u>	<u>0</u>		ml

### Final page for worklist # 25168

D. J. Becker 8-3-98  
Analyst Signature Date

D. J. Becker 8-3-98  
Analyst Signature Date

Approved Rev Schneider 8/3/98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 25170

Analyst: drj Instrument: BA000 Book # NA


Method: LO-160-103 Rev/Mod 0-0

Worklist Comment: Tank U-107 Core 242R Seg# 7 Riser# 2 EXTRUSION

GROUP	PROJECT	S TYPE	SAMPLE#	R A	*****TEST*****	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	INSTCHK01		EXTRUD01	SOLID	<u>20.00</u>	<u>20.00</u>	N/A	
		2	INSTCHK02		EXTRUD01	SOLID	<u>50.00</u>	<u>500.00</u>	N/A	
98000359	U-107 (2)	3	SAMPLE	S98T002229	0	DLIQVOL1	SOLID	N/A	<u>&lt;10</u>	ml
98000359	U-107 (2)	4	SAMPLE	S98T002229	0	DLIQWT01	SOLID	N/A	<u>not 0</u>	g <i>RUS 8/2/98</i>
98000359	U-107 (2)	5	SAMPLE	S98T002229	0	EST.G/ML	SOLID	N/A	<u>0</u>	g/ml
98000359	U-107 (2)	6	SAMPLE	S98T002229	0	EXTRUD01	SOLID	N/A	<u>Complete</u>	
98000359	U-107 (2)	7	SAMPLE	S98T002229	0	LLIQWT01	SOLID	N/A	<u>&lt;5</u>	<u>DNK</u> g
98000359	U-107 (2)	8	SAMPLE	S98T002229	0	NOTEBOOK	SOLID	N/A	<u>W4C-N-1004</u>	
98000359	U-107 (2)	9	SAMPLE	S98T002229	0	SLDWT-01	SOLID	N/A	<u>520.8</u>	g
98000359	U-107 (2)	10	SAMPLE	S98T002229	0	APPEAR01	SOLID	N/A	<u>Complete</u>	
98000359	U-107 (2)	11	SAMPLE	S98T002229	0	ORGVOL01	SOLID	N/A	<u>0</u>	ml

Final page for worklist # 25170

*8-3-98*  
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 Analyst Signature  
Date

*8-3-98*  
 Analyst Signature  
Date  
*Approved PW Schroeder 8/3/98*

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 25171

Analyst: darj Instrument: BA000 Book # N/A

Method: LO-160-103 Rev/Mod D-0

Worklist Comment: Tank U-107 Core245 Seg# 5R Riser#7 EXTRUSION

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	AC TUAL	FOUND	DL	UNIT
		1 INSTCHK01			EXTRUD01	SOLID	<u>20.00</u>	<u>20.00</u>	<u>N/A</u>	
		2 INSTCHK02			EXTRUD01	SOLID	<u>500.00</u>	<u>500.00</u>	<u>N/A</u>	
98000401	U-107 (2)	3 SAMPLE	S98T002224	0	DLIQVOL1	SOLID	<u>N/A</u>	<u>250</u>		ml
98000401	U-107 (2)	4 SAMPLE	S98T002224	0	DLIQWT01	SOLID	<u>N/A</u>	<u>386.7</u>		g
98000401	U-107 (2)	5 SAMPLE	S98T002224	0	EST.G/ML	SOLID	<u>N/A</u>	<u>1.55</u>		g/ml
98000401	U-107 (2)	6 SAMPLE	S98T002224	0	EXTRUD01	SOLID	<u>N/A</u>	<u>Complete</u>		
98000401	U-107 (2)	7 SAMPLE	S98T002224	0	LLIQWT01	SOLID	<u>N/A</u>	<u>0</u>		g
98000401	U-107 (2)	8 SAMPLE	S98T002224	0	NOTEBOOK	SOLID	<u>N/A</u>	<u>WTC-N-1004</u>		
98000401	U-107 (2)	9 SAMPLE	S98T002224	0	SLDWT-01	SOLID	<u>N/A</u>	<u>0</u>		g
98000401	U-107 (2)	10 SAMPLE	S98T002224	0	APPEAR01	SOLID	<u>N/A</u>	<u>Complete</u>		
98000401	U-107 (2)	11 SAMPLE	S98T002224	0	ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>		ml

Final page for worklist # 25171

Darj 8-3-98  
Analyst Signature Date

Darj 8-3-98  
Analyst Signature Date  
Approved R.W. Schneider 8/3/98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



# LABCORE Data Entry Template for Worklist# 25172

Analyst: drj Instrument: BA000 Book # N/A

Method: LO-160-103 Rev/Mod D-0

Worklist Comment: Tank U-107 Core 245 Seg# 6R Riser# 7 EXTRUSION

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	INSTCHK01				EXTRUD01	SOLID	<u>20.00</u>	<u>20.00</u>	<u>N/A</u>	
		2	INSTCHK02				EXTRUD01	SOLID	<u>50.00</u>	<u>50.00</u>	<u>N/A</u>	
98000401	U-107 (2)	3	SAMPLE	S98T002225	0		DLIQVOL1	SOLID	<u>N/A</u>	<u>250</u>		ml
98000401	U-107 (2)	4	SAMPLE	S98T002225	0		DLIQWT01	SOLID	<u>N/A</u>	<u>360.7</u>		g
98000401	U-107 (2)	5	SAMPLE	S98T002225	0		EST.G/ML	SOLID	<u>N/A</u>	<u>1.44</u>		g/ml
98000401	U-107 (2)	6	SAMPLE	S98T002225	0		EXTRUD01	SOLID	<u>N/A</u>	<u>Complete</u>		
98000401	U-107 (2)	7	SAMPLE	S98T002225	0		LLIQWT01	SOLID	<u>N/A</u>	<u>&lt;5</u>	<u>DNR</u>	g
98000401	U-107 (2)	8	SAMPLE	S98T002225	0		NOTEBOOK	SOLID	<u>N/A</u>	<u>WIK-N-104</u>		
98000401	U-107 (2)	9	SAMPLE	S98T002225	0		SLDWT-01	SOLID	<u>N/A</u>	<u>0</u>		g
98000401	U-107 (2)	10	SAMPLE	S98T002225	0		APPEAR01	SOLID	<u>N/A</u>	<u>Complete</u>		
98000401	U-107 (2)	11	SAMPLE	S98T002225	0		ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>		ml

Final page for worklist # 25172

D. J. Jick 8-3-98  
Analyst Signature Date

D. J. Jick 8-3-98  
Analyst Signature Date

Approved R. J. Schoedn 8/3/98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit. S = Worklist Slor Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 25173

Analyst: dcj Instrument: BA000 Book # NA

Method: LO-160-103 Rev/Mod 2-0

Worklist Comment: Tank U-107 Core 245 Seg# 7R Riser# 7 EXTRUSION

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	INSTCHK01		EXTRUD01	SOLID	<u>210.00</u>	<u>20.00</u>	N/A	
		2	INSTCHK02		EXTRUD01	SOLID	<u>5700.00</u>	<u>5000</u>	N/A	
98000401	U-107 (2)	3	SAMPLE	S98T002226	0	DLIQVOL1	N/A	<u>35</u>		ml
98000401	U-107 (2)	4	SAMPLE	S98T002226	0	DLIQWT01	N/A	<u>53.4</u>		g
98000401	U-107 (2)	5	SAMPLE	S98T002226	0	EST.G/ML	N/A	<u>1.53</u>		g/ml
98000401	U-107 (2)	6	SAMPLE	S98T002226	0	EXTRUD01	N/A	<u>Complete</u>		
98000401	U-107 (2)	7	SAMPLE	S98T002226	0	LLIQWT01	N/A	<u>83.6</u>		g
98000401	U-107 (2)	8	SAMPLE	S98T002226	0	NOTEBOOK	N/A	<u>wtk-N-104</u>		
98000401	U-107 (2)	9	SAMPLE	S98T002226	0	SLDWT-01	N/A	<u>0</u>		g
98000401	U-107 (2)	10	SAMPLE	S98T002226	0	APPEAR01	N/A	<u>Complete</u>		
98000401	U-107 (2)	11	SAMPLE	S98T002226	0	ORGVOL01	N/A	<u>0</u>		ml

Final page for worklist # 25173

David J. Laban 8-3-98  
Analyst Signature Date

David J. Laban 8-3-98  
Analyst Signature Date

Validation Complete R. Schroeder 8/3/98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 25508

Analyst: drj Instrument: BA000 Book # NA

Method: LO-160-103 Rev/Mod D-0

Worklist Comment: Tank U-107 Core#245 Segment#1 Riser#7 - Extrusion

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 INSTCHK01			EXTRUD01	SOLID	<del>20.00</del> 20.01	20.01	N/A	
		2 INSTCHK02			EXTRUD01	SOLID	<del>500.00</del> 500.03	500.03	N/A	
98000401	U-107 (2)	3 SAMPLE	S98T012409	0	DLIQVOL1	SOLID	N/A	230		ml
98000401	U-107 (2)	4 SAMPLE	S98T012409	0	DLIQWT01	SOLID	N/A	308.6		g
98000401	U-107 (2)	5 SAMPLE	S98T012409	0	EST.G/ML	SOLID	N/A	1.34		g/ml
98000401	U-107 (2)	6 SAMPLE	S98T012409	0	EXTRUD01	SOLID	N/A	complete		
98000401	U-107 (2)	7 SAMPLE	S98T012409	0	LLIQWT01	SOLID	N/A	0		g
98000401	U-107 (2)	8 SAMPLE	S98T012409	0	NOTEBOOK	SOLID	N/A	2-1004		
98000401	U-107 (2)	9 SAMPLE	S98T012409	0	SLDWT-01	SOLID	N/A	92.5		g
98000401	U-107 (2)	10 SAMPLE	S98T012409	0	APPEAR01	SOLID	N/A	complete		
98000401	U-107 (2)	11 SAMPLE	S98T012409	0	ORGVOL01	SOLID	N/A	0		ml

Final page for worklist # 25508

Dr. J. Inker 8-12-98  
Analyst Signature Date

Dr. J. Inker 8-12-98  
Analyst Signature Date

Approved PW Schroeder 8/14/98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 25509

Analyst: drj Instrument: BA000 Book # NA

Method: LO-160-103 Rev/Mod 1.0

Worklist Comment: Tank U-107 Core 242R Segment#8 Riser#2 - Extrusion

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	INSTCHK01				EXTRUD01	SOLID	<u>20.00</u>	<u>20.01</u>	<u>N/A</u>	
		2	INSTCHK02				EXTRUD01	SOLID	<u>500.00</u>	<u>500.02</u>	<u>N/A</u>	
98000359	U-107 (2)	3	SAMPLE	S98T102408	0		DLIQVOL1	SOLID	<u>N/A</u>	<u>0</u>		ml
98000359	U-107 (2)	4	SAMPLE	S98T102408	0		DLIQWT01	SOLID	<u>N/A</u>	<u>0</u>		g
98000359	U-107 (2)	5	SAMPLE	S98T102408	0		EST.G/ML	SOLID	<u>N/A</u>	<u>0</u>		g/ml
98000359	U-107 (2)	6	SAMPLE	S98T102408	0		EXTRUD01	SOLID	<u>N/A</u>	<u>complete</u>		
98000359	U-107 (2)	7	SAMPLE	S98T102408	0		LLIQWT01	SOLID	<u>N/A</u>	<u>0</u>		g
98000359	U-107 (2)	8	SAMPLE	S98T102408	0		NOTEBOOK	SOLID	<u>N/A</u>	<u>N-1004</u>		
98000359	U-107 (2)	9	SAMPLE	S98T102408	0		SLDWT-01	SOLID	<u>N/A</u>	<u>36.5</u>		g
98000359	U-107 (2)	10	SAMPLE	S98T102408	0		APPEAR01	SOLID	<u>N/A</u>	<u>complete</u>		
98000359	U-107 (2)	11	SAMPLE	S98T102408	0		ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>		ml

Final page for worklist # 25509

[Signature] 8-13-98  
Analyst Signature Date

[Signature] 8-13-98  
Analyst Signature Date

Approved RW Schroeder 8/14/98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 25510

Analyst: dcj Instrument: BA000 Book # N/A

Method: LO-160-103 Rev/Mod D-0

Worklist Comment: Tank U-107 Core 245 Segment#2R Riser#7 - Extrusion

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 INSTCHK01			EXTRUD01	SOLID	<u>20.00</u>	<u>20.01</u>	<u>N/A</u>	
		2 INSTCHK02			EXTRUD01	SOLID	<u>502.00</u>	<u>502.02</u>	<u>N/A</u>	
98000401	U-107 (2)	3 SAMPLE	S98T102414	0	DLIQVOL1	SOLID	<u>N/A</u>	<u>250</u>		ml
98000401	U-107 (2)	4 SAMPLE	S98T102414	0	DLIQWT01	SOLID	<u>N/A</u>	<u>384.8</u>		g
98000401	U-107 (2)	5 SAMPLE	S98T102414	0	EST.G/ML	SOLID	<u>N/A</u>	<u>1.54</u>		g/ml
98000401	U-107 (2)	6 SAMPLE	S98T102414	0	EXTRUD01	SOLID	<u>N/A</u>	<u>complete</u>		
98000401	U-107 (2)	7 SAMPLE	S98T102414	0	LLIQWT01	SOLID	<u>N/A</u>	<u>&lt; 5.01 out</u>	<u>return</u>	<u>g</u>
98000401	U-107 (2)	8 SAMPLE	S98T102414	0	NOTEBOOK	SOLID	<u>N/A</u>	<u>W/1004</u>		
98000401	U-107 (2)	9 SAMPLE	S98T102414	0	SLDWT-01	SOLID	<u>N/A</u>	<u>0</u>		g
98000401	U-107 (2)	10 SAMPLE	S98T102414	0	APPEAR01	SOLID	<u>N/A</u>	<u>complete</u>		
98000401	U-107 (2)	11 SAMPLE	S98T102414	0	ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>		ml

Final page for worklist # 25510

D. J. R. Jahn 8-12-98  
Analyst Signature Date

D. J. R. Jahn 8-10-98  
Analyst Signature Date

Approved RW Schneider 8/14/98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 25511

Analyst: drj Instrument: BA000 Book # NA

Method: LO-160-103 Rev/Mod D-0

Worklist Comment: Tank U-107 Core 245 Segment#3 Riser#7 - Extrusion

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	INSTCHK01		EXTRUD01	SOLID	<u>20.00</u>	<u>20.01</u>	<u>N/A</u>	
		2	INSTCHK02		EXTRUD01	SOLID	<u>500.00</u>	<u>500.02</u>	<u>N/A</u>	
98000401	U-107 (2)	3	SAMPLE	S98T012410	0	DLIQVOL1	SOLID	<u>N/A</u>	<u>0</u>	ml
98000401	U-107 (2)	4	SAMPLE	S98T012410	0	DLIQHT01	SOLID	<u>N/A</u>	<u>0</u>	g
98000401	U-107 (2)	5	SAMPLE	S98T012410	0	EST.G/ML	SOLID	<u>N/A</u>	<u>0</u>	g/ml
98000401	U-107 (2)	6	SAMPLE	S98T012410	0	EXTRUD01	SOLID	<u>N/A</u>	<u>Complete</u>	
98000401	U-107 (2)	7	SAMPLE	S98T012410	0	LLIQHT01	SOLID	<u>N/A</u>	<u>55</u>	<u>Did not catch</u>
98000401	U-107 (2)	8	SAMPLE	S98T012410	0	NOTEBOOK	SOLID	<u>N/A</u>	<u>11-1004</u>	
98000401	U-107 (2)	9	SAMPLE	S98T012410	0	SLDWT-01	SOLID	<u>N/A</u>	<u>373.9</u>	g
98000401	U-107 (2)	10	SAMPLE	S98T012410	0	APPEAR01	SOLID	<u>N/A</u>	<u>Complete</u>	
98000401	U-107 (2)	11	SAMPLE	S98T012410	0	ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>	ml

Final page for worklist # 25511

D.R. Jahn 8-12-98  
Analyst Signature Date

D.R. Jahn 8-12-98  
Analyst Signature Date  
Approved RW Schroeder 8/14/98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 25512


Analyst: DJ Instrument: BA000 Book # \_\_\_\_\_

Method: LO-160-103 Rev/Mod DO

Worklist Comment: Tank U-107 Core 245 Segment#4 Riser#7 - Extrusion

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	INSTCHK01				EXTRUD01	SOLID	<u>20.00</u>	<u>20.00</u>	<u>N/A</u>	
		2	INSTCHK02				EXTRUD01	SOLID	<u>500.00</u>	<u>500.05</u>	<u>N/A</u>	
98000401	U-107 (2)	3	SAMPLE	S98T02415	0		DLIQVOL1	SOLID	<u>N/A</u>	<u>0</u>		ml
98000401	U-107 (2)	4	SAMPLE	S98T02415	0		DLIQWT01	SOLID	<u>N/A</u>	<u>0</u>		g
98000401	U-107 (2)	5	SAMPLE	S98T02415	0		EST.G/ML	SOLID	<u>N/A</u>	<u>0</u>		g/ml
98000401	U-107 (2)	6	SAMPLE	S98T02415	0		EXTRUD01	SOLID	<u>N/A</u>	<u>Complete</u>		
98000401	U-107 (2)	7	SAMPLE	S98T02415	0		LLIQWT01	SOLID	<u>N/A</u>	<u>0</u>		g
98000401	U-107 (2)	8	SAMPLE	S98T02415	0		NOTEBOOK	SOLID	<u>N/A</u>	<u>WTC-N-1004</u>		
98000401	U-107 (2)	9	SAMPLE	S98T02415	0		SLDWT-01	SOLID	<u>N/A</u>	<u>409.5</u>		g
98000401	U-107 (2)	10	SAMPLE	S98T02415	0		APPEAR01	SOLID	<u>N/A</u>	<u>Complete</u>		
98000401	U-107 (2)	11	SAMPLE	S98T02415	0		ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>		ml

Final page for worklist # 25512

 8/14/98  
Analyst Signature Date

 8/14/98  
Analyst Signature Date

Approved Pw Schneider 8/14/98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 25513


Analyst: \_\_\_\_\_ Instrument: BA000 \_\_\_\_\_ Book # \_\_\_\_\_


Method: LO-160-103 Rev/Mod DO

Worklist Comment: Tank U-107 Core 245 Segment#5A Riser#7 - Extrusion

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	INSTCHK01				EXTRUD01	SOLID	<u>20.00</u>	<u>20.00</u>	<u>N/A</u>	
		2	INSTCHK02				EXTRUD01	SOLID	<u>500.00</u>	<u>500.05</u>	<u>N/A</u>	
98000401	U-107 (2)	3	SAMPLE	S98T(02411	0		DLIQVOL1	SOLID	<u>N/A</u>	<u>0</u>		ml
98000401	U-107 (2)	4	SAMPLE	S98T(02411	0		DLIQWT01	SOLID	<u>N/A</u>	<u>0</u>		g
98000401	U-107 (2)	5	SAMPLE	S98T(02411	0		EST.G/ML	SOLID	<u>N/A</u>	<u>0</u>		g/ml
98000401	U-107 (2)	6	SAMPLE	S98T(02411	0		EXTRUD01	SOLID	<u>N/A</u>	<u>complete</u>		
98000401	U-107 (2)	7	SAMPLE	S98T(02411	0		LLIQWT01	SOLID	<u>N/A</u>	<u>0</u>		g
98000401	U-107 (2)	8	SAMPLE	S98T(02411	0		NOTEBOOK	SOLID	<u>N/A</u>	<u>with 10-1004</u>		
98000401	U-107 (2)	9	SAMPLE	S98T(02411	0		SLDWT-01	SOLID	<u>N/A</u>	<u>54.2</u>		g
98000401	U-107 (2)	10	SAMPLE	S98T(02411	0		APPEAR01	SOLID	<u>N/A</u>	<u>complete</u>		
98000401	U-107 (2)	11	SAMPLE	S98T(02411	0		ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>		ml

Final page for worklist # 25513

  
Analyst Signature \_\_\_\_\_ Date 8/14/98

  
Analyst Signature \_\_\_\_\_ Date 8/14/98

Approved R. W. Schaefer 8/14/98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



# LABCORE Data Entry Template for Worklist# 25514

Analyst: DS Instrument: BA000 Book # \_\_\_\_\_

Method: LO-160-103 Rev/Mod D-0

Worklist Comment: Tank U-107 Core 245 Segment#6 Riser#7 - Extrusion

GROUP	PROJECT	S TYPE	SAMPL#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 INSTCHK01			EXTRUD01	SOLID	<u>20.00</u>	<u>20.00</u>	N/A	
		2 INSTCHK02			EXTRUD01	SOLID	<u>500.00</u>	<u>500.05</u>	N/A	
98000401	U-107 (2)	3 SAMPLE	S98T102412	0	DLIQVOL1	SOLID	N/A	<u>0</u>		ml
98000401	U-107 (2)	4 SAMPLE	S98T102412	0	DLIGWT01	SOLID	N/A	<u>0</u>		g
98000401	U-107 (2)	5 SAMPLE	S98T102412	0	EST..G/ML	SOLID	N/A	<u>0</u>		g/mL
98000401	U-107 (2)	6 SAMPLE	S98T102412	0	EXTRUD01	SOLID	N/A	<u>Complete</u>		
98000401	U-107 (2)	7 SAMPLE	S98T102412	0	LLIGWT01	SOLID	N/A	<u>0</u>		g
98000401	U-107 (2)	8 SAMPLE	S98T102412	0	NOTEBOOK	SOLID	N/A	<u>WTC-N-1004</u>		
98000401	U-107 (2)	9 SAMPLE	S98T102412	0	SLDWT-01	SOLID	N/A	<u>80.1</u>		g
98000401	U-107 (2)	10 SAMPLE	S98T102412	0	APPEAR01	SOLID	N/A	<u>Complete</u>		
98000401	U-107 (2)	11 SAMPLE	S98T102412	0	ORGVOL01	SOLID	N/A	<u>0</u>		ml

**Final page for worklist # 25514**

[Signature] 8/14/98  
Analyst Signature Date

[Signature] 8/14/98  
Analyst Signature Date

Approved [Signature] 8/14/98

Data Entry Comments:

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Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

**HNF-1661 REV. 0**

**SAMPLE PREPARATIONS**

# LBCORE Data Entry Template for Worklist# 25125

Analyst: AKL Instrument: FUS01 Book # NA  
 Method: LA-549-141 Rev/Mod GO  
 Worklist Comment: U107, FUSION01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 BLNK-PREP			FUSION01	SOLID		<u>250</u>	N/A	g/L
9800358	U-107 (2)	2 SAMPLE	598T002041	0 F	FUSION01	SOLID	N/A	<u>20432</u>		g/L
9800358	U-107 (2)	3 SAMPLE	598T002041	0	DOSE-02	SOLID	N/A	<u>4.5</u>		mrad/hour
9800358	U-107 (2)	4 DUP	598T002041	0 F	FUSION01	SOLID	<u>20432</u>	<u>20746</u>	N/A	g/L
9800358	U-107 (2)	5 DUP	598T002041	0	DOSE-02	SOLID	<u>4.5</u>	<u>6.6</u>	N/A	mrad/hour

Final page for worklist # 25125

Alita Jensen 8/26/98  
 Analyst Signature Date

AKL 8/27/98  
 Analyst Signature Date

W. Darn 8/26/98

Verified by: TE Wright 8/27/98

Transit 598T002039 → 598T002041

Data Entry Comments:

Units shown for QC (SEK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 25703

Analyst: AVL Instrument: FUS01 Book # VA

Method: LA-549-141 Rev/Mod GO

Worklist Comment: U107, FUSION01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 BLNK-PREP			FUSION01	SOLID		250	N/A	g/L
98000359	U-107 (2)	2 SAMPLE	S98T002268	O F	FUSION01	SOLID	N/A	20580		g/L
• 5145 →										
98000359	U-107 (2)	3 SAMPLE	S98T002268	O	DOSE-02	SOLID	N/A	6		mrad/hour
98000359	U-107 (2)	4 DUP	S98T002268	O F	FUSION01	SOLID	2.0540	2075	N/A	g/L
• 5189 →										
98000359	U-107 (2)	5 DUP	S98T002268	O	DOSE-02	SOLID	6	6	N/A	mrad/hour
98000359	U-107 (2)	6 SAMPLE	S98T002274	O F	FUSION01	SOLID	N/A	20164		g/L
• 5041 →										
98000359	U-107 (2)	7 SAMPLE	S98T002274	O	DOSE-02	SOLID	N/A	6		mrad/hour
98000359	U-107 (2)	8 DUP	S98T002274	O F	FUSION01	SOLID	2.0164	2.0036	N/A	g/L
• 5009 →										
98000359	U-107 (2)	9 DUP	S98T002274	O	DOSE-02	SOLID	6	6	N/A	mrad/hour
98000358	U-107 (2)	10 SAMPLE	S98T002328	O F	FUSION01	SOLID	N/A	2.0268		g/L
• 5067 →										
98000358	U-107 (2)	11 SAMPLE	S98T002328	O	DOSE-02	SOLID	N/A	4.5		mrad/hour
98000358	U-107 (2)	12 DUP	S98T002328	O F	FUSION01	SOLID	2.0268	2.0124	N/A	g/L
• 5031 →										
98000358	U-107 (2)	13 DUP	S98T002328	O	DOSE-02	SOLID	4.5	4.5	N/A	mrad/hour

Final page for worklist # 25703

Olivia Hudson 8/26/98  
Analyst Signature Date

AVL 8-27-98  
Analyst Signature Date

W. J. Dando 8-26-98

Verified by: newright 8/26/98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Parent S98T002266 → S98T002268  
Parent S98T002270 → S98T002274  
Parent S98T002327 → S98T002328

# LABCOE Data Entry Template for Worklist# 25704

Analyst: AKL Instrument: FUS01 Book # DA

Method: LA-549-141 Rev/Mod GD

Worklist Comment: U107, FUSION01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 BLNK-PREP			FUSION01	SOLID		<u>250</u>	N/A	g/L
98000358	U-107 (2)	2 SAMPLE	98T002335	0 F	FUSION01	SOLID	N/A	<u>2.0296</u>		g/L
98000358	U-107 (2)	3 SAMPLE	98T002335	0	DOSE-02	SOLID	N/A	<u>15</u>		mrad/hour
98000358	U-107 (2)	4 DUP	98T002335	0 F	FUSION01	SOLID	<u>2.0296</u>	<u>2.0504</u>	N/A	g/L
98000358	U-107 (2)	5 DUP	98T002335	0	DOSE-02	SOLID	<u>15</u>	<u>15</u>	N/A	mrad/hour
98000358	U-107 (2)	6 SAMPLE	98T002336	0 F	FUSION01	SOLID	N/A	<u>1.9848</u>		g/L
98000358	U-107 (2)	7 SAMPLE	98T002336	0	DOSE-02	SOLID	N/A	<u>30</u>		mrad/hour
98000358	U-107 (2)	8 DUP	98T002336	0 F	FUSION01	SOLID	<u>1.9848</u>	<u>1.9676</u>	N/A	g/L
98000358	U-107 (2)	9 DUP	98T002336	0	DOSE-02	SOLID	<u>30</u>	<u>30</u>	N/A	mrad/hour
98000358	U-107 (2)	10 SAMPLE	98T002343	0 F	FUSION01	SOLID	N/A	<u>2.0176</u>		g/L
98000358	U-107 (2)	11 SAMPLE	98T002343	0	DOSE-02	SOLID	N/A	<u>5</u>		mrad/hour
98000358	U-107 (2)	12 DUP	98T002343	0 F	FUSION01	SOLID	<u>2.0176</u>	<u>2.0256</u>	N/A	g/L
98000358	U-107 (2)	13 DUP	98T002343	0	DOSE-02	SOLID	<u>5</u>	<u>5</u>	N/A	mrad/hour

## Final page for worklist # 25704

Analyst Signature: Mita Heron Date: 8/27/98  
Smiley - 8/27/98

Analyst Signature: newright Date: 8/27/98  
Verified by: Sybil 2 Chum 8/28/98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Parent 598T002333 → 598T002335  
Parent 598T002334 → 598T002336  
Parent 598T002342 → 598T002343  
**203**

**LABCORE Data Entry Template for Worklist# 26113**

**Analyst:** gay **Instrument:** FUS01 **Book #** 111A  
**Method:** LA-549-141 Rev/Mod G-φ  
**Worklist Comment:** U107, FUSION01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT	
		1	BLNK-PREP		FUSION01	SOLID	<u>1</u>	<u>250</u>	<u>N/A</u>	g/L	
98000401	U-107 (2)	2	SAMPLE 15100g → 250L	0	F	FUSION01	SOLID	<u>N/A</u>	<u>2.0400</u>	g/L	
98000401	U-107 (2)	3	SAMPLE 15100g → 250L	0		DOSE-02	SOLID	<u>N/A</u>	<u>15</u>	mrad/hour	
98000401	U-107 (2)	4	DUP 14898g → 250L	0	F	FUSION01	SOLID	<u>2.0400</u>	<u>1.9592</u>	<u>N/A</u>	g/L
98000401	U-107 (2)	5	DUP 14898g → 250L	0		DOSE-02	SOLID	<u>15</u>	<u>15</u>	<u>N/A</u>	mrad/hour
98000401	U-107 (2)	6	SAMPLE 15085g → 250L	0	F	FUSION01	SOLID	<u>N/A</u>	<u>2.0340</u>	g/L	
98000401	U-107 (2)	7	SAMPLE 15085g → 250L	0		DOSE-02	SOLID	<u>N/A</u>	<u>9</u>	mrad/hour	
98000401	U-107 (2)	8	DUP 15045g → 250L	0	F	FUSION01	SOLID	<u>2.0340</u>	<u>2.0180</u>	<u>N/A</u>	g/L
98000401	U-107 (2)	9	DUP 15045g → 250L	0		DOSE-02	SOLID	<u>9</u>	<u>12</u>	<u>N/A</u>	mrad/hour
98000401	U-107 (2)	10	SAMPLE 15100g → 250L	0	F	FUSION01	SOLID	<u>N/A</u>	<u>2.0400</u>	g/L	
98000401	U-107 (2)	11	SAMPLE 15100g → 250L	0		DOSE-02	SOLID	<u>N/A</u>	<u>12</u>	mrad/hour	
98000401	U-107 (2)	12	DUP 15015g → 250L	0	F	FUSION01	SOLID	<u>2.0400</u>	<u>2.0060</u>	<u>N/A</u>	g/L
98000401	U-107 (2)	13	DUP 15015g → 250L	0		DOSE-02	SOLID	<u>12</u>	<u>15</u>	<u>N/A</u>	mrad/hour

**Final page for worklist # 26113**

Alta Humm 9/15/98  
 Analyst Signature Date

M. B. ... 9/17/98  
 Analyst Signature Date

Verified by: Sybil ... 9/17/98

Data Entry Comments:

Sample 198T002528 not homogeneous; mostly dark green liquid w/ some crystals on bottom - unable to pull only solids, so mixed and pulled liquid.

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Parent

598T002528 → 598T002529  
 598T002537 → 598T002539  
 598T002543 → 598T002545

# LABCORE Data Entry Template for Worklist# 26114

Analyst: gaj Instrument: FUS01 Book # N/A  
 Method: LA-549-141 Rev/Mod. G-0  
 Worklist Comment: U107, FUSION01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 BLNK-PREP			FUSION01	SOLID	<u>1</u>	<u>250</u>	<u>N/A</u>	<u>g/L</u>
98000401	U-107 (2)	2 SAMPLE	98T002554	0 F	FUSION01	SOLID	<u>N/A</u>	<u>2.0480</u>		<u>g/L</u>
			<u>151209</u>	<u>7</u>						
98000401	U-107 (2)	3 SAMPLE	98T002554	0	DOSE-02	SOLID	<u>N/A</u>	<u>15</u>		<u>mrad/hour</u>
98000401	U-107 (2)	4 DUP	98T002554	0 F	FUSION01	SOLID	<u>2.0480</u>	<u>2.0500</u>	<u>N/A</u>	<u>g/L</u>
			<u>151257</u>	<u>7</u>						
98000401	U-107 (2)	5 DUP	98T002554	0	DOSE-02	SOLID	<u>15</u>	<u>15</u>	<u>N/A</u>	<u>mrad/hour</u>
98000401	U-107 (2)	6 SAMPLE	98T002561	0 F	FUSION01	SOLID	<u>N/A</u>	<u>2.0496</u>		<u>g/L</u>
			<u>51249</u>	<u>7</u>						
98000401	U-107 (2)	7 SAMPLE	98T002561	0	DOSE-02	SOLID	<u>N/A</u>	<u>30</u>		<u>mrad/hour</u>
98000401	U-107 (2)	8 DUP	98T002561	0 F	FUSION01	SOLID	<u>2.0496</u>	<u>2.0280</u>	<u>N/A</u>	<u>g/L</u>
			<u>150732</u>	<u>7</u>						
98000401	U-107 (2)	9 DUP	98T002561	0	DOSE-02	SOLID	<u>30</u>	<u>30</u>	<u>N/A</u>	<u>mrad/hour</u>
98000401	U-107 (2)	10 SAMPLE	98T002566	0 F	FUSION01	SOLID	<u>N/A</u>	<u>2.0576</u>		<u>g/L</u>
			<u>51449</u>	<u>7</u>						
98000401	U-107 (2)	11 SAMPLE	98T002566	0	DOSE-02	SOLID	<u>N/A</u>	<u>6</u>		<u>mrad/hour</u>
98000401	U-107 (2)	12 DUP	98T002566	0 F	FUSION01	SOLID	<u>2.0576</u>	<u>2.0028</u>	<u>N/A</u>	<u>g/L</u>
			<u>150079</u>	<u>7</u>						
98000401	U-107 (2)	13 DUP	98T002566	0	DOSE-02	SOLID	<u>6</u>	<u>6</u>	<u>N/A</u>	<u>mrad/hour</u>

Final page for worklist # 26114

Aletia Hinson 9/15/98  
 Analyst Signature Date

ANB 9/17/98  
 Analyst Signature Date

Verified by: Sylvia Z. Phoenix

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Parent  
 598T002552 → 598T002554  
 598T002559 → 598T002561  
 598T002565 → 598T002566 205

# LABCORE Data Entry Template for Worklist# 26272

Analyst: ggy Instrument: FUS01 \_\_\_\_\_ Book # N/A

Method: LA-549-141 Rev/Mod G-Ø

Worklist Comment: U107, FUSION01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK-PREP		FUSION01	SOLID	<u>1</u>	<u>250</u>	N/A	g/L
98000401	U-107 (2)	2	SAMPLE S98T002572	0 F	FUSION01	SOLID	N/A	<u>1.9764</u>		g/L
98000401	U-107 (2)	3	SAMPLE S98T002572	0	DOSE-02	SOLID	N/A	<u>1.5 mrad/hr</u>		mrad/hour
98000401	U-107 (2)	4	DUP S98T002572	0 F	FUSION01	SOLID	<u>1.9964</u>	<u>1.9764</u>	N/A	g/L
98000401	U-107 (2)	5	DUP S98T002572	0	DOSE-02	SOLID		<u>1.8</u>	N/A	mrad/hour

Final page for worklist # 26272

Sue Lee  
[Signature] 9-23-98  
Analyst Signature Date

[Signature] 9/24/98  
Analyst Signature Date  
Verified by: [Signature]

Parent

S98T002570 → S98T002572

Data Entry Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



**LABCORE Data Entry Template for Worklist# 26284**

Analyst: gry Instrument: FUS01 Bottle # N/A

Method: LA-549-141 Rev/Mod G-φ

Worklist Comment: U107, FUSION01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK-PREP		FUSION01	SOLID	<u>1.250</u>	<u>N/A</u>		g/L
98000359	U-107 (2)	2	SAMPLE S98T002428	0 F	FUSION01	SOLID	<u>N/A</u>	<u>2.0348</u>		g/L
98000359	U-107 (2)	3	SAMPLE S98T002428	0	DOSE-02	SOLID	<u>N/A</u>	<u>11</u>		mrad/hour
98000359	U-107 (2)	4	DUP S98T002428	0 F	FUSION01	SOLID	<u>2.0348</u>	<u>2.032</u>	<u>N/A</u>	g/L
98000359	U-107 (2)	5	DUP S98T002428	0	DOSE-02	SOLID	<u>11</u>	<u>11</u>	<u>N/A</u>	mrad/hour
98000359	U-107 (2)	6	SAMPLE S98T002434	0 F	FUSION01	SOLID	<u>N/A</u>	<u>2.0308</u>		g/L
98000359	U-107 (2)	7	SAMPLE S98T002434	0	DOSE-02	SOLID	<u>N/A</u>	<u>&lt;10</u>		mrad/hour
98000359	U-107 (2)	8	DUP S98T002434	0 F	FUSION01	SOLID	<u>2.0308</u>	<u>1.972</u>	<u>N/A</u>	g/L
98000359	U-107 (2)	9	DUP S98T002434	0	DOSE-02	SOLID	<u>&lt;10</u>	<u>&lt;10</u>	<u>N/A</u>	mrad/hour
98000359	U-107 (2)	10	SAMPLE S98T002440	0 F	FUSION01	SOLID	<u>N/A</u>	<u>2.0404</u>		g/L
98000359	U-107 (2)	11	SAMPLE S98T002440	0	DOSE-02	SOLID	<u>N/A</u>	<u>11</u>		mrad/hour
98000359	U-107 (2)	12	DUP S98T002440	0 F	FUSION01	SOLID	<u>2.0404</u>	<u>2.032</u>	<u>N/A</u>	g/L
98000359	U-107 (2)	13	DUP S98T002440	0	DOSE-02	SOLID	<u>11</u>	<u>11</u>	<u>N/A</u>	mrad/hour

**Final page for worklist # 26284**

Analyst Signature: [Signature] Date: 9-24-98

Verified by: [Signature] Date: 9/24/98

Parent

Data Entry Comments:  
 S98T002426 → S98T002428  
 S98T002432 → S98T002434  
 S98T002438 → S98T002440

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

**LABCORP Data Entry Template for Worklist# 26285**

Analyst: gay Instrument: FUS01 Book # N/A  
 Method: LA-549-141 Rev/Mod 5-0  
 Worklist Comment: U107, FUSION01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK-PREP		FUSION01	SOLID	<u>1.250</u>		N/A	g/L
98000359	U-107 (2)	2	SAMPLE <u>15088g → .250g</u>	S98T002447	0 F	FUSION01	SOLID	<u>N/A 2.0352</u>		g/L
98000359	U-107 (2)	3	SAMPLE	S98T002447	0	DOSE-02	SOLID	<u>N/A 22</u>		mrad/hour
98000359	U-107 (2)	4	DUP <u>15021g → .250g</u>	S98T002447	0 F	FUSION01	SOLID	<u>2.0352 2.0084</u>	N/A	g/L
98000359	U-107 (2)	5	DUP	S98T002447	0	DOSE-02	SOLID	<u>22 22</u>	N/A	mrad/hour
98000359	U-107 (2)	6	SAMPLE <u>15042g → .250g</u>	S98T002452	0 F	FUSION01	SOLID	<u>N/A 2.0168</u>		g/L
98000359	U-107 (2)	7	SAMPLE	S98T002452	0	DOSE-02	SOLID	<u>N/A 9</u>		mrad/hour
98000359	U-107 (2)	8	DUP <u>15099g → .250g</u>	S98T002452	0 F	FUSION01	SOLID	<u>2.0168 2.0376</u>	N/A	g/L
98000359	U-107 (2)	9	DUP	S98T002452	0	DOSE-02	SOLID	<u>9 9</u>	N/A	mrad/hour
98000359	U-107 (2)	10	SAMPLE <u>15059g → .250g</u>	S98T002520	0 F	FUSION01	SOLID	<u>N/A 2.0236</u>		g/L
98000359	U-107 (2)	11	SAMPLE	S98T002520	0	DOSE-02	SOLID	<u>N/A 11.25</u>		mrad/hour
98000359	U-107 (2)	12	DUP <u>14990g → .250g</u>	S98T002520	0 F	FUSION01	SOLID	<u>2.0236 1.9960</u>	N/A	g/L
98000359	U-107 (2)	13	DUP	S98T002520	0	DOSE-02	SOLID	<u>11.25 11.25</u>	N/A	mrad/hour

**Final page for worklist # 26285**

[Signature] 9-29-98  
 Analyst Signature Date

[Signature] 9/29/98  
 Analyst Signature Date

Parent

Verified by: [Signature]

Data Entry Comments: S98T002444 → S98T002447  
S98T002450 → S98T002452  
S98T002519 → S98T002520

Sample # S98T002444 mostly liquid w/ some crystals;

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Allquot Code.

Tried to get representative sample.  
w/ faxed to 373-1180 9-29-98 gey.

# LABCORE Data Entry Template for Worklist# 27527

Analyst: gll Instrument: FUS01 Book # NA

Method: LA-549-141 Rev/Mod G-0

Worklist Comment: U107, FUSION01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK-PREP		FUSION01	SOLID	<u>1</u>	<u>.250</u>	N/A	g/L
98000401	U-107 (2)	2	SAMPLE	S98T003337	<u>0 F</u>	FUSION01	SOLID	N/A	<u>1.9872</u>	g/L
				<u>0.4968</u>	<u>→ .250</u>					
98000401	U-107 (2)	3	SAMPLE	S98T003337	<u>0</u>	DOSE-02	SOLID	N/A	<u>10.2</u>	mrad/hour
98000401	U-107 (2)	4	DUP	S98T003337	<u>0 F</u>	FUSION01	SOLID	<u>1.9872</u>	<u>2.0280</u>	N/A g/L
				<u>0.5070</u>	<u>→ .250</u>					
98000401	U-107 (2)	5	DUP	S98T003337	<u>0</u>	DOSE-02	SOLID	<u>10.2</u>	<u>8.7</u>	N/A mrad/hour

Final page for worklist # 27527

gll Analyst Signature 12-11-98 Date

Laura Z Charne Analyst Signature 12/15/98 Date

Verified by: M. B. Bivins 12/17/98

PARENT

S98T003335 → S98T003337

Data Entry Comments: APT: Lisa Valdez  
Added 20 ml of Nitric.

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

**LABCORE Data Entry Template for Worklist# 25122**

Analyst: Sam Instrument: H2001 Book # N/A

Method: LA-504-101 Rev/Mod MD-1-27-98  
ESGO

Worklist Comment: U107, H2ODIG01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK-PREP		H2ODIG01	SOLID	<u>1</u>	<u>.100</u>	N/A	g/L
98000358	U-107 (2)	2	SAMPLE	S98T002043	0 W	H2ODIG01	N/A	<u>5.000</u>		g/L
				<u>5000</u>	<u>7</u>					
98000358	U-107 (2)	3	SAMPLE	S98T002043	0	DOSE-D2	N/A	<u>4</u>		mrad/4our
				<u>7</u>						
98000358	U-107 (2)	4	DUP	S98T002043	0 W	H2ODIG01	<u>5.000</u>	<u>5.056</u>	N/A	g/L
				<u>5056</u>	<u>7</u>					
98000358	U-107 (2)	5	DUP	S98T002043	0	DOSE-D2	<u>4</u>	<u>4</u>	N/A	mrad/4our
				<u>7</u>						

**Final page for worklist # 25122**

Sam Salazar 9-17-98  
Analyst Signature Date

Analyst Signature Date

*Validated 9/18/98*  
*J. Bond*

Data Entry Comments: HPI - Sam SALAZAR

DATA ENTRY 9-17-98

John Wauell

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

**LABCORE Data Entry Template for Worklist# 25700**

Analyst: Janice Instrument: H2001 Book: # N/A

Method: LA-504-101 Rev/Mol <sup>1-2-94</sup> FOGO

Worklist Comment: U107, H2ODIG01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 BLNK-PREP			H20DIG01	SOLID	<u>1</u>	<u>.100</u>	N/A	g/L
98000359	U-107 (2)	2 SAMPLE	S98T002270	0 W	H20DIG01	SOLID	N/A	<u>4.967</u>		g/L
98000359	U-107 (2)	3 SAMPLE	S98T002270	0	DOSE-02	SOLID	N/A	<u>6</u>		mrad/hour
98000359	U-107 (2)	4 DUP	S98T002270	0 W	H20DIG01	SOLID	<u>4.967</u>	<u>4.939</u>	N/A	g/L
98000359	U-107 (2)	5 DUP	S98T002270	0	DOSE-02	SOLID	<u>6</u>	<u>5</u>	N/A	mrad/hour
98000359	U-107 (2)	6 SAMPLE	S98T002276	0 W	H20DIG01	SOLID	N/A	<u>5.137</u>		g/L
98000359	U-107 (2)	7 SAMPLE	S98T002276	0	DOSE-02	SOLID	N/A	<u>6</u>		mrad/hour
98000359	U-107 (2)	8 DUP	S98T002276	0 W	H20DIG01	SOLID	<u>5.137</u>	<u>5.006</u>	N/A	g/L
98000359	U-107 (2)	9 DUP	S98T002276	0	DOSE-02	SOLID	<u>6</u>	<u>5</u>	N/A	mrad/hour
98000358	U-107 (2)	10 SAMPLE	S98T002330	0 W	H20DIG01	SOLID	N/A	<u>5.139</u>		g/L
98000358	U-107 (2)	11 SAMPLE	S98T002330	0	DOSE-02	SOLID	N/A	<u>3</u>		mrad/hour
98000358	U-107 (2)	12 DUP	S98T002330	0 W	H20DIG01	SOLID	<u>5.137</u>	<u>4.937</u>	N/A	g/L
98000358	U-107 (2)	13 DUP	S98T002330	0	DOSE-02	SOLID	<u>3</u>	<u>3</u>	N/A	mrad/hour

**Final page for worklist # 25700**

Janice Colwell 10/30/98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments: HPT - Kathy Alessio Validated by: Paul H. Peng  
DATA ENTRY 10-30-98  
J. Howell 11/2/98

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Parent S98T002266 → S98T002270  
Parent S98T002272 → S98T002276  
Parent S98T002327 → S98T002330  
211

# LABCORE Data Entry Template for Worklist# 25701

Analyst: Jay 2 Instrument: H2001 Book # N/A

Method: LA-504-101 Rev/Mod 6-0

Ensure parent samples have dosr rates @ 30 cpi  
≤50 mrem/hr prior to performing g this prep.

Worklist Comment: U107, ACIDIG01, tdm

H2001G01 TRB 8/20/98

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 BLNK-PREP				H2001G01	SOLID	<u>1</u>	<u>.100</u>	<u>N/A</u> g/L
98000358	U-107 (2)	2 SAMPLE	S98T002339	0 W		H2001G01	SOLID	<u>N/A</u>	<u>4.975</u>	g/L
98000358	U-107 (2)	3 SAMPLE	S98T002339	0		DOSE-02	SOLID	<u>N/A</u>	<u>9</u>	mrad/hour
98000358	U-107 (2)	4 DUP	S98T002339	0 W		H2001G01	SOLID	<u>4.975</u>	<u>5.044</u>	<u>N/A</u> g/L
98000358	U-107 (2)	5 DUP	S98T002339	0		DOSE-02	SOLID	<u>9</u>	<u>9</u>	<u>N/A</u> mrad/hour
98000358	U-107 (2)	6 SAMPLE	S98T002340	0 W		H2001G01	SOLID	<u>N/A</u>	<u>5.131</u>	g/L
98000358	U-107 (2)	7 SAMPLE	S98T002340	0		DOSE-02	SOLID	<u>N/A</u>	<u>9</u>	mrad/hour
98000358	U-107 (2)	8 DUP	S98T002340	0 W		H2001G01	SOLID	<u>5.131</u>	<u>4.967</u>	<u>N/A</u> g/L
98000358	U-107 (2)	9 DUP	S98T002340	0		DOSE-02	SOLID	<u>9</u>	<u>9</u>	<u>N/A</u> mrad/hour
98000358	U-107 (2)	10 SAMPLE	S98T002345	0 W		H2001G01	SOLID	<u>N/A</u>	<u>5.022</u>	g/L
98000358	U-107 (2)	11 SAMPLE	S98T002345	0		DOSE-02	SOLID	<u>N/A</u>	<u>9</u>	mrad/hour
98000358	U-107 (2)	12 DUP	S98T002345	0 W		H2001G01	SOLID	<u>5.022</u>	<u>5.006</u>	<u>N/A</u> g/L
98000358	U-107 (2)	13 DUP	S98T002345	0		DOSE-02	SOLID	<u>9</u>	<u>9</u>	<u>N/A</u> mrad/hour

## Final page for worklist # 25701

[Signature] 11/13/98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments: HPT- Bill Bishop Validated by: [Signature]  
DATA ENTRY 11-13-98 [Signature] 11/16/98

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Parent S98T002333 → S98T002339  
Parent S98T002334 → S98T002340  
Parent S98T002344 → S98T002345

**LABCORE Data Entry Template for Worklist# 26111**

Analyst: PL2 Instrument: H2001 Book: # MLA  
 Method: LA-504-101 Rev/Mod GFD LA  
 Worklist Comment: U107, H20DIG01, tdm.

Ensure parent samples have dose rates @ 30 cm <50 mrem/hr prior to performing this prep.

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK-PREP		H20D1G01	SOLID	<u>1</u>	<u>.100</u>	N/A	g/L
98000401	U-107 (2)	2	SAMPLE S98T002531 0 W		H20D1G01	SOLID	N/A	<u>4.979</u>		g/L
98000401	U-107 (2)	3	SAMPLE S98T002531 0	<u>→ .100 L</u>	DOSE-02	SOLID	N/A	<u>7</u>		mrad/hour
98000401	U-107 (2)	4	DUP S98T002531 0 W		H20D1G01	SOLID	<u>4.979</u>	<u>5.073</u>	N/A	g/L
98000401	U-107 (2)	5	DUP S98T002531 0	<u>→ .100 L</u>	DOSE-02	SOLID	<u>7</u>	<u>7</u>	N/A	mrad/hour
98000401	U-107 (2)	6	SAMPLE S98T002541 0 W		H20D1G01	SOLID	N/A	<u>5.105</u>		g/L
98000401	U-107 (2)	7	SAMPLE S98T002541 0	<u>→ .100 L</u>	DOSE-02	SOLID	N/A	<u>5</u>		mrad/hour
98000401	U-107 (2)	8	DUP S98T002541 0 W		H20D1G01	SOLID	<u>5.105</u>	<u>4.985</u>	N/A	g/L
98000401	U-107 (2)	9	DUP S98T002541 0	<u>→ .100 L</u>	DOSE-02	SOLID	<u>5</u>	<u>5</u>	N/A	mrad/hour
98000401	U-107 (2)	10	SAMPLE S98T002547 0 W		H20D1G01	SOLID	N/A	<u>5.007</u>		g/L
98000401	U-107 (2)	11	SAMPLE S98T002547 0	<u>→ .100 L</u>	DOSE-02	SOLID	N/A	<u>6</u>		mrad/hour
98000401	U-107 (2)	12	DUP S98T002547 0 W		H20D1G01	SOLID	<u>5.007</u>	<u>5.146</u>	N/A	g/L
98000401	U-107 (2)	13	DUP S98T002547 0	<u>→ .100 L</u>	DOSE-02	SOLID	<u>6</u>	<u>6</u>	N/A	mrad/hour

**Final page for worklist # 26111**

Sam Salazar 11/2/98  
 Analyst Signature Date

Analyst Signature Date

Data Entry Comments:

HPI - Sam Salazar

Validated by:  
Sam B. Parry  
 11/2/98

DATA ENTRY 11-2-98  
John Weisell

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Parent

S98T002528 → S98T002531  
 S98T002537 → S98T002541  
 S98T002543 → S98T002547

# LABCORE Data Entry Template for Worklist# 26112

Analyst: Am2 Instrument: H2001 Book # N/A

Method: LA-504-101 Rev/Mod 60

Ensure parent samples have dose rates @ 30 cm  
≤ 50 mrem/hr prior to performing this prep.

Worklist Comment: U107, H20DIG01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 BLNK-PREP			H20DIG01	SOLID	<u>1</u>	<u>.100</u>	N/A	g/L
98000401	U-107 (2)	2 SAMPLE	S98T002556	0 W	H20DIG01	SOLID	<u>N/A</u>	<u>4.949</u>		g/L
98000401	U-107 (2)	3 SAMPLE	S98T002556	0	DOSE-02	SOLID	<u>N/A</u>	<u>4</u>		mrad/hour
98000401	U-107 (2)	4 DUP	S98T002556	0 W	H20DIG01	SOLID	<u>4.949</u>	<u>5.056</u>	N/A	g/L
98000401	U-107 (2)	5 DUP	S98T002556	0	DOSE-02	SOLID	<u>4</u>	<u>4</u>	N/A	mrad/hour
98000401	U-107 (2)	6 SAMPLE	S98T002563	0 W	H20DIG01	SOLID	<u>N/A</u>	<u>5.150</u>		g/L
98000401	U-107 (2)	7 SAMPLE	S98T002563	0	DOSE-02	SOLID	<u>N/A</u>	<u>6</u>		mrad/hour
98000401	U-107 (2)	8 DUP	S98T002563	0 W	H20DIG01	SOLID	<u>5.150</u>	<u>5.146</u>	N/A	g/L
98000401	U-107 (2)	9 DUP	S98T002563	0	DOSE-02	SOLID	<u>6</u>	<u>6</u>	N/A	mrad/hour
98000401	U-107 (2)	10 SAMPLE	S98T002568	0 W	H20DIG01	SOLID	<u>N/A</u>	<u>5.002</u>		g/L
98000401	U-107 (2)	11 SAMPLE	S98T002568	0	DOSE-02	SOLID	<u>N/A</u>	<u>2</u>		mrad/hour
98000401	U-107 (2)	12 DUP	S98T002568	0 W	H20DIG01	SOLID	<u>5.002</u>	<u>4.977</u>	N/A	g/L
98000401	U-107 (2)	13 DUP	S98T002568	0	DOSE-02	SOLID	<u>2</u>	<u>6</u>	N/A	mrad/hour

Final page for worklist # 26112

Leo M. Powell 11/16/98  
Analyst Signature Date

Analyst Signature Date

Data Entry Comments:

15PT - Dan Craig

Validated by:

DATA ENTRY 11-107-98  
John Powell

Jan M. Pang  
11/18/98

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Parent

S98T002552 → S98T002556  
S98T002559 → S98T002563  
S98T002565 → S98T002568



**LABCORE Data Entry Template for Worklist# 26289**

Analyst: JWZ Instrument: H2001 Book # N/A

Method: LA-504-101 Rev/Mod G-0

Ensure parent samples have dose rates @ 30 cm  
≤50 mrem/hr prior to performing this prep.

Worklist Comment: U107, H20DIG01, tdm

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK-PREP				H20DIG01	SOLID	<u>1</u>	<u>.100</u>	N/A	g/L
98000359	U-107 (2)	2	SAMPLE	S98T002430	0	W	H20DIG01	SOLID	N/A	<u>4.964</u>		g/L
98000359	U-107 (2)	3	SAMPLE	S98T002430	0		DOSE-02	SOLID	N/A	<u>2.5</u>		mrad/hour
98000359	U-107 (2)	4	DUP	S98T002430	0	W	H20DIG01	SOLID	<u>4.964</u>	<u>5.081</u>	N/A	g/L
98000359	U-107 (2)	5	DUP	S98T002430	0		DOSE-02	SOLID	<u>2.5</u>	<u>2.5</u>	N/A	mrad/hour
98000359	U-107 (2)	6	SAMPLE	S98T002436	0	W	H20DIG01	SOLID	N/A	<u>5.131</u>		g/L
98000359	U-107 (2)	7	SAMPLE	S98T002436	0		DOSE-02	SOLID	N/A	<u>2.5</u>		mrad/hour
98000359	U-107 (2)	8	DUP	S98T002436	0	W	H20DIG01	SOLID	<u>5.131</u>	<u>5.148</u>	N/A	g/L
98000359	U-107 (2)	9	DUP	S98T002436	0		DOSE-02	SOLID	<u>2.5</u>	<u>2.5</u>	N/A	mrad/hour

**Final page for worklist # 26289**

Analyst Signature: [Signature] Date: 11/17/98

Analyst Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Parent

Validated 11/18/98  
[Signature]

S98T002426 → S98T002430  
S98T002432 → S98T002436

Data Entry Comments:

DATA ENTRY 11-18-98  
[Signature]

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

**LABCORE Data Entry Template for Worklist# 26290**

Analyst: Jan 2 Instrument: H2001 Book # N/A  
 Method: LA-504-101 Rev/Mold G-0  
 Worklist Comment: U107, H2ODIG01, tdm

Ensure parent samples have dose rates @ 30 cm  
 ≤50 mrem/hr prior to performing this prep.

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT	
		1	BLNK-PREP			H2ODIG01	SOLID	<u>1</u>	<u>.100</u>	N/A	g/L	
98000359	U-107 (2)	2	SAMPLE	S98T002442	0	W	H2ODIG01	SOLID	N/A	<u>4.978</u>	g/L	
		3	SAMPLE	S98T002442	0		DOSE-02	SOLID	N/A	<u>6</u>	mrad/hour	
98000359	U-107 (2)	4	DUP	S98T002442	0	W	H2ODIG01	SOLID	<u>4.978</u>	<u>5.079</u>	N/A	g/L
		5	DUP	S98T002442	0		DOSE-02	SOLID	<u>6</u>	<u>6</u>	N/A	mrad/hour
98000401	U-107 (2)	6	SAMPLE	S98T002574	0	W	H2ODIG01	SOLID	N/A	<u>5.079</u>	g/L	
		7	SAMPLE	S98T002574	0		DOSE-02	SOLID	N/A	<u>20.5</u>	mrad/hour	
98000401	U-107 (2)	8	DUP	S98T002574	0	W	H2ODIG01	SOLID	<u>5.079</u>	<u>5.001</u>	N/A	g/L
		9	DUP	S98T002574	0		DOSE-02	SOLID	<u>20.5</u>	<u>20.5</u>	N/A	mrad/hour

**Final page for worklist # 26290**

Jan 2 11/19/98  
 Analyst Signature Date

Analyst Signature Date

Parent  
 S98T002438 → S98T002442  
 S98T002570 → S98T002574

Data Entry Comments:

HT. PAREN HAINES

Validated by:

DATA ENTRY 11-19-98

Paul M. Pang  
11/19/98

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

**LABCORE Data Entry Template for Worklist# 26291**

Analyst: Lanz Instrument: H2001 Bool # \_\_\_\_\_  
 Method: LA-504-101 Rev/Mod GFO  
 Worklist Comment: U107, H20DIG01, tdm

Ensure parent samples have dose rates @ 30 cm <= 50 mrem/hr prior to performing this prep.

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 BLNK-PREP			H20DIG01	SOLID	1	.100	N/A	g/L
98000359	U-107 (2)	2 SAMPLE	S98T002446	0 W	H20DIG01	SOLID	N/A	5.652		g/L
98000359	U-107 (2)	3 SAMPLE	S98T002446	0	DOSE-02	SOLID	N/A	8		mrad/hour
98000359	U-107 (2)	4 DUP	S98T002446	0 W	H20DIG01	SOLID	5.052	5.083	N/A	g/L
98000359	U-107 (2)	5 DUP	S98T002446	0	DOSE-02	SOLID	8	8	N/A	mrad/hour
98000359	U-107 (2)	6 SAMPLE	S98T002454	0 W	H20DIG01	SOLID	N/A	5.156		g/L
98000359	U-107 (2)	7 SAMPLE	S98T002454	0	DOSE-02	SOLID	N/A	6		mrad/hour
98000359	U-107 (2)	8 DUP	S98T002454	0 W	H20DIG01	SOLID	5.156	5.082	N/A	g/L
98000359	U-107 (2)	9 DUP	S98T002454	0	DOSE-02	SOLID	6	5	N/A	mrad/hour
98000359	U-107 (2)	10 SAMPLE	S98T002522	0 W	H20DIG01	SOLID	N/A	5.147		g/L
98000359	U-107 (2)	11 SAMPLE	S98T002522	0	DOSE-02	SOLID	N/A	6		mrad/hour
98000359	U-107 (2)	12 DUP	S98T002522	0 W	H20DIG01	SOLID	5.147	4.788	N/A	g/L
98000359	U-107 (2)	13 DUP	S98T002522	0	DOSE-02	SOLID	6	4	N/A	mrad/hour

**Final page for worklist # 26291**

Lanz 10/29/98  
 Analyst Signature Date

\_\_\_\_\_  
 Analyst Signature Date

Parent

S98T002444 → S98T002446

Data Entry Comments:

S98T002450 → S98T002454

S98T002519 → S98T002522

HPT Kathy Alessio

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

DATA ENTRY 10-29-98  
JH Howell

Validated by:  
Sam M. Pang  
 11/2/98

# LABCORE Data Entry Template for Worklist# 27529

Analyst: Am 2 Instrument: H2001 Book # NA

Method: LA-504-101 Rev/Mod G-0

Worklist Comment: U107, H2ODIG01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK-PREP		H2ODIG01	SOLID	<u>1</u>	<u>.100</u>	N/A	g/L
98000401	U-107 (2)	2	SAMPLE S98T003338	0 W	H2ODIG01	SOLID	N/A	<u>4.977</u>		g/L
98000401	U-107 (2)	3	SAMPLE S98T003338	0	DOSE-02	SOLID	N/A	<u>4.5</u>		mrad/hour
98000401	U-107 (2)	4	DUP S98T003338	0 W	H2ODIG01	SOLID	<u>4.977</u>	<u>5.160</u>	N/A	g/L
98000401	U-107 (2)	5	DUP S98T003338	0	DOSE-02	SOLID	<u>4.5</u>	<u>4.5</u>	N/A	mrad/hour

Final page for worklist # 27529

Fuller 12/21/98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

PARENT

S98T003335 → S98T003338

Data Entry Comments:

HPI - Randy Futank

DATA ENTRY 12-21-98

Validated 12/21/98

J. Howell

J. Bond

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

**LABCORE Data Entry Template for Worklist# 25120**

Analyst: Dr 2 Instrument: ACD01 Book # 4442-1.4 4442-2 2.5 ml's each into  
56 ml's total volume  
 Method: LA-505-163 Rev/Mod B-0 D.F. = 20x  
 Worklist Comment: U107, ACIDIG01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	BLNK-PREP		ACIDIG01	SOLID	<u>1</u>	<u>.050</u>	<u>N/A</u>	<u>g/L</u>
		2	STD-PREP		ACIDIG01	SOLID	<u>20</u>	<u>20</u>	<u>N/A</u>	<u>g/L</u>
98000358	U-107 (2)	3	SAMPLE	S98T002042	0 A	ACIDIG01	SOLID	<u>N/A</u>	<u>5.07</u>	<u>g/L</u>
			<u>.2545g</u>		<u>→ .050g</u>					
98000358	U-107 (2)	4	SAMPLE	S98T002042	0	DOSE-02	SOLID	<u>N/A</u>	<u>5</u>	<u>mrad/hour</u>
98000358	U-107 (2)	5	DUP	S98T002042	0 A	ACIDIG01	SOLID	<u>5.07</u>	<u>5.022</u>	<u>N/A</u> <u>g/L</u>
			<u>.2511g</u>		<u>→ .050g</u>					
98000358	U-107 (2)	6	DUP	S98T002042	0	DOSE-02	SOLID	<u>5</u>	<u>4</u>	<u>N/A</u> <u>mrad/hour</u>

**Final page for worklist # 25120**

Dr 2 9-17-98  
 Analyst Signature Date

Analyst Signature Date

*Validated 9/18/98*  
*J. Band*

Data Entry Comments: HPT - San Salazar  
DATA ENTRY 9-17-98  
John Wainell

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Worklist Version 2.1 05/15/95  
08/19/98 14:14

LABCORE Data Entry Template for Worklist# 25697

Analyst: Jan 2 Instrument: ACD01 Book # wbc-2 *wbc-17 2.5 ml each into 50 ml final volume D.F. = 20x*  
Method: LA-505-163 Rev/Mold B-0  
Worklist Comment: U107, ACIDIG01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 BLNK-PREP			ACIDIG01	SOLID	1	.050	N/A	g/L
		2 STD-PREP			ACIDIG01	SOLID	20	20	N/A	g/L
98000359	U-107 (2)	3 SAMPLE	S98T002269	0 A	ACIDIG01	SOLID	N/A	5.298		g/L
		<i>26497</i>	<i>→ .050 ml</i>							
98000359	U-107 (2)	4 SAMPLE	S98T002269	0	DOSE-02	SOLID	N/A	6		mrad/hour
98000359	U-107 (2)	5 DUP	S98T002269	0 A	ACIDIG01	SOLID	5.298	4.97	N/A	g/L
		<i>24955</i>	<i>→ .050 ml</i>							
98000359	U-107 (2)	6 DUP	S98T002269	0	DOSE-02	SOLID	6	5	N/A	mrad/hour
98000359	U-107 (2)	7 SAMPLE	S98T002275	0 A	ACIDIG01	SOLID	N/A	5.07		g/L
		<i>25353</i>	<i>→ .050 ml</i>							
98000359	U-107 (2)	8 SAMPLE	S98T002275	0	DOSE-02	SOLID	N/A	5		mrad/hour
98000359	U-107 (2)	9 DUP	S98T002275	0 A	ACIDIG01	SOLID	5.07	4.972	N/A	g/L
		<i>24865</i>	<i>→ .050 ml</i>							
98000359	U-107 (2)	10 DUP	S98T002275	0	DOSE-02	SOLID	5	5	N/A	mrad/hour
98000359	U-107 (2)	11 SPK	S98T002275	0 A	ACIDIG01	SOLID	<i>1 N/A</i>	4.982	N/A	g/L
		<i>24913</i>	<i>→ .050 ml</i>							
98000359	U-107 (2)	12 SPK	S98T002275	0	DOSE-02	SOLID	<i>5 N/A</i>	5	N/A	mrad/hour
98000358	U-107 (2)	13 SAMPLE	S98T002329	0 A	ACIDIG01	SOLID	N/A	4.826		g/L
		<i>24135</i>	<i>→ .050 ml</i>							
98000358	U-107 (2)	14 SAMPLE	S98T002329	0	DOSE-02	SOLID	N/A	2		mrad/hour
98000358	U-107 (2)	15 DUP	S98T002329	0 A	ACIDIG01	SOLID	4.826	4.922	N/A	g/L
		<i>24615</i>	<i>→ .050 ml</i>							
98000358	U-107 (2)	16 DUP	S98T002329	0	DOSE-02	SOLID	2	3	N/A	mrad/hour

Parent S98T002266 → S98T002269  
Parent S98T002272 → S98T002275  
Parent S98T002327 → S98T002329

Data Entry Comments:


HPT - Kathy Alessio Validated by: Saul Th. Bang  
DATA ENTRY 10-28-98 JR Warrall 11/2/98

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 25697

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
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Final page for worklist # 25697

 10/30/98  
Analyst Signature      Date

\_\_\_\_\_  
Analyst Signature      Date

Data Entry Comments:

HPT - Kathy Alessio

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 25698

Analyst:   *LD*   Instrument: ACD01 Book #   WAC-14 2.5mls each into  
WAC-2 5mls Final volume  
 Method: LA-505-163 Rev/Mod   *B-0*   Ensure parent samples  
 Worklist Comment: U107, ACIDIG01, tdm have dose rates @ 30 cur ≤ 50  
 mRem/hr prior to performing this prep  
*D.K. = 20x*

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT	
		1	BLNK-PREP		ACIDIG01	SOLID	<u>  1  </u>	<u>  .050  </u>	<u>  N/A  </u>	g/L	
		2	STD-PREP		ACIDIG01	SOLID	<u>  20  </u>	<u>  20  </u>	<u>  N/A  </u>	g/L	
98000358	U-107 (2)	3	SAMPLE	S98T002337	0 A	ACIDIG01	SOLID	<u>  N/A  </u>	<u>  5.116  </u>	g/L	
			<i>.2558 g → .050g</i>								
98000358	U-107 (2)	4	SAMPLE	S98T002337	0	DOSE-02	SOLID	<u>  N/A  </u>	<u>  25  </u>	mrad/hour	
98000358	U-107 (2)	5	DUP	S98T002337	0 A	ACIDIG01	SOLID	<u>  5.116  </u>	<u>  4.902  </u>	<u>  N/A  </u>	g/L
			<i>.2451 g → .050g</i>								
98000358	U-107 (2)	6	DUP	S98T002337	0	DOSE-02	SOLID	<u>  25  </u>	<u>  25  </u>	<u>  N/A  </u>	mrad/hour
98000358	U-107 (2)	7	SAMPLE	S98T002338	0 A	ACIDIG01	SOLID	<u>  N/A  </u>	<u>  4.942  </u>	g/L	
			<i>.2471 g → .050g</i>								
98000358	U-107 (2)	8	SAMPLE	S98T002338	0	DOSE-02	SOLID	<u>  N/A  </u>	<u>  52  </u>	mrad/hour	
98000358	U-107 (2)	9	DUP	S98T002338	0 A	ACIDIG01	SOLID	<u>  4.942  </u>	<u>  5.178  </u>	<u>  N/A  </u>	g/L
			<i>.2589 g → .050g</i>								
98000358	U-107 (2)	10	DUP	S98T002338	0	DOSE-02	SOLID	<u>  52  </u>	<u>  52  </u>	<u>  N/A  </u>	mrad/hour
98000358	U-107 (2)	11	SAMPLE	S98T002344	0 A	ACIDIG01	SOLID	<u>  N/A  </u>	<u>  5.192  </u>	g/L	
			<i>.2596 g → .050g</i>								
98000358	U-107 (2)	12	SAMPLE	S98T002344	0	DOSE-02	SOLID	<u>  N/A  </u>	<u>  5  </u>	mrad/hour	
98000358	U-107 (2)	13	DUP	S98T002344	0 A	ACIDIG01	SOLID	<u>  5.192  </u>	<u>  5.026  </u>	<u>  N/A  </u>	g/L
			<i>.2513 g → .050g</i>								
98000358	U-107 (2)	14	DUP	S98T002344	0	DOSE-02	SOLID	<u>  5  </u>	<u>  5  </u>	<u>  N/A  </u>	mrad/hour

### Final page for worklist # 25698

*Lab [Signature]* 11/13/98  
 Analyst Signature Date

Analyst Signature Date

Data Entry Comments:

*HPT: Bill Bishop*

Validated by:

*DATA ENTRY 11-13-98*

*San M. Pung*

*John Wauell*

*11/16/98*

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Parent S98T002333 → S98T002337

Parent S98T002334 → S98T002338

Parent S98T002342 → S98T002344  
*222*



worklist Version 2.1 05/15/95  
09/10/98 15:25

# LABCORE Data Entry Template for Worklist# 26109

Analyst: Jan 2 Instrument: ACD01 7: WPC-1A 2.5 ml each into 50ml  
Boo: # WPC-2 Total volume DF=20x

Method: LA-505-163 Rev/Mod B-0

Ensure parent samples have dose rates @ 30 cm  
≤ 50 mrem/hr prior to performing this prep.

Worklist Comment: U107, ACIDIG01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 BLNK-PREP			ACIDIG01	SOLID	<u>1</u>	<u>.050</u>	N/A	g/L
		2 STD-PREP			ACIDIG01	SOLID	<u>20</u>	<u>20</u>	N/A	g/L
98000401	U-107 (2)	3 SAMPLE	S98T002530 0 A		ACIDIG01	SOLID	<u>N/A</u>	<u>4.774</u>		g/L
		<u>.2387g</u> → <u>.050g</u>								
98000401	U-107 (2)	4 SAMPLE	S98T002530 0		DOSE-02	SOLID	<u>N/A</u>	<u>6</u>		mrad/hour
98000401	U-107 (2)	5 DUP	S98T002530 0 A		ACIDIG01	SOLID	<u>4.774</u>	<u>5.146</u>	N/A	g/L
		<u>.2573g</u> → <u>.050g</u>								
98000401	U-107 (2)	6 DUP	S98T002530 0		DOSE-02	SOLID	<u>6</u>	<u>6</u>	N/A	mrad/hour
98000401	U-107 (2)	7 SPK	S98T002530 0 A		ACIDIG01	SOLID	<u>N/A</u>	<u>5.278</u>	N/A	g/L
		<u>.2649g</u> → <u>.050g</u>								
98000401	U-107 (2)	8 SPK	S98T002530 0		DOSE-02	SOLID	<u>N/A</u>	<u>4.5</u>	N/A	mrad/hour
98000401	U-107 (2)	9 SAMPLE	S98T002540 0 A		ACIDIG01	SOLID	<u>N/A</u>	<u>5.178</u>		g/L
		<u>.2589g</u> → <u>.050g</u>								
98000401	U-107 (2)	10 SAMPLE	S98T002540 0		DOSE-02	SOLID	<u>N/A</u>	<u>5</u>		mrad/hour
98000401	U-107 (2)	11 DUP	S98T002540 0 A		ACIDIG01	SOLID	<u>5.178</u>	<u>5.1</u>	N/A	g/L
		<u>.2550g</u> → <u>.050g</u>								
98000401	U-107 (2)	12 DUP	S98T002540 0		DOSE-02	SOLID	<u>5</u>	<u>5</u>	N/A	mrad/hour
98000401	U-107 (2)	13 SAMPLE	S98T002546 0 A		ACIDIG01	SOLID	<u>N/A</u>	<u>5.044</u>		g/L
		<u>.2522g</u> → <u>.050g</u>								
98000401	U-107 (2)	14 SAMPLE	S98T002546 0		DOSE-02	SOLID	<u>N/A</u>	<u>5</u>		mrad/hour
98000401	U-107 (2)	15 DUP	S98T002546 0 A		ACIDIG01	SOLID	<u>5.044</u>	<u>5.274</u>	N/A	g/L
		<u>.2642g</u> → <u>.050g</u>								
98000401	U-107 (2)	16 DUP	S98T002546 0		DOSE-02	SOLID	<u>5</u>	<u>5</u>	N/A	mrad/hour

Parent  
 S98T002528 → S98T002530  
 S98T002537 → S98T002540  
 S98T002543 → S98T002546

Data Entry Comments:

DATA ENTRY 11-2-98

*John Wainell*

Validated by:

*Sam M. Perry*

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

11/2/98

# LABCORE Data Entry Template for Worklist# 26109

GROUP PROJECT S TYPE SAMPLE# R A -----TEST----- MATRIX ACTUAL FOUND DL UNIT

## Final page for worklist # 26109

 10/2/98  
\_\_\_\_\_  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments:

HPT - Sam Salazar

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Allquot Code.

worklist Version 2.1 05/15/95  
09/10/98 15:26

# LABCORE Data Entry Template for Worklist# 26110

Analyst: FR2 Instrument: ACD01 Book # WNC-1A 2.5mk each into WNC-2 some final volume

Method: LA-505-163 Rev/Mod B0

Ensure parent samples have dose rates @ 30 cm  
≤50 mrem/hr prior to performing this prep.

Worklist Comment: U107, ACIDIG01, tdm

D.F. = 20x

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 BLNK-PREP			ACIDIG01	SOLID	<u>1</u>	<u>.050</u>	N/A	g/L
		2 STD-PREP			ACIDIG01	SOLID	<u>20</u>	<u>20</u>	N/A	g/L
98000401	U-107 (2)	3 SAMPLE	S98T002555	0 A	ACIDIG01	SOLID	N/A	<u>5</u>		g/L
		<u>.2500g</u> → <u>.050g</u>						<u>6</u>		mrad/hour
98000401	U-107 (2)	4 SAMPLE	S98T002555	0	DOSE-02	SOLID	N/A	<u>5</u>	<u>5.232</u>	N/A
98000401	U-107 (2)	5 DUP	S98T002555	0 A	ACIDIG01	SOLID	<u>6</u>	<u>6</u>	N/A	mrad/hour
98000401	U-107 (2)	6 DUP	S98T002555	0	DOSE-02	SOLID	N/A	<u>5.062</u>		g/L
98000401	U-107 (2)	7 SAMPLE	S98T002562	0 A	ACIDIG01	SOLID	N/A	<u>13</u>		mrad/hour
98000401	U-107 (2)	8 SAMPLE	S98T002562	0	DOSE-02	SOLID	N/A	<u>5.062</u>	<u>4.962</u>	N/A
98000401	U-107 (2)	9 DUP	S98T002562	0 A	ACIDIG01	SOLID	<u>13</u>	<u>13</u>	N/A	mrad/hour
98000401	U-107 (2)	10 DUP	S98T002562	0	DOSE-02	SOLID	N/A	<u>4.934</u>		g/L
98000401	U-107 (2)	11 SAMPLE	S98T002567	0 A	ACIDIG01	SOLID	N/A	<u>4.5</u>		mrad/hour
98000401	U-107 (2)	12 SAMPLE	S98T002567	0	DOSE-02	SOLID	N/A	<u>4.934</u>	<u>4.992</u>	N/A
98000401	U-107 (2)	13 DUP	S98T002567	0 A	ACIDIG01	SOLID	<u>4.5</u>	<u>4.5</u>	N/A	g/L
98000401	U-107 (2)	14 DUP	S98T002567	0	DOSE-02	SOLID	<u>4.5</u>	<u>4.5</u>	N/A	mrad/hour

## Final page for worklist # 26110

[Signature] 11/16/98  
Analyst Signature Date

Analyst Signature Date

Data Entry Comments: HPT - Dan Craig  
DATA ENTRY 11-17-98  
John Howell

Validated by: [Signature]  
11/18/98

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Parent  
S98T002553 → S98T002555  
S98T002559 → S98T002562  
S98T002565 → S98T002567  
225

LABCORE Data Entry Template for Worklist# 26286

Analyst: Joe 2 Instrument: ACID01

Book # WNC-4 2.5 ml each into WNC-2 5 ml final volume

Method: LA-505-163 Rev/Mod B-0

Ensure parent samples have dose rates @ 30 cm <50 mrem/hr prior to performing this prep.

Worklist Comment: U107, ACIDIG01, tdm

D.F. = 20x

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 BLNK-PREP			ACIDIG01	SOLID	1	.050	N/A	g/L
		2 STD-PREP			ACIDIG01	SOLID	20	20	N/A	g/L
98000359	U-107 (2)	3 SAMPLE	S98T002429	0 A	ACIDIG01	SOLID	N/A	5.208		g/L
		<u>.26047</u>	<u>→</u>	<u>.050L</u>						
98000359	U-107 (2)	4 SAMPLE	S98T002429	0	DOSE-02	SOLID	N/A	5		mrads/hour
98000359	U-107 (2)	5 DUP	S98T002429	0 A	ACIDIG01	SOLID	5.208	4.972	N/A	g/L
		<u>.24367</u>	<u>→</u>	<u>.050L</u>						
98000359	U-107 (2)	6 DUP	S98T002429	0	DOSE-02	SOLID	5	5	N/A	mrads/hour
98000359	U-107 (2)	7 SAMPLE	S98T002435	0 A	ACIDIG01	SOLID	N/A	5.248		g/L
		<u>.26247</u>	<u>→</u>	<u>.050L</u>						
98000359	U-107 (2)	8 SAMPLE	S98T002435	0	DOSE-02	SOLID	N/A	6		mrads/hour
98000359	U-107 (2)	9 DUP	S98T002435	0 A	ACIDIG01	SOLID	5.248	5.3	N/A	g/L
		<u>.26507</u>	<u>→</u>	<u>.050L</u>						
98000359	U-107 (2)	10 DUP	S98T002435	0	DOSE-02	SOLID	6	6	N/A	mrads/hour
98000359	U-107 (2)	11 SPK	S98T002435	0 A	ACIDIG01	SOLID	1-N/A	5.296	N/A	g/L
		<u>.26487</u>	<u>→</u>	<u>.050L</u>						
98000359	U-107 (2)	12 SPK	S98T002435	0	DOSE-02	SOLID	1-N/A	6	N/A	mrads/hour

Final page for worklist # 26286

Analyst Signature: Joe 2 Date: 11/17/98

Analyst Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Parent  
 S98T002426 → S98T002429  
 S98T002432 → S98T002435  
 Validated 11/18/98 J. Baird

Data Entry Comments:

DATA ENTRY 11-18-98  
J. Howell

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

# LABCORE Data Entry Template for Worklist# 26287

Analyst: PC Instrument: ACD01

Book # WMC-1A 2.5mls each into WMC-2 50 ml's final vol.

Method: LA-505-163 Rev/Mod B-0

Ensure parent samples have dose rates @ 30 cm <50 mrem/hr prior to performing this prep.

Worklist Comment: U107, ACIDIG01, tdim

D.F. = 20x

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 BLNK-PREP			ACIDIG01	SOLID	<u>1</u>	<u>.150</u>	N/A	g/L
		2 STD-PREP			ACIDIG01	SOLID	<u>20</u>	<u>20</u>	N/A	g/L
98000359	U-107 (2)	3 SAMPLE	S98T002441	0 A	ACIDIG01	SOLID	N/A	<u>5.198</u>		g/L
		<u>.25997</u>	<u>→ .050L</u>							
98000359	U-107 (2)	4 SAMPLE	S98T002441	0	DOSE-02	SOLID	N/A	<u>9</u>		mrad/hour
98000359	U-107 (2)	5 DUP	S98T002441	0 A	ACIDIG01	SOLID	<u>5.198</u>	<u>5.25</u>	N/A	g/L
		<u>.26257</u>	<u>→ .050L</u>							
98000359	U-107 (2)	6 DUP	S98T002441	0	DOSE-02	SOLID	<u>9</u>	<u>7</u>	N/A	mrad/hour
98000401	U-107 (2)	7 SAMPLE	S98T002573	0 A	ACIDIG01	SOLID	N/A	<u>5.31</u>		g/L
		<u>.26557</u>	<u>→ .050L</u>							
98000401	U-107 (2)	8 SAMPLE	S98T002573	0	DOSE-02	SOLID	N/A	<u>20.5</u>		mrad/hour
98000401	U-107 (2)	9 DUP	S98T002573	0 A	ACIDIG01	SOLID	<u>5.31</u>	<u>5.032</u>	N/A	g/L
		<u>.25167</u>	<u>→ .050L</u>							
98000401	U-107 (2)	10 DUP	S98T002573	0	DOSE-02	SOLID	<u>20.5</u>	<u>20.5</u>	N/A	mrad/hour
98000401	U-107 (2)	11 SPK	S98T002573	0 A	ACIDIG01	SOLID	<u>1.41</u>	<u>5.234</u>	N/A	g/L
		<u>.26177</u>	<u>→ .050L</u>							
98000401	U-107 (2)	12 SPK	S98T002573	0	DOSE-02	SOLID	<u>1.41</u>	<u>20.5</u>	N/A	mrad/hour

Final page for worklist # 26287

Peer Cell 11/18/98  
Analyst Signature Date

Analyst Signature Date

Parent

S98T002438 → S98T002441

S98T002570 → S98T002573

Data Entry Comments: HPT. Parrell Hayes

DATA ENTRY 11-19-98  
J.R. Howell

Validated by:  
San M. Pang 11/19/98

Units shown for QC (SPK & SID) may not reflect the actual units. DL = Detection Limit, S = Worklist Sloz Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 26288

Analyst: Parl Instrument: ACD01

Book # wite-14 2.5 mls each into  
wite-2 50 mls total volume  
\* DF=20x

Method: LA-505-163 Rev/Mod B-0

Ensure parent samples have dose rates @ 30 cm  
≤ 50 mrem/hr prior to performing this prep.

Worklist Comment: U107, ACIDIG01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 BLNK-PREP			ACIDIG01	SOLID	1	0.050	N/A	g/L
		2 STD-PREP			ACIDIG01	SOLID	20	20	N/A	g/L
98000359	U-107 (2)	3 SAMPLE	S98T002448	0 A	ACIDIG01	SOLID	N/A	5.182		g/L
		<u>.2591 J</u> → <u>.050 L</u>								
98000359	U-107 (2)	4 SAMPLE	S98T002448	0	DOSE-02	SOLID	N/A	4.5		mrad/hour
98000359	U-107 (2)	5 DUP	S98T002448	0 A	ACIDIG01	SOLID	5.18	5.126	N/A	g/L
		<u>.2558 J</u> → <u>.050 L</u>								
98000359	U-107 (2)	6 DUP	S98T002448	0	DOSE-02	SOLID	4.5	4.5	N/A	mrad/hour
98000359	U-107 (2)	7 SAMPLE	S98T002453	0 A	ACIDIG01	SOLID	N/A	5.3		g/L
		<u>.2650 J</u> → <u>.050 L</u>								
98000359	U-107 (2)	8 SAMPLE	S98T002453	0	DOSE-02	SOLID	N/A	4.5		mrad/hour
98000359	U-107 (2)	9 DUP	S98T002453	0 A	ACIDIG01	SOLID	5.3	5.292	N/A	g/L
		<u>.2641 J</u> → <u>.050 L</u>								
98000359	U-107 (2)	10 DUP	S98T002453	0	DOSE-02	SOLID	4.5	4.5	N/A	mrad/hour
98000359	U-107 (2)	11 SAMPLE	S98T002521	0 A	ACIDIG01	SOLID	N/A	5.196		g/L
		<u>.2578 J</u> → <u>.050 L</u>								
98000359	U-107 (2)	12 SAMPLE	S98T002521	0	DOSE-02	SOLID	N/A	4.5		mrad/hour
98000359	U-107 (2)	13 DUP	S98T002521	0 A	ACIDIG01	SOLID	5.196	4.930	N/A	g/L
		<u>.2465 J</u> → <u>.050 L</u>								
98000359	U-107 (2)	14 DUP	S98T002521	0	DOSE-02	SOLID	4.5	4.5	N/A	mrad/hour
98000359	U-107 (2)	15 SPK	S98T002521	0 A	ACIDIG01	SOLID	N/A	4.978	N/A	g/L
		<u>.2459 J</u> → <u>.050 L</u>								
98000359	U-107 (2)	16 SPK	S98T002521	0	DOSE-02	SOLID	4.5	4.5	N/A	mrad/hour

Parent

S98T002444 → S98T002448  
S98T002450 → S98T002453  
S98T002519 → S98T002521

Data Entry Comments:

DATA ENTRY 10-29-98

John Wrenell

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Validated by:  
Sal M. Pang  
11/2/98

# LABCORE Data Entry Template for Worklist# 26288

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
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Final page for worklist # 26288

*Lu. Colwell* 10/22/98  
\_\_\_\_\_  
Analyst Signature      Date

\_\_\_\_\_  
Analyst Signature      Date

Data Entry Comments:

HPT - Dn Cas: 5

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

**HNF-1661 REV. 0**

**BULK DENSITY WORKSHEETS**



HNF-1661 REV. 0

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## Bulk Density Worksheet

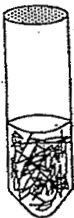
Date: 7/20/98Requestor: STEEN

Tank: U-107  
 Core: 242  
 Seg: 2 LH  
 Auger: \_\_\_\_\_  
 Sample ID: S98T002038



Start Time: \_\_\_\_\_  
 End Time: \_\_\_\_\_  
 Homogenization  
 Time (Min.): \_\_\_\_\_

Jar#: 12385  
 Jar/Vial Size: 11.6 mL  
 Initial Weight: 7.53 g ABC  
 Final Weight: 27.84 g 7/20/98  
 Net Weight: 20.31 g



Cone#: \_\_\_\_\_  
 Final Vol: 11.60 mL  
 Initial Weight: 7.53 g  
 Final Weight: 27.84 g  
 Net Weight: 20.31 g  
 Sample ID: S98T002038

Appearance/Narrative:

$$\text{Bulk den} = \frac{20.31}{11.6} = 1.75 \text{ gms/ml}$$

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 231.1
 

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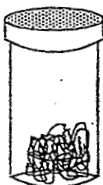
---



## Bulk Density Worksheet

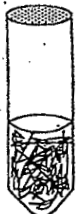
Date: 8/11/98Requestor: Steel

Tank: U-107  
 Core: 242  
 Seg: 724  
 Auger:       
 Sample ID: 598T002332



Start Time:       
 End Time:       
 Homogenization  
 Time (Min.):     

Jar# 14640  
 Jar/Vial Size: 60 mL  
 Initial Weight: 126.48 g  
 Final Weight: 92.8 g  
 Net Weight: 25.5 g



Cone#: 14640  
 Final Vol: 6.0 mL  
 Initial Weight: 7.38 g  
 Final Weight: 17.99 g  
 Net Weight: 10.61 g  
 Sample ID: 598T002332

Appearance/Narrative:

$$10.61/6.0 = 1.77 \text{ g/mL}$$

231.3

## Bulk Density Worksheet

Date: 8/7/98Requestor: SteerTank: U-107Core: 242RSeg: S LHAuger:       Sample ID: 598T002272 <sup>27</sup> <sub>8298</sub>Start Time:        2271End Time:       

Homogenization

Time (Min.):       Jar#: 15049Jar/Vial Size: 250 mLInitial Weight: 415.4 gFinal Weight: 248.9 gNet Weight: 166.5 gCore#: 15049Final Vol: 14.5 mLInitial Weight: 7.4 gFinal Weight: 32.3 gNet Weight: 24.9 g <sup>27</sup> <sub>8298</sub>Sample ID: 598T002272 <sup>27</sup> <sub>8298</sub>

Appearance/Narrative:

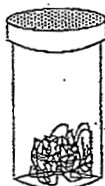
glm 1.72

231.4

## Bulk Density Worksheet

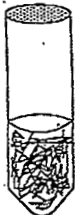
Date: 9/11/98Requestor: F. STEEN

Tank: U-107  
 Core: 242R  
 Seg: 6LH  
 Auger: MM  
 Sample ID: \_\_\_\_\_



Start Time: \_\_\_\_\_  
 End Time: \_\_\_\_\_  
 Homogenization  
 Time (Min.): \_\_\_\_\_

Jar#: 15050  
 Jar/Vial Size: 250 mL  
 Initial Weight: \_\_\_\_\_ g  
 Final Weight: \_\_\_\_\_ g  
 Net Weight: \_\_\_\_\_ g



Conc#: 50  
 Final Vol: 9.5 mL  
 Initial Weight: 7.60 g  
 Final Weight: 25.24 g  
 Net Weight: 17.64 g  
 Sample ID: \_\_\_\_\_

Appearance/Narrative:

$$17.64 / 9.5 = 185 \text{ g/mL}$$

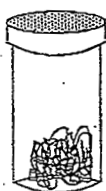
$$231.5$$

HNF-1661 REV. 0

## Bulk Density Worksheet

Date: 9/11/98Requestor: F. STEEN

Tank: U-107  
 Core: 242R  
 Seg: 6A  
 Auger: \_\_\_\_\_  
 Sample ID: 5987002437



Start Time: \_\_\_\_\_  
 End Time: \_\_\_\_\_  
 Homogenization  
 Time (Min.): \_\_\_\_\_

Jar# 15031  
 Jar/Vial Size: \_\_\_\_\_ mL  
 Initial Weight: \_\_\_\_\_ g  
 Final Weight: \_\_\_\_\_ g  
 Net Weight: \_\_\_\_\_ g



Coeff: \_\_\_\_\_  
 Final Vol: 10.3 mL  
 Initial Weight: 7.49 g  
 Final Weight: 26.24 g  
 Net Weight: 18.75 g  
 Sample ID: \_\_\_\_\_

Appearance/Narrative:

Bulk Density =  $\frac{18.75}{10.3} = 1.82 \text{ gms/ml}$

231.6

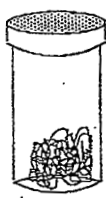
HNF-1661 REV. 0

# Bulk Density Worksheet

Date: 9/14/98

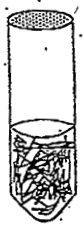
Requestor: F. STEEN

Tank: U-107  
 Core: 242R  
 Seg: 7L4  
 Auger: MF  
 Sample ID: \_\_\_\_\_



Start Time: \_\_\_\_\_  
 End Time: \_\_\_\_\_  
 Homogenization  
 Time (Min.): \_\_\_\_\_

Jar#: 14733  
 Jar/Vial Size: 250 mL  
 Initial Weight: \_\_\_\_\_ g  
 Final Weight: \_\_\_\_\_ g  
 Net Weight: \_\_\_\_\_ g



Cone#: 33  
 Final Vol: 10.0 mL  
 Initial Weight: 7.50 g  
 Final Weight: 25.24 g  
 Net Weight: 17.74 g  
 Sample ID: \_\_\_\_\_

Appearance/Narrative: \_\_\_\_\_  
17.74 / 10.0 = 1.77 g/mL  
231.7



# Bulk Density Worksheet

Date: 9/14/98

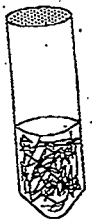
Requestor: F. STEEN

Tank: U-107  
 Core: 242R  
 Seg: 8L4  
 Auger: MT  
 Sample ID: \_\_\_\_\_



Start Time: \_\_\_\_\_  
 End Time: \_\_\_\_\_  
 Homogenization Time (Min.): \_\_\_\_\_

Jar #: 14977  
 Jar Vial Size: 60 mL  
 Initial Weight: \_\_\_\_\_ g  
 Final Weight: \_\_\_\_\_ g  
 Net Weight: \_\_\_\_\_ g



Cone #: 77  
 Final Vol: \_\_\_\_\_ mL  
 Initial Weight: 7.47 g  
 Final Weight: 20.78 g  
 Net Weight: 13.23 g  
 Sample ID: \_\_\_\_\_

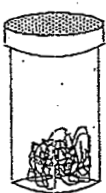
TO DRY  
 WOULD NOT SETTLE  
 RDA  
 9/14/98

Appearance/Narrative: 13.23/  
 \_\_\_\_\_  
 \_\_\_\_\_ 231.8

## Bulk Density Worksheet

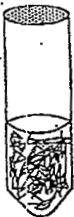
Date: 9/9/98Requestor: Steen

Tank: U-107  
 Core: 245  
 Seg: 1L1  
 Auger: —  
 Sample ID: S987002527



Start Time: \_\_\_\_\_  
 End Time: \_\_\_\_\_  
 Homogenization  
 Time (Min.): \_\_\_\_\_

Jar#: \_\_\_\_\_  
 Jar/Vial Size: \_\_\_\_\_ mL  
 Initial Weight: \_\_\_\_\_ g  
 Final Weight: \_\_\_\_\_ g  
 Net Weight: \_\_\_\_\_ g



Cone#: \_\_\_\_\_  
 Final Vol: \_\_\_\_\_ mL  
 Initial Weight: 7.52 g  
 Final Weight: 23.52 g  
 Net Weight: 16.00 g  
 Sample ID: \_\_\_\_\_

Appearance Narrative:

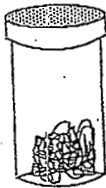
Bulk Den =  $\frac{16.00}{10.5} = 1.52$  gms/ml

# Bulk Density Worksheet

Date: 9/9/98

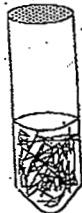
Requestor: Scen

Tank: U-107  
Core: 243  
Seg: 324  
Auger: —  
Sample ID: 578T002542



Start Time: \_\_\_\_\_  
End Time: \_\_\_\_\_  
Homogenization  
Time (Min.): \_\_\_\_\_

Jar#: 13007  
Jar/Vial Size: \_\_\_\_\_ mL  
Initial Weight: \_\_\_\_\_ g  
Final Weight: \_\_\_\_\_ g  
Net Weight: \_\_\_\_\_ g



Cone#: 13007  
Final Vol: 10.2 mL  
Initial Weight: 7.48 g  
Final Weight: 25.68 g  
Net Weight: 18.20 g  
Sample ID: \_\_\_\_\_

Appearance/Narrative: \_\_\_\_\_

Bulk Den = 18.20 / 10.2 = 1.78 gm/ml

231.10

# Bulk Density Worksheet

Date: 9/8/98

Requestor: Seer

Tank: U-1017  
Core: 245  
Seg: 4LH  
Auger:         
Sample ID: S98T020558



Start Time:         
End Time:         
Homogenization Time (Min.):       

Jar#:         
Jar/Vial Size:        mL  
Initial Weight:        g  
Final Weight:        g  
Net Weight:        g

WB



Core#:         
Final Vol:        mL  
Initial Weight: 7.47 g  
Final Weight: 26.24 g  
Net Weight: 19.27 g  
Sample ID:       

Appearance/Narrative:       

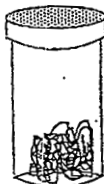
Bulk Den =  $\frac{19.27}{10.2} = 1.78 \text{ g/ml}$

# Bulk Density Worksheet

Date: 9/8/98

Requestor: Steen

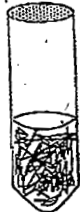
Tank: 11-107  
 Core: 24  
 Seg: 5A LA  
 Auger: —  
 Sample ID: S987002564



Start Time: \_\_\_\_\_  
 End Time: \_\_\_\_\_  
 Homogenization  
 Time (Min.): \_\_\_\_\_

Jar#: \_\_\_\_\_  
 Jar/Vial Size: \_\_\_\_\_ mL  
 Initial Weight: \_\_\_\_\_ g  
 Final Weight: \_\_\_\_\_ g  
 Net Weight: \_\_\_\_\_ g

WR



Core#: \_\_\_\_\_  
 Final Vol: 8.5 mL  
 Initial Weight: 7.46 g  
 Final Weight: 18.23 g  
 Net Weight: 10.77 g  
 Sample ID: \_\_\_\_\_

Appearance/Narrative:

Bulk den = 10.77 / 8.5 = 1.27 g/ml

231.12

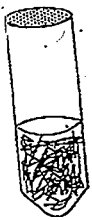
# Bulk Density Worksheet

Date: \_\_\_\_\_

Requestor: \_\_\_\_\_

Tank: \_\_\_\_\_  
 Core: \_\_\_\_\_  
 Seg: \_\_\_\_\_  
 Auger: \_\_\_\_\_  
 Sample ID: \_\_\_\_\_

Start Time: \_\_\_\_\_  
 End Time: \_\_\_\_\_  
 Homogenization Time (Min.): \_\_\_\_\_



Jar: \_\_\_\_\_  
 Jar/Vial Size: \_\_\_\_\_ mL  
 Initial Weight: \_\_\_\_\_ g  
 Final Weight: \_\_\_\_\_ g  
 Net Weight: \_\_\_\_\_ g

Cone#: \_\_\_\_\_  
 Final Vol: \_\_\_\_\_ mL  
 Initial Weight: \_\_\_\_\_ g  
 Final Weight: \_\_\_\_\_ g  
 Net Weight: \_\_\_\_\_ g  
 Sample ID: \_\_\_\_\_

Appearance/Narrative: \_\_\_\_\_

\_\_\_\_\_

231.13

# Bulk Density Worksheet

Date: 12-5-98

HNF-1661 REV. 0

Requestor: JFC

Tank: 4-107

Core: 24

Seg: 384 (Comp)

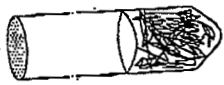
Auger: \_\_\_\_\_

Sample ID: 98T003334

Start Time: \_\_\_\_\_  
End Time: \_\_\_\_\_  
Homogenization Time (Min.): \_\_\_\_\_



Jar#: \_\_\_\_\_  
Jar/Vial Size: \_\_\_\_\_ mL  
Initial Weight: \_\_\_\_\_ g  
Final Weight: \_\_\_\_\_ g  
Net Weight: \_\_\_\_\_ g



Cone#: 87  
Final Vol: 10.6 mL  
Initial Weight: 7.72 g  
Final Weight: 25.65 g  
Net Weight: 17.93 g

Sample ID: \_\_\_\_\_

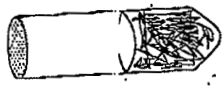
Appearance/Narrative: 17.93/10.6 = 1.689 g/mL  
BLK & ENO =

Tank: \_\_\_\_\_  
Core: \_\_\_\_\_  
Seg: \_\_\_\_\_  
Auger: \_\_\_\_\_  
Sample ID: \_\_\_\_\_

Start Time: \_\_\_\_\_  
End Time: \_\_\_\_\_  
Homogenization Time (Min.): \_\_\_\_\_



Jar#: \_\_\_\_\_  
Jar/Vial Size: \_\_\_\_\_ mL  
Initial Weight: \_\_\_\_\_ g  
Final Weight: \_\_\_\_\_ g  
Net Weight: \_\_\_\_\_ g



Cone#: \_\_\_\_\_  
Final Vol: \_\_\_\_\_ mL  
Initial Weight: \_\_\_\_\_ g  
Final Weight: \_\_\_\_\_ g  
Net Weight: \_\_\_\_\_ g

Sample ID: \_\_\_\_\_

Appearance/Narrative: \_\_\_\_\_

231.14

HNF-1661 REV. 0

**INORGANIC ANALYSIS**



HNF-1661 REV. 0

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# LABCORE Completed Worklist Report for Worklist# 25140

Analyst: jis Instrument: DSC03 Book# B214B

Method: LA-S14-114 Rev/Mod D-1

Worklist Comment: U107, DSC-03, tdm

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0		DSC-03	LIQUID	28.45	28.25	99.332	% Recovery
2 SAMPLE	S98T002031	0	DSC-03	LIQUID	N/A	19.51		Joules/g
3 DUP	S98T002031	0	DSC-03	LIQUID	19.51	19.8	1.475	RFD
4 SAMPLE	S98T002035	0	DSC-03	LIQUID	N/A	23.24		Joules/g
5 DUP	S98T002035	0	DSC-03	LIQUID	23.24	22.06	5.210	RFD

Final page for worklist# 25140

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Mary Jane 8-5-98  
Analyst Signature Date

[Signature] 8/5/98  
Reviewer Signature Date

Units shown for QC (BLK/BKG) may not reflect the actual units.

# LABCORE Data Entry Template for Worklist# 25140

Analyst: JIS Instrument: DSC0 3 Book # 12N14-B

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, DSC-03, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03	LIQUID	28.45	28.76	N/A	Joules/g
							19.51			
98000358	U-107 (2)	2 SAMPLE	S98T002031	0	DSC-03	LIQUID	N/A	23.24	23.84	Joules/g
							19.51	19.8		
98000358	U-107 (2)	3 DUP	S98T002031	0	DSC-03	LIQUID	23.24	23.84	23.84	Joules/g
							23.24	19.51	23.84	Joules/g
98000358	U-107 (2)	4 SAMPLE	S98T002035	0	DSC-03	LIQUID	N/A	19.51	23.84	Joules/g
							23.24	23.06	23.84	Joules/g
98000358	U-107 (2)	5 DUP	S98T002035	0	DSC-03	LIQUID	19.51	19.8	23.84	Joules/g

Final page for worklist # 25140

J. J. [Signature] 080398  
Analyst Signature Date

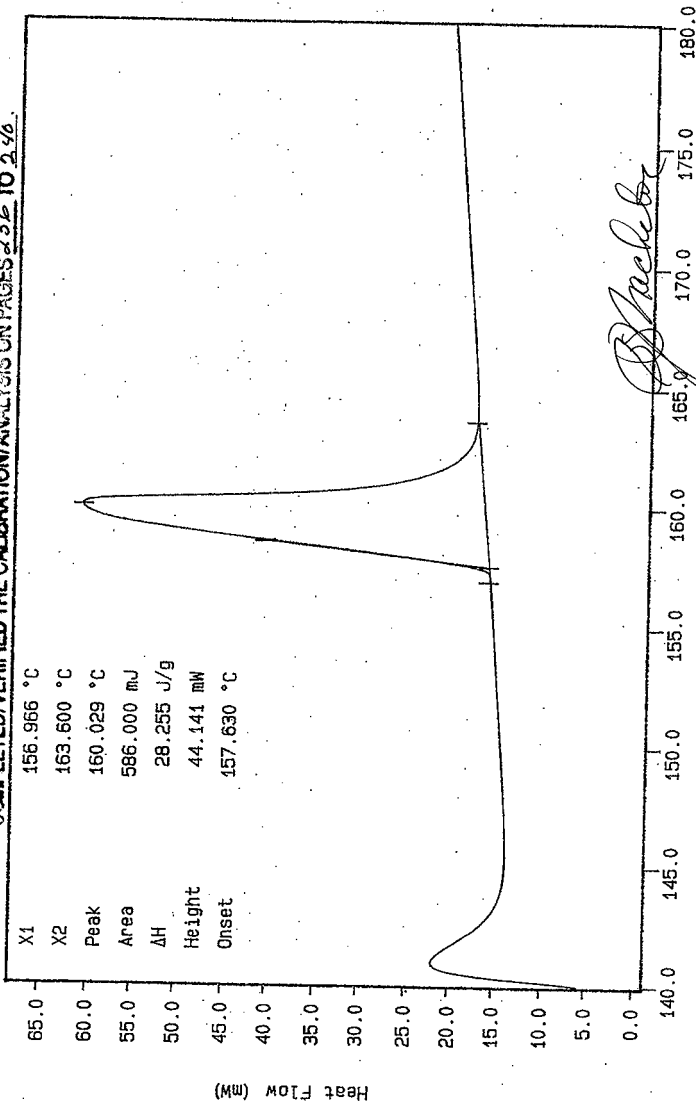
[Signature] 8-5-98  
Analyst Signature Date

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

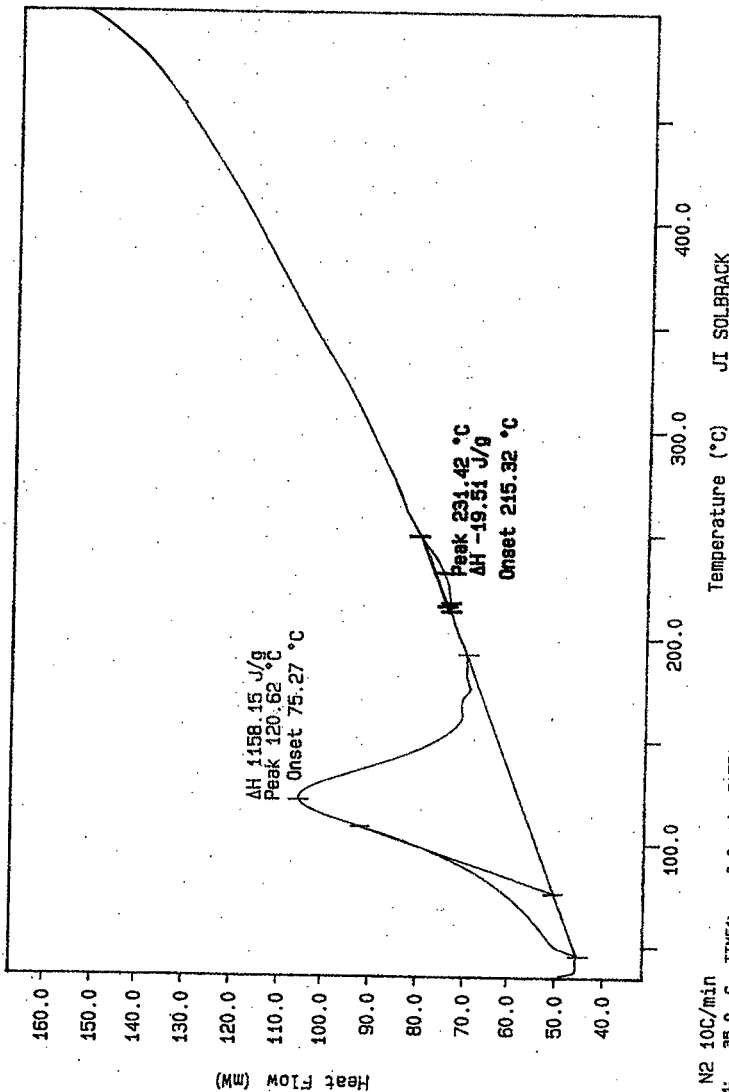
Curve 1: DSC  
File info: INDD80301 Mon Aug 3 10:27:23 1998  
Sample Weight: 20.740 mg  
STD 12N14-B

17  
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 232 TO 236.



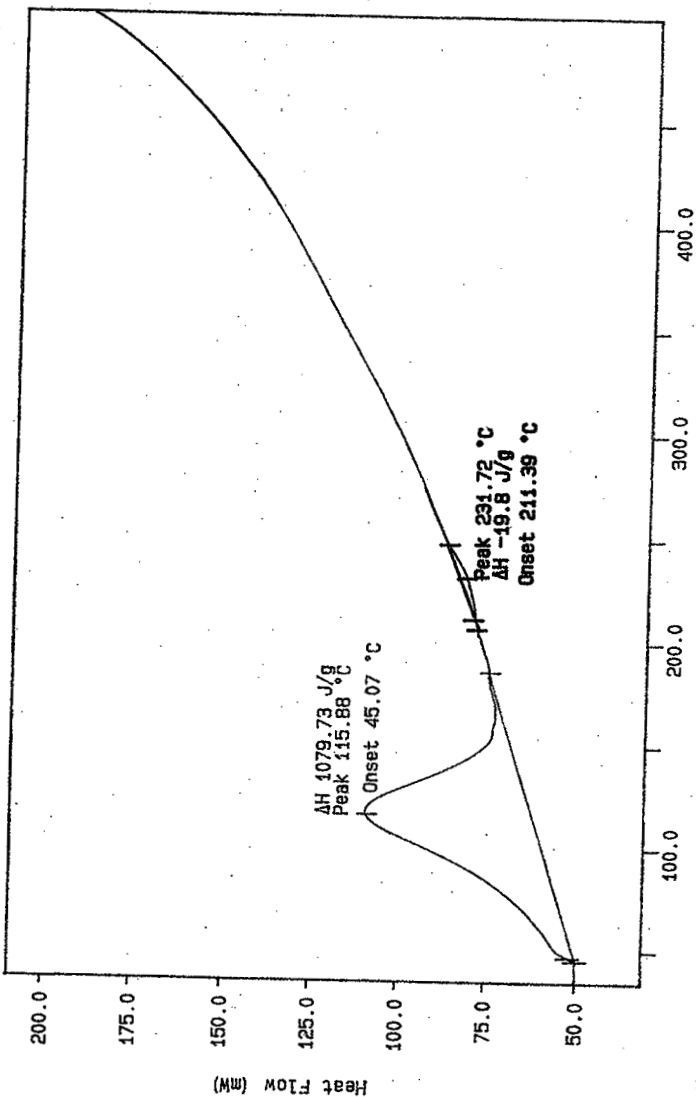
N2, EXOTHERM DOWN  
 TEMP: 160.0 °C TIME: 0.0 min RATE: 10.0 C/min  
 JI SOLBRACK  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Mon Aug 3 10:43:52 1998

Curve 1: DSC  
File info: SAM080304 Mon Aug 3 14: 50: 46 1998  
Sample Weight: 19.170 mg  
S98T002031



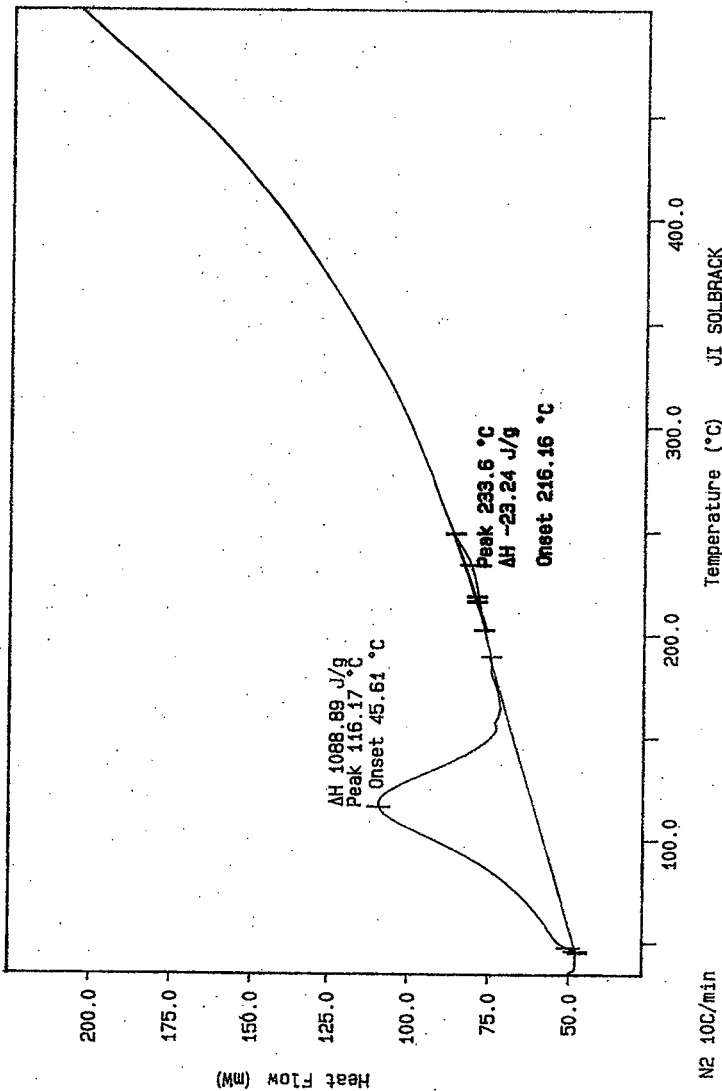
N2 10C/min  
TEMP: 85.0 C  
TIME: 500.0 C  
0.0 min RATE: 40.0 C/min  
Temperature (°C)  
JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Tue Aug 4 08: 26: 48 1998

Curve 1: DSC  
File info: SAM080305 Mon Aug 3 15:58:07 1998  
Sample Weight: 13.650 mg  
S98T002034DUP



N2 10C/min  
TEMP: 35.0 C  
TIME: 500.0 S  
0.0 min RATE: 10.0 C/min  
Temperature (°C)  
JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Tue Aug 4 08:28:39 1998

Curve 1: DSC  
File info: SAM080302 Mon Aug 3 12: 01: 31 1998  
Sample Weight: 14.240 mg  
S98T002035



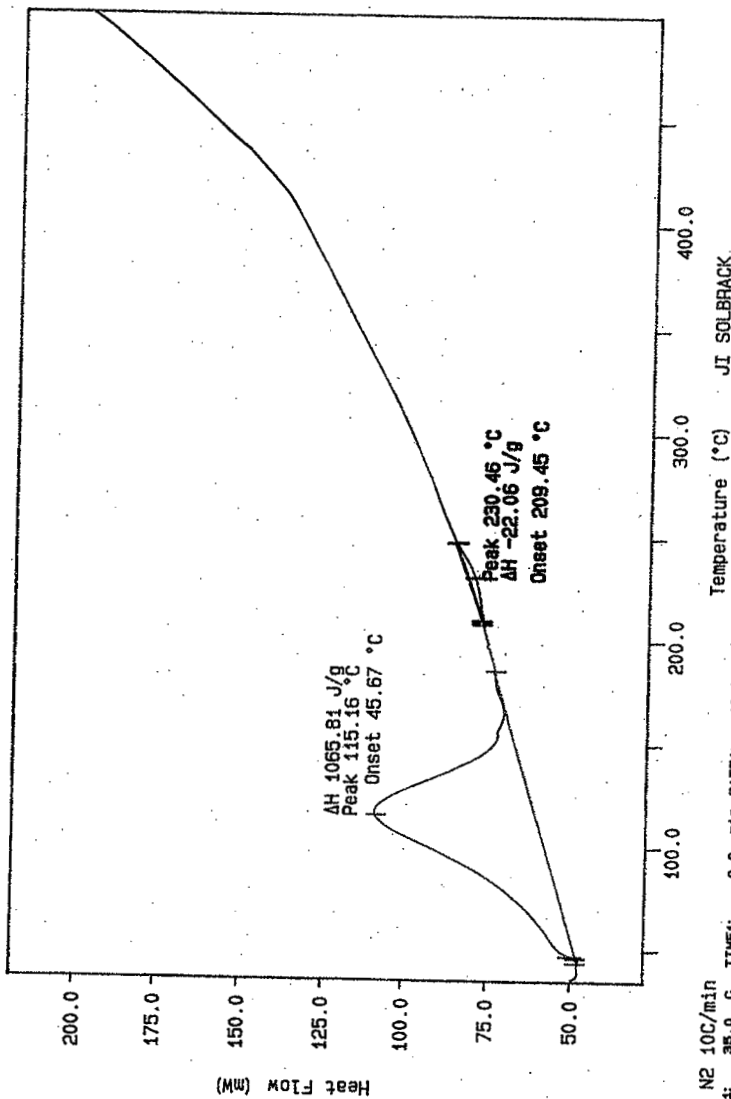
N2 10C/min  
TEMP: 35.0 C  
TIME: 500.0 C

0.0 min RATE: 40.0 C/min

Temperature (°C)

JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Tue Aug 4 08: 23: 02 1998

Curve 1: DSC  
File Info: SAM080303 Mon Aug 3 13:45:04 1998  
Sample Weight: 14.240 mg  
S98T002035DUP



N2 10C/min  
TEMP: 50.0 C TIME: 0.0 min RATE: 10.0 C/min  
JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Tue Aug 4 08:24:50 1998



**LABCORE Data Entry Template for Worklist# 25141**

Analyst: MM Instrument: DSC0 3 Book # 12014-E

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, DSC-03, tdm ~~USE NO MORE~~ <sup>TD- 2/2/98</sup> <15mg

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03	LIQUID	<u>28.45</u>	<u>28.55</u>	N/A	Joules/g
98000358	U-107 (2)	2 SAMPLE	S98T002045 0		DSC-03	LIQUID	N/A	<u>19.58</u>		Joules/g
98000358	U-107 (2)	3 DUP	S98T002045 0		DSC-03	LIQUID	<u>19.58</u>	<u>22.29</u>	N/A	Joules/g

**Final page for worklist # 25141**

Analyst Signature: MM King Date: 8/19/98

Analyst Signature: [Signature] Date: 8-10-98

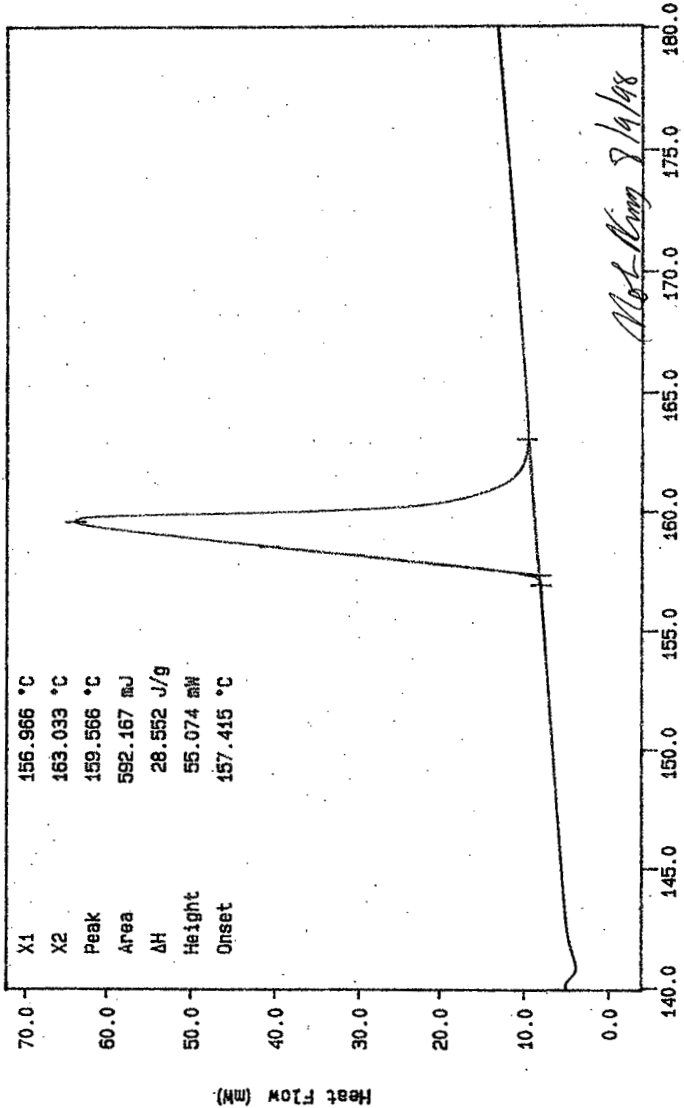
Validated 8/10/98 [Signature]

Data Entry Comments: use < 15mg sample size

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

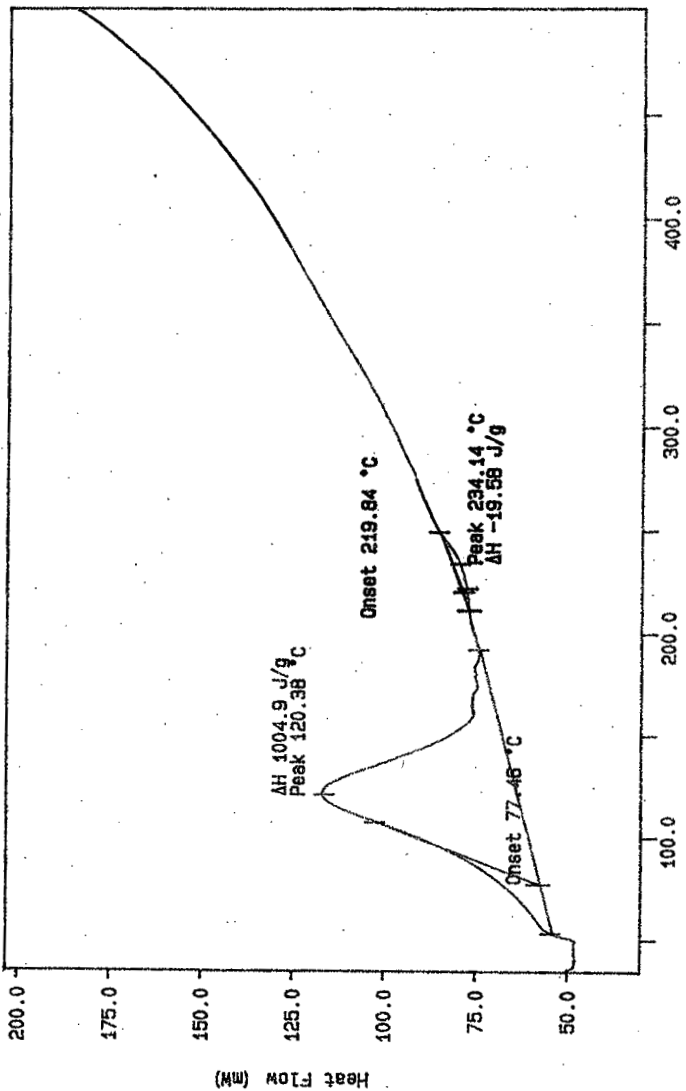
Curve 1: DSC  
 File info: IND080901 Sun Aug 9 07:02:27 1998  
 Sample Weight: 20.740 mg  
 STD 12N14-B

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2/2 TO 2/4/.



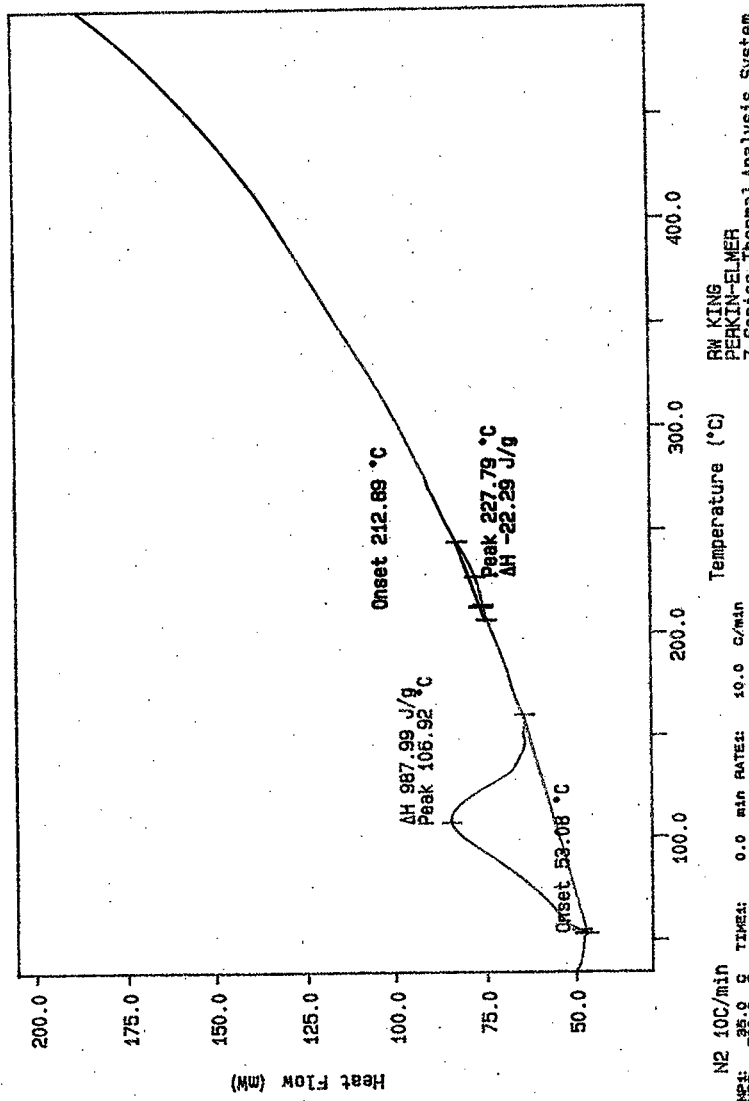
N2, EXOTHERM DOWN  
 TEMP: 149.8 °C TIME: 0.0 min RATE: 10.0 C/min  
 RW KING  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Sun Aug 9 07:06:39 1998

Curve 1: DSC  
 File Info: SAK080901 Sun Aug 9 08:01:42 1998  
 Sample Weight: 15.970 mg  
 S98T002045



N2 10C/min  
 TEMPS: 35.0 C  
 TIME: 0.0 min RATE: 10.0 C/min  
 RW KING PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Sun Aug 9 08:02:41 1998

Curve 1: DSC  
File info: SAM060902 Sun Aug 9 08:53:33 1998  
Sample Weight: 8.520 mg  
S98T002045 DUP



RW KING  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sun Aug 9 10:08:33 1998

N2 10C/min  
TEMP: 86.8 C  
TIME: 6  
0.0 MIN RATE: 10.0 C/min

# LABCORE Data Entry Template for Worklist# 25604

Analyst: SLH Instrument: DSC0 3 Book # 1214-Sub B 8-24-98

Method: LA-514-114 Rev/Mod D-1

12N14-B

Worklist Comment: U107 (2), DSC-03 Use <15mg SS. Run under nitrogen. skm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03	LIQUID	<u>28.45</u>	<u>26.66*</u>	<u>N/A</u>	Joules/g
98000359	U-107 (2)	2 SAMPLE	S98T002235	0	DSC-03	LIQUID	<u>N/A</u>	<u>0</u>		Joules/g
98000359	U-107 (2)	3 DUP	S98T002235	0	DSC-03	LIQUID	<u>0</u>	<u>0</u>	<u>N/A</u>	Joules/g
98000359	U-107 (2)	4 SAMPLE	S98T002239	0	DSC-03	LIQUID	<u>N/A</u>	<u>0</u>		Joules/g
98000359	U-107 (2)	5 DUP	S98T002239	0	DSC-03	LIQUID	<u>0</u>	<u>0</u>	<u>N/A</u>	Joules/g

### Final page for worklist # 25604

Jandra Hood  
Analyst Signature Boe-trust  
Date

R. McCown  
Analyst Signature 8/27/98  
Date

Validated 9/1/98 BB

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

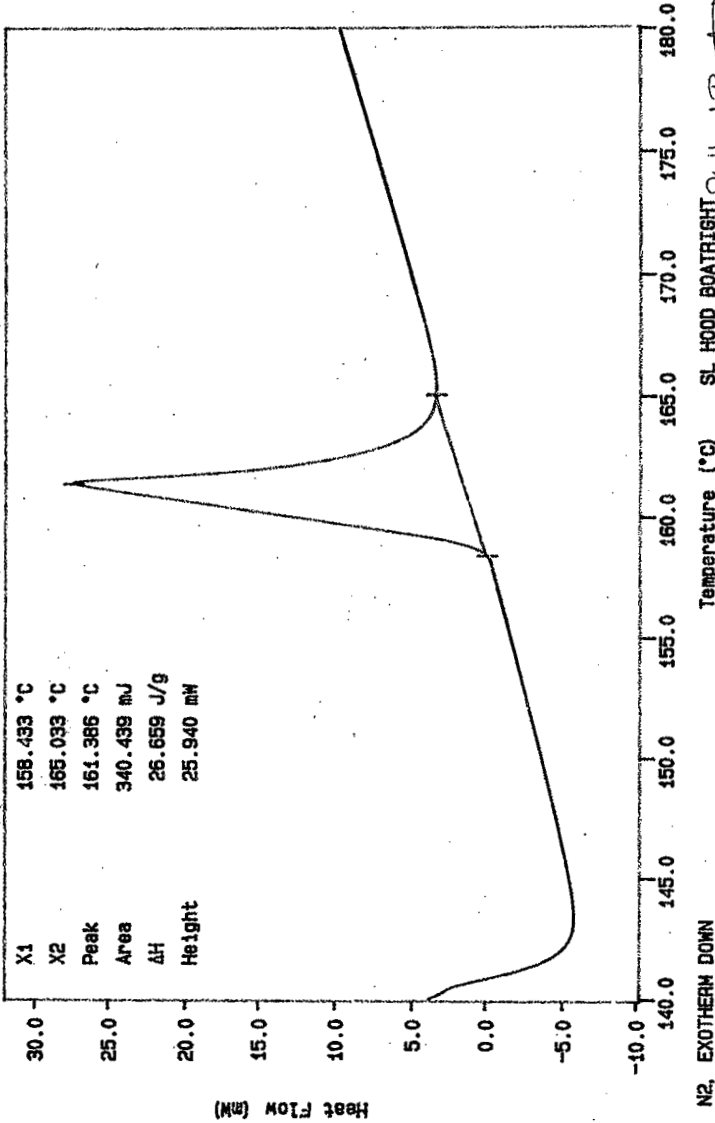
Curve 1: DSC

File Info: STD082301 Sun Aug 23 18:52:54 1998

Sample Weight: 12.770 mg

STD 12N14-B

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 246 TO 252.

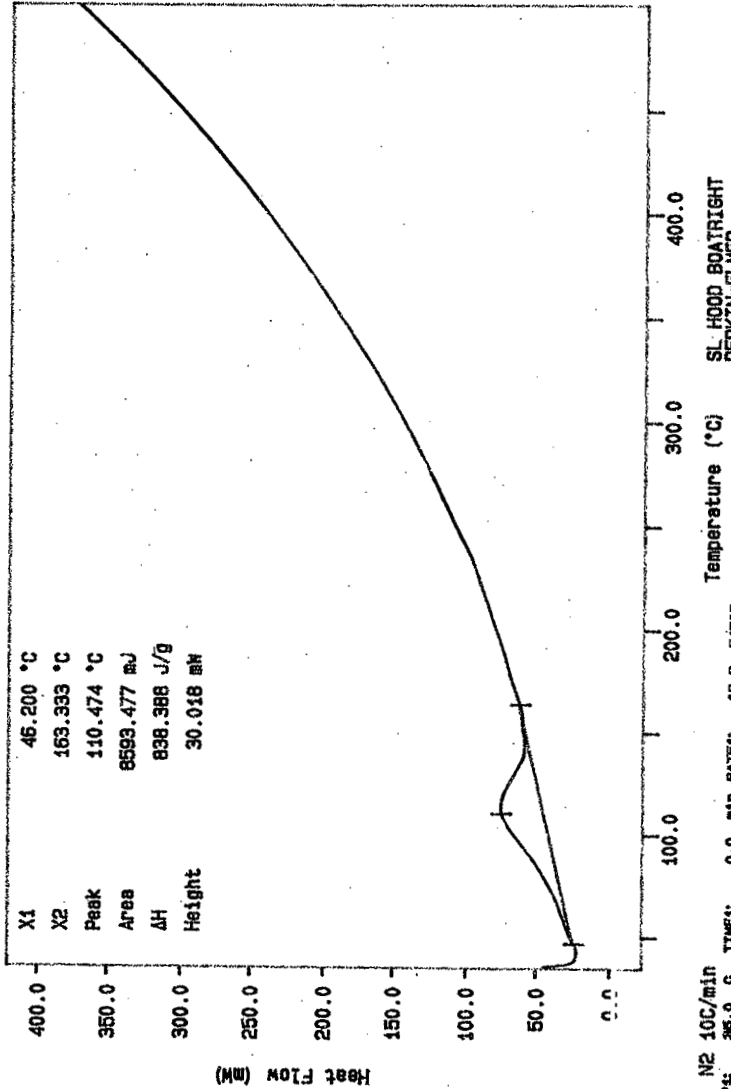


N2, EXOTHERM DOWN  
 THERM 160.0 °C TRIGGER 9.0 min PATTEN 30.0 C/min

Temperature (°C)

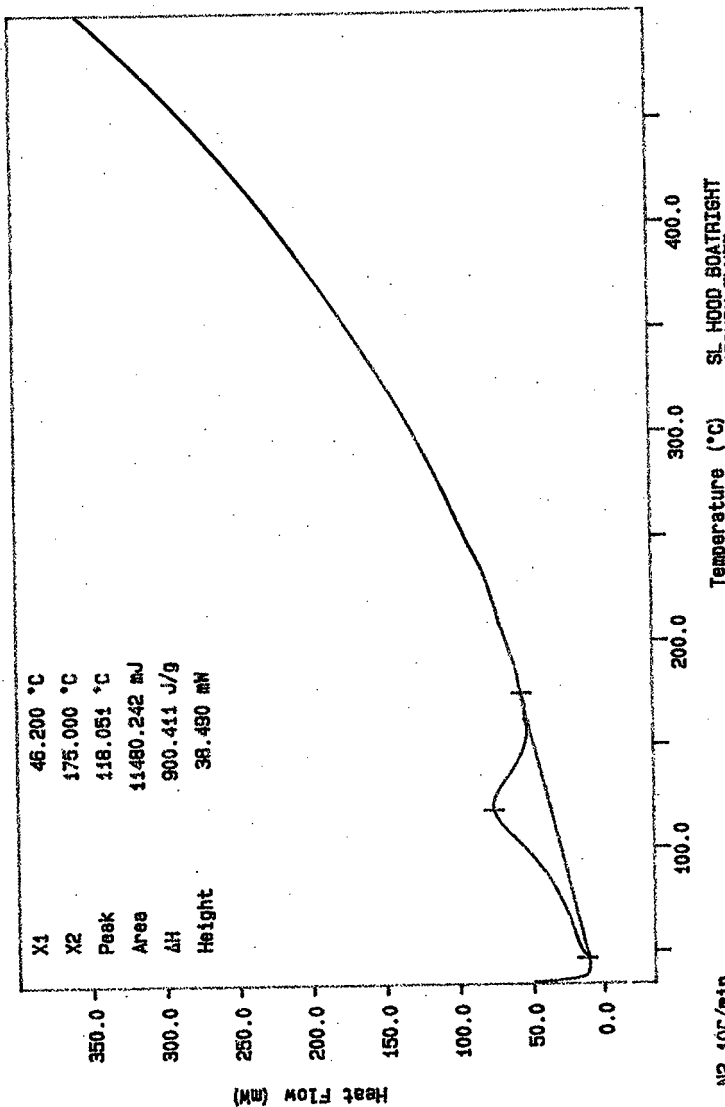
SL HOOD BOATRIGT  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Sun Aug 23 19:12:29 1998

Curve 1: DSC  
 File Info: SAM082401 Mon Aug 24 01: 44: 35 1998  
 Sample Weight: 10.250 mg  
 S98T002235 SAM



N2 10C/min  
 TEMPERATURE 35.0 °C TIME: 0.0 min RATE: 10.0 °C/min  
 SL HOOD BOATRIGT  
 PEAKIN-ET-MER  
 7 Series Thermal Analysis System  
 Mon Aug 24 01: 17: 45 1998

Curve 1: DSC  
 File Info: SAM082402 Mon Aug 24 02:09:46 1998  
 Sample Weight: 12.750 mg  
 S98T02235 DUP



SL HOOD BOATRIGHT  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Mon Aug 24 02:10:15 1998

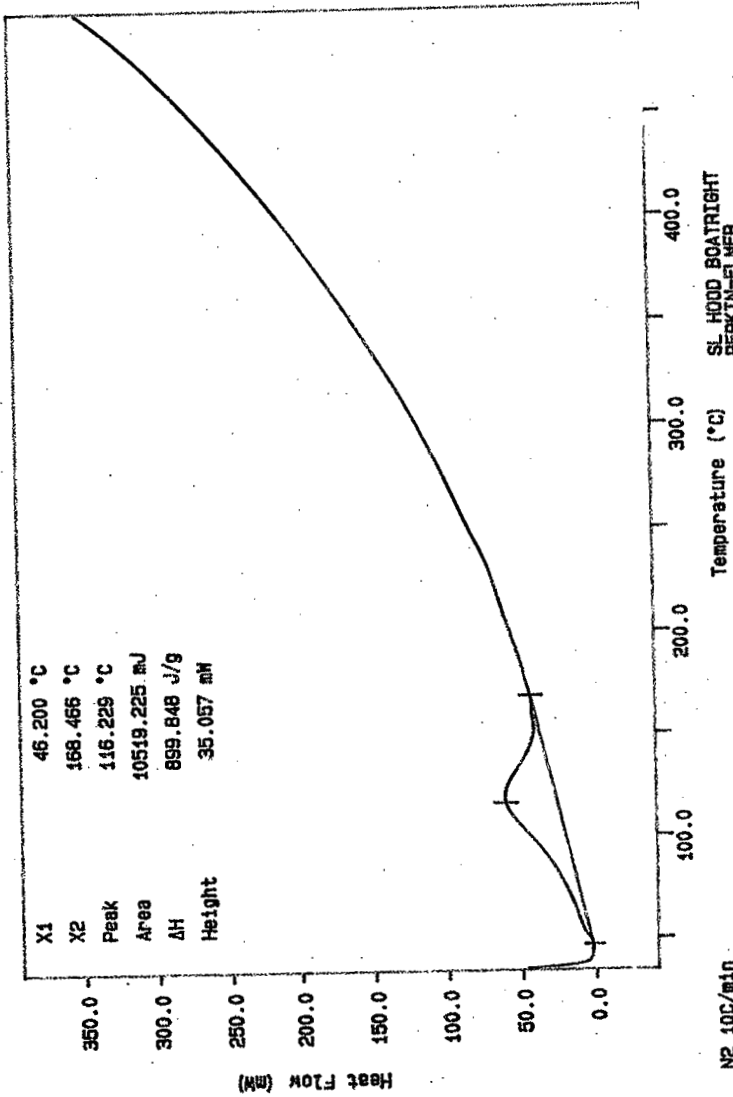
N2 10C/min  
 TEMPI 38.8 °C  
 TIME: 0.0 min RATE: 10.0 C/min

TEMP: 38.8 °C



Curve 1: DSC  
 File Info: SAM082403 Mon Aug 24 03:02:31 1998  
 Sample Weight: 11.690 mg  
 S98T002239 SAM

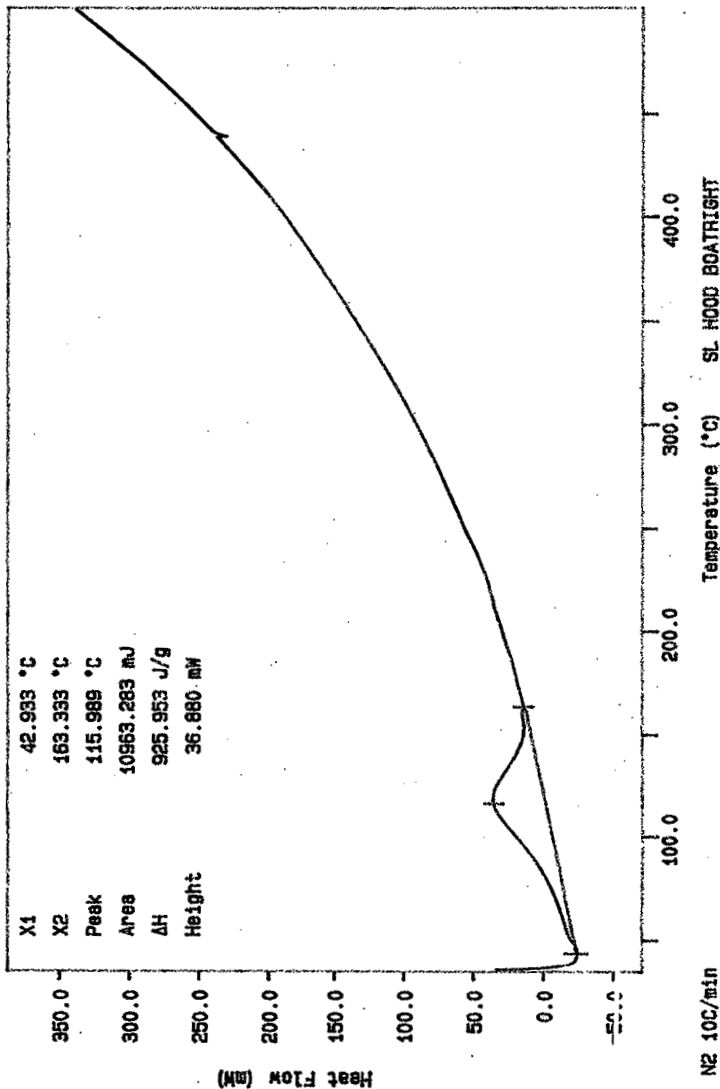
HNF-1661 REV. 0



SL HOOD BOATRUGHT  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Mon Aug 24 03:06:54 1998

N2 10C/min  
 Temp 50.0 °C  
 Time 0.0 min  
 Rate 20.0 °/min

Curve 1: DSC  
File info: SAM082404 Mon Aug 24 03:56:44 1998  
Sample Weight: 11.840 mg  
598T002239 DUP



SL HOOD BOATRIGHT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 24 05:20:38 1998

N2 10C/min  
TEMPER 288.8 E  
TRIGGER 0.0 min RATE: 20.0 C/min

worklistrpt Version 2.1 05/15/95  
08/13/98 15:23

# LABCORE Data Entry Template for Worklist# 25605

Analyst: JAN Instrument: DSC0 3 Book # 12011-13

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107 (2), DSC-03 Use <15mg SS. Run under nitrogen. . skm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03	LIQUID	<u>38.45</u>	<u>27.92*</u>	<u>1/A</u>	Joules/g
98000359	U-107 (2)	2 SAMPLE	S98T002243	0	DSC-03	LIQUID	<u>N/A</u>	<u>38.94</u>		Joules/g
98000359	U-107 (2)	3 DUP	S98T002243	0	DSC-03	LIQUID	<u>38.94</u>	<u>42.70</u>	<u>N/A</u>	Joules/g
98000359	U-107 (2)	4 SAMPLE	S98T002247	0	DSC-03	LIQUID	<u>N/A</u>	<u>66.28</u>		Joules/g
98000359	U-107 (2)	5 DUP	S98T002247	0	DSC-03	LIQUID	<u>66.28</u>	<u>73.35</u>	<u>N/A</u>	Joules/g

**Final page for worklist # 25605**

Jeanine Smith 8/20/98  
Analyst Signature Date

R McCown 8/27/98  
Analyst Signature Date

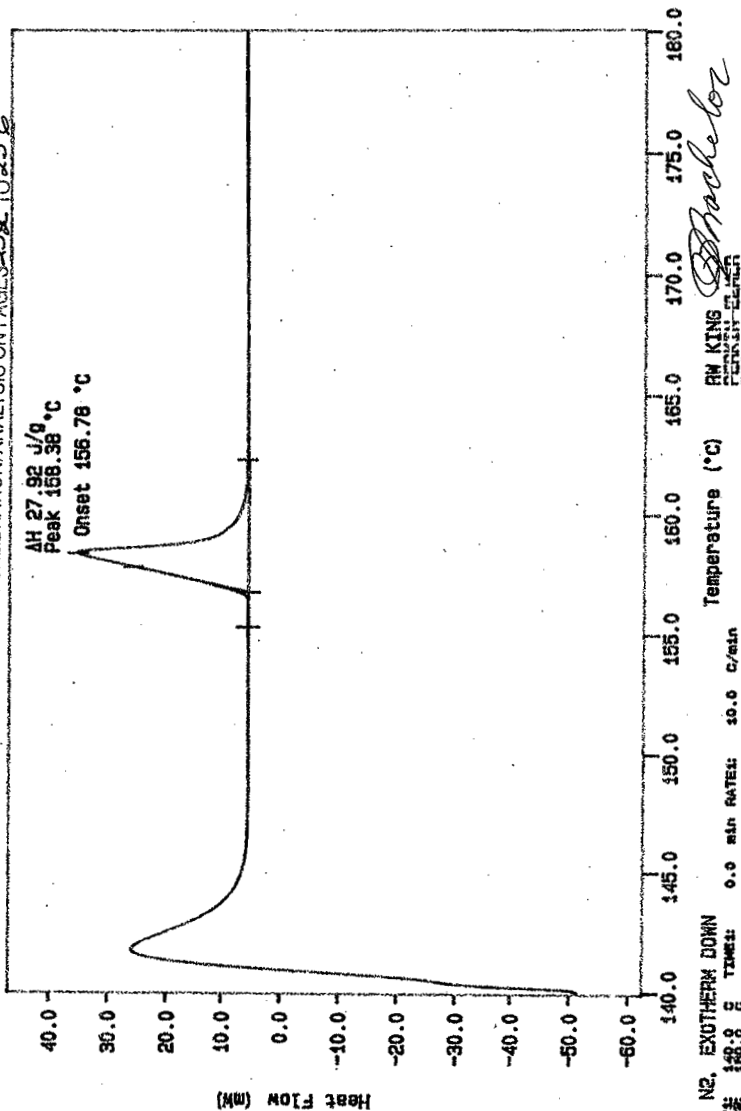
Validated 9/1/98 [Signature]

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

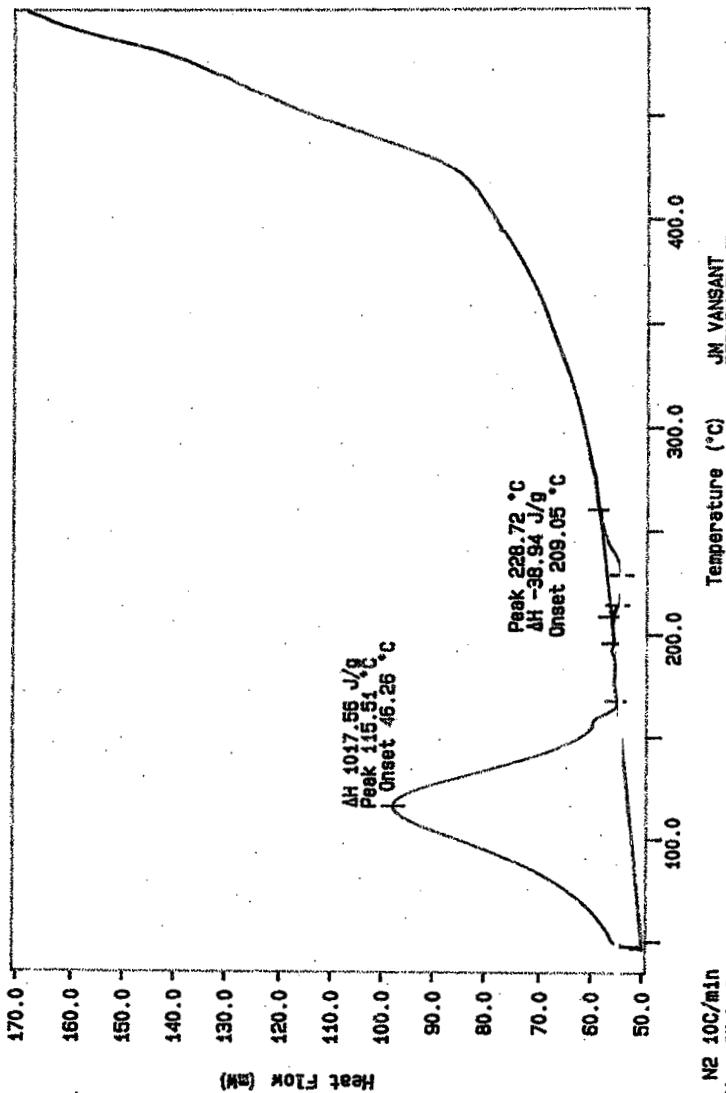
Curve 1: DSC  
File Info: SAM8209B10 Thu Aug 20 06:55:15 1998  
Sample Weight: 8.610 mg  
STD 12N14-B

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 258 TO 256



RW KING  
7 Series Thermal Analysis System  
Mon Aug 24 08:43:02 1998  
*RW King*

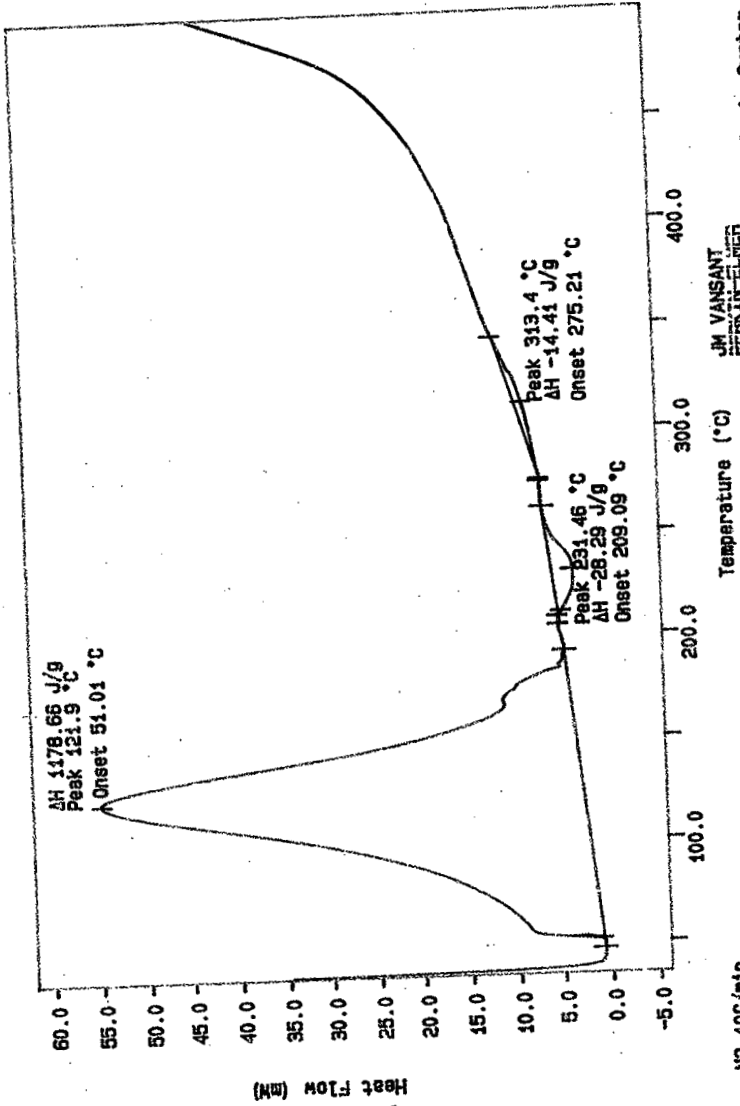
Curve 1: DSC  
File Info: SAM8209821 Thu Aug 20 14: 44: 46 1998  
Sample Weight: 14.270 mg  
S98T002243



JM VANSANT  
PERDUE CHEMICALS  
7 Series Thermal Analysis System  
Mon Aug 24 08: 54: 55 1998

N2 10C/min  
TEMP: 500.0 C  
TIME: 0.0 min RATE: 10.0 C/min

Curve 1: DSC  
File info: SAMB209622 Thu Aug 20 15:36:33 1998  
Sample Weight: 14.870 mg  
S98T002243DUP

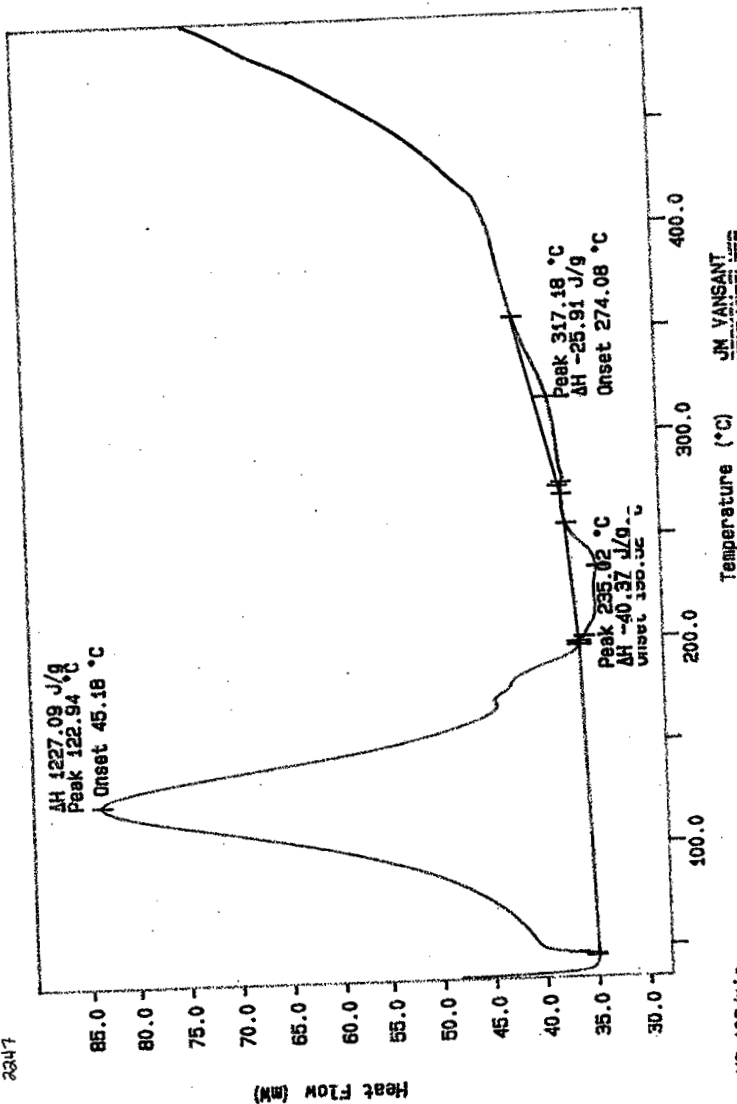


JM VANSANT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 24 08:52:00 1998

N2 10C/min  
TEMP: 200.0  
TIME: 8  
0.0 min RATE: 10.0 C/min

Curve 1: DSC  
File info: SAM8209824 Thu Aug 20 16: 33: 08 1998  
Sample Weight: 13.980 mg  
S98T0022495UP-8/24/98

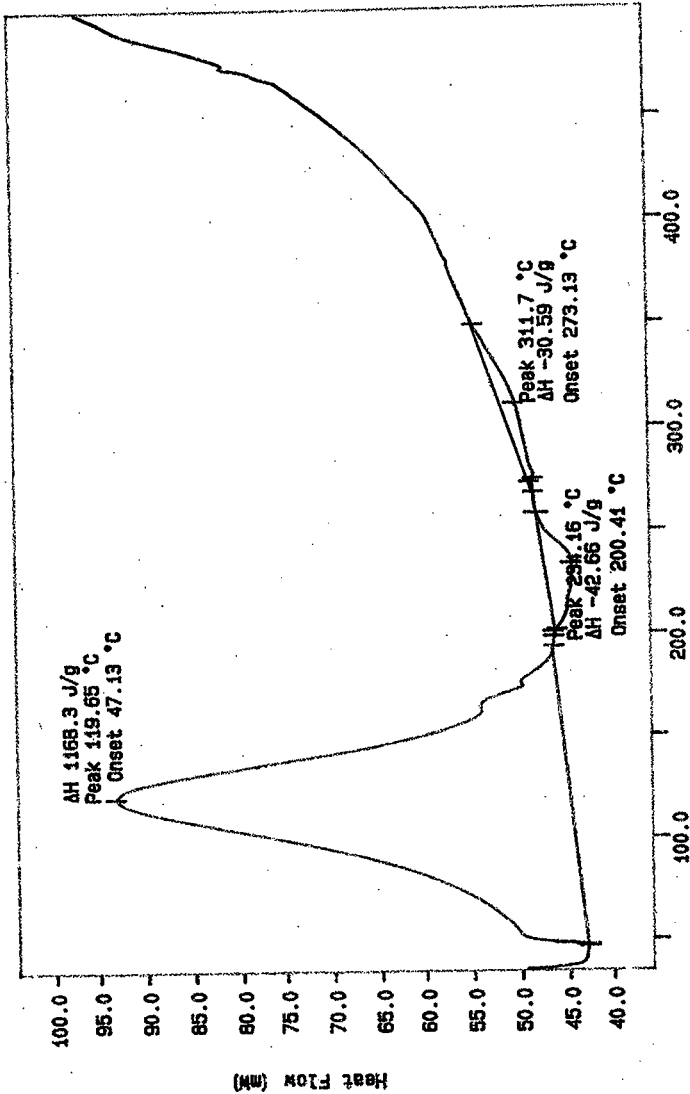
2347



JM VANSANT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 24 08: 47: 01 1998

N2 10C/min  
TEMP: 356.8 C  
TIME: 0.0 min RATE: 50.0 C/min

Curve 4: DSC  
File Info: SAM8209826 Thu Aug 20 17:26:02 1998  
Sample Weight: 14.770 mg  
S98T002247DUP



N2 100/min  
TEMP: 38.8 °C  
TIME: 568.8 s  
0.0 MIN RATE: 10.0 C/min  
Temperature (°C)  
JM VANSANT  
CERTAL-ELMER  
7 Series Thermal Analysis System  
Mon Aug 24 08:49:48 1998



# LABCORE Data Entry Template for Worklist# 25608

Analyst: ROM Instrument: DSC0 3 Bool: # 12N14B

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107 (2), DSC-03 Use < 15mg SS. Run under nitrogen. skm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03	SOLID	<u>28.45</u>	<u>26.42</u>	<u>N/A</u>	Joules/g
98000358	U-107 (2)	2 SAMPLE	S98T002039 0		DSC-03	SOLID	<u>N/A</u>	<u>0</u>		Joules/g
98000358	U-107 (2)	3 DUP	S98T002039 0		DSC-03	SOLID	<u>0</u>	<u>0</u>	<u>N/A</u>	Joules/g
98000359	U-107 (2)	4 SAMPLE	S98T002266 0		DSC-03	SOLID	<u>N/A</u>	<u>0</u>		Joules/g
98000359	U-107 (2)	5 DUP	S98T002266 0		DSC-03	SOLID	<u>0</u>	<u>0</u>	<u>N/A</u>	Joules/g

### Final page for worklist # 25608

ROM 8/24/98  
Analyst Signature Date

R. McCann 8/27/98  
Analyst Signature Date

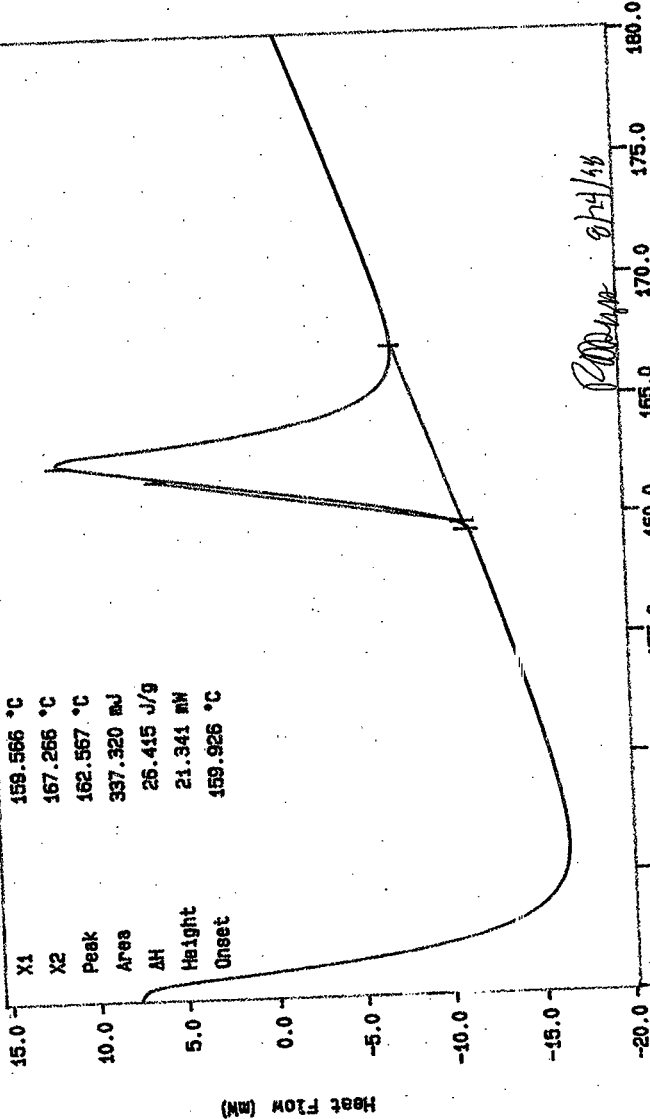
Validated 8/27/98 [Signature]

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: DSC  
 File Info: IND082401 Mon Aug 24 06:24:49 1998  
 Sample Weight: 12.770 mg  
 STD 12N14-B

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 252 TO 262.

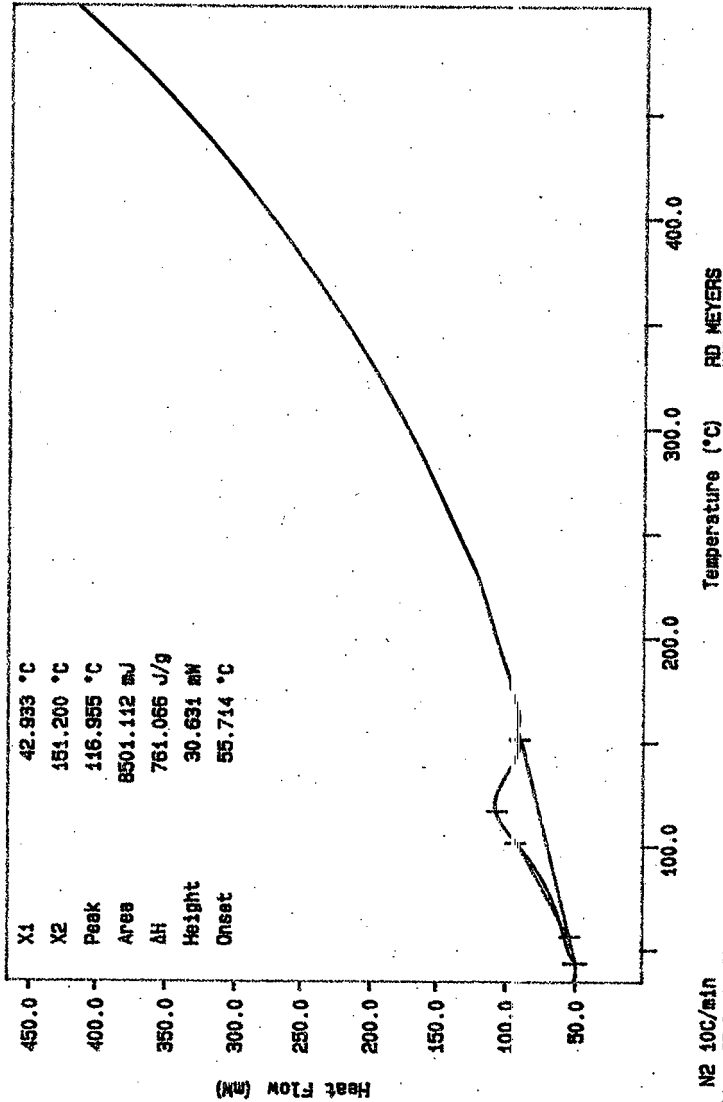


*Signature* 8/24/98

RD NEYERS  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Mon Aug 24 06:27:08 1998

N2, EXOTHERM DOWN  
 148.8 g  
 0.0 min RATE: 10.0 C/min

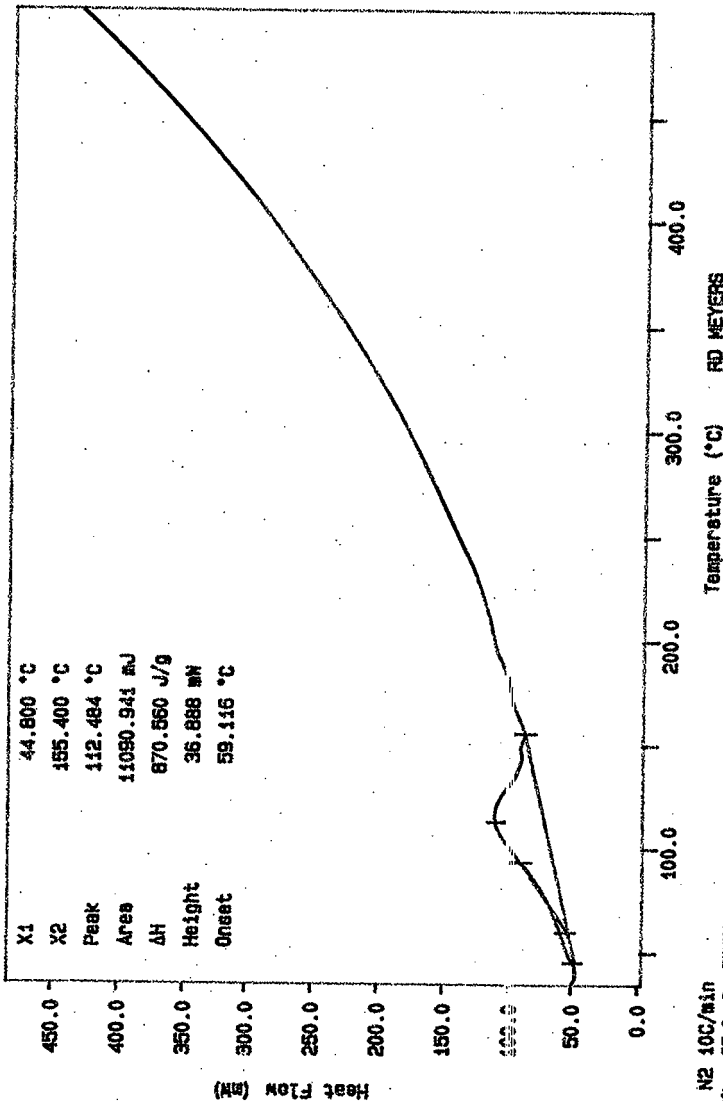
Curve 1: DSC  
File Info: SAM082410 Mon Aug 24 08:01:34 1998  
Sample Weight: 11.170 mg  
S88T002039



RD MEYERS  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 24 10:14:33 1998

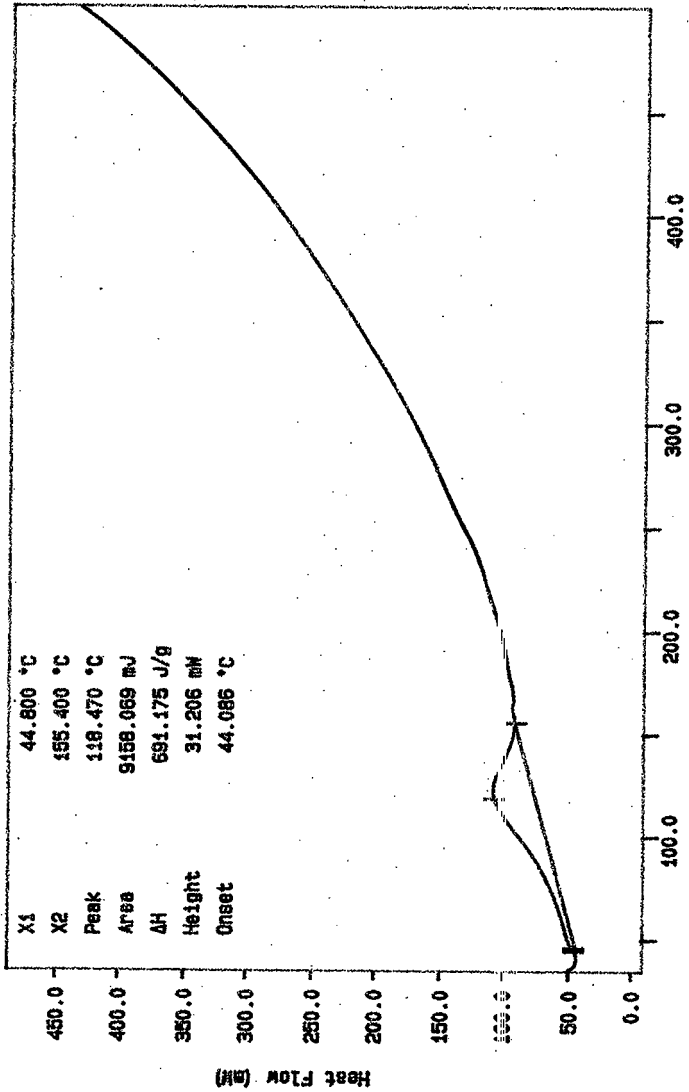
N2 10C/min  
TEMP: 568.8 g  
TIMES: 0.0 min RATE: 10.0 C/min

Curve 1: DSC  
File Info: SAH082411 Mon Aug 24 11:10:24 1998  
Sample Weight: 12.740 mg  
S98T002039DUP



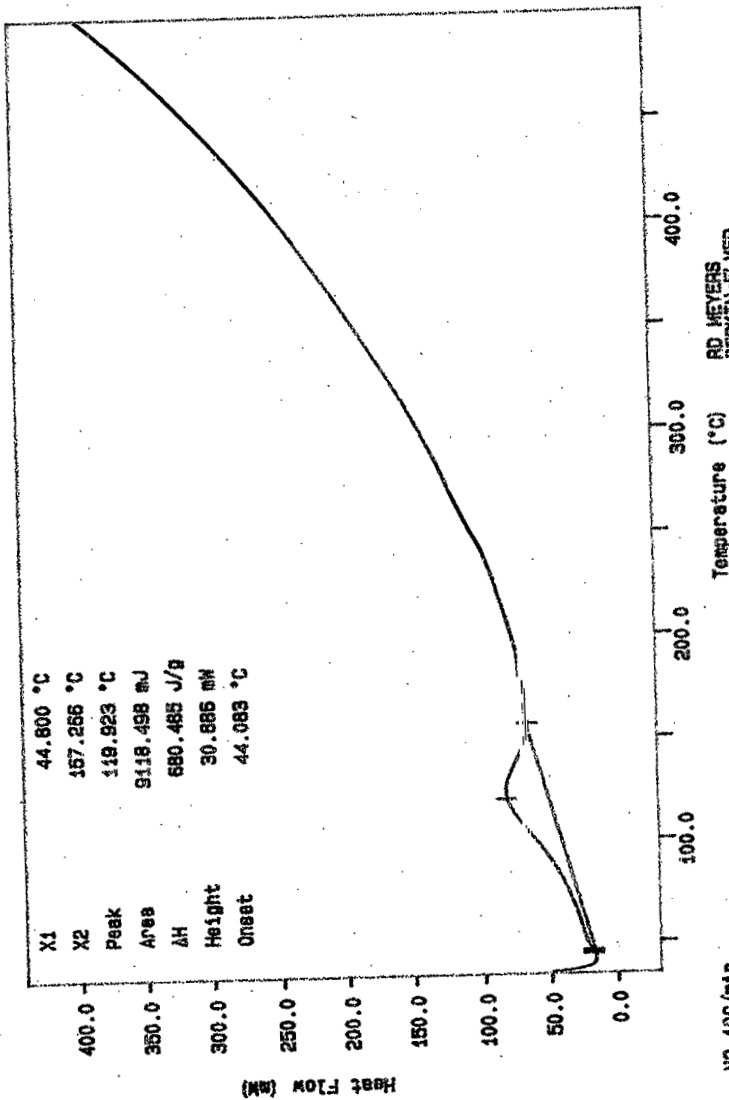
N2 100/min  
TEMPERATURE 551.3 °C  
TIME: 0.0 min RATE: 10.0 C/min  
RD MEYERS  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 24 12:38:09 1998

Curve 1: DSC  
File Info: SAM082412 Mon Aug 24 14: 03: 26 1998  
Sample Weight: 13.260 mg  
S98T002266



N2 10C/min  
TEMPERATURE 500.0 g  
THERM 500.0 g  
0.0 min RATE: 10.0 C/min  
RD MEYERS  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 24 14: 18: 36 1998

Curve 1: DSC  
 File Info: SAK082413 Mon Aug 24 15:22:27 1998  
 Sample Weight: 13.400 mg  
 S98T02256DUP



RD MEYERS  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Mon Aug 24 15:32:46 1998

N2 100/mln  
 THERM 680.8  
 THERM 680.8  
 THERM 0.0 min RATE: 10.0 °C/min

# LABCORE Data Entry Template for Worklist# 25609

Analyst: JIS Instrument: DSCO 3 Book # 12M14-8

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107 (2), DSC-03 Use < 15mg SS. Run under nitrogen. skm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03		28.45	ML		
						SOLID	59.4	9/18/98	21	N/A Joules/g
98000359	U-107 (2)	2 SAMPLE	S98T002272	0	DSC-03	SOLID	N/A	6.80	9/12/99	Joules/g
98000359	U-107 (2)	3 DUP	S98T002272	0	DSC-03	SOLID	6.80	5.99	9/12/99	Joules/g
98000358	U-107 (2)	4 SAMPLE	S98T002327	0	DSC-03	SOLID	N/A	6.80	9/12/99	Joules/g
98000358	U-107 (2)	5 DUP	S98T002327	0	DSC-03	SOLID	6.80	5.99	9/12/99	Joules/g

### Final page for worklist # 25609

Jeff Sobczak 8/26/98  
Analyst Signature Date

J.A. Sp 9/18/98  
Analyst Signature Date

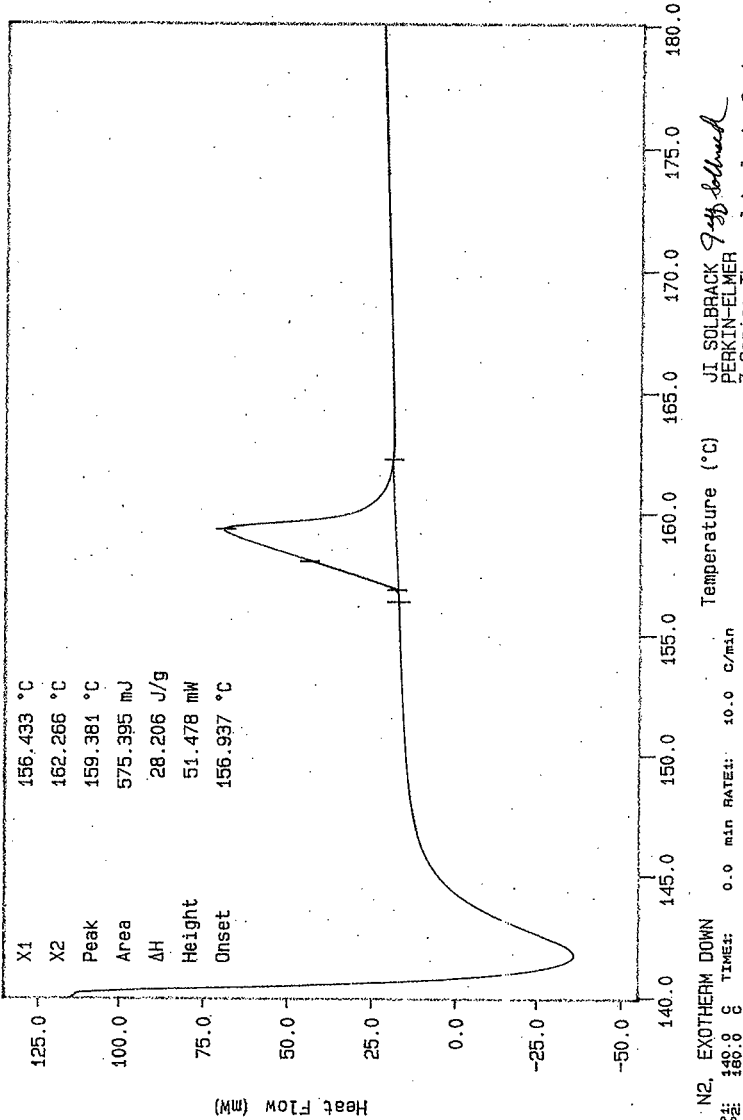
Validated 9/9/98 Phachol

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: DSC  
File Info: IND052601 Wed Aug 26 06: 40: 33 1998  
Sample Weight: 20.400 mg  
STD 12N14-B

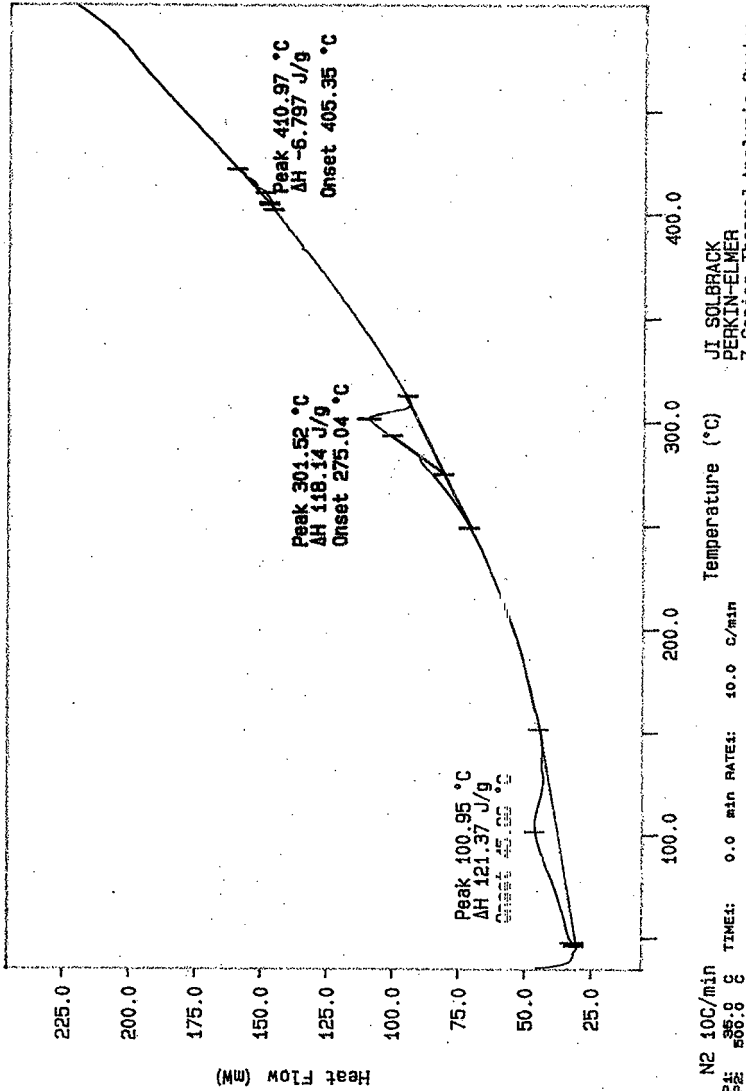
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 264 TO 268.



N2, EXOTHERM DOWN  
TEMP: 140.0 C TIME: 0.0 min RATE: 10.0 C/min  
JI SOLBRACK *Jerry Solbrack*  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Wed Aug 26 06: 54: 55 1998



Curve 1: DSC  
File info: SAM02602 Wed Aug 26 09:23:55 1998  
Sample Weight: 19.800 mg  
S98T002327

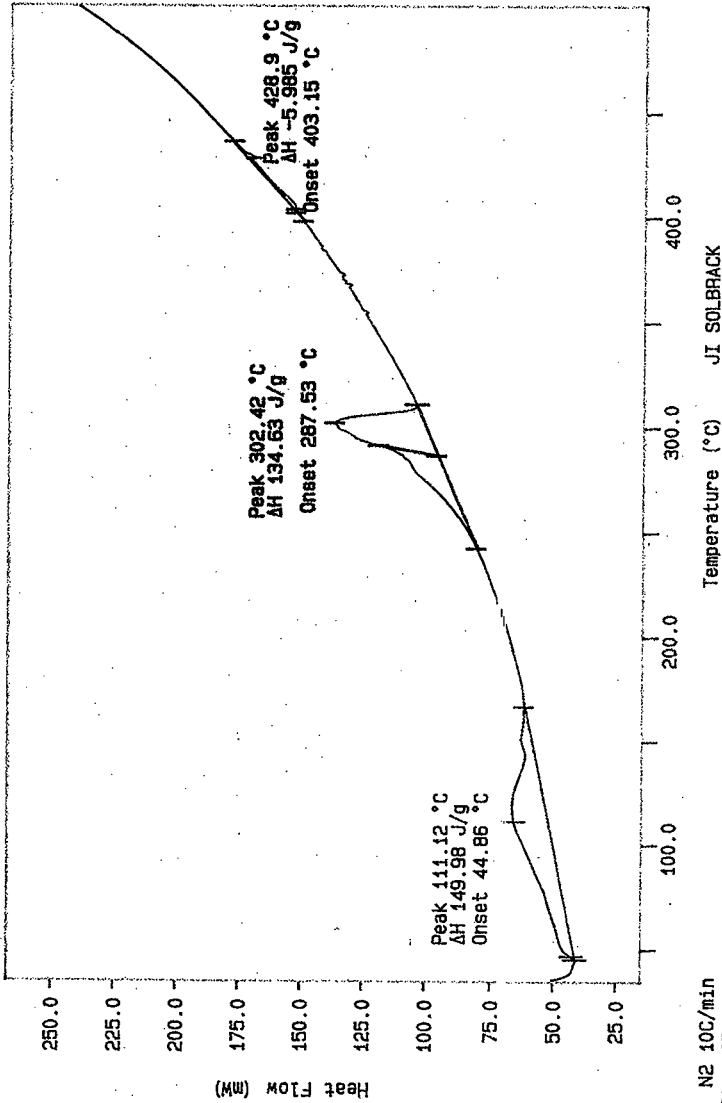


N2 100/min  
TEMP: 35.0 C  
TIME: 500.0 C

JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System

Mon Aug 31 08:55:26 1998

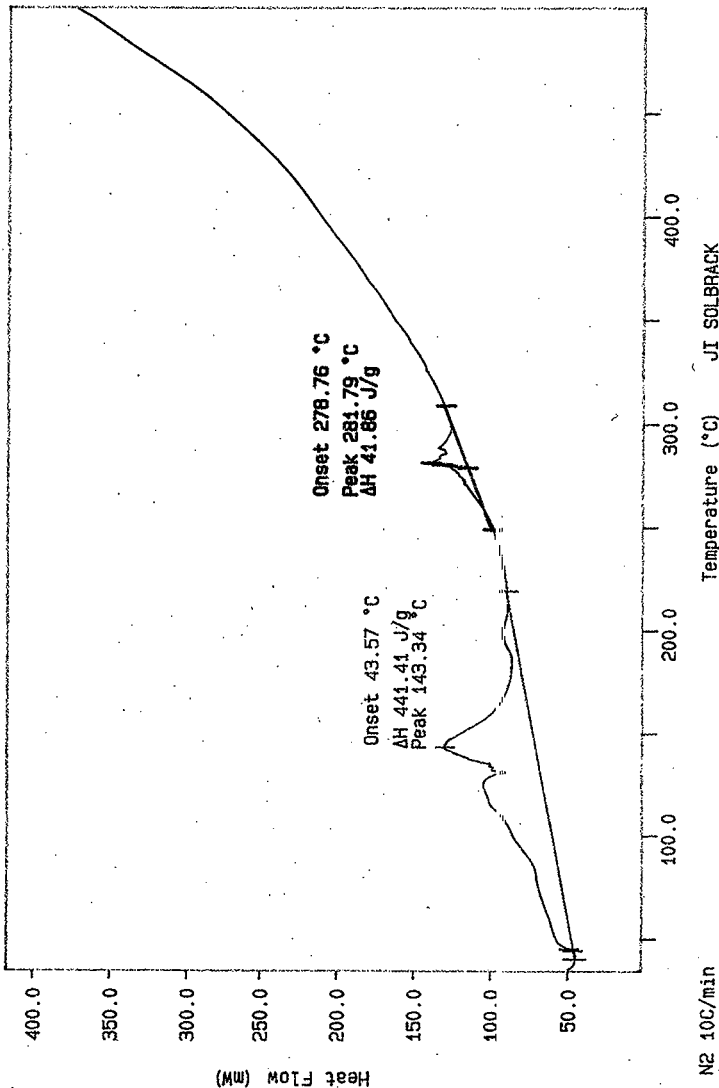
Curve 1: DSC  
File info: SAM082603 Wed Aug 26 10: 37: 41 1998  
Sample Weight: 35.500 mg  
S98T002327DUP



JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 31 08: 57: 53 1998

N2 10C/min  
TEMP: 35.0 °C  
TIME: 0.0 min RATE: 10.0 C/min

Curve 1: DSC  
File info: SAM082604 Wed Aug 26 11:54:36 1998  
Sample Weight: 48.780 mg  
S98T002272

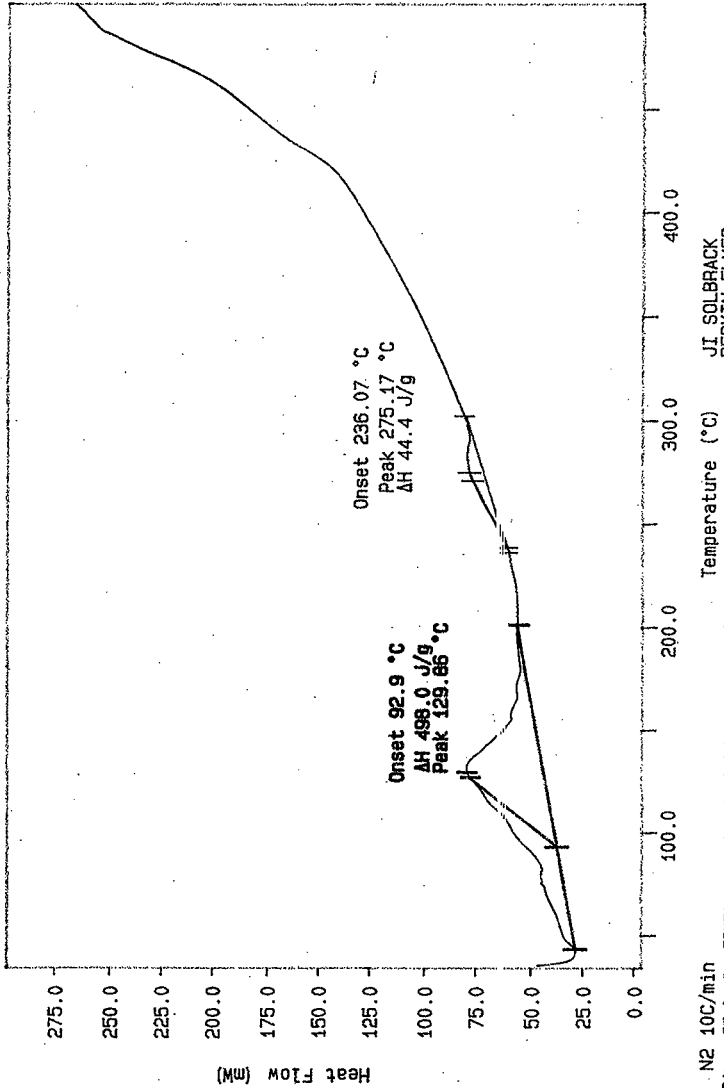


NI 10C/min  
TEMP: 35.0 C  
TIME: 559.0 S

JT SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Wed Aug 26 15:43:25 1998

0.0 min RATE: 10.0 C/min

Curve 1: DSC  
File info: SAM082605 Wed Aug 26 13: 19: 41 1998  
Sample Weight: 26.120 mg  
S98T002272.DUP



JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Wed Aug 26 13: 28: 52 1998

N2 10C/min  
TEMP1: 35.0 C  
TEMP2: 500.0 C  
TIME1: 0.0 min  
RATE1: 10.0 C/min

# LABCORE Data Entry Template for Worklist# 25610

Analyst: SLH Instrument: DSCO 3 Book # 12N11-B

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107 (2), DSC-03 Use <15mg SS. Run under nitrogen. skm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03	SOLID	<u>28.45</u>	<u>26.66*</u>	<u>N/A</u>	Joules/g
98000358	U-107 (2)	2 SAMPLE	S98T002333	0	DSC-03	SOLID	<u>N/A</u>	<u>0</u>		Joules/g
98000358	U-107 (2)	3 DUP	S98T002333	0	DSC-03	SOLID	<u>0</u>	<u>0</u>	<u>N/A</u>	Joules/g
98000358	U-107 (2)	4 SAMPLE	S98T002334	0	DSC-03	SOLID	<u>N/A</u>	<u>0</u>		Joules/g
98000358	U-107 (2)	5 DUP	S98T002334	0	DSC-03	SOLID	<u>0</u>	<u>0</u>	<u>N/A</u>	Joules/g

## Final page for worklist # 25610

Jandra Hood  
Analyst Signature  
Bret Wright  
Date  
8-24-98

RJ McCoun  
Analyst Signature  
8/27/98  
Date

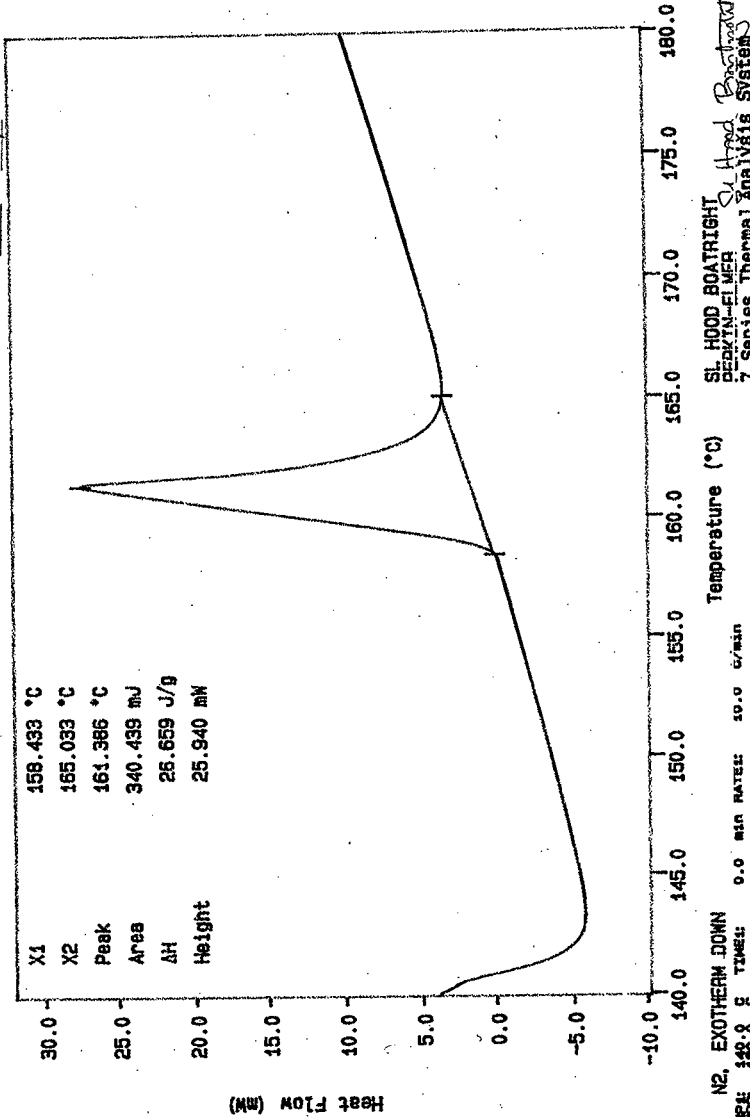
Validated 9/1/98 B. Mchelow

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 4: DSC  
File Info: STD082301 Sun Aug 23 18:52:54 1998  
Sample Weight: 12.770 mg  
STD 12N14-B

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 270 TO 274.



SL HOOD BOATRIGHT  
SERIES 7  
7 Series Thermal Analysis System  
Sun Aug 23 19:14:31 1998  
*Richard B. Howard*

N2, EXOTHERM DOWN  
TEMP: 148.8 °C  
HEAT: 166.8 mW  
0.0 MIN RATE: 10.0 °C/MIN

This document was too large to scan as a single document; therefore, it has been divided into smaller sections.

Section 4 of 7

Document Information

Document #	HNF-1661	Revision	0
Title	TANK 241U107 CORES 242 & 242R & 245 ANALYTICAL RESULTS FOR THE FINAL REPORT		
Date	02/01/99		
Originator	STEEN FH	Originator Co.	WMH
Recipient		Recipient Co.	
References	EDT-626133		
Keywords	PUSH MODE, CHARACTERIZATION, U FARM		
Projects	TWRS		
Other Information			

```

=====
Sample Name: S98T002462          Date: 09/29/1998 14:13:02
Data File  : C:\DX\DATA\98092901.D08
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 8      Detector: CDM-1
Analyst    :                      Column: AG4A/AS4A anion column
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----

```

```

External      1      10201      3000 5Hz      0.00 10.00      30

```

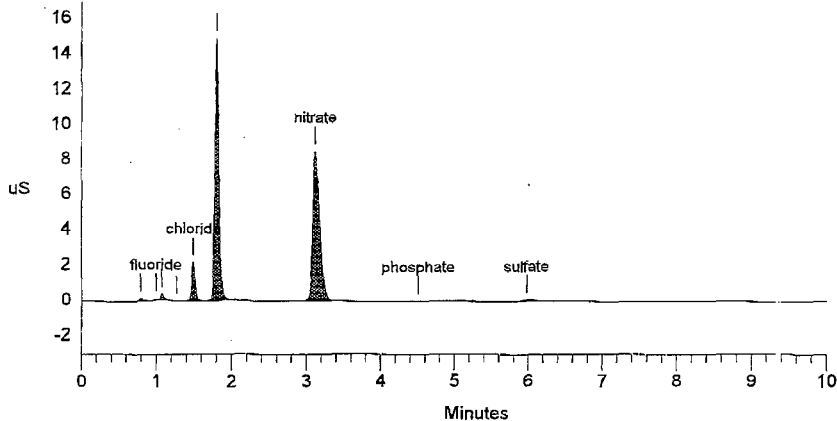
```

***** Peak Report: All Peaks *****

```

PK. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	169	843	1	
2	0.99	fluoride	255.414	100	185	2	4.56
3	1.07		0.000	349	901	2	
4	1.27		0.000	30	115	1	
5	1.49	chloride	12512.723	2242	6996	1	-1.33
6	1.80	nitrite	139857.995	14918	55828	1	-1.64
7	3.11	nitrate	156955.987	8544	55343	1	-3.01
8	4.51	phosphate	2164.360	31	305	1	-2.87
9	5.97	sulfate	4279.319	92	1662	1	-2.61
Totals			316025.798	26473	122177		

File: 98092901.D08 Sample: S98T002462





## HNF-1661 REV. 0

```

=====
Sample Name: S98T002462DUP          Date: 09/29/1998 14:52:20
Data File  : C:\DX\DATA\98092901.D10
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 10      Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====

```

```

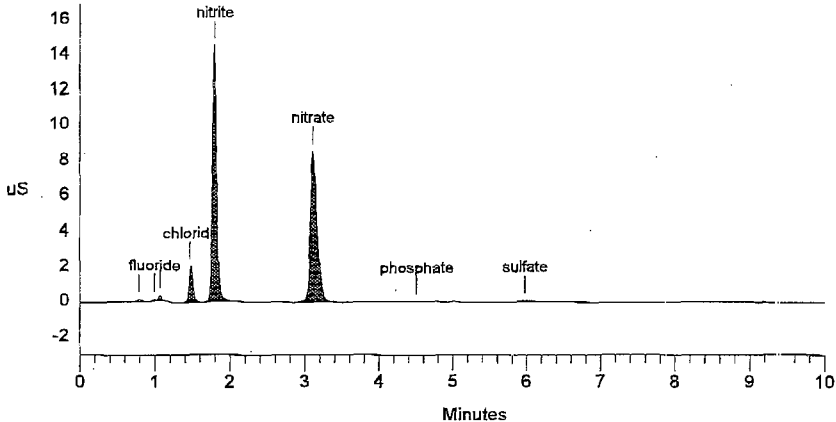
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           10201 3000 5Hz  0.00 10.00           30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	166	769	1	
2	0.99	fluoride	240.486	96	172	1	4.56
3	1.07		0.000	352	845	1	
4	1.47	chloride	13199.307	2065	7389	1	-2.21
5	1.79	nitrite	145448.425	14556	58165	1	-2.00
6	3.11	nitrate	154913.234	8532	54585	1	-3.22
7	4.51	phosphate	3229.803	43	484	1	-2.87
8	5.97	sulfate	3658.510	98	1403	1	-2.61
Totals			320689.764	25908	123814		

File: 98092901.D10 Sample: S98T002462DUP



# LABCORE Completed Worklist Report for Worklist# 26186

Analyst: adp

Instrument: IC45S2

Book#: 131N20B

Method: LA-533-1105 Rev/Mod F-0

Worklist Comment: U107, @IC4G-01, tdm

Seq Type	Sample#	RA	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	@IC4G-QC F*4	QC	1	<2.10e-2		ug/mL
1	CCB	0	@IC4G-QC ACETATE2	QC	1	<2.00e-2		ug/mL
1	CCB	0	@IC4G-QC FORMATE2	QC	1	<2.10e-2		ug/mL
1	CCB	0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2		ug/mL
2	ICV	0	@IC4G-QC F*4	QC	5.80e1	5.91e+01	101.897 %	Recovery
2	ICV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.15e+02	98.291 %	Recovery
2	ICV	0	@IC4G-QC FORMATE2	QC	1.27e2	1.13e+02	88.976 %	Recovery
2	ICV	0	@IC4G-QC GLYCOLT1	QC	1.01e2	9.70e+01	96.040 %	Recovery
3	CCV	0	@IC4G-QC F*4	QC	5.90e1	5.33e+01	90.339 %	Recovery
3	CCV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.06e+02	90.598 %	Recovery
3	CCV	0	@IC4G-QC FORMATE2	QC	1.32e2	1.22e+02	92.424 %	Recovery
3	CCV	0	@IC4G-QC GLYCOLT1	QC	1.16e2	1.14e+02	98.276 %	Recovery
4	SAMPLE	S98T002458	@IC4G-01 F*4-01	LIQUID	<u>N/A</u>	< 1.879e+01	18.790	ug/mL
4	SAMPLE	S98T002458	@IC4G-01 ACETATE2	LIQUID	<u>N/A</u>	1.463e+03	35.150	ug/mL
4	SAMPLE	S98T002458	@IC4G-01 FORMATE2	LIQUID	<u>N/A</u>	4.828e+03	37.570	ug/mL
4	SAMPLE	S98T002458	@IC4G-01 GLYCOLT1	LIQUID	<u>N/A</u>	2.791e+03	33.940	ug/mL
5	DUP	S98T002458	@IC4G-01 F*4-01	LIQUID	<1.88e1	<1.88e1		RPD
5	DUP	S98T002458	@IC4G-01 ACETATE2	LIQUID	1.46e+03	1.43e+03	2.076	RPD
5	DUP	S98T002458	@IC4G-01 FORMATE2	LIQUID	4.83e+03	4.89e+03	1.235	RPD
5	DUP	S98T002458	@IC4G-01 GLYCOLT1	LIQUID	2.79e+03	2.86e+03	2.478	RPD
6	SPK	S98T002458	@IC4G-01 F*4-01	LIQUID	5.80e1	2.71e+01	46.724 %	Recovery
6	SPK	S98T002458	@IC4G-01 ACETATE2	LIQUID	1.17e2	1.21e+02	103.419 %	Recovery
6	SPK	S98T002458	@IC4G-01 FORMATE2	LIQUID	1.27e2	1.31e+02	103.150 %	Recovery
6	SPK	S98T002458	@IC4G-01 GLYCOLT1	LIQUID	1.01e2	9.69e+01	95.941 %	Recovery
7	SAMPLE	S98T002462	@IC4G-01 F*4-01	LIQUID	<u>N/A</u>	< 1.879e+01	18.790	ug/mL
7	SAMPLE	S98T002462	@IC4G-01 ACETATE2	LIQUID	<u>N/A</u>	1.058e+03	35.150	ug/mL
7	SAMPLE	S98T002462	@IC4G-01 FORMATE2	LIQUID	<u>N/A</u>	4.229e+03	37.570	ug/mL
7	SAMPLE	S98T002462	@IC4G-01 GLYCOLT1	LIQUID	<u>N/A</u>	2.567e+03	33.940	ug/mL
8	DUP	S98T002462	@IC4G-01 F*4-01	LIQUID	<1.88e1	<1.88e1		RPD
8	DUP	S98T002462	@IC4G-01 ACETATE2	LIQUID	1.06e+03	1.25e+03	16.450	RPD
8	DUP	S98T002462	@IC4G-01 FORMATE2	LIQUID	4.23e+03	4.38e+03	3.484	RPD
8	DUP	S98T002462	@IC4G-01 GLYCOLT1	LIQUID	2.57e+03	2.65e+03	3.065	RPD

Final page for worklist# 26186

Analyst Signature

Date

Analyst Signature

Date

*Jan M. Luy 10/8/98*

HNF-1661 REV. 0

Page: 1

09/14/98 15:42  
A-0004-1**LABCORE Data Entry Template for Worklist# 26186**Analyst: ADP Instrument: IC 4552 Book# 13 NZO-BMethod: LA-533-1105 Rev/Mod F-O

Worklist Comment: U107, @IC4G-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC4G-QC	QC		
2	ICV		@IC4G-QC	QC		
3	CCV		@IC4G-QC	QC		
4	SAMPLE	S98T002458 0	@IC4G-01	LIQUID	98000401	U-107 (2)
		Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCOLT1				
5	DUP	S98T002458 0	@IC4G-01	LIQUID		
6	SPK	S98T002458 0	@IC4G-01	LIQUID		
7	SAMPLE	S98T002462 0	@IC4G-01	LIQUID	98000401	U-107 (2)
		Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCOLT1				
8	DUP	S98T002462 0	@IC4G-01	LIQUID		

**Final page for worklist # 26186**

*Anthony Perinton*  
 Analyst Signature Date 9-25-98

\_\_\_\_\_  
 Analyst Signature Date

Data Entry Comments:

*uploaded 10-2-98*  
*J. M. W. Swell*  
 26186SEP.CSV

*validated 10/18/98 JMS*

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Data Reprocessed On 09/29/1998 11:22:22

```

=====
Sample Name: BLANK                               Date: 09/25/1998 14:02:15
Data File  : E:\DATA\98092511.d09
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 9             Detector: CDM-1
Analyst    : Ed Colvin                          Column: AG4A-SC,AS4A-SC, SRS
JM. Slay 10/9/98
=====
    
```

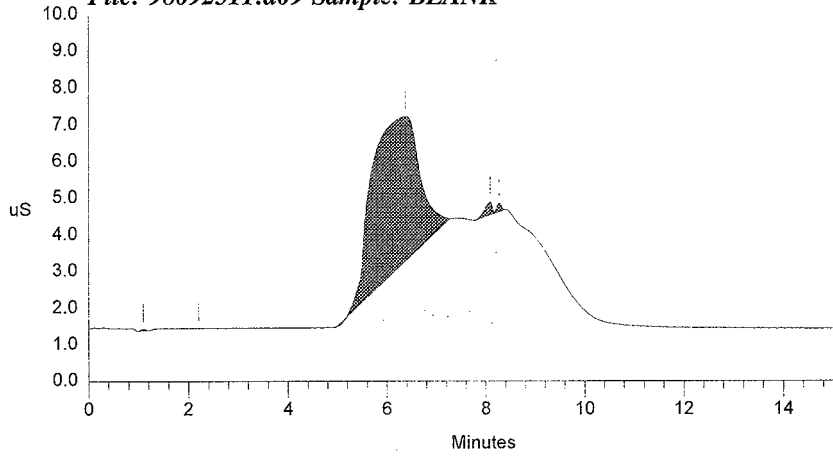
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          1    4500 5Hz    0.00 15.00      0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.10		0.000	54	369	1	
2	2.21		0.000	13	16	1	
3	6.38		0.000	3939	280164	1	
4	8.09		0.000	362	3720	2	
5	8.27		0.000	241	1626	2	
Totals			0.000	4609	285894		

File: 98092511.d09 Sample: BLANK



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 874 TO 880.

Data Reprocessed On 09/29/1998 11:22:22

```

=====
Sample Name: 131N20-B                               Date: 09/25/1998 13:39:59
Data File  : E:\DATA\98092511.d08
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 8                 Detector: CDM-1
Analyst    : Ed Colvin                               Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

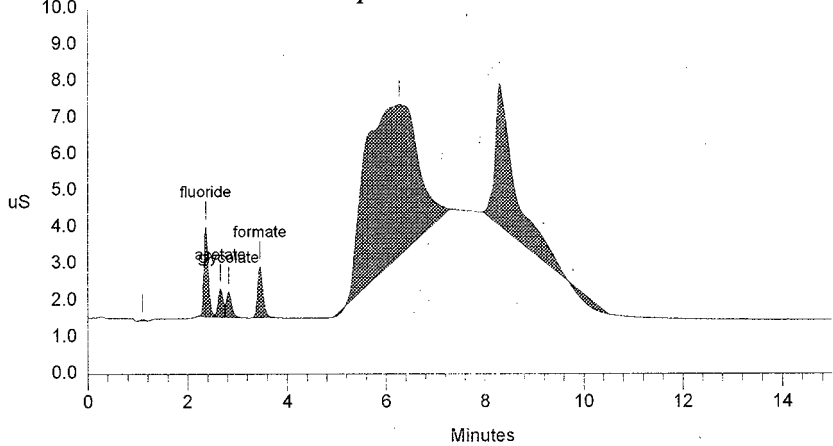
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          101    4500  5Hz    0.00 15.00          0
=====
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.10		0.000	50	335	1	
2	2.37	fluoride	59.150	2458	15245	2	0.00
3	2.66	acetate	114.588	767	5587	2	0.00
4	2.83	glycolate	96.965	693	5218	2	0.00
5	3.45	formate	113.412	1400	10800	1	0.00
6	6.27		0.000	4159	321595	1	
7	8.30		0.000	3890	104980	1	
Totals			384.116	13416	463761		

File: 98092511.d08 Sample: 131N20-B



Data Reprocessed On 09/29/1998 11:22:23

```

=====
Sample Name: 130N20-C                               Date: 09/25/1998 14:44:37
Data File  : E:\DATA\98092511.d11
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 11                Detector: CDM-1
Analyst    : Bd Colvin                               Column: AG4A-SC,AS4A-SC, SRS
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----

```

```

External      1      101      4500 5Hz  0.00 15.00      0
-----

```

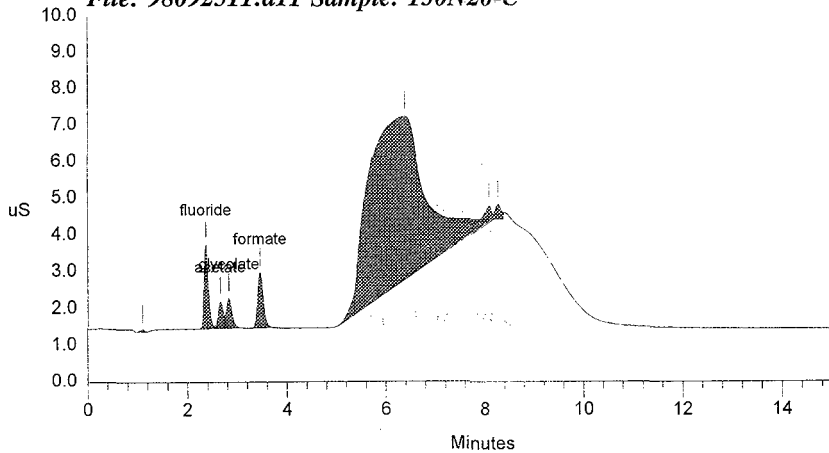
```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.10		0.000	50	319	1	
2	2.37	fluoride	53.281	2290	13657	2	0.00
3	2.65	acetate	106.429	731	5184	2	0.00
4	2.83	glycolate	114.251	802	6210	2	0.00
5	3.45	formate	122.447	1487	11718	1	0.00
6	6.37		0.000	4480	363480	3	
7	8.09		0.000	180	862	4	
8	8.27		0.000	216	1283	4	
Totals			396.408	10236	402714		

File: 98092511.d11 Sample: 130N20-C



```

=====
Sample Name: S98T002458 SAM                      Date: 09/25/1998 15:52:29
Data File  : E:\DATA\98092511.d14
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 14             Detector: CDM-1
Analyst    : Ed Colvin                          Column: AG4A-SC, AS4A-SC, SRS
=====
    
```

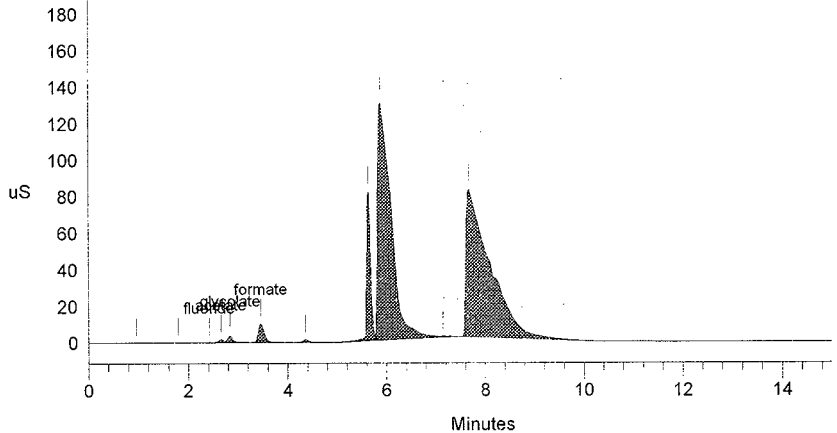
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          1          606    4500  5Hz    0.00 15.00          0
=====
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.96		0.000	96	758	1	
2	1.80		0.000	26	1252	1	
3	2.42	fluoride	16.907	32	149	2	0.00
4	2.65	acetate	1462.992	1635	11838	2	0.00
5	2.83	glycolate	2790.947	3660	28164	2	0.00
6	3.45	formate	4828.142	10359	85759	1	0.00
7	4.36		0.000	1451	12440	1	
8	5.63		0.000	81610	448644	2	
9	5.87		0.000	130517	2482726	3	
10	7.14		0.000	194	1610	4	
11	7.67		0.000	80771	2726147	1	
Totals			9098.989	310350	5799489		

**File: 98092511.d14 Sample: S98T002458 SAM**



Data Reprocessed On 09/29/1998 11:22:25

```

=====
Sample Name: S98T002458 DUP                               Date: 09/25/1998 16:08:34
Data File  : E:\DATA\98092511.d15
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 15                     Detector: CDM-1
Analyst    : Ed Colvin      Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

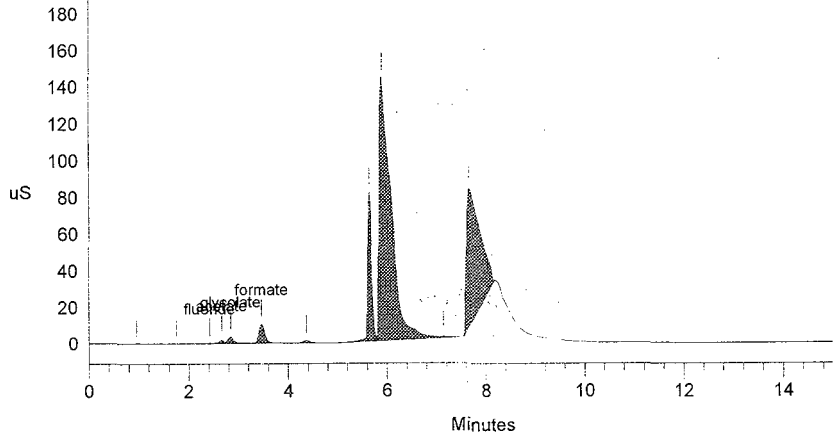
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          606    4500 5Hz  0.00 15.00          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.96		0.000	97	786	1	
2	1.75		0.000	38	1323	1	
3	2.42	fluoride	16.970	36	151	1	0.00
4	2.66	acetate	1430.669	1663	11583	2	0.00
5	2.84	glycolate	2855.640	3680	28905	2	0.00
6	3.46	formate	4890.633	10456	86973	1	0.00
7	4.37		0.000	1473	12961	1	
8	5.64		0.000	82003	450474	2	
9	5.89		0.000	143903	2454581	3	
10	7.15		0.000	209	1835	4	
11	7.66		0.000	75770	1434525	1	
Totals			9193.911	319328	4484097		

File: 98092511.d15 Sample: S98T002458 DUP





Data Reprocessed On 10/07/1998 09:48:03

```

=====
Sample Name: S98T002458 SPK                               Date: 09/25/1998 16:24:31
Data File  : E:\DATA\98092511.D16
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 16                      Detector: CDM-1
Analyst    : Ed Colvin      Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

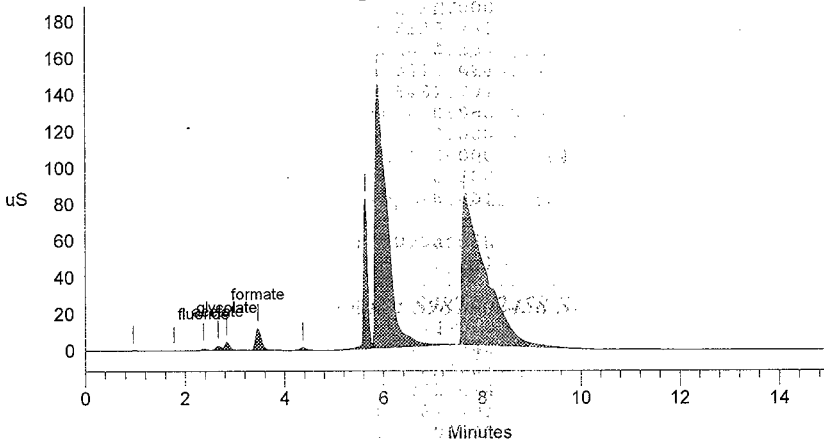
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           606    4500 5Hz   0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration µg/ml	Height	Area	Bl. Code	%Delta
1	0.96		0.000	92	693	1	
2	1.77		0.000	41	1652	1	
3	2.37	fluoride	135.740	885	5419	2	0.00
4	2.66	acetate	2070.385	2272	16573	2	0.00
5	2.83	glycolate	3275.614	4396	33831	2	0.00
6	3.46	formate	5481.791	11709	98602	1	0.00
7	4.37		0.000	1463	12787	1	
8	5.63		0.000	82020	452932	2	
9	5.88		0.000	144529	2443185	3	
10	7.15		0.000	235	2033	4	
11	7.65		0.000	81249	2726056	1	
Totals			10963.530	328891	5793762		

File: 98092511.D16 Sample: S98T002458 SPK



Data Reprocessed On 10/07/1998 09:51:37

8462

```

=====
Sample Name: S98T002458 SAM Sw 10-8-98 Date: 09/25/1998 15:19:16
Data File : E:\DATA\98092511.D12
Method : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 12 Detector: CDM-1
Analyst : Ed Colvin Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

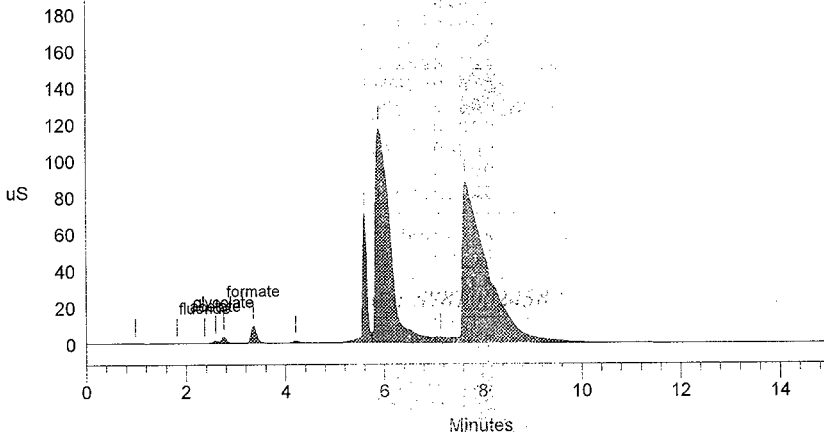
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External 1 606 4500 5Hz 0.00 15.00 0
=====
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.98		0.000	144	1168	1	
2	1.82		0.000	47	1616	1	
3	2.37	fluoride	16.060	28	111	1	0.00
4	2.59	acetate	1057.689	1316	8602	2	0.00
5	2.75	glycolate	2566.514	3401	25631	2	0.00
6	3.35	formate	4229.471	9218	74274	1	0.00
7	4.21		0.000	1252	10996	1	
8	5.60		0.000	70760	424623	2	
9	5.89		0.000	116494	2411283	3	
10	7.15		0.000	2218	44336	4	
11	7.65		0.000	87367	3041417	2	
Totals			7869.724	292246	6044058		

File: 98092511.D12 Sample: S98T002458 SAM



Data Reprocessed On 10/08/1998 10:17:40

```

=====
Sample Name: S98T002462 DUP                               Date: 09/25/1998 15:35:49
Data File  : E:\DATA\98092511.D13
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 13                      Detector: CDM-1
Analyst    : Ed Colvin      Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

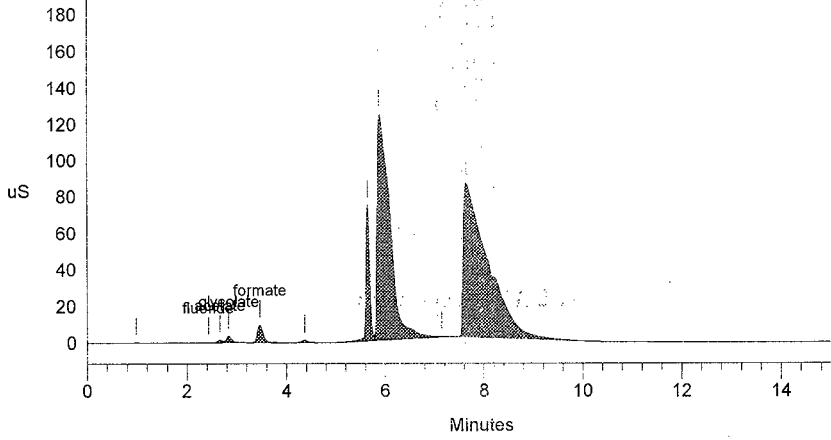
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           606    4500  5Hz   0.00 15.00          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.98		0.000	90	684	1	
2	2.43	fluoride	17.463	37	173	2	0.00
3	2.66	acetate	1247.816	1445	10128	2	0.00
4	2.83	glycolate	2653.509	3538	26607	2	0.00
5	3.47	formate	4377.175	9470	77084	1	0.00
6	4.37		0.000	1296	11106	1	
7	5.64		0.000	74435	400030	2	
8	5.88		0.000	123701	2258016	3	
9	7.14		0.000	176	1562	4	
10	7.64		0.000	84520	2902417	1	
Totals			8295.964	298707	5687808		

File: 98092511.D13 Sample: S98T002462 DUP



# LABCORE Completed Worklist Report for Worklist# 26262

Analyst: adp

Instrument: IC40S2

Book#: 20N21C

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107, @IC-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit		
1	CCB	0	@IC-QC	F	QC	1	<1.20e-2 ug/mL		
1	CCB	0	@IC-QC	CL	QC	1	<1.70e-2 ug/mL		
1	CCB	0	@IC-QC	NO2	QC	1	<1.08e-1 ug/mL		
1	CCB	0	@IC-QC	BR	QC	1	<1.25e-1 ug/mL		
1	CCB	0	@IC-QC	NO3	QC	1	<1.39e-1 ug/mL		
1	CCB	0	@IC-QC	PO4	QC	1	<1.20e-1 ug/mL		
1	CCB	0	@IC-QC	SO4	QC	1	<1.38e-1 ug/mL		
1	CCB	0	@IC-QC	OXALATE2	QC	1	<1.05e-1 ug/mL		
2	ICV	0	@IC-QC	F	QC	5.90e1	6.48e+01 109.831 % Recovery		
2	ICV	0	@IC-QC	CL	QC	8.00e1	8.30e+01 103.750 % Recovery		
2	ICV	0	@IC-QC	NO2	QC	5.38e2	5.26e+02 97.770 % Recovery		
2	ICV	0	@IC-QC	BR	QC	5.86e2	6.15e+02 104.949 % Recovery		
2	ICV	0	@IC-QC	NO3	QC	5.92e2	5.93e+02 100.169 % Recovery		
2	ICV	0	@IC-QC	PO4	QC	5.47e2	5.46e+02 99.817 % Recovery		
2	ICV	0	@IC-QC	SO4	QC	6.38e2	6.53e+02 102.038 % Recovery		
2	ICV	0	@IC-QC	OXALATE2	QC	5.53e2	5.56e+02 100.542 % Recovery		
3	CCV	0	@IC-QC	F	QC	6.40e1	6.43e+01 100.469 % Recovery		
3	CCV	0	@IC-QC	CL	QC	9.00e1	9.21e+01 102.333 % Recovery		
3	CCV	0	@IC-QC	NO2	QC	5.43e2	5.23e+02 96.317 % Recovery		
3	CCV	0	@IC-QC	BR	QC	6.30e2	6.42e+02 101.905 % Recovery		
3	CCV	0	@IC-QC	NO3	QC	6.98e2	7.41e+02 106.160 % Recovery		
3	CCV	0	@IC-QC	PO4	QC	6.32e2	6.23e+02 98.576 % Recovery		
3	CCV	0	@IC-QC	SO4	QC	6.99e2	6.98e+02 99.857 % Recovery		
3	CCV	0	@IC-QC	OXALATE2	QC	5.33e2	5.56e+02 104.315 % Recovery		
4	BLNK-PREP	0	@IC-01	F-02	SOLID	1	<1.20e-2 ug/g		
4	BLNK-PREP	0	@IC-01	CL-02	SOLID	1	<1.70e-2 ug/g		
4	BLNK-PREP	0	@IC-01	NO2-02	SOLID	1	3.31e-01 0.331 ug/g		
4	BLNK-PREP	0	@IC-01	BR-02	SOLID	1	<1.25e-1 ug/g		
4	BLNK-PREP	0	@IC-01	NO3-02	SOLID	1	1.65e-01 0.165 ug/g		
4	BLNK-PREP	0	@IC-01	PO4-02	SOLID	1	<1.20e-1 ug/g		
4	BLNK-PREP	0	@IC-01	SO4-02	SOLID	1	<1.38e-1 ug/g		
4	BLNK-PREP	0	@IC-01	OXALATE2	SOLID	1	<1.05e-1 ug/g		
5	SAMPLE	S98T002043	0	W	@IC-01	F-02	SOLID	N/A	< 1.624e+02 162.400 ug/g
5	SAMPLE	S98T002043	0	W	@IC-01	CL-02	SOLID	N/A	2.168e+03 230.100 ug/g
5	SAMPLE	S98T002043	0	W	@IC-01	NO2-02	SOLID	N/A	2.509e+04 1462.000 ug/g
5	SAMPLE	S98T002043	0	W	@IC-01	BR-02	SOLID	N/A	1.692e+03 1692.000 ug/g
5	SAMPLE	S98T002043	0	W	@IC-01	NO3-02	SOLID	N/A	5.364e+05 1881.000 ug/g
5	SAMPLE	S98T002043	0	W	@IC-01	PO4-02	SOLID	N/A	1.119e+04 1624.000 ug/g
5	SAMPLE	S98T002043	0	W	@IC-01	SO4-02	SOLID	N/A	2.436e+03 1868.000 ug/g
5	SAMPLE	S98T002043	0	W	@IC-01	OXALATE2	SOLID	N/A	1.830e+03 1421.000 ug/g
6	DUP	S98T002043	0	W	@IC-01	F-02	SOLID	<1.62e2	<1.61e2 RPD

Units shown for QC (BLK/BKG) may not reflect the actual units.

# LABCORE Completed Worklist Report for Worklist# 26262

Seq	Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
6	DUP	S98T002043	0	W	@IC-01	CL-02	SOLID	2.17e+03	2.28e+03	4.944 RPD
6	DUP	S98T002043	0	W	@IC-01	NO2-02	SOLID	2.51e+04	2.37e+04	5.738 RPD
6	DUP	S98T002043	0	W	@IC-01	BR-02	SOLID	<1.69e3	<1.67e3	RPD
6	DUP	S98T002043	0	W	@IC-01	NO3-02	SOLID	5.36e+05	5.56e+05	3.663 RPD
6	DUP	S98T002043	0	W	@IC-01	PO4-02	SOLID	1.12e+04	1.05e+04	6.452 RPD
6	DUP	S98T002043	0	W	@IC-01	SO4-02	SOLID	2.44e+03	1.90e+03	24.885 RPD
6	DUP	S98T002043	0	W	@IC-01	OXALATE2	SOLID	1.83e+03	2.03e+03	10.363 RPD

Final page for worklist# 26262

Analyst Signature

Date

Analyst Signature

Date

*Jimm M. Feys* 9/24/98  
Reviewer Signature Date

**LABCORE Data Entry Template for Worklist# 26262**

Analyst: ADP Instrument: IC 4052 Book# 2/N21-C

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107, @IC-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC-QC	QC		
2	ICV		@IC-QC	QC		
3	CCV		@IC-QC	QC		
4	BLNK-PREP		@IC-01	SOLID		
5	SAMPLE	S98T002043 0 W	@IC-01	SOLID	98000358	U-107 (2)
		Analyses Requested:	BR-02	CL-02	F-02	NO2-02
			OXALATE2,	PO4-02	SO4-02	NO3-02
6	DUP	S98T002043 0 W	@IC-01	SOLID		

**Final page for worklist # 26262**

Anthony Perrotto 9-21-98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments: uploaded 9-23-98 Validated 9/24/98 JML  
John Warell  
26262SEP.CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

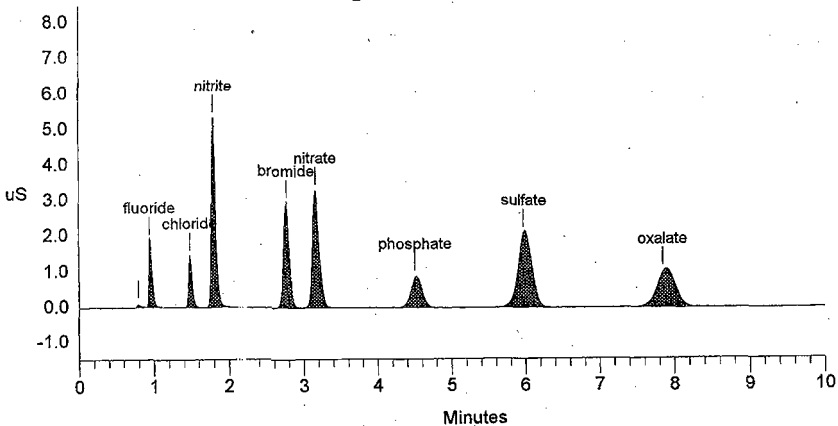
=====  
 Sample Name: 21N21-C Date: 09/21/1998 21:56:34  
 Data File : C:\DX\DATA\98092111.D02  
 Method : C:\DX\METHOD\4000SYS2.MET  
 ACI Address: 1 System: 2 Inject#: 2 Detector: CDM-1  
 Analyst : *Anthony Purita* Column: AG4A/AS4A anion column  
 =====

9-21-98  
 Calibration Volume Dilution Points Rate Start Stop Area Reject  
 -----  
 External 1 101 3000 5Hz 0.00 10.00 30  
 -----

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	79	310	2	
2	0.95	fluoride	64.778	109.81	1857	5611	-0.35
3	1.48	chloride	82.983	103.67	1421	4646	-1.77
4	1.79	nitrite	525.969	97.78	5299	20514	-2.00
5	2.77	bromide	614.518	104.87	2915	15878	-1.54
6	3.16	nitrate	592.648	100.71	3290	20357	-1.56
7	4.51	phosphate	545.910	99.80	858	9329	-2.87
8	5.97	sulfate	651.129	102.06	2089	27658	-2.61
9	7.84	oxalate	555.695	100.49	992	18665	-2.65
Totals			3633.630	18800	122968		

File: 98092111.D02 Sample: 21N21-C



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 884 TO 889.

*SS . 100-10*

```

=====
Sample Name: BLANK                               Date: 09/21/1998 21:43:30
Data File  : C:\DX\DATA\98092111.D01
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 1             Detector: CDM-1
Analyst    :                                   Column: AG4A/AS4A anion column
=====
    
```

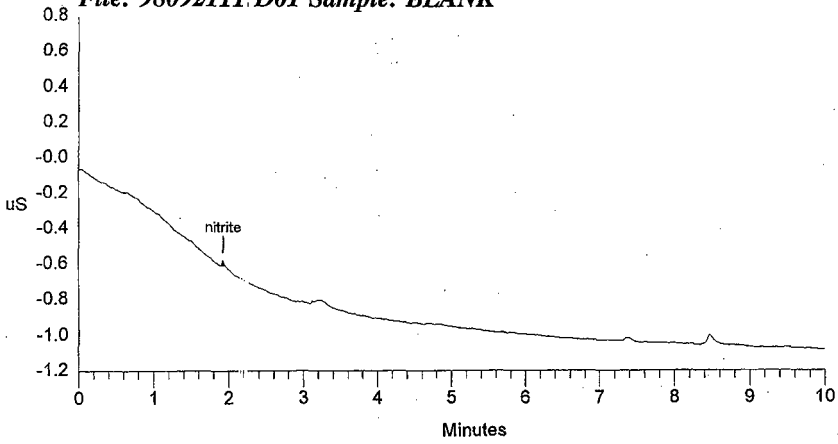
```

-----
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           1 3000 5Hz 0.00 10.00 30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.93	nitrite	0.089	27	50	1	5.28
Totals			0.089	27	50		

File: 98092111.D01 Sample: BLANK



SSI



```

=====
Sample Name: 20N21-C                               Date: 09/21/1998 22:13:11
Data File   : C:\DX\DATA\98092111.D03
Method      : C:\DX\METHOD\4000SYS2.MET
ACI Address : 1 System: 2 Inject#: 3                Detector: CDM-1
Analyst     :                                       Column: AG4A/AS4A anion column
=====
    
```

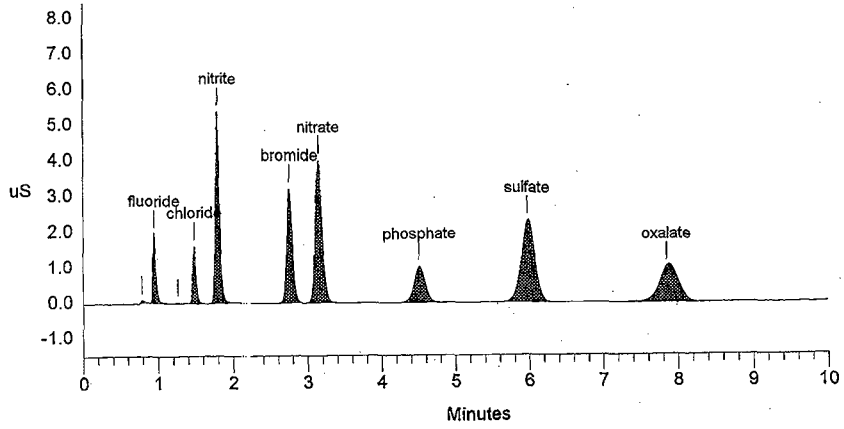
```

-----
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1          101    3000 5Hz   0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	73	279	1	
2	0.95	fluoride	64.350	1936	5573	1	-0.35
3	1.27		0.000	14	59	1	
4	1.48	chloride	92.141	1615	5169	1	-1.77
5	1.79	nitrite	522.935	5382	20392	1	-2.00
6	2.75	bromide	641.804	3214	16604	1	-2.02
7	3.15	nitrate	741.265	4006	25635	1	-1.97
8	4.51	phosphate	623.369	1018	10682	1	-2.87
9	5.97	sulfate	697.799	2312	29683	1	-2.61
10	7.84	oxalate	556.446	1003	18690	1	-2.65
Totals			3940.110	20574	132766		

File: 98092111.D03 Sample: 20N21-C



SS 100-10

```

=====
Sample Name: PREP BLANK                               Date: 09/21/1998 22:29:30
Data File  : C:\DX\DATA\98092111.D04
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 4                   Detector: CDM-1
Analyst    :                                           Column: AG4A/AS4A anion column
=====
    
```

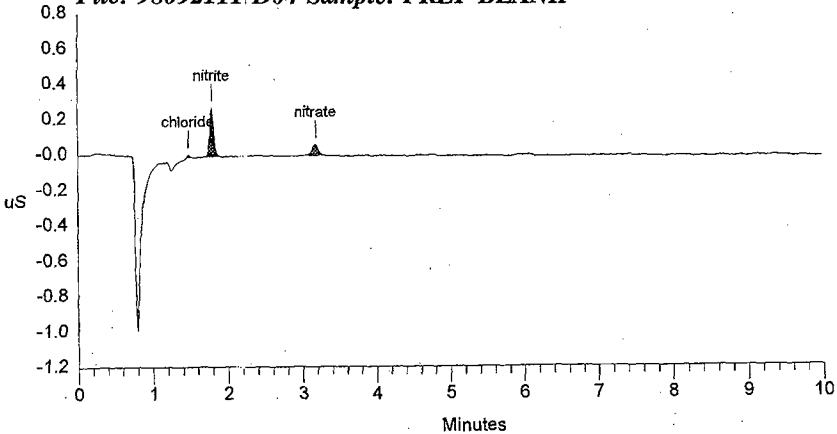
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1 3000 5Hz 0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.48	chloride	0.009	14	34	1	-1.77
2	1.79	nitrite	0.331	273	1003	1	-2.00
3	3.19	nitrate	0.165	56	314	1	-0.73
-----							
Totals			0.505	343	1352		

File: 98092111.D04 Sample: PREP BLANK



SS 1

Data Reprocessed On 09/23/1998 09:49:09

```

=====
Sample Name: S98T002043 SAM                               Date: 09/21/1998 23:57:11
Data File  : F:\DATA\98092111.D08
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 8                      Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

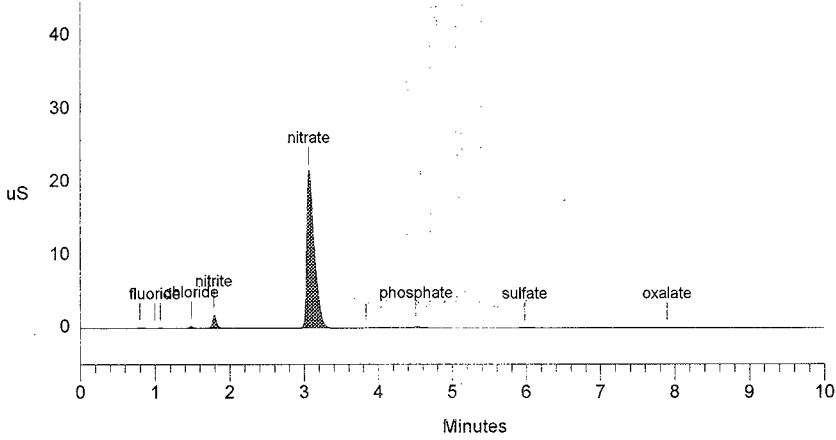
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           67.67  3000 5Hz   0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	98	425	1	
2	0.99	fluoride	0.649	23	51	2	4.56
3	1.07		0.000	46	110	2	
4	1.48	chloride	10.842	274	882	1	-1.77
5	1.79	nitrite	125.445	1797	7042	1	-2.37
6	3.06	nitrate	2682.085	21510	155785	1	0.00
7	3.83		0.000	46	326	1	
8	4.51	phosphate	55.945	125	1361	1	-2.87
9	5.97	sulfate	12.178	40	644	1	-2.61
10	7.89	oxalate	9.150	32	532	1	-1.99
Totals			2896.295	23991	167158		

File: 98092111.D08 Sample: S98T002043 SAM



Data Reprocessed On 09/23/1998 09:49:43

```

=====
Sample Name: S98T002043 DUP                      Date: 09/22/1998 00:09:30
Data File  : F:\DATA\98092111.D09
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 9              Detector: CDM-1
Analyst    :                                     Column: AG4A/AS4A anion column
=====
    
```

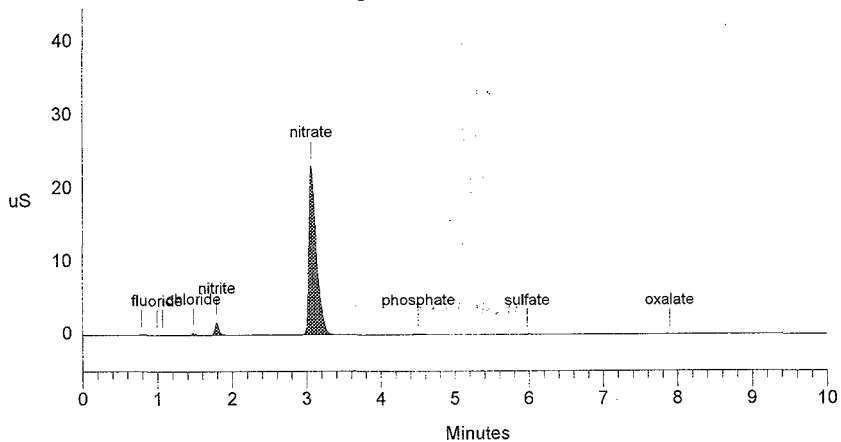
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           67.67  3000 5Hz   0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	100	472	1	
2	0.99	fluoride	0.598	20	44	2	4.56
3	1.07		0.000	49	119	2	
4	1.48	chloride	11.533	291	939	1	-1.77
5	1.79	nitrite	119.926	1761	6717	1	-2.00
6	3.06	nitrate	2811.443	23125	164606	1	0.00
7	4.51	phosphate	53.095	119	1289	1	-2.87
8	5.97	sulfate	9.586	38	482	1	-2.61
9	7.89	oxalate	10.274	30	588	1	-1.99
Totals			3016.455	25533	175256		

**File: 98092111.D09 Sample: S98T002043 DUP**



# LBCORE Completed Worklist Report for Worklist# 26264

Analyst: adp Instrument: IC45S2 Book#: 130N20C

Method: LA-533-X105 Rev/Mod F-0

Worklist Comment: U107, @IC4G-01, tdm

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit	
1	CCB	0	@IC4G-QC F*4	QC	1	7.20e-02	0.072	ug/mL	
1	CCB	0	@IC4G-QC ACETATE2	QC	1	<2.00e-2		ug/mL	
1	CCB	0	@IC4G-QC FORMATE2	QC	1	<2.10e-2		ug/mL	
1	CCB	0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2		ug/mL	
2	ICV	0	@IC4G-QC F*4	QC	5.80e1	5.26e+01	90.690	% Recovery	
2	ICV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.07e+02	91.453	% Recovery	
2	ICV	0	@IC4G-QC FORMATE2	QC	1.27e2	1.15e+02	90.552	% Recovery	
2	ICV	0	@IC4G-QC GLYCOLT1	QC	1.01e2	9.21e+01	91.188	% Recovery	
3	CCV	0	@IC4G-QC F*4	QC	5.90e1	5.83e+01	98.814	% Recovery	
3	CCV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.14e+02	97.436	% Recovery	
3	CCV	0	@IC4G-QC FORMATE2	QC	1.32e2	1.31e+02	99.242	% Recovery	
3	CCV	0	@IC4G-QC GLYCOLT1	QC	1.16e2	1.20e+02	103.448	% Recovery	
4	BLNK-PREP	0	@IC4G-01 F*4-01	SOLID	1	<3.10e-2		ug/g	
4	BLNK-PREP	0	@IC4G-01 ACETATE2	SOLID	1	<2.00e-2		ug/g	
4	BLNK-PREP	0	@IC4G-01 FORMATE2	SOLID	1	<6.20e-2		ug/g	
4	BLNK-PREP	0	@IC4G-01 GLYCOLT1	SOLID	1	<5.60e-2		ug/g	
5	SAMPLE	S98T002043	0 W	@IC4G-01 F*4-01	SOLID	N/A	4.760e+01	6.200	ug/g
5	SAMPLE	S98T002043	0 W	@IC4G-01 ACETATE2	SOLID	N/A	7.936e+02	4.000	ug/g
5	SAMPLE	S98T002043	0 W	@IC4G-01 FORMATE2	SOLID	N/A	1.240e+01	12.400	ug/g
5	SAMPLE	S98T002043	0 W	@IC4G-01 GLYCOLT1	SOLID	N/A	1.120e+01	11.200	ug/g
6	DUP	S98T002043	0 W	@IC4G-01 F*4-01	SOLID	4.76e+01	4.45e+01	6.732	RPD
6	DUP	S98T002043	0 W	@IC4G-01 ACETATE2	SOLID	7.94e+02	7.43e+02	6.636	RPD
6	DUP	S98T002043	0 W	@IC4G-01 FORMATE2	SOLID	<1.24e1	<1.23e1		RPD
6	DUP	S98T002043	0 W	@IC4G-01 GLYCOLT1	SOLID	<1.12e1	<1.11e1		RPD

Final page for worklist# 26264

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*Jan M. Feys 10/27/98*  
Reviewer Signature \_\_\_\_\_ Date \_\_\_\_\_

09/18/98 15:11  
A-0004-1

HNF-1661 REV. 0

Page: 1

**LABCORE Data Entry Template for Worklist# 26264**Analyst: ADP Instrument: IC Book# 131N20-BMethod: LA-533-1105 Rev/Mod FOEnsure dose rate at 30cm  
is  $\leq 50$  mrem/hr prior to performing  
this analysis.

Worklist Comment: U107, @IC4G-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC4G-QC	QC		
2	ICV		@IC4G-QC	QC		
3	CCV		@IC4G-QC	QC		
4	BLNK-PREP		@IC4G-01	SOLID		
5	SAMPLE	S98T002043 0 W	@IC4G-01	SOLID	98000358	U-107 (2)
		Analytes Requested: ACETATE2, P*4-01, FORMATE2, GLYCOLT1				
6	DUP	S98T002043 0 W	@IC4G-01	SOLID		

**Final page for worklist # 26264**

  
Analyst Signature 10-24-98  
Date

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments:

uploaded 10-27-98Validated 10/27/98 JmLyeJohn Wrenell26264OCT.CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

HNF-1661 REV. 0

```

=====
Sample Name: 131N20-B ICV          Date: 10/24/1998 10:02:43
Data File  : C:\DX\DATA\98102401.D02
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 2      Detector: CDM-1
Analyst    : Ed Colvin             Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

*Autolog Purifier 10-24-98*

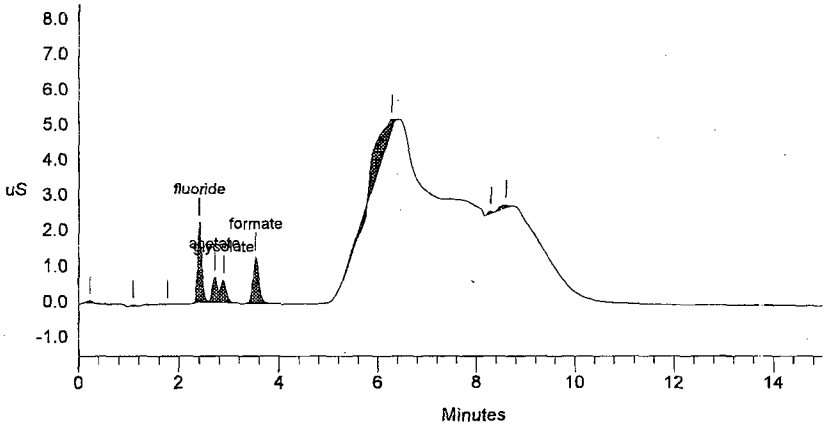
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           101    4500  5Hz   0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	59	477	1	
2	1.10		0.000	41	344	1	
3	1.77		0.000	1	2	1	
4	2.41	fluoride	52.566	<i>90.63</i> 2241	13463	2	0.00
5	2.71	acetate	107.354	<i>91.76</i> 714	5230	2	0.00
6	2.89	glycolate	92.059	<i>91.15</i> 633	4937	2	0.00
7	3.53	formate	115.476	<i>90.93</i> 1304	11010	1	0.00
8	6.28		0.000	261	18116	1	
9	8.29		0.000	76	400	1	
10	8.60		0.000	95	1448	1	
Totals			367.455	5426	55427		

File: 98102401.D02 Sample: 131N20-B ICV



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 892 TO 897.

```

=====
Sample Name: BLANK                      Date: 10/24/1998 09:44:08
Data File  : C:\DX\DATA\98102401.D01
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 1
Analyst    : Ed Colvin                   Column: AG4A-SC,AS4A-SC, SRS
Detector   : CDM-1
=====

```

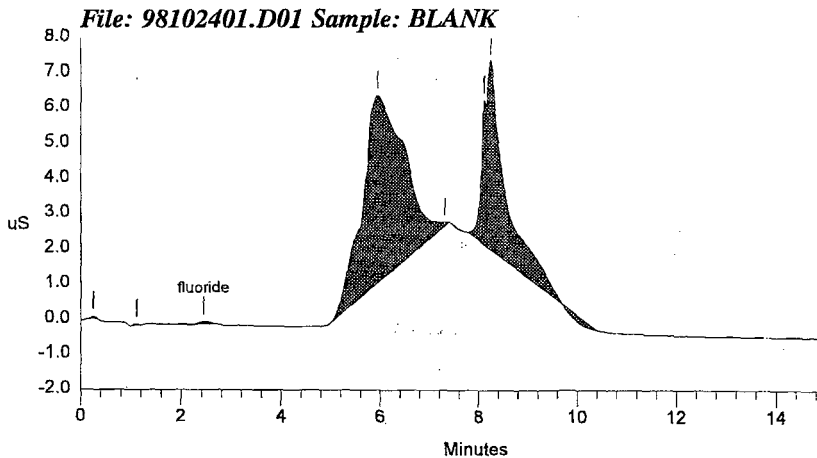
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1 4500 5Hz 0.00 15.00           0
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.26		0.000	67	474	1	
2	1.12		0.000	53	364	1	
3	2.45	fluoride	0.072	82	1330	1	0.00
4	5.95		0.000	5309	308987	3	
5	7.31		0.000	4	17	4	
6	8.12		0.000	4109	27608	2	
7	8.25		0.000	5354	133826	2	
Totals			0.072	14977	472606		





Data Reprocessed On 10/24/1998 11:22:54

```

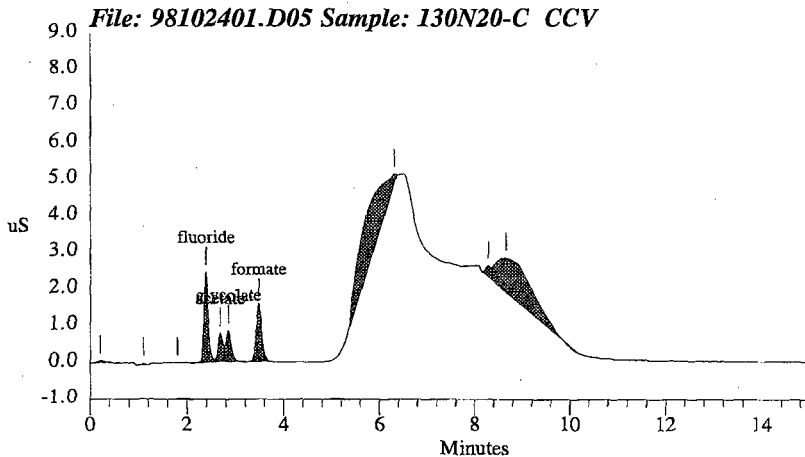
=====
Sample Name: 130N20-C CCV                      Date: 10/24/1998 11:16:57
Data File  : C:\DX\DATA\98102401.D05
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 5             Detector: CDM-1
Analyst    : Ed Colvin                          Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           101 4500 5Hz 0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.21		0.000	61	633	1	
2	1.10		0.000	49	299	1	
3	1.80		0.000	7	160	1	
4	2.38	fluoride	58.310	2448	15017	2	0.00
5	2.68	acetate	114.160	765	5566	2	0.00
6	2.85	glycolate	119.609	849	6519	2	0.00
7	3.47	formate	131.355	1574	12624	1	0.00
8	6.31		0.000	283	62798	1	
9	8.28		0.000	297	2347	2	
10	8.65		0.000	936	52498	2	
Totals			423.434	7269	158464		



## HNF-1661 REV. 0

```

=====
Sample Name: PREP BLANK                      Date: 10/24/1998 11:41:33
Data File  : C:\DX\DATA\98102401.D06
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 6          Detector: CDM-1
Analyst    : Ed Colvin                       Column: AG4A-SC, AS4A-SC, SRS
=====

```

```

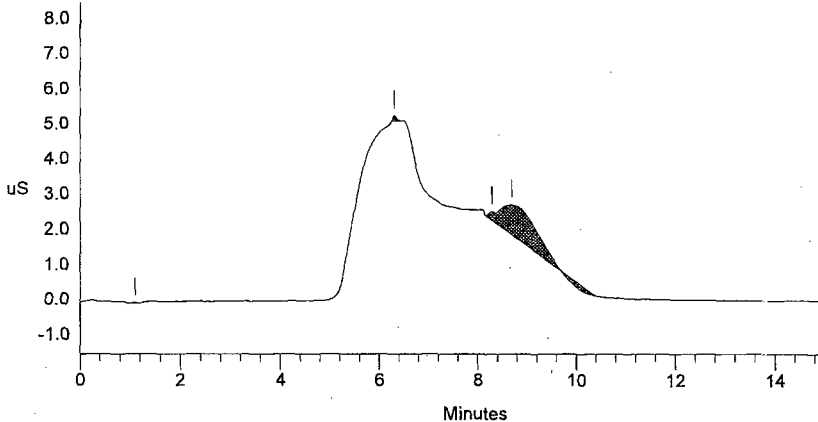
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1             1 4500 5Hz 0.00 15.00           0
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.10		0.000	48	302	1	
2	6.30		0.000	166	775	1	
3	8.28		0.000	267	2044	2	
4	8.69		0.000	865	41954	2	
Totals			0.000	1346	45074		

**File: 98102401.D06 Sample: PREP BLANK**



## HNF-1661 REV. 0

```

=====
Sample Name: S98T002043 SAM                      Date: 10/24/1998 12:14:08
Data File  : C:\DX\DATA\98102401.D08
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 8              Detector: CDM-1
Analyst    : Ed Colvin                          Column: AG4A-SC,AS4A-SC, SRS
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1 4500 5Hz 0.00 15.00 0
=====

```

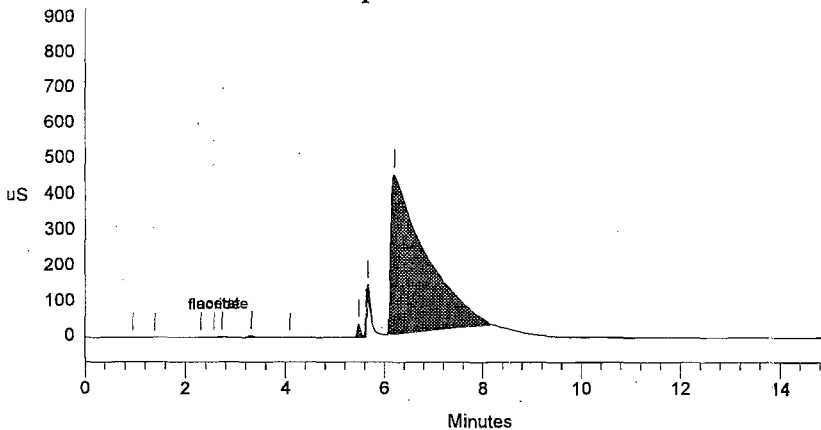
```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.96		0.000	326	2524	1	
2	1.40		0.000	18	539	1	
3	2.31		0.000	46	287	2	
4	2.57	fluoride	0.238	855	5795	2	0.00
5	2.73	acetate	3.968	2688	19123	2	0.00
6	3.31		0.000	5865	41993	1	
7	4.09		0.000	746	6203	1	
8	5.48		0.000	38603	194165	2	
9	5.63		0.000	67220	94500	2	
10	5.67		0.000	51858	220054	1	
11	6.21		0.000	449156	22143464	1	
Totals			4.206	617381	22728648		

**File: 98102401.D08 Sample: S98T002043 SAM**



```

=====
Sample Name: S98T002043 DUP           Date: 10/24/1998 12:30:40
Data File  : C:\DX\DATA\98102401.D09
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 9   Detector: CDM-1
Analyst    : Ed Colvin                Column: AG4A-SC,AS4A-SC, SRS
=====

```

```

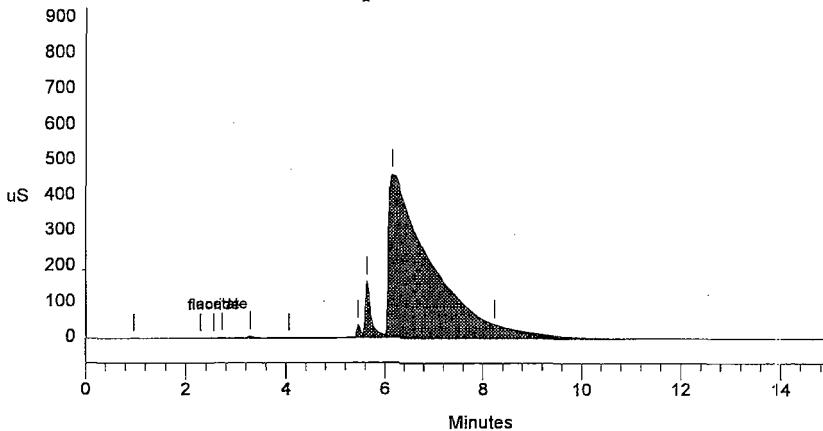
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           1 4500 5Hz 0.00 15.00 0
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.96		0.000	375	2859	1	
2	2.28		0.000	86	559	2	
3	2.55	fluoride	0.225	836	5440	2	0.00
4	2.71	acetate	3.758	2542	18157	2	0.00
5	3.29		0.000	5731	41836	1	
6	4.05		0.000	737	5969	1	
7	5.45		0.000	37759	208433	2	
8	5.63		0.000	158702	1338837	2	
9	6.13		0.000	460484	27810318	3	
10	8.23		0.000	472	1519	4	
Totals			3.983	667724	29433925		

File: 98102401.D09 Sample: S98T002043 DUP



# LABCORE Completed Worklist Report for Worklist# 26337

Analyst: adp

Instrument: IC40S1

Book#: 21N21C

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107, @IC-01 Rerun For NO2 only. Use DF= 10201 or 5151.tdm

Seq Type	Sample#	RA	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	@IC-QC	F	QC	1	<1.20e-2	ug/mL
1	CCB	0	@IC-QC	CL	QC	1	<1.70e-2	ug/mL
1	CCB	0	@IC-QC	NO2	QC	1	<1.08e-1	ug/mL
1	CCB	0	@IC-QC	BR	QC	1	<1.25e-1	ug/mL
1	CCB	0	@IC-QC	NO3	QC	1	<1.39e-1	ug/mL
1	CCB	0	@IC-QC	PO4	QC	1	<1.20e-1	ug/mL
1	CCB	0	@IC-QC	SO4	QC	1	<1.38e-1	ug/mL
1	CCB	0	@IC-QC	OXALATE2	QC	1	<1.05e-1	ug/mL
2	ICV	0	@IC-QC	F	QC	5.90e1	6.54e+01	110.847 % Recovery
2	ICV	0	@IC-QC	CL	QC	8.00e1	8.65e+01	108.125 % Recovery
2	ICV	0	@IC-QC	NO2	QC	5.38e2	5.62e+02	104.461 % Recovery
2	ICV	0	@IC-QC	BR	QC	5.86e2	6.12e+02	104.437 % Recovery
2	ICV	0	@IC-QC	NO3	QC	5.92e2	6.11e+02	103.209 % Recovery
2	ICV	0	@IC-QC	PO4	QC	5.47e2	5.71e+02	104.388 % Recovery
2	ICV	0	@IC-QC	SO4	QC	6.38e2	6.61e+02	103.605 % Recovery
2	ICV	0	@IC-QC	OXALATE2	QC	5.53e2	5.71e+02	103.255 % Recovery
3	CCV	0	@IC-QC	F	QC	6.40e1	6.92e+01	108.125 % Recovery
3	CCV	0	@IC-QC	CL	QC	9.00e1	9.50e+01	105.556 % Recovery
3	CCV	0	@IC-QC	NO2	QC	5.43e2	5.63e+02	103.683 % Recovery
3	CCV	0	@IC-QC	BR	QC	6.30e2	6.65e+02	105.556 % Recovery
3	CCV	0	@IC-QC	NO3	QC	6.98e2	7.32e+02	104.871 % Recovery
3	CCV	0	@IC-QC	PO4	QC	6.32e2	6.72e+02	106.329 % Recovery
3	CCV	0	@IC-QC	SO4	QC	6.99e2	7.29e+02	104.292 % Recovery
3	CCV	0	@IC-QC	OXALATE2	QC	5.33e2	5.64e+02	105.816 % Recovery
4	SAMPLE	S98T002466	@IC-01	NO2-02	LIQUID	N/A	1.850e+05	1102.000 ug/mL
5	DUP	S98T002466	@IC-01	F-02	LIQUID	?	<1.22e2	RPD
5	DUP	S98T002466	@IC-01	CL-02	LIQUID	?	1.56e+04	RPD
5	DUP	S98T002466	@IC-01	NO2-02	LIQUID	1.85e+05	1.85e+05	0.000 RPD
5	DUP	S98T002466	@IC-01	BR-02	LIQUID	?	<1.28e3	RPD
5	DUP	S98T002466	@IC-01	NO3-02	LIQUID	?	2.00e+05	RPD
5	DUP	S98T002466	@IC-01	PO4-02	LIQUID	?	3.45e+03	RPD
5	DUP	S98T002466	@IC-01	SO4-02	LIQUID	?	5.08e+03	RPD
5	DUP	S98T002466	@IC-01	OXALATE2	LIQUID	?	<1.07e3	RPD
6	SPK	S98T002466	@IC-01	F-02	LIQUID	5.90e1	0.00e+00	0.000 % Recovery
6	SPK	S98T002466	@IC-01	CL-02	LIQUID	8.00e1	0.00e+00	0.000 % Recovery
6	SPK	S98T002466	@IC-01	NO2-02	LIQUID	5.38e2	5.39e+02	100.186 % Recovery
6	SPK	S98T002466	@IC-01	BR-02	LIQUID	5.86e2	0.00e+00	0.000 % Recovery
6	SPK	S98T002466	@IC-01	NO3-02	LIQUID	5.92e2	0.00e+00	0.000 % Recovery
6	SPK	S98T002466	@IC-01	PO4-02	LIQUID	5.47e2	0.00e+00	0.000 % Recovery
6	SPK	S98T002466	@IC-01	SO4-02	LIQUID	6.38e2	0.00e+00	0.000 % Recovery
6	SPK	S98T002466	@IC-01	OXALATE2	LIQUID	5.53e2	0.00e+00	0.000 % Recovery

Units shown for QC (BLK/BKG) may not reflect the actual units.

## LABCORE Completed Worklist Report for Worklist# 26337

---

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
----------	-------------	------	--------	--------	-------	-------------	------

---

**Final page for worklist# 26337**

---

Analyst Signature

Date

Analyst Signature

Date

*Jerry M. Lyle* 9/29/98  
Reviewer Signature Date

HNF-1661 REV. 0

09/24/98 10:33  
A-0004-1

Page: 1

**LABCORE Data Entry Template for Worklist# 26337**Analyst: ADD Instrument: IC \_\_\_\_\_ Book# 2121-CMethod: LA-533-105 Rev/Mod F-0

Worklist Comment: U107, @IC-01 Rerun For NO2 only. Use DF= 10201 or 5151.tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC-QC	QC		
2	ICV		@IC-QC	QC		
3	CCV		@IC-QC	QC		
4	SAMPLE	S98T002466 0	@IC-01	LIQUID	98000401	U-101 (2)
		Analytes Requested: NO2-02				
5	DUP	S98T002466 0	@IC-01	LIQUID		
6	SPK	S98T002466 0	@IC-01	LIQUID		

**Final page for worklist # 26337**

Analyst Signature

Date

Analyst Signature

Date

*[Signature]* 9-26-98  
26337.CSV 6/loaded 9-29-98 ~~JK~~

Validated 9/29/98 *[Signature]*

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

HNF-1661 REV.0

Sample Name: 21N21-C Date: 09/16/1998 15:05:59  
 Data File : C:\DX\DATA\98092601.D24  
 Method : C:\DX\METHOD\KIT.MET  
 ACI Address: 1 System: 1 Inject#: 24 Detector: CDM-1  
 Analyst : *Walter Purvish* Column: AG4A/AS4A anion column

*8-26-98*

Calibration Volume Dilution Points Rate Start Stop Area Reject

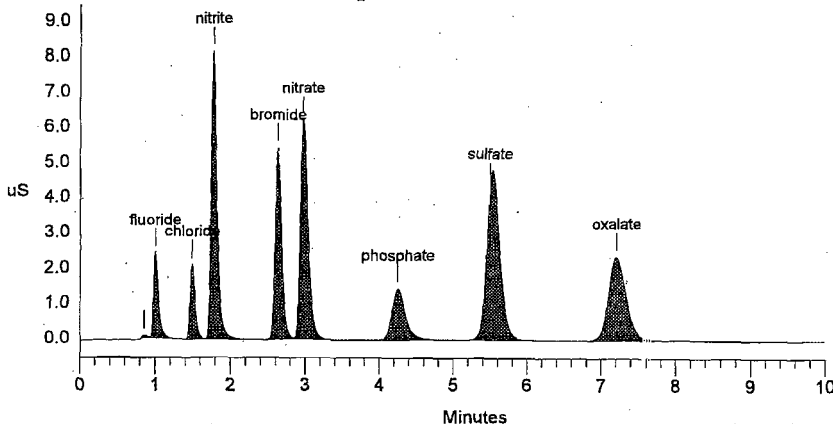
External 1 101 3000 5Hz 0.00 10.00 30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	74	299	2	
2	1.00	fluoride	65.435	<i>110.91</i> 2399	11028	2	0.00
3	1.49	chloride	86.546	<i>108.18</i> 2104	9851	1	-0.22
4	1.77	nitrite	561.979	<i>104.46</i> 8153	43761	1	-0.19
5	2.63	bromide	611.500	<i>104.35</i> 5412	32369	1	-0.51
6	2.97	nitrate	610.871	<i>103.36</i> 6178	44525	1	-1.11
7	4.25	phosphate	570.974	<i>104.38</i> 1452	18377	1	-0.08
8	5.49	sulfate	661.331	<i>103.66</i> 4353	58715	1	0.06
9	7.20	oxalate	571.261	<i>103.02</i> 2378	38967	1	0.00

Totals 3739.897 32503 257892

File: 98092601.D24 Sample: 21N21-C



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 901 TO 906.

*SS .100-10*



```

=====
Sample Name: BLANK                               Date: 09/25/1998 14:54:34
Data File  : C:\DX\DATA\98092601.D23
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 23           Detector: CDM-1
Analyst    :                               Column: AG4A/AS4A anion column
=====

```

```

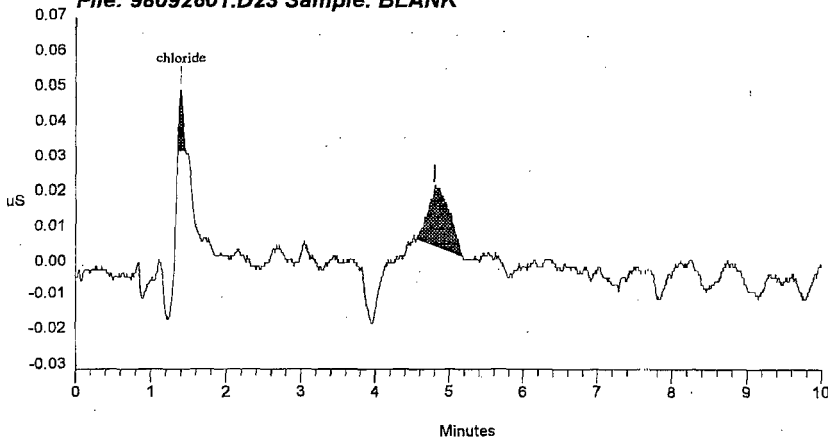
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           '1 3000 5Hz  0.00 10.00          30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.39	chloride	-0.000	17	61	1	-6.49
2	4.80		0.000	16	334	1	
Totals			-0.000	33	395		

File: 98092601.D23 Sample: BLANK



SSI

## HNF-1661 REV. 0

```

=====
Sample Name: 20N21-C                               Date: 09/26/1998 15:21:24
Data File  : C:\DX\DATA\98092601.D25
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 25              Detector: CDM-1
Analyst    :                                     Column: AG4A/AS4A anion column
=====

```

```

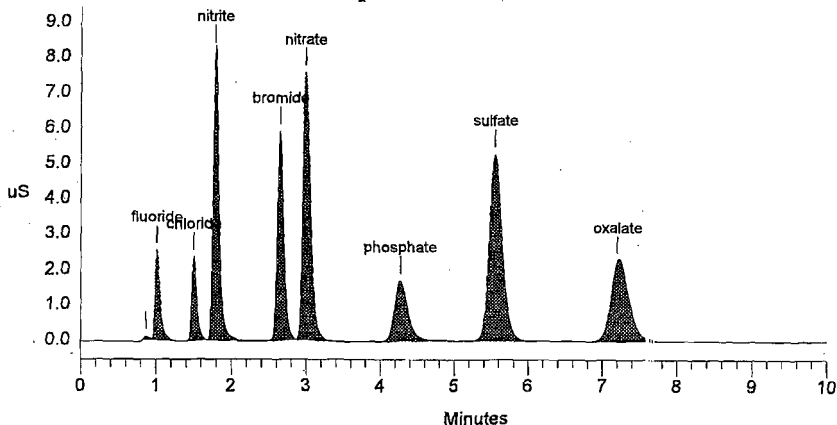
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          101    3000 5HZ   0.00 10.00      30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.87		0.000	77	326	2	
2	1.01	fluoride	69.211	2524	11682	2	1.33
3	1.50	chloride	95.009	2357	10821	1	0.67
4	1.78	nitrite	563.362	8229	43872	1	0.56
5	2.65	bromide	665.073	5912	35298	1	0.25
6	2.99	nitrate	732.355	7551	53674	1	-0.44
7	4.27	phosphate	672.450	1720	21745	1	0.39
8	5.55	sulfate	728.714	5308	64879	1	1.03
9	7.20	oxalate	564.291	2287	38484	1	0.00
Totals			4090.465	35966	280781		

File: 98092601.D25 Sample: 20N21-C



SS .100-10

## HNF-1661 REV. 0

```

=====
Sample Name: S98T002466 SAM           Date: 09/26/1998 15:33:17
Data File  : C:\DX\DATA\98092601.D26
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 26   Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====

```

```

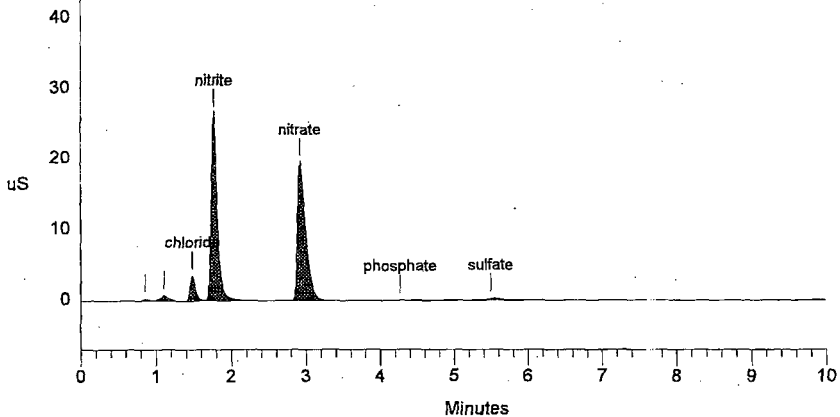
=====
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1          10201   3000 5Hz  0.00 10.00          30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

PK. Num.	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl: Code	%Delta
1	0.85		0.000	259	1559	2	
2	1.11		0.000	778	6083	2	
3	1.48	chloride	15202.977	3523	17247	1	-0.67
4	1.77	nitrite	185036.358	26432	147441	1	-0.19
5	2.92	nitrate	198682.862	19414	150054	1	-2.67
6	4.27	phosphate	3705.493	84	977	1	0.39
7	5.49	sulfate	4646.793	215	3290	1	0.06
Totals			407274.484	50704	326651		

File: 98092601.D26 Sample: S98T002466 SAM



SS .100-10- .100-10

## HNF-1661 REV. 0

```

=====
Sample Name: S98T002466 DUP           Date: 09/26/1998 15:45:26
Data File  : C:\DX\DATA\98092601.D27
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 27   Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====

```

```

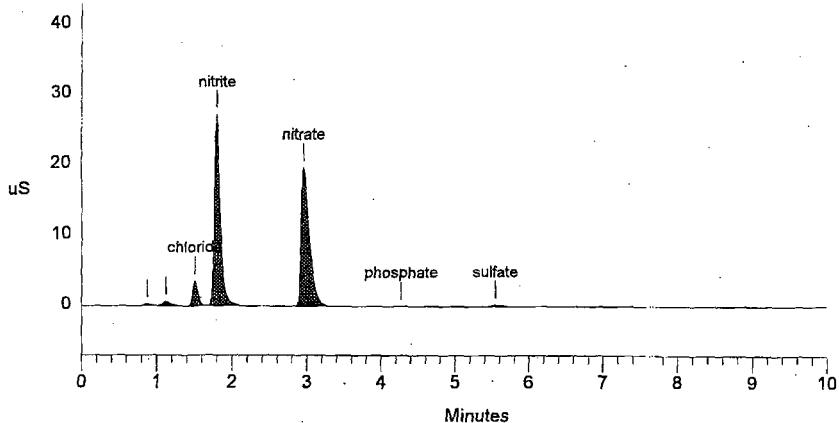
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          10201   3000  5Hz   0.00 10.00          30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.87		0.000	263	1577	2	
2	1.12		0.000	728	5797	2	
3	1.51	chloride	15576.155	3590	17678	1	1.12
4	1.80	nitrite	184509.234	27042	147005	1	1.69
5	2.96	nitrate	200453.991	19569	151470	1	-1.33
6	4.27	phosphate	3449.336	75	896	1	0.39
7	5.55	sulfate	5080.322	246	3672	1	1.03
Totals			409069.037	51512	328095		

File: 98092601.D27 Sample: S98T002466 DUP



SS .100-10 - .100-10

HNF-1661 REV. 0

```

=====
Sample Name: S98T002466 SPK          Date: 09/26/1998 15:56:13
Data File  : C:\DX\DATA\98092601.D28
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 28   Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====

```

```

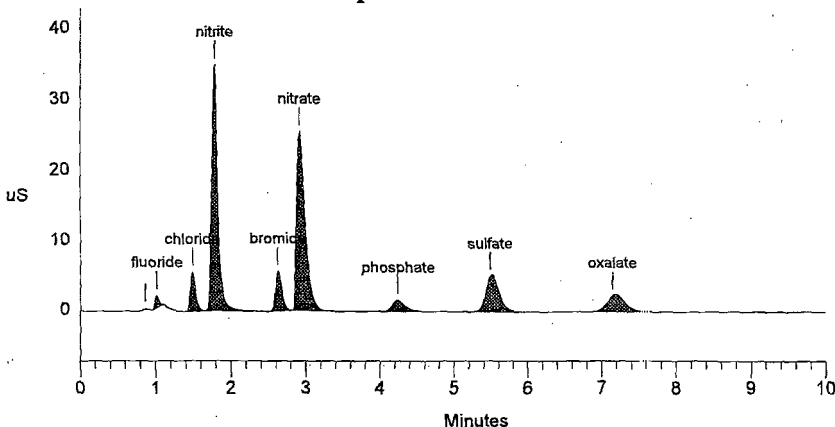
=====
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           10201  3000 5Hz  0.00 10.00           30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.86		0.000	249	1047	1	
2	1.01	fluoride	3783.537	1690	6200	1	1.33
3	1.49	chloride	23715.811	5557	27214	1	-0.22
4	1.78	nitrite	239494.025	34769	192927	1	0.56
5	2.63	bromide	61688.895	5597	32330	1	-0.51
6	2.91	nitrate	262828.796	25327	202304	1	-2.89
7	4.25	phosphate	61296.132	1559	19567	1	-0.08
8	5.49	sulfate	72445.177	4959	63831	1	0.06
9	7.15	oxalate	59193.689	2250	39994	1	-0.74
Totals			784446.062	81957	585415		

File: 98092601.D28 Sample: S98T002466 SPK



SS.100-10-.100-10-SPK #  
21N21-C

# LABCORE Completed Worklist Report for Worklist# 26338

Analyst: adp

Instrument: IC45S2

Book#: 131N20B

Method: LA-533-<sup>QMF 11/2/98</sup>Y105 Rev/Mod F-0

Worklist Comment: U107, @IC4G-01, Use DF= 606. tdm

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	@IC4G-QC F*4	QC	1	<1.10e-2		ug/mL
1	CCB	0	@IC4G-QC ACETATE2	QC	1	<2.00e-2		ug/mL
1	CCB	0	@IC4G-QC FORMATE2	QC	1	<2.10e-2		ug/mL
1	CCB	0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2		ug/mL
2	ICV	0	@IC4G-QC F*4	QC	5.80e1	5.40e+01	93.103 %	Recovery
2	ICV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.09e+02	93.162 %	Recovery
2	ICV	0	@IC4G-QC FORMATE2	QC	1.27e2	1.12e+02	88.189 %	Recovery
2	ICV	0	@IC4G-QC GLYCOLT1	QC	1.01e2	9.34e+01	92.475 %	Recovery
3	CCV	0	@IC4G-QC F*4	QC	5.90e1	5.60e+01	94.915 %	Recovery
3	CCV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.11e+02	94.872 %	Recovery
3	CCV	0	@IC4G-QC FORMATE2	QC	1.32e2	1.28e+02	96.970 %	Recovery
3	CCV	0	@IC4G-QC GLYCOLT1	QC	1.16e2	1.17e+02	100.862 %	Recovery
4	SAMPLE	S98T002236	@IC4G-01 GLYCOLT1	LIQUID	N/A	2.623e+03	33.940	ug/mL
5	DUP	S98T002236	@IC4G-01 F*4-01	LIQUID	?	2.25e+01		RPD
5	DUP	S98T002236	@IC4G-01 ACETATE2	LIQUID	?	7.50e+02		RPD
5	DUP	S98T002236	@IC4G-01 FORMATE2	LIQUID	?	3.11e+03		RPD
5	DUP	S98T002236	@IC4G-01 GLYCOLT1	LIQUID	2.62e+03	2.61e+03	0.382	RPD
6	SPK	S98T002236	@IC4G-01 F*4-01	LIQUID	5.80e1	0.00e+00	0.000 %	Recovery
6	SPK	S98T002236	@IC4G-01 ACETATE2	LIQUID	1.17e2	0.00e+00	0.000 %	Recovery
6	SPK	S98T002236	@IC4G-01 FORMATE2	LIQUID	1.27e2	0.00e+00	0.000 %	Recovery
6	SPK	S98T002236	@IC4G-01 GLYCOLT1	LIQUID	1.01e2	1.06e+02	104.950 %	Recovery
7	SAMPLE	S98T002240	@IC4G-01 GLYCOLT1	LIQUID	N/A	2.629e+03	33.940	ug/mL
8	DUP	S98T002240	@IC4G-01 F*4-01	LIQUID	?	1.98e+01		RPD
8	DUP	S98T002240	@IC4G-01 ACETATE2	LIQUID	?	7.59e+02		RPD
8	DUP	S98T002240	@IC4G-01 FORMATE2	LIQUID	?	3.15e+03		RPD
8	DUP	S98T002240	@IC4G-01 GLYCOLT1	LIQUID	2.63e+03	2.64e+03	0.380	RPD

Final page for worklist# 26338

Analyst Signature

Date

Analyst Signature

Date

*James M. Luge* 11/2/98  
Reviewer Signature Date

09/24/98 10:35  
A-0004-1

Page: 1

**LABCORE Data Entry Template for Worklist# 26338**

Analyst: ADP Instrument: IC 4552 Book# 121A2-4<sup>00</sup> 131N20-B JHW  
 Method: LA-533-1105 Rev/Mod F-0 131N20-B 11-2-98  
 Worklist Comment: U107, @IC4G-01, Use DF= 606. tdm PERUN check if <= 50  
mRen/hr @  
30 cc

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC4G-QC	QC		
2	ICV		@IC4G-QC	QC		
3	CCV		@IC4G-QC	QC		
4	SAMPLE	S98T002236 0	@IC4G-01	LIQUID	98000359	U-107 (2)
Analytes Requested: GLYCOLTI						
5	DUP	S98T002236 0	@IC4G-01	LIQUID		
6	SPK	S98T002236 0	@IC4G-01	LIQUID		
7	SAMPLE	S98T002240 0	@IC4G-01	LIQUID	98000359	U-107 (2)
Analytes Requested: GLYCOLTI						
8	DUP	S98T002240 0	@IC4G-01	LIQUID		

**Final page for worklist # 26338**

John Wonell 10-23-98  
 Analyst Signature Date

Analyst Signature Date

Data Entry Comments: uploaded 11-2-98 validated 11/2/98 JMW  
John Wonell  
263380CT.CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

```

=====
Sample Name: 131N20-B ICV                               Date: 10/23/1998 14:13:48
Data File  : C:\DX\DATA\98102301.D12
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACT Address: 1 System: 2 Inject#: 12                    Detector: CDM-1
Analyst    : Ed Colvin                                   Column: AG4A-SC,AS4A-SC, SRS
=====

```

*Anthony Parente 10-23-98*

```

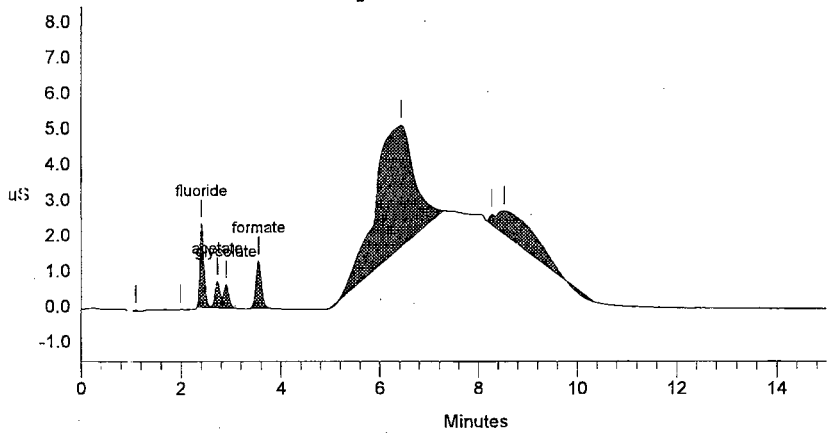
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           101      4500  5Hz   0.00  15.00           0
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.10		0.000	47	292	1	
2	1.98		0.000	18	468	1	
3	2.41	fluoride	53.984	<i>93.08</i> 2346	13847	2	0.00
4	2.72	acetate	108.943	<i>93.11</i> 734	5309	2	0.00
5	2.89	glycolate	93.368	<i>92.44</i> 651	5012	2	0.00
6	3.55	formate	112.162	<i>88.32</i> 1331	10674	1	0.00
7	6.43		0.000	3419	196761	1	
8	8.27		0.000	309	2047	2	
9	8.52		0.000	664	41494	2	
Totals			368.457	9520	275904		

File: 98102301.D12 Sample: 131N20-B ICV



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETELY VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 909 TO 916.  
*SS -100-10*



```

=====
Sample Name: BLANK                               Date: 10/23/1998 14:29:44
Data File  : C:\DX\DATA\98102301.D13
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 13            Detector:CDM-1
Analyst    : Ed Colvin                          Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

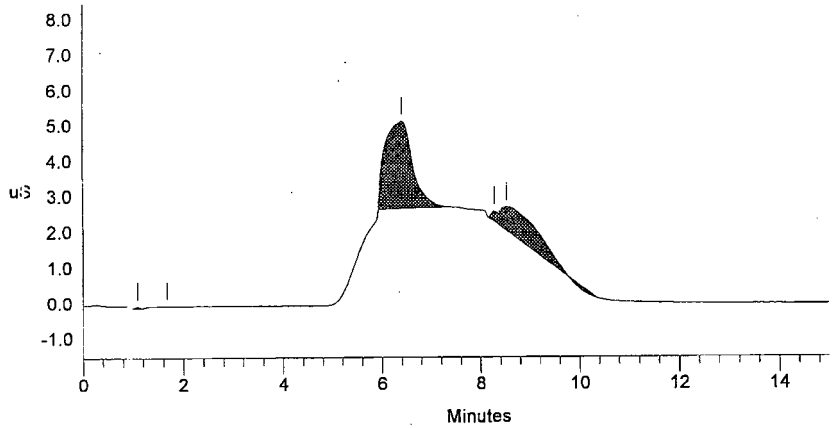
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1    4500  5Hz   0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.10		0.000	47	289	1	
2	1.68		0.000	3	50	1	
3	6.41		0.000	2468	95268	1	
4	8.28		0.000	291	2086	2	
5	8.53		0.000	663	40484	2	
Totals			0.000	3472	138177		

File: 98102301.D13 Sample: BLANK



Data Reprocessed On 10/23/1998 14:01:32

```

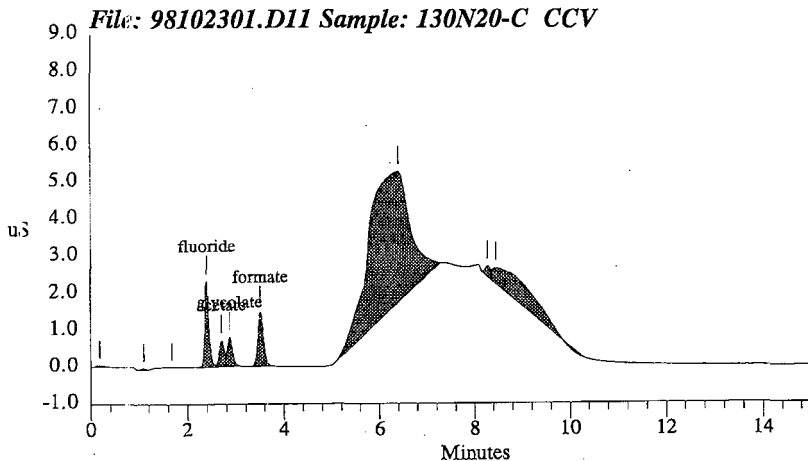
=====
Sample Name: 130N20-C CCV           Date: 10/23/1998 13:57:04
Data File  : C:\DX\DATA\98102301.D11
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 11      Detector: CDM-1
Analyst    : Ed Colvin           Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           101 4500 5Hz  0.00 15.00          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.19		0.000	55	710	1	
2	1.10		0.000	48	308	1	
3	1.68		0.000	0	11	1	
4	2.40	fluoride	55.974	2332	14385	2	0.00
5	2.71	acetate	110.786	731	5400	2	0.00
6	2.87	glycolate	116.967	807	6367	2	0.00
7	3.51	formate	128.028	1487	12286	1	0.00
8	6.41		0.000	3547	226929	1	
9	8.27		0.000	263	2314	2	
10	8.45		0.000	419	36844	2	
Totals			411.755	9690	305553		



SS.100-10

Data Reprocessed On 11/02/1998 10:12:28

```

=====
Sample Name: S98T002236 SAM                      Date: 10/23/1998 14:51:17
Data File  : E:\DATA\98102301.D14
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 14
Analyst    : Ed Colvin                            Column: AG4A-SC,AS4A-SC, SRS
Detector: CDM-1
=====
    
```

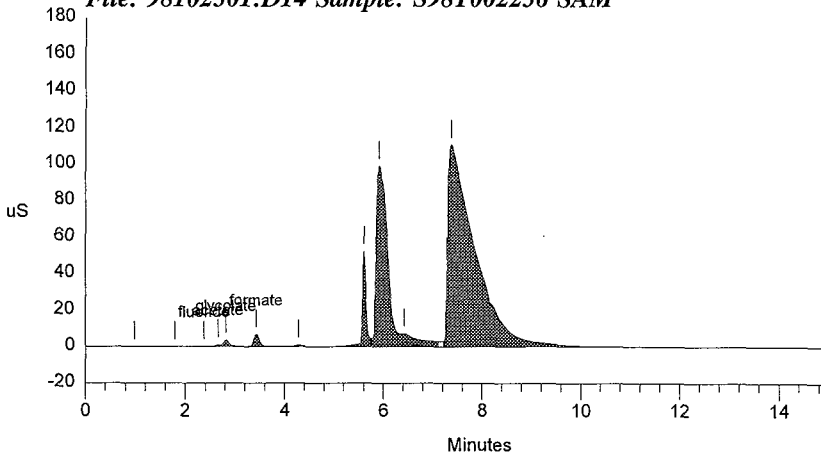
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          606 4500 5Hz 0.00 15.00          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.98		0.000	66	488	1	
2	1.80		0.000	21	672	1	
3	2.38	fluoride	23.371	67	434	1	0.00
4	2.66	acetate	724.600	911	5892	2	0.00
5	2.82	glycolate	2623.087	3497	26265	2	0.00
6	3.43	formate	3107.501	6622	53404	1	0.00
7	4.28		0.000	908	8103	1	
8	5.61		0.000	52230	269159	2	
9	5.91		0.000	99082	1620554	3	
10	6.43		0.000	3923	149246	4	
11	7.37		0.000	110812	4218056	2	
Totals			6478.559	278138	6352272		

File: 98102301.D14 Sample: S98T002236 SAM



Data Reprocessed On 11/02/1998 10:14:35

```

=====
Sample Name: S98T002236 DUP                      Date: 10/23/1998 15:10:23
Data File  : E:\DATA\98102301.D15
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 15              Detector: CDM-1
Analyst    : Ed Colvin                           Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

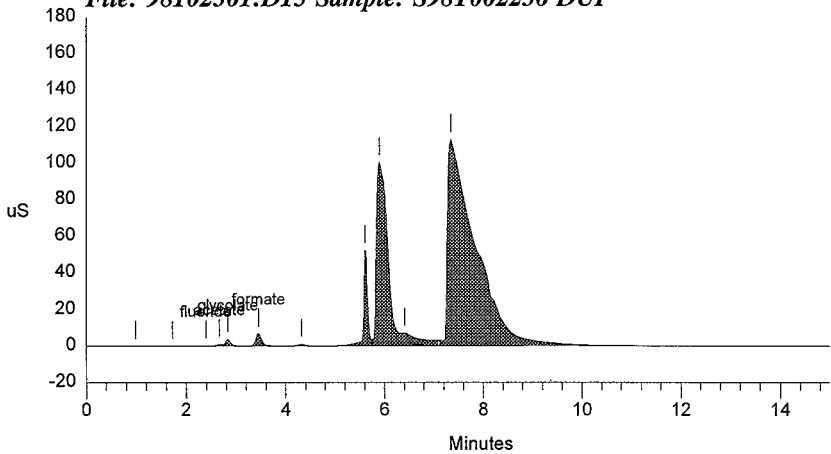
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          606   4500  5Hz   0.00 15.00          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.98		0.000	69	500	1	
2	1.73		0.000	24	721	1	
3	2.39	fluoride	22.504	62	396	1	0.00
4	2.67	acetate	749.809	920	6099	2	0.00
5	2.83	glycolate	2611.119	3532	26131	2	0.00
6	3.45	formate	3111.930	6706	53485	1	0.00
7	4.32		0.000	931	8300	1	
8	5.61		0.000	52174	284081	2	
9	5.90		0.000	100256	1631581	3	
10	6.41		0.000	3678	146225	4	
11	7.35		0.000	112813	4418047	2	
Totals			6495.363	281164	6575563		

File: 98102301.D15 Sample: S98T002236 DUP



Data Reprocessed On 11/02/1998 10:16:32

```

=====
Sample Name: S98T002236 SPK                               Date: 10/23/1998 15:27:12
Data File  : E:\DATA\98102301.D16
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACTI Address: 1 System: 2 Inject#: 16                     Detector: CDM-1
Analyst    : Ed Colvin      Column: AG4A-SC, AS4A-SC, SRS
=====
    
```

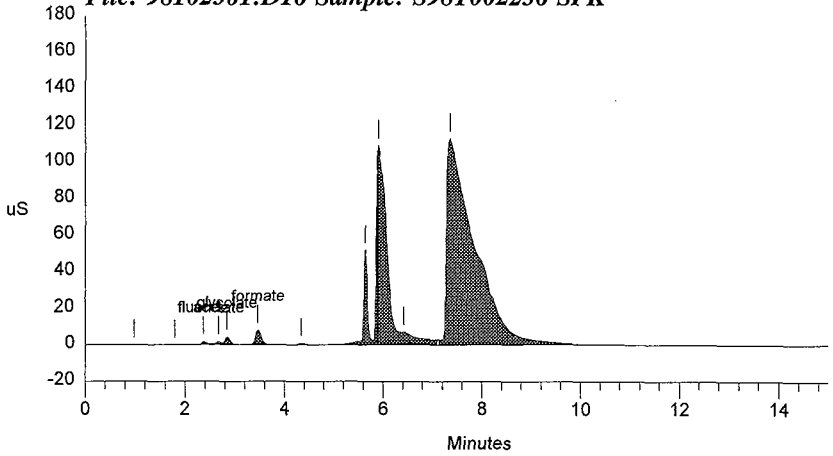
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           606 4500 5Hz 0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.98		0.000	68	486	1	
2	1.80		0.000	28	1052	1	
3	2.37	fluoride	227.207	1594	9503	2	0.00
4	2.67	acetate	1334.927	1572	10823	2	0.00
5	2.85	glycolate	3152.839	4263	32369	2	0.00
6	3.47	formate	3817.270	8037	66511	1	0.00
7	4.35		0.000	917	8239	1	
8	5.63		0.000	51947	292715	2	
9	5.87		0.000	92681	164234	2	
10	5.91		0.000	109070	1386169	3	
11	6.42		0.000	3766	145536	4	
12	7.36		0.000	112833	4432233	2	
Totals			8532.244	386777	6549869		

File: 98102301.D16 Sample: S98T002236 SPK



Data Reprocessed On 11/02/1998 10:19:13

```

=====
Sample Name: S98T002240 SAM                      Date: 10/23/1998 15:50:38
Data File  : E:\DATA\98102301.D17
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 17             Detector: CDM-1
Analyst    : Ed Colvin                          Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

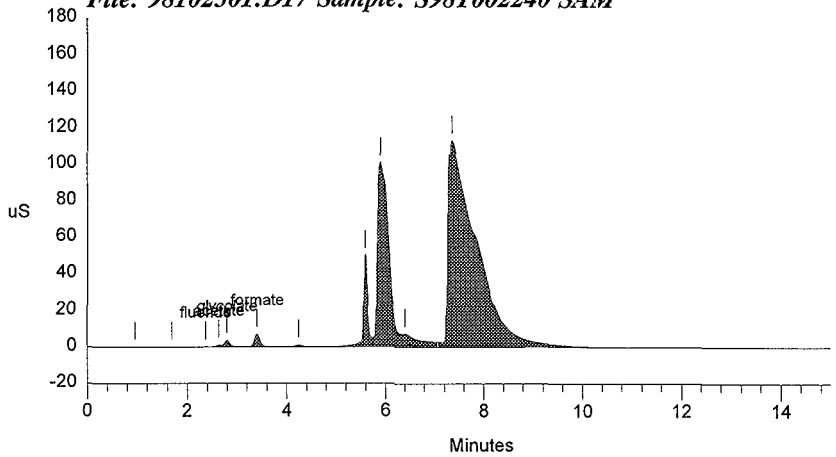
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          606    4500 5Hz   0.00 15.00          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.96		0.000	88	682	1	
2	1.70		0.000	39	1323	1	
3	2.37	fluoride	19.825	48	278	1	0.00
4	2.64	acetate	756.796	949	6156	2	0.00
5	2.80	glycolate	2629.131	3581	26333	2	0.00
6	3.41	formate	3108.378	6801	53420	1	0.00
7	4.25		0.000	942	8281	1	
8	5.59		0.000	49851	293851	2	
9	5.89		0.000	100436	1656865	3	
10	6.41		0.000	3926	145398	4	
11	7.34		0.000	113009	4491375	2	
Totals			6514.131	279670	6683962		

File: 98102301.D17 Sample: S98T002240 SAM



Data Reprocessed On 11/02/1998 10:22:40

```

=====
Sample Name: S98T002240 DUP                               Date: 10/23/1998 16:06:41
Data File  : E:\DATA\98102301.D18
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 18                      Detector: CDM-1
Analyst    : Ed Colvin                                     Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

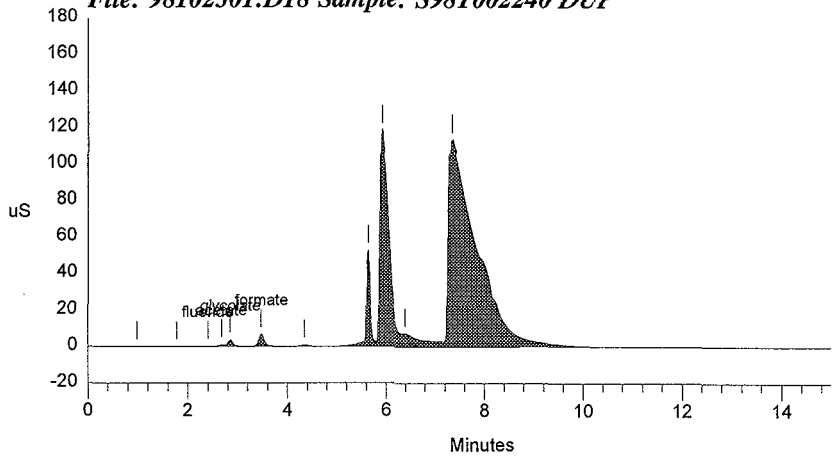
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           606 4500 5Hz  0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.98		0.000	68	467	1	
2	1.77		0.000	20	589	1	
3	2.40	fluoride	19.807	57	277	1	0.00
4	2.68	acetate	758.615	927	6171	2	0.00
5	2.85	glycolate	2643.082	3525	26489	2	0.00
6	3.47	formate	3153.745	6678	54248	1	0.00
7	4.35		0.000	917	8402	1	
8	5.63		0.000	52611	296680	2	
9	5.91		0.000	118271	1581889	3	
10	6.40		0.000	3966	153497	4	
11	7.33		0.000	113419	4505648	2	
Totals			6575.249	300459	6634357		

File: 98102301.D18 Sample: S98T002240 DUP



HNF-1661 REV. 0

# LABCORE Completed Worklist Report for Worklist# 26836

Analyst: adp

Instrument: IC45S2

Book#: 131N20B

Method: LA-533-105

Rev/Mod F-0

Worklist Comment: U107(2), @IC4G-01 rerun at 2121, used to be 26238.jmf

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 CCB	0	@IC4G-QC F*4	QC	1	<1.10e-2		ug/mL
1 CCB	0	@IC4G-QC ACETATE2	QC	1	<2.00e-2		ug/mL
1 CCB	0	@IC4G-QC FORMATE2	QC	1	<2.10e-2		ug/mL
1 CCB	0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2		ug/mL
2 ICV	0	@IC4G-QC F*4	QC	5.80e1	5.32e+01	91.724 % Recovery	
2 ICV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.07e+02	91.453 % Recovery	
2 ICV	0	@IC4G-QC FORMATE2	QC	1.27e2	1.13e+02	88.976 % Recovery	
2 ICV	0	@IC4G-QC GLYCOLT1	QC	1.01e2	9.01e+01	89.208 % Recovery	
3 CCV	0	@IC4G-QC F*4	QC	5.90e1	5.45e+01	92.373 % Recovery	
3 CCV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.07e+02	91.453 % Recovery	
3 CCV	0	@IC4G-QC FORMATE2	QC	1.32e2	1.19e+02	90.152 % Recovery	
3 CCV	0	@IC4G-QC GLYCOLT1	QC	1.16e2	1.12e+02	96.552 % Recovery	
4 SAMPLE	S98T002035	@IC4G-01 ACETATE2	LIQUID	<u>N/A</u>	6.907e+02	123.000	ug/mL
5 DUP	S98T002035	@IC4G-01 ACETATE2	LIQUID	6.91e+02	7.11e+02	2.853	RPD
6 SPK	S98T002035	@IC4G-01 ACETATE2	LIQUID	1.17e2	1.14e+02	97.436 % Recovery	
7 SAMPLE	S98T002045	@IC4G-01 ACETATE2	LIQUID	<u>N/A</u>	7.578e+02	123.000	ug/mL
8 DUP	S98T002045	@IC4G-01 ACETATE2	LIQUID	7.58e+02	7.71e+02	1.700	RPD

Final page for worklist# 26836

Analyst Signature

Date

Analyst Signature

Date

*James M. Lyle*  
Reviewer Signature Date 10/26/98



# LABCORE Data Entry Template for Worklist# 26836

Analyst: ADP Instrument: IC 4552 Book# 131120B

Method: LA-533-<sup>97F 10/26/98</sup>Y105 Rev/Mod F-0

Worklist Comment: U107(2), @IC4G-01 rerun at 2121, used to be 26238.jmf

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC4G-QC	QC		
2	ICV		@IC4G-QC	QC		
3	CCV		@IC4G-QC	QC		
4	SAMPLE	S98T002035 0	@IC4G-01	LIQUID	98000358	U-107 (2)
		Analytes Requested: ACETATE2				
5	DUP	S98T002035 0	@IC4G-01	LIQUID		
6	SPK	S98T002035 0	@IC4G-01	LIQUID		
7	SAMPLE	S98T002045 0	@IC4G-01	LIQUID	98000358	U-107 (2)
		Analytes Requested: ACETATE2				
8	DUP	S98T002045 0	@IC4G-01	LIQUID		

## Final page for worklist # 26836

See Original 26238  
\_\_\_\_\_  
Analyst Signature      Date

\_\_\_\_\_  
Analyst Signature      Date

Data Entry Comments: Reuploaded 10/26/98      Validated 10/26/98 jmb

# LABCORE Data Entry Template for Worklist# 26238

Analyst: AJP Instrument: IC \_\_\_\_\_ Book# 131N20-B

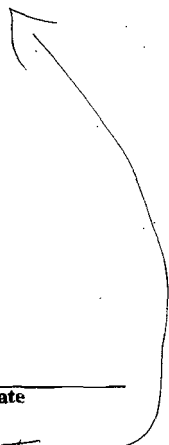
Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107(2), @IC4G-01 Rerun DF= Ace 2121 skm

*Rerun due to cvv failure. SKM  
check if ≤ 50  
w/Rem Am @ 20 cm*

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC4-QC	QC		
2	ICV		@IC4-QC	QC		
3	SAMPLE S98T002035 0		@IC4G-01	LIQUID	98000358	U-107 (2)
Analytes Requested: ACETATE2						
4	DUP S98T002035 0		@IC4G-01	LIQUID		
5	SPK S98T002035 0		@IC4G-01	LIQUID		
6	SAMPLE S98T002045 0		@IC4G-01	LIQUID	98000358	U-107 (2)
Analytes Requested: ACETATE2						
7	DUP S98T002045 0		@IC4G-01	LIQUID		
8	CCV		@IC4-QC	QC		

*WRONG TRAY*



### Final page for worklist # 26238

*Anthony Purinton* 10-23-98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

*Became 26836 to correct for Wrong Tray*

Data Entry Comments:

*up loaded 10-23-98*  
*John Wouell*  
*26238OCT.CSV*

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Data Reprocessed On 10/23/1998 10:41:35

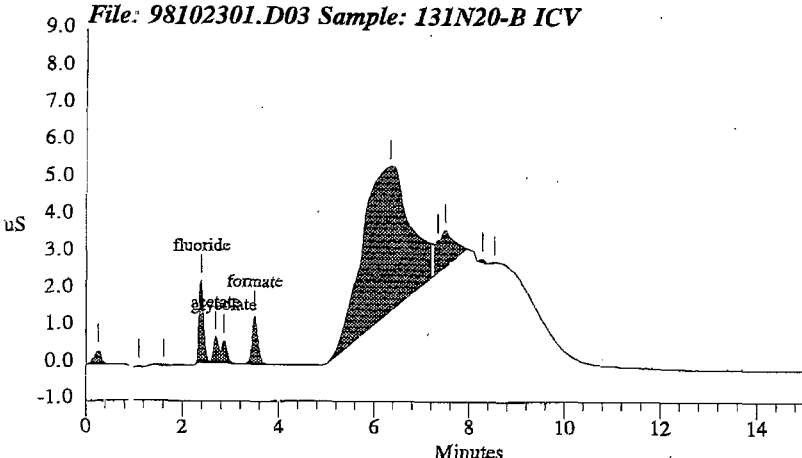
Sample Name: 131N20-B ICV Date: 10/23/1998 10:37:54  
 Data File : C:\DX\DATA\98102301.D03  
 Method : C:\DX\METHOD\GLYCOLIC.MET  
 ACI Address: 1 System: 2 Inject#: 3 Detector: CDM-1  
 Analyst : Ed Colvin Column: AG4A-SC, AS4A-SC, SRS

*Ed Colvin* 10-23-98

External	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
1		101	4500	5Hz	0.00	15.00		0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.26		0.000	386	3670	1	
2	1.10		0.000	45	267	1	
3	1.61		0.000	13	214	1	
4	2.39	fluoride	53.232	2205	13643	2	0.00
5	2.69	acetate	106.595	695	5193	2	0.00
6	2.86	glycolate	90.124	628	4827	2	0.00
7	3.50	formate	113.316	1294	10791	1	0.00
8	5.33		0.000	3946	275943	2	
9	7.33		0.000	880	5439	2	
10	7.49		0.000	995	17888	2	
11	3.27		0.000	116	579	1	
12	3.53		0.000	30	363	1	
Totals			363.267	11234	338817		



SS 100-10

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 920 TO 927.

Date: 10/23/1998 10:19:35

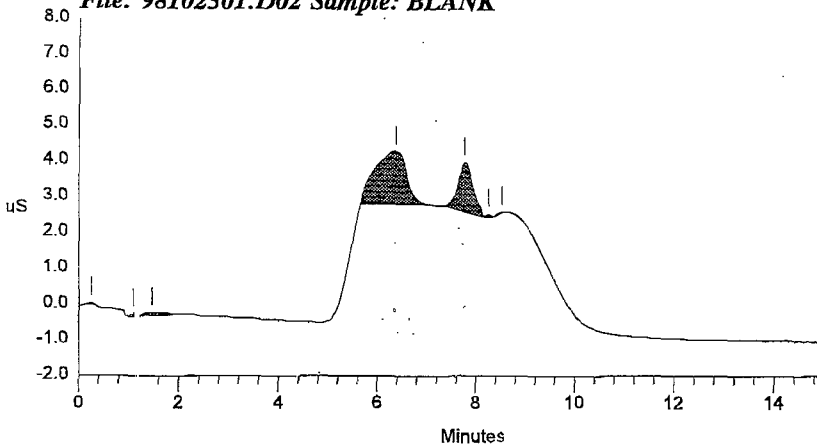
Sample Name: BLANK  
 Data File : C:\DX\DATA\98102301.D02  
 Method : C:\DX\METHOD\GLYCOLIC.MET  
 ACI Address: 1 System: 2 Inject#: 2 Detector: CDM-1  
 Analyst : Ed Colvin Column: AG4A-SC, AS4A-SC, SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	4500	5Hz	0.00	15.00		0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.26		0.000	59	331		1
2	1.10		0.000	92	629		2
3	1.47		0.000	91	3176		2
4	5.37		0.000	1505	68438		1
5	7.77		0.000	1405	30022		1
6	8.27		0.000	101	515		1
7	8.53		0.000	34	405		1
Totals			0.000	3287	103516		

File: 98102301.D02 Sample: BLANK



SS1

Data Reprocessed On 10/23/1998 14:17:27

```

=====
Sample Name: S98002035 SAM                      Date: 10/23/1998 11:02:11
Data File  : E:\DATA\98102301.D04
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 4             Detector: CDM-1
Analyst    : Ed Colvin                          Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

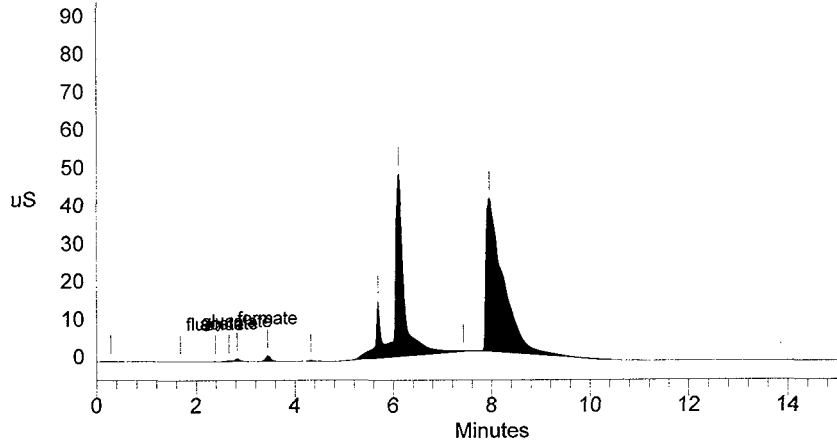
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           2121  4500 5Hz   0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.28		0.000	142	1654	1	
2	1.68		0.000	19	574	1	
3	2.39	fluoride	52.802	13	68	1	0.00
4	2.67	acetate	690.735	227	1505	2	0.00
5	2.83	glycolate	2268.058	774	5851	2	0.00
6	3.45	formate	2595.220	1523	11833	1	0.00
7	4.32		0.000	199	1865	1	
8	5.69		0.000	15047	130213	2	
9	6.11		0.000	48460	642539	3	
10	7.43		0.000	126	1454	4	
11	7.95		0.000	40663	1007451	1	
Totals			5606.815	107192	1805006		

File: 98102301.D04 Sample: S98002035 SAM



```

=====
Sample Name: S98002035 DUP                               Date: 10/23/1998 11:18:23
Data File  : C:\DX\DATA\98102301.D05
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 5                      Detector: CDM-1
Analyst    : Ed Colvin                                   Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

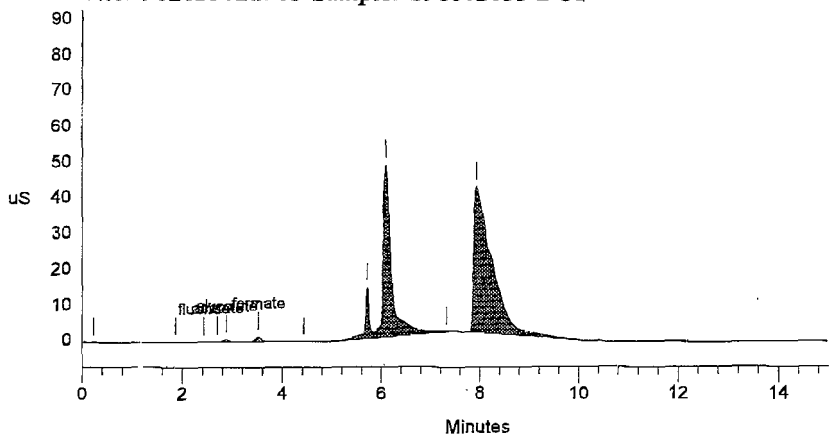
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           2121  4500 5Hz  0.00 15.00  0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	94	1021	1	
2	1.87		0.000	11	421	1	
3	2.43	fluoride	54.672	16	92	1	0.00
4	2.71	acetate	711.486	226	1555	2	0.00
5	2.89	glycolate	2313.994	766	5976	2	0.00
6	3.53	formate	2688.569	1523	12286	1	0.00
7	4.44		0.000	199	1904	1	
8	5.72		0.000	14396	89248	2	
9	6.10		0.000	48585	602132	3	
10	7.33		0.000	23	51	4	
11	7.93		0.000	41090	1051828	1	
Totals			5768.720	106929	1766513		

File: 98102301.D05 Sample: S98002035 DUP



SS .100-10-.500-10

```

=====
Sample Name: S98002035 SPK                               Date: 10/23/1998 11:34:34
Data File  : C:\DX\DATA\98102301.D06
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 6                      Detector: CDM-1
Analyst    : Ed Colvin                                   Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

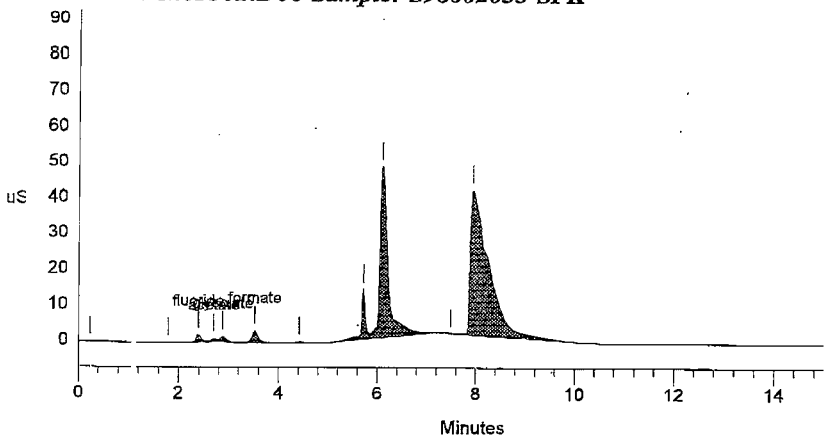
```

-----
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
-----
External           1           2121  4500  5Hz   0.00  15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	99	1040	1	
2	1.80		0.000	12	486	1	
3	2.39	fluoride	1076.189	2151	13107	2	0.00
4	2.70	acetate	2992.443	950	6958	2	0.00
5	2.88	glycolate	4340.781	1539	11643	2	0.00
6	3.52	formate	5307.676	3087	25116	1	0.00
7	4.42		0.000	193	1848	1	
8	5.72		0.000	14153	87310	2	
9	6.10		0.000	48165	577362	2	
10	7.49		0.000	94	1906	2	
11	7.94		0.000	40892	1060921	2	
Totals			13717.088	111335	1787697		

File: 98102301.D06 Sample: S98002035 SPK



SS .100-10 - .500-10

```

=====
Sample Name: S98002045 SAM                               Date: 10/23/1998 11:50:57
Data File  : C:\DX\DATA\98102301.D07
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 7                      Detector: CDM-1
Analyst    : Ed Colvin                                   Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

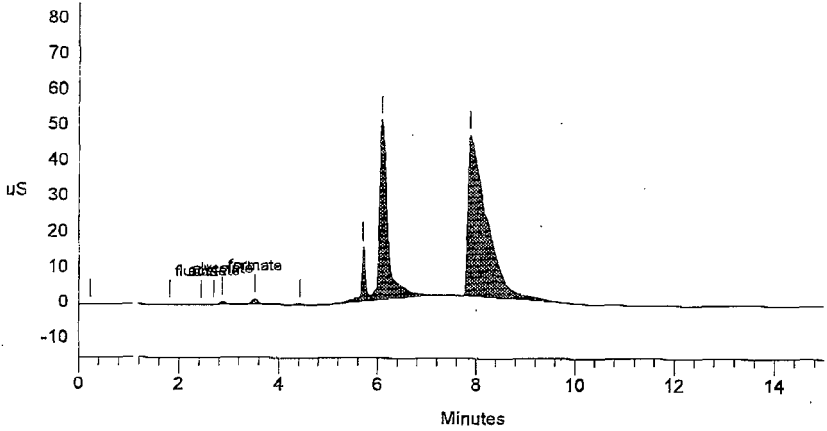
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          2121  4500 5Hz   0.00 15.00          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	94	872	1	
2	1.82		0.000	14	546	1	
3	2.45	fluoride	64.605	32	217	1	0.00
4	2.70	acetate	757.771	242	1666	2	0.00
5	2.87	glycolate	2485.836	833	6448	2	0.00
6	3.52	formate	2865.507	1656	13143	1	0.00
7	4.43		0.000	218	2127	1	
8	5.71		0.000	15292	90243	2	
9	6.09		0.000	50434	611405	2	
10	7.88		0.000	45096	1191627	1	
Totals			6173.719	113911	1918293		

File: 98102301.D07 Sample: S98002045 SAM



SS 100-10 - 500-10



HNF-1661 REV. 0

```

=====
Sample Name: S98002045 DUP                      Date: 10/23/1998 12:06:55
Data File  : C:\DX\DATA\98102301.D08
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 8              Detector: CDM-1
Analyst    : Ed Colvin                          Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

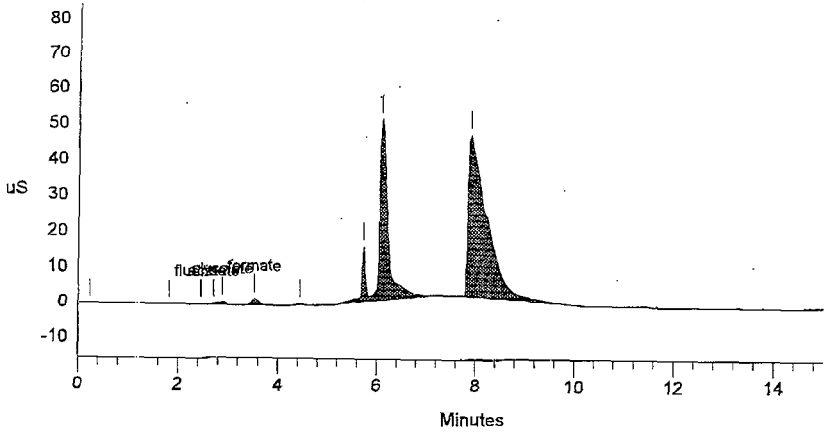
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           2121  4500 5Hz  0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	89	891	1	
2	1.82		0.000	16	725	1	
3	2.45	fluoride	60.929	27	171	2	0.00
4	2.71	acetate	770.638	248	1697	2	0.00
5	2.88	glycolate	2577.373	843	6700	2	0.00
6	3.52	formate	2950.305	1650	13555	1	0.00
7	4.44		0.000	224	2198	1	
8	5.73		0.000	15500	92776	2	
9	5.09		0.000	50759	611000	2	
10	7.89		0.000	45341	1189632	1	
Totals			6359.246	114697	1919345		

File: 98102301.D08 Sample: S98002045 DUP



SS .100-10 - .500-10

```

=====
Sample Name: 130N20-C CCV                               Date: 10/23/1998 12:23:32
Data File  : C:\DX\DATA\98102301.D09
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 9                     Detector:CDM-1
Analyst    : Ed Colvin                                  Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

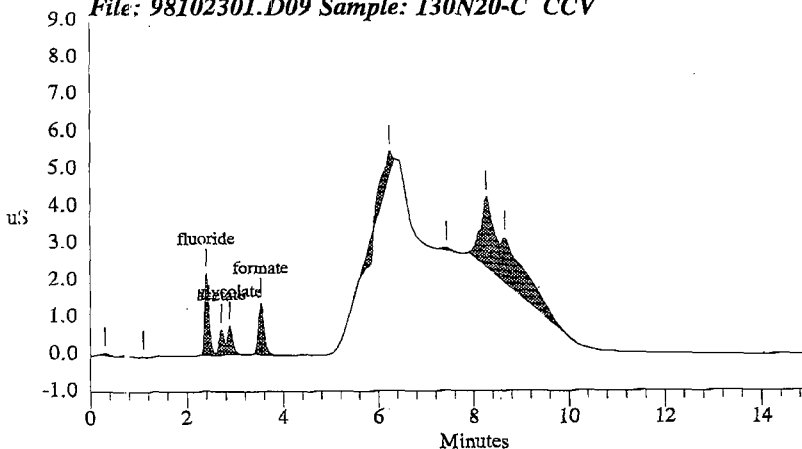
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          1          101 4500 5Hz 0.00 15.00          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.30		0.000	63	527	1	
2	1.10		0.000	45	278	1	
3	2.40	fluoride	54.465	2206	13977	2	0.00
4	2.71	acetate	106.727	683	5199	2	0.00
5	2.89	glycolate	111.713	767	6064	2	0.00
6	3.53	formate	119.268	8393	11395	1	0.00
7	5.24		0.000	640	7938	1	
8	7.44		0.000	76	766	1	
9	8.27		0.000	1893	37885	2	
10	8.67		0.000	1223	46607	2	
Totals			392.173	8988	130635		

File: 98102301.D09 Sample: 130N20-C CCV



# LABCORE Completed Worklist Report for Worklist# 26837

Analyst: adp

Instrument: IC45S2

Book#: 131N20B

Method: LA-533-105 *gmF10/26/98*  
Rev/Mod F-0

Worklist Comment: U107(2), @IC4G-01 rerun, used to be 26237. jmf

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	@IC4G-QC F*4	QC	1	<1.10e-2		ug/mL
1	CCB	0	@IC4G-QC ACETATE2	QC	1	<2.00e-2		ug/mL
1	CCB	0	@IC4G-QC FORMATE2	QC	1	<2.10e-2		ug/mL
1	CCB	0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2		ug/mL
2	ICV	0	@IC4G-QC F*4	QC	5.80e1	5.18e+01	89.310	% Recovery
2	ICV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.12e+02	95.726	% Recovery
2	ICV	0	@IC4G-QC FORMATE2	QC	1.27e2	1.10e+02	86.614	% Recovery
2	ICV	0	@IC4G-QC GLYCOLT1	QC	1.01e2	9.24e+01	91.485	% Recovery
3	CCV	0	@IC4G-QC F*4	QC	5.90e1	5.38e+01	91.186	% Recovery
3	CCV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.07e+02	91.453	% Recovery
3	CCV	0	@IC4G-QC FORMATE2	QC	1.32e2	1.23e+02	93.182	% Recovery
3	CCV	0	@IC4G-QC GLYCOLT1	QC	1.16e2	1.18e+02	101.724	% Recovery
4	SAMPLE	S98T002031	@IC4G-01 ACETATE2	LIQUID	N/A	6.986e+02	35.150	ug/mL
4	SAMPLE	S98T002031	@IC4G-01 FORMATE2	LIQUID	N/A	3.013e+03	37.570	ug/mL
4	SAMPLE	S98T002031	@IC4G-01 GLYCOLT1	LIQUID	N/A	2.616e+03	33.940	ug/mL
5	DUP	S98T002031	@IC4G-01 F*4-01	LIQUID	?	2.00e+01		RPD
5	DUP	S98T002031	@IC4G-01 ACETATE2	LIQUID	6.99e+02	7.67e+02	9.277	RPD
5	DUP	S98T002031	@IC4G-01 FORMATE2	LIQUID	3.01e+03	3.12e+03	3.589	RPD
5	DUP	S98T002031	@IC4G-01 GLYCOLT1	LIQUID	2.62e+03	2.64e+03	0.760	RPD
6	SPK	S98T002031	@IC4G-01 ACETATE2	LIQUID	1.17e2	1.24e+02	105.983	% Recovery
6	SPK	S98T002031	@IC4G-01 FORMATE2	LIQUID	1.27e2	1.52e+02	119.685	% Recovery
6	SPK	S98T002031	@IC4G-01 GLYCOLT1	LIQUID	1.01e2	1.09e+02	107.921	% Recovery

Final page for worklist# 26837

Analyst Signature

Date

Analyst Signature

Date

*Jean M. Lige*  
Reviewer Signature

*10/26/98*  
Date

# LABCORE Data Entry Template for Worklist# 26837

Analyst: ADP Instrument: IC 4582 Book# 131/16208

Method: LA-533 <sup>9MF 10/26/98</sup> 1105 Rev/Mod F-0

Worklist Comment: U107(2), @IC4G-01 rerun , used to be 26237. jmf

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	CCB				@IC4G-QC	QC		
2	ICV				@IC4G-QC	QC		
3	CCV				@IC4G-QC	QC		
4	SAMPLE	S98T002031	0		@IC4G-01	LIQUID	98000358	U-107 (2)
		Analytes Requested: ACETATE2, FORMATE2, GLYCOLT1						
5	DUP	S98T002031	0		@IC4G-01	LIQUID		
6	SPK	S98T002031	0		@IC4G-01	LIQUID		

## Final page for worklist # 26837

See Original 26237  
Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Data Entry Comments:

Reuploaded 10/26/98 Validated 10/26/98 JMF

09/16/98 13:18  
A-0004-1

# LABCORE Data Entry Template for Worklist# 26237

Analyst: ADP Instrument: IC Book# 131P20-B

Check  
↳ 50 m Rem / hr  
@ 30 can

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107(2), @IC4G-01. Refun due to CCV failure. SKM  
Refun DF= Ace 2121, Form & Gly 5151 skm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC4-QC	QC		
2	ICV		@IC4-QC	QC		
3	SAMPLE	S98T002031 0	@IC4G-01	LIQUID	98000358	U-107 (2)
Analytes Requested: ACETATE2, FORMATE2, GLYCOLT1						
4	DUP	S98T002031 0	@IC4G-01	LIQUID		
5	SPK	S98T002031 0	@IC4G-01	LIQUID		
6	CCV		@IC4-QC	QC		

*} Wrong Tray*

## Final page for worklist # 26237

*Adrian Parra* 10-25-98

Analyst Signature	Date	Analyst Signature	Date
-------------------	------	-------------------	------

*Became 26837 to correct for wrong tray.*

Data Entry Comments: uploaded 10-26-98  
J. Wallace  
26237OCT.CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Data Reprocessed On 10/25/1998 12:21:30

Sample Name: 131N20-B ICV Date: 10/25/1998 12:14:14  
 Data File : C:\DX\DATA\98102501.D08  
 Method : C:\DX\METHOD\GLYCOLIC.MBT  
 ACI Address: 1 System, 2 Inject#: 8 Detector: CDM-1  
 Analyst : Ed Colvin *Ed Colvin* Column: AG4A-SC, AS4A-SC, SRS

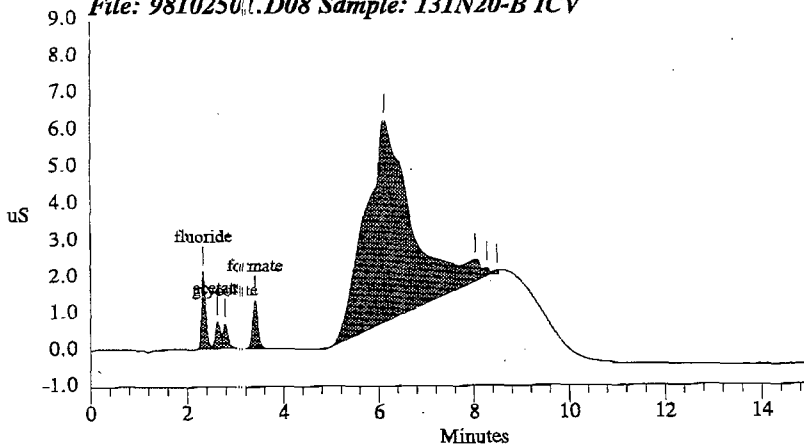
10-25-98

Calibration Volume Dilution Points Rate Start Stop Area Reject  
 External 1 101 4500 5Hz 0.00 15.00 0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	2.33	fluoride	51.801	89.31	2134	13257	2 0.00
2	2.63	acetate	111.728	95.49	730	5446	2 0.00
3	2.79	glycolate	92.375	91.46	661	4956	2 0.00
4	3.41	formate	109.720	86.39	1337	10426	1 0.00
5	6.12		0.000		5517	359953	3
6	8.03		0.000		270	4430	4
7	8.27		0.000		76	370	4
8	8.49		0.000		7	3	4
Totals			365.625		10731	398841	

File: 98102501.D08 Sample: 131N20-B ICV



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 931 TO 936

```

=====
Sample Name: BLANK                      Date: 10/25/1998 11:43:17
Data File  : C:\DX\DATA\98102501.D07
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 7      Detector: CDM-1
Analyst    : Ed Colvin                   Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

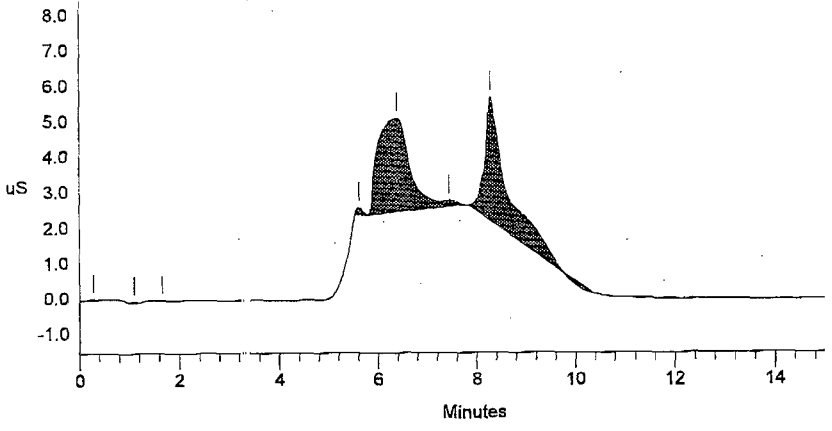
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1 4500 5Hz 0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.28		0.000	56	787	1	
2	1.10		0.000	45	271	1	
3	1.66		0.000	8	175	1	
4	5.62		0.000	211	1776	1	
5	6.39		0.000	2666	118910	3	
6	7.45		0.000	104	1369	4	
7	8.29		0.000	3487	108737	1	
Totals			0.000	6577	232025		

File: 98102501.D07 Sample: BLANK



Data Reprocessed On 10/26/1998 08:15:38

```

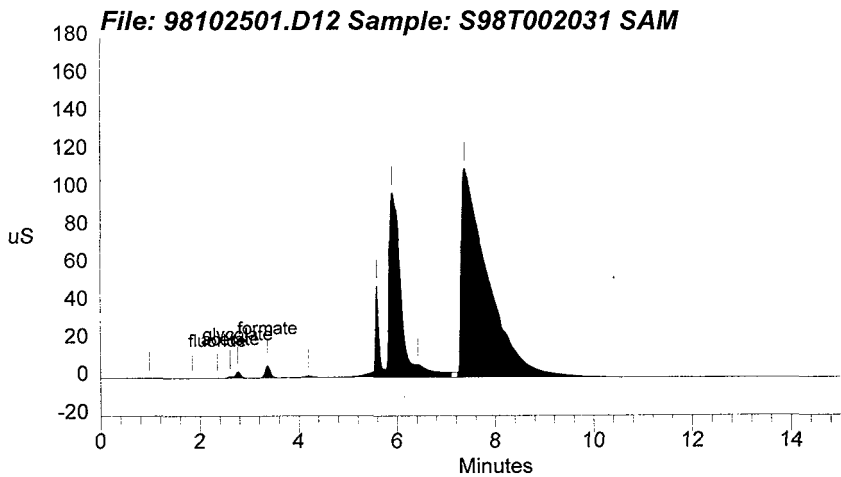
=====
Sample Name: S98T002031 SAM                               Date: 10/25/1998 14:35:42
Data File  : E:\DATA\98102501.D12
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 12                      Detector: CDM-1
Analyst    : Ed Colvin      Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           606 4500 5Hz  0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.98		0.000	74	594	1	
2	1.84		0.000	15	391	1	
3	2.35	fluoride	18.945	43	239	2	0.00
4	2.61	acetate	698.570	926	5678	2	0.00
5	2.77	glycolate	2616.203	3485	26188	2	0.00
6	3.37	formate	3013.020	6580	51683	1	0.00
7	4.20		0.000	917	11118	1	
8	5.59		0.000	48552	290360	2	
9	5.91		0.000	97992	1631586	3	
10	6.43		0.000	3537	134899	4	
11	7.38		0.000	110771	4235253	2	
Totals			6346.738	272892	6387987		





Data Reprocessed On 10/26/1998 08:17:29

```

=====
Sample Name: S98T002031 DUP                               Date: 10/25/1998 14:52:06
Data File  : E:\DATA\98102501.D13
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 13                     Detector: CDM-1
Analyst    : Ed Colvin                                   Column: AG4A-SC,AS4A-SC, SRS
=====

```

```

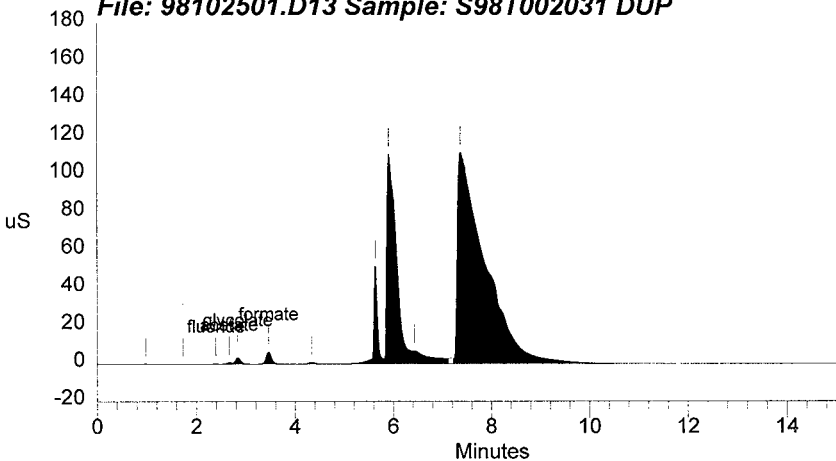
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           606   4500 5Hz   0.00 15.00           0
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.98		0.000	73	500	1	
2	1.73		0.000	20	692	1	
3	2.39	fluoride	19.955	46	283	2	0.00
4	2.66	acetate	767.139	921	6240	2	0.00
5	2.83	glycolate	2642.481	3457	26483	2	0.00
6	3.46	formate	3118.796	6514	53610	1	0.00
7	4.33		0.000	889	8322	1	
8	5.63		0.000	51608	297582	2	
9	5.91		0.000	110872	1595337	3	
10	6.43		0.000	3678	147619	4	
11	7.37		0.000	111638	4414403	2	
Totals			6548.371	289717	6551073		

File: 98102501.D13 Sample: S98T002031 DUP



Data Reprocessed On 10/26/1998 08:18:57

```

=====
Sample Name: S98T002031 SPK                               Date: 10/25/1998 15:07:44
Data File  : E:\DATA\98102501.D14
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 14                      Detector: CDM-1
Analyst    : Ed Colvin                                   Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

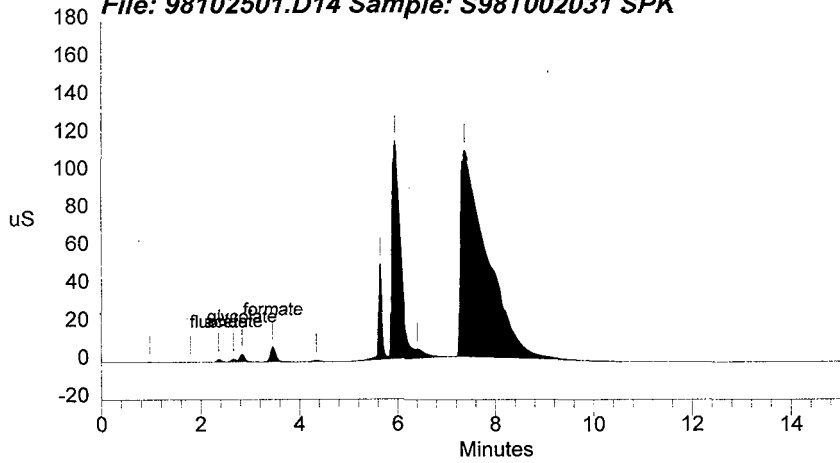
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           606 4500 5Hz 0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.98		0.000	70	506	1	
2	1.80		0.000	26	887	1	
3	2.37	fluoride	212.660	1479	8852	2	0.00
4	2.67	acetate	1320.698	1560	10709	2	0.00
5	2.84	glycolate	3159.851	4178	32452	2	0.00
6	3.46	formate	3774.756	7862	65716	1	0.00
7	4.35		0.000	879	7974	1	
8	5.64		0.000	50619	267972	2	
9	5.94		0.000	115517	1515042	3	
10	6.41		0.000	2172	36670	4	
11	7.36		0.000	109429	4124576	1	
Totals			8467.965	293790	6071355		

File: 98102501.D14 Sample: S98T002031 SPK



Data Reprocessed On 10/25/1998 14:13:47

```

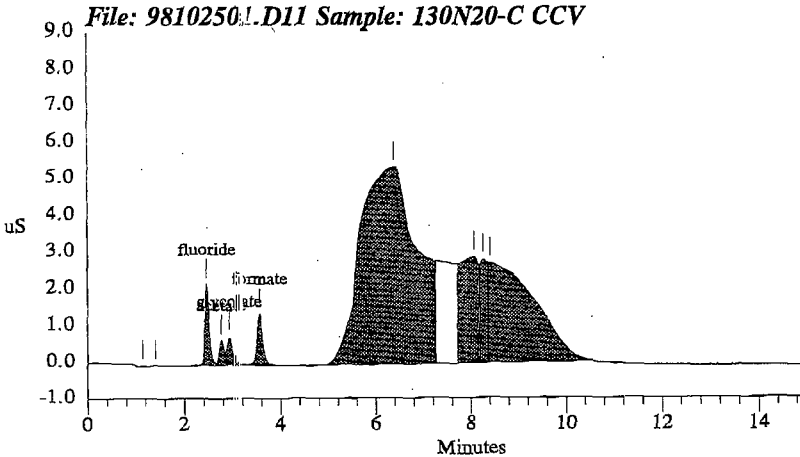
=====
Sample Name: 130N20-C CCV                               Date: 10/25/1998 14:09:28
Data File  : C:\DX\DATA\98102501.D11
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 11                   Detector: CDM-1
Analyst    : Ed Colvin                                  Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           101 4500 5Hz 0.00 15.00 0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	El. Code	%Delta
1	1.14		0.000	44	305	1	
2	1.40		0.000	24	506	1	
3	2.47	fluoride	53.753	2212	13784	2	0.00
4	2.77	acetate	105.894	687	5158	2	0.00
5	2.93	glycolate	117.855	797	6418	2	0.00
6	3.57	formate	123.208	1406	11795	1	0.00
7	6.39		0.000	5375	446442	2	
8	8.07		0.000	2894	74287	2	
9	8.27		0.000	2818	29083	2	
10	8.42		0.000	2718	181778	2	
Totals			400.710	18975	769558		



# LABCORE Completed Worklist Report for Worklist# 26998

Analyst: kjt

Instrument: IC45S1

Book#: 29N21A

Method: LA-533-105

Rev/Mod F-0

Worklist Comment: U107, @IC-01, tdm

Seq Type	Sample#	RA	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	@IC-QC	F	QC	1	<1.20e-2	ug/mL
1	CCB	0	@IC-QC	CL	QC	1	<1.70e-2	ug/mL
1	CCB	0	@IC-QC	NO2	QC	1	<1.08e-1	ug/mL
1	CCB	0	@IC-QC	BR	QC	1	<1.25e-1	ug/mL
1	CCB	0	@IC-QC	NO3	QC	1	<1.39e-1	ug/mL
1	CCB	0	@IC-QC	PO4	QC	1	<1.20e-1	ug/mL
1	CCB	0	@IC-QC	SO4	QC	1	<1.38e-1	ug/mL
1	CCB	0	@IC-QC	OXALATE2	QC	1	<1.05e-1	ug/mL
2	CCV	0	@IC-QC	F	QC	6.40e1	6.78e+01	105.938 % Recovery
2	CCV	0	@IC-QC	CL	QC	9.00e1	9.34e+01	103.778 % Recovery
2	CCV	0	@IC-QC	NO2	QC	5.53e2	5.58e+02	100.904 % Recovery
2	CCV	0	@IC-QC	BR	QC	6.30e2	6.40e+02	101.587 % Recovery
2	CCV	0	@IC-QC	NO3	QC	6.98e2	7.39e+02	105.874 % Recovery
2	CCV	0	@IC-QC	PO4	QC	6.32e2	6.58e+02	104.114 % Recovery
2	CCV	0	@IC-QC	SO4	QC	6.99e2	7.27e+02	104.006 % Recovery
2	CCV	0	@IC-QC	OXALATE2	QC	5.47e2	5.49e+02	100.366 % Recovery
3	SAMPLE	S98T002976	@IC-01	F-02	LIQUID	N/A	< 1.224e+02	122.400 ug/mL
3	SAMPLE	S98T002976	@IC-01	CL-02	LIQUID	N/A	7.955e+03	173.400 ug/mL
3	SAMPLE	S98T002976	@IC-01	NO2-02	LIQUID	N/A	9.985e+04	1102.000 ug/mL
3	SAMPLE	S98T002976	@IC-01	BR-02	LIQUID	N/A	< 1.275e+05	1275.000 ug/mL
3	SAMPLE	S98T002976	@IC-01	NO3-02	LIQUID	N/A	2.262e+05	1418.000 ug/mL
3	SAMPLE	S98T002976	@IC-01	PO4-02	LIQUID	N/A	3.877e+03	1224.000 ug/mL
3	SAMPLE	S98T002976	@IC-01	SO4-02	LIQUID	N/A	6.536e+03	1408.000 ug/mL
3	SAMPLE	S98T002976	@IC-01	OXALATE2	LIQUID	N/A	< 1.071e+03	1071.000 ug/mL
4	DUP	S98T002976	@IC-01	F-02	LIQUID	<1.22e2	<1.22e2	RPD
4	DUP	S98T002976	@IC-01	CL-02	LIQUID	8.00e+03	7.17e+03	10.943 RPD
4	DUP	S98T002976	@IC-01	NO2-02	LIQUID	9.98e+04	9.10e+04	9.224 RPD
4	DUP	S98T002976	@IC-01	BR-02	LIQUID	<1.28e3	<1.28e3	RPD
4	DUP	S98T002976	@IC-01	NO3-02	LIQUID	2.26e+05	2.05e+05	9.745 RPD
4	DUP	S98T002976	@IC-01	PO4-02	LIQUID	3.88e+03	3.56e+03	8.602 RPD
4	DUP	S98T002976	@IC-01	SO4-02	LIQUID	6.54e+03	5.86e+03	10.968 RPD
4	DUP	S98T002976	@IC-01	OXALATE2	LIQUID	<1.07e3	<1.07e3	RPD
5	SPK	S98T002976	@IC-01	F-02	LIQUID	5.90e1	6.76e+01	114.576 % Recovery
5	SPK	S98T002976	@IC-01	CL-02	LIQUID	8.00e1	8.52e+01	106.500 % Recovery
5	SPK	S98T002976	@IC-01	NO2-02	LIQUID	5.70e2	6.21e+02	108.947 % Recovery
5	SPK	S98T002976	@IC-01	BR-02	LIQUID	5.86e2	5.81e+02	99.147 % Recovery
5	SPK	S98T002976	@IC-01	NO3-02	LIQUID	5.92e2	6.95e+02	117.399 % Recovery
5	SPK	S98T002976	@IC-01	PO4-02	LIQUID	5.47e2	5.54e+02	101.280 % Recovery
5	SPK	S98T002976	@IC-01	SO4-02	LIQUID	6.38e2	6.58e+02	103.135 % Recovery
5	SPK	S98T002976	@IC-01	OXALATE2	LIQUID	5.44e2	5.44e+02	100.000 % Recovery
6	LCS-INST	0	@IC-QC	F	QC	5.90e1	6.47e+01	109.661 % Recovery

Units shown for QC (BLK/BKG) may not reflect the actual units.

# LABCORE Completed Worklist Report for Worklist# 26998

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
6 LCS-INST	0	@IC-QC	CL	QC	8.00e1	8.32e+01	104.000 %	Recovery
6 LCS-INST	0	@IC-QC	NO2	QC	5.70e2	5.68e+02	99.649 %	Recovery
6 LCS-INST	0	@IC-QC	BR	QC	5.86e2	6.04e+02	103.072 %	Recovery
6 LCS-INST	0	@IC-QC	NO3	QC	5.92e2	6.14e+02	103.716 %	Recovery
6 LCS-INST	0	@IC-QC	PO4	QC	5.47e2	5.75e+02	105.119 %	Recovery
6 LCS-INST	0	@IC-QC	SO4	QC	6.38e2	6.69e+02	104.859 %	Recovery
6 LCS-INST	0	@IC-QC	OxALATE2	QC	5.44e2	5.51e+02	101.287 %	Recovery

**Final page for worklist# 26998**

\_\_\_\_\_  
Analyst Signature                      Date

\_\_\_\_\_  
Analyst Signature                      Date

*Janice Juy*      *11/12/98*  
\_\_\_\_\_  
Reviewer Signature                      Date

11/05/98 13:56  
A-0004-1

HNF-1661 REV. 0

Page: 1

**LABCORE Data Entry Template for Worklist# 26998**

Analyst: KST Instrument: IC \_\_\_\_\_ Book# 2910A1-A  
 Method: LA-533-105 Rev/Mod F-0  
 Worklist Comment: U107, @IC-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC-QC	QC		
2	CCV		@IC-QC	QC		
3	SAMPLE S98T002976 0		@IC-01	LIQUID	98000401	U-107 (2)
	Analytes Requested: BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02					
4	DUP S98T002976 0		@IC-01	LIQUID		
5	SPK S98T002976 0		@IC-01	LIQUID		
6	LCS-INST		@IC-QC	QC		

**Final page for worklist # 26998**

Kathum J. Thomdike 11-6-98  
 Analyst Signature Date

\_\_\_\_\_  
 Analyst Signature Date

Data Entry Comments:

uploaded 11-10-98validated 11/11/98 JMS/eyeJohn Warell26998NOV.CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

```

=====
Sample Name: CCB BLANK                      Date: 11/06/1998 10:15:03
Data File  : C:\DX\DATA\98051431.D01
Method     : C:\DX\METHOD\ANIONSA.met
ACI Address: 1 System: 1 Inject#: 1         Detector: CDM-1
Analyst    : Ks Thomdike                 Column: AG4A/AS4A anion column
=====

```

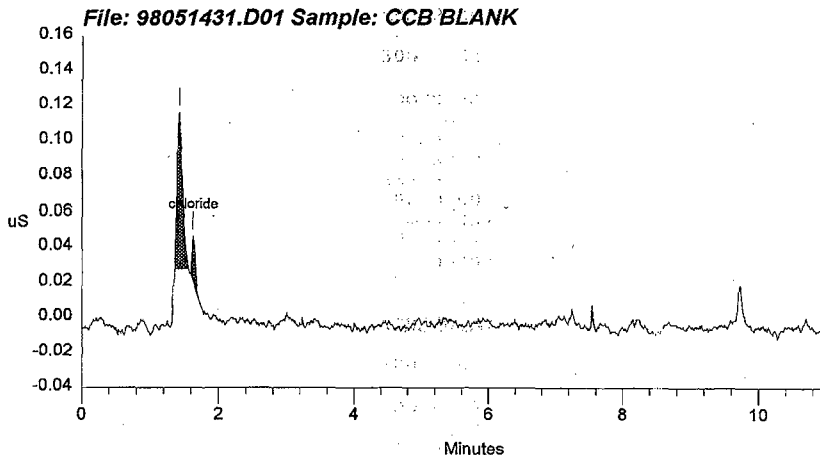
```

-----
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
-----
External            1            1  3300  5Hz  0.00  11.00          50
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.42		0.000	88	492	1	
2	1.63	chloride	0.007	25	90	1	1.04
Totals			0.007	113	581		



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 940 TO 945.

## HNF-1661 REV. 0

```

=====
Sample Name: 28N21-A CCV                               Date: 11/06/1998 14:00:16
Data File  : C:\DX\DATA\98110511.D04
Method     : C:\DX\METHOD\ANIONS.MET
ACI Address: 1 System: 1 Inject#: 4                    Detector: CDM-1
Analyst    :                                           Column: AG4A/AS4A anion column
=====

```

```

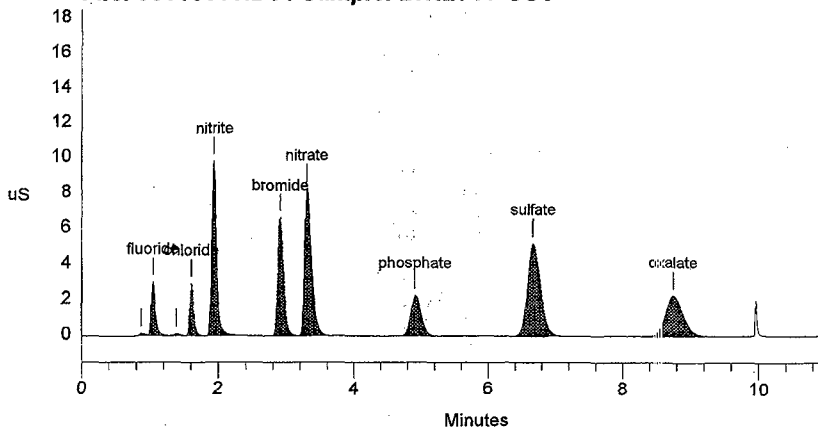
=====
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           101 3300 5Hz 0.00 11.00           50
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	110	533	2	
2	1.05	fluoride	67.791	105.9%	2954	12855	2 0.64
3	1.39		0.000	84	502	1	
4	1.61	chloride	93.385	103.8%	2900	11652	1 -0.21
5	1.93	nitrite	557.820	100.9%	9803	47571	1 -0.34
6	2.91	bromide	640.134	101.0%	6571	38816	1 -1.47
7	3.30	nitrate	739.309	105.9%	8235	59607	1 -2.37
8	4.91	phosphate	657.566	104.0%	2232	24715	1 1.59
9	6.67	sulfate	727.416	104.0%	5173	70162	1 3.36
10	8.75	oxalate	548.839	100.3%	2285	41549	1 3.14
Totals			4032.261		40346	307962	

File: 98110511.D04 Sample: 28N21-A CCV





## HNF-1661 REV. 0

```

=====
Sample Name: S98T002976 SAM           Date: 11/06/1998 13:19:22
Data File  : C:\DX\DATA\98110501.D01
Method     : C:\DX\METHOD\ANIONS.MET
ACI Address: 1 System: 1 Inject#: 1   Detector: CDM-1
Analyst    : KS Thompson           Column: AG4A/AS4A anion column
=====

```

```

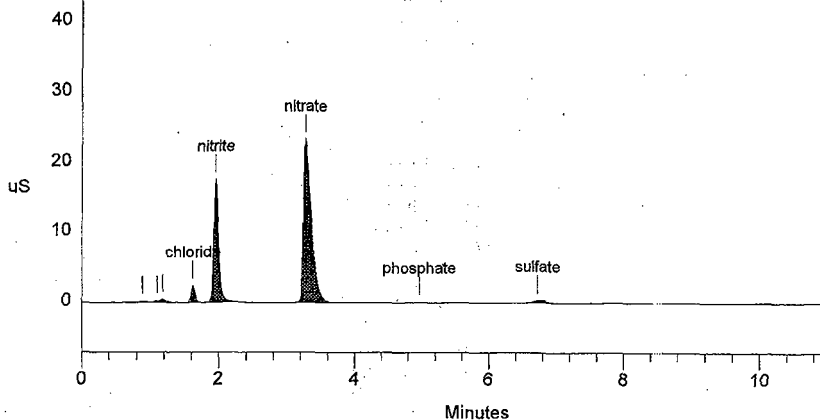
=====
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
-----
External            1          10201  3300  5Hz  0.00  11.00          50
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	208	1214	1	
2	1.10		0.000	232	759	2	
3	1.18		0.000	450	2523	2	
4	1.62	chloride	7994.509	2347	9846	1	0.62
5	1.95	nitrite	99853.222	17541	85646	1	0.69
6	3.27	nitrate	226228.380	23290	190564	1	-3.35
7	4.96	phosphate	3876.568	114	1345	1	2.69
8	6.72	sulfate	6536.103	369	5653	1	4.19
Totals			344488.781	44551	297551		

File: 98110501.D01 Sample: S98T002976 SAM



01-10-1-10

## HNF-1661 REV. 0

```

=====
Sample Name: S98T002976 DUP           Date: 11/06/1998 13:33:16
Data File  : C:\DX\DATA\98110511.D02
Method     : C:\DX\METHOD\ANIONS.MET
ACI Address: 1 System: 1 Inject#: 2   Detector: CDM-1
Analyst    : KS Monrude Column: AG4A/AS4A anion column
=====

```

```

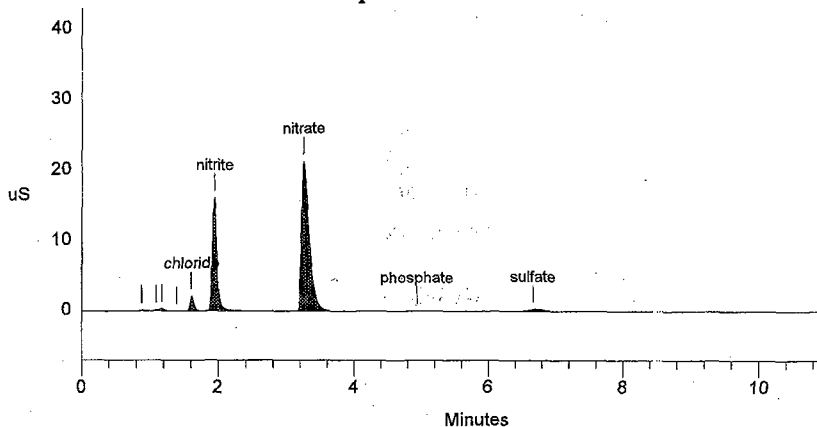
=====
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
=====
External           1          10201   3300 5Hz   0.00  11.00          50
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	194	1151	2	
2	1.09		0.000	216	736	2	
3	1.17		0.000	417	2515	3	
4	1.39		0.000	41	224	4	
5	1.61	chloride	7171.366	2117	8817	1	-0.21
6	1.94	nitrite	90953.603	16027	77823	1	0.00
7	3.25	nitrate	204561.277	21219	171054	1	-3.94
8	4.93	phosphate	3564.179	109	1231	1	2.14
9	6.67	sulfate	5859.071	318	5013	1	3.36
Totals			312109.496	40658	268564		

File: 98110511.D02 Sample: S98T002976 DUP



01-10-01-10

```

=====
Sample Name: S98T002976 SPIKE           Date: 11/06/1998 13:47:28
Data File  : C:\DX\DATA\98110511.D03
Method     : C:\DX\METHOD\ANIONS.MET
ACI Address: 1 System: 1 Inject#: 3      Detector: CDM-1
Analyst    : KS Thomdeke Column: AG4A/AS4A anion column
=====

```

```

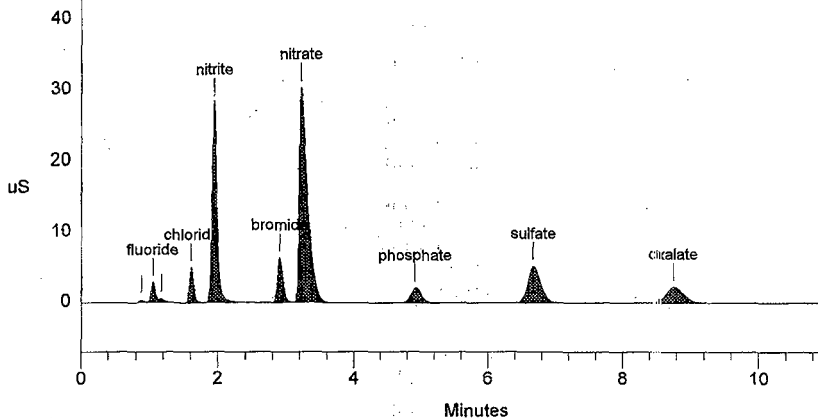
-----
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           10201  3300  5Hz  0.00 11.00           50
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	278	1384	2	
2	1.05	fluoride	6830.197	2776	12823	3	0.64
3	1.17		0.000	360	1930	4	
4	1.61	chloride	16598.797	4949	20840	1	-0.21
5	1.94	nitrite	162603.876	28136	141340	1	0.00
6	2.90	bromide	58655.391	6322	35081	1	-1.69
7	3.22	nitrate	296405.178	30280	255840	1	-4.73
8	4.91	phosphate	59816.985	1998	22204	1	1.59
9	6.67	sulfate	72989.626	5157	69691	1	3.36
10	8.75	oxalate	54924.998	2257	41165	1	3.14
Totals			728825.048	82512	602296		

File: 98110511.D03 Sample: S98T002976 SPIKE



01-10-01-10 \*

4560

```

=====
Sample Name: 29N21-A ICV                               Date: 11/06/1998 10:28:42
Data File  : C:\DX\DATA\98051431.D02
Method     : C:\DX\METHOD\ANTONSA.met
ACI Address: 1 System: 1 Inject#: 2                    Detector: CDM-1
Analyst    :                                           Column: AG4A/AS4A anion column
=====

```

```

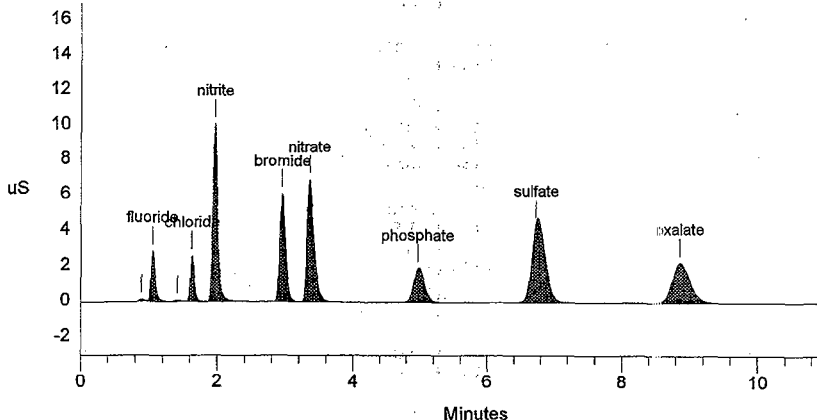
=====
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           101 3300 5Hz 0.00 11.00           50
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	99	499	2	
2	1.05	fluoride	64.695	2838	12252	2	1.28
3	1.41		0.000	87	530	1	
4	1.63	chloride	83.164	2569	10354	1	1.04
5	1.96	nitrite	567.572	10072	48428	1	1.03
6	2.95	bromide	603.847	6061	36532	1	-0.11
7	3.35	nitrate	614.178	6854	49219	1	-0.79
8	4.96	phosphate	575.327	1897	21555	1	2.69
9	6.72	sulfate	668.918	4382	64364	1	4.19
10	8.85	oxalate	551.489	2264	41752	1	4.40
Totals			3729.189	37124	285485		

File: 98051431.D02 Sample: 29N21-A ICV



# LABCORE Completed Worklist Report for Worklist# 26999

Analyst: kjt

Instrument: IC40S2

Book#: 29N21B

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107, @IC-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB 0	@IC-QC F QC	QC	1	<1.20e-2		ug/mL
1	CCB 0	@IC-QC CL QC	QC	1	<1.70e-2		ug/mL
1	CCB 0	@IC-QC NO2 QC	QC	1	<1.08e-1		ug/mL
1	CCB 0	@IC-QC BR QC	QC	1	<1.25e-1		ug/mL
1	CCB 0	@IC-QC NO3 QC	QC	1	<1.39e-1		ug/mL
1	CCB 0	@IC-QC PO4 QC	QC	1	<1.20e-1		ug/mL
1	CCB 0	@IC-QC SO4 QC	QC	1	<1.38e-1		ug/mL
1	CCB 0	@IC-QC OXALATE2 QC	QC	1	<1.05e-1		ug/mL
2	CCV 0	@IC-QC F QC	QC	6.40e1	6.76e+01	105.625 %	Recovery
2	CCV 0	@IC-QC CL QC	QC	9.00e1	9.39e+01	104.333 %	Recovery
2	CCV 0	@IC-QC NO2 QC	QC	5.62e2	5.62e+02	100.000 %	Recovery
2	CCV 0	@IC-QC BR QC	QC	6.30e2	6.76e+02	107.302 %	Recovery
2	CCV 0	@IC-QC NO3 QC	QC	6.98e2	7.21e+02	103.295 %	Recovery
2	CCV 0	@IC-QC PO4 QC	QC	6.32e2	6.53e+02	103.323 %	Recovery
2	CCV 0	@IC-QC SO4 QC	QC	6.99e2	7.32e+02	104.721 %	Recovery
2	CCV 0	@IC-QC OXALATE2 QC	QC	5.53e2	5.68e+02	102.712 %	Recovery
3	BLNK-PREP 0	@IC-01 F-02 SOLID	SOLID	1	<1.20e-2		ug/g
3	BLNK-PREP 0	@IC-01 CL-02 SOLID	SOLID	1	<1.70e-2		ug/g
3	BLNK-PREP 0	@IC-01 NO2-02 SOLID	SOLID	1	3.33e-01	0.333	ug/g
3	BLNK-PREP 0	@IC-01 BR-02 SOLID	SOLID	1	<1.25e-1		ug/g
3	BLNK-PREP 0	@IC-01 NO3-02 SOLID	SOLID	1	<1.39e-1		ug/g
3	BLNK-PREP 0	@IC-01 PO4-02 SOLID	SOLID	1	<1.20e-1		ug/g
3	BLNK-PREP 0	@IC-01 SO4-02 SOLID	SOLID	1	<1.38e-1		ug/g
3	BLNK-PREP 0	@IC-01 OXALATE2 SOLID	SOLID	1	<1.05e-1		ug/g
4	SAMPLE S98T002270 0 W	@IC-01 F-02 SOLID	SOLID	N/A	2.321e+02	163.500	ug/g
4	SAMPLE S98T002270 0 W	@IC-01 CL-02 SOLID	SOLID	N/A	3.478e+03	231.600	ug/g
4	SAMPLE S98T002270 0 W	@IC-01 NO2-02 SOLID	SOLID	N/A	3.731e+04	1472.000	ug/g
4	SAMPLE S98T002270 0 W	@IC-01 BR-02 SOLID	SOLID	N/A	1.703e+03	1703.000	ug/g
4	SAMPLE S98T002270 0 W	@IC-01 NO3-02 SOLID	SOLID	N/A	4.351e+05	1893.000	ug/g
4	SAMPLE S98T002270 0 W	@IC-01 PO4-02 SOLID	SOLID	N/A	7.520e+03	1635.000	ug/g
4	SAMPLE S98T002270 0 W	@IC-01 SO4-02 SOLID	SOLID	N/A	2.594e+03	1880.000	ug/g
4	SAMPLE S98T002270 0 W	@IC-01 OXALATE2 SOLID	SOLID	N/A	1.431e+03	1431.000	ug/g
5	DUP S98T002270 0 W	@IC-01 F-02 SOLID	SOLID	2.32e+02	5.56e+02	82.234	RPD
5	DUP S98T002270 0 W	@IC-01 CL-02 SOLID	SOLID	3.48e+03	3.44e+03	1.156	RPD
5	DUP S98T002270 0 W	@IC-01 NO2-02 SOLID	SOLID	3.73e+04	3.66e+04	1.894	RPD
5	DUP S98T002270 0 W	@IC-01 BR-02 SOLID	SOLID	<1.70e3	<1.71e3		RPD
5	DUP S98T002270 0 W	@IC-01 NO3-02 SOLID	SOLID	4.35e+05	4.37e+05	0.459	RPD
5	DUP S98T002270 0 W	@IC-01 PO4-02 SOLID	SOLID	7.52e+03	1.05e+04	33.074	RPD
5	DUP S98T002270 0 W	@IC-01 SO4-02 SOLID	SOLID	2.59e+03	2.68e+03	3.416	RPD
5	DUP S98T002270 0 W	@IC-01 OXALATE2 SOLID	SOLID	<1.43e3	<1.44e3		RPD
6	SAMPLE S98T002276 0 W	@IC-01 F-02 SOLID	SOLID	N/A	6.046e+02	158.100	ug/g

Units shown for QC (BLK/BKG) may not reflect the actual units.

# LABCORE Completed Worklist Report for Worklist# 26999

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
6 SAMPLE	S98T002276 0 W	@IC-01 CL-02	SOLID	N/A	3.512e+03	223.900	ug/g
6 SAMPLE	S98T002276 0 W	@IC-01 NO2-02	SOLID	N/A	3.575e+04	1422.000	ug/g
6 SAMPLE	S98T002276 0 W	@IC-01 BR-02	SOLID	N/A	1.647e+03	1646.000	ug/g
6 SAMPLE	S98T002276 0 W	@IC-01 NO3-02	SOLID	N/A	3.723e+05	1831.000	ug/g
6 SAMPLE	S98T002276 0 W	@IC-01 PO4-02	SOLID	N/A	3.402e+04	1581.000	ug/g
6 SAMPLE	S98T002276 0 W	@IC-01 SO4-02	SOLID	N/A	2.626e+03	1618.000	ug/g
6 SAMPLE	S98T002276 0 W	@IC-01 OXALATE2	SOLID	N/A	3.272e+03	1383.000	ug/g
7 DUP	S98T002276 0 W	@IC-01 F-02	SOLID	6.05e+02	6.02e+02	0.497	RFD
7 DUP	S98T002276 0 W	@IC-01 CL-02	SOLID	3.51e+03	3.28e+03	6.775	RFD
7 DUP	S98T002276 0 W	@IC-01 NO2-02	SOLID	3.58e+04	3.45e+04	3.698	RFD
7 DUP	S98T002276 0 W	@IC-01 BR-02	SOLID	<1.65e3	<1.69e3		RFD
7 DUP	S98T002276 0 W	@IC-01 NO3-02	SOLID	3.72e+05	3.69e+05	0.810	RFD
7 DUP	S98T002276 0 W	@IC-01 PO4-02	SOLID	3.40e+04	3.85e+04	12.414	RFD
7 DUP	S98T002276 0 W	@IC-01 SO4-02	SOLID	2.63e+03	2.52e+03	4.272	RFD
7 DUP	S98T002276 0 W	@IC-01 OXALATE2	SOLID	3.27e+03	2.42e+03	29.877	RFD
8 SPK	S98T002276 0 W	@IC-01 F-02	SOLID	5.90e1	6.45e+01	109.322	% Recovery
8 SPK	S98T002276 0 W	@IC-01 CL-02	SOLID	8.00e1	8.50e+01	106.250	% Recovery
8 SPK	S98T002276 0 W	@IC-01 NO2-02	SOLID	5.48e2	5.70e+02	104.015	% Recovery
8 SPK	S98T002276 0 W	@IC-01 BR-02	SOLID	5.86e2	6.16e+02	105.119	% Recovery
8 SPK	S98T002276 0 W	@IC-01 NO3-02	SOLID	5.92e2	5.55e+02	93.750	% Recovery
8 SPK	S98T002276 0 W	@IC-01 PO4-02	SOLID	5.47e2	5.64e+02	103.108	% Recovery
8 SPK	S98T002276 0 W	@IC-01 SO4-02	SOLID	6.38e2	6.74e+02	105.643	% Recovery
8 SPK	S98T002276 0 W	@IC-01 OXALATE2	SOLID	5.40e2	5.46e+02	101.111	% Recovery
9 SAMPLE	S98T002330 0 W	@IC-01 F-02	SOLID	N/A	2.131e+02	158.000	ug/g
9 SAMPLE	S98T002330 0 W	@IC-01 CL-02	SOLID	N/A	2.284e+03	223.900	ug/g
9 SAMPLE	S98T002330 0 W	@IC-01 NO2-02	SOLID	N/A	2.281e+04	1422.000	ug/g
9 SAMPLE	S98T002330 0 W	@IC-01 BR-02	SOLID	N/A	1.646e+03	1646.000	ug/g
9 SAMPLE	S98T002330 0 W	@IC-01 NO3-02	SOLID	N/A	5.603e+05	1830.000	ug/g
9 SAMPLE	S98T002330 0 W	@IC-01 PO4-02	SOLID	N/A	6.243e+03	1580.000	ug/g
9 SAMPLE	S98T002330 0 W	@IC-01 SO4-02	SOLID	N/A	1.817e+03	1817.000	ug/g
9 SAMPLE	S98T002330 0 W	@IC-01 OXALATE2	SOLID	N/A	1.383e+03	1382.000	ug/g
10 DUP	S98T002330 0 W	@IC-01 F-02	SOLID	2.13e+02	2.55e+02	17.949	RFD
10 DUP	S98T002330 0 W	@IC-01 CL-02	SOLID	2.28e+03	2.41e+03	5.544	RFD
10 DUP	S98T002330 0 W	@IC-01 NO2-02	SOLID	2.28e+04	2.36e+04	3.448	RFD
10 DUP	S98T002330 0 W	@IC-01 BR-02	SOLID	<1.65e3	<1.71e3		RFD
10 DUP	S98T002330 0 W	@IC-01 NO3-02	SOLID	5.60e+05	5.81e+05	3.681	RFD
10 DUP	S98T002330 0 W	@IC-01 PO4-02	SOLID	6.24e+03	6.73e+03	7.556	RFD
10 DUP	S98T002330 0 W	@IC-01 SO4-02	SOLID	<1.82e3	<1.89e3		RFD
10 DUP	S98T002330 0 W	@IC-01 OXALATE2	SOLID	<1.38e3	<1.44e3		RFD
11 LCS-INST	0	@IC-QC F	QC	5.90e1	6.46e+01	109.492	% Recovery
11 LCS-INST	0	@IC-QC CL	QC	8.00e1	8.46e+01	105.750	% Recovery
11 LCS-INST	0	@IC-QC NO2	QC	5.48e2	5.54e+02	101.095	% Recovery
11 LCS-INST	0	@IC-QC BR	QC	5.86e2	6.29e+02	107.338	% Recovery
11 LCS-INST	0	@IC-QC NO3	QC	5.92e2	5.89e+02	99.493	% Recovery
11 LCS-INST	0	@IC-QC PO4	QC	5.47e2	5.40e+02	98.720	% Recovery
11 LCS-INST	0	@IC-QC SO4	QC	6.38e2	6.72e+02	105.329	% Recovery
11 LCS-INST	0	@IC-QC OXALATE2	QC	5.40e2	5.48e+02	101.481	% Recovery

Units shown for QC (BLK/BKG) may not reflect the actual units.

# LABCORE Completed Worklist Report for Worklist# 26999

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Seq	Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
-----	------	---------	---	---	------	--------	--------	-------	-------------	------

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**Final page for worklist# 26999**

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Analyst Signature                      Date

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Analyst Signature                      Date

*Jenny Faye*      *11/12/98*  
Reviewer Signature      Date

HNF-1661 REV. 0

Page: 1

11/05/98 13:58  
A-0004-1

## LABCORE Data Entry Template for Worklist# 26999

Analyst: KST Instrument: IC 4000sys 2 Book# 29021B  
 Method: LA-533-105 Rev/Mod F-0  
 Worklist Comment: U107, @IC-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC-QC	QC		
2	CCV		@IC-QC	QC		
3	BLNK-PRSP		@IC-01	SOLID		
4	SAMPLE	S98T002270 0 W	@IC-01	SOLID	98000359	U-107 (2)
			Analytes Requested: BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02			
5	DUP	S98T002270 0 W	@IC-01	SOLID		
6	SAMPLE	S98T002276 0 W	@IC-01	SOLID	98000359	U-107 (2)
			Analytes Requested: BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02			
7	DUP	S98T002276 0 W	@IC-01	SOLID		
8	SPK	S98T002276 0 W	@IC-01	SOLID		
9	SAMPLE	S98T002330 0 W	@IC-01	SOLID	98000358	U-107 (2)
			Analytes Requested: BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02			
10	DUP	S98T002330 0 W	@IC-01	SOLID		
11	LCS-INST		@IC-QC	QC		

Final page for worklist # 26999

KSTrombka  
Analyst Signature

11-10-98  
Date

\_\_\_\_\_  
Analyst Signature

\_\_\_\_\_  
Date

Data Entry Comments:

up loaded 11-10-98  
John Wainell  
26999NOV.CSV

Validated 11/11/98 JMS/eye

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



HNF-1661 REV. 0

CCV 11-10-98  
9/14/98

```

=====
Sample Name: 28N21B CCB                               Date: 11/10/1998 09:22:14
Data File  : C:\DX\DATA\98100851.D03
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 12 Inject#: 3
Analyst    : KS Fluoride                               Detector: CDM-1
Column    : AG4A/AS4A anion column
=====
    
```

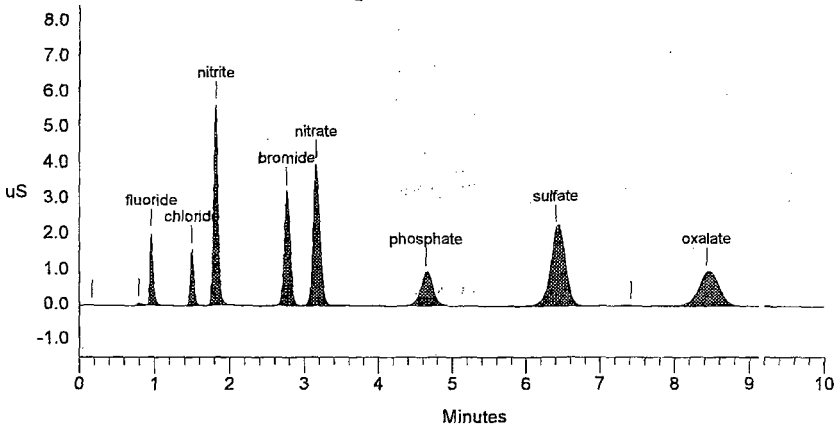
```

=====
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           101 3000 5Hz 0.00 10.00 30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	24	130	1	
2	0.79		0.000	73	283	2	
3	0.96	fluoride	67.629	2021	5863		1.05
4	1.49	chloride	93.936	1569	5272	1	-0.88
5	1.81	nitrite	561.564	5622	21944	1	-0.91
6	2.76	bromide	676.073	3217	17518	1	-1.78
7	3.15	nitrate	720.752	3957	24904	1	-1.77
8	4.64	phosphate	653.439	954	11208	1	0.00
9	6.40	sulfate	732.003	2160	31170	1	-4.35
10	7.41		0.000	25	358	1	
11	8.43	oxalate	567.755	975	19072	1	4.64
Totals			4073.151	20597	137722		

File: 98100851.D03 Sample: 28N21B CCB



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 950 TO 960.

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```

=====
Sample Name: CCB                               Date: 11/10/1998 08:58:31
Data File  : C:\DX\DATA\98100841.D01
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 1           Detector: CDM-1
Analyst    : K. Thomdike                   Column: AG4A/AS4A anion column
=====
    
```

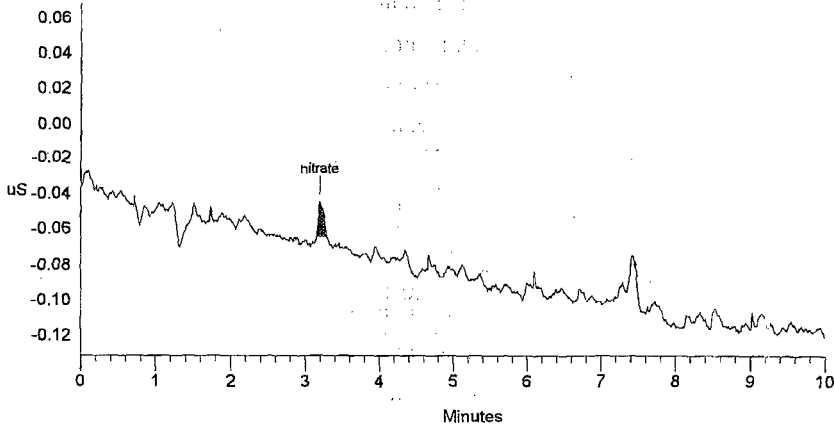
```

alibration Volume Dilution Points Rate Start Stop Area Reject
-----
external         1           1    3000  5Hz   0.00 10.00         30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	3.19	nitrate	0.102	20	95	1	-0.73
Totals			0.102	20	95		

File: 98100841.D01 Sample: CCB



HNF-1661 REV. 0

```

=====
Sample Name: BLK-PREP                               Date: 11/10/1998 09:42:02
Data File  : C:\DX\DATA\98111021.D01
Method     : C:\DX\METHOD\400ASYS2.met
ACTI Address: 1 System B Inject#: 1                Detector: CDM-1
Analyst    : K. Stomdike Column: AG4A/AS4A anion column
=====
    
```

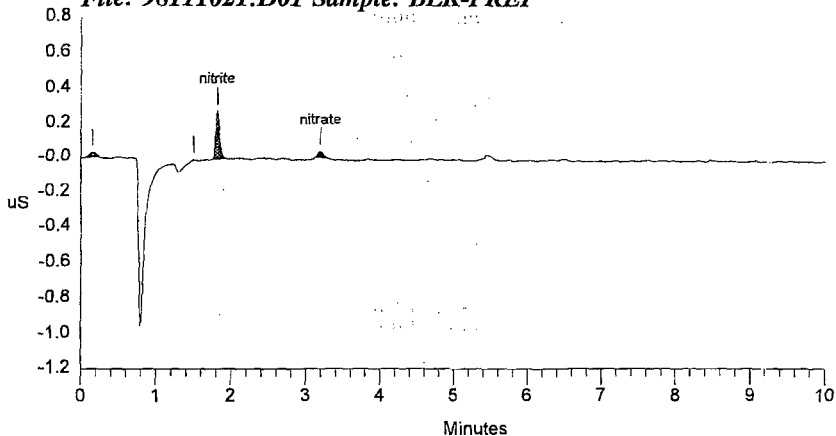
```

=====
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           1 3000 5Hz  0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.15		0.000	33	238	1	
3	1.81	nitrite	0.333	279	1013	1	-0.91
4	3.19	nitrate	0.122	34	164	1	-0.52
Totals			0.455	346	1415		

File: 98111021.D01 Sample: BLK-PREP



```

=====
Sample Name: S98T002270 SAM                      Date: 11/10/1998 09:54:28
Data File  : C:\DX\DATA\98111021.D02
Method     : C:\DX\METHOD\400ASYS2.met
ACI Address: 1 System: 2 Inject#: 2              Detector: CDM-1
Analyst    : RS Handike Column: AG4A/AS4A anion column
=====
    
```

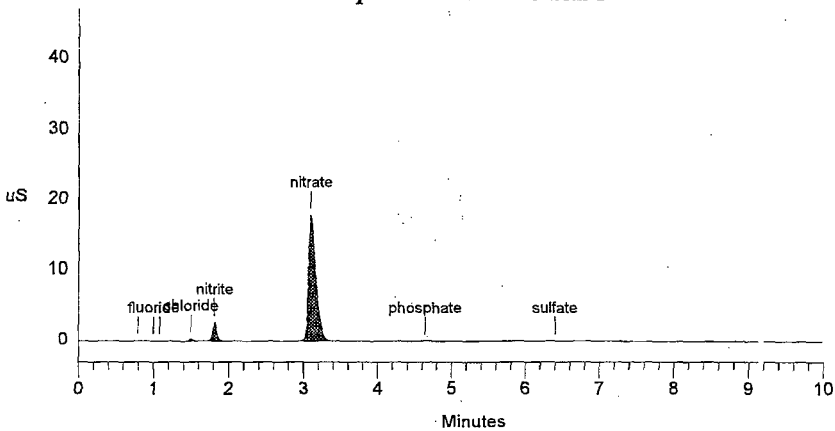
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           67.67  3000 5Hz   0.00 10.00           30
-----
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	78	348	1	
2	1.00	fluoride	1.153	29	115	2	5.26
3	1.08		0.000	76	184	2	
4	1.49	chloride	17.277	390	1418	1	-0.88
5	1.81	nitrite	185.307	2662	10571	1	-1.28
6	3.09	nitrate	2161.351	17848	121792	1	-3.63
7	4.64	phosphate	37.350	76	888	1	0.00
8	6.40	sulfate	12.886	43	689	1	4.35
Totals			2415.324	21202	136006		

*File: 98111021.D02 Sample: S98T002270 SAM*



*.150-10*

```

=====
Sample Name: S98T002270 DUP                               Date: 11/10/1998 10:06:55
Data File  : C:\DX\DATA\98111021.D03
Method     : C:\DX\METHOD\400ASYS2.met
ACI Address: 1 System: 2 Inject#: 3                       Detector: CDM-1
Analyst    : K. S. Monahan Column: AG4A/AS4A anion column
=====
    
```

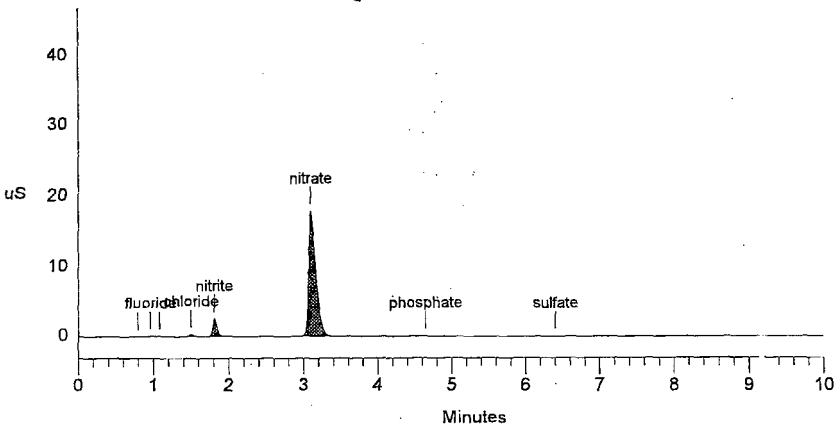
```

=====
alibration Volume Dilution Points Rate Start Stop Area Reject
-----
external      1      67.67    3000 5Hz    0.00 10.00      30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	77	333	1	
2	0.96	fluoride	2.747	100	320	2	1.05
3	1.08		0.000	69	161	2	
4	1.49	chloride	17.013	376	1396	1	-0.88
5	1.81	nitrite	180.948	2569	10314	1	-1.28
6	3.09	nitrate	2157.445	17891	121546	1	-3.63
7	4.64	phosphate	51.632	112	1251	1	0.00
8	6.40	sulfate	13.256	40	712	1	1.35
Totals			2423.042	21235	136032		

File: 98111021.D03 Sample: S98T002270 DUP



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```

=====
Sample Name: S98T002276 SAM                               Date: 11/10/1998 10:19:22
Data File  : C:\DX\DATA\98111021.D04
Method     : C:\DX\METHOD\400ASYS2.met
ACI Address: 1 System: 2 Inject#: 4                       Detector: CDM-1
Analyst    : KS Hemmleke                               Column: AG4A/AS4A anion column
=====
    
```

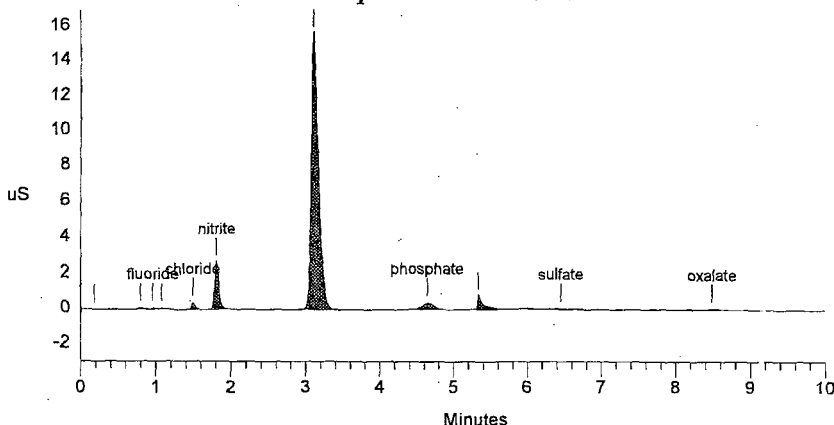
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External           1           67.67  3000 5Hz  0.00 10.00          30
=====
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.19		0.000	30	217	1	
2	0.80		0.000	87	388	2	
3	0.96	fluoride	3.106	106	366	2	1.05
4	1.08		0.000	79	201	2	
5	1.49	chloride	18.041	401	1481	1	-0.88
6	1.81	nitrite	183.651	2640	10473	1	-1.28
7	3.10	nitrate	1912.494	15595	106313	1	-3.43
8	4.64	phosphate	174.754	398	4396	1	0.00
9	5.33		0.000	768	5767	1	
10	6.45	sulfate	13.492	61	727	1	5.22
11	8.48	oxalate	16.809	41	911	1	5.30
Totals			2322.346	20206	131240		

File: 98111021.D04 Sample: S98T002276 SAM



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HNF-1661 REV. 0

```

=====
Sample Name: S98T002276 DUP           Date: 11/10/1998 10:31:49
Data File  : C:\DX\DATA\98111021.D05
Method     : C:\DX\METHOD\400ASYS2.met
ACI Address: 1 System: 2 Inject#: 5
Analyst   : KSP Column: AG4A/AS4A anion column
Detector: CDM-1
=====
    
```

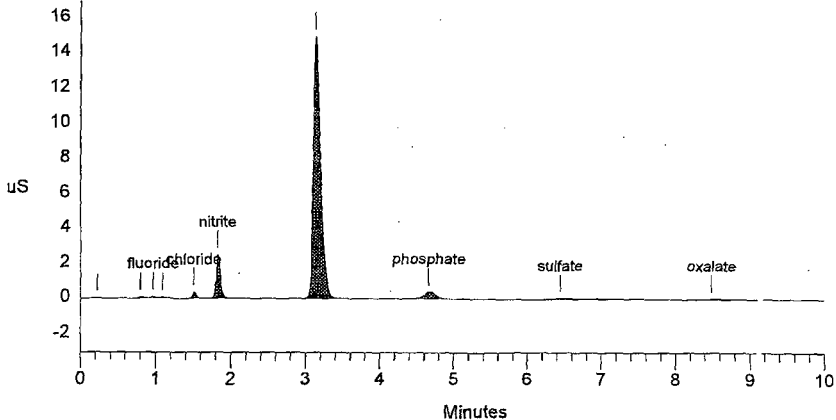
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           67.67  3000  5Hz  0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	45	380	1	
2	0.80		0.000	76	307	1	
3	0.97	fluoride	3.014	110	355	2	1.75
4	1.09		0.000	74	184	2	
5	1.51	chloride	16.425	372	1347	1	0.00
6	1.83	nitrite	172.486	2517	9814	1	-0.18
7	3.13	nitrate	1848.869	14933	102427	1	-2.39
8	4.67	phosphate	192.695	414	4856	1	0.57
9	6.45	sulfate	12.596	50	671	1	5.22
10	8.48	oxalate	12.110	30	679	1	5.30
Totals			2256.195	18621	121019		

File: 98111021.D05 Sample: S98T002276 DUP



*KSP*  
*11-10-98*  
 .150-10

## HNF-1661 REV. 0

```

=====
Sample Name: S98T002276 SPIKE          Date: 11/10/1998 10:44:15
Data File  : C:\DX\DATA\98111021.D06
Method     : C:\DX\METHOD\400ASYS2.met
ACI Address: 1 System: 2 Inject#: 6
Analyst    :                          Column: AG4A/AS4A anion column
Detector   : CDM-1
=====

```

```

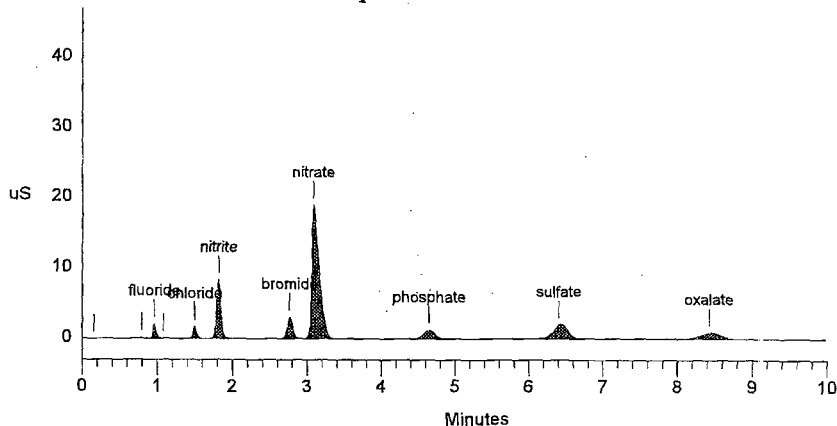
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          67.67  3000  5Hz  0.00 10.00          30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.15		0.000	22	153	1	
2	0.79		0.000	137	556	2	
3	0.96	fluoride	46.132	2082	5971	3	1.05
4	1.08		0.000	77	188	4	
5	1.49	chloride	74.726	1739	6282	1	-0.88
6	1.81	nitrite	563.443	8367	33266	1	-0.91
7	2.76	bromide	410.507	3062	15830	1	-1.78
8	3.09	nitrate	2282.242	18938	129481	1	-3.84
9	4.64	phosphate	550.939	1270	14179	1	0.00
10	6.40	sulfate	463.101	2082	29396	1	4.35
11	8.43	oxalate	380.881	1008	19097	1	4.64
Totals			4771.971	38784	254399		

File: 98111021.D06 Sample: S98T002276 SPIKE



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HNF-1661 REV.0

Data Reprocessed On 11/10/1998 11:02:54

```

=====
Sample Name: S98T002330 SAM          Date: 11/10/1998 10:56:42
Data File  : C:\DX\DATA\98111021.D07
Method     : C:\DX\METHOD\400ASYS2.met
ACI Address: 1 System: 2 Inject#: 7
Analyst    :                          Column: AG4A/AS4A anion column
=====

```

```

=====
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
-----
External           1          67.67  3000  5Hz  0.00  10.00          30
=====

```

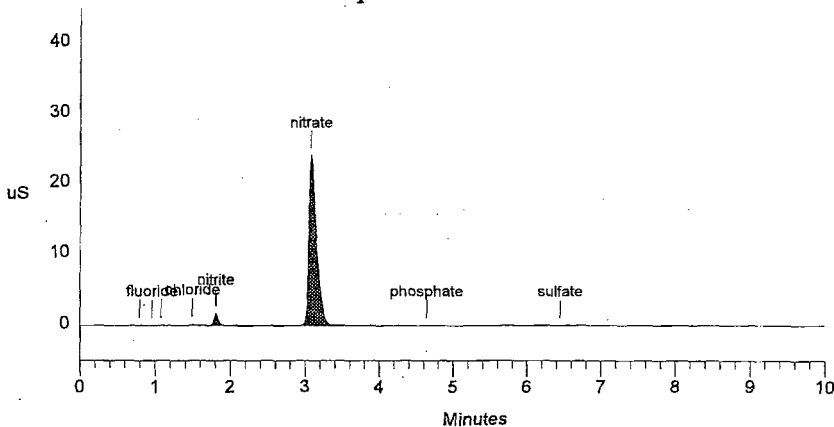
```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	77	339	2	
2	0.96	fluoride	1.095	43	108	2	1.05
3	1.08		0.000	58	150	1	
4	1.49	chloride	11.740	258	956	1	-0.88
5	1.81	nitrite	117.211	1652	6557	1	-1.28
6	3.07	nitrate	2879.479	24007	169313	1	0.11
7	4.64	phosphate	32.082	67	755	1	0.00
8	6.45	sulfate	7.631	24	359	1	5.22
Totals			3049.238	26186	178537		

*File: 98111021.D07 Sample: S98T002330 SAM*



150-10

HNF-1661 REV. 0

Data Reprocessed On 11/10/1998 11:12:00

```

=====
Sample Name: S98T002330 DUP           Date: 11/10/1998 11:09:10
Data File  : C:\DX\DATA\98111021.D08
Method     : C:\DX\METHOD\400ASYS2.met
ACI Address: 1 System: 2 Inject#: 8    Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====
    
```

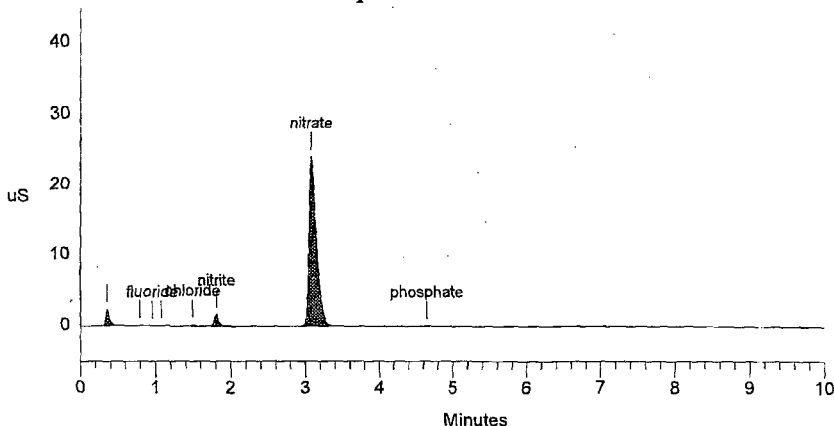
```

=====
elibration Volume Dilution Points Rate Start Stop Area Reject
-----
external          1          67.67 3000 5Hz  0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.36		0.000	2391	8800	1	
2	0.79		0.000	88	413	2	
3	0.96	fluoride	1.259	48	129	2	1.05
4	1.08		0.000	63	155	1	
5	1.49	chloride	11.914	252	971	1	-0.88
6	1.81	nitrite	116.483	1655	6515	1	-0.91
7	3.07	nitrate	2870.560	24112	168693	1	0.11
8	4.64	phosphate	33.208	73	783	1	0.00
Totals			3033.423	28683	186459		

File: 98111021.D08 Sample: S98T002330 DUP



0150-10

```

=====
Sample Name: 29N21B LCS                               Date: 11/10/1998 09:10:04
Data File  : C:\DX\DATA\98100851.D02
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 2                   Detector: CDM-1
Analyst    : K. Shomake Column: AG4A/AS4A anion column
=====
    
```

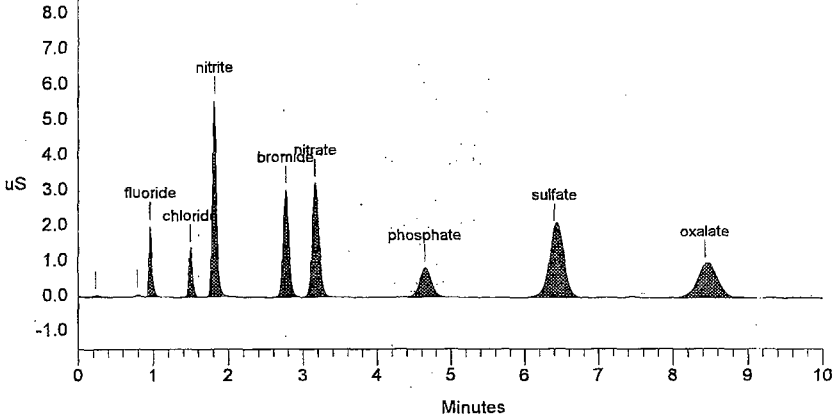
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          1           101 3000 5Hz 0.00 10.00          30
-----
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	58	427	1	
2	0.79		0.000	64	255	2	
3	0.96	fluoride	64.580	2001	5593	2	1.05
4	1.49	chloride	84.619	1375	4739	1	-0.88
5	1.81	nitrite	554.361	5566	21654	1	-0.91
6	2.77	bromide	629.142	3028	16267	1	-1.54
7	3.16	nitrate	588.852	3221	20223	1	-1.56
8	4.64	phosphate	540.010	808	9227	1	0.00
9	6.40	sulfate	672.420	1967	28581	1	4.35
10	8.43	oxalate	548.021	939	18406	1	4.64
Totals			3682.005	19025	125372		

File: 98100851.D02 Sample: 29N21B LCS



# LABCORE Completed Worklist Report for Worklist# 27000

Analyst: vlm

Instrument: IC40S1

Book#: 29N21B

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107, @IC-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB 0	④IC-QC F	QC	1	<1.20e-2		ug/mL
1	CCB 0	④IC-QC CL	QC	1	<1.70e-2		ug/mL
1	CCB 0	④IC-QC NO2	QC	1	<1.08e-1		ug/mL
1	CCB 0	④IC-QC BR	QC	1	<1.25e-1		ug/mL
1	CCB 0	④IC-QC NO3	QC	1	<1.39e-1		ug/mL
1	CCB 0	④IC-QC P04	QC	1	<1.20e-1		ug/mL
1	CCB 0	④IC-QC S04	QC	1	<1.38e-1		ug/mL
1	CCB 0	④IC-QC OXALATE2	QC	1	<1.05e-1		ug/mL
2	LCS-INST 0	④IC-QC F	QC	5.90e1	6.57e+01	111.356 % Recovery	
2	LCS-INST 0	④IC-QC CL	QC	8.00e1	8.38e+01	104.750 % Recovery	
2	LCS-INST 0	④IC-QC NO2	QC	5.48e2	5.95e+02	108.577 % Recovery	
2	LCS-INST 0	④IC-QC BR	QC	5.86e2	5.76e+02	98.294 % Recovery	
2	LCS-INST 0	④IC-QC NO3	QC	5.52e2	5.56e+02	93.919 % Recovery	
2	LCS-INST 0	④IC-QC P04	QC	5.47e2	5.49e+02	100.366 % Recovery	
2	LCS-INST 0	④IC-QC S04	QC	6.38e2	6.53e+02	102.351 % Recovery	
2	LCS-INST 0	④IC-QC OXALATE2	QC	5.40e2	5.47e+02	101.296 % Recovery	
3	CCV 0	④IC-QC F	QC	6.40e1	6.80e+01	106.250 % Recovery	
3	CCV 0	④IC-QC CL	QC	9.00e1	9.44e+01	104.889 % Recovery	
3	CCV 0	④IC-QC NO2	QC	5.62e2	6.02e+02	107.117 % Recovery	
3	CCV 0	④IC-QC BR	QC	6.30e2	6.17e+02	97.937 % Recovery	
3	CCV 0	④IC-QC NO3	QC	6.98e2	6.78e+02	97.135 % Recovery	
3	CCV 0	④IC-QC P04	QC	6.32e2	6.42e+02	101.582 % Recovery	
3	CCV 0	④IC-QC S04	QC	6.99e2	7.08e+02	101.288 % Recovery	
3	CCV 0	④IC-QC OXALATE2	QC	5.53e2	5.58e+02	100.904 % Recovery	
4	BLNK-PREP 0	④IC-01 F-02	SOLID	1	<1.20e-2		ug/g
4	BLNK-PREP 0	④IC-01 CL-02	SOLID	1	<1.70e-2		ug/g
4	BLNK-PREP 0	④IC-01 NO2-02	SOLID	1	3.50e-01	0.350	ug/g
4	BLNK-PREP 0	④IC-01 BR-02	SOLID	1	<1.25e-1		ug/g
4	BLNK-PREP 0	④IC-01 NO3-02	SOLID	1	1.39e-01	0.139	ug/g
4	BLNK-PREP 0	④IC-01 P04-02	SOLID	1	<1.20e-1		ug/g
4	BLNK-PREP 0	④IC-01 S04-02	SOLID	1	<1.38e-1		ug/g
4	BLNK-PREP 0	④IC-01 OXALATE2	SOLID	1	<1.05e-1		ug/g
5	SAMPLE S98T002446 0 W	④IC-01 F-02	SOLID	N/A	< 1.607e+02	160.700	ug/g
5	SAMPLE S98T002446 0 W	④IC-01 CL-02	SOLID	N/A	4.200e+03	227.700	ug/g
5	SAMPLE S98T002446 0 W	④IC-01 NO2-02	SOLID	N/A	4.671e+04	1447.000	ug/g
5	SAMPLE S98T002446 0 W	④IC-01 BR-02	SOLID	N/A	1.674e+03	1674.000	ug/g
5	SAMPLE S98T002446 0 W	④IC-01 NO3-02	SOLID	N/A	4.607e+05	1862.000	ug/g
5	SAMPLE S98T002446 0 W	④IC-01 P04-02	SOLID	N/A	4.969e+03	1607.000	ug/g
5	SAMPLE S98T002446 0 W	④IC-01 S04-02	SOLID	N/A	1.848e+03	1849.000	ug/g
5	SAMPLE S98T002446 0 W	④IC-01 OXALATE2	SOLID	N/A	1.406e+03	1406.000	ug/g
6	DUP S98T002446 0 W	④IC-01 F-02	SOLID	<1.61e2	<1.60e2		RFD

Units shown for QC (BLK/BKG) may not reflect the actual units.

## LABCORE Completed Worklist Report for Worklist# 27000

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
6 DUF	S98T002446 0 W	@IC-01 CL-02	SOLID	4.20e+03	5.53e+03		27.338 RPD
6 DUF	S98T002446 0 W	@IC-01 NO2-02	SOLID	4.67e+04	6.30e+04		29.717 RPD
6 DUF	S98T002446 0 W	@IC-01 BR-02	SOLID	<1.67e3	<1.66e3		RPD
6 DUF	S98T002446 0 W	@IC-01 NO3-02	SOLID	4.61e+05	5.57e+05		18.861 RPD
6 DUF	S98T002446 0 W	@IC-01 PO4-02	SOLID	4.97e+03	3.72e+03		28.769 RPD
6 DUF	S98T002446 0 W	@IC-01 SO4-02	SOLID	<1.85e3	2.38e+03		RPD
6 DUF	S98T002446 0 W	@IC-01 OXALATE2	SOLID	<1.41e3	<1.40e3		RPD
7 SAMPLE	S98T002454 0 W	@IC-01 F-02	SOLID	N/A	3.025e+02		157.500 ug/g
7 SAMPLE	S98T002454 0 W	@IC-01 CL-02	SOLID	N/A	3.515e+03		223.100 ug/g
7 SAMPLE	S98T002454 0 W	@IC-01 NO2-02	SOLID	N/A	3.773e+04		1418.000 ug/g
7 SAMPLE	S98T002454 0 W	@IC-01 BR-02	SOLID	N/A <	1.643e+03		1640.000 ug/g
7 SAMPLE	S98T002454 0 W	@IC-01 NO3-02	SOLID	N/A	4.883e+05		1824.000 ug/g
7 SAMPLE	S98T002454 0 W	@IC-01 PO4-02	SOLID	N/A	1.035e+04		1575.000 ug/g
7 SAMPLE	S98T002454 0 W	@IC-01 SO4-02	SOLID	N/A <	1.811e+03		1811.000 ug/g
7 SAMPLE	S98T002454 0 W	@IC-01 OXALATE2	SOLID	N/A <	1.378e+03		1378.000 ug/g
8 DUF	S98T002454 0 W	@IC-01 F-02	SOLID	3.03e+02	2.84e+02		6.474 RPD
8 DUF	S98T002454 0 W	@IC-01 CL-02	SOLID	3.52e+03	3.37e+03		4.354 RPD
8 DUF	S98T002454 0 W	@IC-01 NO2-02	SOLID	3.77e+04	3.69e+04		2.145 RPD
8 DUF	S98T002454 0 W	@IC-01 BR-02	SOLID	<1.64e3	<1.67e3		RPD
8 DUF	S98T002454 0 W	@IC-01 NO3-02	SOLID	4.88e+05	4.35e+05		11.484 RPD
8 DUF	S98T002454 0 W	@IC-01 PO4-02	SOLID	1.04e+04	1.30e+04		22.222 RPD
8 DUF	S98T002454 0 W	@IC-01 SO4-02	SOLID	<1.81e3	2.02e+03		RPD
8 DUF	S98T002454 0 W	@IC-01 OXALATE2	SOLID	<1.38e3	<1.41e3		RPD
9 SAMPLE	S98T002522 0 W	@IC-01 F-02	SOLID	N/A <	1.578e+02		157.700 ug/g
9 SAMPLE	S98T002522 0 W	@IC-01 CL-02	SOLID	N/A	3.216e+03		223.500 ug/g
9 SAMPLE	S98T002522 0 W	@IC-01 NO2-02	SOLID	N/A	3.427e+04		1420.000 ug/g
9 SAMPLE	S98T002522 0 W	@IC-01 BR-02	SOLID	N/A <	1.643e+03		1644.000 ug/g
9 SAMPLE	S98T002522 0 W	@IC-01 NO3-02	SOLID	N/A	1.532e+05		1828.000 ug/g
9 SAMPLE	S98T002522 0 W	@IC-01 PO4-02	SOLID	N/A	8.041e+03		1577.000 ug/g
9 SAMPLE	S98T002522 0 W	@IC-01 SO4-02	SOLID	N/A <	1.814e+03		1814.000 ug/g
9 SAMPLE	S98T002522 0 W	@IC-01 OXALATE2	SOLID	N/A <	1.380e+03		1380.000 ug/g
10 DUF	S98T002522 0 W	@IC-01 F-02	SOLID	<1.58e2	5.95e+02		RPD
10 DUF	S98T002522 0 W	@IC-01 CL-02	SOLID	3.32e+03	3.05e+03		8.477 RPD
10 DUF	S98T002522 0 W	@IC-01 NO2-02	SOLID	3.43e+04	3.28e+04		4.471 RPD
10 DUF	S98T002522 0 W	@IC-01 BR-02	SOLID	<1.64e3	<1.70e3		RPD
10 DUF	S98T002522 0 W	@IC-01 NO3-02	SOLID	1.53e+05	4.09e+05		91.103 RPD
10 DUF	S98T002522 0 W	@IC-01 PO4-02	SOLID	8.04e+03	3.36e+04		122.767 RPD
10 DUF	S98T002522 0 W	@IC-01 SO4-02	SOLID	<1.81e3	2.18e+03		RPD
10 DUF	S98T002522 0 W	@IC-01 OXALATE2	SOLID	<1.38e3	<1.42e3		RPD
11 SPK	S98T002522 0 W	@IC-01 F-02	SOLID	5.90e1	7.18e+01		121.695 % Recovery
11 SPK	S98T002522 0 W	@IC-01 CL-02	SOLID	8.00e1	8.34e+01		104.250 % Recovery
11 SPK	S98T002522 0 W	@IC-01 NO2-02	SOLID	5.48e2	6.21e+02		113.321 % Recovery
11 SPK	S98T002522 0 W	@IC-01 BR-02	SOLID	5.86e2	5.93e+02		101.195 % Recovery
11 SPK	S98T002522 0 W	@IC-01 NO3-02	SOLID	5.92e2	6.41e+02		108.277 % Recovery
11 SPK	S98T002522 0 W	@IC-01 PO4-02	SOLID	5.47e2	5.75e+02		105.119 % Recovery
11 SPK	S98T002522 0 W	@IC-01 SO4-02	SOLID	6.38e2	6.63e+02		103.918 % Recovery
11 SPK	S98T002522 0 W	@IC-01 OXALATE2	SOLID	5.40e2	5.70e+02		105.556 % Recovery

Units shown for QC (BLK/BKG) may not reflect the actual units.

# LABCORE Completed Worklist Report for Worklist# 27000

---

Seq	Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
-----	------	---------	-----	------	--------	--------	-------	-------------	------

---

**Final page for worklist# 27000**

---

Analyst Signature      Date

---

Analyst Signature      Date

*James M. Euge*      *11/10/98*  
Reviewer Signature      Date

HNF-1661 REV. 0

11/05/98 14:00  
A-0004-1

Page: 1

# LABCORE Data Entry Template for Worklist# 27000

Analyst: VCM Instrument: IC ✓ Book# LC# 29N21-B  
CCV 28W21-B

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107, @IC-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC-QC	QC		
2	LCS-INST		@IC-QC	QC		
3	CCV		@IC-QC	QC		
4	BLNK-PREP		@IC-01	SOLID		
5	SAMPLE	S98T002446 0 W	@IC-01	SOLID	98000359 U-107 (2)	
		<b>Analytes Requested:</b>	BR-02	CL-02	F-02	NO2-02
			OXALATE2	PO4-02	SO4-02	NO3-02
6	DUP	S98T002446 0 W	@IC-01	SOLID		
7	SAMPLE	S98T002454 0 W	@IC-01	SOLID	98000359 U-107 (2)	
		<b>Analytes Requested:</b>	BR-02	CL-02	F-02	NO2-02
			OXALATE2	PO4-02	SO4-02	NO3-02
8	DUP	S98T002454 0 W	@IC-01	SOLID		
9	SAMPLE	S98T002522 0 W	@IC-01	SOLID	98000359 U-107 (2)	
		<b>Analytes Requested:</b>	BR-02	CL-02	F-02	NO2-02
			OXALATE2	PO4-02	SO4-02	NO3-02
10	DUP	S98T002522 0 W	@IC-01	SOLID		
11	SPK	S98T002522 0 W	@IC-01	SOLID		

### Final page for worklist # 27000

Valerie Masse 11-09-98

Analyst Signature	Date	Analyst Signature	Date
<i>Valerie Masse</i>	11-09-98	<i>Valerie Masse</i>	11/10/98

*Replicates were run on S98T002522 which show the sample and dup do not agree with each other. The samples are non homogenous. If a re run is desired, a re prep should be done.*

Data Entry Comments:

*uploaded 11-10-98*

*JH Howell*  
27000NOV.CSV

*Valerie Masse*  
*JM*

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

```

=====
Sample Name: LCS INST 29N21-B           Date: 11/09/1998 11:40:58
Data File : C:\DX\DATA\98110901.D02
Method    : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 2      Detector: CDM-1
Analyst   : Valerie Mason              Column: AG4A/AS4A anion column
=====

```

11-09-98

```

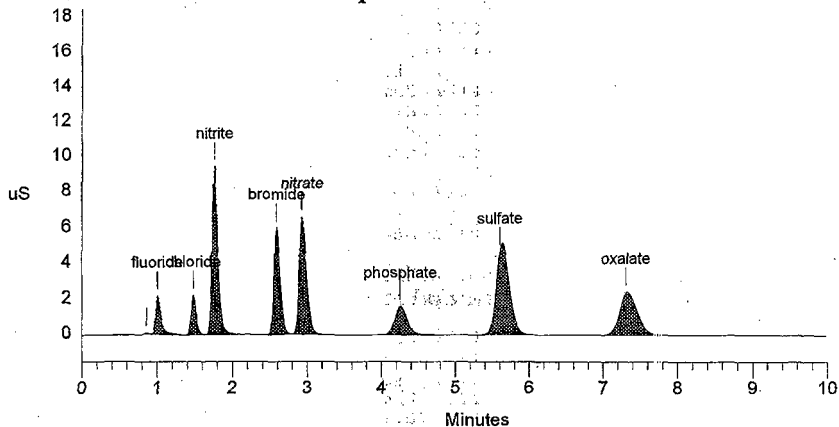
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
=====
External          1           101      3000 5Hz   0.00 10.00           30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.86		101.26	0.000	79	352	2
2	1.01	fluoride	111.44	65.749	2167	11322	2 1.68
3	1.48	chloride	104.75	83.803	2224	10370	1 -0.67
4	1.76	nitrite	108.64	595.320	9433	50160	1 -1.68
5	2.59	bromide	98.22	575.559	5932	34868	1 1.84
6	2.93	nitrate	90.93	556.095	6564	45155	1 0.23
7	4.25	phosphate	100.39	549.110	1610	19600	1 1.27
8	5.60	sulfate	102.32	652.775	4647	63666	1 2.00
9	7.31	oxalate		546.778	2400	39952	1 2.19
Totals			3625.189		35056	275445	

## File: 98110901.D02 Sample: LCS INST 29N21-B



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 965 TO 977.



```

=====
Sample Name: 298T002522          Date: 11/09/1998 14:36:25
Data File  : C:\DX\DATA\98110921.D02
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 2      Detector: CDM-1
Analyst    :                      Column: AG4A/AS4A anion column
=====
    
```

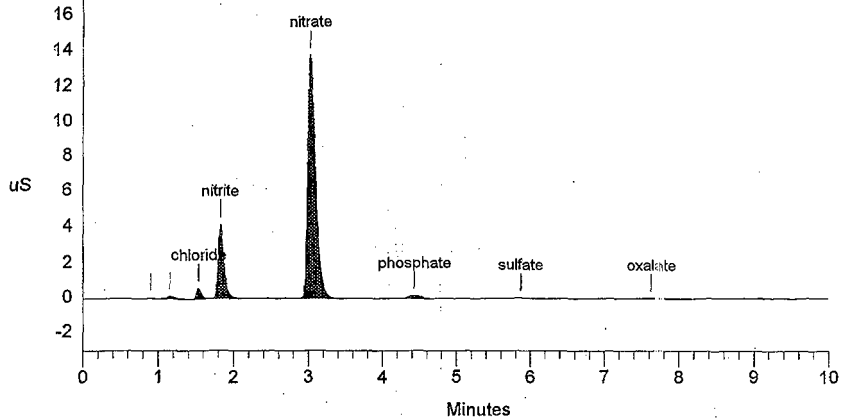
```

-----
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
-----
External           1           67.67  3000  5Hz   0.00  10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	57	337	2	
2	1.15		0.000	165	1528	2	
3	1.53	chloride	16.725	624	2980	1	2.91
4	1.83	nitrite	181.289	4154	22375	1	2.05
5	3.02	nitrate	808.499	13758	100479	1	3.42
6	4.43	phosphate	42.455	162	2041	1	5.40
7	5.87	sulfate	7.323	44	588	1	6.86
8	7.63	oxalate	5.593	23	516	1	6.67
Totals			1061.884	18988	130844		

File: 98110921.D02 Sample: 298T002522 Run # 2



## HNF-1661 REV. 0

```

=====
Sample Name: 298T002522 DUP                      Date: 11/09/1998 14:23:55
Data File  : C:\DX\DATA\98110921.D01
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 1                Detector: CDM-1
Analyst    :                                       Column: AG4A/AS4A anion column
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----

```

```

External      1      67.67   3000 5Hz   0.00 10.00      30

```

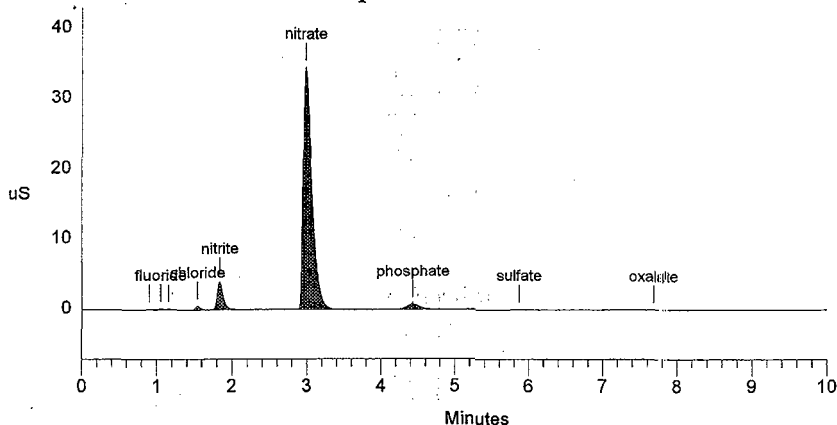
```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.90		0.000	100	521	2	
2	1.05	fluoride	3.513	178	899	2	6.40
3	1.15		0.000	168	1474	2	
4	1.54	chloride	16.274	581	2897	1	3.36
5	1.83	nitrite	173.938	3942	21441	1	2.42
6	2.98	nitrate	2129.998	34502	280654	1	2.05
7	4.43	phosphate	178.480	720	9307	1	5.40
8	5.87	sulfate	11.543	92	1196	1	6.86
9	7.68	oxalate	6.284	32	591	1	7.41
Totals			2520.030	40315	318981		

File: 98110921.D01 Sample: 298T002522 DUP Run#2



HNF-1661 REV.0

```

=====
Sample Name: CCB                               Date: 11/09/1998 11:22:22
Data File  : C:\DX\DATA\98110901.D01
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 1           Detector: CDM-1
Analyst    :                               Column: AG4A/AS4A anion column
=====
    
```

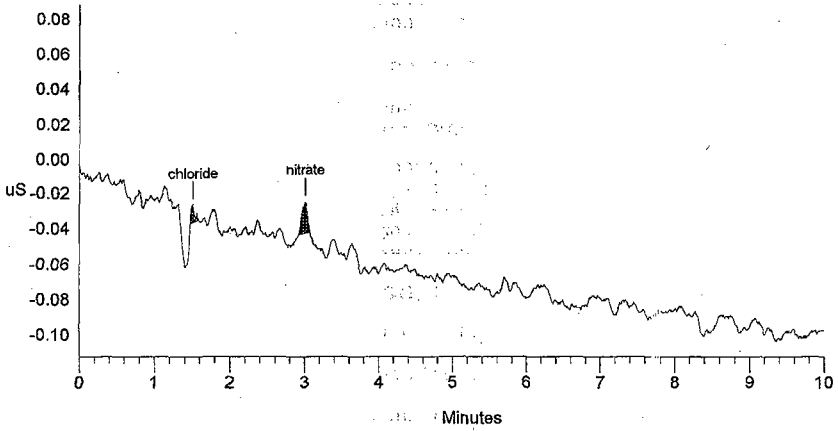
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1             1 3000 5Hz 0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.51	chloride	0.011	9	35	1	1.57
2	3.01	nitrate	0.104	17	91	1	3.20
Totals			0.115	27	125		

File: 98110901.D01 Sample: CCB



HNF-1661 REV. 0

✓ *Sub 11-10-98*

Sample Name: CCR 28N21-B Date: 11/09/1998 11:52:32  
 Data File : C:\DX\DATA\98110901.D03  
 Method : C:\DX\METHOD\KIT.MET  
 ACI Address: 1 System: 1 Inject#: 3 Detector: CDM-1  
 Analyst : Column: AG4A/AS4A anion column

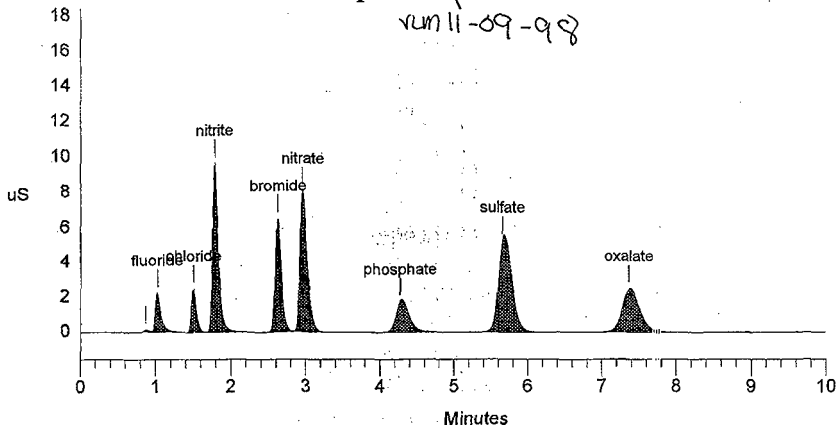
Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.87		0.000	88	408	2	
2	1.02	fluoride	104.26	68.006	2188	11716	2 3.03
3	1.50	chloride	104.84	94.357	2487	11714	1 0.67
4	1.78	nitrite	107.04	601.547	9594	50696	1 -0.56
5	2.62	bromide	97.89	616.734	6487	37438	1 3.15
6	2.95	nitrate	97.19	678.416	8028	55421	1 1.14
7	4.27	phosphate	101.52	641.562	1719	23011	1 1.59
8	5.65	sulfate	101.27	707.905	5259	69188	1 2.98
9	7.36	oxalate	100.97	558.389	2476	40812	1 2.94
Totals			3966.916		38326	300404	

File: 98110901.D03 Sample: CCR 28N21-B

*run 11-09-98*



```

=====
Sample Name: PREP BLANK          Date: 11/09/1998 12:19:02
Data File  : C:\DX\DATA\98110911.D01
Method     : C:\DX\METHOD\AUTOMEL.met
ACI Address: 1 System: 1 Inject#: 1      Detector: CDM-1
Analyst    :                      Column: AG4A/AS4A anion column
=====

```

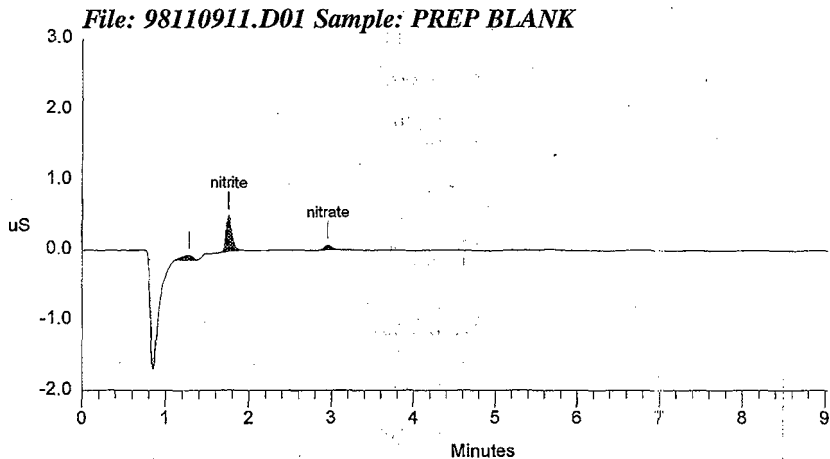
```

-----
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
-----
External           1           1  2712  5Hz  0.00  9.04      30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.29		0.000	64	615	1	
2	1.75	nitrite	0.350	509	2427	1	-2.05
3	2.95	nitrate	0.139	65	383	1	1.14
Totals			0.490	639	3424		



```

=====
Sample Name: S98T002446           Date: 11/09/1998 12:35:47
Data File  : C:\DX\DATA\98110911.D02
Method     : C:\DX\METHOD\AUTOMEL.met
ACI Address: 1 System: 1 Inject#: 2           Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====

```

```

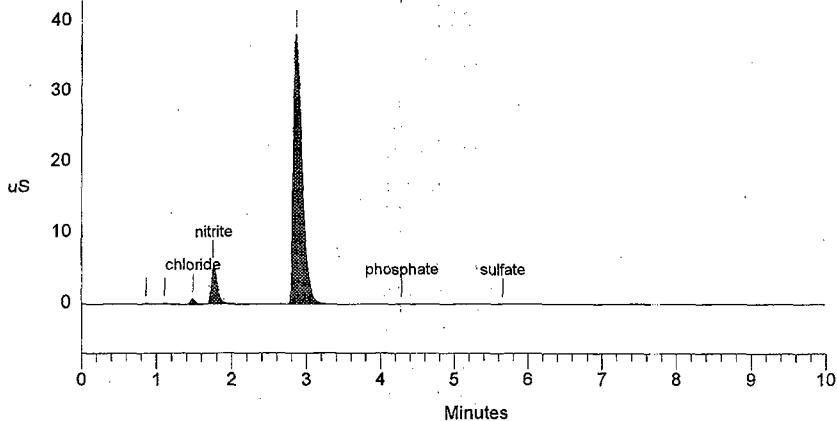
-----
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           67.67  3000 5Hz  0.00 10.00           30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.86		0.000	121	697	2	
2	1.11		0.000	180	1799	2	
3	1.48	chloride	21.218	789	3814	1	-0.67
4	1.75	nitrite	236.000	5418	29335	1	-2.05
5	2.85	nitrate	2327.520	38133	309485	1	-2.28
6	4.28	phosphate	25.102	99	1121	1	1.90
7	5.65	sulfate	9.078	63	841	1	2.98
Totals			2618.917	44803	347091		

File: 98110911.D02 Sample: S98T002446



```

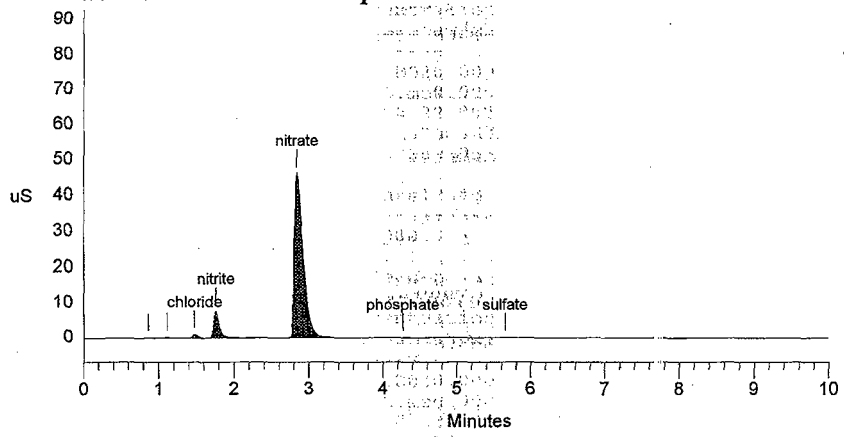
=====
Sample Name: S98T002446 DUP           Date: 11/09/1998 12:48:25
Data File : C:\DX\DATA\98110911.D03
Method    : C:\DX\METHOD\AUTOMEL.met
ACI Address: 1 System: 1 Inject#: 3
Analyst   :                          Column: AQ4A/AS4A anion column
=====
    
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	67.67	3000	5Hz	0.00	10.00		30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.86		0.000	165	945	2	
2	1.11		0.000	264	2468	2	
3	1.47	chloride	28.097	1073	5095	1	-1.12
4	1.75	nitrite	320.365	7637	40102	1	-2.05
5	2.83	nitrate	2830.956	46047	385671	1	-2.97
6	4.27	phosphate	18.924	70	794	1	1.59
7	5.65	sulfate	12.102	91	1277	1	2.98
Totals			3210.445	55346	436352		

File: 98110911.D03 Sample: S98T002446 DUP



```

=====
Sample Name: S98T002454      Date: 11/09/1998 13:01:05
Data File  : C:\DX\DATA\98110901.D04
Method     : C:\DX\METHOD\AUTOMEL.met
ACI Address: 1 System: 1 Inject#: 4      Detector: CDM-1
Analyst    :                   Column: AG4A/AS4A anion column
=====
    
```

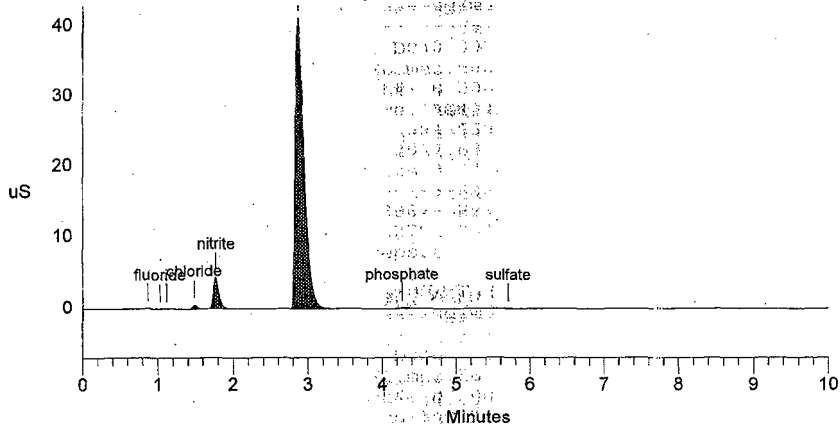
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           67.67  3000  5Hz  0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.87		4.000	115	604	2	
2	1.03	fluoride	1.562	77	405	2	3.70
3	1.11		0.000	155	1296	2	
4	1.48	chloride	180.24	655	3240	1	-0.67
5	1.77	nitrite	194.559	4490	24061	1	-1.30
6	2.86	nitrate	2517.681	41203	337788	1	-2.05
7	4.27	phosphate	53.346	198	2619	1	1.59
8	5.71	sulfate	8.822	65	804	1	3.95
Totals			2794.094	46958	370817		

File: 98110901.D04 Sample: S98T002454





```

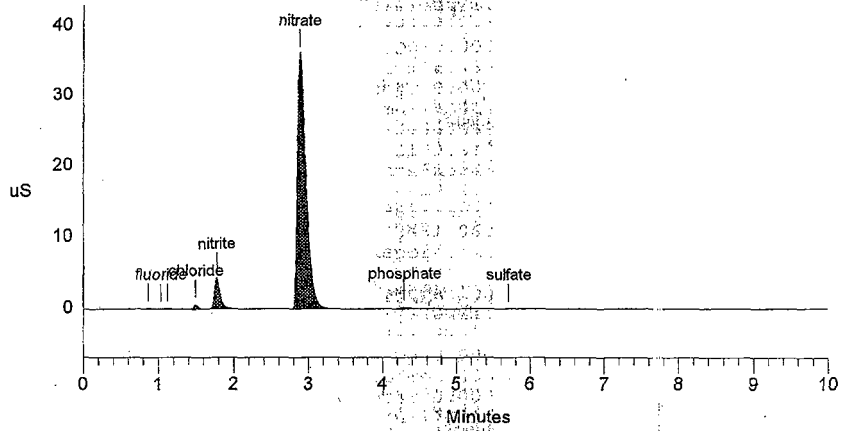
=====
Sample Name: S98T002454 DUP           Date: 11/09/1998 13:13:44
Data File  : C:\DX\DATA\98110901.D05
Method     : C:\DX\METHOD\AUTOMEL.met
ACI Address: 1 System: 1 Inject#: 5   Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====
    
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	67.67	3000	5HZ	0.00	10.00		30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.87		0.000	107	569	2	
2	1.03	fluoride	1.436	75	373	2	4.38
3	1.12		0.000	144	1171	2	
4	1.49	chloride	17.014	649	3034	1	0.22
5	1.77	nitrite	186.658	4377	23057	1	-0.93
6	2.88	nitrate	2199.818	36105	290781	1	-1.37
7	4.29	phosphate	65.916	261	3287	1	2.22
8	5.71	sulfate	10.225	72	1006	1	3.95
Totals			2481.068	41788	323278		

File: 98110901.D05 Sample: S98T002454 DUP



## HNF-1661 REV.0

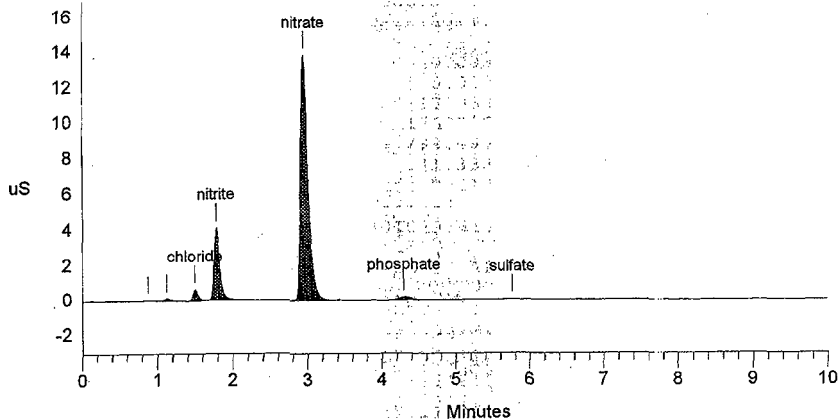
=====  
 Sample Name: S98T002522 Date: 11/09/1998 13:26:23  
 Data File : C:\DX\DATA\98110901.D06  
 Method : C:\DX\METHOD\AUTOMEL.met  
 ACI Address: 1 System: 1 Inject#: 6 Detector: CDM-1  
 Analyst : Column: AG4A/AS4A anion column  
 =====

=====  
 Calibration Volume Dilution Points Rate Start Stop Area Reject  
 -----  
 External 1 67.67 3000 5Hz 0.00 10.00 30  
 =====

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.87		0.000	52	288	2	
2	1.12		0.000	152	1235	2	
3	1.49	chloride	17.068	661	3044	1	0.22
4	1.77	nitrite	176.395	4121	21753	1	-0.93
5	2.94	nitrate	788.495	13822	97900	1	0.68
6	4.29	phosphate	41.388	158	1984	1	2.22
7	5.76	sulfate	6.219	36	429	1	4.92
Totals			1029.565	19003	126634		

## File: 98110901.D06 Sample: S98T002522



```

=====
Sample Name: S98T002522 DUP                      Date: 11/09/1998 13:39:01
Data File  : C:\DX\DATA\98110901.D07
Method     : C:\DX\METHOD\AUTOMEL.met
ACI Address: 1 System: 1 Inject#: 7              Detector: CDM-1
Analyst    :                                     Column: AG4A/AS4A anion column
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----

```

```

External      1      67.67  3000  5Hz  0.00 10.00      30
-----

```

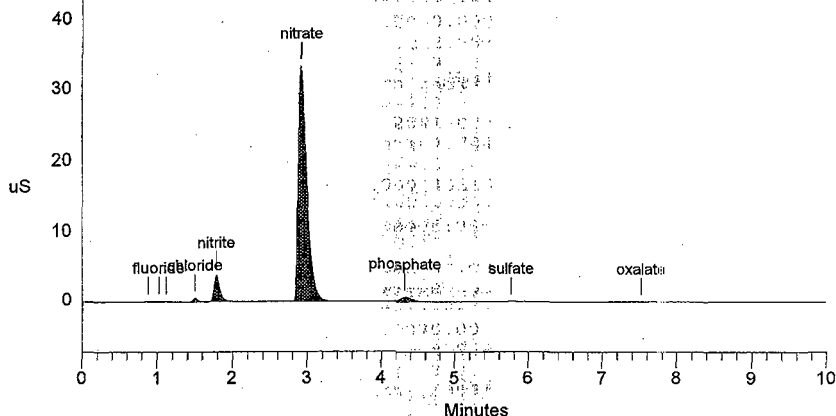
```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	97	479	2	
2	1.02	fluoride	2.968	160	761	2	3.03
3	1.12		0.000	151	1179	2	
4	1.50	chloride	15.019	577	2696	1	0.67
5	1.79	nitrite	163.624	3816	20131	1	-0.19
6	2.91	nitrate	2041.023	33366	267847	1	-0.23
7	4.32	phosphate	167.704	689	8728	1	2.86
8	5.76	sulfate	10.869	84	1099	1	4.92
9	7.52	oxalate	4.618	29	411	1	5.17
Totals			2405.996	38970	303331		

File: 98110901.D07 Sample: S98T002522 DUP



```

=====
Sample Name: S98T002522 SPIKE          Date: 11/09/1998 13:51:40
Data File  : C:\DX\DATA\98110901.D08
Method     : C:\DX\METHOD\AUTOMEL.met
ACI Address: 1 System: 1 Inject#: 8    Detector: CDM-1
Analyst    :                          Column: AQ4A/AS4A anion column
=====
    
```

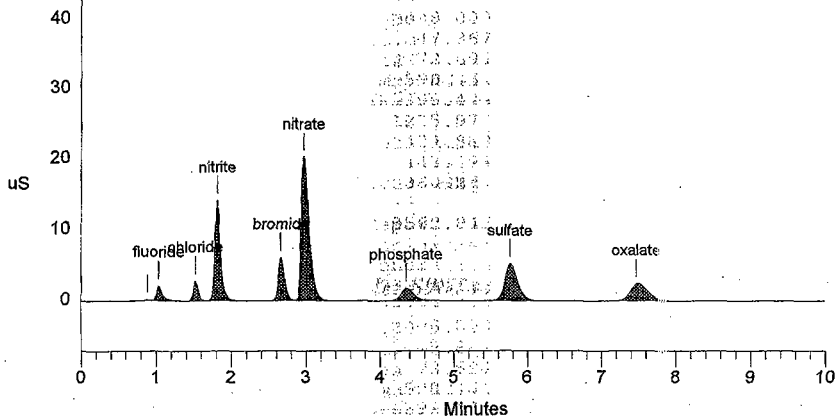
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          67.67  3000 5Hz  0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		10.000	119	541	2	
2	1.03	fluoride	47.867	2129	12317	2	4.38
3	1.52	chloride	72.694	2820	13523	1	2.01
4	1.81	nitrite	590.451	14006	74867	1	1.30
5	2.66	bromide	395.475	6017	35785	1	4.72
6	2.97	nitrate	1215.977	20175	153899	1	1.60
7	4.35	phosphate	424.810	1776	22733	1	3.49
8	5.76	sulfate	442.293	5175	64402	1	4.92
9	7.47	oxalate	380.279	2365	41492	1	4.43
Totals			3569.845	54582	419559		

File: 98110901.D08 Sample: S98T002522 SPIKE



# LABCORE Completed Worklist Report for Worklist# 27001

Analyst: **kjt** Instrument: **IC45S1** Book#: **29N21B**

Method: **LA-533-105** Rev/Mod **F-0**

Worklist Comment: **U107, @IC-01, tdm**

Seq Type	Sample#	RA	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	@IC-QC F	QC	1	<1.20e-2		ug/mL
1	CCB	0	@IC-QC CL	QC	1	<1.70e-2		ug/mL
1	CCB	0	@IC-QC NO2	QC	1	<1.08e-1		ug/mL
1	CCB	0	@IC-QC BR	QC	1	<1.25e-1		ug/mL
1	CCB	0	@IC-QC NO3	QC	1	<1.39e-1		ug/mL
1	CCB	0	@IC-QC P04	QC	1	<1.20e-1		ug/mL
1	CCB	0	@IC-QC S04	QC	1	<1.38e-1		ug/mL
1	CCB	0	@IC-QC OXALATE2	QC	1	<1.05e-1		ug/mL
2	LCS-INST	0	@IC-QC F	QC	5.90e1	6.33e+01	107.288 %	Recovery
2	LCS-INST	0	@IC-QC CL	QC	8.00e1	8.22e+01	102.750 %	Recovery
2	LCS-INST	0	@IC-QC NO2	QC	5.48e2	5.67e+02	103.467 %	Recovery
2	LCS-INST	0	@IC-QC BR	QC	5.86e2	5.81e+02	99.147 %	Recovery
2	LCS-INST	0	@IC-QC NO3	QC	5.92e2	5.65e+02	95.439 %	Recovery
2	LCS-INST	0	@IC-QC P04	QC	5.47e2	5.65e+02	103.291 %	Recovery
2	LCS-INST	0	@IC-QC S04	QC	6.38e2	6.53e+02	102.351 %	Recovery
2	LCS-INST	0	@IC-QC OXALATE2	QC	5.40e2	5.38e+02	99.630 %	Recovery
3	CCV	0	@IC-QC F	QC	6.40e1	6.62e+01	103.438 %	Recovery
3	CCV	0	@IC-QC CL	QC	9.00e1	9.26e+01	102.889 %	Recovery
3	CCV	0	@IC-QC NO2	QC	5.62e2	5.85e+02	104.093 %	Recovery
3	CCV	0	@IC-QC BR	QC	6.30e2	6.41e+02	101.746 %	Recovery
3	CCV	0	@IC-QC NO3	QC	6.98e2	6.85e+02	98.138 %	Recovery
3	CCV	0	@IC-QC P04	QC	6.32e2	6.61e+02	104.589 %	Recovery
3	CCV	0	@IC-QC S04	QC	6.99e2	7.15e+02	102.289 %	Recovery
3	CCV	0	@IC-QC OXALATE2	QC	5.53e2	5.57e+02	100.723 %	Recovery
4	BLNK-PREP	0	@IC-01 F-02	SOLID	1	<1.20e-2		ug/g
4	BLNK-PREP	0	@IC-01 CL-02	SOLID	1	2.50e-02	0.025	ug/g
4	BLNK-PREP	0	@IC-01 NO2-02	SOLID	1	3.83e-01	0.383	ug/g
4	BLNK-PREP	0	@IC-01 BR-02	SOLID	1	<1.25e-1		ug/g
4	BLNK-PREP	0	@IC-01 NO3-02	SOLID	1	1.63e-01	0.163	ug/g
4	BLNK-PREP	0	@IC-01 P04-02	SOLID	1	<1.20e-1		ug/g
4	BLNK-PREP	0	@IC-01 S04-02	SOLID	1	<1.38e-1		ug/g
4	BLNK-PREP	0	@IC-01 OXALATE2	SOLID	1	<1.05e-1		ug/g
5	SAMPLE	S98T002531	0 W @IC-01 F-02	SOLID	N/A	3.715e+02	169.300	ug/g
5	SAMPLE	S98T002531	0 W @IC-01 CL-02	SOLID	N/A	4.153e+03	239.800	ug/g
5	SAMPLE	S98T002531	0 W @IC-01 NO2-02	SOLID	N/A	5.045e+04	1523.000	ug/g
5	SAMPLE	S98T002531	0 W @IC-01 BR-02	SOLID	N/A	1.763e+03	1763.000	ug/g
5	SAMPLE	S98T002531	0 W @IC-01 NO3-02	SOLID	N/A	1.112e+05	1961.000	ug/g
5	SAMPLE	S98T002531	0 W @IC-01 P04-02	SOLID	N/A	8.326e+04	1693.000	ug/g
5	SAMPLE	S98T002531	0 W @IC-01 S04-02	SOLID	N/A	3.719e+03	1947.000	ug/g
5	SAMPLE	S98T002531	0 W @IC-01 OXALATE2	SOLID	N/A	1.481e+03	1481.000	ug/g
6	DDP	S98T002531	0 W @IC-01 F-02	SOLID	3.72e+02	3.67e+02	1.353	RPD

Units shown for QC (BLK/BKG) may not reflect the actual units.

# LABCORE Completed Worklist Report for Worklist# 27001

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
6 DUP	S98T002531	0 W	@IC-01	CL-02	SOLID	4.15e+03	4.46e+03	7.201 RPD
6 DUP	S98T002531	0 W	@IC-01	NO2-02	SOLID	5.04e+04	5.35e+04	5.967 RPD
6 DUP	S98T002531	0 W	@IC-01	BR-02	SOLID	<1.76e3	<1.67e3	RPD
6 DUP	S98T002531	0 W	@IC-01	NO3-02	SOLID	1.11e+05	1.21e+05	8.621 RPD
6 DUP	S98T002531	0 W	@IC-01	PO4-02	SOLID	8.33e+04	6.97e+04	17.778 RPD
6 DUP	S98T002531	0 W	@IC-01	SO4-02	SOLID	3.72e+03	3.97e+03	6.502 RPD
6 DUP	S98T002531	0 W	@IC-01	OXALATE2	SOLID	<1.48e3	<1.40e3	RPD
7 SPK	S98T002531	0 W	@IC-01	F-02	SOLID	5.90e1	7.12e+01	120.678 % Recovery
7 SPK	S98T002531	0 W	@IC-01	CL-02	SOLID	8.00e1	8.86e+01	110.750 % Recovery
7 SPK	S98T002531	0 W	@IC-01	NO2-02	SOLID	5.48e2	6.31e+02	115.146 % Recovery
7 SPK	S98T002531	0 W	@IC-01	BR-02	SOLID	5.86e2	5.87e+02	100.171 % Recovery
7 SPK	S98T002531	0 W	@IC-01	NO3-02	SOLID	5.92e2	6.24e+02	105.405 % Recovery
7 SPK	S98T002531	0 W	@IC-01	PO4-02	SOLID	5.47e2	5.93e+02	108.410 % Recovery
7 SPK	S98T002531	0 W	@IC-01	SO4-02	SOLID	6.38e2	6.63e+02	103.918 % Recovery
7 SPK	S98T002531	0 W	@IC-01	OXALATE2	SOLID	5.40e2	5.60e+02	103.704 % Recovery
8 SAMPLE	S98T002541	0 W	@IC-01	F-02	SOLID	N/A	3.189e+02	159.100 ug/g
8 SAMPLE	S98T002541	0 W	@IC-01	CL-02	SOLID	N/A	3.548e+03	225.300 ug/g
8 SAMPLE	S98T002541	0 W	@IC-01	NO2-02	SOLID	N/A	4.061e+04	1432.000 ug/g
8 SAMPLE	S98T002541	0 W	@IC-01	BR-02	SOLID	N/A	1.657e+03	1657.000 ug/g
8 SAMPLE	S98T002541	0 W	@IC-01	NO3-02	SOLID	N/A	4.270e+05	1843.000 ug/g
8 SAMPLE	S98T002541	0 W	@IC-01	PO4-02	SOLID	N/A	2.995e+04	1591.000 ug/g
8 SAMPLE	S98T002541	0 W	@IC-01	SO4-02	SOLID	N/A	2.237e+03	1829.000 ug/g
8 SAMPLE	S98T002541	0 W	@IC-01	OXALATE2	SOLID	N/A	1.392e+03	1392.000 ug/g
9 DUP	S98T002541	0 W	@IC-01	F-02	SOLID	3.19e+02	2.91e+02	9.180 RPD
9 DUP	S98T002541	0 W	@IC-01	CL-02	SOLID	3.55e+03	3.45e+03	2.857 RPD
9 DUP	S98T002541	0 W	@IC-01	NO2-02	SOLID	4.06e+04	3.83e+04	5.830 RPD
9 DUP	S98T002541	0 W	@IC-01	BR-02	SOLID	<1.66e3	<1.70e3	RPD
9 DUP	S98T002541	0 W	@IC-01	NO3-02	SOLID	4.27e+05	4.13e+05	3.333 RPD
9 DUP	S98T002541	0 W	@IC-01	PO4-02	SOLID	2.99e+04	3.08e+04	3.300 RPD
9 DUP	S98T002541	0 W	@IC-01	SO4-02	SOLID	2.24e+03	2.31e+03	3.077 RPD
9 DUP	S98T002541	0 W	@IC-01	OXALATE2	SOLID	<1.39e3	<1.43e3	RPD
10 SAMPLE	S98T002547	0 W	@IC-01	F-02	SOLID	N/A	6.004e+02	162.200 ug/g
10 SAMPLE	S98T002547	0 W	@IC-01	CL-02	SOLID	N/A	3.950e+03	229.700 ug/g
10 SAMPLE	S98T002547	0 W	@IC-01	NO2-02	SOLID	N/A	4.531e+04	1460.000 ug/g
10 SAMPLE	S98T002547	0 W	@IC-01	BR-02	SOLID	N/A	1.689e+03	1690.000 ug/g
10 SAMPLE	S98T002547	0 W	@IC-01	NO3-02	SOLID	N/A	3.961e+05	1879.000 ug/g
10 SAMPLE	S98T002547	0 W	@IC-01	PO4-02	SOLID	N/A	1.931e+04	1622.000 ug/g
10 SAMPLE	S98T002547	0 W	@IC-01	SO4-02	SOLID	N/A	4.684e+03	1865.000 ug/g
10 SAMPLE	S98T002547	0 W	@IC-01	OXALATE2	SOLID	N/A	2.223e+03	1419.000 ug/g
11 DUP	S98T002547	0 W	@IC-01	F-02	SOLID	6.00e+02	3.83e+02	44.151 RPD
11 DUP	S98T002547	0 W	@IC-01	CL-02	SOLID	3.95e+03	3.58e+03	9.827 RPD
11 DUP	S98T002547	0 W	@IC-01	NO2-02	SOLID	4.53e+04	4.18e+04	8.037 RPD
11 DUP	S98T002547	0 W	@IC-01	BR-02	SOLID	<1.69e3	<1.64e3	RPD
11 DUP	S98T002547	0 W	@IC-01	NO3-02	SOLID	3.96e+05	4.07e+05	2.740 RPD
11 DUP	S98T002547	0 W	@IC-01	PO4-02	SOLID	1.93e+04	1.77e+04	8.649 RPD
11 DUP	S98T002547	0 W	@IC-01	SO4-02	SOLID	4.68e+03	4.27e+03	9.162 RPD
11 DUP	S98T002547	0 W	@IC-01	OXALATE2	SOLID	2.22e+03	1.72e+03	25.381 RPD

## LABCORE Completed Worklist Report for Worklist# 27001

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Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
----------	-------------	------	--------	--------	-------	-------------	------

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**Final page for worklist# 27001**

Analyst Signature

Date

Analyst Signature

Date

*James M. Faye* 11/12/98  
Reviewer Signature Date

HNF-1661 REV. 0

11/05/98 14:03

A-0004-1

Page: 1

## LABCORE Data Entry Template for Worklist# 27001

Analyst: KST Instrument: IC 4500sys1 Book# 27001-BMethod: LA-533-105 Rev/Mod F-0

Worklist Comment: U107, @IC-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC-QC	QC		
2	LCS-INST		@IC-QC	QC		
3	CCV		@IC-QC	QC		
4	BLNK-PREP		@IC-01	SOLID		
5	SAMPLE	S98T002531 0 W	@IC-01	SOLID	98000401 U-107 (2)	
		<b>Analytes Requested:</b>	BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02			
6	DUP	S98T002531 0 W	@IC-01	SOLID		
7	SPK	S98T002531 0 W	@IC-01	SOLID		
8	SAMPLE	S98T002541 0 W	@IC-01	SOLID	98000401 U-107 (2)	
		<b>Analytes Requested:</b>	BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02			
9	DUP	S98T002541 0 W	@IC-01	SOLID		
10	SAMPLE	S98T002547 0 W	@IC-01	SOLID	98000401 U-107 (2)	
		<b>Analytes Requested:</b>	BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02			
11	DUP	S98T002547 0 W	@IC-01	SOLID		

Final page for worklist # 27001

Analyst Signature

Date

Analyst Signature

Date

Data Entry Comments:

uploaded 11-10-98Validated 11/11/98 JmLyeJL Wauell27001NOVCSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

981



```

=====
Sample Name: CCB                               Date: 11/09/1998 11:26:11
Data File  : C:\DX\DATA\98110511.D01
Method     : C:\DX\METHOD\ANIONS.MET
ACT Address: 1 System: 1 Inject#: 1           Detector: CDM-1
Analyst    : KS Thomado Column: AG4A/AS4A anion column
=====

```

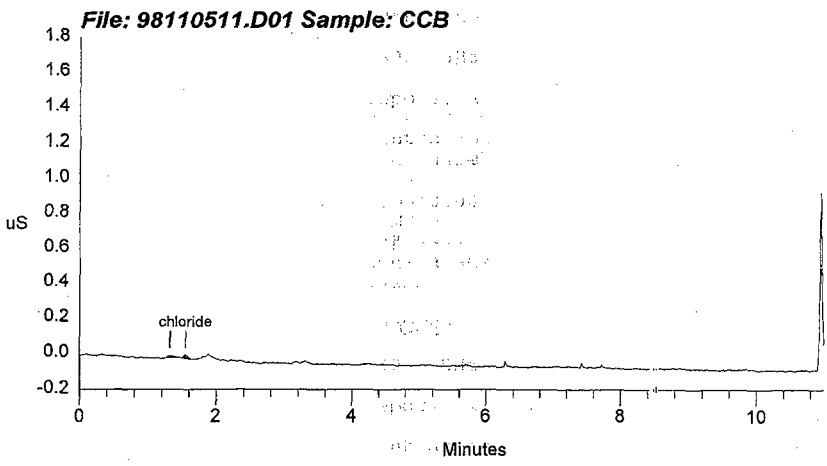
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1             1 3300 5Hz 0.00 11.00           50
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.33		0.000	11	53	1	
2	1.55	chloride	0.007	21	95	1	-3.52
Totals			0.007	32	148		



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 982 TO 992.

```

=====
Sample Name: LCS 29N21-B                               Date: 11/09/1998 11:40:09
Data File  : C:\DX\DATA\98110521.D02
Method     : C:\DX\METHOD\ANIONS.MET
ACI Address: 1 System: 1 Inject#: 2                   Detector: CDM-1
Analyst    : KS Thorndike                            Column: AG4A/AS4A anion column
=====

```

```

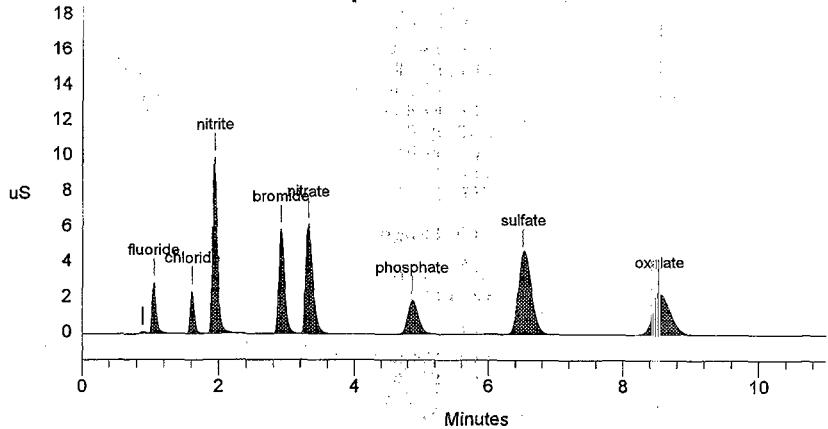
-----
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
-----
External           1           101    3300  5Hz   0.00  11.00          50
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	95	454	2	
2	1.05	fluoride	107.30%	2827	11982	2	0.64
3	1.61	chloride	102.70%	2386	10231	1	-0.21
4	1.93	nitrite	103.40%	9917	48376	1	-0.34
5	2.91	bromide	99.10%	580.533	35067	1	-1.47
6	3.31	nitrate	95.50%	565.284	6147	1	-1.97
7	4.85	phosphate	103.20%	564.631	1867	1	0.48
8	6.51	sulfate	97.70%	653.142	4557	2	0.88
9	8.53	oxalate	99.50%	537.567	2201	1	0.63
Totals			3613.629	35861	275926		

File: 98110521.D02 Sample: LCS 29N21-B



```

=====
Sample Name:  CCV28N21-B                      Date: 11/09/1998 11:54:38
Data File   :  C:\DX\DATA\98110521.D03
Method      :  C:\DX\METHOD\ANIONS.MET
ACI Address :  1 System: 1 Inject#: 3         Detector: CDM-1
Analyst     :  KS Thorndike                Column: AG4A/AS4A anion column
=====

```

```

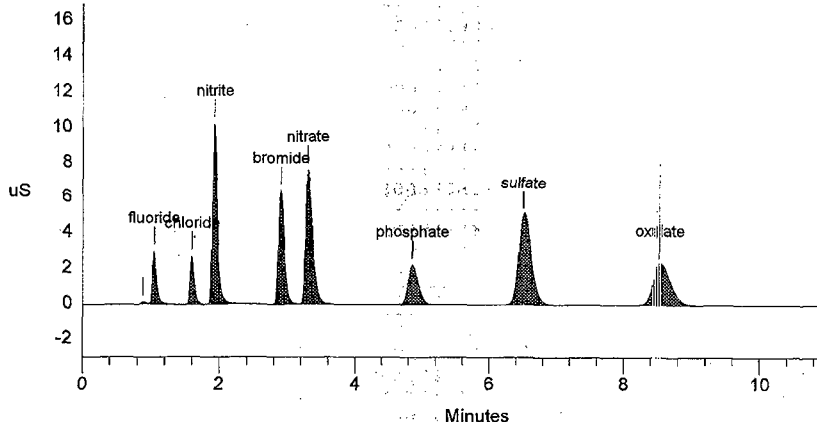
=====
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
-----
External           1             101    3300  5Hz   0.00  11.00           50
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		100.000	103	494	2	
2	1.05	fluoride	66.173	2949	12540	2	0.64
3	1.60	chloride	92.637	2685	11557	1	-0.62
4	1.93	nitrite	585.336	10214	49990	1	-0.69
5	2.90	bromide	641.458	6420	38899	1	-1.69
6	3.30	nitrate	684.552	7624	55052	1	-2.37
7	4.85	phosphate	660.733	2226	24837	1	0.48
8	6.51	sulfate	714.598	5036	68890	1	0.88
9	8.53	oxalate	556.813	2303	42159	1	0.63
Totals			4002.299	39560	304418		

File: 98110521.D03 Sample: CCV28N21-B



## HNF-1661 REV. 0

```

=====
Sample Name: BLNK-PREP                      Date: 11/09/1998 12:31:32
Data File  : C:\DX\DATA\98110931.D01
Method     : C:\DX\METHOD\ANIONSa.met
ACI Address: 1 System: 1 Inject#: 1         Detector: CDM-1
Analyst    : Rs Thorn                      Column: AG4A/AS4A anion column
=====

```

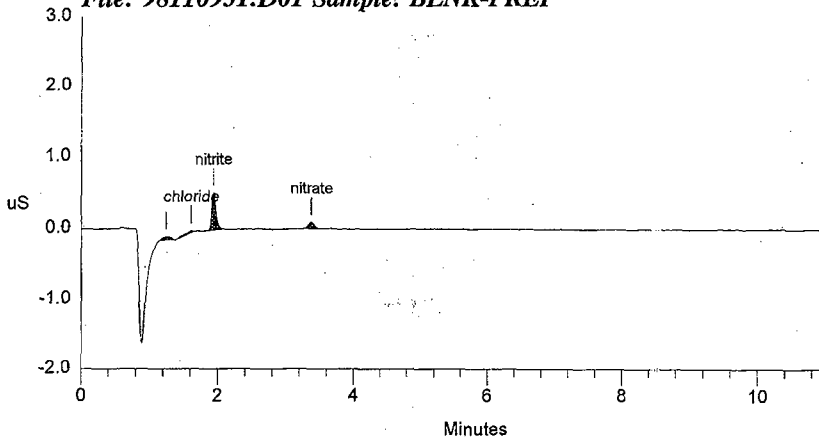
Calibration Volume Dilution Points Rate Start Stop Area Reject

External 1 1 3300 5Hz 0.00 11.00 50

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.25		0.000	48	417	1	
2	1.61	chloride	0.025	32	319	1	0.21
3	1.93	nitrite	0.383	516	2255	1	-0.34
4	3.37	nitrate	0.163	93	584	1	-0.20
Totals			0.571	689	3576		

*File: 98110931.D01 Sample: BLNK-PREP*



```

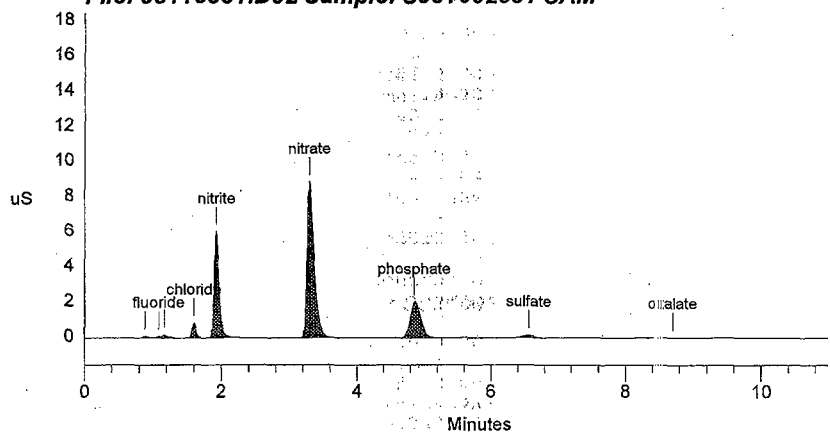
=====
Sample Name: S98T002531 SAM                      Date: 11/09/1998 12:45:12
Data File  : C:\DX\DATA\98110931.D02
Method     : C:\DX\METHOD\ANIONSa.met
ACI Address: 1 System: 1 Inject#: 2              Detector: CDM-1
Analyst    : Ks Thomas Column: AG4A/AS4A anion column
=====
    
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	67.67	3300	5Hz	0.00	11.00		50

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		10.000	102	612	2	
2	1.09	fluoride	1.782	104	407	2	4.49
3	1.17		0.000	190	1204	2	
4	1.60	chloride	19.923	835	3664	1	-0.62
5	1.93	nitrite	242.009	6033	30338	1	-0.69
6	3.29	nitrate	533.544	8855	64366	1	-2.56
7	4.85	phosphate	399.414	1992	22353	1	0.48
8	6.56	sulfate	17.839	148	2021	1	1.71
9	8.69	oxalate	3.855	20	392	1	2.52
<b>Totals</b>			<b>1218.366</b>	<b>18280</b>	<b>125357</b>		

**File: 98110931.D02 Sample: S98T002531 SAM**



*150-10*

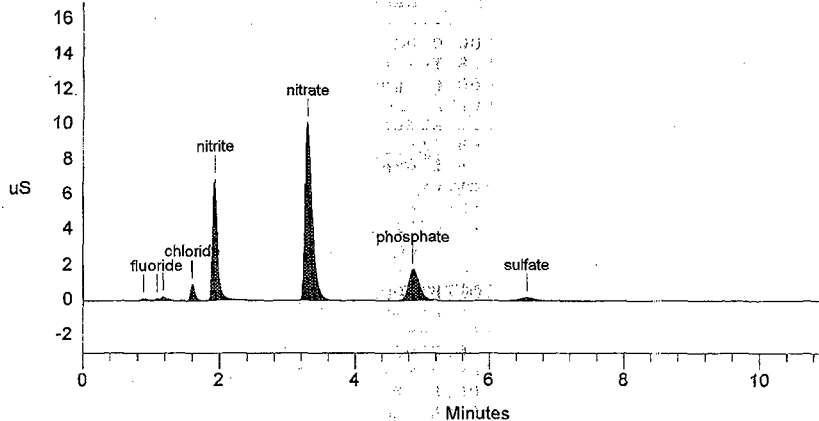
Sample Name: S98T002531 DUP Date: 11/09/1998 12:58:50  
 Data File : C:\DX\DATA\98110931.D03  
 Method : C:\DX\METHOD\ANIONSa.met  
 ACT Address: 1 System; 1 Inject#: 3 Detector: CDM-1  
 Analyst : *K. Stomdoba* Column: AG4A/AS4A anion column

Calibration Volume Dilution Points Rate Start Stop Area Reject  
 External 1 67.67 3300 5HZ 0.00 11.00 50

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	104	640	2	
2	1.09	fluoride	1.862	116	429	2	4.49
3	1.17		0.000	218	1373	2	
4	1.60	chloride	22.609	942	4161	1	-0.62
5	1.93	nitrite	271.210	6898	34150	1	-0.69
6	3.29	nitrate	611.894	10074	74175	1	-2.76
7	4.85	phosphate	353.409	1759	19725	1	0.48
8	6.56	sulfate	20.158	170	2350	1	1.71
Totals			1281.142	20280	137004		

File: 98110931.D03 Sample: S98T002531 DUP



0.156-10

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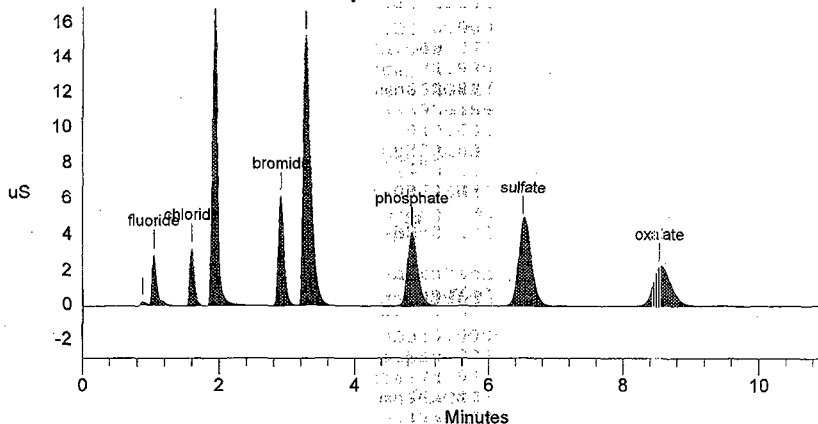
=====  
 Sample Name: S98T002531 SPIKE Date: 11/09/1998 13:12:29  
 Data File : C:\DX\DATA\98110931.D04  
 Method : C:\DX\METHOD\ANIONS.amet  
 ACI Address: 1 System: 1 Inject#: 4 Detector: CDM-1  
 Analyst : *K. Hernandez* Column: AG4A/AS4A anion column  
 =====

=====  
 Calibration Volume Dilution Points Rate Start Stop Area Reject  
 -----  
 External 1 67.67 3300 5Hz 0.00 11.00 50  
 =====

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	163	773	2	
2	1.05	fluoride	49.277	2884	13978	2	0.64
3	1.60	chloride	78.979	3264	14789	1	-0.62
4	1.93	nitrite	6620874	16846	85710	1	-0.34
5	2.91	bromide	391.155	6131	35273	1	-1.47
6	3.27	nitrate	949.601	15289	117247	1	-3.35
7	4.85	phosphate	794.624	4176	45454	1	0.48
8	6.51	sulfate	460.139	4793	66131	1	0.88
9	8.53	oxalate	373.471	2219	42206	1	0.63
Totals			3760.120	55763	421562		

File: 98110931.D04 Sample: S98T002531 SPIKE



.150-10

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Sample Name: S98T0098T2541 SAM Date: 11/09/1998 13:26:07  
 Data File : C:\DX\DATA\98110931.D05  
 Method : C:\DX\METHOD\ANIONSa.met  
 ACI Address: 1 System: 1 Inject#: 5 Detector: CDM-1  
 Analyst : *KS Thomas* Column: AG4A/AS4A anion column

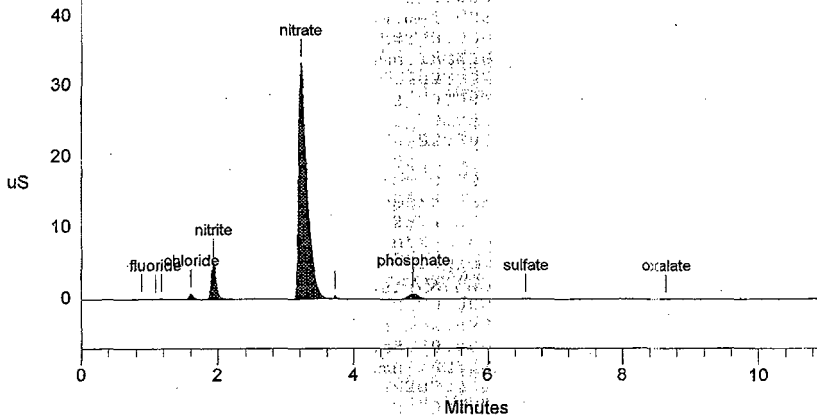
Calibration Volume Dilution Points Rate Start Stop Area Reject

External 1 67.67 3300 5Hz 0.00 11.00 50

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	130	740	2	
2	1.09	fluoride	1.628	80	364	2	4.49
3	1.17		0.000	157	959	2	
4	1.61	chloride	18.110	744	3329	1	-0.21
5	1.93	nitrite	207.291	5065	25811	1	-0.69
6	3.21	nitrate	2179.991	33342	286981	1	-4.93
7	3.72		0.000	410	824	1	
8	4.88	phosphate	152.396	744	8382	1	1.04
9	6.56	sulfate	11.419	83	1108	1	1.71
10	8.64	oxalate	3.723	22	377	1	1.89
Totals			2574.560	40778	328875		

File: 98110931.D05 Sample: S98T0098T2541 SAM



150-10



```

=====
Sample Name: S98T002541 DUP                               Date: 11/09/1998 13:39:45
Data File  : C:\DX\DATA\98110931.D06
Method     : C:\DX\METHOD\ANIONSa.met
ACI Address: 1 System: 1 Inject#: 6
Analyst    : KS Thomdeko Column: AG4A/AS4A anion column
=====
    
```

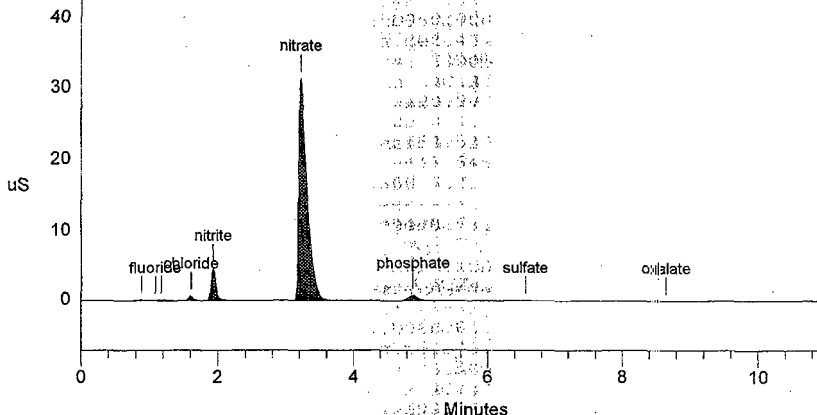
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          67.67  3300 5Hz  0.00 11.00          50
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	125	731	2	
2	1.09	fluoride	1.451	74	314	2	4.49
3	1.17		0.000	153	974	2	
4	1.61	chloride	17.182	721	3158	1	-0.21
5	1.93	nitrite	190.970	4705	23685	1	-0.69
6	3.22	nitrate	2060.489	31385	269473	1	-4.73
7	4.88	phosphate	153.530	765	8445	1	1.04
8	6.56	sulfate	11.516	82	1122	1	1.71
9	8.64	oxalate	5.395	32	564	1	1.89
Totals			2440.533	38042	308466		

File: 98110931.D06 Sample: S98T002541 DUP



ISO-10

```

=====
Sample Name: S98T002547 SAM                               Date: 11/09/1998 13:53:23
Data File   : C:\DX\DATA\98110931.D07
Method      : C:\DX\METHOD\ANIONSa.met
ACI Address : 1 System: 1 Inject#: 7                      Detector: CDM-1
Analyst     : K. Thomas Column: AG4A/AS4A anion column
=====

```

```

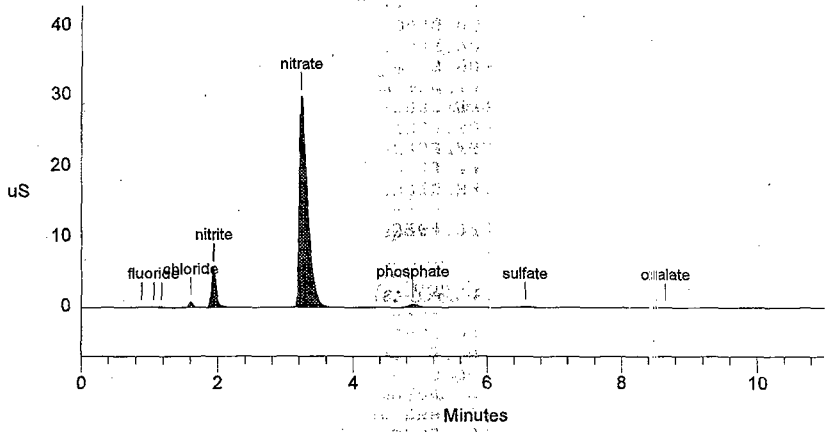
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           67.67  3300 5HZ  0.00 11.00           50
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	123	700	2	
2	1.06	fluoride	3.006	144	750	2	1.92
3	1.17		0.000	180	1113	2	
4	1.60	chloride	19.780	823	3638	1	-0.62
5	1.93	nitrite	226.890	5709	28366	1	-0.34
6	3.22	nitrate	1983.100	29863	258266	1	-4.73
7	4.88	phosphate	96.708	464	5278	1	1.04
8	6.56	sulfate	23.451	202	2819	1	1.71
9	8.64	oxalate	11.131	62	1208	1	1.89
Totals			2364.066	37570	302137		

File: 98110931.D07 Sample: S98T002547 SAM



## HNF-1661 REV. 0

Sample Name: S98T002547 DUP Date: 11/09/1998 14:07:03  
 Data File : C:\DX\DATA\98110931.D08  
 Method : C:\DX\METHOD\ANIONSa.met  
 ACI Address: 1 System: 1 Inject#: 8 Detector: CDM-1  
 Analyst : *KS Promdila* Column: AG4A/AS4A anion column

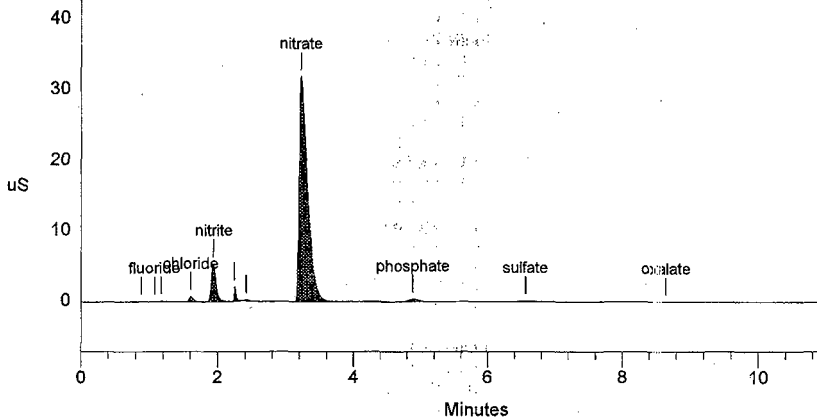
Calibration Volume Dilution Points Rate Start Stop Area Reject

External 1 67.67 3300 5Hz 0.00 11.00 50

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.89		0.000	118	659	2	
2	1.08	fluoride	1.973	93	460	2	3.85
3	1.17		0.000	166	1030	2	
4	1.61	chloride	18.440	773	3390	1	-0.21
5	1.93	nitrite	215.027	5414	26819	1	-0.34
6	2.25		0.000	2056	3901	1	
7	2.41		0.000	196	638	1	
8	3.22	nitrate	2095.462	31871	274571	1	-4.73
9	4.88	phosphate	90.941	429	4958	1	1.04
10	6.56	sulfate	21.978	189	2609	1	1.71
11	8.64	oxalate	8.851	52	952	1	1.89
Totals			2452.671	41357	319988		

File: 98110931.D08 Sample: S98T002547 DUP



150-10

# LABCORE Completed Worklist Report for Worklist# 27003

Analyst: adp

Instrument: IC45S2

Book#: 35N21C

Method: LA-533-105

Rev/Mod F-0

Worklist Comment: U107, @IC4G-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB 0	@IC4G-QC F*4	QC	1	<1.10e-2		ug/mL
1	CCB 0	@IC4G-QC ACETATE2	QC	1	<2.00e-2		ug/mL
1	CCB 0	@IC4G-QC FORMATE2	QC	1	<2.10e-2		ug/mL
1	CCB 0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2		ug/mL
2	LCS-INST 0	@IC4G-QC F*4	QC	5.89e1	5.81e+01	98.642 %	Recovery
2	LCS-INST 0	@IC4G-QC ACETATE2	QC	1.24e2	1.02e+02	82.258 %	Recovery
2	LCS-INST 0	@IC4G-QC FORMATE2	QC	1.19e2	1.03e+02	86.555 %	Recovery
2	LCS-INST 0	@IC4G-QC GLYCOLT1	QC	1.07e2	1.01e+02	94.393 %	Recovery
3	CCV 0	@IC4G-QC F*4	QC	6.21e1	5.83e+01	93.881 %	Recovery
3	CCV 0	@IC4G-QC ACETATE2	QC	1.23e2	1.21e+02	98.374 %	Recovery
3	CCV 0	@IC4G-QC FORMATE2	QC	1.30e2	1.26e+02	96.923 %	Recovery
3	CCV 0	@IC4G-QC GLYCOLT1	QC	1.02e2	9.91e+01	97.157 %	Recovery
4	BLNK-PREP 0	@IC4G-01 F*4-01	SOLID	1	<3.10e-2		ug/g
4	BLNK-PREP 0	@IC4G-01 ACETATE2	SOLID	1	<2.00e-2		ug/g
4	BLNK-PREP 0	@IC4G-01 FORMATE2	SOLID	1	<6.20e-2		ug/g
4	BLNK-PREP 0	@IC4G-01 GLYCOLT1	SOLID	1	<5.60e-2		ug/g
5	SAMPLE S98T002270	0 W @IC4G-01 F*4-01	SOLID	N/A	9.402e+01	68.650	ug/g
5	SAMPLE S98T002270	0 W @IC4G-01 ACETATE2	SOLID	N/A	8.617e+01	44.300	ug/g
5	SAMPLE S98T002270	0 W @IC4G-01 FORMATE2	SOLID	N/A	5.746e+02	137.300	ug/g
5	SAMPLE S98T002270	0 W @IC4G-01 GLYCOLT1	SOLID	N/A	2.335e+02	124.000	ug/g
6	DUP S98T002270	0 W @IC4G-01 F*4-01	SOLID	9.40e+01	2.59e+02	93.484	RPD
6	DUP S98T002270	0 W @IC4G-01 ACETATE2	SOLID	8.62e+01	1.33e+02	42.701	RPD
6	DUP S98T002270	0 W @IC4G-01 FORMATE2	SOLID	5.75e+02	6.65e+02	14.516	RPD
6	DUP S98T002270	0 W @IC4G-01 GLYCOLT1	SOLID	2.34e+02	3.75e+02	46.305	RPD
7	SAMPLE S98T002276	0 W @IC4G-01 F*4-01	SOLID	N/A	2.459e+02	66.390	ug/g
7	SAMPLE S98T002276	0 W @IC4G-01 ACETATE2	SOLID	N/A	2.155e+02	42.820	ug/g
7	SAMPLE S98T002276	0 W @IC4G-01 FORMATE2	SOLID	N/A	6.872e+02	132.800	ug/g
7	SAMPLE S98T002276	0 W @IC4G-01 GLYCOLT1	SOLID	N/A	3.778e+02	119.900	ug/g
8	DUP S98T002276	0 W @IC4G-01 F*4-01	SOLID	2.46e+02	2.70e+02	9.302	RPD
8	DUP S98T002276	0 W @IC4G-01 ACETATE2	SOLID	2.16e+02	1.97e+02	9.201	RPD
8	DUP S98T002276	0 W @IC4G-01 FORMATE2	SOLID	6.87e+02	6.55e+02	4.769	RPD
8	DUP S98T002276	0 W @IC4G-01 GLYCOLT1	SOLID	3.78e+02	3.48e+02	8.264	RPD
9	SPK S98T002276	0 W @IC4G-01 F*4-01	SOLID	5.89e1	6.60e+01	112.054 %	Recovery
9	SPK S98T002276	0 W @IC4G-01 ACETATE2	SOLID	1.24e2	1.21e+02	97.581 %	Recovery
9	SPK S98T002276	0 W @IC4G-01 FORMATE2	SOLID	1.19e2	1.24e+02	104.202 %	Recovery
9	SPK S98T002276	0 W @IC4G-01 GLYCOLT1	SOLID	1.07e2	1.13e+02	105.607 %	Recovery
10	SAMPLE S98T002330	0 W @IC4G-01 F*4-01	SOLID	N/A	1.129e+02	66.350	ug/g
10	SAMPLE S98T002330	0 W @IC4G-01 ACETATE2	SOLID	N/A	8.679e+01	42.810	ug/g
10	SAMPLE S98T002330	0 W @IC4G-01 FORMATE2	SOLID	N/A	4.493e+02	132.700	ug/g
10	SAMPLE S98T002330	0 W @IC4G-01 GLYCOLT1	SOLID	N/A	1.199e+02	119.900	ug/g
11	DUP S98T002330	0 W @IC4G-01 F*4-01	SOLID	1.13e+02	1.35e+02	17.742	RPD

Units shown for QC (BLK/BKG) may not reflect the actual units.

# LABCORE Completed Worklist Report for Worklist# 27003

Seq	Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
11	DUP	S98T002330	0	W	@IC4G-01 ACETATE2	SOLID	8.68e+01	8.63e+01		0.578 RPD
11	DUP	S98T002330	0	W	@IC4G-01 FORMATE2	SOLID	4.49e+02	4.84e+02		7.503 RPD
11	DUP	S98T002330	0	W	@IC4G-01 GLYCOLT1	SOLID	<1.20e2	<1.25e2		RPD

Final page for worklist# 27003

\_\_\_\_\_  
Analyst Signature                      Date

\_\_\_\_\_  
Analyst Signature                      Date

*Jeanne L. Lipp* 12/30/98  
\_\_\_\_\_  
Reviewer Signature                      Date

HNF-1661 REV. 0

Page: 1

12/28/98 14:14  
A-0004-1

## LABCORE Data Entry Template for Worklist# 27003

Analyst: ADD Instrument: IC 4552 Book# 34N21A  
 Method: LA-533-105 Rev/Mod F-0  
 Worklist Comment: U107, @IC4G-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC4G-QC	QC		
2	LCS-INST		@IC4G-QC	QC		
3	CCV		@IC4G-QC	QC		
4	BLNK-PREP		@IC4G-01	SOLID		
5	SAMPLE	S98T002270 0 W	@IC4G-01	SOLID	98000359 U-107 (2)	
		Analytes Requested: ACETATE2, F*4-01 , FORMATE2, GLYCOLT1				
6	DUP	S98T002270 0 W	@IC4G-01	SOLID		
7	SAMPLE	S98T002276 0 W	@IC4G-01	SOLID	98000359 U-107 (2)	
		Analytes Requested: ACETATE2, F*4-01 , FORMATE2, GLYCOLT1				
8	DUP	S98T002276 0 W	@IC4G-01	SOLID		
9	SPK	S98T002276 0 W	@IC4G-01	SOLID		
10	SAMPLE	S98T002330 0 W	@IC4G-01	SOLID	98000358 U-107 (2)	
		Analytes Requested: ACETATE2, F*4-01 , FORMATE2, GLYCOLT1				
11	DUP	S98T002330 0 W	@IC4G-01	SOLID		

Final page for worklist # 27003

  
 Analyst Signature Date 12-28-98

\_\_\_\_\_  
 Analyst Signature Date

## Data Entry Comments:

uploaded 12-29-98

John Wainell

27003DEC.CSV

validated 12/30/98 JMS

S98T002270 is non homogeneous

if better RPD's are needed on

this one then a reprep of it  
should be done. JMS

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Data Reprocessed On 12/28/1998 10:44:57

```

=====
Sample Name: 35N21-C LCS          Date: 12/28/1998 10:17:13
Data File  : C:\DX\DATA\98122801.D03
Method     : C:\DX\METHOD\AAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 3
Analyst    : Anthony Column: AG14A-SC,AS14A-SC, SRS
=====

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```

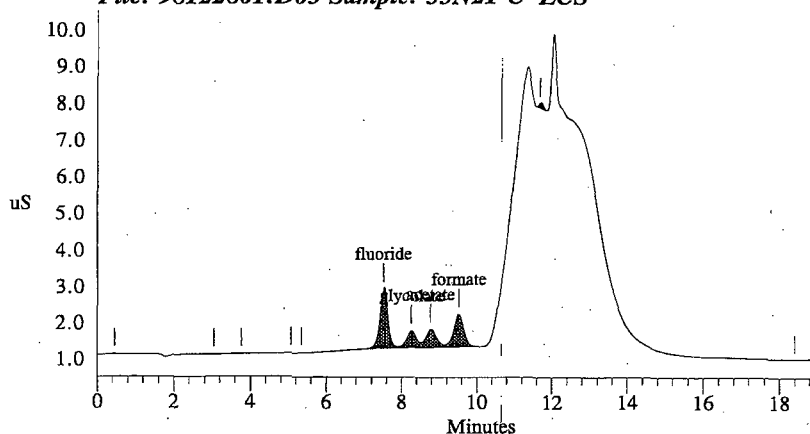
=====
Calibration Volume 12-28-99 Dilution Points Rate Start Stop Area Reject
-----
External 1 101 5700 5Hz 0.00 19.00 500
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.47		0.000	25601	1121400	1	
3	3.77		0.000	400	5600	1	
4	5.08		0.000	400	5000	1	
5	5.35		0.000	3200	28600	1	
6	7.52	fluoride	58.096	1639578	24895693	2	0.00
7	8.27	glycolate	100.530	476254	8949644	2	0.00
8	8.77	acetate	102.380	507142	10275528	2	0.00
9	9.52	formate	102.884	901818	17246343	2	0.00
10	11.68		0.000	123671	1107800	1	
11	18.40		0.000	2000	6400	1	
Totals			363.890	3680064	63642008		

File: 98122801.D03 Sample: 35N21-C LCS



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 996 TO 1011.

```

=====
Sample Name: BLANK                      Date: 12/28/1998 09:42:42
Data File  : C:\DX\DATA\98122801.D02
Method     : C:\DX\METHOD\AAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 2      Detector: CDM-2
Analyst    :                            Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           1 5700 5Hz 0.00 19.00          500
=====

```

```

***** Peak Report: All Peaks *****

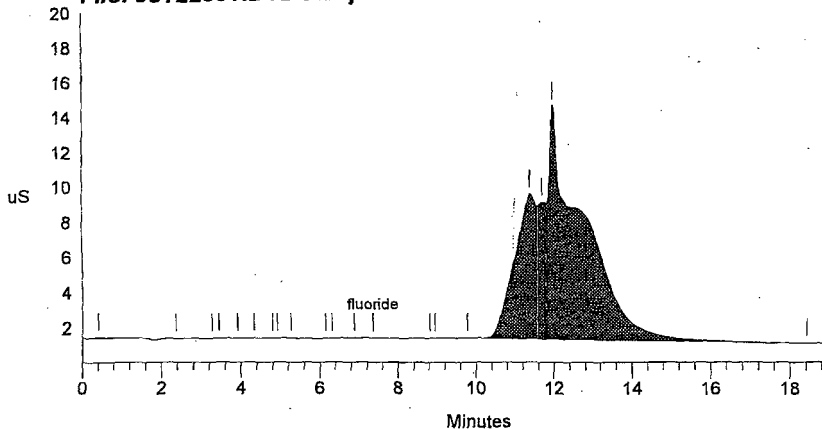
```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.40		0.000	30000	825200	1	
2	2.36		0.000	2000	6400	1	
3	3.27		0.000	2000	5600	1	
4	3.44		0.000	2000	10400	1	
5	3.91		0.000	2000	10000	1	
6	4.32		0.000	2000	6400	1	
7	4.79		0.000	2000	7600	1	
8	4.91		0.000	1032	6800	1	
9	5.27		0.000	6507	46800	1	
10	6.15		0.000	2000	4400	1	
11	6.31		0.000	2000	13600	1	
12	6.88		0.000	883	13200	1	
13	7.36	fluoride	0.010	4209	66200	1	0.00
14	8.83		0.000	1524	3600	1	
15	8.96		0.000	604	1200	1	
16	9.79		0.000	2410	12800	1	
17	11.39		0.000	8135068	308321427	2	
18	11.71		0.000	7696105	86787954	2	
19	11.97		0.000	13116302	801005523	2	
20	18.43		0.000	2117	34135	2	
Totals			0.010	29012762	1197189240		



File: 98122801.D02 Sample: BLANK

HNF-1661 REV. 0



Data Reprocessed On 12/28/1998 10:44:12

```

=====
Sample Name: 34N21-A CCV                               Date: 12/28/1998 10:39:58
Data File  : C:\DX\DATA\98122801.D04
Method     : C:\DX\METHOD\AAS14GLY.MET
ACT Address: 1 System: 2 Inject#: 4                    Detector: CDM-2
Analyst    :                                           Column: AG14A-SC,AS14A-SC, SRS
=====

```

```

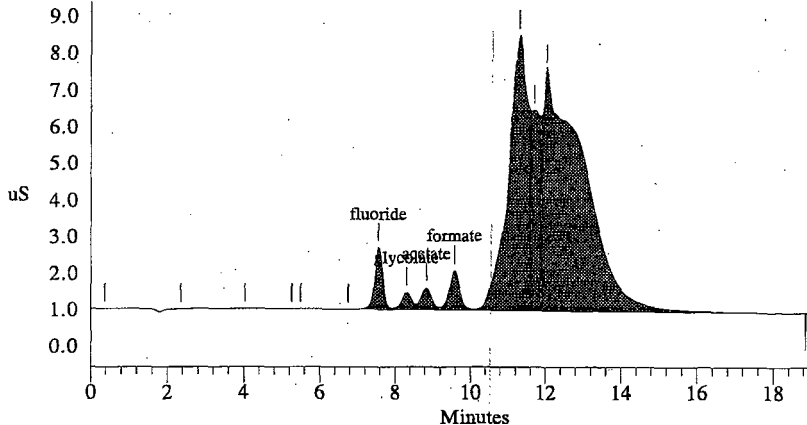
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          101    5700  5Hz   0.00 19.00      500
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.37		0.000	16000	360000	1	
2	2.35		0.000	4000	19600	1	
3	4.03		0.000	2960	10000	1	
4	5.25		0.000	6057	21600	1	
5	5.49		0.000	2000	3600	1	
6	6.75		0.000	1500	5000	1	
7	7.55	fluoride	58.332	1654817	24999914	2	0.00
8	8.29	glycolate	99.099	470982	8821874	2	0.00
9	8.83	acetate	120.572	593385	12054628	2	0.00
10	9.57	formate	126.491	1077550	21281419	2	0.00
11	11.31		0.000	7495862	274784629	2	
12	11.71		0.000	5493165	78207336	2	
13	12.03		0.000	6593807	499830459	2	
Totals			404.495	23412086	920400059		

File: 98122801.D04 Sample: 34N21-A CCV



HNF-1661 REV. 0

Data Reprocessed On 12/28/1998 13:44:51

```

=====
Sample Name: PREP BLANK                      Date: 12/28/1998 11:02:12
Data File  : C:\DX\DATA\98122801.d05
Method     : C:\DX\METHOD\AAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 5          Detector: CDM-2
Analyst    :                               Column: AG14A-SC,AS14A-SC, SRS
=====

```

```

=====
Calibration Volume Dilution Points Rate | Start Stop Area Reject
-----
External           1           1 5700 5Hz 0.00 19.00 16000
=====

```

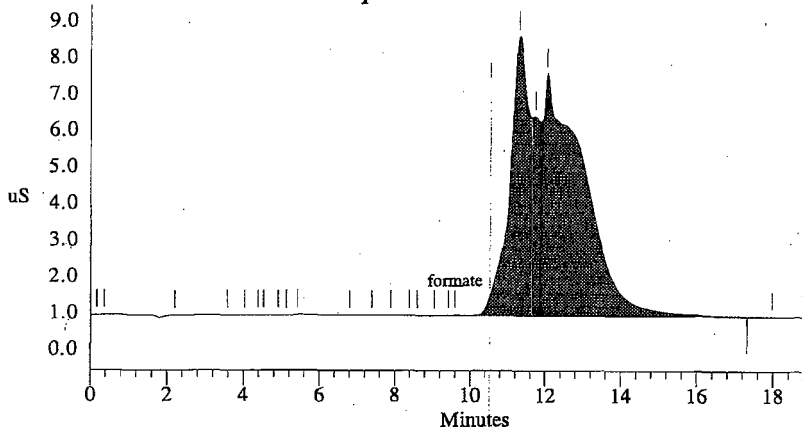
```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	10750	47944	2	
2	0.37		0.000	14875	395462	2	
10	5.41		0.000	6545	32200	1	
16	9.04		0.000	5200	17400	1	
17	9.41		0.000	4000	22400	1	
18	9.60	formate	0.005	3290	29400	1	0.00
19	11.31		0.000	7628330	269615616	2	
20	11.73		0.000	5437744	70013026	2	
21	12.05		0.000	6618805	500766002	3	
22	17.97		0.000	2799	63953	4	
Totals			0.005	19732340	841003403		

File: 98122801.d05 Sample: PREP BLANK



1000

Data Reprocessed On 12/28/1998 13:45:22

```

=====
Sample Name: S98T002270 SAM                      Date: 12/28/1998 11:53:16
Data File  : C:\DX\DATA\98122801.d07
Method     : C:\DX\METHOD\AAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 7
Analyst    :                      Column: AG14A-SC,AS14A-SC, SRS
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External      1          11    5700    5Hz    0.00 19.00    16000
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

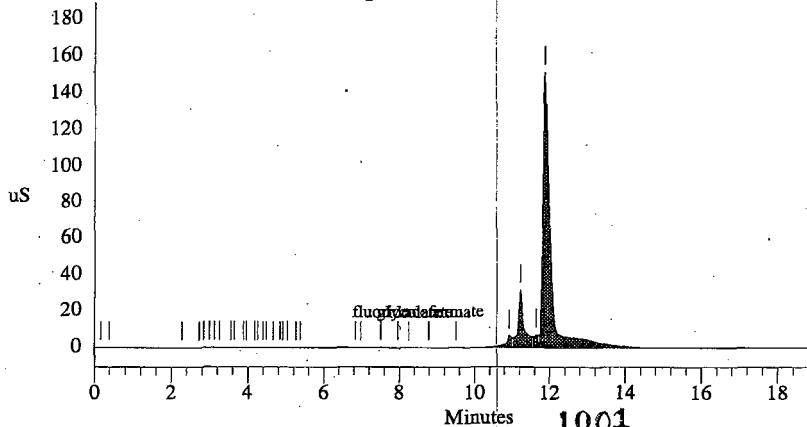
Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	7116	28092	2	
2	0.40		0.000	6671	114532	2	
3	2.28		0.000	5400	87520	1	
4	2.73		0.000	4359	31202	2	
5	2.85		0.000	4522	37565	2	
6	3.00		0.000	4099	37207	2	
8	3.25		0.000	2533	23653	2	
9	3.56		0.000	1595	18350	2	
21	5.27		0.000	11081	72382	2	
22	5.39		0.000	9907	457932	2	
25	7.52	fluoride	0.467	97994	1487080	1	0.00
27	8.27	glycolate	1.160	68704	1080845	2	0.00
28	8.80	acetate	0.428	36269	609882	2	0.00
29	9.52	formate	2.854	229074	4312888	2	0.00
30	10.93		0.000	6336867	73858170	2	
31	11.23		0.000	31414655	385453714	2	
32	11.65		0.000	6952800	53364668	2	
33	11.87		0.000	151106373	2230324095	2	

```

-----
Totals          4.908    196300019 2751399776
-----

```

File: 98122801.d07 Sample: S98T002270 SAM



**HNF-1661 REV. 0**  
 Data Reprocessed On 12/28/1998 13:45:37

```

=====
Sample Name: S98T002270 DUP                      Date: 12/28/1998 12:16:53
Data File  : C:\DX\DATA\98122801.d08
Method     : C:\DX\METHOD\AAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 8
Analyst    :                               Column: AG14A-SC,AS14A-SC, SRS
=====
  
```

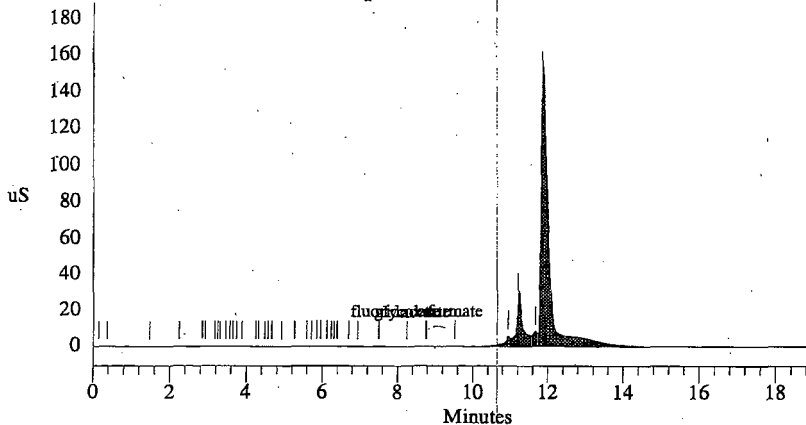
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           11 5700 5Hz  0.00 19.00      16000
  
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.13		0.000	3310	33232	2	
2	0.37		0.000	8575	243874	3	
4	2.24		0.000	5600	92880	1	
5	2.84		0.000	2862	42442	2	
6	2.92		0.000	2108	16524	2	
14	3.88		0.000	3542	28360	1	
20	4.92		0.000	2624	25656	2	
21	5.25		0.000	11922	71366	2	
32	7.49	fluoride	1.281	314764	4699250	2	0.00
33	8.24	glycolate	1.852	83152	1627031	2	0.00
34	8.75	acetate	0.656	49415	816155	2	0.00
35	9.52	formate	3.286	231818	4976043	2	0.00
36	10.93		0.000	5536553	60813582	2	
37	11.20		0.000	26549691	345393363	2	
38	11.65		0.000	7896927	58169547	2	
39	11.84		0.000	147320024	2262257475	2	
Totals			7.075	188022886	2739306779		

**File: 98122801.d08 Sample: S98T002270 DUP**



1002

Data Reprocessed On 12/28/1998 13:45:56

```

=====
Sample Name: S98T002276 SAM                      Date: 12/28/1998 12:40:49
Data File  : C:\DX\DATA\98122801.d09
Method     : C:\DX\METHOD\AAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 9
Analyst    :                               Column: AG14A-SC,AS14A-SC, SRS
Detector: CDM-2
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External 1 11 5700 5Hz 0.00 19.00 16000
=====

```

```

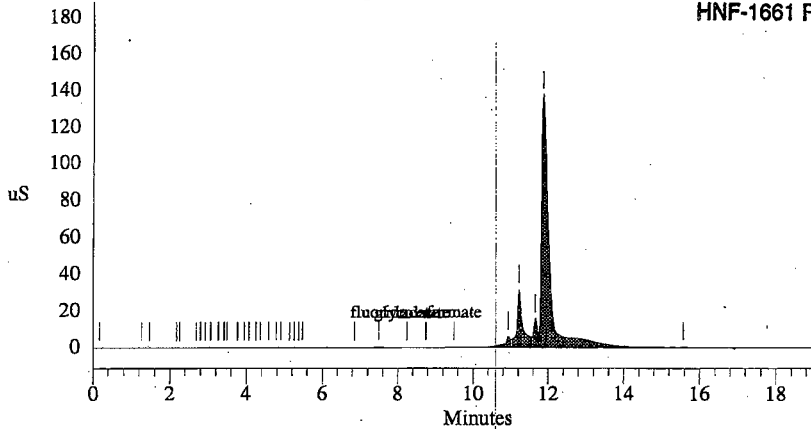
***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	10200	109520	1	
3	1.47		0.000	2798	26488	2	
4	2.19		0.000	7867	171320	2	
5	2.27		0.000	5067	28960	2	
6	2.69		0.000	5870	51284	2	
7	2.80		0.000	5763	30779	2	
8	2.93		0.000	7629	60525	2	
9	3.07		0.000	4695	27121	2	
10	3.27		0.000	2394	21817	2	
18	4.59		0.000	3271	33985	2	
20	4.91		0.000	2566	23965	2	
22	5.25		0.000	12083	64615	2	
23	5.37		0.000	7905	35863	2	
24	5.47		0.000	7788	341208	2	
25	6.85		0.000	2908	33622	2	
26	7.49	fluoride	1.263	290069	4627537	2	0.00
27	8.24	glycolate	1.941	84372	1697523	2	0.00
28	8.75	acetate	1.107	56579	1223987	2	0.00
29	9.49	formate	3.530	246882	5351106	2	0.00
30	10.93		0.000	5707468	67857863	2	
31	11.23		0.000	31176587	336537058	2	
32	11.65		0.000	15316761	122260811	2	
33	11.87		0.000	136526848	2041400401	3	
34	15.57		0.000	80516	6281931	4	
Totals			7.841	189574887	2588299288		

File: 98122801.d09 Sample: S98T002276 SAM

HNF-1661 REV. 0



Data Reprocessed On 12/28/1998 13:46:01

```

=====
Sample Name: S98T002276 DUP           Date: 12/28/1998 13:03:45
Data File  : C:\DX\DATA\98122801.d10
Method     : C:\DX\METHOD\AAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 10   Detector: CDM-2
Analyst    :                          Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           11  5700  5Hz  0.00 19.00 16000
-----

```

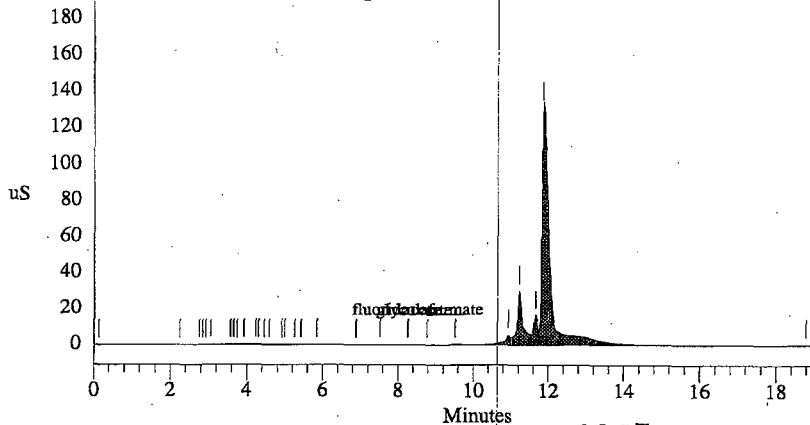
```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.13		0.000	7800	581320	1	
2	2.25		0.000	6194	94760	1	
3	2.76		0.000	1349	19112	2	
9	3.75		0.000	4060	20948	2	
14	4.57		0.000	3400	41120	1	
17	5.25		0.000	9568	59459	2	
18	5.43		0.000	9606	189227	2	
19	5.84		0.000	6250	151673	2	
20	6.88		0.000	2712	30316	2	
21	7.52	fluoride	1.351	313255	4975865	2	0.00
22	8.27	glycolate	1.741	75539	1539308	2	0.00
23	8.77	acetate	0.988	51731	1116790	2	0.00
24	9.52	formate	3.279	226015	4965039	2	0.00
25	10.93		0.000	5346552	64865979	2	
26	11.23		0.000	29739664	323192043	2	
27	11.65		0.000	16059826	127290161	2	
28	11.87		0.000	130729907	1972078521	2	
Totals			7.359	182593428	2501211642		

File: 98122801.d10 Sample: S98T002276 DUP



1005



## HNF-1661 REV.0

Data Reprocessed On 12/28/1998 13:44:27

```

=====
Sample Name: S98T002276 SPK      Date: 12/28/1998 13:32:56
Data File  : C:\DX\DATA\98122801.d11
Method     : C:\DX\METHOD\AAS14GLY.MET
ACT Address: 1 System: 2 Inject#: 11
Analyst    :                      Column: AG14A-SC,AS14A-SC, SRS
Detector: CDM-2
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          11    5700  5Hz   0.00 19.00    16000
-----

```

```

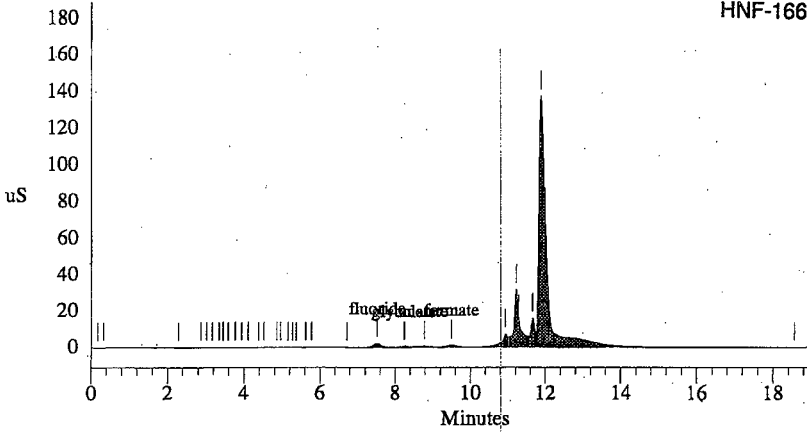
***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	6836	29784	2	
2	0.33		0.000	7230	187907	2	
3	2.28		0.000	5000	89880	1	
4	2.87		0.000	4069	60746	2	
5	3.01		0.000	3683	23681	2	
6	3.16		0.000	3297	43512	2	
18	5.27		0.000	7758	44682	2	
19	5.37		0.000	6726	66594	2	
20	5.61		0.000	9505	107265	2	
21	5.77		0.000	9758	261484	2	
23	7.52	fluoride	7.861	2121532	31133074	2	0.00
24	8.24	glycolate	13.236	576024	10835424	2	0.00
25	8.77	acetate	13.162	618388	12081622	2	0.00
26	9.49	formate	15.925	1258879	24673947	2	0.00
27	10.93		0.000	7083861	87890066	2	
28	11.23		0.000	31479062	350495843	2	
29	11.65		0.000	15599353	124170118	2	
30	11.87		0.000	137129498	2026463207	2	
31	18.56		0.000	2366	58156	2	
Totals			50.184	195932824	2668716991		

**File: 98122801.d11 Sample: S98T002276 SPK**

**HNF-1661 REV. 0**



```

=====
Sample Name: S98T002330 SAM                               Date: 12/28/1998 13:54:29
Data File  : C:\DX\DATA\98122811.D01
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 1
Analyst    :                               Column: AG14A-SC,AS14A-SC, SRS
Detector: CDM-2
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           11 5700 5Hz 0.00 19.00 16000
-----

```

```

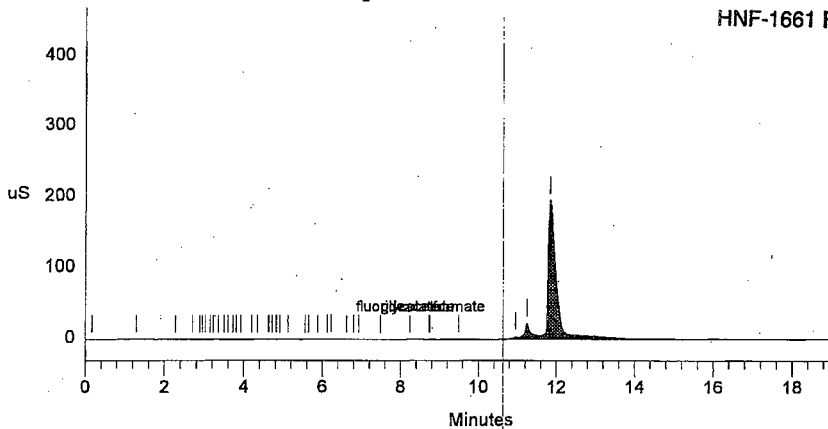
***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	8000	250620	2	
3	2.28		0.000	3960	41400	1	
4	2.71		0.000	3344	31370	3	
11	3.51		0.000	3476	16808	2	
12	3.60		0.000	3312	20239	2	
13	3.72		0.000	3899	18937	2	
15	3.93		0.000	4030	24706	2	
16	4.20		0.000	3470	16994	2	
21	4.91		0.000	3596	23054	2	
22	5.12		0.000	3380	61183	2	
24	5.64		0.000	3284	28142	2	
25	5.88		0.000	6799	76212	2	
26	6.12		0.000	5313	28933	2	
27	6.23		0.000	5175	52256	2	
30	6.93		0.000	4140	30221	2	
31	7.49	fluoride	0.580	117746	1933753	2	0.00
32	8.24	glycolate	-0.122	6104	73435	2	0.00
33	8.75	acetate	0.446	29265	626198	2	0.00
34	9.49	formate	2.309	171303	3477814	2	0.00
35	10.96		0.000	3993385	49360128	2	
36	11.25		0.000	22872696	287155891	2	
37	11.84		0.000	194499318	3123788880	2	
Totals			3.212	221754994	3467137174		

**File: 98122811.D01 Sample: S98T002330 SAM**

HNF-1661 REV. 0



## HNF-1661 REV. 0

```

=====
Sample Name: S98T002330 DUP                               Date: 12/28/1998 14:14:49
Data File  : C:\DX\DATA\98122811.D02
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 2                       Detector: CDM-2
Analyst    :                                               Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          11    5700  5Hz  0.00 19.00    16000
=====

```

```

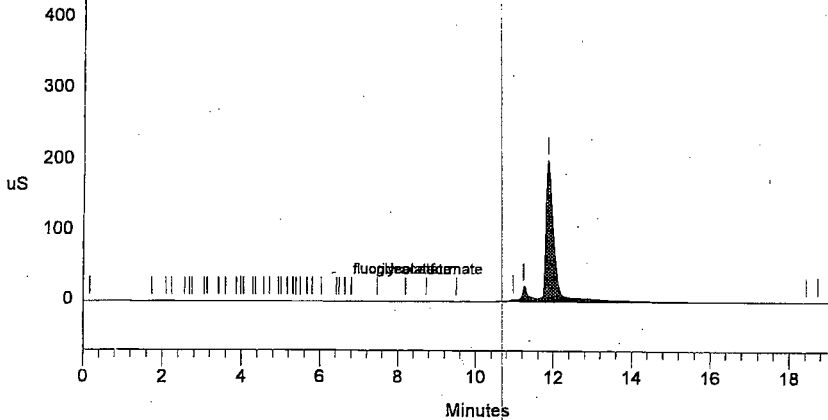
***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	9160	150668	1	
2	1.73		0.000	13697	119508	1	
3	2.10		0.000	2973	23363	2	
6	2.68		0.000	5562	25241	2	
7	2.75		0.000	6891	84759	2	
8	3.05		0.000	7250	41198	2	
9	3.13		0.000	8900	93237	2	
10	3.41		0.000	4975	39892	2	
11	3.59		0.000	5478	43607	2	
15	4.29		0.000	3504	20362	2	
16	4.36		0.000	3296	19407	2	
18	4.71		0.000	2852	17704	2	
26	5.80		0.000	4188	33407	2	
27	6.03		0.000	5497	63662	2	
31	6.80		0.000	3671	64905	2	
32	7.47	fluoride	0.668	136674	2280284	2	0.00
33	8.19	glycolate	-0.019	7838	154228	2	0.00
34	8.72	acetate	0.426	29277	607911	2	0.00
35	9.49	formate	2.391	181503	3603658	2	0.00
36	10.96		0.000	4027934	54797216	2	
37	11.23		0.000	20992249	283048382	2	
38	11.84		0.000	200496271	3221534850	3	
Totals			3.465	225959639	3566867452		

File: 98122811.D02 Sample: S98T002330 DUP

HNF-1661 REV. 0



1011

# LABCORE Completed Worklist Report for Worklist# 27004

Analyst: adp

Instrument: IC45S2

Book#: 35N21C

Method: LA-533-105

Rev/Mod F-0

Worklist Comment: U107, @IC4G-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit	
1	CCB	0	@IC4G-QC F*4	QC	1	<1.10e-2	ug/mL	
1	CCB	0	@IC4G-QC ACETATE2	QC	1	<2.00e-2	ug/mL	
1	CCB	0	@IC4G-QC FORMATE2	QC	1	<2.10e-2	ug/mL	
1	CCB	0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2	ug/mL	
2	LCS-INST	0	@IC4G-QC F*4	QC	5.89e1	5.86e+01	99.491 % Recovery	
2	LCS-INST	0	@IC4G-QC ACETATE2	QC	1.24e2	1.16e+02	93.548 % Recovery	
2	LCS-INST	0	@IC4G-QC FORMATE2	QC	1.19e2	1.15e+02	96.639 % Recovery	
2	LCS-INST	0	@IC4G-QC GLYCOLT1	QC	1.07e2	9.80e+01	91.589 % Recovery	
3	CCV	0	@IC4G-QC F*4	QC	6.21e1	6.34e+01	102.093 % Recovery	
3	CCV	0	@IC4G-QC ACETATE2	QC	1.23e2	1.29e+02	104.878 % Recovery	
3	CCV	0	@IC4G-QC FORMATE2	QC	1.30e2	1.39e+02	106.923 % Recovery	
3	CCV	0	@IC4G-QC GLYCOLT1	QC	1.02e2	1.00e+02	98.039 % Recovery	
4	BLNK-PREP	0	@IC4G-01 F*4-01	SOLID	1	<3.10e-2	ug/g	
4	BLNK-PREP	0	@IC4G-01 ACETATE2	SOLID	1	<2.00e-2	ug/g	
4	BLNK-PREP	0	@IC4G-01 FORMATE2	SOLID	1	<6.20e-2	ug/g	
4	BLNK-PREP	0	@IC4G-01 GLYCOLT1	SOLID	1	<5.60e-2	ug/g	
5	SAMPLE	S98T002446	0 W	@IC4G-01 F*4-01	SOLID	N/A	1.791e+02	128.900 ug/g
5	SAMPLE	S98T002446	0 W	@IC4G-01 ACETATE2	SOLID	N/A	5.847e+02	83.140 ug/g
5	SAMPLE	S98T002446	0 W	@IC4G-01 FORMATE2	SOLID	N/A	1.383e+03	257.700 ug/g
5	SAMPLE	S98T002446	0 W	@IC4G-01 GLYCOLT1	SOLID	N/A	8.834e+02	232.700 ug/g
6	DUP	S98T002446	0 W	@IC4G-01 F*4-01	SOLID	1.79e+02	1.35e+02	28.025 RFD
6	DUP	S98T002446	0 W	@IC4G-01 ACETATE2	SOLID	5.85e+02	6.23e+02	6.291 RFD
6	DUP	S98T002446	0 W	@IC4G-01 FORMATE2	SOLID	1.38e+03	1.48e+03	6.993 RFD
6	DUP	S98T002446	0 W	@IC4G-01 GLYCOLT1	SOLID	8.83e+02	9.02e+02	2.129 RFD
7	SAMPLE	S98T002454	0 W	@IC4G-01 F*4-01	SOLID	N/A	2.740e+02	126.300 ug/g
7	SAMPLE	S98T002454	0 W	@IC4G-01 ACETATE2	SOLID	N/A	5.184e+02	81.460 ug/g
7	SAMPLE	S98T002454	0 W	@IC4G-01 FORMATE2	SOLID	N/A	1.479e+03	252.400 ug/g
7	SAMPLE	S98T002454	0 W	@IC4G-01 GLYCOLT1	SOLID	N/A	5.628e+02	228.100 ug/g
8	DUP	S98T002454	0 W	@IC4G-01 F*4-01	SOLID	2.74e+02	2.50e+02	9.160 RFD
8	DUP	S98T002454	0 W	@IC4G-01 ACETATE2	SOLID	5.18e+02	5.56e+02	7.076 RFD
8	DUP	S98T002454	0 W	@IC4G-01 FORMATE2	SOLID	1.48e+03	1.27e+03	15.273 RFD
8	DUP	S98T002454	0 W	@IC4G-01 GLYCOLT1	SOLID	5.63e+02	6.67e+02	16.911 RFD
9	SAMPLE	S98T002522	0 W	@IC4G-01 F*4-01	SOLID	N/A	1.467e+02	126.500 ug/g
9	SAMPLE	S98T002522	0 W	@IC4G-01 ACETATE2	SOLID	N/A	4.541e+02	81.610 ug/g
9	SAMPLE	S98T002522	0 W	@IC4G-01 FORMATE2	SOLID	N/A	1.414e+03	253.100 ug/g
9	SAMPLE	S98T002522	0 W	@IC4G-01 GLYCOLT1	SOLID	N/A	2.668e+02	228.500 ug/g
10	DUP	S98T002522	0 W	@IC4G-01 F*4-01	SOLID	1.47e+02	6.25e+02	123.834 RFD
10	DUP	S98T002522	0 W	@IC4G-01 ACETATE2	SOLID	4.54e+02	4.88e+02	7.219 RFD
10	DUP	S98T002522	0 W	@IC4G-01 FORMATE2	SOLID	1.41e+03	1.29e+03	8.889 RFD
10	DUP	S98T002522	0 W	@IC4G-01 GLYCOLT1	SOLID	2.67e+02	2.69e+02	0.746 RFD
11	SPK	S98T002522	0 W	@IC4G-01 F*4-01	SOLID	5.89e1	5.61e+01	95.246 % Recovery

Units shown for QC (BLK/BKG) may not reflect the actual units.

# LABCORE Completed Worklist Report for Worklist# 27004

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
11 SPK	S98T002522	0 W	@IC4G-01 ACETATE2	SOLID	1.24e2	1.08e+02	87.097 %	Recovery
11 SPK	S98T002522	0 W	@IC4G-01 FORMATE2	SOLID	1.19e2	1.15e+02	96.639 %	Recovery
11 SPK	S98T002522	0 W	@IC4G-01 GLXCOLT1	SOLID	1.07e2	9.12e+01	85.234 %	Recovery

**Final page for worklist# 27004**

\_\_\_\_\_  
Analyst Signature      Date

\_\_\_\_\_  
Analyst Signature      Date

*James L. Lyle*  
\_\_\_\_\_  
Reviewer Signature      Date



HNF-1661 REV. 0

11/05/98 14:09

Page: 1

A-0004-1

## LABCORE Data Entry Template for Worklist# 27004

Analyst: AD Instrument: IC 4532 Book# 35N21-C LCSMethod: LA-533-<sup>gmP, 12/14/98</sup>1105 Rev/Mod F-0 34N21-A CCV

Worklist Comment: U107, @IC4G-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC4G-QC	QC		
2	LCS-INST		@IC4G-QC	QC		
3	CCV		@IC4G-QC	QC		
4	BLNK-PREP		@IC4G-01	SOLID		
5	SAMPLE	S98T002446	0 W	@IC4G-01	SOLID	98000359 U-107 (2)
		Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCOLT1				
6	DUP	S98T002446	0 W	@IC4G-01	SOLID	
7	SAMPLE	S98T002454	0 W	@IC4G-01	SOLID	98000359 U-107 (2)
		Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCOLT1				
8	DUP	S98T002454	0 W	@IC4G-01	SOLID	
9	SAMPLE	S98T002522	0 W	@IC4G-01	SOLID	98000359 U-107 (2)
		Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCOLT1				
10	DUP	S98T002522	0 W	@IC4G-01	SOLID	
11	SPK	S98T002522	0 W	@IC4G-01	SOLID	

## Final page for worklist # 27004

Anthony Perrotto 12-13-98  
 Analyst Signature Date

\_\_\_\_\_  
 Analyst Signature Date

*Appears to be non homogeneous*  
 → S98T002446 & 2522

Data Entry Comments:

uploaded 12-14-98  
John Waneell

Validated 12/14/98  
JM Lays

27004 DEC. CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

1014

HNF-1661 REV. 0

```

=====
Sample Name: 35N21-C LCS                               Date: 12/13/1998 00:13:17
Data File  : C:\DX\DATA\98121301.D09
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: System: 2 Inject#: 9                      Detector: CDM-1
Analyst    : Anthony Perenti                        Column: AG14A-SC, AS14A-SC, SRS
=====

```

12-13-98

```

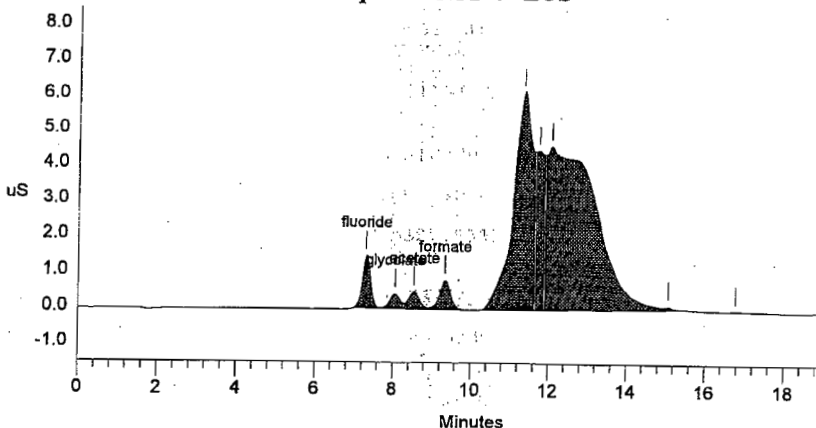
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           101 5700 5Hz 0.00 19.00           0
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	7.31	fluoride	58.569	1440	20687	2	0.00
2	8.05	glycolate	98.008	402	7141	2	0.02
3	8.53	acetate	116.451	468	9166	2	-0.02
4	9.33	formate	114.811	798	15439	2	0.00
5	11.33		0.000	6120	207477	2	
6	11.73		0.000	4456	57402	2	
7	12.05		0.000	4584	401739	3	
8	15.07		0.000	61	680	4	
9	16.77		0.000	8	49	1	
Totals			387.839	18336	719781		

File: 98121301.D09 Sample: 35N21-C LCS



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1015 TO 1025.

1015

## HNF-1661 REV. 0

```

=====
Sample Name: BLANK                               Date: 12/12/1998 23:51:38
Data File  : C:\DX\DATA\98121301.D08
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 8             Detector: CDM-1
Analyst    :                                   Column: AG14A-SC,AS14A-SC, SRS
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----

```

```

External      1      1      5700  5Hz  0.00 19.00      0
-----

```

```

***** Peak Report: All Peaks *****

```

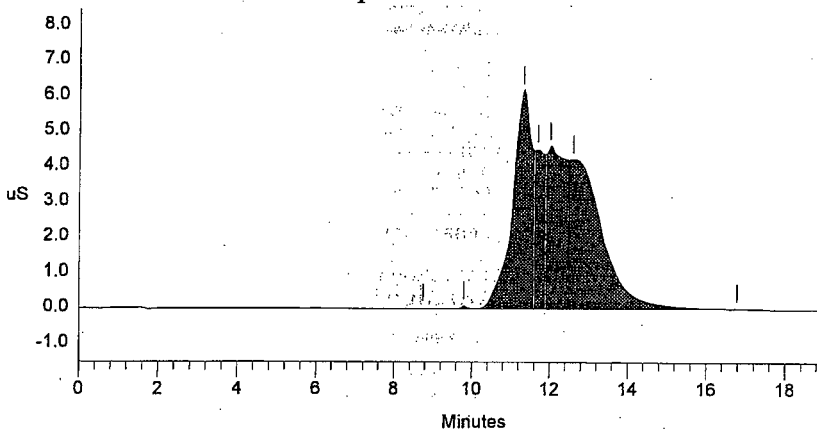
Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	8.75		0.000	6	43	1	
2	9.79		0.000	73	573	1	
3	11.31		0.000	6135	203527	2	
4	11.68		0.000	4488	71512	2	
5	12.00		0.000	4562	146739	2	
6	12.59		0.000	4202	245686	2	
7	16.77		0.000	7	55	1	

```

-----
Totals      0.0000      19473      668135
-----

```

File: 98121301.D08 Sample: BLANK



Sample Name: 34N21-A CCV Date: 12/13/1998 00:35:21  
 Data File : C:\DX\DATA\98121301.D10  
 Method : C:\DX\METHOD\MAS14GLY.MET  
 ACI Address: 1 System: 2 Inject#: 10 Detector: CDM-1  
 Analyst : Column: AG14A-SC, AS14A-SC, SRS

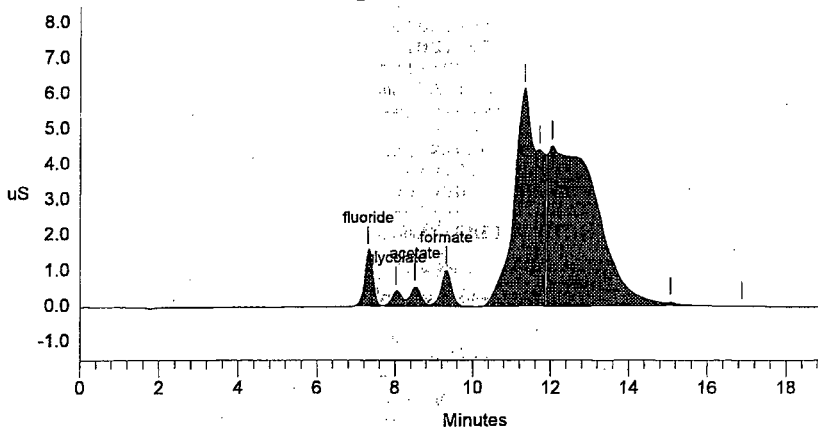
Calibration Volume Dilution Points Rate Start Stop Area Reject

External 1 101 5700 5Hz 0.00 19.00 0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	7.31	fluoride	63.404	1533	22491	2	0.00
2	8.03	glycolate	100.092	408	7304	2	-0.00
3	8.51	acetate	129.072	526	10205	2	0.00
4	9.31	formate	139.330	981	18945	2	0.00
5	11.33		0.000	6137	207160	2	
6	11.71		0.000	4391	63340	2	
7	12.03		0.000	4513	396666	3	
8	15.07		0.000	52	611	4	
9	16.88		0.000	12	138	1	
Totals			431.898	18553	726858		

File: 98121301.D10 Sample: 34N21-A CCV



## HNF-1661 REV. 0

```

=====
Sample Name: PREP BLANK                               Date: 12/13/1998 01:48:11
Data File  : C:\DX\DATA\98121301.D11
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 11                 Detector: CDM-1
Analyst    :                                         Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----

```

```

External      1      1      5700 5Hz  0.00 19.00      0
-----

```

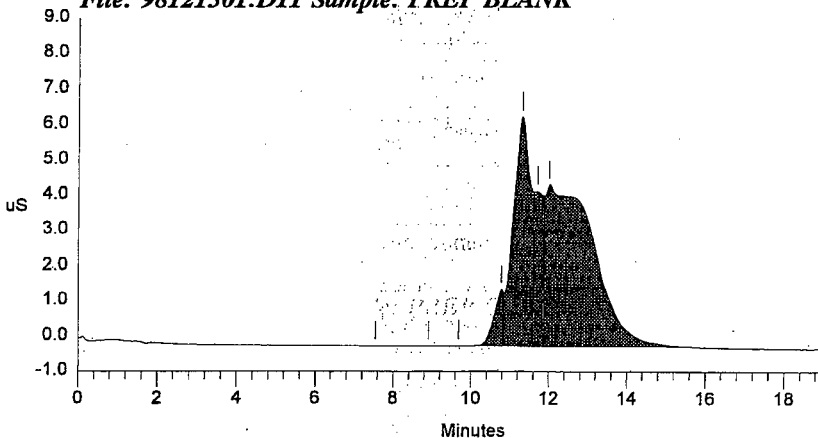
```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	7.55		0.000	1	43	1	
2	8.91		0.000	2	46	1	
3	9.68		0.000	3	30	1	
4	10.77		0.000	1596	25151	2	
5	11.31		0.000	6475	198068	2	
6	11.71		0.000	4374	56294	2	
7	12.00		0.000	4556	397674	2	
Totals			0.000	17006	677306		

File: 98121301.D11 Sample: PREP BLANK



Sample Name: S98T002446 SAM Date: 12/13/1998 02:31:27  
 Data File : C:\DX\DATA\98121301.D13  
 Method : C:\DX\METHOD\MAS14GLY.MET  
 ACI Address: 1 System: 2 Inject#: 13 Detector: CDM-1  
 Analyst : Column: AG14A-SC, AS14A-SC, SRS

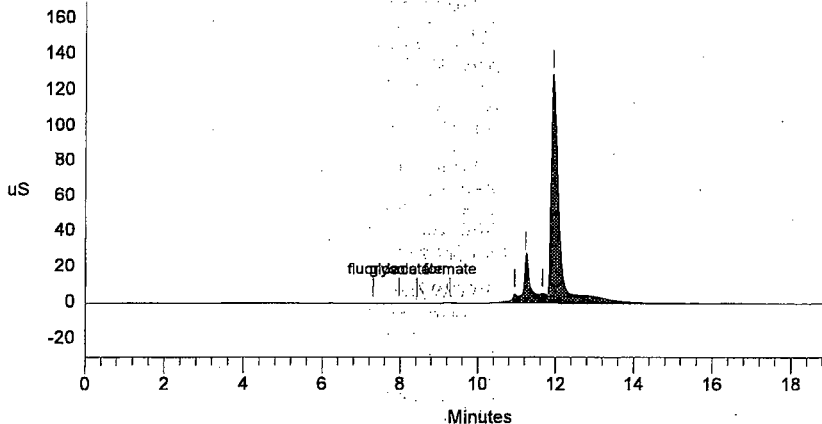
Calibration Volume Dilution Points Rate Start Stop Area Reject

External 1 21 5700 5Hz 0.00 19.00 0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	7.31	fluoride	0.905	42	629	1	0.00
2	7.97	glycolate	4.463	64	1243	2	0.28
3	8.43	acetate	2.954	37	663	2	-0.28
4	9.28	formate	6.987	201	3959	1	0.00
5	10.93		0.000	4918	54348	2	
6	11.23		0.000	26089	304763	2	
7	11.65		0.000	5220	56062	2	
8	11.92		0.000	128473	1912029	2	
Totals			15.308	165045	2333696		

File: 98121301.D13 Sample: S98T002446 SAM



```

=====
Sample Name: S98T002446  DUP                               Date: 12/13/1998 02:51:53
Data File  : C:\DX\DATA\98121301.D14
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 14                      Detector: CDM-1
Analyst    :                                             Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----

```

```

External      1          21    5700  5Hz    0.00  19.00          0
-----

```

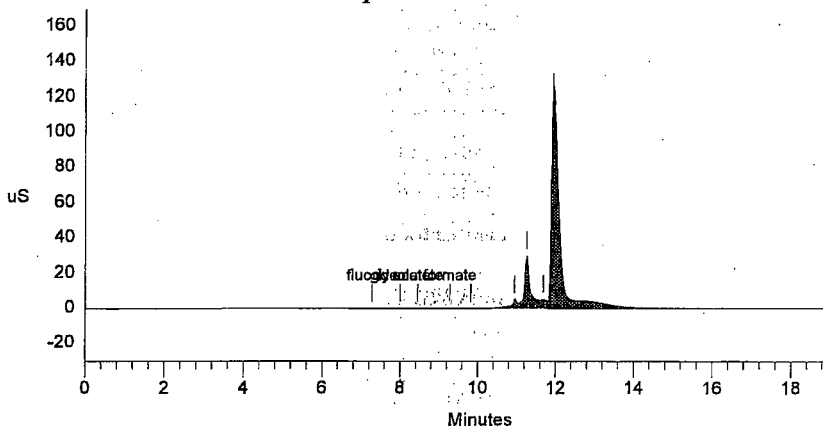
```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	7.28	fluoride	0.688	20	246	1	0.00
2	8.00	glycolate	4.583	71	1287	2	0.29
3	8.45	acetate	3.169	42	750	2	-0.29
4	9.28	formate	7.524	224	4321	2	0.00
5	9.81		0.000	5	36	2	
6	10.93		0.000	4656	57255	2	
7	11.25		0.000	29725	323746	3	
8	11.68		0.000	4158	44938	4	
9	11.92		0.000	119469	1849625	2	
Totals			15.964	158370	2282204		

**File: 98121301.D14 Sample: S98T002446 DUP**



Sample Name: S98T002454 SAM Date: 12/13/1998 03:11:56  
 Data File : C:\DX\DATA\98121301.D15  
 Method : C:\DX\METHOD\MAS14GLY.MET  
 ACI Address: 1 System: 2 Inject#: 15 Detector: CDM-1  
 Analyst : Column: AG14A-SC, AS14A-SC, SRS

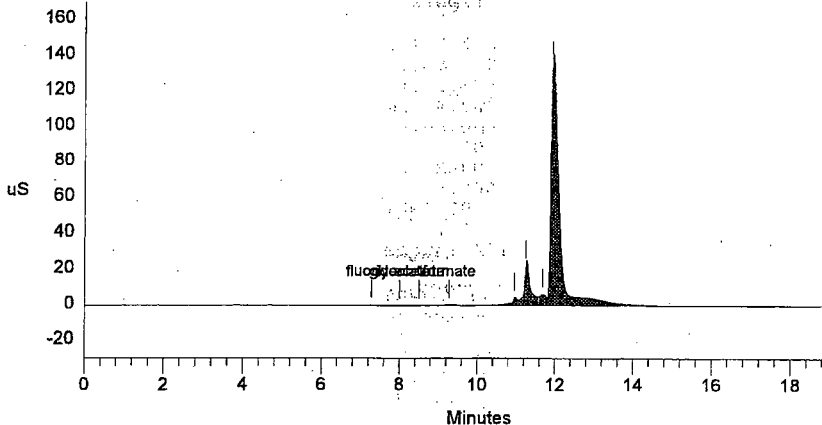
Calibration Volume Dilution Points Rate Start Stop Area Reject

External 1 21 5700 5Hz 0:00 19:00 0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	7.28	fluoride	1.413	99	1527	1	0.00
2	8.00	glycolate	2.902	37	672	2	-0.33
3	8.51	acetate	2.673	32	550	2	0.34
4	9.28	formate	7.628	191	4391	1	0.00
5	10.96		0.000	4248	49662	2	
6	11.25		0.000	22069	274560	2	
7	11.68		0.000	6145	62356	2	
8	11.92		0.000	133874	2084750	2	
Totals			14.617	166694	2478469		

File: 98121301.D15 Sample: S98T002454 SAM





```

=====
Sample Name: S98T002454 DUP                      Date: 12/13/1998 03:31:53
Data File  : C:\DX\DATA\98121301.D16
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 16              Detector: CDM-1
Analyst    :                                     Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

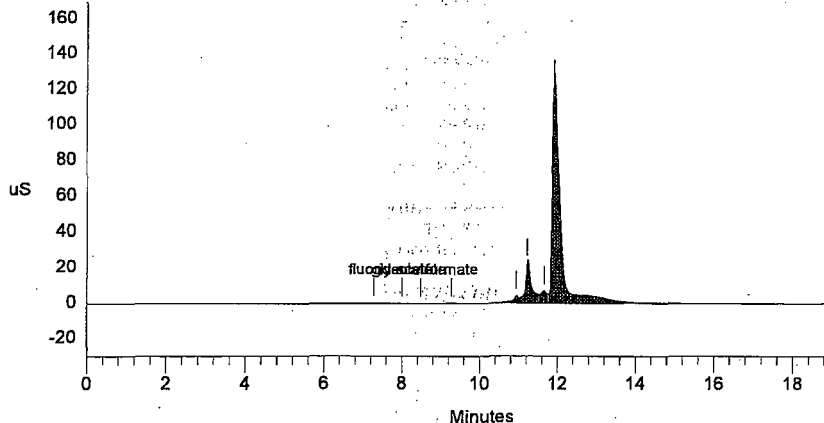
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          21    5700 5Hz   0.00 19.00          0
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	7.28	fluoride	1.262	92	1259	1	0.00
2	8.00	glycolate	3.371	44	844	2	-0.02
3	8.48	acetate	2.810	33	605	2	0.02
4	9.28	formate	6.422	188	3578	1	0.00
5	10.93		0.000	4027	48311	2	
6	11.23		0.000	22616	263585	2	
7	11.65		0.000	6789	73413	2	
8	11.89		0.000	122680	1885087	2	
Totals			13.865	156469	2276681		

File: 98121301.D16 Sample: S98T002454 DUP



## HNF-1661 REV. 0

Sample Name: S98T002522 SAM Date: 12/13/1998 03:52:18  
 Data File : C:\DX\DATA\98121301.D17  
 Method : C:\DX\METHOD\MAS14GLY.MET  
 ACI Address: 1 System: 2 Inject#: 17 Detector: CDM-1  
 Analyst : Column: AG14A-SC, AS14A-SC, SRS

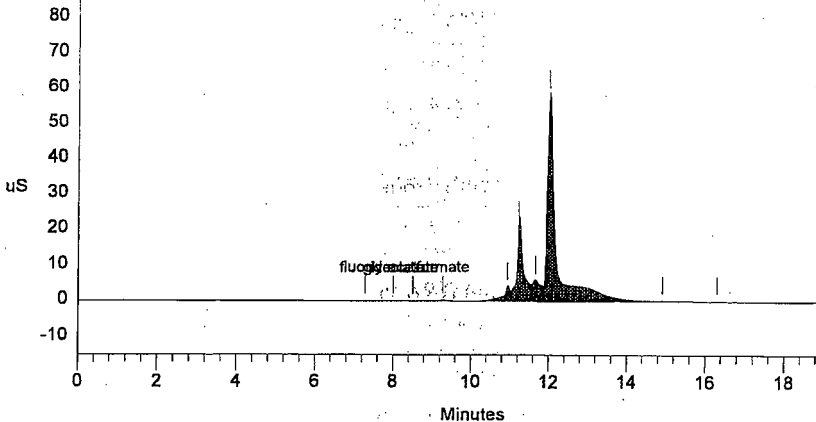
Calibration Volume Dilution Points Rate Start Stop Area Reject

External 1 21 5700 5Hz 0.00 19.00 0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	7.28	fluoride	0.755	27	364	1	0.00
2	8.00	glycolate	1.373	9	114	1	-0.33
3	8.51	acetate	2.337	28	414	1	0.34
4	9.28	formate	7.279	214	4156	1	0.00
5	10.93		0.000	4001	48261	2	
6	11.23		0.000	21151	264417	2	
7	11.65		0.000	5886	81628	2	
8	12.00		0.000	58243	947557	3	
9	14.91		0.000	63	918	4	
10	16.29		0.000	14	137	1	
11	18.88		0.000	1	15	1	
Totals			11.744	89635	1347981		

File: 98121301.D17 Sample: S98T002522 SAM



1023

```

=====
Sample Name: S98T002522 DUP                               Date: 12/13/1998 04:11:55
Data File  : C:\DX\DATA\98121301.D18
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 18                      Detector: CDM-1
Analyst    :                                             Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

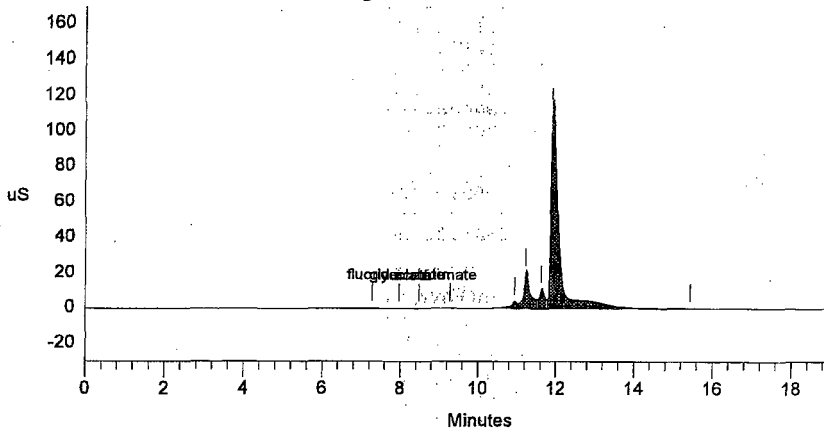
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
External           1           21  5700 5Hz  0.00 19.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	7.28	fluoride	3.119	300	4543	1	0.00
2	7.97	glycolate	1.341	8	102	1	-0.35
3	8.48	acetate	2.435	26	454	1	0.36
4	9.28	formate	6.423	187	3578	1	0.00
5	10.93		0.000	3783	46955	2	
6	11.23		0.000	20195	245982	2	
7	11.63		0.000	10871	102844	2	
8	11.89		0.000	110079	1713035	3	
9	15.44		0.000	41	576	4	
Totals			13.318	145490	2118071		

File: 98121301.D18 Sample: S98T002522 DUP



HNF-1661 REV. 0

```

=====
Sample Name: S98T002522 SPK                      Date: 12/13/1998 04:32:01
Data File  : C:\DX\DATA\98121301.D19
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 19              Detector: CDM-1
Analyst    :                      Column: AG14A-SC,AS14A-SC, SRS
=====

```

```

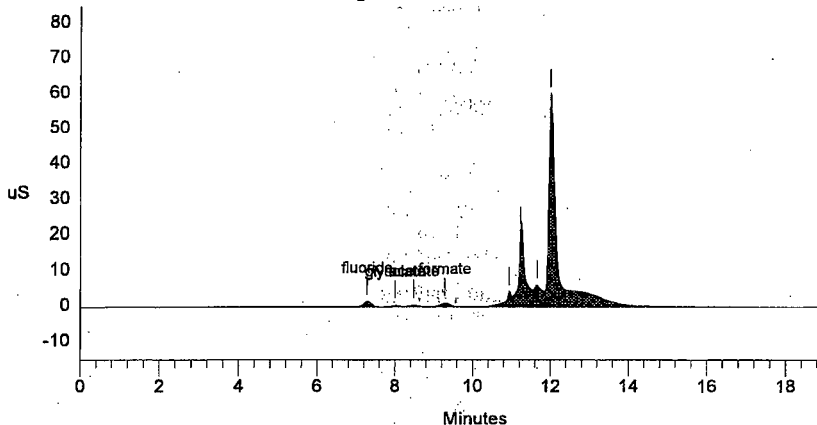
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           21   5700  5Hz   0.00 19.00           0
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	7.28	fluoride	11.985	1409	20341	2	0.00
2	8.00	glycolate	19.620	388	6857	2	-0.02
3	8.48	acetate	23.945	472	9060	2	0.02
4	9.28	formate	30.260	1031	19835	2	0.00
5	10.93		0.000	3951	47803	2	
6	11.23		0.000	21072	263730	2	
7	11.65		0.000	5985	82145	2	
8	12.00		0.000	59848	963548	2	
Totals			85.810	94156	1413317		

**File: 98121301.D19 Sample: S98T002522 SPK**



1025

## LABCORE Completed Worklist Report for Worklist# 27155

Analyst: adp

Instrument: IC4552

Book#: 35N21C

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107, @IC4G-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit		
1	CCB	0	@IC4G-QC F*4	QC	1	<1.10e-2	ug/mL		
1	CCB	0	@IC4G-QC ACETATE2	QC	1	7.40e-02	0.074 ug/mL		
1	CCB	0	@IC4G-QC FORMATE2	QC	1	<2.10e-2	ug/mL		
1	CCB	0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2	ug/mL		
2	LCS-INST	0	@IC4G-QC F*4	QC	5.89e1	5.84e+01	99.151 % Recovery		
2	LCS-INST	0	@IC4G-QC ACETATE2	QC	1.24e2	1.01e+02	81.452 % Recovery		
2	LCS-INST	0	@IC4G-QC FORMATE2	QC	1.19e2	1.08e+02	90.756 % Recovery		
2	LCS-INST	0	@IC4G-QC GLYCOLT1	QC	1.07e2	9.85e+01	92.056 % Recovery		
3	CCV	0	@IC4G-QC F*4	QC	6.21e1	6.06e+01	97.585 % Recovery		
3	CCV	0	@IC4G-QC ACETATE2	QC	1.23e2	1.29e+02	104.878 % Recovery		
3	CCV	0	@IC4G-QC FORMATE2	QC	1.30e2	1.42e+02	109.231 % Recovery		
3	CCV	0	@IC4G-QC GLYCOLT1	QC	1.02e2	1.00e+02	98.039 % Recovery		
4	BLNK-PREP	0	@IC4G-01 F*4-01	SOLID	1	<3.10e-2	ug/g		
4	BLNK-PREP	0	@IC4G-01 ACETATE2	SOLID	1	<2.00e-2	ug/g		
4	BLNK-PREP	0	@IC4G-01 FORMATE2	SOLID	1	<6.20e-2	ug/g		
4	BLNK-PREP	0	@IC4G-01 GLYCOLT1	SOLID	1	<5.60e-2	ug/g		
5	SAMPLE	S98T002531	0	W	@IC4G-01 F*4-01	SOLID	N/A	< 7.109e+01	71.080 ug/g
5	SAMPLE	S98T002531	0	W	@IC4G-01 ACETATE2	SOLID	N/A	3.671e+02	45.860 ug/g
5	SAMPLE	S98T002531	0	W	@IC4G-01 FORMATE2	SOLID	N/A	1.315e+03	142.100 ug/g
5	SAMPLE	S98T002531	0	W	@IC4G-01 GLYCOLT1	SOLID	N/A	1.087e+03	128.400 ug/g
6	DUP	S98T002531	0	W	@IC4G-01 F*4-01	SOLID	<7.11e1	<6.72e1	RPD
6	DUP	S98T002531	0	W	@IC4G-01 ACETATE2	SOLID	3.67e+02	4.19e+02	13.232 RPD
6	DUP	S98T002531	0	W	@IC4G-01 FORMATE2	SOLID	1.32e+03	1.49e+03	12.100 RPD
6	DUP	S98T002531	0	W	@IC4G-01 GLYCOLT1	SOLID	1.09e+03	1.22e+03	11.255 RPD
7	SPK	S98T002531	0	W	@IC4G-01 F*4-01	SOLID	5.89e1	5.58e+01	94.737 % Recovery
7	SPK	S98T002531	0	W	@IC4G-01 ACETATE2	SOLID	1.24e2	1.09e+02	87.903 % Recovery
7	SPK	S98T002531	0	W	@IC4G-01 FORMATE2	SOLID	1.19e2	1.35e+02	113.445 % Recovery
7	SPK	S98T002531	0	W	@IC4G-01 GLYCOLT1	SOLID	1.07e2	1.02e+02	95.327 % Recovery
8	SAMPLE	S98T002541	0	W	@IC4G-01 FORMATE2	SOLID	N/A	1.199e+03	72.840 ug/g
9	DUP	S98T002541	0	W	@IC4G-01 F*4-01	SOLID	7.50e+01	5.60e+01	79.008 RPD
9	DUP	S98T002541	0	W	@IC4G-01 ACETATE2	SOLID	1.49e+02	2.87e+02	63.303 RPD
9	DUP	S98T002541	0	W	@IC4G-01 FORMATE2	SOLID	1.20e+03	1.08e+03	10.526 RPD
9	DUP	S98T002541	0	W	@IC4G-01 GLYCOLT1	SOLID	5.43e+02	6.69e+02	20.792 RPD
10	SAMPLE	S98T002547	0	W	@IC4G-01 ACETATE2	SOLID	N/A	3.793e+02	23.960 ug/g
10	SAMPLE	S98T002547	0	W	@IC4G-01 FORMATE2	SOLID	N/A	1.355e+03	74.280 ug/g
10	SAMPLE	S98T002547	0	W	@IC4G-01 GLYCOLT1	SOLID	N/A	6.924e+02	67.080 ug/g
11	DUP	S98T002547	0	W	@IC4G-01 F*4-01	SOLID	2.75e+02	1.40e+02	65.060 RPD
11	DUP	S98T002547	0	W	@IC4G-01 ACETATE2	SOLID	3.79e+02	3.93e+02	3.627 RPD
11	DUP	S98T002547	0	W	@IC4G-01 FORMATE2	SOLID	1.36e+03	1.38e+03	1.460 RPD
11	DUP	S98T002547	0	W	@IC4G-01 GLYCOLT1	SOLID	6.92e+02	5.70e+02	19.334 RPD

Units shown for QC (BLK/BKG) may not reflect the actual units.

## LABCORE Completed Worklist Report for Worklist# 27155

---

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
----------	-------------	------	--------	--------	-------	-------------	------

---

**Final page for worklist# 27155**

---

Analyst Signature

Date

---

Analyst Signature

Date

*Janno M. Luyck* 1/11/99  
Reviewer Signature Date

11/11/98 19:15  
A-0004-1

HNF-1661 REV. 0

Page: 1

# LABCORE Data Entry Template for Worklist# 27155

Analyst: ADD Instrument: IC 4552 Book# 35N21-C LCS  
34N21-A CCV

Method: LA-533-1105 Rev/Mod F-0

Worklist Comment: U107, @IC4G-01, tdm

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	CCB				@IC4G-QC	QC		
2	LCS-INST				@IC4G-QC	QC		
3	CCV				@IC4G-QC	QC		
4	BLNK-PREP				@IC4G-01	SOLID		
5	SAMPLE	S98T002531	0	W	@IC4G-01	SOLID	98000401	U-107 (2)
		Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCOLT1						
6	DUP	S98T002531	0	W	@IC4G-01	SOLID		
7	SPK	S98T002531	0	W	@IC4G-01	SOLID		
8	SAMPLE	S98T002541	0	W	@IC4G-01	SOLID	98000401	U-107 (2)
		Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCOLT1						
9	DUP	S98T002541	0	W	@IC4G-01	SOLID		
10	SAMPLE	S98T002547	0	W	@IC4G-01	SOLID	98000401	U-107 (2)
		Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCOLT1						
11	DUP	S98T002547	0	W	@IC4G-01	SOLID		

## Final page for worklist # 27155

Anthony Perenta  
Analyst Signature Date 12-14-98

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments:

upload 1-11-99  
J. Howell  
27155 DEC. CSV

Faxed 12-14-98

Rejected some analytes on  
S98T002541 + 2547 for high RPD  
Rest validated. 1/11/99  
JM Suye

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Data Reprocessed On 12/13/1998 22:11:59

```

=====
Sample Name: 35N21-C LCS                               Date: 12/13/1998 22:06:31
Data File  : C:\DX\DATA\98121311.D02
Method     : C:\DX\METHOD\AAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 2
Analyst    : Anthony Parrella                       Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

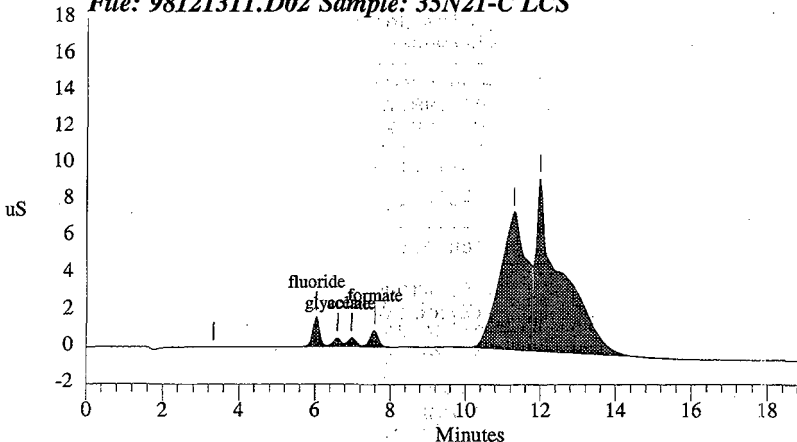
*12-13-98*

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	5700	5Hz	0.00	19.00		0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	3.32		0.000	7	126	1	
2	6.03	fluoride	58.410	1620	20628	2	0.00
3	6.59	glycolate	98.536	460	7183	2	0.00
4	6.96	acetate	100.533	460	7853	2	0.00
5	7.57	formate	107.529	899	14402	2	0.00
6	11.28		0.000	7435	355658	2	
7	11.97		0.000	9357	447515	2	
Totals			365.009	20238	853364		

File: 98121311.D02 Sample: 35N21-C LCS



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1029 TO 1039.



```

=====
Sample Name: BLANK                      Date: 12/13/1998 21:27:36
Data File  : C:\DX\DATA\98121311.D01
Method     : C:\DX\METHOD\AAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 1      Detector: CDM-1
Analyst    :                            Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

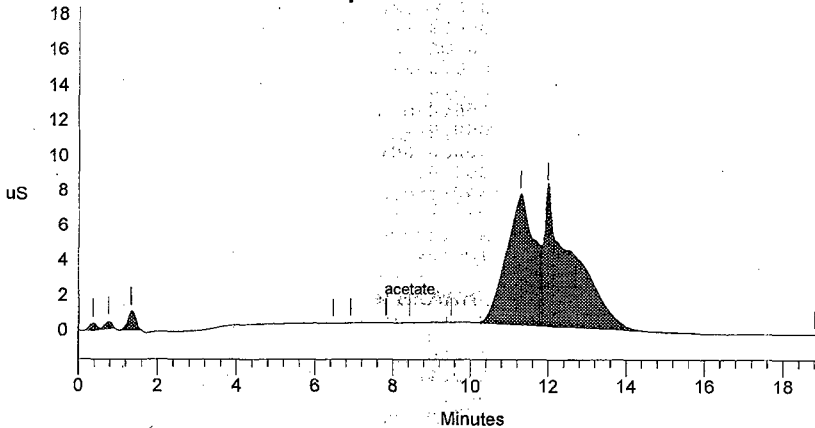
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          1 5700 5Hz 0.00 19.00          0
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.37		0.000	407	5121	2	
2	0.77		0.000	431	5472	2	
3	1.33		0.000	1058	15468	1	
4	6.47		0.000	3	9	1	
5	6.91		0.000	2	62	1	
6	7.81		0.000	2	91	1	
7	8.43	acetate	0.074	2	95	1	0.00
8	9.49		0.000	2	104	1	
9	11.28		0.000	7407	360558	2	
10	11.97		0.000	7980	424448	2	
11	18.80		0.000	4	27	1	
Totals			0.074	17299	811456		

File: 98121311.D01 Sample: BLANK



Data Reprocessed On 12/14/1998 00:14:57

```

=====
Sample Name: 34N21-A CCV                               Date: 12/14/1998 00:00:36
Data File  : C:\DX\DATA\98121321.D07
Method     : C:\DX\METHOD\AAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 7                   Detector: CDM-1
Analyst    :                                           Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----

```

```

External      1          101    5700    5Hz    0.00  19.00          0

```

```

***** Peak Report: All Peaks *****

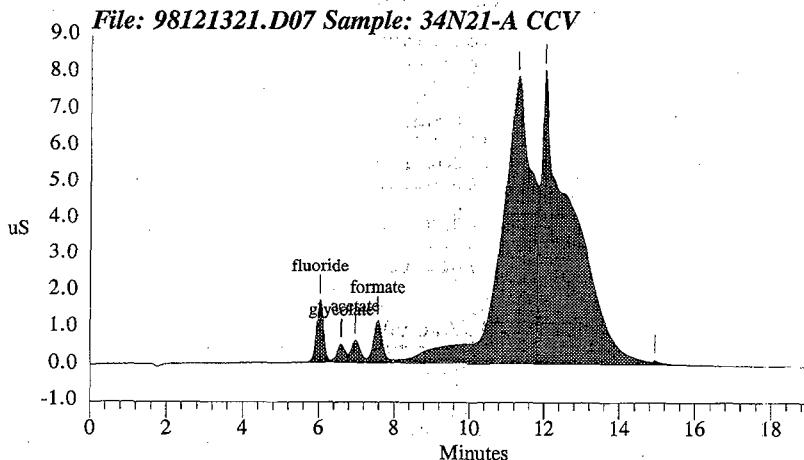
```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	6.03	fluoride	60.608	1682	21447	2	0.00
2	6.59	glycolate	100.401	486	7328	2	0.00
3	6.96	acetate	128.853	585	10187	2	0.00
4	7.55	formate	141.506	1109	19257	2	0.00
5	11.28		0.000	7842	450530	2	
6	12.00		0.000	8040	455217	3	
7	14.93		0.000	61	612	4	

```

-----
Totals      431.368      19806      964578

```



```

=====
Sample Name: PREP BLANK          Date: 12/13/1998 22:52:09
Data File  : C:\DX\DATA\98121321.D04
Method     : C:\DX\METHOD\AAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 4
Analyst    :                      Column: AG14A-SC,AS14A-SC, SRS
Detector: CDM-1
=====

```

```

-----
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           1    5700 5Hz   0.00 19.00           0
-----

```

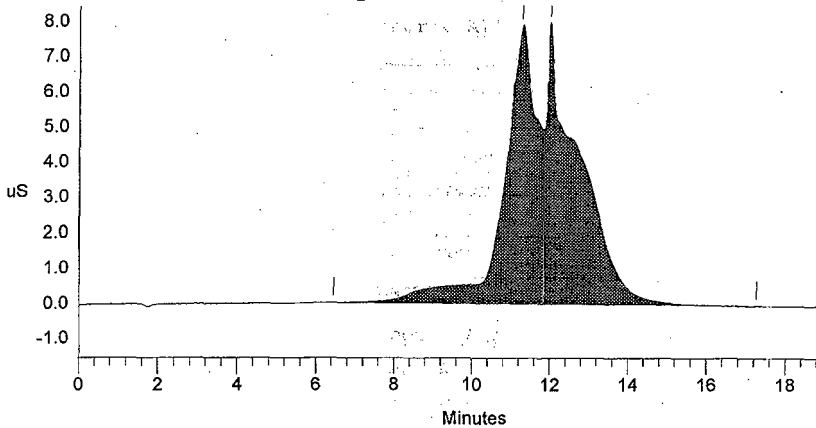
```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	6.44		0.000	0	6	1	
2	11.28		0.000	7840	462132	2	
3	12.00		0.000	7956	456806	2	
4	17.25		0.000	5	25	1	
Totals			0.000	15801	918969		

**File: 98121321.D04 Sample: PREP BLANK**



Data Reprocessed On 01/11/1999 10:09:01

```

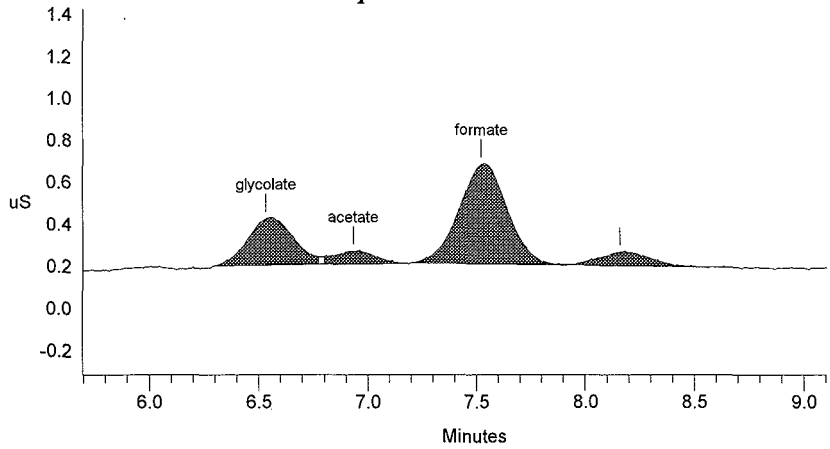
=====
Sample Name: S98T002531 SAM                               Date: 12/14/1998 00:34:29
Data File  : E:\DATA\98121321.D08
Method     : C:\DX\METHOD\AAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 8                       Detector: CDM-1
Analyst    :                                               Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	11	5700	5Hz	5.70	9.10		0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	6.53	glycolate	5.214	220	3263	2	0.00
2	6.93	acetate	1.761	62	828	2	0.00
3	7.52	formate	6.309	477	7377	2	0.00
4	8.16		0.000	66	1092	2	
5	10.53		0.000	5076	54516	2	
6	10.99		0.000	43776	557219	2	
7	11.60		0.000	44568	305342	2	
8	11.79		0.000	70910	1214100	2	
Totals			13.284	165155	2143736		

File: 98121321.D08 Sample: S98T002531 SAM



Data Reprocessed On 01/11/1999 10:11:05

```

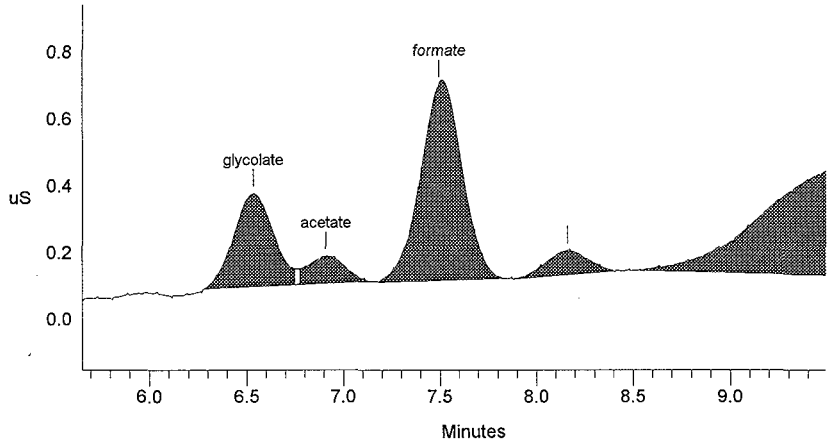
=====
Sample Name: S98T002531 DUP                               Date: 12/14/1998 00:56:15
Data File  : E:\DATA\98121321.D09
Method     : C:\DX\METHOD\AAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 9                       Detector: CDM-1
Analyst    :                                             Column: AG14A-SC, AS14A-SC, SRS
=====
    
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	11	5700	5Hz	5.66	9.49		0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	6.53	glycolate	6.207	279	3964	2	0.00
2	6.91	acetate	2.126	82	1109	2	0.00
3	7.49	formate	7.558	588	8994	1	0.00
4	8.16		0.000	73	1110	1	
5	10.51		0.000	5546	92374	2	
6	10.99		0.000	49235	609397	2	
7	11.60		0.000	40305	280086	2	
8	11.79		0.000	81208	1324552	2	
9	16.13		0.000	15	167	1	
Totals			15.890	177331	2321753		

File: 98121321.D09 Sample: S98T002531 DUP



Data Reprocessed On 01/11/1999 10:12:54

```

=====
Sample Name: S98T002531 SPK                               Date: 12/14/1998 01:18:58
Data File  : E:\DATA\98121321.D10
Method     : C:\DX\METHOD\AAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 10
Analyst    :                               Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

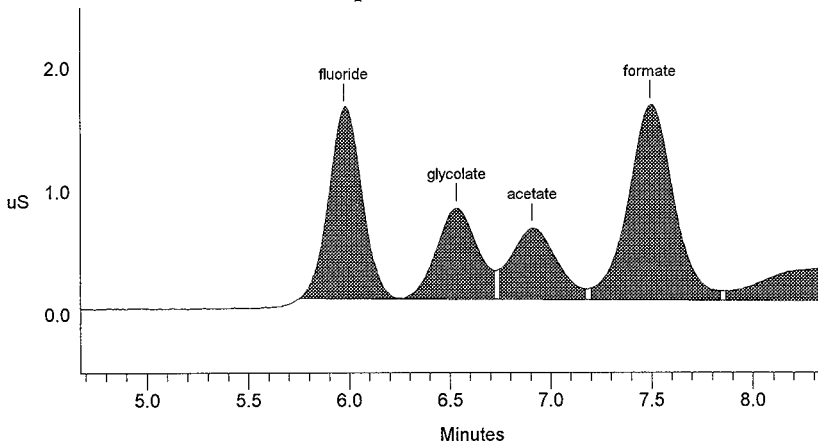
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           11  5700  5Hz  4.67  8.35           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.97	fluoride	5.581	1547	17960	2	0.00
2	6.53	glycolate	15.418	745	10561	2	0.00
3	6.91	acetate	12.709	583	9186	2	0.00
4	7.49	formate	19.770	1581	25021	2	0.00
5	10.51		0.000	5149	118752	2	
6	10.99		0.000	45908	582851	2	
7	11.60		0.000	45973	314158	2	
8	11.79		0.000	73874	1254955	2	
Totals			53.479	175358	2333444		

File: 98121321.D10 Sample: S98T002531 SPK



Data Reprocessed On 01/11/1999 10:17:12

```

=====
Sample Name: S98T002541 SAM                               Date: 12/14/1998 01:42:45
Data File  : E:\DATA\98121321.D11
Method     : C:\DX\METHOD\AAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 11                      Detector: CDM-1
Analyst    :                                               Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

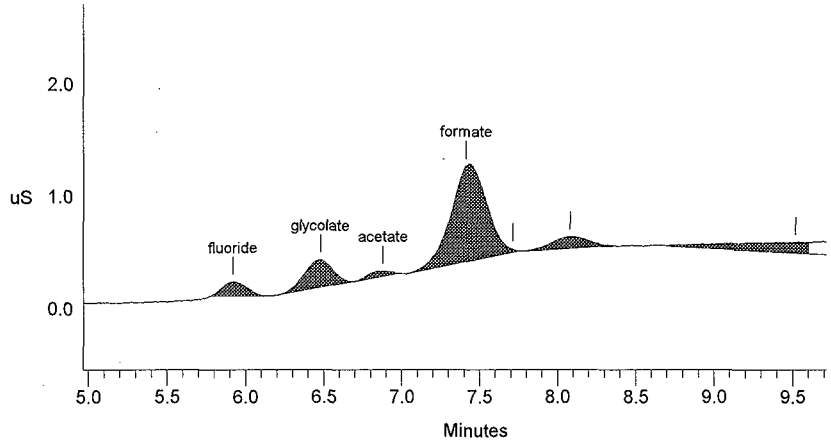
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           6 5700 5Hz 4.97 9.72           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.73		0.000	66	644	1	
2	5.92	fluoride	0.383	128	1395	1	0.00
3	6.48	glycolate	2.774	247	3172	2	0.00
4	6.88	acetate	0.762	51	547	2	0.00
5	7.41	formate	6.122	852	13764	3	0.00
6	7.71		0.000	7	1	4	
7	8.08		0.000	104	1761	1	
8	9.52		0.000	97	3115	2	
9	10.48		0.000	6894	84728	2	
10	10.93		0.000	57722	721223	2	
11	11.55		0.000	336739	5766855	2	
Totals			10.040	402907	6597206		

File: 98121321.D11 Sample: S98T002541 SAM



Data Reprocessed On 01/11/1999 10:22:07

```

=====
Sample Name: S98T002541  DUP                               Date: 12/14/1998 02:05:28
Data File  : E:\DATA\98121321.D12
Method     : C:\DX\METHOD\AAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 12                      Detector: CDM-1
Analyst    :                                               Column: AG14A-SC, AS14A-SC, SRS
=====
    
```

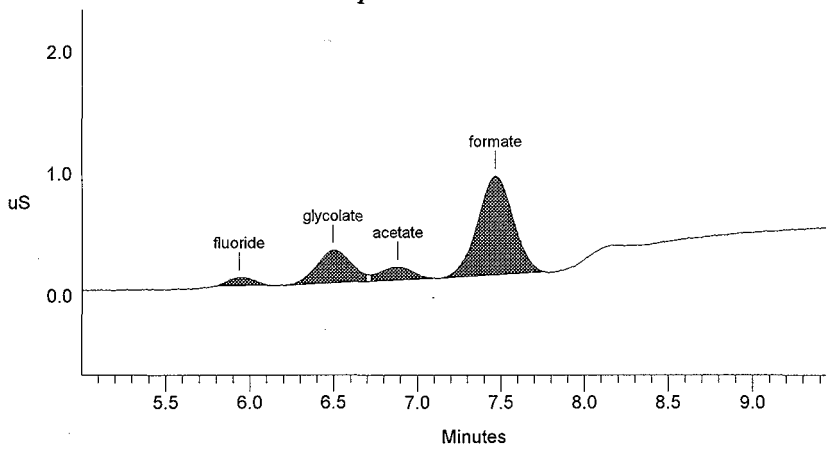
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1             6 5700 5Hz 5.00 9.44           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.73		0.000	57	539	1	
2	5.93	fluoride	0.279	69	756	1	0.00
3	6.49	glycolate	3.334	268	3897	2	0.00
4	6.88	acetate	1.430	108	1491	2	0.00
5	7.47	formate	5.398	812	12033	1	0.00
6	16.67		0.000	13	149	1	
Totals			10.441	1327	18865		

File: 98121321.D12 Sample: S98T002541 DUP





Data Reprocessed On 01/11/1999 10:24:24

```

=====
Sample Name: S98T002547 SAM                               Date: 12/14/1998 02:35:01
Data File  : E:\DATA\98121321.D13
Method     : C:\DX\METHOD\AAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 13                      Detector: CDM-1
Analyst    :                                               Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

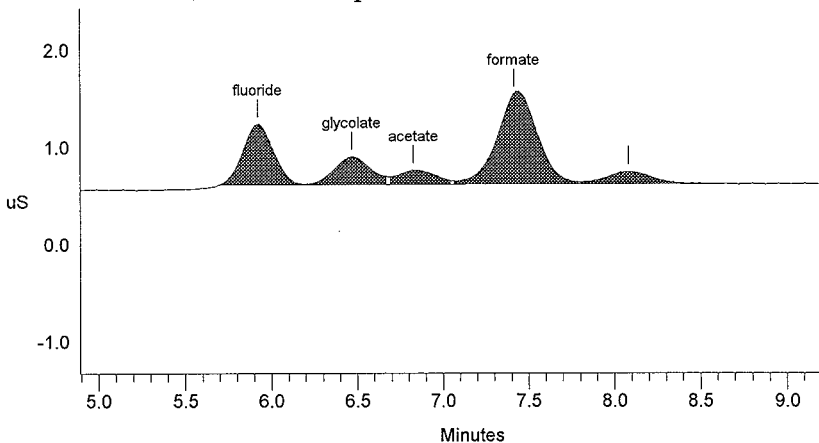
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           6 5700 5Hz 4.89 9.21          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.73		0.000	56	406	1	
2	5.92	fluoride	1.378	618	7563	2	0.00
3	6.47	glycolate	3.467	279	4070	2	0.00
4	6.83	acetate	1.899	139	2152	2	0.00
5	7.41	formate	6.784	920	15353	2	0.00
6	8.08		0.000	124	2256	2	
7	10.48		0.000	7495	85163	2	
8	10.93		0.000	61663	776732	2	
9	11.57		0.000	314649	5219050	2	
Totals			13.529	385942	6112744		

File: 98121321.D13 Sample: S98T002547 SAM



Data Reprocessed On 01/11/1999 10:29:09

```

=====
Sample Name: S98T002547 DUP                               Date: 12/14/1998 02:58:58
Data File  : E:\DATA\98121321.D14
Method     : C:\DX\METHOD\AAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 14                      Detector: CDM-1
Analyst    :                                               Column: AG14A-SC, AS14A-SC, SRS
=====
    
```

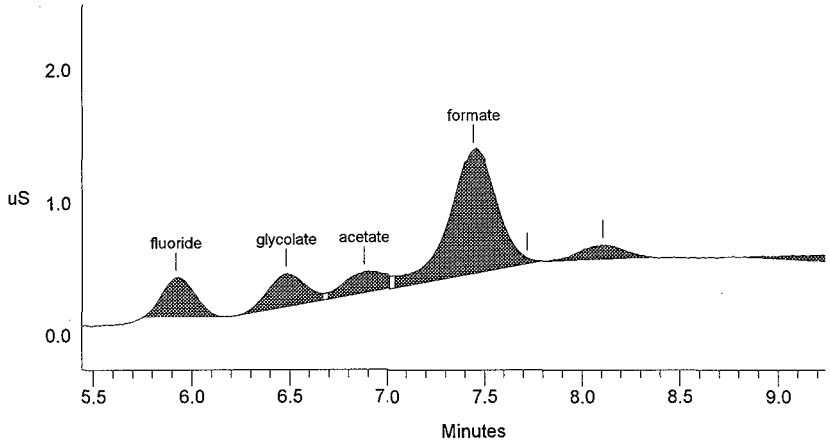
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1             6 5700 5Hz  5.44  9.24         0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.73		0.000	64	625	1	
2	5.92	fluoride	0.721	298	3487	1	0.00
3	6.48	glycolate	2.933	250	3377	2	0.00
4	6.88	acetate	2.020	159	2322	2	0.00
5	7.44	formate	7.103	935	16117	3	0.00
6	7.72		0.000	3	4	4	
7	8.11		0.000	104	1662	1	
8	10.48		0.000	7330	91006	2	
9	10.93		0.000	60192	750881	2	
10	11.57		0.000	324916	5477471	2	
Totals			12.776	394251	6346953		

File: 98121321.D14 Sample: S98T002547 DUP



# LABCORE Completed Worklist Report for Worklist# 27204

Analyst: adp

Instrument: IC40S2

Book#: 28N21B

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107 (2), @IC-01 skm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 CCB	0	@IC-QC F	QC	1	<1.20e-2		ug/mL
1 CCB	0	@IC-QC CL	QC	1	<1.70e-2		ug/mL
1 CCB	0	@IC-QC NO2	QC	1	<1.08e-1		ug/mL
1 CCB	0	@IC-QC BR	QC	1	<1.25e-1		ug/mL
1 CCB	0	@IC-QC NO3	QC	1	<1.39e-1		ug/mL
1 CCB	0	@IC-QC P04	QC	1	<1.20e-1		ug/mL
1 CCB	0	@IC-QC SO4	QC	1	<1.38e-1		ug/mL
1 CCB	0	@IC-QC OXALATE2	QC	1	<1.05e-1		ug/mL
2 LCS-INST	0	@IC-QC F	QC	5.90e1	6.29e+01	106.610 % Recovery	
2 LCS-INST	0	@IC-QC CL	QC	8.00e1	8.66e+01	108.250 % Recovery	
2 LCS-INST	0	@IC-QC NO2	QC	5.48e2	5.56e+02	101.460 % Recovery	
2 LCS-INST	0	@IC-QC BR	QC	5.86e2	6.16e+02	105.119 % Recovery	
2 LCS-INST	0	@IC-QC NO3	QC	5.92e2	5.93e+02	100.169 % Recovery	
2 LCS-INST	0	@IC-QC P04	QC	5.47e2	5.42e+02	99.086 % Recovery	
2 LCS-INST	0	@IC-QC SO4	QC	6.38e2	6.54e+02	102.508 % Recovery	
2 LCS-INST	0	@IC-QC OXALATE2	QC	5.40e2	5.49e+02	101.667 % Recovery	
3 CCV	0	@IC-QC F	QC	6.40e1	6.82e+01	106.562 % Recovery	
3 CCV	0	@IC-QC CL	QC	9.00e1	9.48e+01	105.333 % Recovery	
3 CCV	0	@IC-QC NO2	QC	5.62e2	5.55e+02	98.754 % Recovery	
3 CCV	0	@IC-QC BR	QC	6.30e2	6.61e+02	104.921 % Recovery	
3 CCV	0	@IC-QC NO3	QC	6.98e2	7.60e+02	108.883 % Recovery	
3 CCV	0	@IC-QC P04	QC	6.32e2	6.21e+02	98.259 % Recovery	
3 CCV	0	@IC-QC SO4	QC	6.99e2	7.29e+02	104.292 % Recovery	
3 CCV	0	@IC-QC OXALATE2	QC	5.53e2	5.79e+02	104.702 % Recovery	
4 BLNK-PREP	0	@IC-01 F-02	SOLID	1	<1.20e-2		ug/g
4 BLNK-PREP	0	@IC-01 CL-02	SOLID	1	<1.70e-2		ug/g
4 BLNK-PREP	0	@IC-01 NO2-02	SOLID	1	3.11e-01	0.311	ug/g
4 BLNK-PREP	0	@IC-01 BR-02	SOLID	1	<1.25e-1		ug/g
4 BLNK-PREP	0	@IC-01 NO3-02	SOLID	1	1.64e-01	0.164	ug/g
4 BLNK-PREP	0	@IC-01 P04-02	SOLID	1	<1.20e-1		ug/g
4 BLNK-PREP	0	@IC-01 SO4-02	SOLID	1	<1.38e-1		ug/g
4 BLNK-PREP	0	@IC-01 OXALATE2	SOLID	1	<1.05e-1		ug/g
5 SAMPLE	S98T002339	0 W @IC-01 F-02	SOLID	N/A	2.704e+02	98.890	ug/g
5 SAMPLE	S98T002339	0 W @IC-01 CL-02	SOLID	N/A	3.781e+03	140.100	ug/g
5 SAMPLE	S98T002339	0 W @IC-01 NO2-02	SOLID	N/A	4.035e+04	890.100	ug/g
5 SAMPLE	S98T002339	0 W @IC-01 BR-02	SOLID	N/A	1.030e+03	1030.000	ug/g
5 SAMPLE	S98T002339	0 W @IC-01 NO3-02	SOLID	N/A	2.895e+05	1146.000	ug/g
5 SAMPLE	S98T002339	0 W @IC-01 P04-02	SOLID	N/A	5.753e+04	988.900	ug/g
5 SAMPLE	S98T002339	0 W @IC-01 SO4-02	SOLID	N/A	1.682e+03	1137.000	ug/g
5 SAMPLE	S98T002339	0 W @IC-01 OXALATE2	SOLID	N/A	9.998e+03	865.500	ug/g
6 DUP	S98T002339	0 W @IC-01 F-02	SOLID	2.70e+02	2.80e+02	3.636	RPD

# LABCORE Completed Worklist Report for Worklist# 27204

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
6 DUP	S98T002339	0 W	@IC-01	CL-02	SOLID	3.78e+03	3.64e+03	3.774 RPD
6 DUP	S98T002339	0 W	@IC-01	NO2-02	SOLID	4.04e+04	3.89e+04	3.783 RPD
6 DUP	S98T002339	0 W	@IC-01	BR-02	SOLID	<1.03e3	<1.02e3	RPD
6 DUP	S98T002339	0 W	@IC-01	NO3-02	SOLID	2.90e+05	2.91e+05	0.344 RPD
6 DUP	S98T002339	0 W	@IC-01	PO4-02	SOLID	5.75e+04	5.70e+04	0.873 RPD
6 DUP	S98T002339	0 W	@IC-01	SO4-02	SOLID	1.68e+03	1.57e+03	6.769 RPD
6 DUP	S98T002339	0 W	@IC-01	OXALATE2	SOLID	1.00e+04	1.06e+04	5.825 RPD
7 SAMPLE	S98T002340	0 W	@IC-01	F-02	SOLID	N/A	1.162e+03	95.900 ug/g
7 SAMPLE	S98T002340	0 W	@IC-01	CL-02	SOLID	N/A	4.279e+03	135.800 ug/g
7 SAMPLE	S98T002340	0 W	@IC-01	NO2-02	SOLID	N/A	4.445e+04	863.100 ug/g
7 SAMPLE	S98T002340	0 W	@IC-01	BR-02	SOLID	N/A	< 9.988e+02	998.800 ug/g
7 SAMPLE	S98T002340	0 W	@IC-01	NO3-02	SOLID	N/A	2.684e+05	1111.000 ug/g
7 SAMPLE	S98T002340	0 W	@IC-01	PO4-02	SOLID	N/A	5.012e+04	959.000 ug/g
7 SAMPLE	S98T002340	0 W	@IC-01	SO4-02	SOLID	N/A	1.709e+03	1103.000 ug/g
7 SAMPLE	S98T002340	0 W	@IC-01	OXALATE2	SOLID	N/A	3.073e+03	838.900 ug/g
8 DUP	S98T002340	0 W	@IC-01	F-02	SOLID	1.16e+03	1.36e+03	15.873 RPD
8 DUP	S98T002340	0 W	@IC-01	CL-02	SOLID	4.28e+03	3.91e+03	9.035 RPD
8 DUP	S98T002340	0 W	@IC-01	NO2-02	SOLID	4.44e+04	4.01e+04	10.178 RPD
8 DUP	S98T002340	0 W	@IC-01	BR-02	SOLID	<9.99e2	<1.03e3	RPD
8 DUP	S98T002340	0 W	@IC-01	NO3-02	SOLID	2.68e+05	2.63e+05	1.883 RPD
8 DUP	S98T002340	0 W	@IC-01	PO4-02	SOLID	5.01e+04	3.18e+04	44.689 RPD
8 DUP	S98T002340	0 W	@IC-01	SO4-02	SOLID	1.71e+03	<1.14e3	RPD
8 DUP	S98T002340	0 W	@IC-01	OXALATE2	SOLID	3.07e+03	2.82e+03	8.489 RPD
9 SAMPLE	S98T002345	0 W	@IC-01	F-02	SOLID	N/A	9.837e+01	97.950 ug/g
9 SAMPLE	S98T002345	0 W	@IC-01	CL-02	SOLID	N/A	1.251e+03	138.800 ug/g
9 SAMPLE	S98T002345	0 W	@IC-01	NO2-02	SOLID	N/A	1.519e+04	881.900 ug/g
9 SAMPLE	S98T002345	0 W	@IC-01	BR-02	SOLID	N/A	< 1.021e+03	1020.000 ug/g
9 SAMPLE	S98T002345	0 W	@IC-01	NO3-02	SOLID	N/A	5.600e+05	1135.000 ug/g
9 SAMPLE	S98T002345	0 W	@IC-01	PO4-02	SOLID	N/A	1.626e+04	979.500 ug/g
9 SAMPLE	S98T002345	0 W	@IC-01	SO4-02	SOLID	N/A	< 1.127e+03	1127.000 ug/g
9 SAMPLE	S98T002345	0 W	@IC-01	OXALATE2	SOLID	N/A	1.404e+03	857.300 ug/g
10 DUP	S98T002345	0 W	@IC-01	F-02	SOLID	9.84e+01	1.08e+02	9.302 RPD
10 DUP	S98T002345	0 W	@IC-01	CL-02	SOLID	1.25e+03	1.21e+03	3.252 RPD
10 DUP	S98T002345	0 W	@IC-01	NO2-02	SOLID	1.52e+04	1.47e+04	3.344 RPD
10 DUP	S98T002345	0 W	@IC-01	BR-02	SOLID	<1.02e3	<1.02e3	RPD
10 DUP	S98T002345	0 W	@IC-01	NO3-02	SOLID	5.60e+05	5.71e+05	1.945 RPD
10 DUP	S98T002345	0 W	@IC-01	PO4-02	SOLID	1.63e+04	1.78e+04	8.798 RPD
10 DUP	S98T002345	0 W	@IC-01	SO4-02	SOLID	<1.13e3	<1.13e3	RPD
10 DUP	S98T002345	0 W	@IC-01	OXALATE2	SOLID	1.40e+03	9.76e+02	35.690 RPD

Final page for worklist# 27204

Analyst Signature

Date

Analyst Signature

Date

*James M. Feys* 11/17/98  
Reviewer Signature Date

HNF-1661 REV. 0

Page: 1

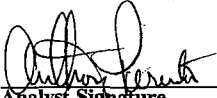
11/16/98 10:22  
A-0004-1

## LABCORE Data Entry Template for Worklist# 27204

Analyst: ADP Instrument: IC Book# 29N21-B LCS  
28N21-B CCV  
 Method: LA-533-105 Rev/Mod F-0  
 Worklist Comment: U107 (2); @IC-01 skm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC-QC	QC		
2	LCS-INST		@IC-QC	QC		
3	CCV		@IC-QC	QC		
4	BLNK-PREP		@IC-01	SOLID		
5	SAMPLE	S98T002339 0 W	@IC-01	SOLID	98000358	U-107 (2)
		Analytes Requested: BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02				
6	DUP	S98T002339 0 W	@IC-01	SOLID		
7	SAMPLE	S98T002340 0 W	@IC-01	SOLID	98000358	U-107 (2)
		Analytes Requested: BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02				
8	DUP	S98T002340 0 W	@IC-01	SOLID		
9	SAMPLE	S98T002345 0 W	@IC-01	SOLID	98000358	U-107 (2)
		Analytes Requested: BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02				
10	DUP	S98T002345 0 W	@IC-01	SOLID		

Final page for worklist # 27204

  
 Analyst Signature \_\_\_\_\_ Date 11-16-98

\_\_\_\_\_  
 Analyst Signature Date

Data Entry Comments:

updated 11-17-98  
John Howell  
27204NOV.CSV

Validated 11/17/98 AMT

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

1042

Sample Name: 29N21-B LCS Date: 11/16/1998 21:55:19  
 Data File : C:\DX\DATA\98111621.D09  
 Method : C:\DX\METHOD\4000SYS2.MET  
 ACI Address: 1 System: 2 Inject#: 9 Detector: CDM-1  
 Analyst: *Patricia Parvatin* Column: AG4A/AS4A anion column

*11-16-98*

Calibration Volume Dilution Points Rate Start Stop Area Reject

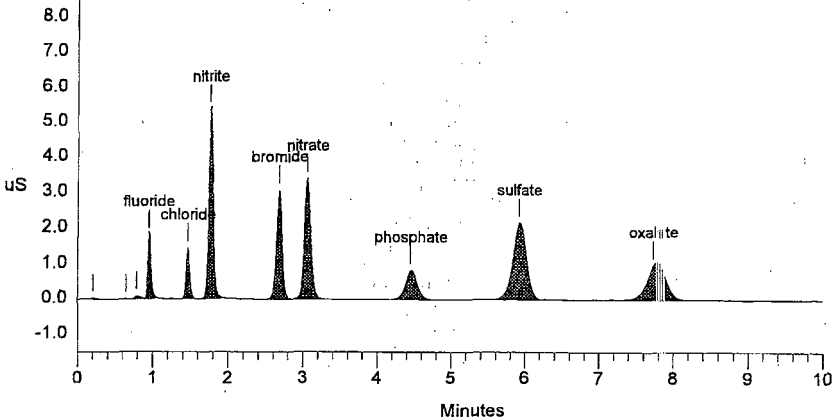
External 1 101 3000 5Hz 0.00 10.00 30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.21		0.000	24	151	1	
3	0.79		0.000	80	377	2	
4	0.95	fluoride	62.864	106.55	1806	5442	2 -0.35
5	1.47	chloride	86.577	108.22	1436	4851	1 -2.65
6	1.76	nitrite	555.615	101.39	5364	21704	1 -3.83
7	2.68	bromide	615.717	105.07	3071	15910	1 -4.63
8	3.05	nitrate	593.422	100.24	3389	20385	1 -0.54
9	4.45	phosphate	542.329	99.15	823	9267	1 -4.02
10	5.92	sulfate	653.625	102.45	2158	27766	1 -3.48
11	7.73	oxalate	548.779	101.62	976	18431	1 -3.97

Totals 3658.927 19127 124285

File: 98111621.D09 Sample: 29N21-B LCS



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1043 TO 1052.

```

=====
Sample Name: BLANK                               Date: 11/16/1998 21:44:19
Data File  : C:\DX\DATA\98111621.D08
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 8             Detector: CDM-1
Analyst    :                                   Column: AG4A/AS4A anion column
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----

```

```

External      1          1    3000 5Hz    0.00 10.00          30
-----

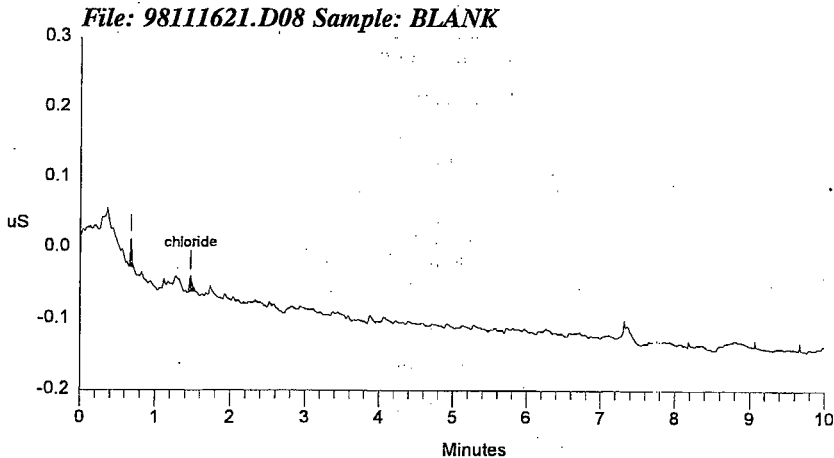
```

```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.68		0.000	39	57	1	
2	1.47	chloride	0.012	21	51	1	-2.21
Totals			0.012	60	109		



HNF-1661 REV. 0

```

=====
Sample Name: 28N21-B CCV          Date: 11/16/1998 22:07:23
Data File  : C:\DX\DATA\98111621.D10
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 10      Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====

```

```

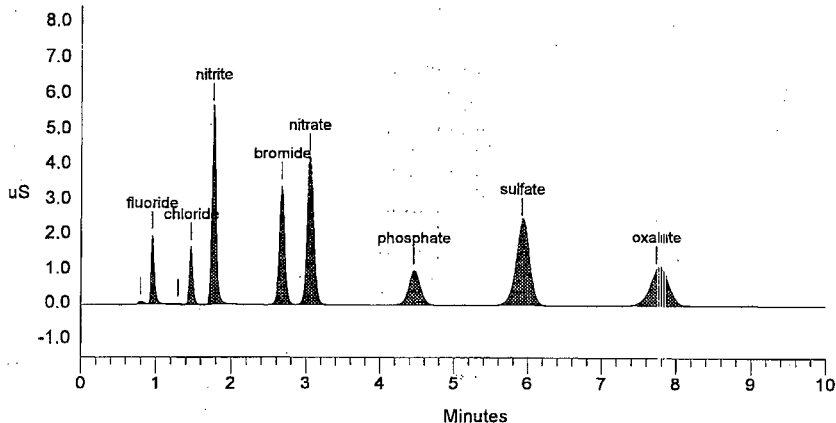
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          101    3000  5Hz   0.00 10.00          30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	75	304	2	
2	0.95	fluoride	68.205	1959	5914	2	-0.35
3	1.29		0.000	21	129	2	
4	1.47	chloride	94.814	1651	5322	2	-2.65
5	1.76	nitrite	554.506	5611	21660	1	-3.83
6	2.67	bromide	661.051	3384	17117	1	-4.86
7	3.05	nitrate	760.326	4206	26315	1	-0.76
8	4.45	phosphate	621.477	981	10649	1	-4.02
9	5.92	sulfate	729.253	2394	31051	1	-3.48
10	7.73	oxalate	578.809	1036	19446	1	-3.97
Totals			4068.441	21317	137907		

File: 98111621.D10 Sample: 28N21-B CCV





```

=====
Sample Name: PREP BLANK                      Date: 11/15/1998 22:21:19
Data File  : C:\DX\DATA\98111621.D11
Method     : C:\DX\METHOD\4000SYS2.MET
ACT Address: 1 System: 2 Inject#: 11         Detector: CDM-1
Analyst    :                               Column: AG4A/AS4A anion column
=====

```

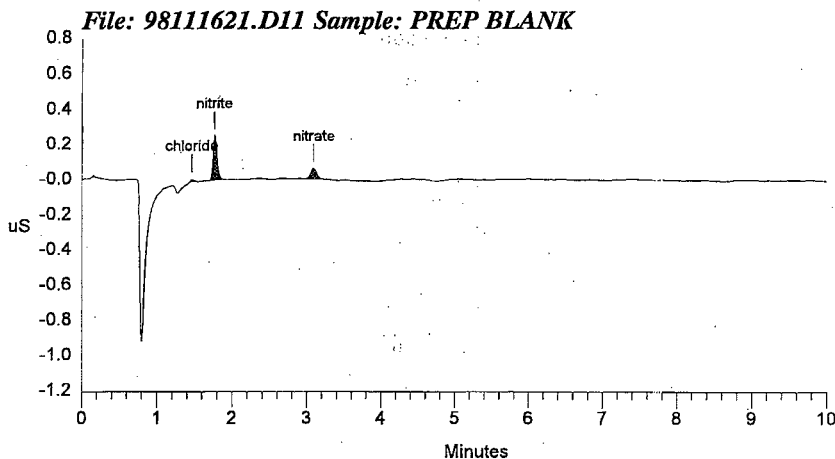
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           1 3000 5Hz 0.00 10.00          30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.46	chloride	0.009	16	35	1	-3.10
2	1.76	nitrite	0.311	251	923	1	-3.83
3	3.09	nitrate	0.164	56	312	1	0.54
Totals			0.484	322	1270		



Data Reprocessed On 11/17/1998 11:52:34

```

=====
Sample Name: S98T002339 SAM                      Date: 11/16/1998 22:35:07
Data File  : F:\DATA\98111621.D12
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 12             Detector: CDM-1
Analyst    :                                     Column: AG4A/AS4A anion column
=====
    
```

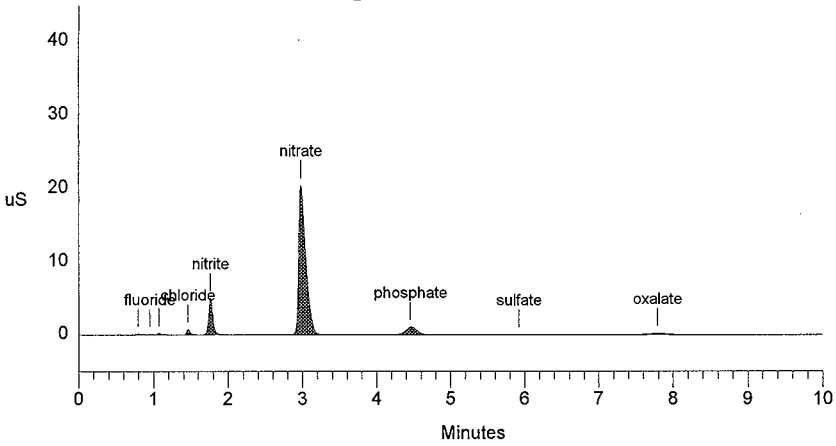
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           41  3000  5Hz   0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	121	512	2	
2	0.95	fluoride	1.345	88	252	2	-0.35
3	1.07		0.000	175	437	1	
4	1.46	chloride	18.811	749	2570	1	-3.10
5	1.76	nitrite	200.729	5027	19251	1	-3.83
6	2.97	nitrate	1440.101	20445	135582	1	0.00
7	4.45	phosphate	286.191	1096	12113	1	-4.02
8	5.92	sulfate	8.366	52	747	1	-3.48
9	7.79	oxalate	49.739	230	4146	1	-3.31
Totals			2005.282	27984	175611		

File: 98111621.D12 Sample: S98T002339 SAM



Data Reprocessed On 11/17/1998 11:53:33

```

=====
Sample Name: S98T002339 DUP                               Date: 11/16/1998 22:52:19
Data File  : F:\DATA\98111621.D13
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 13                     Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

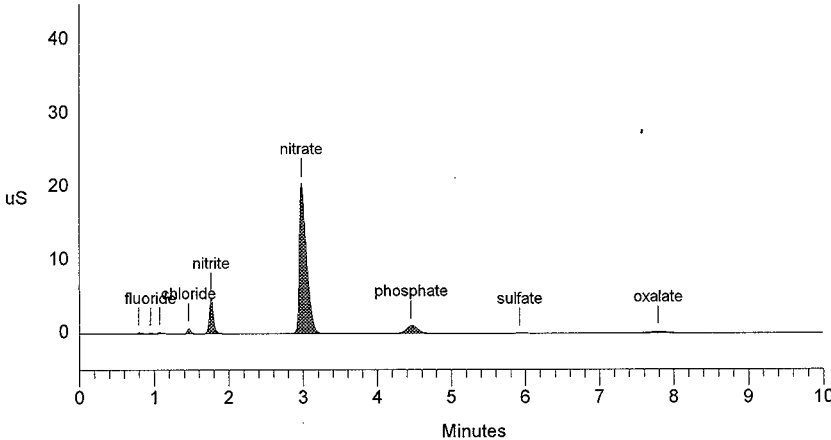
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-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           41    3000 5Hz   0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	131	566	2	
2	0.95	fluoride	1.414	89	267	2	-0.35
3	1.07		0.000	173	428	1	
4	1.46	chloride	18.369	734	2509	1	-3.10
5	1.76	nitrite	196.344	4873	18818	1	-3.83
6	2.97	nitrate	1467.963	20487	138574	1	0.00
7	4.45	phosphate	287.476	1066	12168	1	-4.02
8	5.92	sulfate	7.908	53	699	1	-3.48
9	7.79	oxalate	53.261	252	4435	1	-3.31
Totals			2032.734	27859	178464		

**File: 98111621.D13 Sample: S98T002339 DUP**



Data Reprocessed On 11/17/1998 11:54:39

```

=====
Sample Name: S98T002340 SAM                      Date: 11/16/1998 23:05:14
Data File  : F:\DATA\98111621.D14
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 14             Detector: CDM-1
Analyst    :                                     Column: AG4A/AS4A anion column
=====
    
```

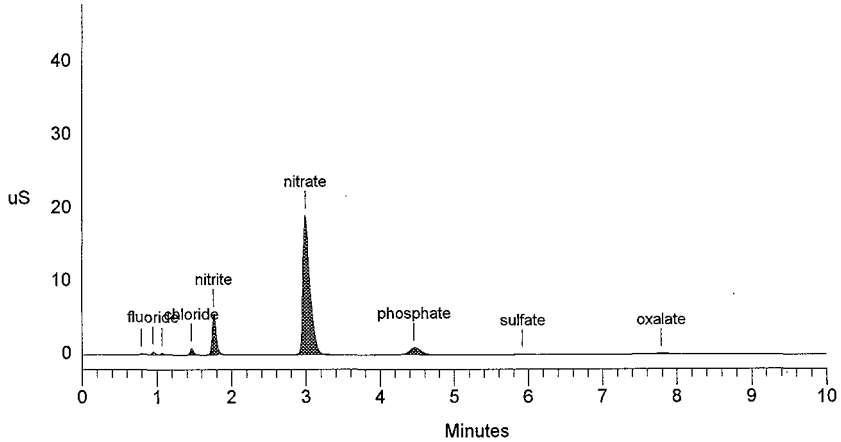
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           41  3000  5Hz   0.00 10.00          30
=====
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	118	483	1	
2	0.95	fluoride	5.960	421	1233	1	-0.35
3	1.07		0.000	224	550	1	
4	1.46	chloride	21.958	894	3007	1	-3.10
5	1.76	nitrite	228.097	5620	21957	1	-3.83
6	2.99	nitrate	1376.920	19047	128863	1	0.00
7	4.45	phosphate	257.150	976	10858	1	-4.02
8	5.92	sulfate	8.767	48	788	1	-3.48
9	7.79	oxalate	15.770	90	1367	1	-3.31
Totals			1914.623	27438	169107		

File: 98111621.D14 Sample: S98T002340 SAM



Data Reprocessed On 11/17/1998 11:55:31

```

=====
Sample Name: S98T002340 DUP                               Date: 11/16/1998 23:17:13
Data File  : F:\DATA\98111621.D15
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 15                     Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

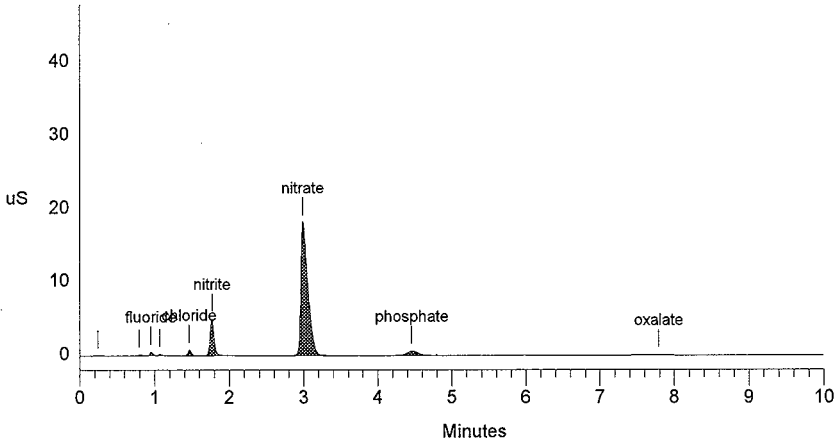
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           41    3000 5Hz   0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.24		0.000	35	142	1	
2	0.79		0.000	102	427	1	
3	0.95	fluoride	6.758	488	1403	2	-0.35
4	1.07		0.000	189	460	2	
5	1.46	chloride	19.418	789	2654	1	-3.10
6	1.77	nitrite	199.349	4998	19115	1	-3.46
7	2.99	nitrate	1304.302	18205	121248	1	0.00
8	4.45	phosphate	157.799	595	6601	1	-4.02
9	7.79	oxalate	14.015	81	1224	1	-3.31
Totals			1701.641	25483	153274		

File: 98111621.D15 Sample: S98T002340 DUP



Data Reprocessed On 11/17/1998 11:56:23

```

=====
Sample Name: S98T002345 SAM                               Date: 11/16/1998 23:29:06
Data File  : F:\DATA\98111621.D16
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 16                      Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

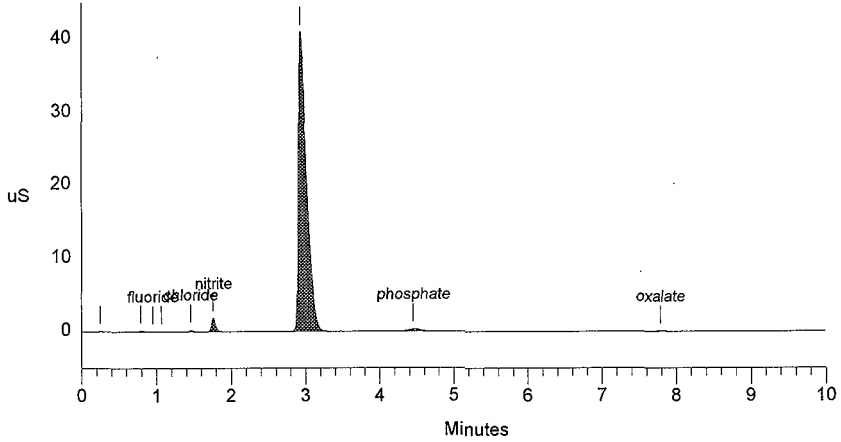
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           41    3000 5Hz   0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.25		0.000	52	264	1	
2	0.79		0.000	147	618	2	
3	0.95	fluoride	0.494	30	72	2	0.35
4	1.07		0.000	57	142	1	
5	1.46	chloride	6.281	254	842	1	-3.10
6	1.76	nitrite	76.305	1818	7071	1	-3.83
7	2.93	nitrate	2812.115	41008	314131	1	0.00
8	4.45	phosphate	81.643	303	3371	1	-4.02
9	7.79	oxalate	7.051	43	655	1	-3.31
Totals			2983.888	43711	327166		

File: 98111621.D16 Sample: S98T002345 SAM



Data Reprocessed On 11/17/1998 11:57:15

```

=====
Sample Name: S98T002345 DUP                               Date: 11/16/1998 23:40:41
Data File  : F:\DATA\98111621.D17
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 17                      Detector: CDM-1
Analyst    :                                               Column: AG4A/AS4A anion column
=====
    
```

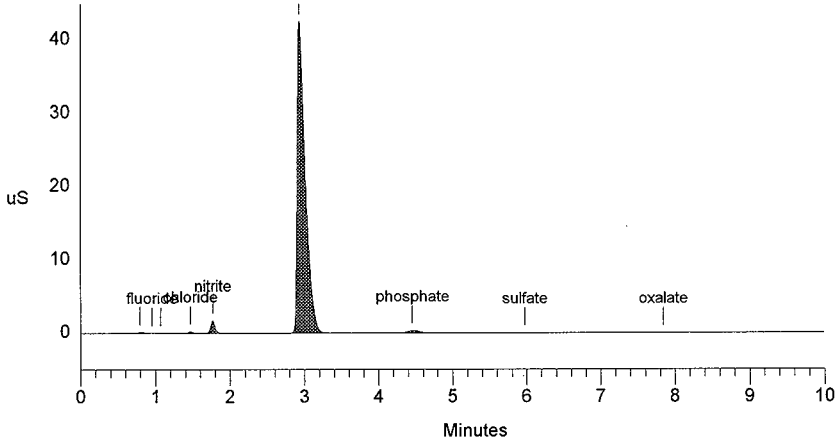
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           41    3000  5Hz   0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	151	657	2	
2	0.95	fluoride	0.542	35	82	2	0.35
3	1.07		0.000	51	132	1	
4	1.47	chloride	6.034	240	808	1	-2.65
5	1.77	nitrite	73.681	1736	6816	1	-3.46
6	2.93	nitrate	2860.901	42486	322328	1	0.00
7	4.45	phosphate	89.115	327	3687	1	-4.02
8	5.97	sulfate	5.088	31	407	1	-2.61
9	7.84	oxalate	4.887	33	479	1	-2.65
Totals			3040.249	45088	335396		

File: 98111621.D17 Sample: S98T002345 DUP



# LABCORE Completed Worklist Report for Worklist# 27205

Analyt: adp

Instrument: IC45S2

Book#: 34N21A

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107 (2), @IC4G-01 skm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit	
1	CCB	0	@IC4G-QC F*4	QC	1	<1.10e-2	ug/mL	
1	CCB	0	@IC4G-QC ACETATE2	QC	1	<2.00e-2	ug/mL	
1	CCB	0	@IC4G-QC FORMATE2	QC	1	<2.10e-2	ug/mL	
1	CCB	0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2	ug/mL	
2	LCS-INST	0	@IC4G-QC F*4	QC	5.89e1	5.92e+01	100.509 % Recovery	
2	LCS-INST	0	@IC4G-QC ACETATE2	QC	1.24e2	1.05e+02	84.677 % Recovery	
2	LCS-INST	0	@IC4G-QC FORMATE2	QC	1.19e2	1.07e+02	89.916 % Recovery	
2	LCS-INST	0	@IC4G-QC GLYCOLT1	QC	1.07e2	9.89e+01	92.430 % Recovery	
3	CCV	0	@IC4G-QC F*4	QC	6.21e1	5.73e+01	92.271 % Recovery	
3	CCV	0	@IC4G-QC ACETATE2	QC	1.23e2	1.13e+02	91.870 % Recovery	
3	CCV	0	@IC4G-QC FORMATE2	QC	1.30e2	1.20e+02	92.308 % Recovery	
3	CCV	0	@IC4G-QC GLYCOLT1	QC	1.02e2	9.46e+01	92.745 % Recovery	
4	BLNK-PREP	0	@IC4G-01 F*4-01	SOLID	1	<3.10e-2	ug/g	
4	BLNK-PREP	0	@IC4G-01 ACETATE2	SOLID	1	<2.00e-2	ug/g	
4	BLNK-PREP	0	@IC4G-01 FORMATE2	SOLID	1	<6.20e-2	ug/g	
4	BLNK-PREP	0	@IC4G-01 GLYCOLT1	SOLID	1	<5.60e-2	ug/g	
5	SAMPLE	S98T002339	0 W	@IC4G-01 F*4-01	SOLID	N/A	2.412e+02	130.900 ug/g
5	SAMPLE	S98T002339	0 W	@IC4G-01 ACETATE2	SOLID	N/A	3.427e+02	84.420 ug/g
5	SAMPLE	S98T002339	0 W	@IC4G-01 FORMATE2	SOLID	N/A	1.502e+03	261.700 ug/g
5	SAMPLE	S98T002339	0 W	@IC4G-01 GLYCOLT1	SOLID	N/A	< 2.364e+02	236.500 ug/g
6	DUP	S98T002339	0 W	@IC4G-01 F*4-01	SOLID	2.41e+02	2.97e+02	20.818 RPD
6	DUP	S98T002339	0 W	@IC4G-01 ACETATE2	SOLID	3.43e+02	3.46e+02	0.871 RPD
6	DUP	S98T002339	0 W	@IC4G-01 FORMATE2	SOLID	1.50e+03	1.65e+03	9.524 RPD
6	DUP	S98T002339	0 W	@IC4G-01 GLYCOLT1	SOLID	<2.36e2	<2.33e2	RPD
7	SAMPLE	S98T002340	0 W	@IC4G-01 F*4-01	SOLID	N/A	1.181e+03	126.900 ug/g
7	SAMPLE	S98T002340	0 W	@IC4G-01 ACETATE2	SOLID	N/A	4.755e+02	81.860 ug/g
7	SAMPLE	S98T002340	0 W	@IC4G-01 FORMATE2	SOLID	N/A	1.896e+03	253.700 ug/g
7	SAMPLE	S98T002340	0 W	@IC4G-01 GLYCOLT1	SOLID	N/A	< 2.292e+02	229.100 ug/g
8	DUP	S98T002340	0 W	@IC4G-01 F*4-01	SOLID	1.18e+03	1.29e+03	8.907 RPD
8	DUP	S98T002340	0 W	@IC4G-01 ACETATE2	SOLID	4.76e+02	3.23e+02	38.298 RPD
8	DUP	S98T002340	0 W	@IC4G-01 FORMATE2	SOLID	1.90e+03	1.67e+03	12.885 RPD
8	DUP	S98T002340	0 W	@IC4G-01 GLYCOLT1	SOLID	<2.29e2	<2.37e2	RPD
9	SAMPLE	S98T002345	0 W	@IC4G-01 F*4-01	SOLID	N/A	1.368e+02	129.600 ug/g
9	SAMPLE	S98T002345	0 W	@IC4G-01 ACETATE2	SOLID	N/A	< 8.363e+01	83.620 ug/g
9	SAMPLE	S98T002345	0 W	@IC4G-01 FORMATE2	SOLID	N/A	4.839e+02	259.300 ug/g
9	SAMPLE	S98T002345	0 W	@IC4G-01 GLYCOLT1	SOLID	N/A	< 2.342e+02	234.200 ug/g
10	DUP	S98T002345	0 W	@IC4G-01 F*4-01	SOLID	1.37e+02	<1.30e2	RPD
10	DUP	S98T002345	0 W	@IC4G-01 ACETATE2	SOLID	<8.36e1	<8.39e1	RPD
10	DUP	S98T002345	0 W	@IC4G-01 FORMATE2	SOLID	4.84e+02	4.57e+02	5.739 RPD
10	DUP	S98T002345	0 W	@IC4G-01 GLYCOLT1	SOLID	<2.34e2	<2.35e2	RPD

Units shown for QC (BLK/BKG) may not reflect the actual units.



## LABCORE Completed Worklist Report for Worklist# 27205

---

Seq	Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
-----	------	---------	---	---	------	--------	--------	-------	-------------	------

---

Final page for worklist# 27205

---

Analyst Signature

Date

---

Analyst Signature

Date

*Jann M. Luce* 1/15/99  
Reviewer Signature Date


11/16/98 10:27  
A-0004-1

# LABCORE Data Entry Template for Worklist# 27205

Analyst: ADP Instrument: IC 4552 Book# 35N21-C LCS  
 Method: LA-533-1105 Rev/Mod F-0 34N21-A CCV  
 Worklist Comment: U107 (2), @IC4G-01 skm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1 CCB			@IC4G-QC	QC		
2 LCS-INST			@IC4G-QC	QC		
3 CCV			@IC4G-QC	QC		
4 BLNK-PREP			@IC4G-01	SOLID		
5 SAMPLE	S98T002339	0 W	@IC4G-01	SOLID	98000358	U-107 (2)
	Analytes Requested: ACETATE2, F*4-01 , FORMATE2, GLYCOLT1					
6 DUP	S98T002339	0 W	@IC4G-01	SOLID		
7 SAMPLE	S98T002340	0 W	@IC4G-01	SOLID	98000358	U-107 (2)
	Analytes Requested: ACETATE2, F*4-01 , FORMATE2, GLYCOLT1					
8 DUP	S98T002340	0 W	@IC4G-01	SOLID		
9 SAMPLE	S98T002345	0 W	@IC4G-01	SOLID	98000358	U-107 (2)
	Analytes Requested: ACETATE2, F*4-01 , FORMATE2, GLYCOLT1					
10 DUP	S98T002345	0 W	@IC4G-01	SOLID		

## Final page for worklist # 27205

 1-9-98  
 Analyst Signature Date

\_\_\_\_\_  
 Analyst Signature Date

Data Entry Comments:  
uploaded 1-12-99  
DR Howell  
27205JAN.CSV  
validated 1/13/99 gmf

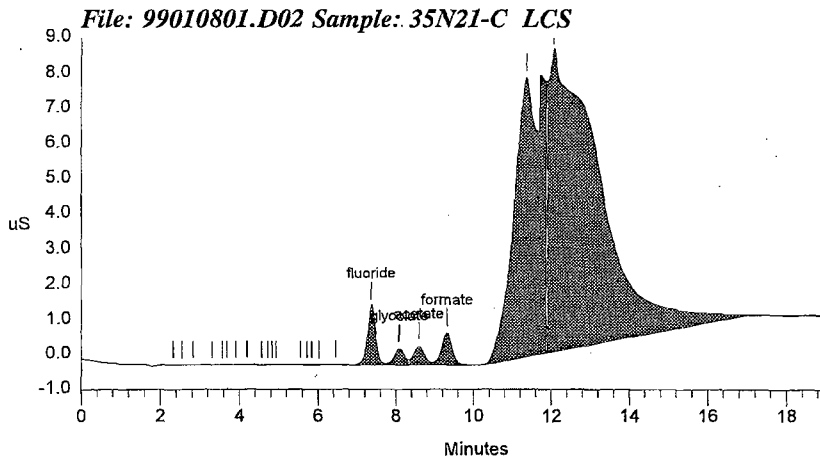
S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

=====  
 Sample Name: 35N21-C LCS Date: 01/08/1999 22:29:07  
 Data File : C:\DX\DATA\99010801.D02  
 Method : C:\DX\METHOD\MAS14GLY.MET  
 ACI Address: System: 2 Inject#: 2 Detector: CDM-2  
 Analyst : *Chetan J. J...* Column: AG14A-SC, AS14A-SC, SRS  
 1-8-99  
 =====

=====  
 Calibration Volume Dilution Points Rate Start Stop Area Reject  
 External 1 101 5700 5Hz 0.00 19.00 16000  
 =====

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	2.32		0.000	2000	22240	1	
3	2.83		0.000	2417	54280	1	
6	3.68		0.000	3889	35665	2	
7	3.91		0.000	3248	35489	2	
12	4.92		0.000	1667	44600	1	
16	6.03		0.000	6597	143247	2	
17	6.45		0.000	10306	230804	2	
18	7.36	fluoride	59.160	100.4	1688339	25365339	2 0.00
19	8.08	glycolate	98.924	92.45	484374	8806206	2 0.00
20	8.59	acetate	104.830	84.54	538654	10515277	2 0.00
21	9.31	formate	106.732	89.61	938588	17902278	2 0.00
22	11.36		0.000	7935793	403280178	2	
23	12.05		0.000	8549913	792845611	2	
Totals			369.646	20165784	1259281213		



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST WHO  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1056 TO 1068.

## HNF-1661 REV. 0

```

=====
Sample Name: BLANK                      Date: 01/08/1999 22:06:10
Data File  : C:\DX\DATA\99010801.D01
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 1      Detector: CDM-2
Analyst    :                            Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

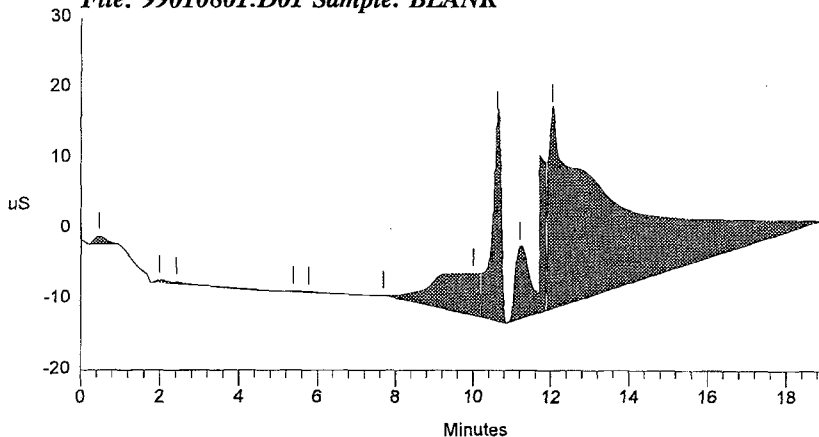
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           1 5700 5Hz 0.00 19.00      16000
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.47		0.000	1207309	26400000	1	
2	2.00		0.000	357097	7994917	2	
3	2.43		0.000	292671	743430	2	
4	5.39		0.000	121448	1991952	2	
5	5.77		0.000	155448	1137614	2	
7	10.00		0.000	5989513	473853785	2	
8	10.61		0.000	29159769	488681861	2	
9	11.20		0.000	10343962	479969474	2	
10	12.03		0.000	28429367	3551337381	2	
Totals			0.000	76056585	5032110412		

**File: 99010801.D01 Sample: BLANK**



## HNF-1661 REV. 0

```

=====
Sample Name: 34N21-A CCV                      Date: 01/08/1999 22:51:56
Data File  : C:\DX\DATA\99010801.D03
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 3           Detector: CDM-2
Analyst    :                               Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          101    5700  5Hz   0.00 19.00   16000
-----

```

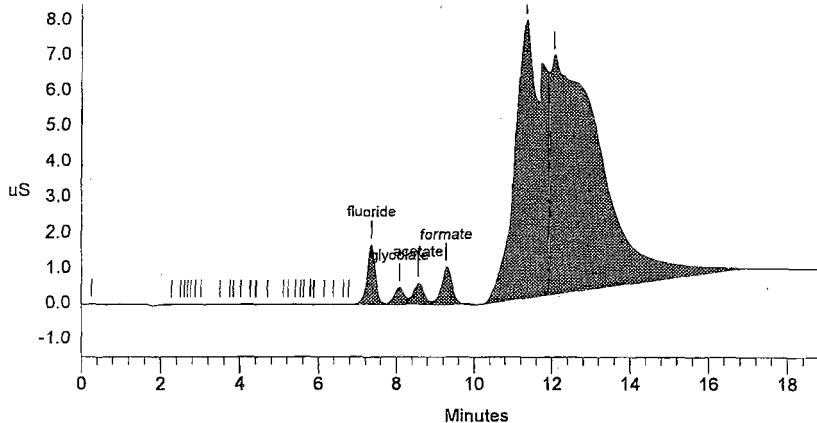
```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.27		0.000	20428	892776	1	
8	3.03		0.000	2421	38867	2	
15	4.71		0.000	4347	83642	2	
27	7.36	fluoride	57.317	1689748	24551985	2	0.00
28	8.08	glycolate	94.588	469521	8419389	2	0.00
29	8.56	acetate	113.382	573303	11351756	2	0.00
30	9.28	formate	119.513	1045276	20086015	2	0.00
31	11.33		0.000	7833223	388557865	2	
32	12.05		0.000	6733466	610494328	2	
Totals			384.800	18371732	1064476623		

**File: 99010801.D03 Sample: 34N21-A CCV**



Data Reprocessed On 01/11/1999 15:02:25

```

=====
Sample Name: PREP BLANK                               Date: 01/08/1999 23:17:03
Data File  : E:\DATA\99010801.D04
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 4
Analyst    :                                           Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

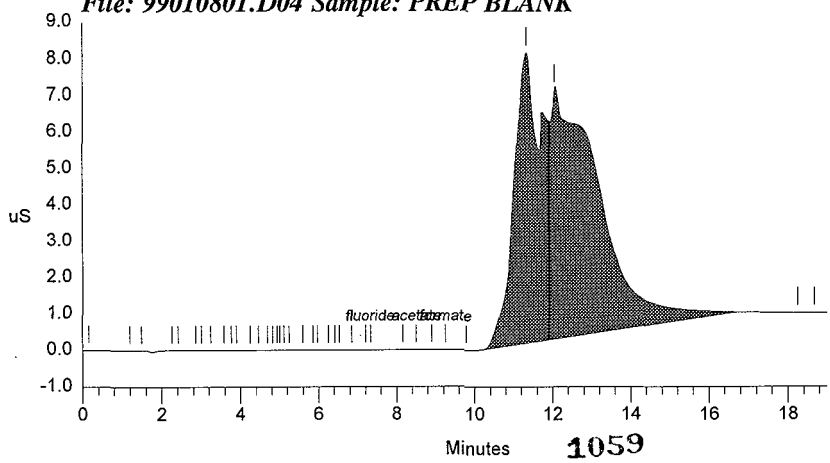
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1    5700 5Hz   0.00 19.00   16000
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	6370	70960	1	
6	2.87		0.000	5509	89394	2	
7	3.01		0.000	4804	43291	2	
8	3.25		0.000	6282	98700	2	
9	3.59		0.000	3161	27957	2	
10	3.77		0.000	3306	23035	2	
11	3.91		0.000	3658	49010	2	
12	4.25		0.000	2681	28729	2	
19	5.25		0.000	1540	19028	2	
26	6.85		0.000	1512	19091	2	
28	7.33	fluoride	0.010	3296	64710	2	0.00
30	8.51	acetate	-0.018	3551	41791	3	0.00
32	9.25	formate	0.006	3050	57644	1	0.00
34	11.33		0.000	7975890	388630348	2	
35	12.05		0.000	6853188	603423543	2	
36	18.24		0.000	2558	42600	1	
37	18.67		0.000	2000	16400	1	
Totals			-0.002	14882359	992746231		

File: 99010801.D04 Sample: PREP BLANK



Data Reprocessed On 01/11/1999 15:04:03

```

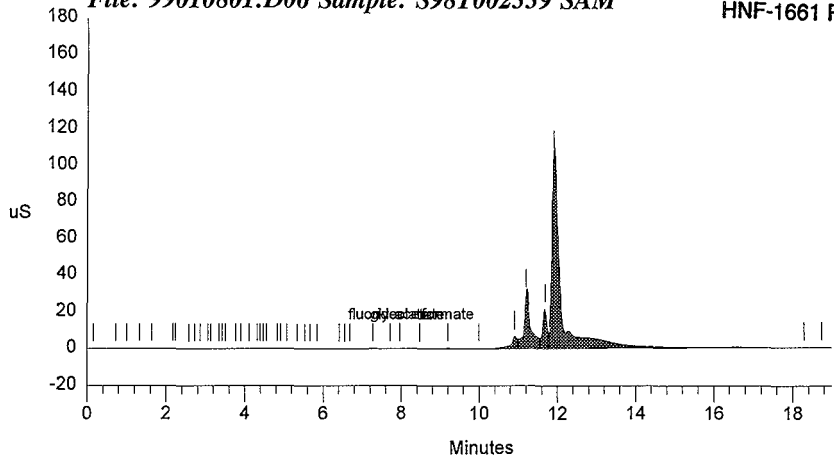
=====
Sample Name: S98T002339 SAM                      Date: 01/09/1999 00:06:10
Data File  : E:\DATA\99010801.D06
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 6              Detector: CDM-2
Analyst    :                                     Column: AG14A-SC, AS14A-SC, SRS
=====
  
```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          21    5700 5Hz   0.00 19.00    16000
-----
  
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	4486	89176	1	
4	1.33		0.000	3470	39550	2	
5	1.63		0.000	5409	39959	2	
6	2.19		0.000	3372	46243	2	
8	2.59		0.000	5118	31731	2	
9	2.73		0.000	5754	34734	2	
10	2.87		0.000	7031	58161	2	
11	3.07		0.000	6086	35418	2	
12	3.15		0.000	6024	35515	2	
15	3.52		0.000	5753	41044	2	
17	3.91		0.000	2628	17083	2	
22	4.56		0.000	6288	121952	2	
28	5.68		0.000	2638	26090	2	
29	5.85		0.000	6142	62793	2	
32	6.69		0.000	4806	60569	2	
33	7.28	fluoride	1.200	135745	2126126	3	0.00
35	7.97	glycolate	-0.289	5645	50545	2	0.00
36	8.48	acetate	1.705	55707	1030500	2	0.00
37	9.20	formate	7.472	314510	5940302	2	0.00
38	10.00		0.000	18920	273674	1	
39	10.91		0.000	6586799	73006178	2	
40	11.20		0.000	29396915	375195501	2	
41	11.68		0.000	21579831	172897171	2	
42	11.89		0.000	105664460	1803422878	3	
44	18.75		0.000	2000	19600	1	
Totals			10.088	163835535	2434702493		





HNF-1661 REV.0

```

=====
Sample Name: S98T002339 DUP                      Date: 01/09/1999 01:19:47
Data File  : C:\DX\DATA\99010801.D07
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 7                Detector: CDM-2
Analyst    :                                     Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           21 5700 5Hz  0.00 19.00      16000
-----

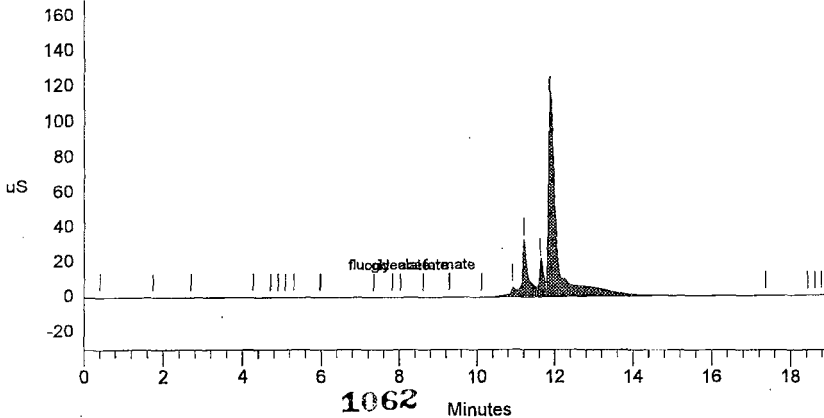
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.40		0.000	63462	1142016	1	
3	2.69		0.000	1227	136640	1	
6	4.89		0.000	3433	20337	2	
7	5.08		0.000	2367	23807	2	
8	5.29		0.000	6033	284553	2	
9	5.97		0.000	5933	91560	2	
10	7.33	fluoride	1.499	168849	2743229	2	0.00
11	7.81		0.000	5229	26583	2	
12	8.03	glycolate	-0.361	4748	20680	1	0.00
13	8.61	acetate	1.746	55705	1050094	2	0.00
14	9.28	formate	8.340	340519	6639809	2	0.00
16	10.91		0.000	5188349	57574222	2	
17	11.20		0.000	31788814	354988994	2	
18	11.63		0.000	19869853	176694767	2	
19	11.87		0.000	112426688	1932313293	3	
20	17.36		0.000	10687	489112	4	
21	18.43		0.000	7696	47632	4	
22	18.61		0.000	3943	19976	4	
23	18.77		0.000	6759	45600	1	

Totals 11.224 169960294 2534352903

File: 99010801.D07 Sample: S98T002339 DUP



```

=====
Sample Name: S98T002340 SAM                      Date: 01/09/1999 01:39:51
Data File  : C:\DX\DATA\99010801.D08
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 8              Detector: CDM-2
Analyst    :                                  Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

=====
alibration Volume Dilution Points Rate Start Stop Area Reject
-----
xternal          1          21    5700  5Hz    0.00 19.00    16000
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

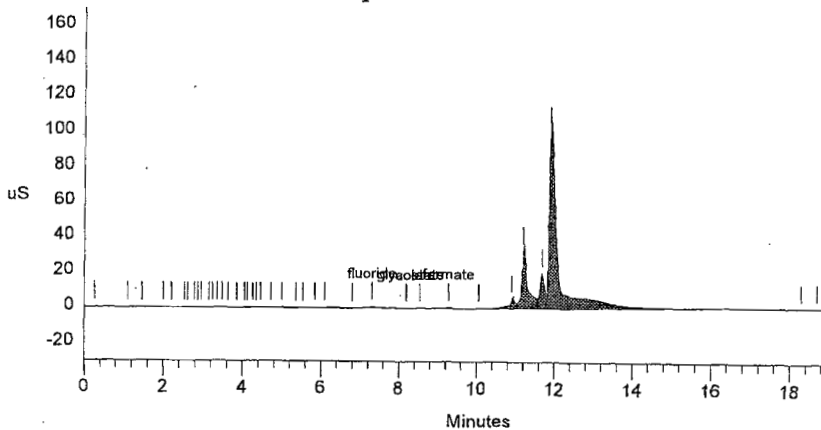
Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.27		0.000	20619	424436	1	
2	1.10		0.000	2682	29778	1	
3	1.47		0.000	3340	99656	1	
4	2.00		0.000	4386	25351	2	
5	2.20		0.000	5322	36862	2	
6	2.53		0.000	3610	16169	2	
7	2.61		0.000	6313	42081	3	
10	2.96		0.000	3281	20430	1	
11	3.16		0.000	5130	18151	2	
12	3.24		0.000	6599	32377	2	
13	3.36		0.000	4722	20196	2	
14	3.48		0.000	5225	37133	2	
15	3.64		0.000	9342	46744	2	
16	3.85		0.000	3996	31080	1	
18	4.12		0.000	4482	16495	2	
21	4.45		0.000	3388	32954	2	
22	4.72		0.000	3485	29245	2	
23	5.00		0.000	7355	133908	2	
24	5.36		0.000	9409	80933	2	
25	5.53		0.000	11329	119099	2	
26	5.84		0.000	9828	121098	2	
27	6.09		0.000	5691	67248	2	
28	6.80		0.000	11952	98473	2	
29	7.31	fluoride	6.062	787528	12222964	3	0.00
30	8.19	glycolate	-0.295	7015	48018	4	0.00
31	8.53	acetate	2.440	72049	1378792	2	0.00
32	9.28	formate	9.727	412014	7758828	2	0.00
33	10.05		0.000	15843	173636	1	
34	10.91		0.000	5254522	61620017	2	
35	11.20		0.000	32422567	366590944	2	
36	11.68		0.000	19912278	163397539	2	
37	11.89		0.000	100031038	1680170682	2	
38	18.29		0.000	966	33124	2	
39	18.69		0.000	2517	27490	2	

```

-----
Totals          17.934  159069825  2295001931
-----

```

**File: 99010801.D08 Sample: S98T002340 SAM**



Data Reprocessed On 01/11/1999 15:06:00

```

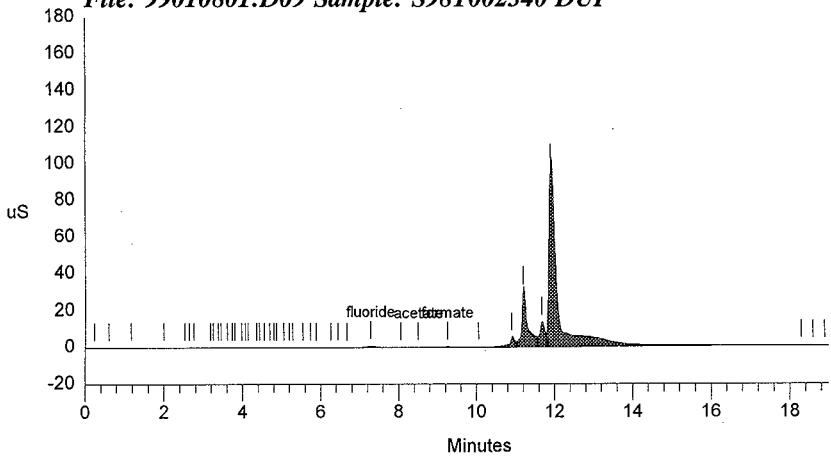
=====
Sample Name: S98T002340 DUP                               Date: 01/09/1999 01:59:58
Data File  : E:\DATA\99010801.D09
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 9                       Detector: CDM-2
Analyst    :                                             Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          21  5700  5Hz   0.00 19.00   16000
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	5918	58072	1	
2	0.60		0.000	3024	21892	1	
3	1.17		0.000	2416	46046	1	
4	2.00		0.000	6240	120672	1	
5	2.53		0.000	3903	25404	2	
6	2.64		0.000	5669	31665	2	
7	2.76		0.000	6998	87987	2	
11	3.45		0.000	3958	18718	2	
25	5.20		0.000	3285	16560	2	
26	5.28		0.000	3769	41721	2	
27	5.55		0.000	3773	29449	2	
28	5.75		0.000	5602	51313	2	
29	5.88		0.000	5794	79681	2	
32	6.67		0.000	4687	38226	2	
33	7.28	fluoride	6.408	848092	12946558	2	0.00
35	8.51	acetate	1.605	52192	983119	2	0.00
36	9.25	formate	8.273	347852	6585924	2	0.00
37	10.05		0.000	11639	138590	1	
38	10.91		0.000	5121134	58455883	2	
39	11.20		0.000	30204670	343476327	2	
40	11.68		0.000	13653547	124290100	2	
41	11.89		0.000	96761937	1634234862	2	
Totals			16.286	147066100	2181778769		



Data Reprocessed On 01/11/1999 15:06:35

```

=====
Sample Name: S98T002345 SAM                               Date: 01/09/1999 02:20:08
Data File  : E:\DATA\99010801.D10
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 10                      Detector: CDM-2
Analyst    :                                               Column: AG14A-SC, AS14A-SC, SRS
=====
    
```

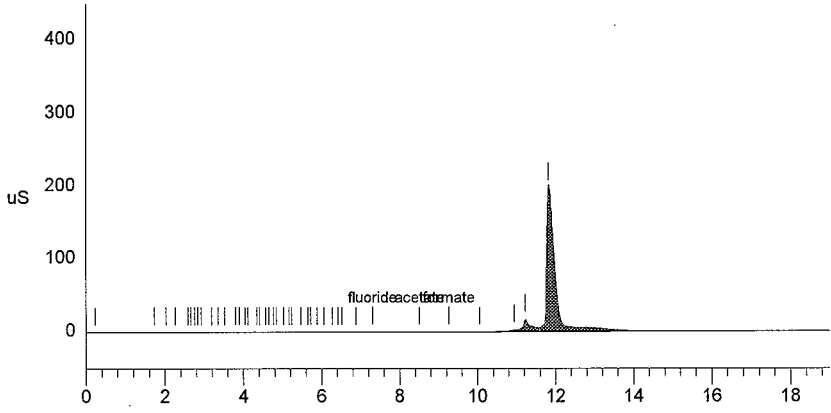
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           21  5700  5Hz  0.00 19.00  16000
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	12058	188860	1	
2	1.73		0.000	15679	141800	1	
5	2.59		0.000	2870	18152	2	
9	2.92		0.000	4117	29375	2	
12	3.52		0.000	2592	27890	2	
16	4.12		0.000	3535	24226	2	
25	5.23		0.000	3648	21268	2	
33	6.52		0.000	2829	22464	2	
34	6.88		0.000	3727	24662	2	
35	7.31	fluoride	0.687	61424	1067217	2	0.00
36	8.51	acetate	0.192	16412	313980	2	0.00
37	9.25	formate	2.430	98016	1894054	2	0.00
38	10.05		0.000	2847	29864	1	
39	10.93		0.000	2949156	40856079	2	
40	11.23		0.000	16765479	258741182	2	
41	11.81		0.000	197910124	3175218442	2	
Totals			3.310	217854514	3478619515		

File: 99010801.D10 Sample: S98T002345 SAM



Data Reprocessed On 01/11/1999 15:07:46

```

=====
Sample Name: S98T002345 DUP                               Date: 01/09/1999 02:49:26
Data File  : E:\DATA\99010801.D11
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 11                      Detector:CDM-2
Analyst    :                                               Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

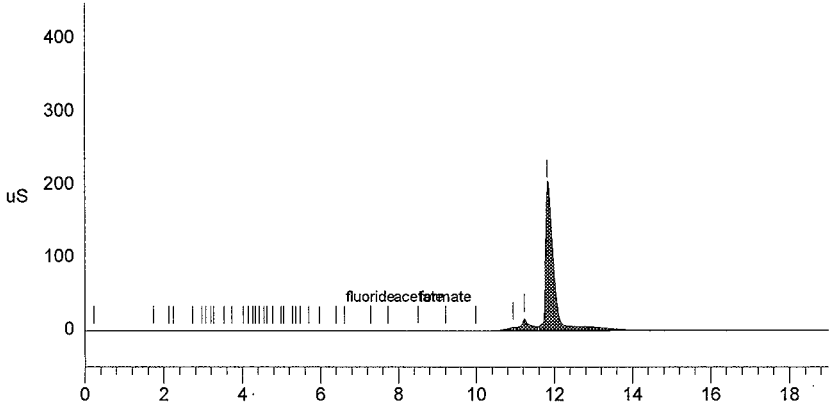
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           21   5700 5Hz   0.00 19.00   16000
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	10350	336532	1	
2	1.73		0.000	13745	113060	1	
3	2.13		0.000	1545	16590	2	
5	2.73		0.000	3008	43297	2	
19	4.77		0.000	1866	19468	1	
24	5.48		0.000	1553	18376	2	
25	5.69		0.000	3005	42471	2	
26	5.97		0.000	4033	58369	2	
28	6.61		0.000	2854	42799	2	
29	7.28	fluoride	0.624	59402	937563	3	0.00
31	8.51	acetate	0.044	13542	243877	2	0.00
32	9.20	formate	2.289	95213	1780721	2	0.00
33	9.97		0.000	4621	53272	1	
34	10.93		0.000	4963760	67021124	2	
35	11.23		0.000	16441928	289320954	2	
36	11.81		0.000	200870265	3233311397	2	
Totals			2.957	222490690	3593359871		

File: 99010801.D11 Sample: S98T002345 DUP



# LABCORE Completed Worklist Report for Worklist# 27227

Analyst: adp

Instrument: IC40S1

Book#: 28N21B

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107 (2), @IC-01 skm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	@IC-QC	F	QC	1	<1.20e-2 ug/mL
1	CCB	0	@IC-QC	CL	QC	1	<1.70e-2 ug/mL
1	CCB	0	@IC-QC	NO2	QC	1	<1.08e-1 ug/mL
1	CCB	0	@IC-QC	BR	QC	1	<1.25e-1 ug/mL
1	CCB	0	@IC-QC	NO3	QC	1	<1.39e-1 ug/mL
1	CCB	0	@IC-QC	PO4	QC	1	<1.20e-1 ug/mL
1	CCB	0	@IC-QC	SO4	QC	1	<1.38e-1 ug/mL
1	CCB	0	@IC-QC	OXALATE2	QC	1	<1.05e-1 ug/mL
2	LCS-INST	0	@IC-QC	F	QC	5.90e1	5.71e+01 96.780 % Recovery
2	LCS-INST	0	@IC-QC	CL	QC	8.00e1	8.23e+01 102.875 % Recovery
2	LCS-INST	0	@IC-QC	NO2	QC	5.48e2	5.57e+02 101.642 % Recovery
2	LCS-INST	0	@IC-QC	BR	QC	5.86e2	5.62e+02 95.904 % Recovery
2	LCS-INST	0	@IC-QC	NO3	QC	5.92e2	5.67e+02 95.777 % Recovery
2	LCS-INST	0	@IC-QC	PO4	QC	5.47e2	5.41e+02 98.903 % Recovery
2	LCS-INST	0	@IC-QC	SO4	QC	6.38e2	6.35e+02 99.530 % Recovery
2	LCS-INST	0	@IC-QC	OXALATE2	QC	5.40e2	5.45e+02 100.926 % Recovery
3	CCV	0	@IC-QC	F	QC	6.40e1	6.17e+01 96.406 % Recovery
3	CCV	0	@IC-QC	CL	QC	9.00e1	9.55e+01 106.111 % Recovery
3	CCV	0	@IC-QC	NO2	QC	5.62e2	5.84e+02 103.915 % Recovery
3	CCV	0	@IC-QC	BR	QC	6.30e2	6.44e+02 102.222 % Recovery
3	CCV	0	@IC-QC	NO3	QC	6.98e2	7.19e+02 103.009 % Recovery
3	CCV	0	@IC-QC	PO4	QC	6.32e2	6.65e+02 105.222 % Recovery
3	CCV	0	@IC-QC	SO4	QC	6.99e2	7.23e+02 103.433 % Recovery
3	CCV	0	@IC-QC	OXALATE2	QC	5.53e2	5.83e+02 105.425 % Recovery
4	BLNK-PREP	0	@IC-01	F-02	SOLID	1	<1.20e-2 ug/g
4	BLNK-PREP	0	@IC-01	CL-02	SOLID	1	<1.70e-2 ug/g
4	BLNK-PREP	0	@IC-01	NO2-02	SOLID	1	5.30e-01 0.530 ug/g
4	BLNK-PREP	0	@IC-01	BR-02	SOLID	1	<1.25e-1 ug/g
4	BLNK-PREP	0	@IC-01	NO3-02	SOLID	1	1.80e-01 0.180 ug/g
4	BLNK-PREP	0	@IC-01	PO4-02	SOLID	1	<1.20e-1 ug/g
4	BLNK-PREP	0	@IC-01	SO4-02	SOLID	1	<1.38e-1 ug/g
4	BLNK-PREP	0	@IC-01	OXALATE2	SOLID	1	<1.05e-1 ug/g
5	SAMPLE	S98T002556	0 W	@IC-01	F-02	SOLID	<u>N/A</u> < 1.237e+02 123.700 ug/g
5	SAMPLE	S98T002556	0 W	@IC-01	CL-02	SOLID	<u>N/A</u> 4.374e+03 175.200 ug/g
5	SAMPLE	S98T002556	0 W	@IC-01	NO2-02	SOLID	<u>N/A</u> 5.051e+04 1113.000 ug/g
5	SAMPLE	S98T002556	0 W	@IC-01	BR-02	SOLID	<u>N/A</u> < 1.288e+03 1288.000 ug/g
5	SAMPLE	S98T002556	0 W	@IC-01	NO3-02	SOLID	<u>N/A</u> 3.529e+05 1433.000 ug/g
5	SAMPLE	S98T002556	0 W	@IC-01	PO4-02	SOLID	<u>N/A</u> 2.188e+04 1237.000 ug/g
5	SAMPLE	S98T002556	0 W	@IC-01	SO4-02	SOLID	<u>N/A</u> 3.163e+03 1422.000 ug/g
5	SAMPLE	S98T002556	0 W	@IC-01	OXALATE2	SOLID	<u>N/A</u> 2.666e+03 1082.000 ug/g
6	DUP	S98T002556	0 W	@IC-01	F-02	SOLID	<1.24e2 <1.21e2 RPD

Units shown for QC (BLK/BKG) may not reflect the actual units.



# LABCORE Completed Worklist Report for Worklist# 27227

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
6 DUP	S98T002556	0 W	QIC-01	CL-02	SOLID	4.37e+03	4.46e+03	2.039 RPD
6 DUP	S98T002556	0 W	QIC-01	NO2-02	SOLID	5.05e+04	5.20e+04	2.927 RPD
6 DUP	S98T002556	0 W	QIC-01	BR-02	SOLID	<1.29e3	<1.26e3	RPD
6 DUP	S98T002556	0 W	QIC-01	NO3-02	SOLID	3.53e+05	3.63e+05	2.793 RPD
6 DUP	S98T002556	0 W	QIC-01	PO4-02	SOLID	2.19e+04	2.08e+04	5.152 RPD
6 DUP	S98T002556	0 W	QIC-01	SO4-02	SOLID	3.16e+03	2.94e+03	7.213 RPD
6 DUP	S98T002556	0 W	QIC-01	OXALATE2	SOLID	2.67e+03	2.88e+03	7.568 RPD
7 SAMPLE	S98T002563	0 W	QIC-01	F-02	SOLID	N/A	< 1.188e+02	118.800 ug/g
7 SAMPLE	S98T002563	0 W	QIC-01	CL-02	SOLID	N/A	4.364e+03	168.400 ug/g
7 SAMPLE	S98T002563	0 W	QIC-01	NO2-02	SOLID	N/A	5.018e+04	1069.000 ug/g
7 SAMPLE	S98T002563	0 W	QIC-01	BR-02	SOLID	N/A	< 1.238e+03	1238.000 ug/g
7 SAMPLE	S98T002563	0 W	QIC-01	PO4-02	SOLID	N/A	3.206e+04	1188.000 ug/g
7 SAMPLE	S98T002563	0 W	QIC-01	SO4-02	SOLID	N/A	2.303e+03	1367.000 ug/g
8 DUP	S98T002563	0 W	QIC-01	F-02	SOLID	<1.19e2	2.34e+02	RPD
8 DUP	S98T002563	0 W	QIC-01	CL-02	SOLID	4.36e+03	4.22e+03	3.263 RPD
8 DUP	S98T002563	0 W	QIC-01	NO2-02	SOLID	5.02e+04	4.81e+04	4.273 RPD
8 DUP	S98T002563	0 W	QIC-01	BR-02	SOLID	<1.24e3	<1.24e3	RPD
8 DUP	S98T002563	0 W	QIC-01	NO3-02	SOLID	2.26e+05	2.93e+05	25.819 RPD
8 DUP	S98T002563	0 W	QIC-01	PO4-02	SOLID	3.21e+04	3.40e+04	5.749 RPD
8 DUP	S98T002563	0 W	QIC-01	SO4-02	SOLID	2.30e+03	2.36e+03	2.575 RPD
8 DUP	S98T002563	0 W	QIC-01	OXALATE2	SOLID	8.69e+03	1.16e+04	28.684 RPD
9 SAMPLE	S98T002568	0 W	QIC-01	F-02	SOLID	N/A	< 1.623e+02	162.300 ug/g
9 SAMPLE	S98T002568	0 W	QIC-01	CL-02	SOLID	N/A	1.653e+03	230.000 ug/g
9 SAMPLE	S98T002568	0 W	QIC-01	NO2-02	SOLID	N/A	1.980e+04	1461.000 ug/g
9 SAMPLE	S98T002568	0 W	QIC-01	BR-02	SOLID	N/A	< 1.691e+03	1691.000 ug/g
9 SAMPLE	S98T002568	0 W	QIC-01	NO3-02	SOLID	N/A	6.481e+05	1881.000 ug/g
9 SAMPLE	S98T002568	0 W	QIC-01	SO4-02	SOLID	N/A	< 1.867e+03	1867.000 ug/g
9 SAMPLE	S98T002568	0 W	QIC-01	OXALATE2	SOLID	N/A	< 1.421e+03	1420.000 ug/g
10 DUP	S98T002568	0 W	QIC-01	F-02	SOLID	<1.62e2	<1.63e2	RPD
10 DUP	S98T002568	0 W	QIC-01	CL-02	SOLID	1.65e+03	1.74e+03	5.310 RPD
10 DUP	S98T002568	0 W	QIC-01	NO2-02	SOLID	1.98e+04	2.06e+04	3.960 RPD
10 DUP	S98T002568	0 W	QIC-01	BR-02	SOLID	<1.69e3	<1.70e3	RPD
10 DUP	S98T002568	0 W	QIC-01	NO3-02	SOLID	6.48e+05	6.08e+05	6.369 RPD
10 DUP	S98T002568	0 W	QIC-01	PO4-02	SOLID	1.22e+04	1.88e+04	42.581 RPD
10 DUP	S98T002568	0 W	QIC-01	SO4-02	SOLID	<1.87e3	<1.88e3	RPD
10 DUP	S98T002568	0 W	QIC-01	OXALATE2	SOLID	<1.42e3	<1.43e3	RPD

Final page for worklist# 27227

Analyst Signature

Date

Analyst Signature

Date

*James M. Feys*  
 Reviewer Signature Date 11/23/98

# LABCORE Data Entry Template for Worklist# 27227

Analyst: ADP Instrument: IC 4051 Book# 29N21-B LCS  
 Method: LA-533-105 Rev/Mod F-0 28N21-B CCV

Worklist Comment: U107 (2), @IC-01 skm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC-QC	QC		
2	LCS-INST		@IC-QC	QC		
3	CCV		@IC-QC	QC		
4	BLNK-PREP		@IC-01	SOLID		
5	SAMPLE	S98T002556 0 W	@IC-01	SOLID	98000401	U-107 (2)
	Analytes Requested:		BR-02	CL-02	F-02	NO2-02
			OXALATE2	PO4-02	S04-02	NO3-02
6	DUP	S98T002556 0 W	@IC-01	SOLID		
7	SAMPLE	S98T002563 0 W	@IC-01	SOLID	98000401	U-107 (2)
	Analytes Requested:		BR-02	CL-02	F-02	NO2-02
			OXALATE2	PO4-02	S04-02	NO3-02
8	DUP	S98T002563 0 W	@IC-01	SOLID		
9	SAMPLE	S98T002568 0 W	@IC-01	SOLID	98000401	U-107 (2)
	Analytes Requested:		BR-02	CL-02	F-02	NO2-02
			OXALATE2	PO4-02	S04-02	NO3-02
10	DUP	S98T002568 0 W	@IC-01	SOLID		

### Final page for worklist # 27227

11-21-98  
 Analyst Signature Date

\_\_\_\_\_  
 Analyst Signature Date

Data Entry Comments:

up loaded 11-23-98

J. L. Wallace  
27227NOV.CSV

S98T002563 NO<sub>3</sub> & Oxalate rejected

S98T002568 PO<sub>4</sub> rejected due to RPD

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Reanalyzed on worklist # 27293.

Rest Validated. JM Fyfe 11/23/98

115799 1071

```

=====
Sample Name: 29N21-B LCS                               Date: 11/21/1998 10:54:03
Data File : C:\DX\DATA\98112101.D15
Method    : C:\DX\METHOD\KIT.MET
ACI Address: System: 1 Inject#: 15                      Detector: CDM-1
Analyst   : Anthony Perito Column: AG4A/AS4A anion column
=====
    
```

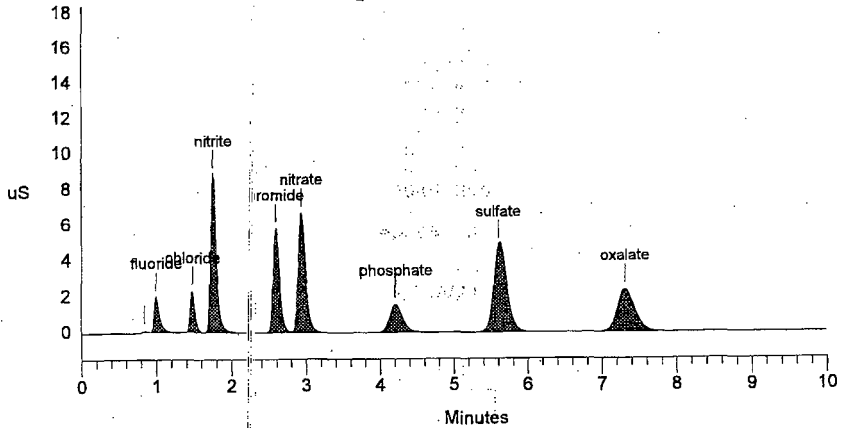
*11-21-98*

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	86	354	2	
2	1.00	fluoride	57.138	1955	9821	2	1.01
3	1.48	chloride	82.322	2262	10182	1	-0.67
4	1.75	nitrite	556.677	8848	46838	1	-2.05
5	2.59	bromide	561.894	5783	34016	1	2.10
6	2.93	nitrate	566.586	6670	46033	1	0.46
7	4.21	phosphate	541.181	1577	19308	1	0.16
8	5.60	sulfate	634.591	4855	61848	1	2.00
9	7.31	oxalate	545.096	2393	39828	1	2.19
<b>Totals</b>			<b>3545.487</b>	<b>34429</b>	<b>268229</b>		

File: 98112101.D15 Sample: 29N21-B LCS



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1072 TO 1081.

```

=====
Sample Name: BLANK                               Date: 11/21/1998 10:29:34
Data File  : C:\DX\DATA\98112101.D14
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 14           Detector: CDM-1
Analyst    :                               Column: AG4A/AS4A anion column
=====
    
```

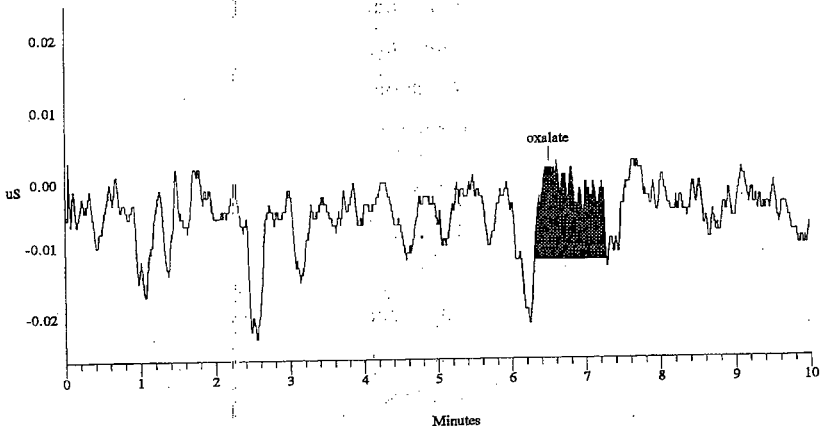
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          1    3000  5Hz   0.00 10.00      30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	6.51	oxalate	0.089	13	566	1	-9.00
Totals			0.089	13	566		

File: 98112101.D1 Sample: BLANK



```

=====
Sample Name: 28N21-B CCV                               Date: 11/21/1998 11:06:54
Data File  : C:\DX\DATA\98112101.D16
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 16                   Detector: CDM-1
Analyst    :                                           Column: AG4A/AS4A anion column
=====
    
```

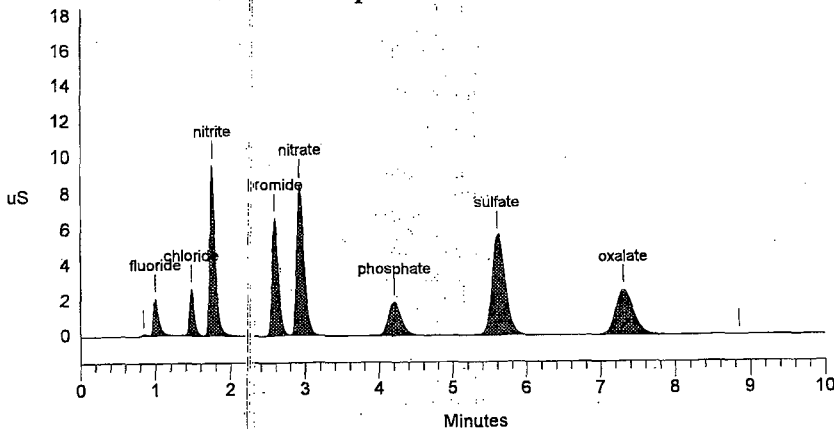
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          101 3000 5Hz 0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	95	396	2	
2	1.00	fluoride	61.697	2117	10615	2	1.01
3	1.48	chloride	95.477	2680	11857	1	-0.67
4	1.76	nitrite	583.785	9576	49168	1	-1.68
5	2.59	bromide	644.267	6649	39160	1	2.10
6	2.93	nitrate	719.089	8522	58848	1	0.23
7	4.21	phosphate	664.555	1944	23863	1	0.16
8	5.60	sulfate	723.199	5656	70724	1	2.00
9	7.31	oxalate	583.081	2584	42640	1	2.19
10	8.85		0.000	19	782	1	
Totals			4075.149	39841	308053		

File: 98112101.D16 Sample: 28N21-B CCV



```

=====
Sample Name: PREP BLK                               Date: 11/21/1998 11:19:25
Data File  : C:\DX\DATA\98112101.D17
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 17                Detector: CDM-1
Analyst    :                                         Column: AG4A/AS4A anion column
=====
    
```

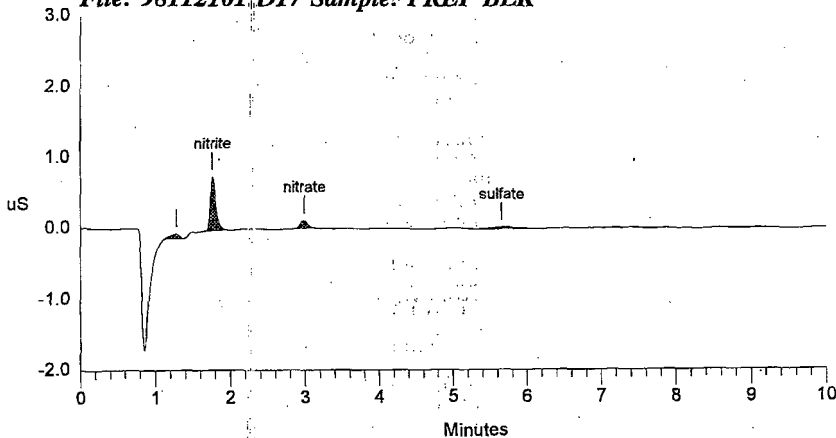
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           1    3000 5Hz   0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.28		0.000	65	566	1	
2	1.76	nitrite	0.530	767	3965	1	-1.68
3	2.99	nitrate	0.180	114	717	1	2.28
4	5.65	sulfate	0.114	26	646	1	2.98
Totals			0.825	972	5895		

File: 98112101.D17 Sample: PREP BLK



```

=====
Sample Name: S98T002556 SAM                      Date: 11/21/1998 11:32:40
Data File  : C:\DX\DATA\98112101.D18
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 18              Detector: CDM-1
Analyst    :                                     Column: AG4A/AS4A anion column
=====
    
```

```

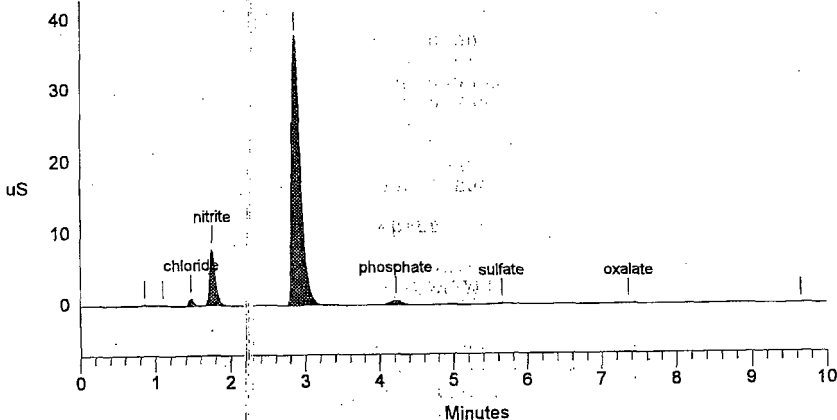
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           51  3000 5Hz  0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	155	850	2	
2	1.10		0.000	251	2550	2	
3	1.47	chloride	21.646	1089	5211	1	-1.12
4	1.75	nitrite	249.956	7880	41547	1	-2.05
5	2.85	nitrate	1746.658	37903	308020	1	-2.28
6	4.22	phosphate	108.302	619	7440	1	0.48
7	5.65	sulfate	15.656	177	2528	1	2.98
8	7.36	oxalate	13.192	116	1806	1	2.94
9	9.65		0.000	17	320	1	

Totals 2155.409 48207 370272

File: 98112101.D18 Sample: S98T002556 SAM



```

=====
Sample Name: S98T002556 DUP                               Date: 11/21/1998 11:45:19
Data File  : C:\DX\DATA\98112101.D19
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 19                      Detector: CDM-1
Analyst    :                                               Column: AG4A/AS4A anion column
=====
    
```

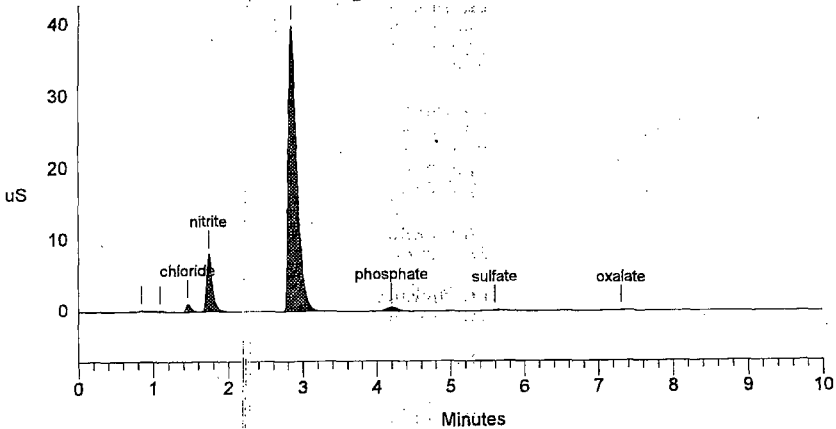
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           51    3000  5Hz   0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	187	1135	2	
2	1.09		0.000	248	2310	2	
3	1.46	chloride	22.547	1117	5435	1	-2.01
4	1.74	nitrite	263.143	8058	43786	1	-2.79
5	2.84	nitrate	1833.491	40058	325085	1	-2.74
6	4.20	phosphate	105.332	588	7229	1	0.00
7	5.60	sulfate	14.851	159	2374	1	2.00
8	7.31	oxalate	14.568	114	2004	1	2.19
Totals			2253.933	50529	389359		

File: 98112101.D19 Samples: S98T002556 DUP





```

=====
Sample Name: S98T002563 SAM          Date: 11/21/1998 11:58:49
Data File  : C:\DX\DATA\98112101.D20
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 20      Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====
    
```

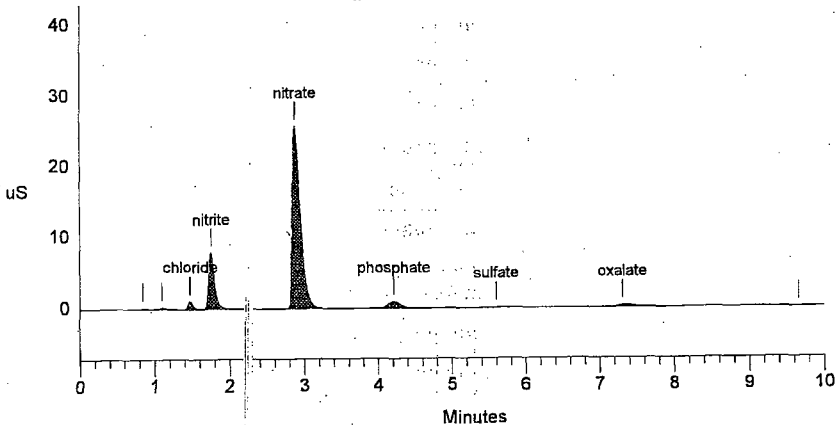
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          51    3000  5Hz   0.00 10.00      30
    
```

\*\*\*\*\* \*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	123	690	2	
2	1.10		0.000	290	2518	2	
3	1.47	chloride	22.473	1114	5416	1	-1.12
4	1.75	nitrite	258.441	7834	42988	1	-2.05
5	2.88	nitrate	1161.521	25900	197830	1	-1.37
6	4.21	phosphate	165.129	944	11497	1	0.32
7	5.60	sulfate	11.858	116	1801	1	2.00
8	7.31	oxalate	44.737	327	6345	1	2.19
9	9.65		0.000	8	172	1	
Totals			1664.160	36654	269257		

File: 98112101.D20 Sample: S98T002563 SAM



```

=====
Sample Name: S98T002563 DUP                               Date: 11/21/1998 12:10:10
Data File   : C:\DX\DATA\98112101.D21
Method      : C:\DX\METHOD\KIT.MET
ACI Address : 1 System: 1 Inject#: 21                    Detector: CDM-1
Analyst     :                                             Column: AG4A/AS4A anion column
=====
    
```

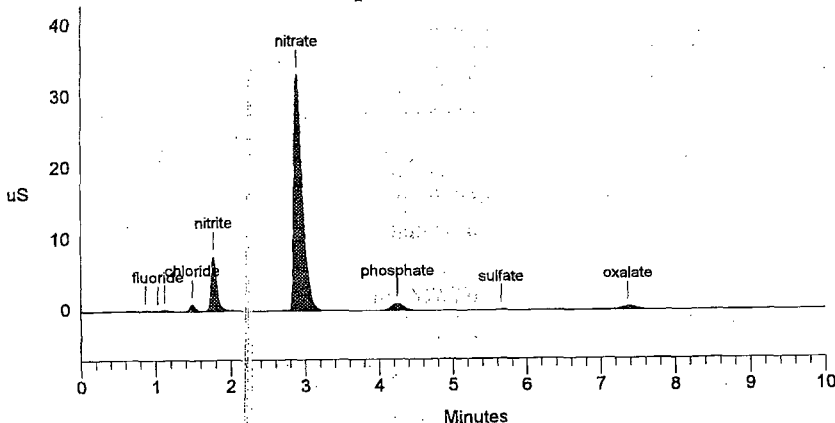
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           51  3000 5Hz  0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.87		0.000	154	843	2	
2	1.03	fluoride	1.202	85	413	2	3.70
3	1.12		0.000	286	2067	2	
4	1.49	chloride	21.734	1085	5233	1	-0.22
5	1.77	nitrite	247.485	7747	41127	1	-0.93
6	2.89	nitrate	1510.073	33419	262501	1	-1.14
7	4.25	phosphate	174.889	1001	12197	1	1.11
8	5.65	sulfate	12.157	131	1858	1	2.98
9	7.36	oxalate	59.570	511	8482	1	2.94
Totals			2027.109	44419	334722		

File: 98112101.D21 Sample: S98T002563 DUP



```

=====
Sample Name: S98T002568 SAM                      Date: 11/21/1998 14:02:01
Data File  : C:\DX\DATA\98112101.D23
Method     : C:\DX\METHOD\RIT.MET
ACI Address: 1 System: 1 Inject#: 23              Detector: CDM-1
Analyst    :                                     Column: AG4A/AS4A anion column
=====
    
```

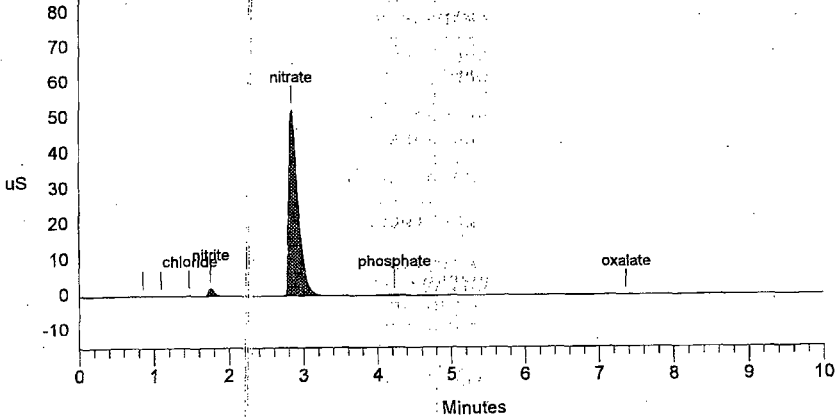
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          67.67  3000 5Hz  0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	179	1307	2	
2	1.10		0.000	86	884	2	
3	1.47	chloride	8.267	287	1416	1	-1.12
4	1.75	nitrite	99.025	2144	11943	1	-2.05
5	2.84	nitrate	3242.036	52521	451126	1	-2.74
6	4.23	phosphate	61.125	245	3032	1	0.63
7	7.36	oxalate	6.791	36	646	1	2.94
Totals			3417.244	55497	470354		

File: 98112101.D23 Sample: S98T002568 SAM



```

=====
Sample Name: S98T002568 DUP                               Date: 11/21/1998 14:15:41
Data File  : C:\DX\DATA\98112101.D24
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 24                      Detector:CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

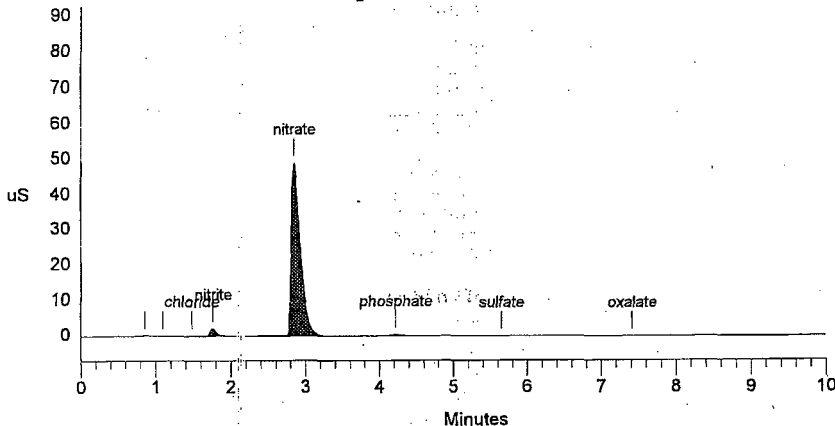
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          67.67  3000 5Hz  0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	129	609	1	
2	1.10		0.000	54	525	1	
3	1.48	chloride	8.641	308	1485	1	-0.67
4	1.76	nitrite	102.510	2272	12384	1	-1.68
5	2.85	nitrate	3025.115	49164	416193	1	-2.51
6	4.22	phosphate	93.515	394	4757	1	0.48
7	5.65	sulfate	5.928	29	387	1	2.98
8	7.41	oxalate	5.856	26	545	1	3.68
Totals			3241.564	52376	436884		

File: 98112101.D24 Sample: S98T002568 DUP



# LABCORE Completed Worklist Report for Worklist# 27228

Analyst: adp

Instrument: IC45S2

Book#: 34N21A

Method: LA-533-105

Rev/Mod F-0

Worklist Comment: U107 (2), @IC4G-01 skm

Seq Type	Sample#	RA	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	@IC4G-QC F*4	QC	1	2.90e-02	0.029	ug/mL
1	CCB	0	@IC4G-QC ACETATE2	QC	1	<2.00e-2		ug/mL
1	CCB	0	@IC4G-QC FORMATE2	QC	1	<2.10e-2		ug/mL
1	CCB	0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2		ug/mL
2	LCS-INST	0	@IC4G-QC F*4	QC	5.89e1	5.77e+01	97.963 %	Recovery
2	LCS-INST	0	@IC4G-QC ACETATE2	QC	1.24e2	1.08e+02	87.097 %	Recovery
2	LCS-INST	0	@IC4G-QC FORMATE2	QC	1.19e2	1.06e+02	89.076 %	Recovery
2	LCS-INST	0	@IC4G-QC GLYCOLT1	QC	1.07e2	1.00e+02	93.458 %	Recovery
3	CCV	0	@IC4G-QC F*4	QC	6.21e1	6.38e+01	102.738 %	Recovery
3	CCV	0	@IC4G-QC ACETATE2	QC	1.23e2	1.22e+02	99.187 %	Recovery
3	CCV	0	@IC4G-QC FORMATE2	QC	1.30e2	1.20e+02	92.308 %	Recovery
3	CCV	0	@IC4G-QC GLYCOLT1	QC	1.02e2	1.07e+02	104.902 %	Recovery
4	BLNK-PREP	0	@IC4G-01 F*4-01	SOLID	1	<3.10e-2		ug/g
4	BLNK-PREP	0	@IC4G-01 ACETATE2	SOLID	1	7.80e-02	0.078	ug/g
4	BLNK-PREP	0	@IC4G-01 FORMATE2	SOLID	1	<6.20e-2		ug/g
4	BLNK-PREP	0	@IC4G-01 GLYCOLT1	SOLID	1	5.60e-02	0.056	ug/g
5	SAMPLE	S98T002556	0 W	@IC4G-01 F*4-01	SOLID	N/A	6.264e+00	6.264 ug/g
5	SAMPLE	S98T002556	0 W	@IC4G-01 ACETATE2	SOLID	N/A	3.795e+03	4.041 ug/g
5	SAMPLE	S98T002556	0 W	@IC4G-01 FORMATE2	SOLID	N/A	2.114e+02	12.530 ug/g
5	SAMPLE	S98T002556	0 W	@IC4G-01 GLYCOLT1	SOLID	N/A	1.132e+01	11.320 ug/g
6	DUP	S98T002556	0 W	@IC4G-01 F*4-01	SOLID	<6.26e0	<6.13e0	RPD
6	DUP	S98T002556	0 W	@IC4G-01 ACETATE2	SOLID	3.80e+03	4.10e+03	7.595 RPD
6	DUP	S98T002556	0 W	@IC4G-01 FORMATE2	SOLID	2.11e+02	4.11e+02	64.309 RPD
6	DUP	S98T002556	0 W	@IC4G-01 GLYCOLT1	SOLID	<1.13e1	<1.11e1	RPD
7	SAMPLE	S98T002563	0 W	@IC4G-01 F*4-01	SOLID	N/A	6.019e+00	6.019 ug/g
7	SAMPLE	S98T002563	0 W	@IC4G-01 ACETATE2	SOLID	N/A	4.370e+03	3.883 ug/g
7	SAMPLE	S98T002563	0 W	@IC4G-01 FORMATE2	SOLID	N/A	2.076e+02	12.040 ug/g
7	SAMPLE	S98T002563	0 W	@IC4G-01 GLYCOLT1	SOLID	N/A	7.441e+02	10.870 ug/g
8	DUP	S98T002563	0 W	@IC4G-01 F*4-01	SOLID	<6.02e0	<6.02e0	RPD
8	DUP	S98T002563	0 W	@IC4G-01 ACETATE2	SOLID	4.37e+03	4.25e+03	2.784 RPD
8	DUP	S98T002563	0 W	@IC4G-01 FORMATE2	SOLID	2.08e+02	1.88e+02	10.101 RPD
8	DUP	S98T002563	0 W	@IC4G-01 GLYCOLT1	SOLID	7.44e+02	7.04e+02	5.525 RPD
9	SAMPLE	S98T002568	0 W	@IC4G-01 F*4-01	SOLID	N/A	6.198e+00	6.198 ug/g
9	SAMPLE	S98T002568	0 W	@IC4G-01 ACETATE2	SOLID	N/A	1.417e+03	3.998 ug/g
9	SAMPLE	S98T002568	0 W	@IC4G-01 FORMATE2	SOLID	N/A	4.758e+01	12.400 ug/g
9	SAMPLE	S98T002568	0 W	@IC4G-01 GLYCOLT1	SOLID	N/A	1.120e+01	11.200 ug/g
10	DUP	S98T002568	0 W	@IC4G-01 F*4-01	SOLID	<6.20e0	<6.23e0	RPD
10	DUP	S98T002568	0 W	@IC4G-01 ACETATE2	SOLID	1.42e+03	1.56e+03	9.396 RPD
10	DUP	S98T002568	0 W	@IC4G-01 FORMATE2	SOLID	4.76e+01	4.86e+01	2.079 RPD
10	DUP	S98T002568	0 W	@IC4G-01 GLYCOLT1	SOLID	<1.12e1	<1.13e1	RPD

Units shown for QC (BLK/BKG) may not reflect the actual units.

# LABCORE Completed Worklist Report for Worklist# 27228

---

Seq	Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
-----	------	---------	-----	------	--------	--------	-------	-------------	------

---

Final page for worklist# 27228

---

Analyst Signature      Date

---

Analyst Signature      Date

*JAMES M. FAYE*      11/30/98  
Reviewer Signature      Date

## LABCORE Data Entry Template for Worklist# 27228

Analyst: ADD Instrument: IC 4652 Book# 35N21-C LCS  
 Method: LA-533-1105 Rev/Mod F-0 34N21-A CCV

Worklist Comment: U107 (2), @IC4G-01 skm

S Type	Sample#	R A	Test	Matrix	Group#	Project	
1	CCB		@IC4G-QC	QC			
2	LCS-INST		@IC4G-QC	QC			
3	CCV		@IC4G-QC	QC			
4	BLNK-PREP		@IC4G-01	SOLID			
5	SAMPLE	S98T002556	0 W	@IC4G-01	SOLID	98000401 U-107 (2)	
		Analytes Requested: ACETATE2, F*4-01				FORMATE2, GLYCOLT1	
6	DUP	S98T002556	0 W	@IC4G-01	SOLID		
7	SAMPLE	S98T002563	0 W	@IC4G-01	SOLID	98000401 U-107 (2)	
		Analytes Requested: ACETATE2, F*4-01				FORMATE2, GLYCOLT1	
8	DUP	S98T002563	0 W	@IC4G-01	SOLID		
9	SAMPLE	S98T002568	0 W	@IC4G-01	SOLID	98000401 U-107 (2)	
		Analytes Requested: ACETATE2, F*4-01				FORMATE2, GLYCOLT1	
10	DUP	S98T002568	0 W	@IC4G-01	SOLID		

Final page for worklist # 27228

Anthony Swartz 11-26-98  
 Analyst Signature Date

\_\_\_\_\_  
 Analyst Signature Date

Data Entry Comments:

uploaded 11-30-98

John Wavell

27228 NOV. C SV

validated 11/30/98

JM Fuge

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Data Reprocessed On 11/25/1998 20:11:29

```

=====
Sample Name: 35N21-C LCS                               Date: 11/25/1998 19:59:42
Data File   : C:\DX\DATA\98112601.D05
Method      : C:\DX\METHOD\MAS14GLY.MET
ACI Address : 1 System: 2 Inject#: 5                   Detector: CDM-1
Analyst     : Anthony J. ...                          Column: AG14A-SC, AS14A-SC, SRS
=====
    
```

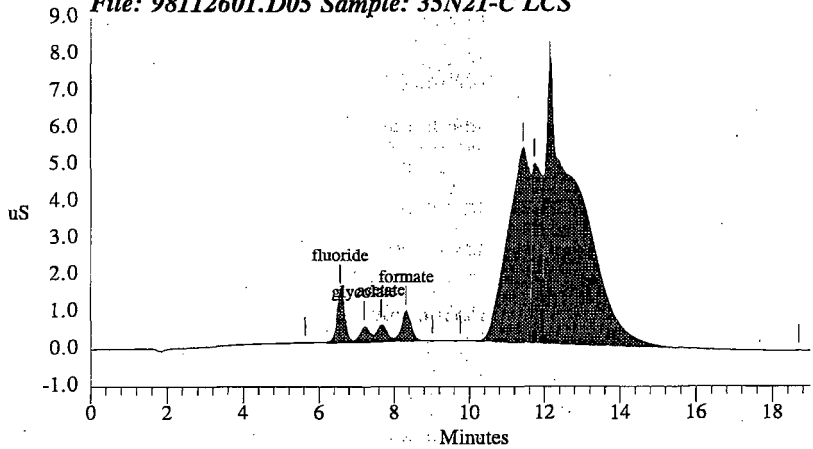
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
=====
External           1           101    5700 5Hz   0.00  19.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.63		0.000	2	7	1	
2	6.56	fluoride	57.699	1421	20363	2	0.00
3	7.20	glycolate	100.067	417	7302	2	0.00
4	7.65	acetate	108.490	456	8510	2	0.00
5	8.32	formate	106.459	794	14249	2	0.00
6	9.01		0.000	15	95	1	
7	9.76		0.000	4	120	1	
8	11.44		0.000	5298	209584	2	
9	11.73		0.000	4867	82868	2	
10	12.13		0.000	7509	446838	2	
11	18.69		0.000	7	104	1	
Totals			372.716	20791	790040		

File: 98112601.D05 Sample: 35N21-C LCS



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1085 TO 1094.



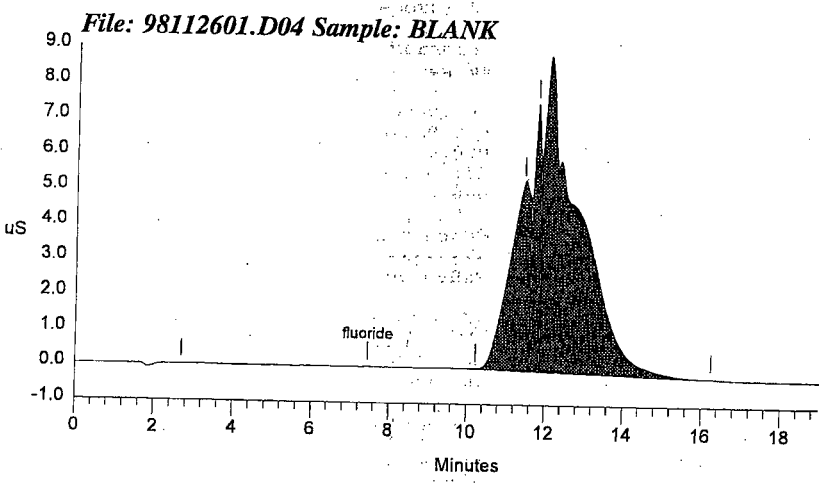
```

=====
Sample Name: BLANK                               Date: 11/25/1998 19:28:48
Data File  : C:\DX\DATA\98112601.D04
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 4             Detector: CDM-1
Analyst    :                                   Column: AG14A-SC, AS14A-SC, SRS
=====
    
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	5700	5Hz	0.00	19.00		0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	2.69		0.000	12	40	1	
2	7.44	fluoride	0.029	6	122	1	0.00
3	10.21		0.000	10	126	2	
4	11.44		0.000	5351	194959	2	
5	11.76		0.000	7550	83115	2	
6	12.05		0.000	8879	552595	2	
7	16.24		0.000	16	198	2	
Totals			0.029	21824	831155		



34N21-A

Data Reprocessed On 11/26/1998 03:04:24

```

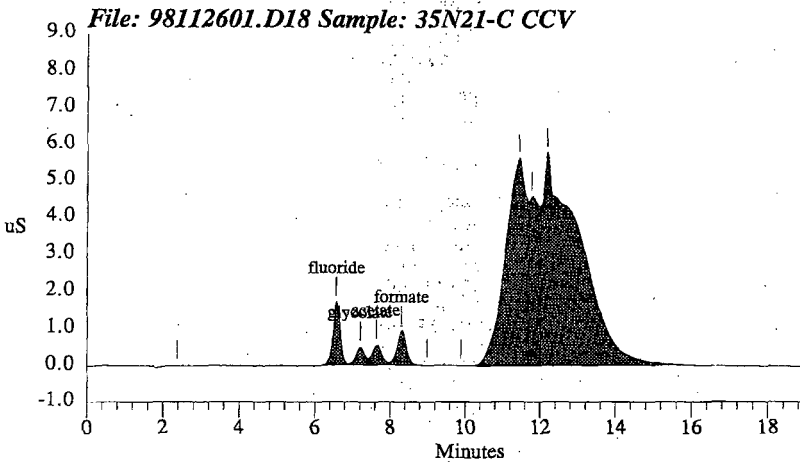
=====
Sample Name: 35N21-C CCV 11-30-98 Jw Date: 11/26/1998 03:03:04
Data File : C:\DX\DATA\98112601.D18
Method : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 18 Detector: CDM-1
Analyst : Column: AG14A-SC, AS14A-SC, SRS
=====
    
```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External 1 101 5700 5Hz 0.00 19.00 0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	2.37		0.000	3	4	1	
2	6.56	fluoride	63.837	1678	22653	2	0.00
3	7.20	glycolate	106.517	474	7806	2	-0.00
4	7.63	acetate	121.672	525	9596	2	0.00
5	8.29	formate	120.191	903	16207	2	0.00
6	8.99		0.000	19	57	1	
7	9.89		0.000	4	27	1	
8	11.41		0.000	5608	211991	2	
9	11.76		0.000	4559	79067	2	
10	12.16		0.000	5755	397749	2	
Totals			412.216	19528	745156		



```

=====
Sample Name:  PREP BLANK                      Date: 11/25/1998 21:03:42
Data File   :  C:\DX\DATA\98112601.D07
Method      :  C:\DX\METHOD\MAS14GLY.MET
ACI Address :  1 System: 2 Inject#: 7        Detector: CDM-1
Analyst     :                               Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

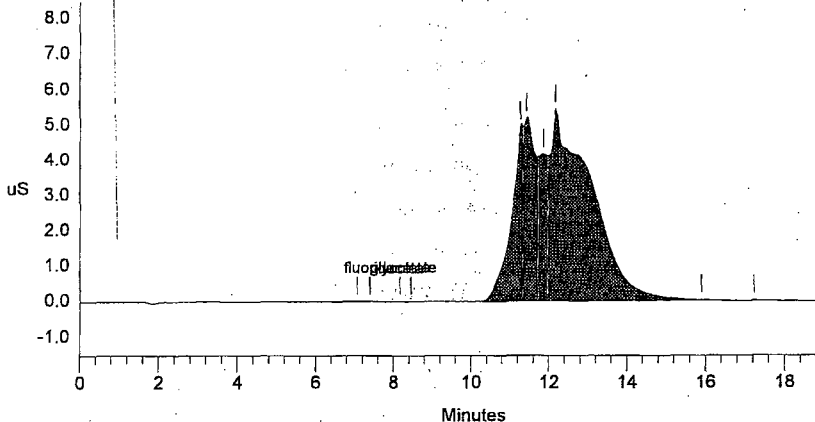
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External      1          1      5700 5Hz  0.00 19.00      0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	7.07		0.000	0	8	1	
2	7.39	fluoride	0.028	13	86	1	0.00
3	8.16	glycolate	0.056	16	45	1	0.00
4	8.45	acetate	0.078	5	132	1	0.00
5	11.25		0.000	4982	94965	2	
6	11.41		0.000	5236	105182	2	
7	11.84		0.000	4212	54256	2	
8	12.16		0.000	5479	398654	3	
9	15.89		0.000	13	127	4	
10	17.23		0.000	13	100	1	
Totals			0.163	19970	653555		

File: 98112601.D07 Sample: PREP BLANK



Data Reprocessed On 11/30/1998 09:17:35

```

=====
Sample Name: S98T0025546 SAM.           Date: 11/26/1998 00:03:34
Data File  : E:\DATA\98112601.D14
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 14
Analyst    :                               Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

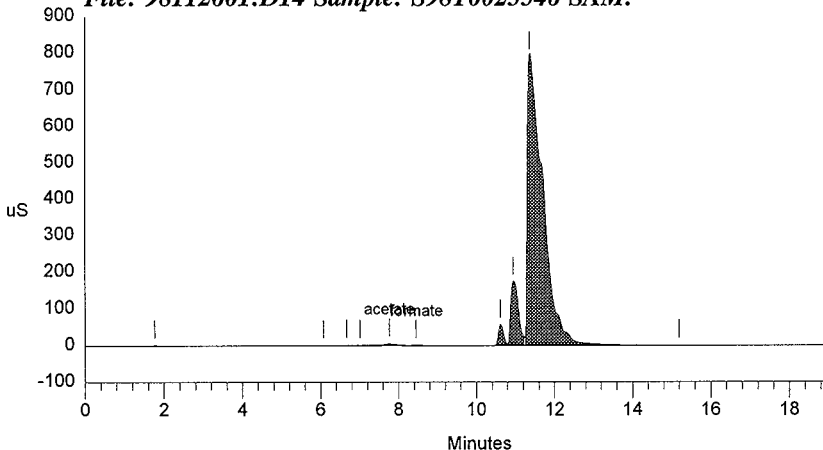
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          1 5700 5Hz 0.00 19.00          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.77		0.000	603	7364	1	
2	6.07		0.000	845	18672	2	
3	6.67		0.000	1315	30731	2	
4	7.01		0.000	1151	25312	2	
5	7.76	acetate	18.781	5132	137821	3	0.00
6	8.45	formate	1.046	608	14129	4	8.93
7	10.61		0.000	55995	512255	2	
8	10.93		0.000	172462	2466626	2	
9	11.36		0.000	790858	22023682	3	
10	15.20		0.000	96	1647	4	
Totals			19.827	1029064	25238239		

File: 98112601.D14 Sample: S98T0025546 SAM.



Data Reprocessed On 11/30/1998 09:18:28

```

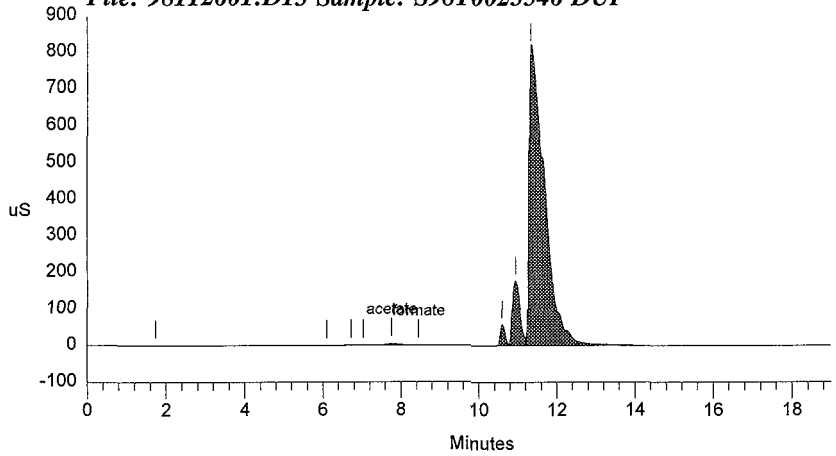
=====
Sample Name: S98T0025546 DUP                               Date: 11/26/1998 02:00:15
Data File  : E:\DATA\98112601.D15
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 15
Analyst    :                                               Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	5700	5Hz	0.00	19.00		0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.73		0.000	1134	11386	1	
2	6.11		0.000	294	5692	2	
3	6.72		0.000	1471	32071	2	
4	7.04		0.000	1342	31087	2	
5	7.76	acetate	20.746	5438	150454	2	0.00
6	8.45	formate	2.076	1096	29102	2	8.93
7	10.59		0.000	55588	515844	2	
8	10.93		0.000	176675	2476797	2	
9	11.33		0.000	813470	22810761	2	
Totals			22.822	1056507	26063194		

File: 98112601.D15 Sample: S98T0025546 DUP



Data Reprocessed On 11/30/1998 09:36:14

```

=====
Sample Name: S98T002563 SAM                               Date: 11/25/1998 23:21:41
Data File  : E:\DATA\98112601.D12
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 12                      Detector: CDM-1
Analyst    :                                               Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

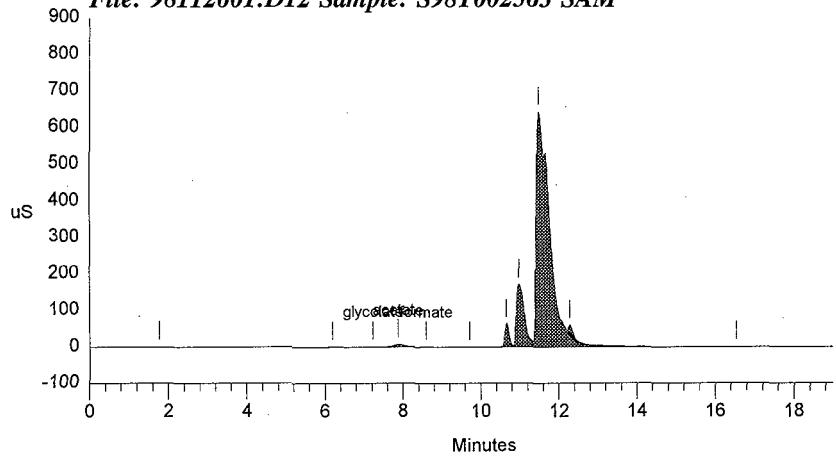
```

-----
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External            1            1 5700 5Hz  0.00 19.00            0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.77		0.000	428	5159	1	
2	6.19		0.000	1101	23816	2	
3	7.23	glycolate	3.832	1044	30788	2	0.00
4	7.87	acetate	22.503	6748	161528	3	0.00
5	8.59	formate	1.069	676	14468	4	9.15
6	9.71		0.000	6	105	1	
7	10.64		0.000	61120	505097	2	
8	10.96		0.000	169447	2493988	2	
9	11.47		0.000	642242	15646468	3	
10	12.27		0.000	25928	354615	4	
11	16.53		0.000	13	100	1	
Totals			27.404	908755	19236130		

File: 98112601.D12 Sample: S98T002563 SAM



Data Reprocessed On 11/30/1998 09:38:48

```

=====
Sample Name: S98T002563 DUP                               Date: 11/25/1998 23:43:25
Data File  : E:\DATA\98112601.D13
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 13                     Detector: CDM-1
Analyst    :                                             Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

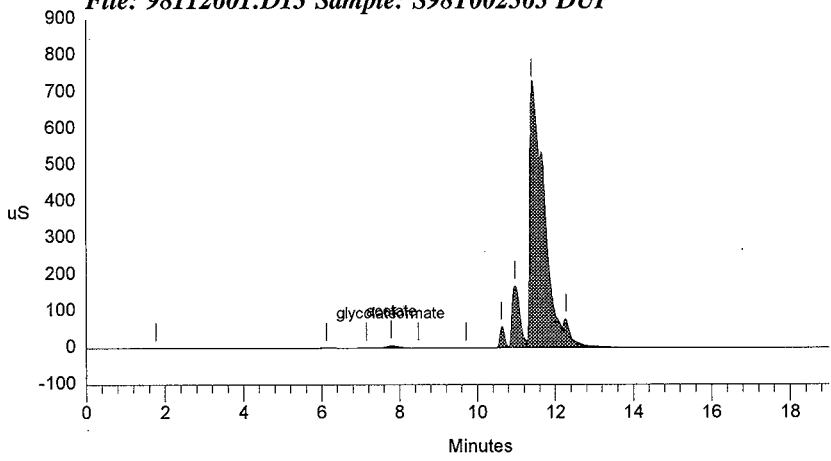
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1 5700 5Hz 0.00 19.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.77		0.000	562	6604	1	
2	6.12		0.000	1032	24332	2	
3	7.15	glycolate	3.623	963	28979	2	0.00
4	7.79	acetate	21.862	6198	157509	3	0.00
5	8.48	formate	0.970	584	13044	4	8.90
6	9.71		0.000	6	88	1	
7	10.61		0.000	56844	505386	2	
8	10.96		0.000	169470	2420628	2	
9	11.39		0.000	722265	19201336	3	
10	12.27		0.000	40532	443520	4	
Totals			26.455	998455	22801426		

File: 98112601.D13 Sample: S98T002563 DUP



Data Reprocessed On 11/30/1998 09:40:36

```

=====
Sample Name: S98T002568 SAM                               Date: 11/26/1998 02:21:00
Data File  : E:\DATA\98112601.D16
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 16                      Detector: CDM-1
Analyst    :                               Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

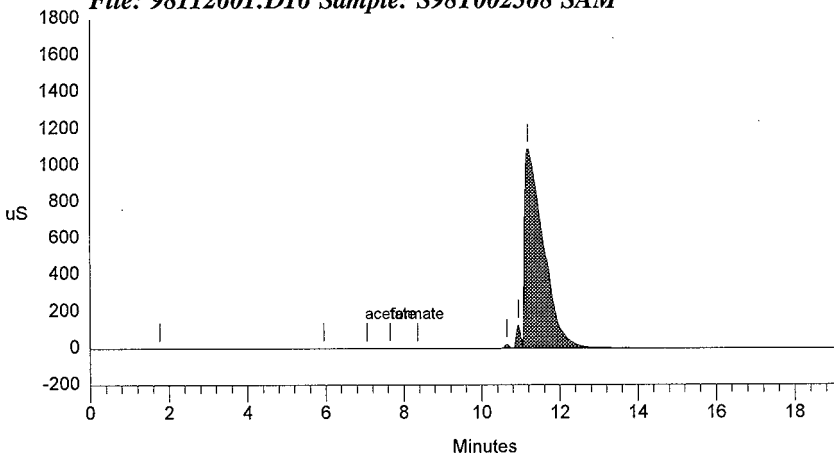
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           1 5700 5Hz  0.00 19.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.77		0.000	686	8178	1	
2	5.95		0.000	209	6920	2	
3	7.07		0.000	249	4820	2	
4	7.65	acetate	7.088	1795	56147	3	0.00
5	8.35	formate	0.238	89	2615	4	9.06
6	10.64		0.000	21118	173636	2	
7	10.93		0.000	125885	917234	2	
8	11.17		0.000	1088983	36629573	2	
Totals			7.326	1239014	37799124		

File: 98112601.D16 Sample: S98T002568 SAM





Data Reprocessed On 11/30/1998 09:41:40

```

=====
Sample Name: S98T002568 DUP                               Date: 11/26/1998 02:41:48
Data File  : E:\DATA\98112601.D17
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 17                      Detector: CDM-1
Analyst    :                                               Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

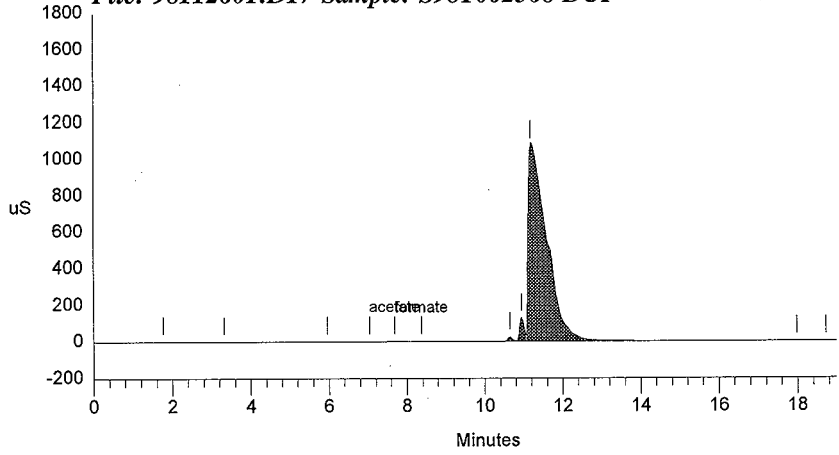
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1 5700 5Hz  0.00 19.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.77		0.000	682	7958	1	
2	3.32		0.000	10	839	1	
3	5.96		0.000	479	15370	2	
4	7.04		0.000	265	5333	2	
5	7.68	acetate	7.765	2024	61230	3	0.00
6	8.37	formate	0.242	109	2677	4	9.03
7	10.64		0.000	23579	189644	2	
8	10.93		0.000	127286	1029204	2	
9	11.17		0.000	1072983	35571943	2	
10	17.97		0.000	1	19	1	
11	18.72		0.000	5	133	1	
Totals			8.007	1227424	36884351		

File: 98112601.D17 Sample: S98T002568 DUP



# LBCORE Completed Worklist Report for Worklist# 27241

Analyst: adp

Instrument: IC40S1

Book#: 29N21B

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107 (2), @IC-01 skm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit			
1	CCB	0	@IC-QC	F	QC	1	<1.20e-2	ug/mL		
1	CCB	0	@IC-QC	CL	QC	1	<1.70e-2	ug/mL		
1	CCB	0	@IC-QC	NO2	QC	1	<1.08e-1	ug/mL		
1	CCB	0	@IC-QC	BR	QC	1	<1.25e-1	ug/mL		
1	CCB	0	@IC-QC	NO3	QC	1	<1.39e-1	ug/mL		
1	CCB	0	@IC-QC	PO4	QC	1	<1.20e-1	ug/mL		
1	CCB	0	@IC-QC	SO4	QC	1	<1.38e-1	ug/mL		
1	CCB	0	@IC-QC	OXALATE2	QC	1	<1.05e-1	ug/mL		
2	LCS-INST	0	@IC-QC	F	QC	5.90e1	6.11e+01	103.559 % Recovery		
2	LCS-INST	0	@IC-QC	CL	QC	8.00e1	8.48e+01	106.000 % Recovery		
2	LCS-INST	0	@IC-QC	NO2	QC	5.48e2	5.58e+02	101.825 % Recovery		
2	LCS-INST	0	@IC-QC	BR	QC	5.86e2	5.75e+02	98.123 % Recovery		
2	LCS-INST	0	@IC-QC	NO3	QC	5.92e2	5.81e+02	98.142 % Recovery		
2	LCS-INST	0	@IC-QC	PO4	QC	5.47e2	5.70e+02	104.205 % Recovery		
2	LCS-INST	0	@IC-QC	SO4	QC	6.38e2	6.62e+02	103.762 % Recovery		
2	LCS-INST	0	@IC-QC	OXALATE2	QC	5.40e2	5.63e+02	104.259 % Recovery		
3	CCV	0	@IC-QC	F	QC	6.40e1	6.38e+01	99.688 % Recovery		
3	CCV	0	@IC-QC	CL	QC	9.00e1	9.46e+01	105.111 % Recovery		
3	CCV	0	@IC-QC	NO2	QC	5.62e2	5.66e+02	100.712 % Recovery		
3	CCV	0	@IC-QC	BR	QC	6.30e2	6.15e+02	97.619 % Recovery		
3	CCV	0	@IC-QC	NO3	QC	6.98e2	6.95e+02	99.570 % Recovery		
3	CCV	0	@IC-QC	PO4	QC	6.32e2	6.58e+02	104.114 % Recovery		
3	CCV	0	@IC-QC	SO4	QC	6.99e2	7.09e+02	101.431 % Recovery		
3	CCV	0	@IC-QC	OXALATE2	QC	5.53e2	5.80e+02	104.882 % Recovery		
4	BLNK-PREP	0	@IC-01	F-02	SOLID	1	<1.20e-2	ug/g		
4	BLNK-PREP	0	@IC-01	CL-02	SOLID	1	2.60e-2	0.026 ug/g		
4	BLNK-PREP	0	@IC-01	NO2-02	SOLID	1	3.90e-01	0.390 ug/g		
4	BLNK-PREP	0	@IC-01	BR-02	SOLID	1	<1.25e-1	ug/g		
4	BLNK-PREP	0	@IC-01	NO3-02	SOLID	1	<1.39e-1	ug/g		
4	BLNK-PREP	0	@IC-01	PO4-02	SOLID	1	<1.20e-1	ug/g		
4	BLNK-PREP	0	@IC-01	SO4-02	SOLID	1	<1.38e-1	ug/g		
4	BLNK-PREP	0	@IC-01	OXALATE2	SOLID	1	<1.05e-1	ug/g		
5	SAMPLE	S98T002430	0	W	@IC-01	F-02	SOLID	N/A < 1.233e+02	123.300 ug/g	
5	SAMPLE	S98T002430	0	W	@IC-01	CL-02	SOLID	N/A	2.837e+03	174.700 ug/g
5	SAMPLE	S98T002430	0	W	@IC-01	NO2-02	SOLID	N/A	3.340e+04	1110.000 ug/g
5	SAMPLE	S98T002430	0	W	@IC-01	BR-02	SOLID	N/A < 1.284e+03	1284.000 ug/g	
5	SAMPLE	S98T002430	0	W	@IC-01	SO4-02	SOLID	N/A	1.943e+03	1418.000 ug/g
5	SAMPLE	S98T002430	0	W	@IC-01	OXALATE2	SOLID	N/A	2.477e+03	1079.000 ug/g
6	DUP	S98T002430	0	W	@IC-01	F-02	SOLID	<1.23e2	<1.20e2	RPD
6	DUP	S98T002430	0	W	@IC-01	CL-02	SOLID	2.84e+03	3.05e+03	7.131 RPD
6	DUP	S98T002430	0	W	@IC-01	NO2-02	SOLID	3.34e+04	3.65e+04	8.870 RPD

Units shown for QC (BLK/BKG) may not reflect the actual units.

# LABCORE Completed Worklist Report for Worklist# 27241

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
6 DUP	S98T002430	0 W	@IC-01 BR-02	SOLID	<1.28e3	<1.25e3		RPD
6 DUP	S98T002430	0 W	@IC-01 NO3-02	SOLID	5.29e+05	5.13e+05		3.071 RPD
6 DUP	S98T002430	0 W	@IC-01 PO4-02	SOLID	5.39e+03	8.52e+03		45.004 RPD
6 DUP	S98T002430	0 W	@IC-01 SO4-02	SOLID	1.94e+03	2.12e+03		8.867 RPD
6 DUP	S98T002430	0 W	@IC-01 OXALATE2	SOLID	2.48e+03	2.99e+03		18.647 RPD
7 SAMPLE	S98T002436	0 W	@IC-01 CL-02	SOLID	N/A	2.995e+03		169.000 ug/g
7 SAMPLE	S98T002436	0 W	@IC-01 NO2-02	SOLID	N/A	3.689e+04		1074.000 ug/g
7 SAMPLE	S98T002436	0 W	@IC-01 BR-02	SOLID	N/A	< 1.242e+03		1242.000 ug/g
7 SAMPLE	S98T002436	0 W	@IC-01 PO4-02	SOLID	N/A	5.321e+03		1193.000 ug/g
7 SAMPLE	S98T002436	0 W	@IC-01 OXALATE2	SOLID	N/A	< 1.044e+03		1043.000 ug/g
8 DUP	S98T002436	0 W	@IC-01 F-02	SOLID	2.43e+02	3.98e+02		48.362 RPD
8 DUP	S98T002436	0 W	@IC-01 CL-02	SOLID	3.00e+03	2.90e+03		3.390 RPD
8 DUP	S98T002436	0 W	@IC-01 NO2-02	SOLID	3.69e+04	3.42e+04		7.595 RPD
8 DUP	S98T002436	0 W	@IC-01 BR-02	SOLID	<1.24e3	<1.24e3		RPD
8 DUP	S98T002436	0 W	@IC-01 NO3-02	SOLID	5.95e+05	5.34e+05		10.806 RPD
8 DUP	S98T002436	0 W	@IC-01 PO4-02	SOLID	5.32e+03	6.13e+03		14.148 RPD
8 DUP	S98T002436	0 W	@IC-01 SO4-02	SOLID	2.09e+03	1.61e+03		25.946 RPD
8 DUP	S98T002436	0 W	@IC-01 OXALATE2	SOLID	<1.04e3	<1.04e3		RPD
9 SPK	S98T002436	0 W	@IC-01 F-02	SOLID	5.90e1	6.70e+01		113.559 % Recovery
9 SPK	S98T002436	0 W	@IC-01 CL-02	SOLID	8.00e1	7.82e+01		97.750 % Recovery
9 SPK	S98T002436	0 W	@IC-01 NO2-02	SOLID	5.48e2	5.30e+02		96.715 % Recovery
9 SPK	S98T002436	0 W	@IC-01 BR-02	SOLID	5.86e2	5.46e+02		93.174 % Recovery
9 SPK	S98T002436	0 W	@IC-01 NO3-02	SOLID	5.92e2	1.41e2		23.818 % Recovery
9 SPK	S98T002436	0 W	@IC-01 PO4-02	SOLID	5.47e2	5.56e+02		101.645 % Recovery
9 SPK	S98T002436	0 W	@IC-01 SO4-02	SOLID	6.38e2	6.37e+02		99.843 % Recovery
9 SPK	S98T002436	0 W	@IC-01 OXALATE2	SOLID	5.40e2	5.63e+02		104.259 % Recovery

Final page for worklist# 27241

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*Jeanne Lyle* 11/23/98  
Reviewer Signature \_\_\_\_\_ Date \_\_\_\_\_

HNF-1661 REV. 0

11/19/98 13:52  
A-0004-1

Page: 1

## LABCORE Data Entry Template for Worklist# 27241

Analyst: ADP Instrument: IC 4051 Book# 29N21-B LCS  
 Method: LA-533-105 Rev/Mod F-0 29N21-B CCV  
 Worklist Comment: U107 (2), @IC-01 skm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC-QC	QC		
2	LCS-INST		@IC-QC	QC		
3	CCV		@IC-QC	QC		
4	BLNK-PREP		@IC-01	SOLID		
5	SAMPLE	S98T002430 0 W	@IC-01	SOLID	98000359	U-107 (2)
		Analytes Requested:	BR-02	CL-02	F-02	NO2-C2
			OXALATE2,	PO4-02	SO4-02	NO3-02
6	DUP	S98T002430 0 W	@IC-01	SOLID		
7	SAMPLE	S98T002436 0 W	@IC-01	SOLID	98000359	U-107 (2)
		Analytes Requested:	BR-02	CL-02	F-02	NO2-C2
			OXALATE2,	PO4-02	SO4-02	NO3-02
8	DUP	S98T002436 0 W	@IC-01	SOLID		
9	SPK	S98T002436 0 W	@IC-01	SOLID		

Final page for worklist # 27241

Analyst Signature

Date

Analyst Signature

Date

S98T002430 rejected for NO<sub>3</sub> and PO<sub>4</sub>S98T002436 rejected for NO<sub>3</sub> & SO<sub>4</sub> + F.

Rest validated. JM Juy 11/23/98

Data Entry Comments:

uploaded 11-23-98

Reanalyzed on worklist #27290.

H. W. Wall

Date 11/15/99

27241/NOV.CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

```

=====
Sample Name: 29N21-B LCS                               Date: 11/22/1998 07:17:17
Data File  : C:\DX\DATA\98112201.D02
Method     : C:\DX\METHOD\KIT.MBT
ACI Address: 1 System 1 Inject#: 2                     Detector: CDM-1
Analyst    : Anthony Perini                          Column: AG4A/AS4A anion column
=====
    
```

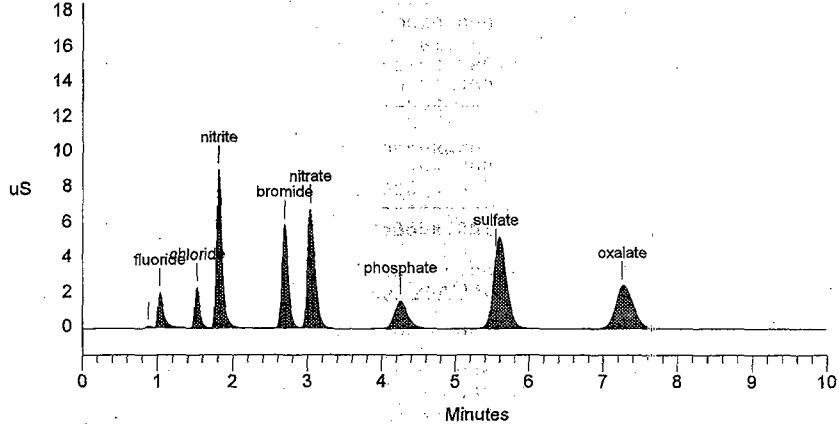
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          101      3000 5Hz   0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	86	354	2	
2	1.03	fluoride	61.147	1991	10519	2	3.70
3	1.52	chloride	105.984	2306	10496	1	2.01
4	1.81	nitrite	557.759	8981	46931	1	0.93
5	2.69	bromide	575.278	5884	34850	1	5.77
6	3.03	nitrate	580.579	6743	47205	1	3.88
7	4.25	phosphate	569.984	1589	20368	1	1.27
8	5.55	sulfate	661.768	4323	64565	1	1.03
9	7.25	oxalate	562.953	2458	41149	1	1.45
Totals			3654.257	34360	276439		

**File: 98112201.D02 Sample: 29N21-B LCS**



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1098 TO 1106.

## HNF-1661 REV. 0

```

=====
Sample Name: BLANK                      Date: 11/21/1998 07:05:19
Data File  : C:\DX\DATA\98112201.D01
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 1      Detector: CDM-1
Analyst    :                            Column: AG4A/AS4A anion column
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1             1 3000 5Hz 0.00 10.00          30
=====

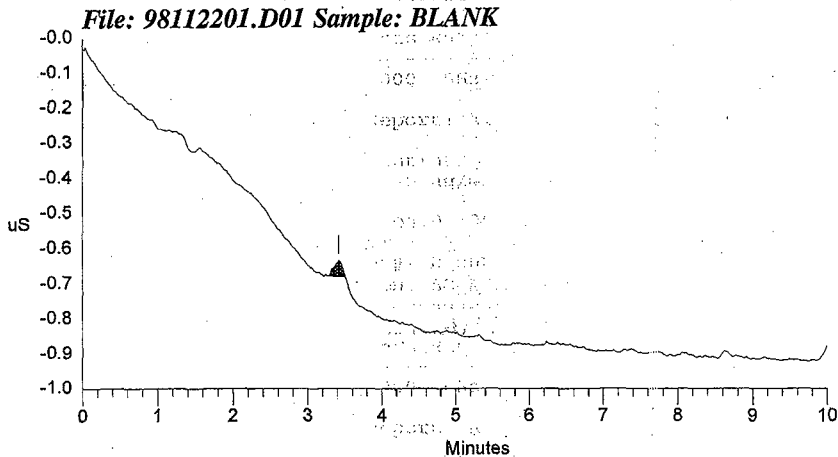
```

```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	3.42		0.000	44	335		1
Totals			0.000	44	335		



## HNF-1661 REV. 0

```

=====
Sample Name : 28N21-B CCV                               Date: 11/22/1998 07:32:25
Data File  : C:\DX\DATA\98112201.D03
Method     : C:\DX\METHOD\KIT.MET
ACTI Address: 1 System: 1 Inject#: 3                    Detector: CDM-1
Analyst    :                                           Column: AG4A/AS4A anion column
=====

```

```

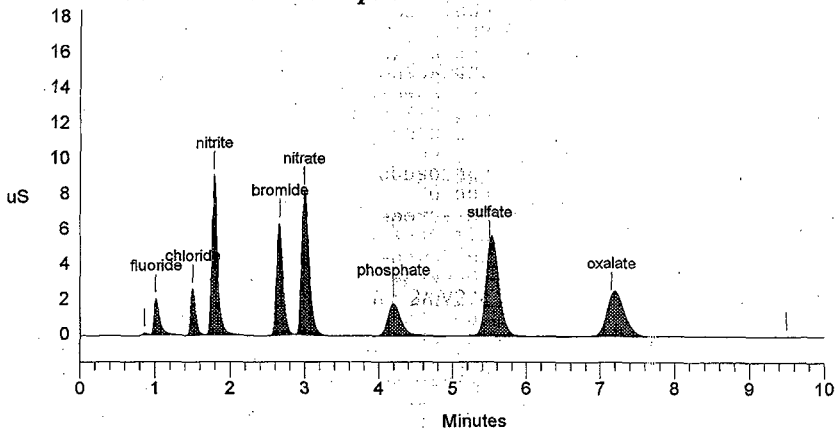
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External      1          101      3000 5Hz   0.00 10.00      30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.86		0.000	99	420	2	
2	1.01	fluoride	63.827	2046	10986	2	2.36
3	1.50	chloride	94.594	2628	11744	1	0.67
4	1.78	nitrite	565.738	9038	47617	1	-0.56
5	2.65	bromide	614.799	6355	37317	1	4.46
6	2.99	nitrate	695.288	8151	56841	1	2.28
7	4.19	phosphate	658.201	1852	23628	1	-0.16
8	5.49	sulfate	709.202	5197	69319	1	0.06
9	7.15	oxalate	580.462	2276	42446	1	-0.05
10	9.49		0.000	21	844	1	
Totals			3982.112	37664	301163		

File: 98112201.D03 Sample: 28N21-B CCV



## HNF-1661 REV. 0

```

=====
Sample Name: PREP BLANK                      Date: 11/22/1998 07:46:25
Data File  : C:\DX\DATA\98112201.D04
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 4          Detector: CDM-1
Analyst    :                               Column: AG4A/AS4A anion column
=====

```

```

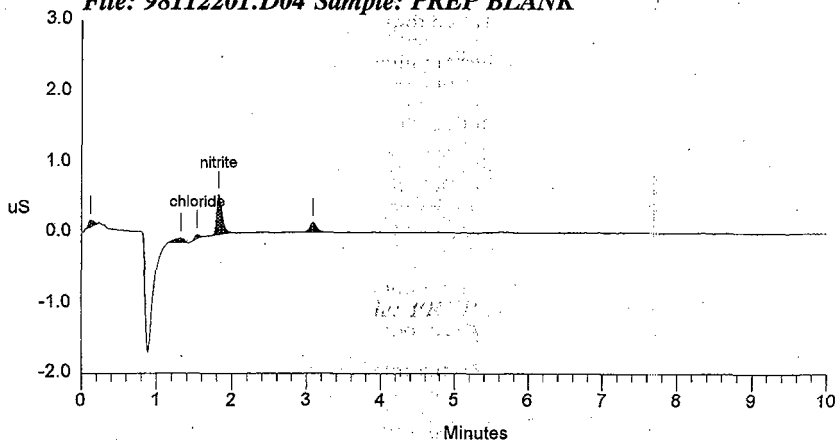
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1 3000 5Hz 0.00 10.00           30
=====

```

## \*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.12		0.000	98	478	1	
2	1.32		0.000	62	598	1	
3	1.53	chloride	0.026	52	214	1	2.91
4	1.82	nitrite	0.390	560	2766	1	1.68
5	3.08		0.000	131	814	1	
Totals			0.416	904	4870		

## File: 98112201.D04 Sample: PREP BLANK



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## HNF-1661 REV.0

```

=====
Sample Name: S98T002430 SAM                      Date: 11/22/1998 07:57:36
Data File  : C:\DX\DATA\98112201.D05
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 5              Detector: CDM-1
Analyst    :                                     Column: AG4A/AS4A anion column
=====

```

```

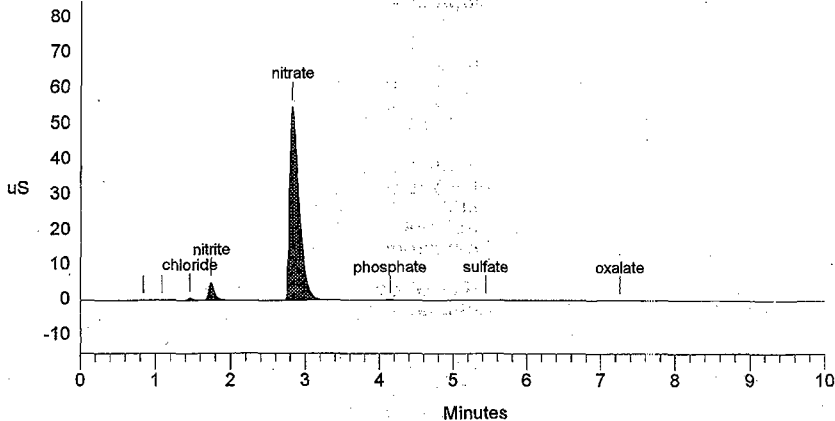
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           51  3000 5Hz  0.00 10.00           30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

PK. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.84		0.000	144	730	2	
2	1.09		0.000	155	1409	2	
3	1.45	chloride	14.085	704	3344	1	-2.46
4	1.73	nitrite	165.777	5117	27293	1	-3.17
5	2.81	nitrate	2627.825	54919	491677	1	-3.65
6	4.14	phosphate	26.736	134	1671	1	-1.43
7	5.44	sulfate	9.644	86	1377	1	-0.91
8	7.25	oxalate	12.296	41	1677	1	1.45
Totals			2856.363	61299	529178		

File: 98112201.D05 Sample: S98T002430 SAM



## HNF-1661 REV.0

```

=====
Sample Name: S98T002430 DUP          Date: 11/22/1998 08:25:43
Data File  : C:\DX\DATA\98112201.D06
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 6   Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====

```

```

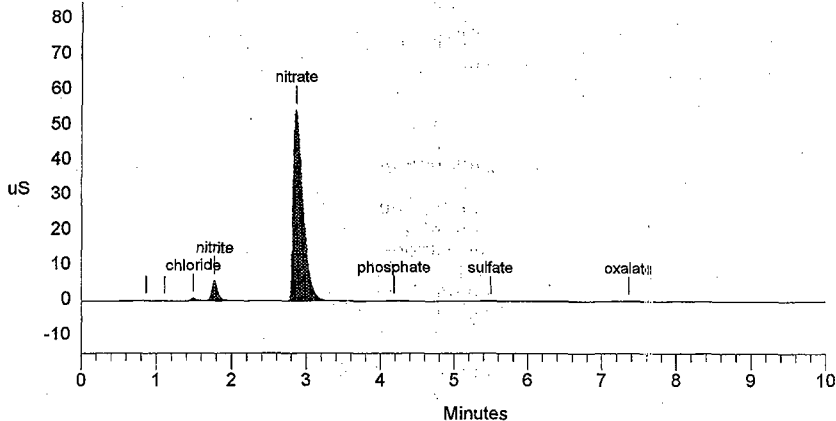
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          51    3000  5Hz   0.00 10.00          30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.86		0.000	181	990	2	
2	1.11		0.000	165	1514	2	
3	1.49	chloride	15.475	775	3687	1	-0.22
4	1.77	nitrite	185.243	5659	30582	1	-1.30
5	2.85	nitrate	2606.543	54277	486932	1	-2.28
6	4.18	phosphate	43.299	239	2837	1	-0.48
7	5.49	sulfate	10.794	111	1597	1	0.06
8	7.36	oxalate	15.171	88	2090	1	2.94
Totals			2876.524	61494	530230		

File: 98112201.D06 Sample: S98T002430 DUP



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## HNF-1661 REV. 0

```

=====
Sample Name: S98T002436 SAM           Date: 11/22/1998 08:48:40
Data File  : C:\DX\DATA\98112201.D08
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 8   Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====

```

```

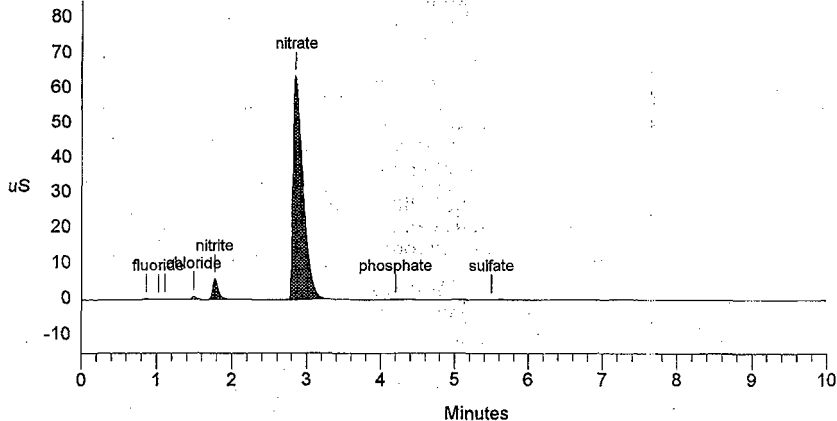
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           51 3000 5Hz  0.00 10.00          30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.86		0.000	207	1030	2	
2	1.02	fluoride	1.245	89	428	2	3.03
3	1.11		0.000	162	971	2	
4	1.49	chloride	15.365	799	3660	1	-0.22
5	1.77	nitrite	189.273	5875	31264	1	-1.30
6	2.85	nitrate	3053.134	63475	590460	1	-2.51
7	4.19	phosphate	27.304	143	1711	1	-0.16
8	5.49	sulfate	10.715	111	1582	1	0.06
Totals			3297.036	70860	631104		

File: 98112201.D08 Sample: S98T002436 SAM



## HNF-1661 REV. 0

```

=====
Sample Name: S98T002436 DUP           Date: 11/22/1998 09:01:41
Data File  : C:\DX\DATA\98112201.D09
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 9   Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====

```

```

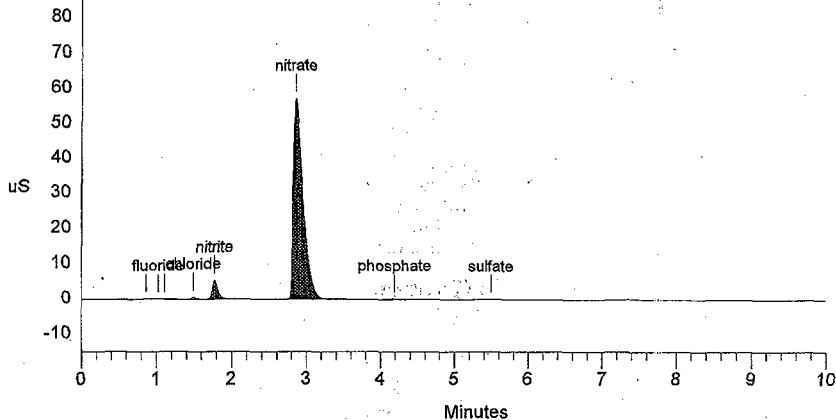
=====
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           51  3000 5Hz  0.00 10.00           30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	RI Code	%Delta
1	0.86		0.000	175	875	2	
2	1.02	fluoride	2.048	136	698	2	3.03
3	1.11		0.000	166	1100	2	
4	1.49	chloride	14.949	756	3557	1	-0.22
5	1.77	nitrite	175.941	5427	29010	1	-1.30
6	2.85	nitrate	2748.004	57196	518803	1	-2.28
7	4.19	phosphate	31.541	167	2009	1	-0.32
8	5.49	sulfate	8.310	86	1122	1	0.06
Totals			2980.793	64109	557173		

File: 98112201.D09 Sample: S98T002436 DUP



## HNF-1661 REV. 0

Sample Name: S98T002436 SPK Date: 11/22/1998 09:13:30  
 Data File : C:\DX\DATA\98112201.D10  
 Method : C:\DX\METHOD\KIT.MET  
 ACI Address: 1 System: 1 Inject#: 10 Detector: CDM-1  
 Analyst : Column: AG4A/AS4A anion column

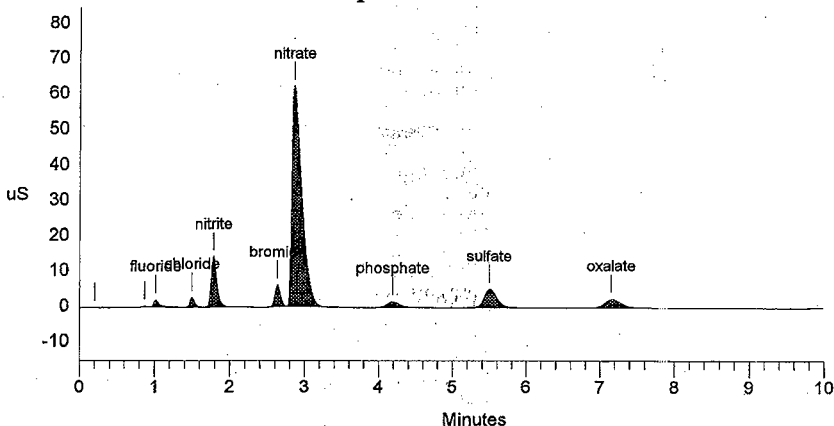
Calibration Volume Dilution Points Rate Start Stop Area Reject

External 1 51 3000 5Hz 0.00 10.00 30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.20		0.000	18	165	1	
2	0.87		0.000	232	1002	2	
3	1.01	fluoride	34.758	2004	11861	2	2.36
4	1.49	chloride	54.487	2825	13447	1	0.22
5	1.78	nitrite	454.028	14297	76420	1	-0.56
6	2.63	bromide	273.114	6144	32706	1	3.67
7	2.85	nitrate	2982.859	62099	573578	1	-2.28
8	4.19	phosphate	305.091	1712	21630	1	-0.32
9	5.49	sulfate	329.308	5190	63604	1	0.06
10	7.15	oxalate	281.659	2481	40768	1	-0.05
Totals			4715.302	97002	835181		

File: 98112201.D10 Sample: S98T002436 SPK



# LABCORE Completed Worklist Report for Worklist# 27242

Analyst: adp

Instrument: IC40S1

Book#: 29N21B

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107 (2), @IC-01 skm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB 0	@IC-QC F	QC	1	<1.20e-2		ug/mL
1	CCB 0	@IC-QC CL	QC	1	1.94e-01	0.194	ug/mL
1	CCB 0	@IC-QC NO2	QC	1	<1.08e-1		ug/mL
1	CCB 0	@IC-QC BR	QC	1	<1.25e-1		ug/mL
1	CCB 0	@IC-QC NO3	QC	1	<1.39e-1		ug/mL
1	CCB 0	@IC-QC P04	QC	1	<1.20e-1		ug/mL
1	CCB 0	@IC-QC S04	QC	1	<1.38e-1		ug/mL
1	CCB 0	@IC-QC OXALATE2	QC	1	<1.05e-1		ug/mL
2	LCS-INST 0	@IC-QC F	QC	5.90e1	5.87e+01	99.492 %	Recovery
2	LCS-INST 0	@IC-QC CL	QC	8.00e1	8.00e+01	100.000 %	Recovery
2	LCS-INST 0	@IC-QC NO2	QC	5.48e2	5.45e+02	99.453 %	Recovery
2	LCS-INST 0	@IC-QC BR	QC	5.86e2	5.78e+02	98.635 %	Recovery
2	LCS-INST 0	@IC-QC NO3	QC	5.92e2	5.62e+02	94.932 %	Recovery
2	LCS-INST 0	@IC-QC P04	QC	5.47e2	5.58e+02	102.011 %	Recovery
2	LCS-INST 0	@IC-QC S04	QC	6.38e2	6.36e+02	99.687 %	Recovery
2	LCS-INST 0	@IC-QC OXALATE2	QC	5.40e2	5.52e+02	102.222 %	Recovery
3	CCV 0	@IC-QC F	QC	6.40e1	6.17e+01	96.406 %	Recovery
3	CCV 0	@IC-QC CL	QC	9.00e1	9.69e+01	107.667 %	Recovery
3	CCV 0	@IC-QC NO2	QC	5.62e2	6.04e+02	107.473 %	Recovery
3	CCV 0	@IC-QC BR	QC	6.30e2	6.38e+02	101.270 %	Recovery
3	CCV 0	@IC-QC NO3	QC	6.98e2	7.30e+02	104.585 %	Recovery
3	CCV 0	@IC-QC P04	QC	6.32e2	6.88e+02	108.861 %	Recovery
3	CCV 0	@IC-QC S04	QC	6.99e2	7.32e+02	104.721 %	Recovery
3	CCV 0	@IC-QC OXALATE2	QC	5.53e2	5.88e+02	106.329 %	Recovery
4	BLNK-PREP 0	@IC-01 F-02	SOLID	1	<1.20e-2		ug/g
4	BLNK-PREP 0	@IC-01 CL-02	SOLID	1	2.20e-02	0.022	ug/g
4	BLNK-PREP 0	@IC-01 NO2-02	SOLID	1	5.62e-01	0.562	ug/g
4	BLNK-PREP 0	@IC-01 BR-02	SOLID	1	<1.25e-1		ug/g
4	BLNK-PREP 0	@IC-01 NO3-02	SOLID	1	2.09e-01	0.209	ug/g
4	BLNK-PREP 0	@IC-01 P04-02	SOLID	1	<1.20e-1		ug/g
4	BLNK-PREP 0	@IC-01 S04-02	SOLID	1	<1.38e-1		ug/g
4	BLNK-PREP 0	@IC-01 OXALATE2	SOLID	1	<1.05e-1		ug/g
5	SAMPLE S98T002442 0 W	@IC-01 F-02	SOLID	N/A	< 1.631e+02	163.200	ug/g
5	SAMPLE S98T002442 0 W	@IC-01 CL-02	SOLID	N/A	2.950e+03	231.100	ug/g
5	SAMPLE S98T002442 0 W	@IC-01 NO2-02	SOLID	N/A	3.418e+04	1468.000	ug/g
5	SAMPLE S98T002442 0 W	@IC-01 BR-02	SOLID	N/A	< 1.699e+03	1699.000	ug/g
5	SAMPLE S98T002442 0 W	@IC-01 NO3-02	SOLID	N/A	5.641e+05	1889.000	ug/g
5	SAMPLE S98T002442 0 W	@IC-01 P04-02	SOLID	N/A	4.126e+03	1632.000	ug/g
5	SAMPLE S98T002442 0 W	@IC-01 S04-02	SOLID	N/A	< 1.876e+03	1876.000	ug/g
5	SAMPLE S98T002442 0 W	@IC-01 OXALATE2	SOLID	N/A	< 1.427e+03	1427.000	ug/g
6	DUP S98T002442 0 W	@IC-01 F-02	SOLID	<1.63e2	<1.60e2		RPD

Units shown for QC (BLK/BKG) may not reflect the actual units.

## LABCORE Completed Worklist Report for Worklist# 27242

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
6 DUP	S98T002442	0 W	@IC-01	CL-02	SOLID	2.95e+03	3.02e+03	2.345 RPD
6 DUP	S98T002442	0 W	@IC-01	NO2-02	SOLID	3.42e+04	3.48e+04	1.739 RPD
6 DUP	S98T002442	0 W	@IC-01	BR-02	SOLID	<1.70e3	<1.67e3	RPD
6 DUP	S98T002442	0 W	@IC-01	NO3-02	SOLID	5.64e+05	5.74e+05	1.757 RPD
6 DUP	S98T002442	0 W	@IC-01	PO4-02	SOLID	4.13e+03	4.04e+03	2.203 RPD
6 DUP	S98T002442	0 W	@IC-01	SO4-02	SOLID	<1.88e3	<1.84e3	RPD
6 DUP	S98T002442	0 W	@IC-01	OXALATE2	SOLID	<1.43e3	<1.40e3	RPD
7 SAMPLE	S98T002574	0 W	@IC-01	F-02	SOLID	N/A	2.306e+03	120.500 ug/g
7 SAMPLE	S98T002574	0 W	@IC-01	CL-02	SOLID	N/A	3.969e+02	170.700 ug/g
7 SAMPLE	S98T002574	0 W	@IC-01	NO2-02	SOLID	N/A	3.739e+03	1084.000 ug/g
7 SAMPLE	S98T002574	0 W	@IC-01	BR-02	SOLID	N/A	1.255e+03	1255.000 ug/g
7 SAMPLE	S98T002574	0 W	@IC-01	NO3-02	SOLID	N/A	1.031e+04	1396.000 ug/g
7 SAMPLE	S98T002574	0 W	@IC-01	PO4-02	SOLID	N/A	2.711e+05	1205.000 ug/g
7 SAMPLE	S98T002574	0 W	@IC-01	SO4-02	SOLID	N/A	1.386e+03	1386.000 ug/g
7 SAMPLE	S98T002574	0 W	@IC-01	OXALATE2	SOLID	N/A	1.366e+03	1054.000 ug/g
8 DUP	S98T002574	0 W	@IC-01	F-02	SOLID	2.31e+03	1.19e+03	64.000 RPD
8 DUP	S98T002574	0 W	@IC-01	CL-02	SOLID	3.97e+02	4.93e+02	21.573 RPD
8 DUP	S98T002574	0 W	@IC-01	NO2-02	SOLID	3.74e+03	4.35e+03	15.080 RPD
8 DUP	S98T002574	0 W	@IC-01	BR-02	SOLID	<1.26e3	<1.27e3	RPD
8 DUP	S98T002574	0 W	@IC-01	NO3-02	SOLID	1.03e+04	1.01e+04	1.961 RPD
8 DUP	S98T002574	0 W	@IC-01	PO4-02	SOLID	2.71e+05	2.76e+05	1.828 RPD
8 DUP	S98T002574	0 W	@IC-01	SO4-02	SOLID	<1.39e3	<1.41e3	RPD
8 DUP	S98T002574	0 W	@IC-01	OXALATE2	SOLID	1.37e+03	<1.07e3	RPD
9 SPK	S98T002574	0 W	@IC-01	F-02	SOLID	5.90e1	5.24e+01	88.814 % Recovery
9 SPK	S98T002574	0 W	@IC-01	CL-02	SOLID	8.00e1	8.10e+01	101.250 % Recovery
9 SPK	S98T002574	0 W	@IC-01	NO2-02	SOLID	5.48e2	5.46e+02	99.635 % Recovery
9 SPK	S98T002574	0 W	@IC-01	BR-02	SOLID	5.86e2	5.64e+02	96.246 % Recovery
9 SPK	S98T002574	0 W	@IC-01	NO3-02	SOLID	5.92e2	5.64e+02	95.270 % Recovery
9 SPK	S98T002574	0 W	@IC-01	PO4-02	SOLID	5.47e2	5.38e+02	98.355 % Recovery
9 SPK	S98T002574	0 W	@IC-01	SO4-02	SOLID	6.38e2	6.43e+02	100.794 % Recovery
9 SPK	S98T002574	0 W	@IC-01	OXALATE2	SOLID	5.48e2	5.47e+02	101.296 % Recovery

**Final page for worklist# 27242**

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*Jean M. Szye 11/23/98*  
Reviewer Signature \_\_\_\_\_ Date \_\_\_\_\_

Analyst

ADP Instrument: IC 4051

Book#

Worklist 27242  
2 N21 B LCS  
2 N21 B CCV


Method: LA-533-105 Rev/Mod F-0

HNF-1661 REV. 0

Worklist Comment: U107 (2), @IC-01 skm

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	CCB				@IC-QC	QC		
2	LCS-INST				@IC-QC	QC		
3	CCV				@IC-QC	QC		
4	BLNK-PREP				@IC-01	SOLID		
5	SAMPLE	S98T002442	0	W	@IC-01	SOLID	98000359	U-107 (2)
		Analytes Requested: BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02						
6	DUP	S98T002442	0	W	@IC-01	SOLID		
7	SAMPLE	S98T002574	0	W	@IC-01	SOLID	98000401	U-107 (2)
		Analytes Requested: BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02						
8	DUP	S98T002574	0	W	@IC-01	SOLID		
9	SPK	S98T002574	0	W	@IC-01	SOLID		

Final page for worklist # 27242

 11-21-98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments:

uploaded 11-23-98  
John Wauell

Validated 11/23/98 JM Eysen

27242 NOV. CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



HNF-1661 REV. 0

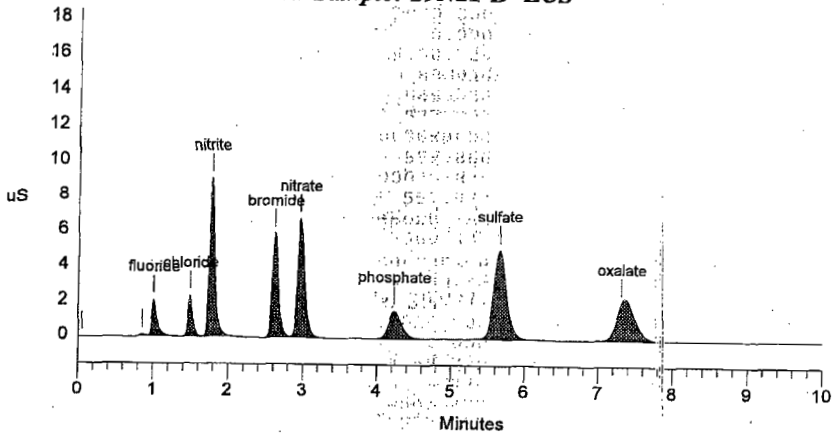
Sample Name: 29N21-B LCS Date: 11/21/1998 07:00:40  
 Data File : C:\DX\DATA\98112101.D02  
 Method : C:\DX\METHOD\KIT.MET  
 ACI Address: 1 System: 1 Inject#: 2 Detector: CDM-1  
 Analyst : *Anthony Peruto* Column: AG4A/AS4A anion column  
 11-21-98

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.05		0.000	34	85	1	
2	0.85		0.000	84	337	2	
3	1.01	fluoride	58.729	2057	10098	2	1.68
4	1.49	chloride	80.044	2297	9893	1	-0.22
5	1.77	nitrite	545.488	9002	45878	1	-1.30
6	2.61	bromide	577.903	5881	35014	1	2.89
7	2.95	nitrate	561.758	6762	45629	1	1.14
8	4.23	phosphate	557.866	1606	19922	1	0.63
9	5.65	sulfate	635.674	5070	61956	1	2.98
10	7.31	oxalate	551.977	2166	40337	1	2.19
Totals			3569.439	34958	269149		

File: 98112101.D02 Sample: 29N21-B LCS



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1110 TO 1118.

```

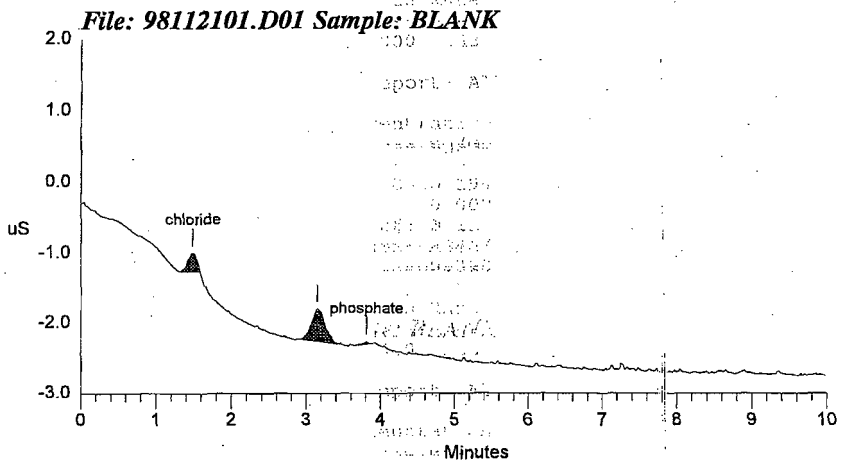
=====
Sample Name: BLANK                               Date: 11/21/1998 06:44:10
Data File  : C:\DX\DATA\98112101.D01
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 1             Detector: CDM-1
Analyst    :                                   Column: AG4A/AS4A anion column
=====
    
```

```

-----
Calibration Volume  Dilution Points Rate  Start  Stop  Area Reject
-----
External           1           1  3000  5Hz  0.00  10.00  30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.48	chloride	0.194	271	2317	1	-0.67
2	3.14		0.000	462	5771	1	
3	3.81	phosphate	0.116	44	206	1	-9.37
Totals			0.310	778	8295		



```

=====
Sample Name: 28N21-B   CCV                               Date: 11/21/1998 07:14:41
Data File  : C:\DX\DATA\98112101.D03
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 3                      Detector: CDM-1
Analyst    :                               Column: AG4A/AS4A anion column
=====
    
```

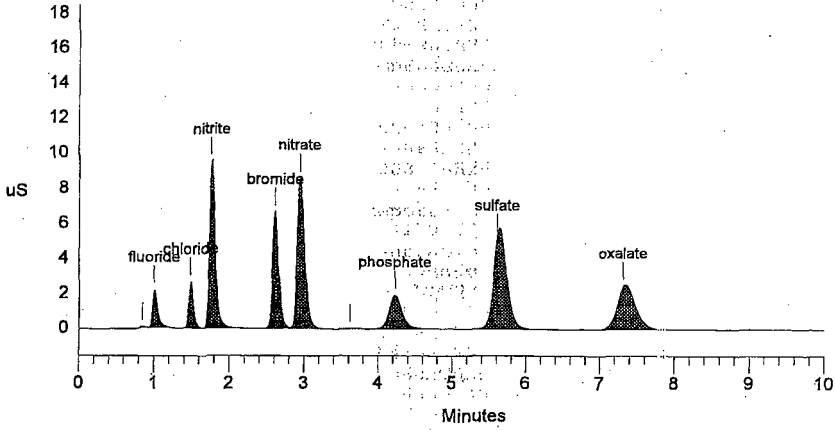
```

-----
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           101 3000 5Hz 0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	85	334	2	
2	1.00	fluoride	61.736	2163	10622	2	1.01
3	1.48	chloride	96.873	2676	12035	1	-0.67
4	1.76	nitrite	604.015	9501	50908	1	-1.68
5	2.60	bromide	638.445	6650	38796	1	2.36
6	2.93	nitrate	730.423	8573	59804	1	0.46
7	3.61		0.000	18	61	1	
8	4.22	phosphate	688.284	1957	24744	1	0.48
9	5.60	sulfate	731.878	5197	71595	1	2.00
10	7.31	oxalate	587.920	2485	42998	1	2.19
Totals			4139.574	39306	311897		

File: 98112101.D03 Sample: 28N21-B · CCV



1112

## HNF-1661 REV. 0

```

=====
Sample Name: PREP BLANK                      Date: 11/11/1998 07:29:51
Data File  : C:\DX\DATA\98112101.D04
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 4          Detector: CDM-1
Analyst    :                               Column: AG4A/AS4A anion column
=====

```

```

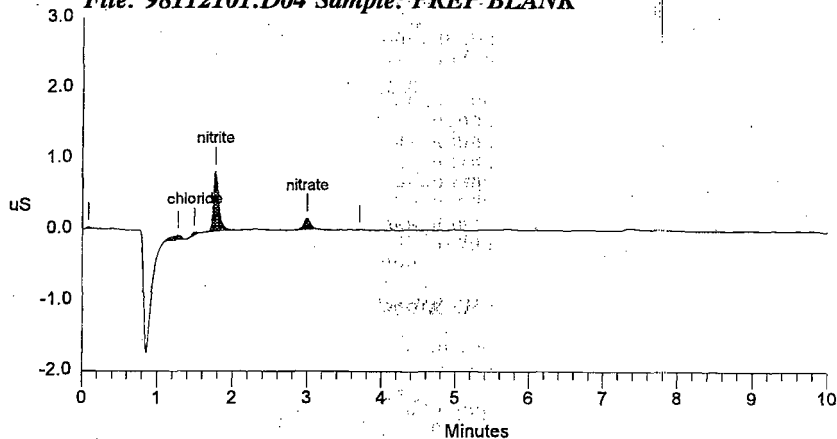
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          1           1    3000 5Hz   0.00 10.00           30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.08		0.000	28	107	1	
2	1.27		0.000	62	625	1	
3	1.49	chloride	0.022	45	171	1	-0.22
4	1.77	nitrite	0.562	846	4231	1	-1.30
5	2.99	nitrate	0.209	160	954	1	2.28
6	3.69		0.000	11	38	1	
Totals			0.793	1151	6126		

File: 98112101.D04 Sample: PREP BLANK



HNF-1661 REV. 0

```

=====
Sample Name: S98T002442 SAM                      Date: 11/21/1998 08:22:30
Data File  : C:\DX\DATA\98112101.D08
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 8                Detector: CDM-1
Analyst    :                                     Column: AG4A/AS4A anion column
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          1      67.67  3000 5Hz  0.00 10.0      30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

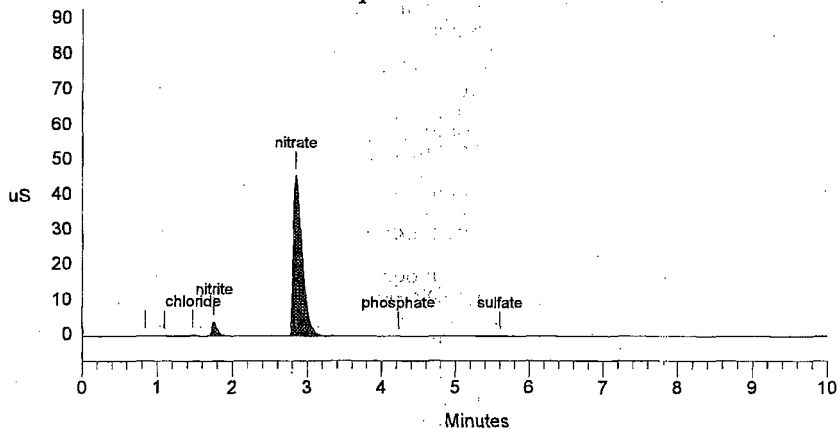
Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	126	609	1	
2	1.10		0.000	79	375	1	
3	1.47	chloride	14.685	569	2602	1	-1.12
4	1.75	nitrite	170.148	4033	20960	1	-2.05
5	2.84	nitrate	2807.886	45650	382088	1	-2.74
6	4.23	phosphate	20.537	77	879	1	0.63
7	5.60	sulfate	8.672	55	782	1	2.00

```

-----
Totals          30214929      50590      408296
-----

```

File: 98112101.D08 Sample: S98T002442 SAM



1114

HNF-1661 REV.0

```

=====
Sample Name: S98T002442 DUP           Date: 11/21/1998 08:33:47
Data File  : C:\DX\DATA\98112101.D09
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 9   Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====

```

```

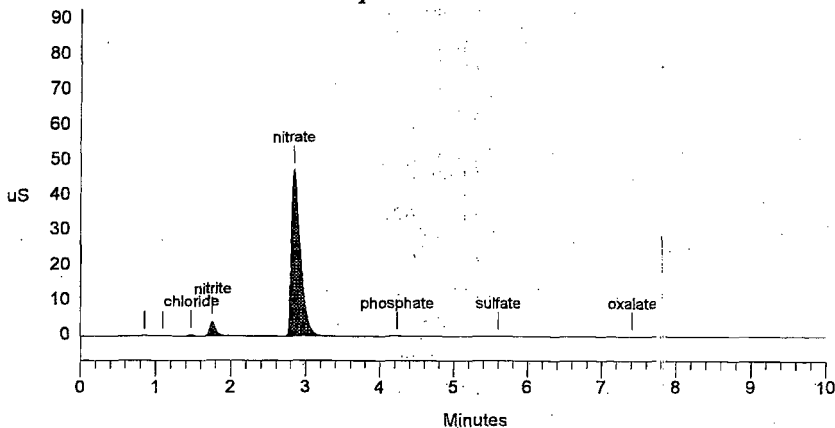
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          1      67.67   3000 5Hz  0.00 10.00      30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	133	640	1	
2	1.10		0.000	94	695	1	
3	1.47	chloride	15.321	582	2720	1	-1.12
4	1.75	nitrite	176.838	4158	21809	1	-2.05
5	2.84	nitrate	2914.060	47453	398652	1	-2.74
6	4.23	phosphate	20.520	76	878	1	0.79
7	5.60	sulfate	7.996	54	685	1	2.00
8	7.41	oxalate	4.894	26	441	1	3.68
Totals			3139.629	52577	426521		

File: 98112101.D09 Sample: S98T002442 DUP



1115

HNF-1661 REV. 0

```

=====
Sample Name: S98T002574 SAM                      Date: 11/21/1998 09:54:21
Data File  : C:\DX\DATA\98112101.D11
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 11              Detector: CDM-1
Analyst    :                                     Column: AG4A/AS4A anion column
=====
    
```

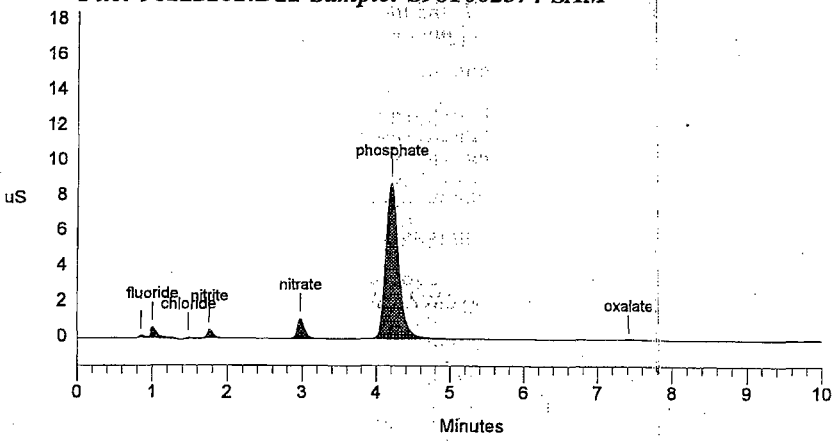
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           51  3000 5Hz  0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	115	560	2	
2	1.01	fluoride	11.711	600	3962	2	1.68
3	1.48	chloride	2.016	79	386	1	-0.67
4	1.76	nitrite	18.989	482	2615	1	-1.68
5	2.97	nitrate	52.355	1135	7706	1	1.83
6	4.19	phosphate	1376.913	8768	107255	1	-0.16
7	7.41	oxalate	6.939	40	908	1	3.68
Totals			1468.924	11219	123391		

File: 98112101.D11 Sample: S98T002574 SAM



## HNF-1661 REV. 0

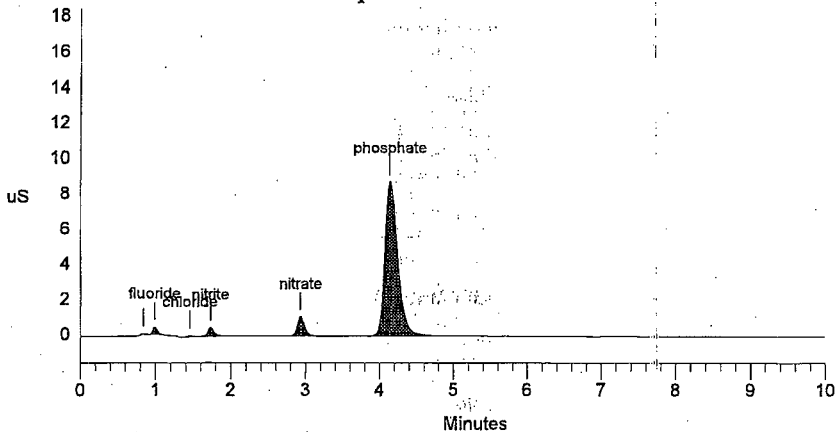
Sample Name: S98T002574 DUP Date: 11/11/1998 10:07:03  
 Data File : C:\DX\DATA\98112101.D12  
 Method : C:\DX\METHOD\KIT.MET  
 ACI Address: 1 System: 1 Inject#: 12 Detector: CDM-1  
 Analyst : Column: AG4A/AS4A anion column

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	51	3000	5Hz	0.00	10.00		30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.84		0.000	105	439	2	
2	0.99	fluoride	5.932	451	2006	2	-0.34
3	1.45	chloride	2.465	97	495	1	-2.46
4	1.73	nitrite	21.732	504	3075	1	-3.54
5	2.93	nitrate	50.640	1086	7428	1	0.23
6	4.13	phosphate	1382.188	8752	107719	1	-1.59
Totals			1462.957	10995	121162		

File: 98112101.D12 Sample: S98T002574 DUP





## HNF-1661 REV. 0

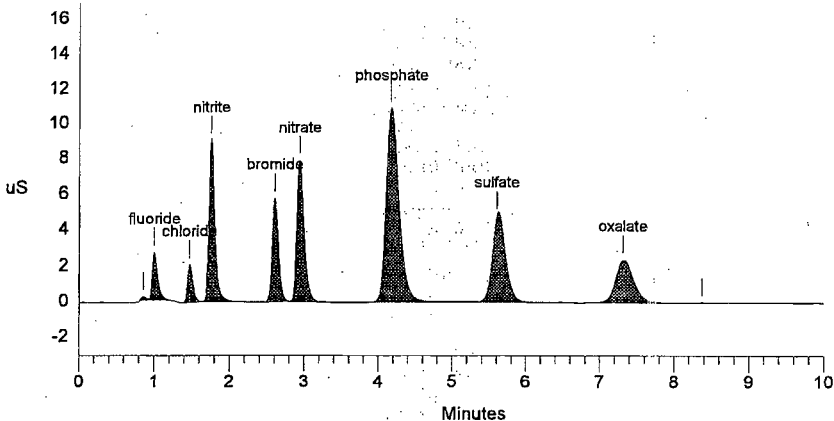
Sample Name: S98T002574 SPK Date: 11/11/1998 10:18:15  
 Data File : C:\DX\DATA\98112101.D13  
 Method : C:\DX\METHOD\KIT.MET  
 ACI Address: 1 System: 1 Inject#: 13 Detector: CDM-1  
 Analyst : Column: AG4A/AS4A anion column

Calibration Volume Dilution Points Rate Start Stop Area Reject  
 External 1 51 3000 5Hz 0.00 10.0 30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	182	723	2	
2	1.00	fluoride	37.915	2627	12956	2	1.01
3	1.47	chloride	42.541	2105	10427	1	-1.57
4	1.75	nitrite	291.826	9060	48665	1	-2.05
5	2.60	bromide	282.027	5788	33806	1	2.36
6	2.93	nitrate	334.428	7887	54065	1	0.46
7	4.17	phosphate	1645.851	10937	131639	1	-0.79
8	5.60	sulfate	321.510	4812	62060	1	2.00
9	7.31	oxalate	280.548	2388	40605	1	2.19
10	8.37		0.000	15	291	1	
Totals			3236.646	45801	395236		

File: 98112101.D13 Sample: S98T002574 SPK



1118

# LBCORE Completed Worklist Report for Worklist# 27243

Analyst: adp

Instrument: IC45S2

Book#: 35N21C

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107 (2), @IC4G-01 skm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	@IC4G-QC F*4	QC	1	7.20e-02	0.072 ug/mL
1	CCB	0	@IC4G-QC ACETATE2	QC	1	<2.00e-2	ug/mL
1	CCB	0	@IC4G-QC FORMATE2	QC	1	<2.10e-2	ug/mL
1	CCB	0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2	ug/mL
2	LCS-INST	0	@IC4G-QC F*4	QC	5.89e1	6.21e+01	105.433 % Recovery
2	LCS-INST	0	@IC4G-QC ACETATE2	QC	1.24e2	1.12e+02	90.323 % Recovery
2	LCS-INST	0	@IC4G-QC FORMATE2	QC	1.19e2	1.12e+02	94.118 % Recovery
2	LCS-INST	0	@IC4G-QC GLYCOLT1	QC	1.07e2	1.03e+02	96.262 % Recovery
3	CCV	0	@IC4G-QC F*4	QC	6.21e1	5.83e+01	93.881 % Recovery
3	CCV	0	@IC4G-QC ACETATE2	QC	1.23e2	1.13e+02	91.870 % Recovery
3	CCV	0	@IC4G-QC FORMATE2	QC	1.30e2	1.21e+02	93.077 % Recovery
3	CCV	0	@IC4G-QC GLYCOLT1	QC	1.02e2	9.72e+01	95.294 % Recovery
4	BLNK-PREP	0	@IC4G-01 F*4-01	SOLID	1	<3.10e-2	ug/g
4	BLNK-PREP	0	@IC4G-01 ACETATE2	SOLID	1	<2.00e-2	ug/g
4	BLNK-PREP	0	@IC4G-01 FORMATE2	SOLID	1	<6.20e-2	ug/g
4	BLNK-PREP	0	@IC4G-01 GLYCOLT1	SOLID	1	<5.60e-2	ug/g
5	SAMPLE	S98T002430	0 W	@IC4G-01 F*4-01	SOLID	<u>N/A</u>	1.122e+02 37.470 ug/g
5	SAMPLE	S98T002430	0 W	@IC4G-01 ACETATE2	SOLID	<u>N/A</u>	1.726e+02 24.170 ug/g
5	SAMPLE	S98T002430	0 W	@IC4G-01 FORMATE2	SOLID	<u>N/A</u>	9.253e+02 74.940 ug/g
5	SAMPLE	S98T002430	0 W	@IC4G-01 GLYCOLT1	SOLID	<u>N/A</u>	3.112e+02 67.680 ug/g
6	DUP	S98T002430	0 W	@IC4G-01 F*4-01	SOLID	1.12e+02	1.14e+02 1.770 RPD
6	DUP	S98T002430	0 W	@IC4G-01 ACETATE2	SOLID	1.73e+02	2.59e+02 39.815 RPD
6	DUP	S98T002430	0 W	@IC4G-01 FORMATE2	SOLID	9.25e+02	1.08e+03 15.461 RPD
6	DUP	S98T002430	0 W	@IC4G-01 GLYCOLT1	SOLID	3.11e+02	4.63e+02 39.276 RPD
7	SAMPLE	S98T002436	0 W	@IC4G-01 F*4-01	SOLID	<u>N/A</u>	< 3.625e+01 36.250 ug/g
7	SAMPLE	S98T002436	0 W	@IC4G-01 ACETATE2	SOLID	<u>N/A</u>	< 2.339e+01 23.390 ug/g
7	SAMPLE	S98T002436	0 W	@IC4G-01 FORMATE2	SOLID	<u>N/A</u>	< 7.250e+01 72.480 ug/g
7	SAMPLE	S98T002436	0 W	@IC4G-01 GLYCOLT1	SOLID	<u>N/A</u>	< 6.548e+01 65.460 ug/g
8	DUP	S98T002436	0 W	@IC4G-01 F*4-01	SOLID	<3.62e1	<3.61e1 RPD
8	DUP	S98T002436	0 W	@IC4G-01 ACETATE2	SOLID	<2.34e1	<2.33e1 RPD
8	DUP	S98T002436	0 W	@IC4G-01 FORMATE2	SOLID	<7.25e1	<7.23e1 RPD
8	DUP	S98T002436	0 W	@IC4G-01 GLYCOLT1	SOLID	<6.55e1	<6.53e1 RPD
9	SPK	S98T002436	0 W	@IC4G-01 F*4-01	SOLID	5.89e1	6.40e+01 108.659 % Recovery
9	SPK	S98T002436	0 W	@IC4G-01 ACETATE2	SOLID	1.24e2	1.00e+02 80.645 % Recovery
9	SPK	S98T002436	0 W	@IC4G-01 FORMATE2	SOLID	1.19e2	1.85e+02 155.462 % Recovery
9	SPK	S98T002436	0 W	@IC4G-01 GLYCOLT1	SOLID	1.07e2	1.12e+02 104.673 % Recovery

Final page for worklist# 27243

*Janis M. Lynn 1/4/99*

Units shown for QC (BLK/BKG) may not reflect the actual units.

HNF-1661 REV. 0

11/19/98 14:03

Page: 1


A-0004-1

**LABCORE Data Entry Template for Worklist# 27243**

Analyst: ASP Instrument: IC 4552 Book# 35N21-C LCS  
 Method: LA-533-1105 Rev/Mod F-0 39N21-A ecv  
 Worklist Comment: U107 (2), @IC4G-01 skm

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	CCB				@IC4G-QC	QC		
2	LCS-INST.				@IC4G-QC	QC		
3	CCV				@IC4G-QC	QC		
4	BLNK-PREP				@IC4G-01	SOLID		
5	SAMPLE	S98T002430	0	W	@IC4G-01	SOLID	98000359	U-107 (2)
Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCOLT1								
6	DUP	S98T002430	0	W	@IC4G-01	SOLID		
7	SAMPLE	S98T002436	0	W	@IC4G-01	SOLID	98000359	U-107 (2)
Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCOLT1								
8	DUP	S98T002436	0	W	@IC4G-01	SOLID		
9	SPK	S98T002436	0	W	@IC4G-01	SOLID		

**Final page for worklist # 27243**

  
 Analyst Signature Date 12-29-98

\_\_\_\_\_  
 Analyst Signature Date

## Data Entry Comments:

uploaded 1-4-99  
John Howell  
27243DEC.CSV  
S98T002430 showed non homogeneity in acetate & glycolate values, S98T002436 had no detectable organic acids, but

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

1120

poor spike recovery indicates possible matrix interference with format.  
 1.1412 1.1412 1.1412

## HNF-1661 REV. 0

=====

Sample Name: 35N21-C LCS Date: 12/29/1998 09:39:24

Data File : C:\DX\DATA\98122901.D04

Method : C:\DX\METHOD\MAS14GLY.MET

ACI Address: System: 2 Inject#: 4 Detector: CDM-2

Analyst : *Anthony Parente* Column: AG14A-SC, AS14A-SC, SRS

=====

=====

12-29-98

Calibration Volume Dilution Points Rate Start Stop Area Reject

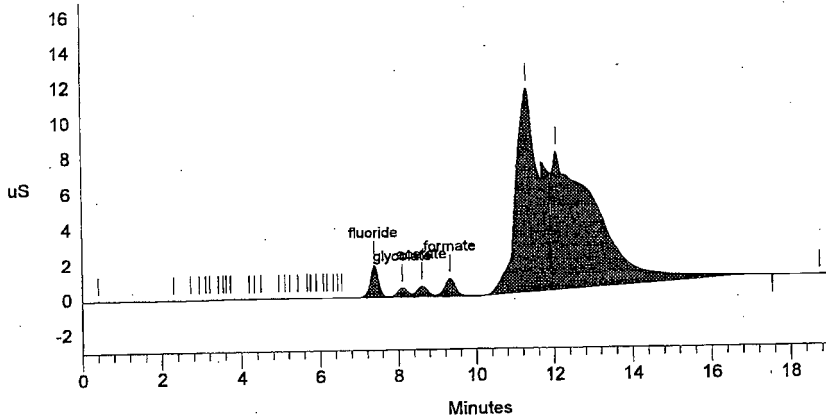
External 1 101 5700 5Hz 0.00 19.00 16000

=====

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta	
1	0.40		0.000	12053	727332	1		
3	2.73		0.000	2523	26643	2		
4	2.95		0.000	2605	33839	2		
5	3.11		0.000	2592	17480	2		
6	3.21		0.000	2723	23443	2		
10	3.73		0.000	1378	19517	2		
12	4.33		0.000	2307	17344	2		
13	4.49		0.000	2345	36146	3		
16	5.23		0.000	1726	17020	2		
26	7.39	fluoride	62.146	105,118	34578	26684818	2	0.00
27	8.11	glycolate	102.789	96,06	509537	9151649	2	0.00
28	8.61	acetate	111.509	89,93	583750	11168616	2	0.00
29	9.33	formate	111.856	93,99	1003709	18776935	2	0.00
30	11.33		0.000	11574761	502949983	2		
31	12.08		0.000	7847508	630686080	2		
Totals			388.301	23384096	1200336846			

File: 98122901.D04 Sample: 35N21-C LCS



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1121 TO 1123.

1121

HNF-1661 REV. 0

Data Reprocessed On 12/29/1998 09:22:44

```

=====
Sample Name: BLANK                      Date: 12/29/1998 07:06:30
Data File  : C:\DX\DATA\98122901.D01
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 1      Detector: CDM-2
Analyst    :                            Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

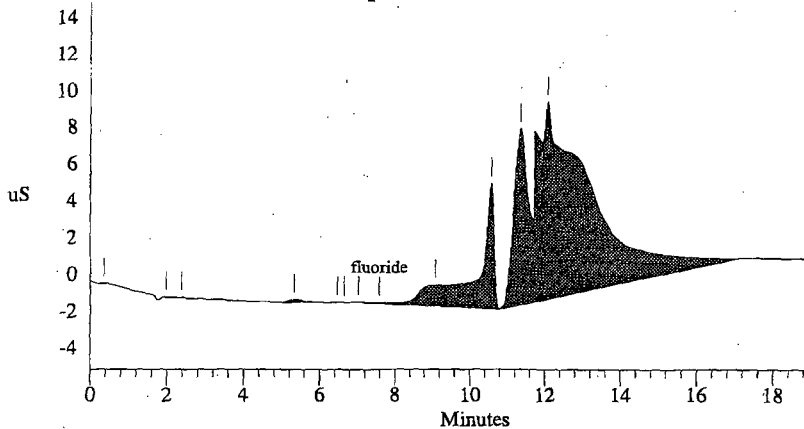
=====
alibration Volume Dilution Points Rate Start Stop Area Reject
-----
external      1          1    5700 5Hz   0.00 19.00    16000
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
2	2.00		0.000	57891	1270578	2	
3	2.40		0.000	51858	2020598	2	
4	5.35		0.000	167528	3927200	1	
7	7.04		0.000	51288	1676951	2	
8	7.60	fluoride	0.072	76795	2775068	2	0.00
9	9.09		0.000	1149579	52262722	2	
10	10.56		0.000	6845616	171942929	2	
11	11.33		0.000	9595957	366134046	2	
12	12.05		0.000	10763200	948140494	2	
Totals			0.072	28759713	1550150586		

File: 98122901.D01 Sample: BLANK



HNF-1661 REV. 0

```

=====
Sample Name: 34N21-A.CCV          Date: 12/29/1998 09:17:17
Data File  : C:\DX\DATA\98122901.D03
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 3      Detector: CDM-2
Analyst    :                      Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

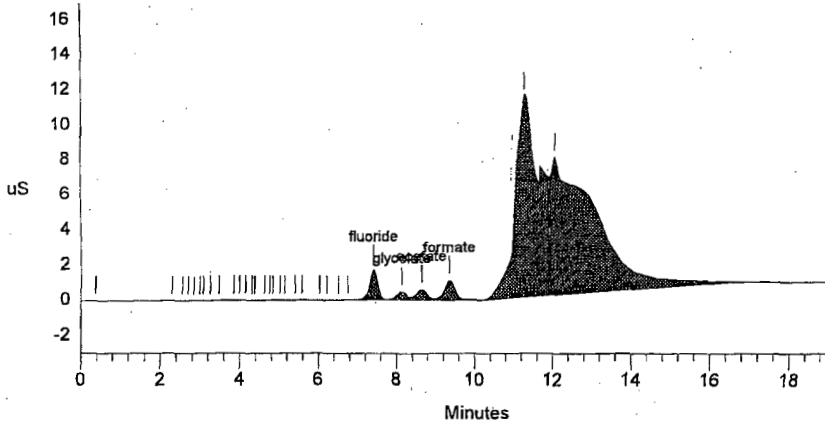
=====
alibration Volume Dilution Points Rate Start Stop Area Reject
-----
external      1          101  5700  5Hz  0.00  19.00      16000
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.37		0.000	12275	479522	1	
5	2.85		0.000	2349	17677	2	
6	3.00		0.000	4282	28101	2	
7	3.09		0.000	4492	25749	2	
8	3.27		0.000	5177	49298	2	
9	3.48		0.000	4009	59761	2	
10	3.85		0.000	4249	57865	2	
11	4.00		0.000	3622	28017	2	
13	4.31		0.000	3824	19864	2	
14	4.37		0.000	4283	47915	2	
15	4.63		0.000	4002	16951	2	
16	4.76		0.000	5719	35768	2	
17	4.84		0.000	5353	44298	2	
18	5.03		0.000	5614	36446	2	
19	5.15		0.000	5575	67404	2	
20	5.40		0.000	5334	37240	2	
21	5.57		0.000	4819	121830	2	
22	6.03		0.000	4294	45724	2	
23	6.21		0.000	4454	60582	2	
24	6.51		0.000	4380	42859	2	
25	6.75		0.000	4843	42153	2	
26	7.41	fluoride	58.2789385	1709140	24975922	2	0.00
27	8.13	glycolate	97.2408533	473050	8655918	2	0.00
28	8.64	acetate	112.6579159	588768	11280830	2	0.00
29	9.36	formate	120.8799298	1080677	20319794	2	0.00
30	11.31		0.000	11277788	485612347	2	
31	12.08		0.000	7705545	625077953	2	
Totals			389.054	22937920	1177287788		

File: 98122901.D03 Sample: 34N21-A CCV



## HNF-1661 REV. 0

```

=====
Sample Name: PREP BLANK                      Date: 12/29/1998 10:00:36
Data File  : C:\DX\DATA\98122901.D05
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1. System: 2 Inject#: 5         Detector: CDM-2
Analyst    :                               Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

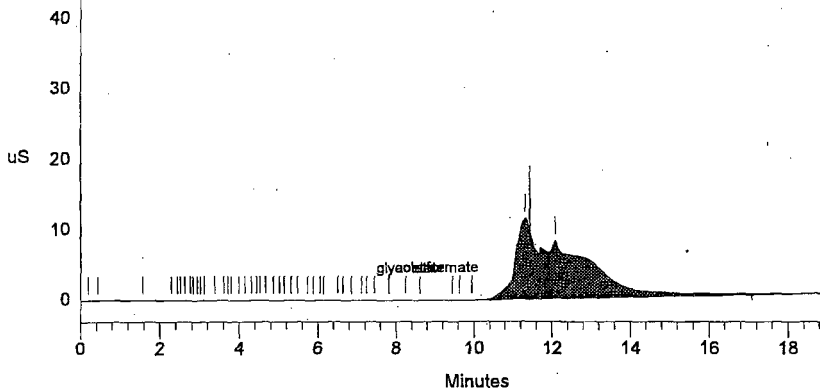
=====
alibration Volume Dilution Points Rate Start Stop Area Reject
-----
external          1           1 5700 5Hz  0.00 19.00      16000
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	BI. Code	%Delta
1	0.20		0.000	1671	22575	2	
3	1.57		0.000	1366	16046	1	
38	7.81		0.000	491	25017	2	
39	8.24	glycolate	-0.018	705	17999	2	0.00
40	8.61	acetate	-0.020	688	28002	2	0.00
41	9.44	formate	0.004	2205	20396	2	0.00
44	11.31		0.000	11475540	501551526	2	
45	12.08		0.000	8222650	685852789	2	
Totals			-0.033	19705315	1187534350		

File: 98122901.D05 Sample: PREP BLANK





Data Reprocessed On 12/31/1998 15:17:34

```

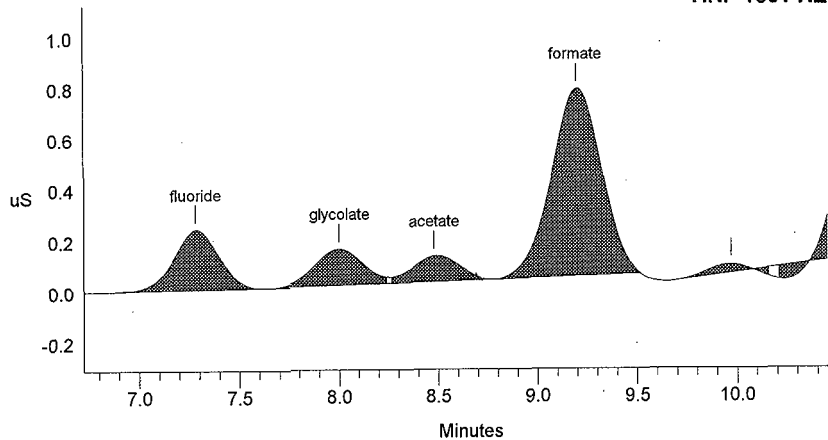
=====
Sample Name: S98T002430 SAM                               Date: 12/29/1998 10:47:19
Data File  : E:\DATA\98122901.D07
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 7                     Detector: CDM-2
Analyst    :                                             Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           6   5700  5Hz   6.72 10.45   16000
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.27		0.000	6469	183372	1	
3	1.70		0.000	121860	1540440	1	
4	2.95		0.000	10885	356096	2	
5	3.27		0.000	9728	46851	2	
6	3.40		0.000	8609	63348	2	
7	3.48		0.000	8170	39313	2	
8	3.59		0.000	7651	62200	2	
9	3.73		0.000	6533	68207	2	
10	4.00		0.000	4295	28765	2	
11	4.08		0.000	4476	31528	2	
20	5.40		0.000	1939	19654	1	
23	7.28	fluoride	0.557	234586	3675090	1	0.00
24	8.00	glycolate	1.545	140486	2402361	2	0.00
25	8.48	acetate	0.857	99258	1643027	2	0.00
26	9.20	formate	4.592	732917	12902350	1	0.00
27	9.97		0.000	33560	326702	2	
28	10.88		0.000	11602439	98611599	2	
29	11.15		0.000	66455138	692655112	2	
30	11.68		0.000	444050538	7738312657	2	
31	17.97		0.000	102351	3319984	2	
Totals			7.550	523641887	8556288656		



```

=====
Sample Name: S98T002430 DUP                               Date: 12/29/1998 11:09:32
Data File  : E:\DATA\98122901.D08
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 8                       Detector: CDM-2
Analyst    :                               Column: AG14A-SC, AS14A-SC, SRS
=====
    
```

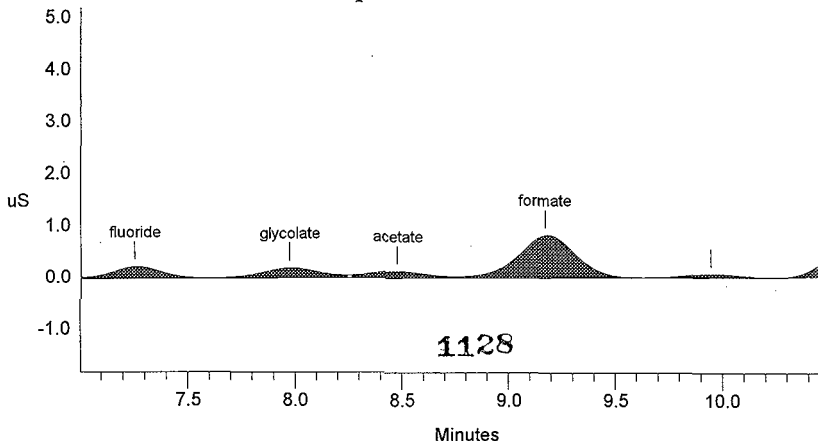
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           6 5700 5Hz 7.00 10.47 16000
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	4480	73790	1	
4	1.10		0.000	1805	27342	2	
5	1.70		0.000	130939	1578701	2	
6	2.81		0.000	7048	115354	2	
7	3.01		0.000	4107	33904	3	
17	4.29		0.000	2893	23429	2	
24	5.37		0.000	2180	36291	2	
25	5.57		0.000	5603	31204	2	
26	5.72		0.000	4664	32187	2	
27	5.85		0.000	5179	79644	2	
30	7.25	fluoride	0.578	232761	3827373	2	0.00
31	7.97	glycolate	2.354	189916	3582766	2	0.00
32	8.48	acetate	1.316	129136	2403747	2	0.00
33	9.17	formate	5.481	821173	15438228	2	0.00
34	9.95		0.000	71562	1247911	2	
35	10.88		0.000	12435165	103360635	2	
36	11.15		0.000	72166199	733885243	2	
37	11.68		0.000	442898268	7658220628	2	
Totals			9.729	529113079	8523998377		

File: 98122901.D08 Sample: S98T002430 DUP



HNF-1661 REV.0

```

=====
Sample Name: S98T002436 SAM                      Date: 12/29/1998 11:57:40
Data File  : C:\DX\DATA\98122901.D09
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 9              Detector: CDM-2
Analyst    :                                  Column: AG14A-SC,AS14A-SC, SRS
=====

```

```

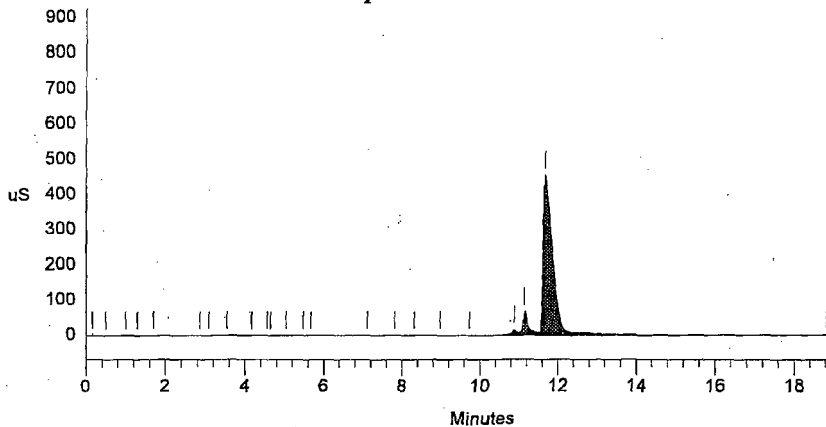
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           6  5700 5Hz  0.00 19.00      16000
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
5	1.70		0.000	296538	5042826	2	
6	2.87		0.000	1156	162608	2	
7	3.09		0.000	1636	32486	2	
10	4.56		0.000	2863	18886	2	
11	4.65		0.000	3406	36466	2	
12	5.04		0.000	2876	81646	2	
13	5.48		0.000	3977	39119	2	
14	5.68		0.000	4541	89220	2	
15	7.12		0.000	399179	6719959	2	
16	7.81		0.000	152977	3003265	2	
17	8.32		0.000	104768	2056345	2	
18	8.99		0.000	678651	13512632	2	
19	9.73		0.000	81290	1704883	2	
20	10.88		0.000	14518248	149752439	2	
21	11.15		0.000	67128449	690379201	2	
22	11.68		0.000	457918851	8084171780	3	
Totals			0.000	541299407	8956803762		

File: 98122901.D09 Sample: S98T002436 SAM



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HNF-1661 REV. 0

```

=====
Sample Name: S98T002436 DUP           Date: 12/29/1998 12:28:30
Data File  : C:\DX\DATA\98122901.D10
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 10   Detector: CDM-2
Analyst    :                          Column: AG14A-SC,AS14A-SC, SRS
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           6   5700 5Hz  0.00 19.00      16000

```

```

***** Peak Report: All Peaks *****

```

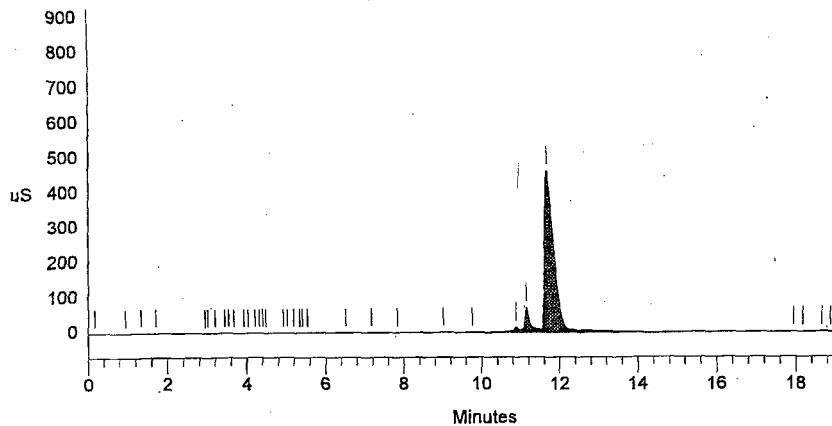
Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	6620	127894	2	
4	1.70		0.000	136654	1678628	1	
5	2.95		0.000	12719	188384	2	
6	3.01		0.000	12477	101712	2	
7	3.20		0.000	12038	117041	2	
8	3.44		0.000	9947	78364	2	
9	3.53		0.000	9948	64586	2	
10	3.67		0.000	7623	75082	2	
11	3.92		0.000	4883	31408	2	
12	4.03		0.000	3436	25936	2	
17	4.92		0.000	4573	35714	2	
18	5.03		0.000	4136	30185	2	
19	5.19		0.000	4362	18513	2	
20	5.33		0.000	6727	32641	2	
21	5.40		0.000	7689	49123	2	
22	5.53		0.000	7474	211504	2	
24	7.17		0.000	785067	11935132	1	
25	7.84		0.000	143626	2249319	2	
26	9.01		0.000	1397829	56404920	2	
27	9.76		0.000	769914	29250077	2	
28	10.88		0.000	15696040	186449058	2	
29	11.15		0.000	70053927	728283268	2	
30	11.68		0.000	457699701	7938602015	3	
31	17.95		0.000	3217	26508	4	
32	18.19		0.000	2740	61631	4	

```

-----
Totals          0.000  546803367  8956128644

```

**File: 98122901.D10 Sample: S98T002436 DUP HNF-1661 REV. 0**



```

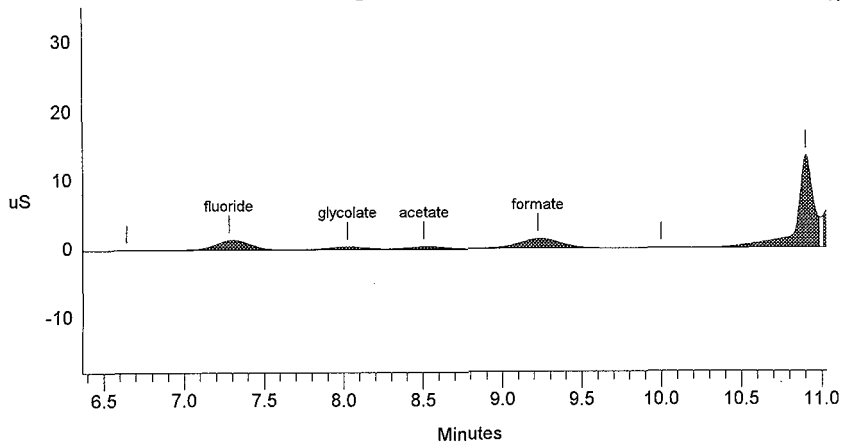
=====
Sample Name: S98T002436 SPK                               Date: 12/29/1998 12:49:05
Data File  : E:\DATA\98122901.D11
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 11                     Detector: CDM-2
Analyst    :                                             Column: AG14A-SC,AS14A-SC, SRS
=====
  
```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           6   5700  5Hz   6.37 11.03   16000
  
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	6080	110896	1	
2	0.83		0.000	2860	37956	1	
3	1.70		0.000	128594	1601536	1	
4	2.69		0.000	12843	96784	2	
5	2.81		0.000	16567	92044	2	
6	2.89		0.000	17423	155436	2	
7	3.11		0.000	20718	328188	2	
8	3.39		0.000	16913	335408	2	
9	3.80		0.000	13228	114714	2	
10	3.93		0.000	14348	170128	2	
11	4.16		0.000	13519	52404	2	
12	4.24		0.000	13775	88206	2	
13	4.36		0.000	15418	173659	2	
14	4.60		0.000	13746	77557	2	
15	4.69		0.000	15757	251744	2	
16	5.00		0.000	13584	94227	2	
17	5.13		0.000	13464	64269	2	
18	5.23		0.000	15356	180730	2	
19	5.47		0.000	12123	65710	2	
20	5.57		0.000	11571	74776	2	
21	5.69		0.000	11854	48346	2	
22	5.77		0.000	11890	122429	2	
23	5.97		0.000	9769	87799	2	
24	6.15		0.000	9317	77479	2	
25	6.64		0.000	5691	30358	2	
26	7.28	fluoride	3.201	1416223	23037188	2	0.00
27	8.03	glycolate	5.577	448405	8356641	2	0.00
28	8.51	acetate	5.014	434286	8515992	2	0.00
29	9.23	formate	9.262	1395409	26347005	2	0.00
30	10.00		0.000	53118	836150	1	
31	10.91		0.000	13287609	95392711	2	
32	11.15		0.000	69621734	695431700	2	
33	11.65		0.000	455097108	8101586111	3	
Totals			23.055	542190299	8964036281		





# LBCORE Completed Worklist Report for Worklist# 27244

Analyst: adp

Instrument: IC45S2

Book#: 35N21C

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107 (2), @IC4G-01 skm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 CCB	0	@IC4G-QC F*4	QC	1	<1.10e-2		ug/mL
1 CCB	0	@IC4G-QC ACETATE2	QC	1	<2.00e-2		ug/mL
1 CCB	0	@IC4G-QC FORMATE2	QC	1	<2.10e-2		ug/mL
1 CCB	0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2		ug/mL
2 LCS-INST	0	@IC4G-QC F*4	QC	5.89e1	6.01e+01	102.037 % Recovery	
2 LCS-INST	0	@IC4G-QC ACETATE2	QC	1.24e2	1.09e+02	87.903 % Recovery	
2 LCS-INST	0	@IC4G-QC FORMATE2	QC	1.19e2	1.07e+02	89.916 % Recovery	
2 LCS-INST	0	@IC4G-QC GLYCOLT1	QC	1.07e2	9.79e+01	91.495 % Recovery	
3 CCV	0	@IC4G-QC F*4	QC	6.21e1	5.80e+01	93.398 % Recovery	
3 CCV	0	@IC4G-QC ACETATE2	QC	1.23e2	1.13e+02	91.870 % Recovery	
3 CCV	0	@IC4G-QC FORMATE2	QC	1.30e2	1.22e+02	93.846 % Recovery	
3 CCV	0	@IC4G-QC GLYCOLT1	QC	1.02e2	9.65e+01	94.608 % Recovery	
4 BLNK-PRFP	0	@IC4G-01 F*4-01	SOLID	1	<3.10e-2		ug/g
4 BLNK-PRFP	0	@IC4G-01 ACETATE2	SOLID	1	<2.00e-2		ug/g
4 BLNK-PRFP	0	@IC4G-01 FORMATE2	SOLID	1	<6.120e-2		ug/g
4 BLNK-PRFP	0	@IC4G-01 GLYCOLT1	SOLID	1	<5.60e-2		ug/g
5 SAMPLE	S98T002442	D W	@IC4G-01 F*4-01	SOLID	<u>N/A</u>	9.321e+01	37.360 ug/g
5 SAMPLE	S98T002442	0 W	@IC4G-01 ACETATE2	SOLID	<u>N/A</u>	2.618e+02	24.110 ug/g
5 SAMPLE	S98T002442	0 W	@IC4G-01 FORMATE2	SOLID	<u>N/A</u>	1.089e+03	74.700 ug/g
5 SAMPLE	S98T002442	0 W	@IC4G-01 GLYCOLT1	SOLID	<u>N/A</u>	3.736e+02	67.500 ug/g
6 DUP	S98T002442	0 W	@IC4G-01 F*4-01	SOLID	9.32e+01	7.15e+01	26.351 RPD
6 DUP	S98T002442	0 W	@IC4G-01 ACETATE2	SOLID	2.62e+02	2.51e+02	4.288 RPD
6 DUP	S98T002442	0 W	@IC4G-01 FORMATE2	SOLID	1.09e+03	1.07e+03	1.852 RPD
6 DUP	S98T002442	0 W	@IC4G-01 GLYCOLT1	SOLID	3.74e+02	3.62e+02	3.261 RPD
7 SAMPLE	S98T002574	0 W	@IC4G-01 F*4-01	SOLID	<u>N/A</u>	1.984e+03	36.620 ug/g
7 SAMPLE	S98T002574	0 W	@IC4G-01 ACETATE2	SOLID	<u>N/A</u>	2.363e+01	23.630 ug/g
7 SAMPLE	S98T002574	0 W	@IC4G-01 FORMATE2	SOLID	<u>N/A</u>	7.324e+01	73.260 ug/g
7 SAMPLE	S98T002574	0 W	@IC4G-01 GLYCOLT1	SOLID	<u>N/A</u>	6.615e+01	66.180 ug/g
8 DUP	S98T002574	0 W	@IC4G-01 F*4-01	SOLID	1.98e+03	1.66e+03	17.582 RPD
8 DUP	S98T002574	0 W	@IC4G-01 ACETATE2	SOLID	<2.36e1	<2.40e1	RPD
8 DUP	S98T002574	0 W	@IC4G-01 FORMATE2	SOLID	<7.32e1	<7.44e1	RPD
8 DUP	S98T002574	0 W	@IC4G-01 GLYCOLT1	SOLID	<6.62e1	<6.72e1	RPD
9 SPK	S98T002574	0 W	@IC4G-01 F*4-01	SOLID	5.89e1	5.82e+01	98.812 % Recovery
9 SPK	S98T002574	0 W	@IC4G-01 ACETATE2	SOLID	1.24e2	9.50e+01	76.613 % Recovery
9 SPK	S98T002574	0 W	@IC4G-01 FORMATE2	SOLID	1.19e2	9.56e+01	80.336 % Recovery
9 SPK	S98T002574	0 W	@IC4G-01 GLYCOLT1	SOLID	1.07e2	8.72e+01	81.495 % Recovery

Final page for worklist# 27244

*Janro M. Eze* 1/4/99

Units shown for QC (BLK/BKG) may not reflect the actual units.



## HNF-1661 REV. 0

Sample Name: 35N21-C LCS Date: 12/29/1998 13:31:56  
 Data File : C:\DX\DATA\98122901.D13  
 Method : C:\DX\METHOD\MAS14GLY.MET  
 ACT Address: 1 System 2 Inject#: 13 Detector: CDM-2  
 Analyst : *Anthony Paris* Column: AG14A-SC, AS14A-SC, SRS

12-29-98

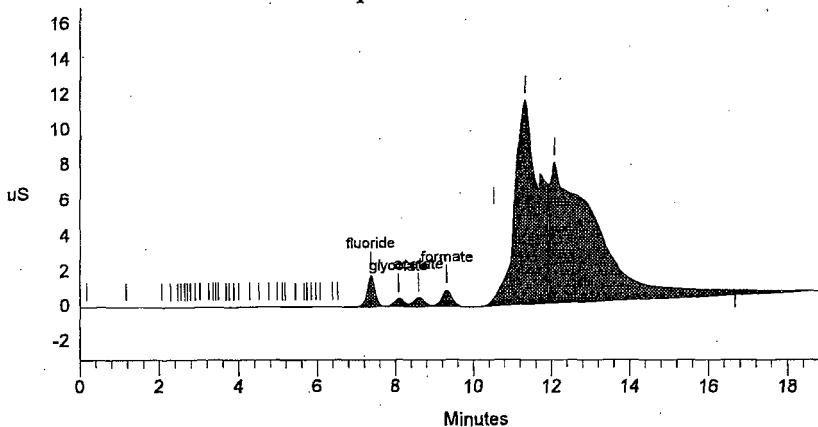
Calibration Volume Dilution Points Rate Start Stop Area Reject  
 External 1 101 5700 5Hz 0.00 19.00 16000

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	3048	22120	1	
2	1.17		0.000	2236	67592	1	
3	2.07		0.000	22919	415850	2	
4	2.28		0.000	15959	152804	3	
11	3.03		0.000	1880	18677	2	
19	4.00		0.000	3242	29864	2	
31	6.07		0.000	2229	19114	2	
33	6.52		0.000	3870	43226	2	
34	7.36	fluoride	60.100	10203	25780217	2	0.00
35	8.08	glycolate	97.945	1154	8718805	2	0.00
36	8.59	acetate	108.621	3760	10886142	2	0.00
37	9.31	formate	106.936	8736	17937065	2	0.00
38	11.33		0.000	11597535	500051885	2	
39	12.08		0.000	7975608	681307550	2	

Totals 373.602 23387865 1245450909

## File: 98122901.D13 Sample: 35N21-C LCS



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1136 TO 1147.

Data Reprocessed On 12/31/1998 15:28:01

```

=====
Sample Name: BLANK                               Date: 12/29/1998 13:10:29
Data File  : E:\DATA\98122901.D12
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 12
Analyst    :                                     Column: AG14A-SC,AS14A-SC, SRS
=====

```

```

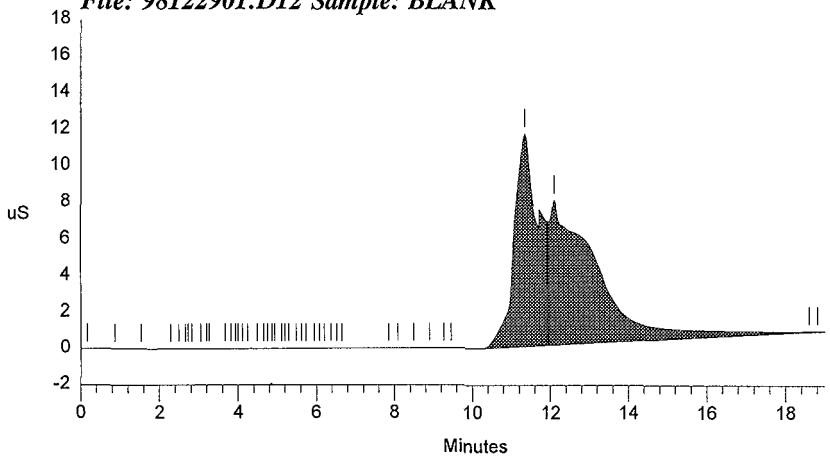
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           1    5700  5Hz   0.00 19.00    16000
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	5471	40558	1	
3	1.53		0.000	4536	57044	1	
4	2.27		0.000	2969	23646	1	
17	4.23		0.000	2620	25830	2	
30	6.07		0.000	3554	18061	2	
31	6.19		0.000	3380	23815	2	
34	6.64		0.000	2854	96154	2	
35	7.84		0.000	5642	66282	3	
37	8.48		0.000	3727	67319	2	
38	8.88		0.000	2762	55236	2	
39	9.25		0.000	6214	48813	2	
40	9.44		0.007	3619	66485	2	0.00
41	11.33		0.000	11603900	499938386	2	
42	12.08		0.000	7911444	686721453	3	
Totals			0.007	19562691	1187249083		

File: 98122901.D12 Sample: BLANK



## HNF-1661 REV. 0

```

=====
Sample Name: 34N21-A CCV                               Date: 12/29/1998 13:55:54
Data File  : C:\DX\DATA\98122901.D14
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 14                   Detector: CDM-2
Analyst    :                                           Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          101 5700 5Hz 0.00 19.00 16000
=====

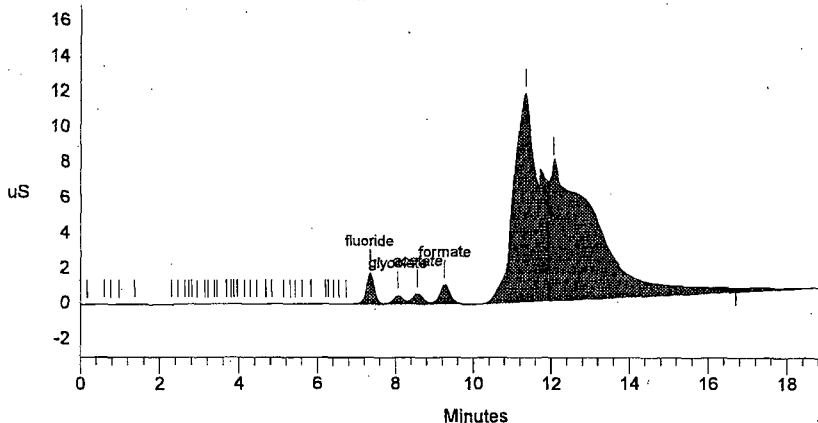
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	2691	21709	2	
4	0.97		0.000	2240	29887	2	
5	1.37		0.000	3020	62693	2	
15	3.44		0.000	2859	23612	2	
24	4.83		0.000	3060	36800	2	
35	7.33	fluoride	58.019	1716653	24861602	2	0.00
36	8.05	glycolate	96.482	479552	8588240	2	0.00
37	8.56	acetate	113.250	598543	11338798	2	0.00
38	9.25	formate	121.555	1103315	20435637	2	0.00
39	11.33		0.000	11852487	534198397	2	
40	12.05		0.000	7909380	680265219	2	

Totals 389.305 23673801 1279862594

File: 98122901.D14 Sample: 34N21-A CCV



Data Reprocessed On 12/31/1998 15:29:51

```

=====
Sample Name: PREP BLANK                               Date: 12/29/1998 14:18:46
Data File  : E:\DATA\98122901.D15
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 15                 Detector: CDM-2
Analyst    :                                         Column: AG14A-SC, AS14A-SC, SRS
=====
    
```

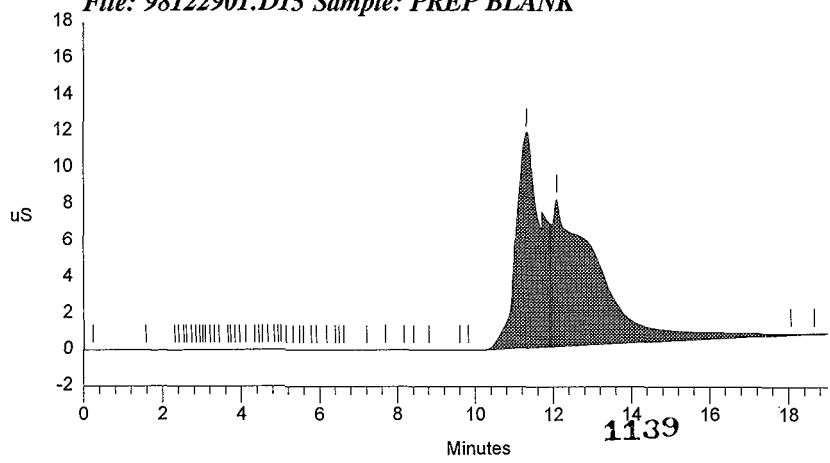
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1 5700 5Hz 0.00 19.00 16000
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	5621	144441	2	
2	1.57		0.000	2280	33667	2	
14	3.43		0.000	3002	24750	2	
18	3.95		0.000	3209	23989	2	
19	4.11		0.000	2980	23650	2	
28	5.32		0.000	2948	18106	2	
32	5.92		0.000	3309	38421	2	
36	6.61		0.000	1134	48731	2	
37	7.20		0.000	2060	45702	2	
38	7.68		0.000	3581	50687	2	
39	8.16		0.000	3002	22652	2	
40	8.40		0.000	2813	22541	2	
41	8.80		0.000	3134	53185	2	
42	9.60		0.000	2412	16081	2	
43	9.81		0.000	1826	22019	2	
44	11.31		0.000	11720398	520975407	2	
45	12.08		0.000	8063787	683689985	3	
46	18.05		0.000	1365	23897	4	
Totals			0.000	19828860	1205277910		

File: 98122901.D15 Sample: PREP BLANK



Data Reprocessed On 12/31/1998 15:31:45

```

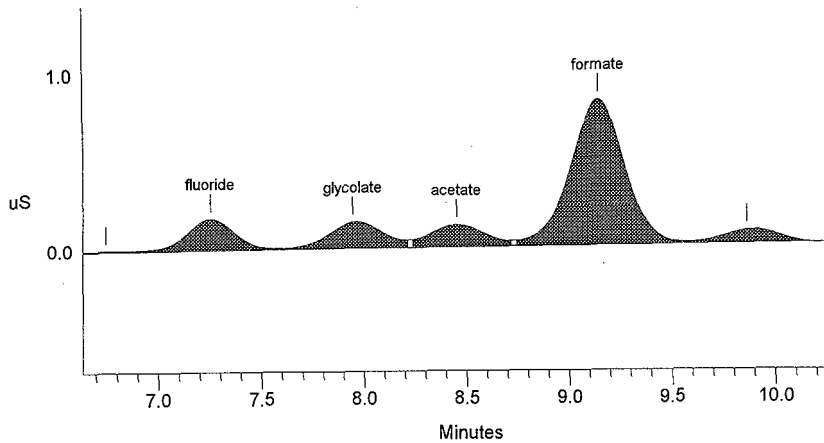
=====
Sample Name: S98T002442 SAM                               Date: 12/29/1998 15:03:55
Data File  : E:\DATA\98122901.D17
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 17
Analyst    :                                             Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           6   5700  5Hz  6.64 10.25   16000
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.27		0.000	4151	93160	1	
3	1.70		0.000	135031	1655886	1	
4	2.97		0.000	3142	87640	2	
12	3.81		0.000	2303	26302	2	
13	4.12		0.000	3550	26213	2	
14	4.20		0.000	3812	25755	2	
15	4.33		0.000	3515	18871	2	
16	4.44		0.000	3297	23173	2	
17	4.59		0.000	3721	37539	2	
18	4.76		0.000	4225	36031	2	
19	4.95		0.000	5289	40469	2	
20	5.08		0.000	5892	112445	2	
21	5.40		0.000	6759	63398	2	
22	5.64		0.000	7225	85026	2	
23	5.81		0.000	8449	99043	2	
24	6.07		0.000	6534	60554	2	
25	6.75		0.000	5270	64881	2	
26	7.25	fluoride	0.464	180345	3003338	2	0.00
27	7.95	glycolate	1.860	151202	2860952	2	0.00
28	8.45	acetate	1.303	126567	2382474	2	0.00
29	9.15	formate	5.423	823224	15274534	2	0.00
30	9.87		0.000	75837	1444547	2	
31	10.88		0.000	14558849	109380305	2	
32	11.15		0.000	71149974	737555638	2	
33	11.65		0.000	448305110	8062831520	2	
Totals			9.050	535583274	8937289692		





```

=====
Sample Name: S98T002442 DUP                               Date: 12/29/1998 15:24:23
Data File  : E:\DATA\98122901.D18
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 18                      Detector: CDM-2
Analyst    :                               Column: AG14A-SC, AS14A-SC, SRS
=====
    
```

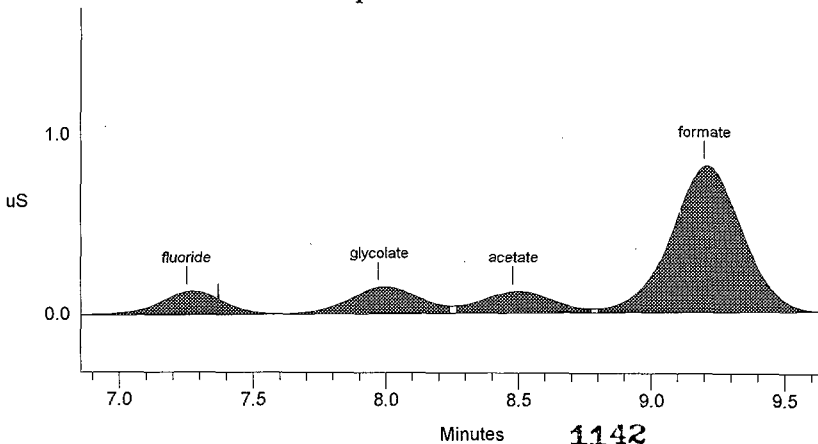
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           6 5700 5Hz 6.86 9.65 16000
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
4	1.67		0.000	124950	1574666	1	
5	2.55		0.000	8005	26060	1	
6	2.75		0.000	2600	18048	2	
17	4.28		0.000	2878	23064	2	
19	4.51		0.000	2602	21277	2	
21	4.80		0.000	2433	29559	2	
22	5.07		0.000	2105	17295	2	
28	5.89		0.000	2752	71481	2	
29	6.69		0.000	4012	49640	2	
30	7.25	fluoride	0.363	129841	2273706	2	0.00
31	7.97	glycolate	1.840	149693	2832192	2	0.00
32	8.48	acetate	1.273	121901	2332240	2	0.00
33	9.20	formate	5.429	814154	15291952	2	0.00
34	9.97		0.000	64239	1054234	1	
35	10.88		0.000	10915958	98423618	2	
36	11.15		0.000	72447205	717224550	2	
37	11.65		0.000	466902575	8240033895	2	
Totals			8.905	551697903	9081297476		

File: 98122901.D18 Sample: S98T002442 DUP



## HNF-1661 REV. 0

```

=====
Sample Name: S98T002574 SAM           Date: 12/29/1998 15:44:35
Data File  : C:\DX\DATA\98122901.D19
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 19   Detector: CDM-2
Analyst    :                          Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           6 5700 5Hz 0.00 19.00 16000
=====

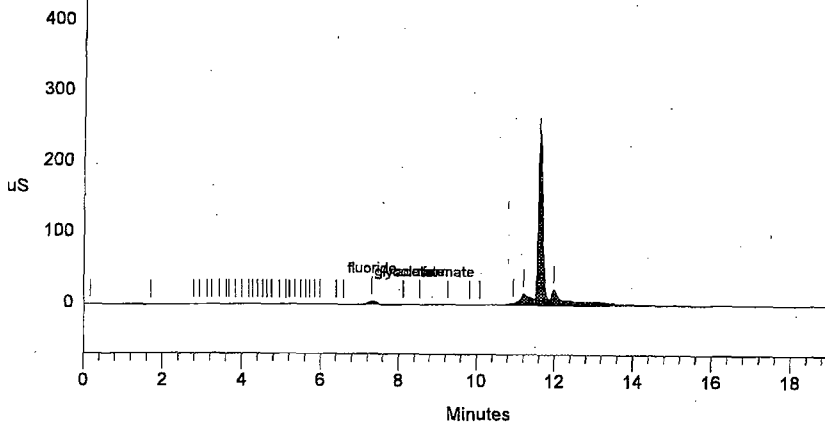
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	5361	142504	1	
2	1.70		0.000	78880	923892	1	
3	2.77		0.000	9570	88036	2	
4	2.92		0.000	9460	76048	2	
5	3.12		0.000	8987	115796	2	
6	3.23		0.000	7720	64173	2	
7	3.43		0.000	3667	23017	2	
22	5.49		0.000	2709	23295	2	
24	5.71		0.000	3530	22865	2	
25	5.84		0.000	3069	22040	2	
26	5.99		0.000	3341	44417	2	
28	6.59		0.000	3126	18948	2	
29	7.31	fluoride	10.075	4840846	75681515	3	0.00
30	8.11	glycolate	-0.073	5173	64146	4	0.00
31	8.53	acetate	0.063	13379	326890	4	0.00
32	9.25	formate	0.206	27452	526769	2	0.00
35	10.93		0.000	2834450	39111427	2	
36	11.20		0.000	16040214	291828821	2	
37	11.60		0.000	229526360	2206197853	3	
38	11.97		0.000	20277210	662417489	4	
Totals			10.270	273704504	3277719940		

File: 98122901.D19 Sample: S98T002574 SAM

HNF-1661 REV. 0



## HNF-1661 REV.0

```

=====
Sample Name: S98T002574 DUP           Date: 12/29/1998 16:04:28
Data File  : C:\DX\DATA\98122901.D20
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 20   Detector: CDM-2
Analyst    :                          Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

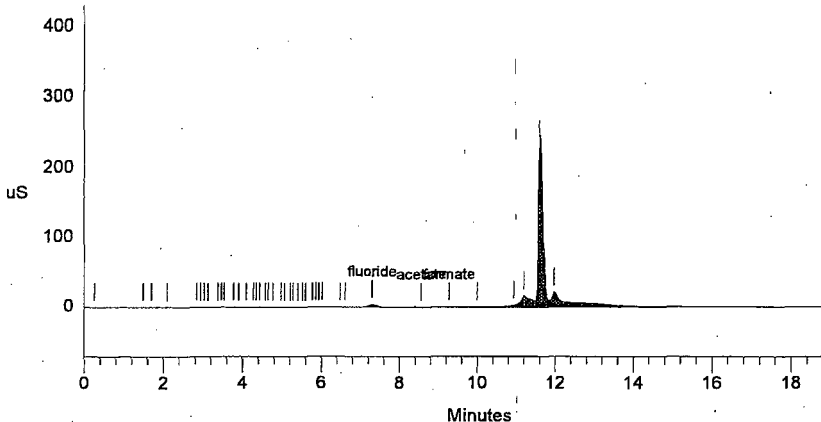
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           6 5700 5Hz | 0.00 19.00          16000
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.27		0.000	4207	97384	1	
3	1.70		0.000	76828	889744	1	
5	2.85		0.000	5582	82012	2	
6	2.95		0.000	4071	24953	2	
31	6.03		0.000	1465	28931	2	
33	6.61		0.000	2964	25866	2	
34	7.31	fluoride	8.291	3937912	61678680	2	0.00
35	8.56	acetate	0.061	15963	324029	2	0.00
36	9.28	formate	0.209	27737	534759	2	0.00
38	10.93		0.000	2850615	39020860	2	
39	11.20		0.000	15960420	287779525	2	
40	11.60		0.000	231926629	2165097418	3	
41	11.97		0.000	19109339	655819006	4	
Totals			8.561	273923731	3211403165		

File: 98122901.D20 Sample: S98T002574 DUP



## HNF-1661 REV.0

```

=====
Sample Name: S98T002574 SPK                               Date: 12/29/1998 16:24:17
Data File  : C:\DX\DATA\98122901.D21
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 21                      Detector: CDM-2
Analyst    :                                             Column: AG14A-SC,AS14A-SC, SRS
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           6 5700 5Hz 0.00 19.00      16000
-----

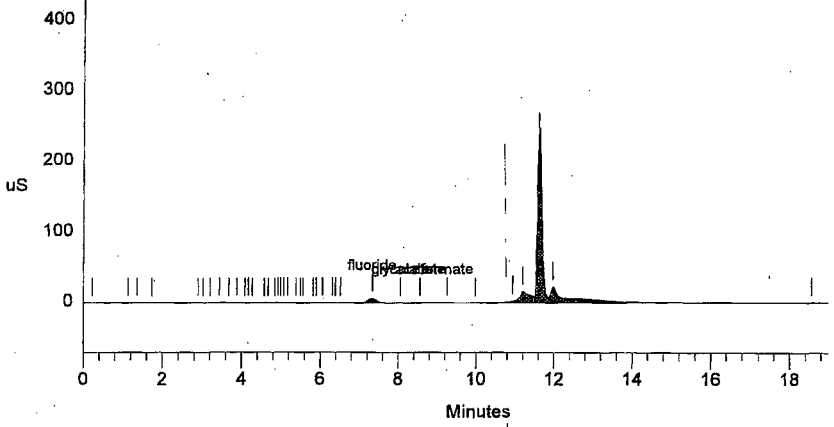
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	6306	96056	1	
4	1.73		0.000	87289	923478	1	
5	2.91		0.000	13113	202455	2	
6	3.03		0.000	13151	132490	2	
7	3.21		0.000	12794	160929	2	
8	3.44		0.000	9917	88254	2	
9	3.68		0.000	7353	95266	2	
10	3.88		0.000	6349	57723	2	
11	4.08		0.000	6206	41450	2	
12	4.17		0.000	5757	30082	2	
13	4.27		0.000	4769	46752	2	
15	4.67		0.000	3142	18115	2	
26	6.05		0.000	2170	18312	2	
30	7.33	fluoride	12.986	6390310	99100546	2	0.00
31	8.05	glycolate	4.358	345301	6537579	2	0.00
32	8.56	acetate	4.750	413334	8079403	2	0.00
33	9.25	formate	4.781	682118	13439125	3	0.00
35	10.93		0.000	2836988	38784489	2	
36	11.20		0.000	15938875	287112537	2	
37	11.60		0.000	233925205	2183710542	3	
38	11.97		0.000	20450171	664370613	4	
39	18.56		0.000	2800	40360	4	
Totals			26.874	281163417	3303086556		

**File: 98122901.D21 Sample: S98T002574 SPK**

**HNF-1661 REV. 0**



# LBCORE Completed Worklist Report for Worklist# 27290

Analyst: adp

Instrument: IC40S1

Book#: 29N21B

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107(2) @IC-01 rerun. Use 101df. jmf

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0 @IC-QC	F QC	1	<1.20e-2		ug/mL
1	CCB	0 @IC-QC	CL QC	1	<1.70e-2		ug/mL
1	CCB	0 @IC-QC	NO2 QC	1	<1.08e-1		ug/mL
1	CCB	0 @IC-QC	BR QC	1	<1.25e-1		ug/mL
1	CCB	0 @IC-QC	NO3 QC	1	<1.39e-1		ug/mL
1	CCB	0 @IC-QC	P04 QC	1	<1.20e-1		ug/mL
1	CCB	0 @IC-QC	S04 QC	1	<1.38e-1		ug/mL
1	CCB	0 @IC-QC	OXALATE2 QC	1	<1.05e-1		ug/mL
2	LCS-INST	0 @IC-QC	F QC	5.90e1	6.88e+01	116.610 %	Recovery
2	LCS-INST	0 @IC-QC	CL QC	8.00e1	8.65e+01	108.125 %	Recovery
2	LCS-INST	0 @IC-QC	NO2 QC	5.48e2	5.71e+02	104.197 %	Recovery
2	LCS-INST	0 @IC-QC	BR QC	5.86e2	5.90e+02	100.683 %	Recovery
2	LCS-INST	0 @IC-QC	NO3 QC	5.92e2	6.02e+02	101.689 %	Recovery
2	LCS-INST	0 @IC-QC	P04 QC	5.47e2	5.68e+02	103.839 %	Recovery
2	LCS-INST	0 @IC-QC	S04 QC	6.38e2	6.61e+02	103.605 %	Recovery
2	LCS-INST	0 @IC-QC	OXALATE2 QC	5.40e2	5.72e+02	105.926 %	Recovery
3	CCV	0 @IC-QC	F QC	6.40e1	6.16e+01	96.250 %	Recovery
3	CCV	0 @IC-QC	CL QC	9.00e1	9.57e+01	106.333 %	Recovery
3	CCV	0 @IC-QC	NO2 QC	5.62e2	5.74e+02	102.135 %	Recovery
3	CCV	0 @IC-QC	BR QC	6.30e2	6.26e+02	99.365 %	Recovery
3	CCV	0 @IC-QC	NO3 QC	6.98e2	7.29e+02	104.441 %	Recovery
3	CCV	0 @IC-QC	P04 QC	6.32e2	6.65e+02	105.222 %	Recovery
3	CCV	0 @IC-QC	S04 QC	6.99e2	7.16e+02	102.432 %	Recovery
3	CCV	0 @IC-QC	OXALATE2 QC	5.53e2	5.88e+02	106.329 %	Recovery
4	BLNK-PREP	0 @IC-01	F-02 SOLID	1	<1.20e-2		ug/g
4	BLNK-PREP	0 @IC-01	CL-02 SOLID	1	2.60e-02	0.026	ug/g
4	BLNK-PREP	0 @IC-01	NO2-02 SOLID	1	3.97e-01	0.397	ug/g
4	BLNK-PREP	0 @IC-01	BR-02 SOLID	1	<1.25e-1		ug/g
4	BLNK-PREP	0 @IC-01	NO3-02 SOLID	1	<1.39e-1		ug/g
4	BLNK-PREP	0 @IC-01	P04-02 SOLID	1	<1.20e-1		ug/g
4	BLNK-PREP	0 @IC-01	S04-02 SOLID	1	<1.38e-1		ug/g
4	BLNK-PREP	0 @IC-01	OXALATE2 SOLID	1	<1.05e-1		ug/g
5	SAMPLE	S98T002430 0 W	@IC-01 NO3-02 SOLID	N/A	5.261e+05	2828.000	ug/g
5	SAMPLE	S98T002430 0 W	@IC-01 P04-02 SOLID	N/A	4.175e+03	2441.000	ug/g
6	DUP	S98T002430 0 W	@IC-01 F-02 SOLID	?	<2.39e2		RPD
6	DUP	S98T002430 0 W	@IC-01 CL-02 SOLID	?	3.08e+03		RPD
6	DUP	S98T002430 0 W	@IC-01 NO2-02 SOLID	?	3.53e+04		RPD
6	DUP	S98T002430 0 W	@IC-01 BR-02 SOLID	?	<2.48e3		RPD
6	DUP	S98T002430 0 W	@IC-01 NO3-02 SOLID	5.26e+05	5.15e+05	2.113	RPD
6	DUP	S98T002430 0 W	@IC-01 P04-02 SOLID	4.18e+03	9.36e+03	76.514	RPD
6	DUP	S98T002430 0 W	@IC-01 S04-02 SOLID	?	<2.74e3		RPD

Units shown for QC (BLK/BKG) may not reflect the actual units.

# LABCORE Completed Worklist Report for Worklist# 27290

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
6 DUP	S98T002430	0 W	@IC-01	OXALATE2	SOLID	?	<2.09e3	RPD
7 SAMPLE	S98T002436	0 W	@IC-01	F-02	SOLID	N/A	< 2.362e+02	236.200 ug/g
7 SAMPLE	S98T002436	0 W	@IC-01	NO3-02	SOLID	N/A	5.459e+05	2736.000 ug/g
7 SAMPLE	S98T002436	0 W	@IC-01	SO4-02	SOLID	N/A	< 2.716e+03	2717.000 ug/g
8 DUP	S98T002436	0 W	@IC-01	F-02	SOLID	<2.36e2	4.21e+02	RPD
8 DUP	S98T002436	0 W	@IC-01	CL-02	SOLID	?	2.83e+03	RPD
8 DUP	S98T002436	0 W	@IC-01	NO2-02	SOLID	?	3.27e+04	RPD
8 DUP	S98T002436	0 W	@IC-01	BR-02	SOLID	?	<2.45e3	RPD
8 DUP	S98T002436	0 W	@IC-01	NO3-02	SOLID	5.46e+05	5.33e+05	2.410 RPD
8 DUP	S98T002436	0 W	@IC-01	PO4-02	SOLID	?	6.28e+03	RPD
8 DUP	S98T002436	0 W	@IC-01	SO4-02	SOLID	<2.72e3	<2.71e3	RPD
8 DUP	S98T002436	0 W	@IC-01	OXALATE2	SOLID	?	<2.06e3	RPD
9 SPK	S98T002436	0 W	@IC-01	F-02	SOLID	5.90e1	5.77e+01	97.797 % Recovery
9 SPK	S98T002436	0 W	@IC-01	CL-02	SOLID	8.00e1	0.00e+00	0.000 % Recovery
9 SPK	S98T002436	0 W	@IC-01	NO2-02	SOLID	5.48e2	0.00e+00	0.000 % Recovery
9 SPK	S98T002436	0 W	@IC-01	BR-02	SOLID	5.86e2	0.00e+00	0.000 % Recovery
9 SPK	S98T002436	0 W	@IC-01	NO3-02	SOLID	5.92e2	5.53e+02	93.412 % Recovery
9 SPK	S98T002436	0 W	@IC-01	PO4-02	SOLID	5.47e2	0.00e+00	0.000 % Recovery
9 SPK	S98T002436	0 W	@IC-01	SO4-02	SOLID	6.38e2	6.62e+02	103.762 % Recovery
9 SPK	S98T002436	0 W	@IC-01	OXALATE2	SOLID	5.40e2	0.00e+00	0.000 % Recovery

Final page for worklist# 27290

Analyst Signature

Date

Analyst Signature

Date

*Juan M. Suss* 11/30/98  
 Reviewer Signature Date



11/23/98 15:21  
A-0004-1


**LABCORE Data Entry Template for Worklist# 27290**

Analyst: ADP Instrument: IC 4051 Book# 29N21-B LCS  
 Method: LA-533-105 Rev/Mod F-0 28N21-B CCV

Worklist Comment: U107(2) @ IC-01 rerun. Use 101df. jmf

S Type	Sample#	R A	Test	Matrix	Group#	Project
1 CCB			@IC-QC	QC		
2 LCS-INST			@IC-QC	QC		
3 CCV			@IC-QC	QC		
4 BLNK-PREP			@IC-01	SOLID		
5 SAMPLE	S98T002430 0 W		@IC-01	SOLID	98000359	U-107 (2)
	Analyses Requested:		NO3-02	, PO4-02		
6 DUP	S98T002430 0 W		@IC-01	SOLID		
7 SAMPLE	S98T002436 0 W		@IC-01	SOLID	98000359	U-107 (2)
	Analyses Requested:		F-02	, NO3-02 , SO4-02		
8 DUP	S98T002436 0 W		@IC-01	SOLID		
9 SPK	S98T002436 0 W		@IC-01	SOLID		

**Final page for worklist # 27290**

  
 Analyst Signature Date 11-24-98

\_\_\_\_\_  
 Analyst Signature Date

Data Entry Comments:

uploaded 11-25-98  
John Worell

validated 11/30/98 JM Juy

27290X0V.CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

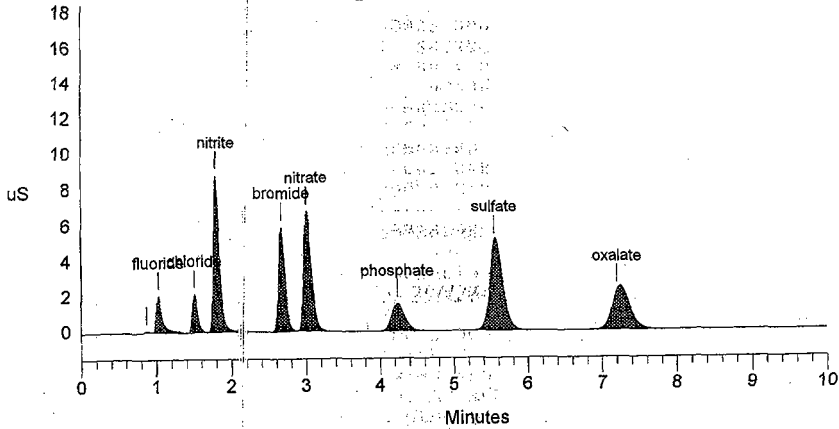
Sample Name: 29N21-B LCS Date: 11/24/1998 20:04:01  
 Data File : C:\DX\DATA\98112421.D02  
 Method : C:\DX\METHOD\KIT.MET  
 ACI Address: 1 System: 1 Inject#: 2 Detector: CDM-1  
 Analyst : *Autia Furuta* Column: AG4A/AS4A anion column  
 11-24-98

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.87		0.000	69	304	2	
2	1.03	fluoride	68.774	116.57	11850	2	3.70
3	1.51	chloride	86.450	108.06	10707	1	1.12
4	1.79	nitrite	570.586	104.12	48034	1	0.19
5	2.67	bromide	589.604	100.62	35744	1	4.99
6	3.01	nitrate	601.922	101.68	48994	1	2.97
7	4.23	phosphate	568.282	103.89	20305	1	0.79
8	5.55	sulfate	661.248	103.64	64513	1	1.03
9	7.20	oxalate	572.118	105.95	41828	1	0.70
Totals			3718.983	34912	282279		

File: 98112421.D02 Sample: 29N21-B LCS



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1151 TO 1159.

```

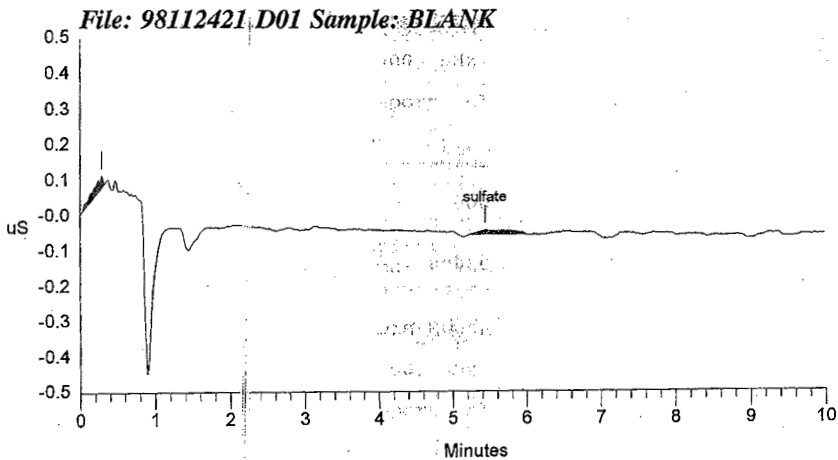
=====
Sample Name: BLANK                               Date: 11/24/1998 19:49:57
Data File  : C:\DX\DATA\98112421.D01
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 1             Detector: CDM-1
Analyst    :                                   Column: AG4A/AS4A anion column
=====
    
```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1 3000 5Hz 0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret. Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.29		0.000	34	372	1	
2	5.44	sulfate	0.086	13	373	1	-0.91
Totals			0.086	47	745		



```

=====
Sample Name: 28N21-B   CCV                               Date: 11/24/1998 20:15:40
Data File  : C:\DX\DATA\98112421.D03
Method     : C:\DX\METMOD\KIT.MBT
ACI Address: 1 System: 1 Inject#: 3                     Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

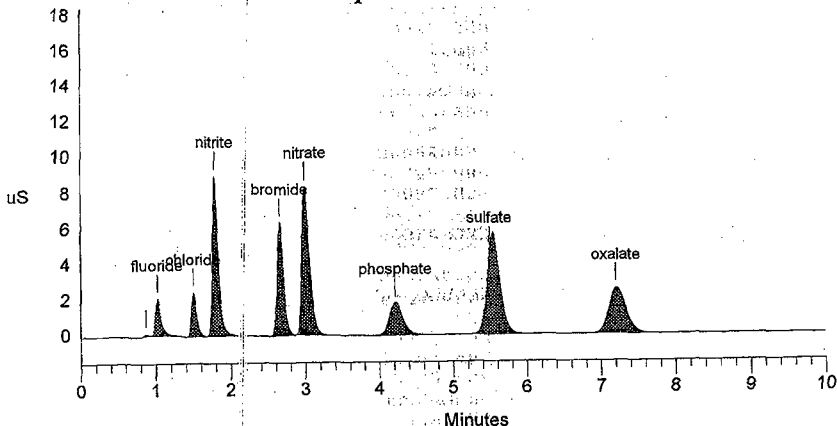
```

-----
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           101    3000  5Hz   0.00 10.00      30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.87		0.000	84	331	2	
2	1.02	fluoride	61.587	2070	10596	2	3.03
3	1.50	chloride	95.709	2464	11886	1	0.67
4	1.79	nitrite	574.016	8972	48328	1	-0.19
5	2.65	bromide	626.459	6363	38046	1	4.46
6	2.99	nitrate	728.557	8341	59646	1	2.51
7	4.21	phosphate	664.620	1873	23866	1	0.32
8	5.49	sulfate	715.500	4721	69951	1	0.06
9	7.20	oxalate	587.624	2617	42977	1	0.70
Totals			4054.073	37504	305627		

File: 98112421.D03 Sample: 28N21-B CCV



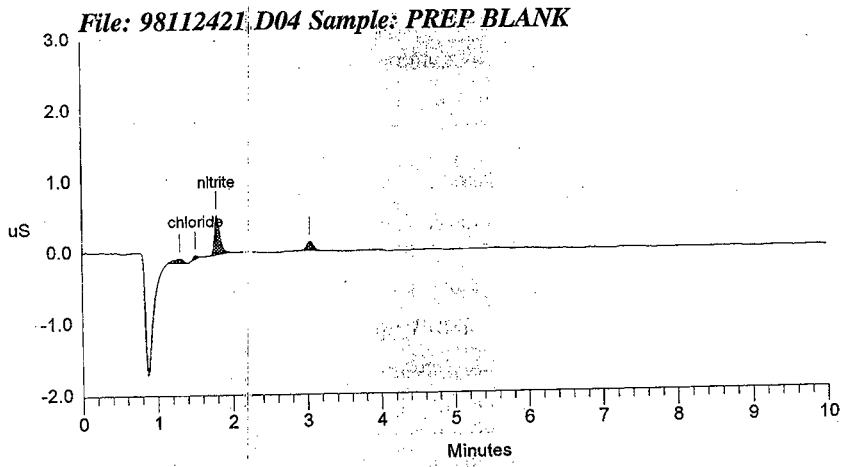
```

=====
Sample Name: PREP BLANK                               Date: 11/24/1998 20:34:34
Data File  : C:\DX\DATA\98112421.D04
Method     : C:\DX\METHODS\KIT.MET
ACI Address: 1 System: 1 Inject#: 4                 Detector: CDM-1
Analyst    :                                         Column: AG4A/AS4A anion column
=====
    
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	3000	5Hz	0.00	10.00		30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.31		0.000	62	582	1	
2	1.51	chloride	0.026	50	211	1	1.57
3	1.79	nitrite	0.397	552	2827	1	0.19
4	3.05		0.000	131	832	1	
Totals			0.423	795	4451		



```

=====
Sample Name: S98T002430 SAM          Date: 11/24/1998 20:47:08
Data File  : C:\DX\DATA\98112421.D05
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 5   Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====
    
```

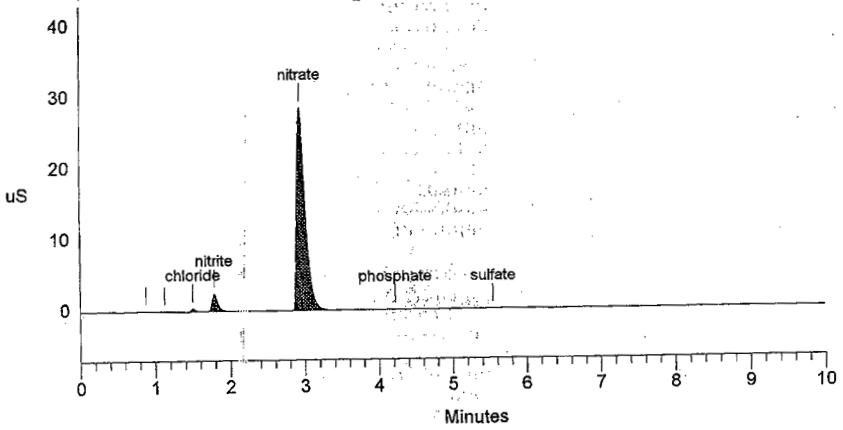
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           101    3000 5Hz   0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	54	284	2	
2	1.13		0.000	108	1423	2	
3	1.50	chloride	18.724	460	2206	1	0.67
4	1.79	nitrite	161.705	2442	13123	1	-0.19
5	2.93	nitrate	2611.648	28670	226669	1	0.46
6	4.22	phosphate	20.727	48	527	1	0.48
7	5.55	sulfate	10.852	50	580	1	1.03
Totals			2823.656	31831	244813		

File: 98112421.D05 Sample: S98T002430 SAM



```

=====
Sample Name: S98T002430 DUP                               Date: 11/24/1998 20:58:29
Data File  : C:\DX\DATA\98112421.D06
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 6                       Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

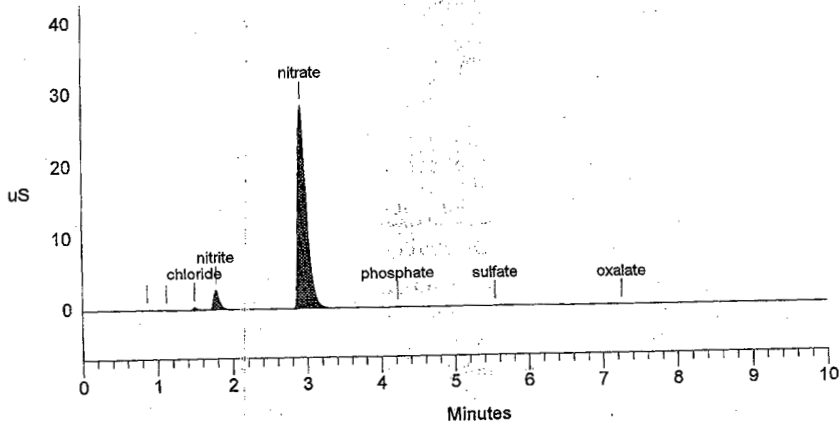
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          101      3000 5Hz  0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.87		0.000	84	501	2	
2	1.12		0.000	109	1386	2	
3	1.49	chloride	15.630	385	1823	1	0.22
4	1.78	nitrite	179.127	2688	14601	1	-0.56
5	2.93	nitrate	2614.663	28505	226951	1	0.23
6	4.23	phosphate	47.543	118	1479	1	0.63
7	5.55	sulfate	12.083	57	699	1	1.03
8	7.25	oxalate	5.795	23	331	1	1.45
Totals			2874.841	31968	247771		

File: 98112421.D06 Sample: S98T002430 DUP



```

=====
Sample Name: S98T002436 SAM                               Date: 11/24/1998 22:22:42
Data File   : C:\DX\DATA\98112421.D07
Method      : C:\DX\METHOD\KIT.MET
ACI Address : 1 System: 1 Inject#: 7                      Detector: CDM-1
Analyst     :                                             Column: AG4A/AS4A anion column
=====
    
```

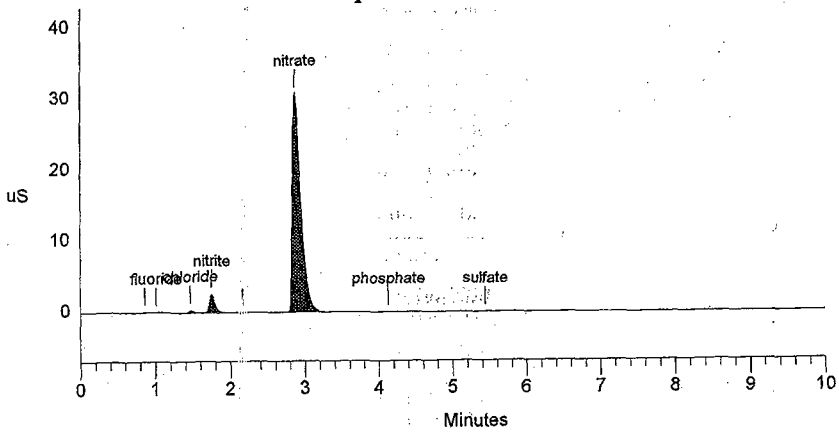
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           101    3000 5Hz   0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.86		0.000	77	336	1	
2	1.01	fluoride	0.251	15	52	1	2.36
3	1.47	chloride	15.046	372	1751	1	-1.57
4	1.75	nitrite	166.652	2552	13543	1	-2.42
5	2.16		0.000	27	152	1	
6	2.87	nitrate	2800.906	30918	244463	1	-1.83
7	4.13	phosphate	25.965	60	713	1	-1.75
8	5.44	sulfate	10.119	41	509	1	-0.91
Totals			3018.939	34063	261519		

File: 98112421.D07 Sample: S98T002436 SAM





```

=====
Sample Name: S98T002436 DUP                               Date: 11/24/1998 22:38:28
Data File  : C:\DX\DATA\98112421.D08
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 8                       Detector: CDM-1
Analyst    :                                               Column: AG4A/AS4A anion column
=====
    
```

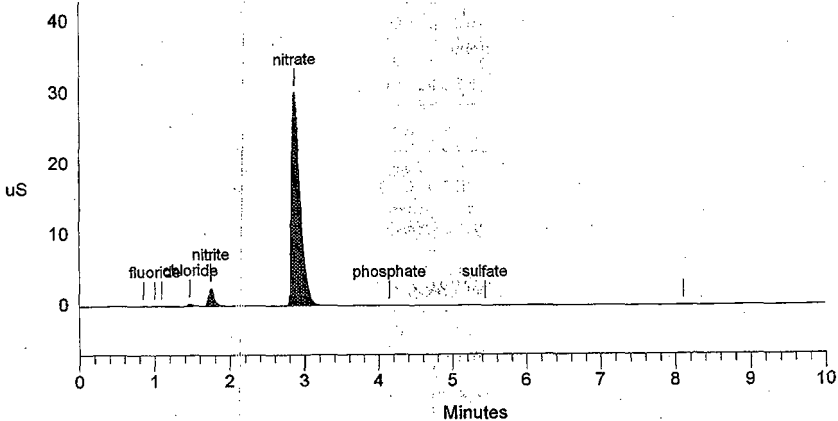
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
External           1           101    3000 5Hz   0.00 10.00          30
-----
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	75	367	2	
2	1.01	fluoride	2.165	75	377	2	1.68
3	1.10		0.000	96	877	2	
4	1.47	chloride	14.580	364	1693	1	-1.12
5	1.75	nitrite	168.402	2561	13691	1	-2.42
6	2.87	nitrate	2744.422	30244	239131	1	-1.60
7	4.15	phosphate	32.335	81	939	1	-1.27
8	5.44	sulfate	12.796	55	768	1	-0.91
9	8.11		0.000	17	625	1	
Totals			2974.700	33567	258467		

File: 98112421.D08 Sample: S98T002436 DUP



```

=====
Sample Name: S98T002436 SPK                               Date: 11/24/1998 22:50:42
Data File  : C:\DX\DATA\98112421.D09
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 9                       Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

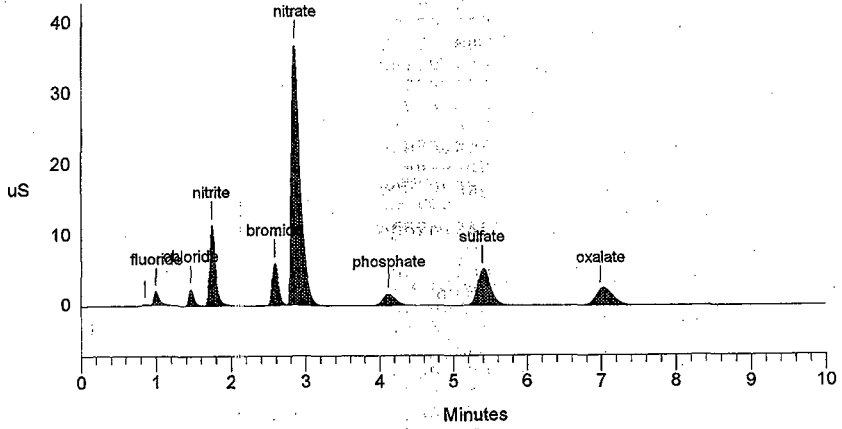
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           101 3000 5Hz  0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	139	524	2	
2	1.00	fluoride	57.685	1972	9916	2	1.01
3	1.46	chloride	95.239	2473	11826	1	-2.01
4	1.74	nitrite	718.632	11412	60786	1	-2.79
5	2.58	bromide	553.614	6077	33500	1	1.57
6	2.85	nitrate	3353.677	36906	297659	1	-2.51
7	4.12	phosphate	586.908	1661	20992	1	-1.90
8	5.39	sulfate	662.142	5208	64603	1	-1.88
9	6.99	oxalate	550.338	2247	40216	1	-2.28
Totals			6578.235	68097	540022		

File: 98112421.D09 Sample: S98T002436 SPK



# LABCORE Completed Worklist Report for Worklist# 27293

Analyst: adp

Instrument: IC40S1

Book#: 28N21B

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107(2) @IC-01 rerun. Use 67.67df. jmf

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 CCB	0	@IC-QC	F	QC	1	<1.20e-2	ug/mL
1 CCB	0	@IC-QC	CL	QC	1	2.80e-02	0.028 ug/mL
1 CCB	0	@IC-QC	NO2	QC	1	<1.08e-1	ug/mL
1 CCB	0	@IC-QC	BR	QC	1	<1.25e-1	ug/mL
1 CCB	0	@IC-QC	NO3	QC	1	<1.39e-1	ug/mL
1 CCB	0	@IC-QC	PO4	QC	1	<1.20e-1	ug/mL
1 CCB	0	@IC-QC	SO4	QC	1	<1.38e-1	ug/mL
1 CCB	0	@IC-QC	OXALATE2	QC	1	<1.05e-1	ug/mL
2 LCS-INST	0	@IC-QC	F	QC	5.90e1	6.47e+01	109.661 % Recovery
2 LCS-INST	0	@IC-QC	CL	QC	8.00e1	8.42e+01	105.250 % Recovery
2 LCS-INST	0	@IC-QC	NO2	QC	5.48e2	5.78e+02	105.474 % Recovery
2 LCS-INST	0	@IC-QC	BR	QC	5.86e2	5.91e+02	100.853 % Recovery
2 LCS-INST	0	@IC-QC	NO3	QC	5.92e2	6.10e+02	103.041 % Recovery
2 LCS-INST	0	@IC-QC	PO4	QC	5.47e2	5.58e+02	102.011 % Recovery
2 LCS-INST	0	@IC-QC	SO4	QC	6.38e2	6.64e+02	104.075 % Recovery
2 LCS-INST	0	@IC-QC	OXALATE2	QC	5.40e2	5.67e+02	105.000 % Recovery
3 CCV	0	@IC-QC	F	QC	6.40e1	6.61e+01	103.281 % Recovery
3 CCV	0	@IC-QC	CL	QC	9.00e1	9.82e+01	109.111 % Recovery
3 CCV	0	@IC-QC	NO2	QC	5.62e2	5.89e+02	104.804 % Recovery
3 CCV	0	@IC-QC	BR	QC	6.30e2	6.32e+02	100.317 % Recovery
3 CCV	0	@IC-QC	NO3	QC	6.98e2	7.39e+02	105.874 % Recovery
3 CCV	0	@IC-QC	PO4	QC	6.32e2	6.59e+02	104.272 % Recovery
3 CCV	0	@IC-QC	SO4	QC	6.99e2	7.25e+02	103.720 % Recovery
3 CCV	0	@IC-QC	OXALATE2	QC	5.53e2	5.86e+02	105.967 % Recovery
4 BLNK-PREP	0	@IC-01	F-02	SOLID	1	<1.20e-2	ug/g
4 BLNK-PREP	0	@IC-01	CL-02	SOLID	1	<1.70e-2	ug/g
4 BLNK-PREP	0	@IC-02	NO2-02	SOLID	1	6.37e-01	0.637 ug/g
4 BLNK-PREP	0	@IC-01	BR-02	SOLID	1	<1.25e-1	ug/g
4 BLNK-PREP	0	@IC-01	NO3-02	SOLID	1	1.89e-01	0.189 ug/g
4 BLNK-PREP	0	@IC-01	PO4-02	SOLID	1	<1.20e-1	ug/g
4 BLNK-PREP	0	@IC-01	SO4-02	SOLID	1	<1.38e-1	ug/g
4 BLNK-PREP	0	@IC-01	OXALATE2	SOLID	1	<1.05e-1	ug/g
5 SAMPLE	S98T002563	0 W	@IC-01	NO3-02	SOLID	N/A	3.053e+05 1826.000 ug/g
5 SAMPLE	S98T002563	0 W	@IC-01	OXALATE2	SOLID	N/A	1.120e+04 1380.000 ug/g
6 DUP	S98T002563	0 W	@IC-01	F-02	SOLID	?	<1.58e2 RPD
6 DUP	S98T002563	0 W	@IC-01	CL-02	SOLID	?	4.35e+03 RPD
6 DUP	S98T002563	0 W	@IC-01	NO2-02	SOLID	?	4.94e+04 RPD
6 DUP	S98T002563	0 W	@IC-01	BR-02	SOLID	?	<1.64e3 RPD
6 DUP	S98T002563	0 W	@IC-01	NO3-02	SOLID	3.05e+05	2.24e+05 30.624 RPD
6 DUP	S98T002563	0 W	@IC-01	PO4-02	SOLID	?	3.11e+04 RPD
6 DUP	S98T002563	0 W	@IC-01	SO4-02	SOLID	?	2.28e+03 RPD

Units shown for QC (BLK/BKG) may not reflect the actual units.

## LABCORE Completed Worklist Report for Worklist# 27293

Seq Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
6 DUP	S98T002563	0	W	@IC-01	OXALATE2	SOLID	1.12e+04	8.06e+03	32.606 RPD
7 SAMPLE	S98T002568	0	W	@IC-01	PO4-02	SOLID	<u>N/A</u>	1.196e+04	1623.000 ug/g
8 DUP	S98T002568	0	W	@IC-01	F-02	SOLID	?	<1.63e2	RPD
8 DUP	S98T002568	0	W	@IC-01	CL-02	SOLID	?	1.66e+03	RPD
8 DUP	S98T002568	0	W	@IC-01	NO2-02	SOLID	?	2.01e+04	RPD
8 DUP	S98T002568	0	W	@IC-01	BR-02	SOLID	?	<1.70e3	RPD
8 DUP	S98T002568	0	W	@IC-01	NO3-02	SOLID	?	6.16e+05	RPD
8 DUP	S98T002568	0	W	@IC-01	PO4-02	SOLID	1.20e+04	1.80e+04	40.000 RPD
8 DUP	S98T002568	0	W	@IC-01	SO4-02	SOLID	?	<1.88e3	RPD
8 DUP	S98T002568	0	W	@IC-01	OXALATE2	SOLID	?	<1.43e3	RPD

Final page for worklist# 27293

Analyst Signature

Date

Analyst Signature

Date

*John M. Lutz* 12/1/98  
Reviewer Signature Date

# LBCORE Data Entry Template for Worklist# 27293

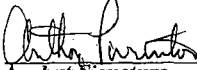
Analyst: ADD Instrument: IC 4051 Book# 29N21-B LCS

Method: LA-533-105 Rev/Mod F-0 28N21-B CCV

Worklist Comment: U107(2) @IC-01 rerun. Use 67.67df. jmf

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC-QC	QC		
2	LCS-INST		@IC-QC	QC		
3	CCV		@IC-QC	QC		
4	BLNK-PREP		@IC-01	SOLID		
5	SAMPLE	S98T002563 0 W	@IC-01	SOLID	98000401	U-107 (2)
		Analytes Requested: NO3-02		, OXALATE2		
6	DUP	S98T002563 0 W	@IC-01	SOLID		
7	SAMPLE	S98T002568 0 W	@IC-01	SOLID	98000401	U-107 (2)
		Analytes Requested: PO4-02				
8	DUP	S98T002568 0 W	@IC-01	SOLID		

### Final page for worklist # 27293

 11-26-98  
Analyst Signature      Date

\_\_\_\_\_  
Analyst Signature      Date

Data Entry Comments: uploaded 11-30-98 validated 12/1/98 JM Eyr  
JH Howell  
27293NOV.CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

```

=====
Sample Name: 29N21-B LCS                               Date: 11/25/1998 23:16:07
Data File  : C:\DX\DATA\98112521.D16
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 16                   Detector: CDM-1
Analyst    : Anthony Perun                          Column: AG4A/AS4A anion column
=====
    
```

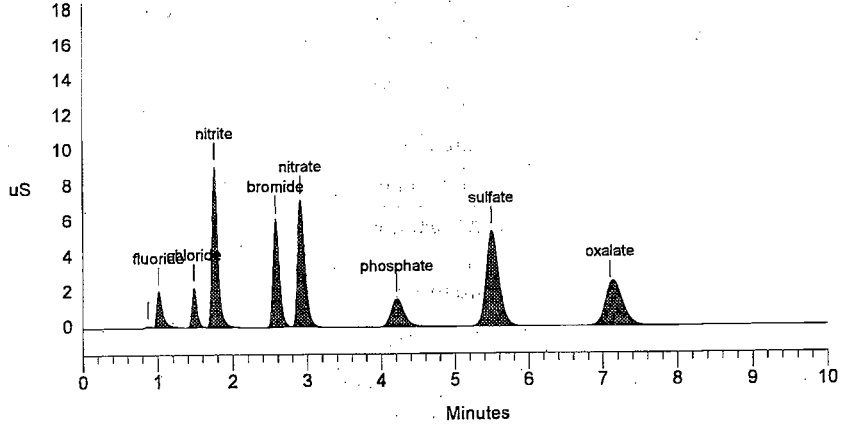
```

=====
Calibration Volume 11-25-98 Dilution Points Rate Start Stop Area Reject
-----
External           1           101       3000  5Hz   0.00  10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.87		0.000	79	336	2	
2	1.01	fluoride	64.674	109.62	2041	11134	2 2.36
3	1.48	chloride	84.160	105.2	2243	10416	1 -0.67
4	1.76	nitrite	578.028	105.48	9093	48673	1 -1.68
5	2.57	bromide	591.318	100.91	6083	35851	1 1.31
6	2.91	nitrate	609.869	103.02	7189	49661	1 -0.46
7	4.21	phosphate	557.720	101.96	1603	19917	1 0.16
8	5.49	sulfate	664.486	104.15	5447	64838	1 0.06
9	7.09	oxalate	566.540	104.91	2352	41415	1 -0.79
Totals			3716.795		36129	282240	

File: 98112521.D16 Sample: 29N21-B LCS



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED AND VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1163 TO 1170.

```

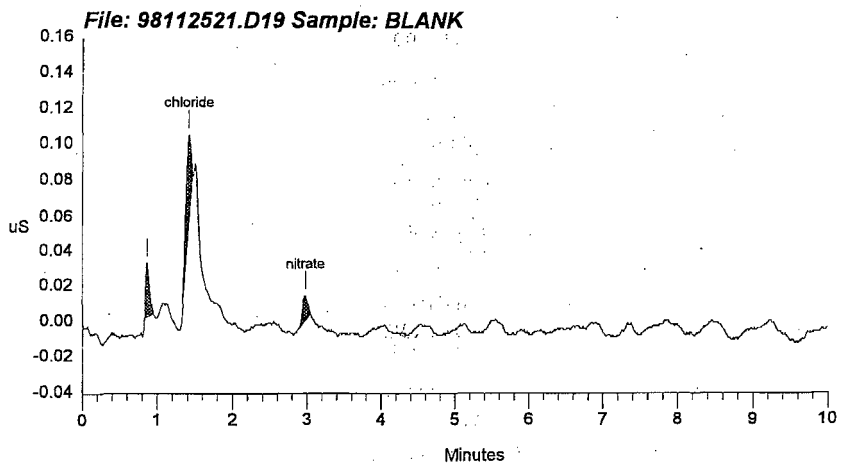
=====
Sample Name: BLANK                               Date: 11/25/1998 23:59:18
Data File  : C:\DX\DATA\98112521.D19
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 19           Detector: CDM-1
Analyst    :                                   Column: AG4A/AS4A anion column
=====
    
```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           1 3000 5Hz 0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.87		0.000	30	114	1	
2	1.42	chloride	0.028	48	240	1	-4.70
3	2.98	nitrate	0.101	13	68	1	2.05
Totals			0.129	92	423		



```

=====
Sample Name: 28N21-B CCV                               Date: 11/25/1998 23:37:47
Data File  : C:\DX\DATA\98112521.D17
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 17                   Detector: CDM-1
Analyst    :                                           Column: AG4A/AS4A anion column
=====
    
```

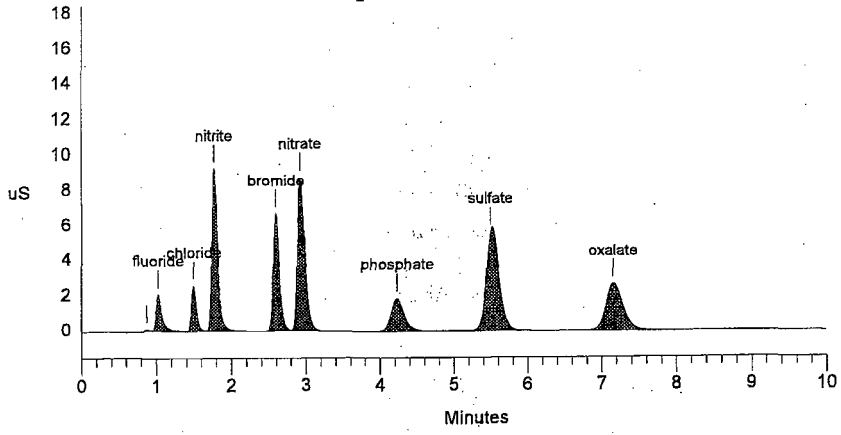
```

-----
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           101    3000  5Hz  0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.87		0.000	75	318	2	
2	1.02	fluoride	66.130	2061	11388	2	3.03
3	1.49	chloride	98.192	2554	12203	1	0.22
4	1.77	nitrite	589.332	9233	49645	1	-1.30
5	2.59	bromide	632.131	6683	38401	1	2.10
6	2.92	nitrate	738.593	8756	60493	1	0.00
7	4.23	phosphate	658.675	1888	23645	1	0.63
8	5.49	sulfate	724.858	5682	70890	1	0.06
9	7.15	oxalate	586.449	2655	42890	1	-0.05
Totals			4094.360	39587	309874		

File: 98112521.D17 Sample: 28N21-B CCV





```

=====
Sample Name: PREP BLANK                      Date: 11/25/1998 23:48:36
Data File  : C:\DX\DATA\98112521.D18
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 18         Detector: CDM-1
Analyst    :                               Column: AG4A/AS4A anion column
=====
    
```

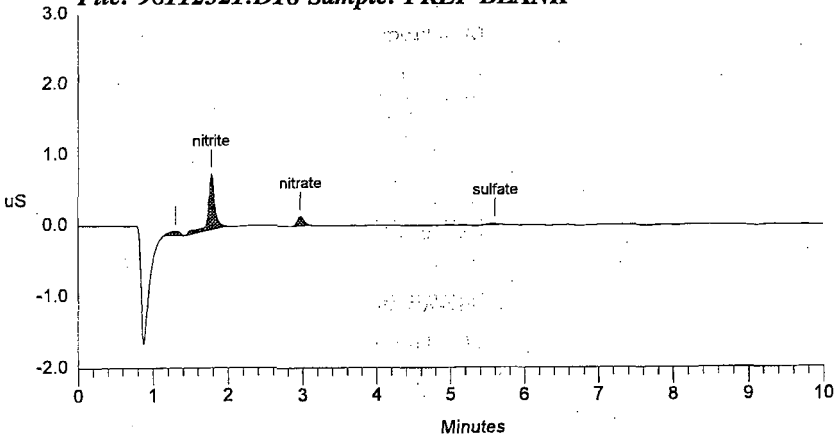
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1    3000 5Hz   0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.31		0.000	65	667	1	
2	1.77	nitrite	0.637	792	4875	1	-0.93
3	2.97	nitrate	0.189	129	788	1	1.60
4	5.60	sulfate	0.081	22	322	1	2.00
Totals			0.907	1008	6652		

**File: 98112521.D18 Sample: PREP BLANK**



```

=====
Sample Name: S98T002563 SAM                      Date: 11/26/1998 01:52:56
Data File  : C:\DX\DATA\98112521.D20
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 20             Detector: CDM-1
Analyst    :                               Column: AG4A/AS4A anion column
=====
    
```

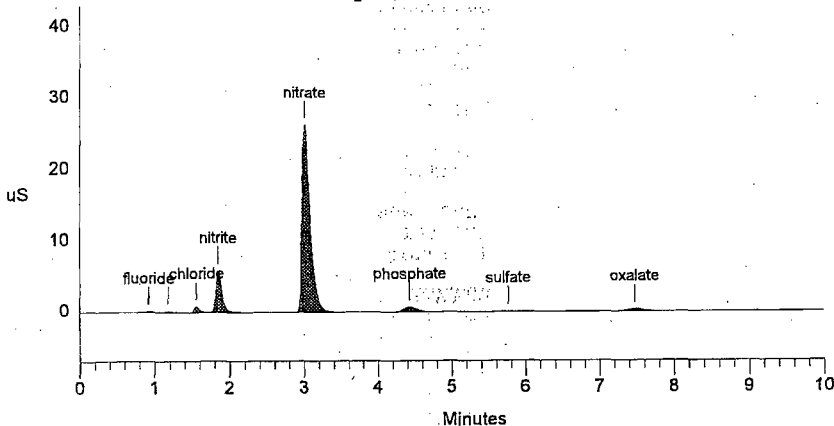
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          67.67  3000 5Hz  0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.92	fluoride	2.179	102	561	2	-7.07
2	1.18		0.000	203	1975	2	
3	1.55	chloride	22.222	813	4001	1	4.25
4	1.85	nitrite	257.106	5825	32024	1	3.17
5	3.01	nitrate	1572.103	26134	202072	1	2.97
6	4.43	phosphate	180.430	706	9412	1	5.40
7	5.76	sulfate	11.964	97	1257	1	4.92
8	7.47	oxalate	57.669	375	6161	1	4.43
Totals			2103.672	34254	257463		

File: 98112521.D20 Sample: S98T002563 SAM



```

=====
Sample Name: S98T002563 DUP                               Date: 11/26/1998 02:04:01
Data File  : C:\DX\DATA\98112521.D21
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 21                     Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

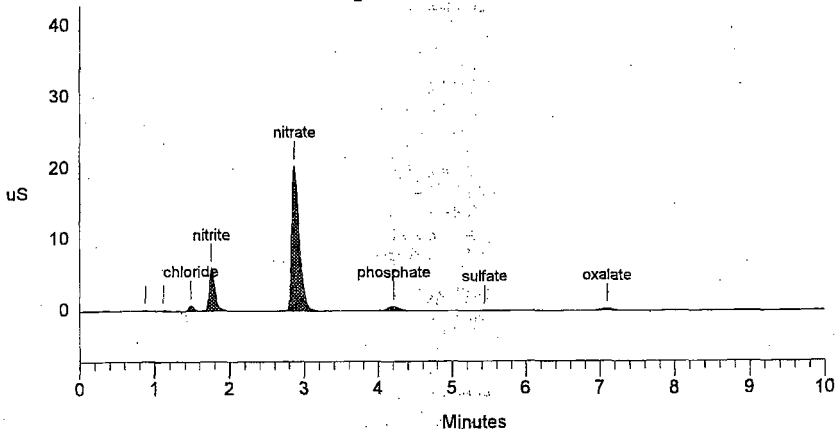
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          67.67  3000  5Hz  0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.88		0.000	95	519	2	
2	1.12		0.000	213	2004	2	
3	1.48	chloride	22.392	844	4032	1	-0.67
4	1.76	nitrite	254.168	6013	31650	1	-1.68
5	2.87	nitrate	1153.606	20491	145609	1	-1.83
6	4.21	phosphate	160.064	678	8318	1	0.16
7	5.44	sulfate	11.718	84	1221	1	-0.91
8	7.09	oxalate	41.497	268	4406	1	-0.79
Totals			1643.444	28684	197759		

File: 98112521.D21 Sample: S98T002563 DUP



Data Reprocessed On 11/30/1998 14:10:44

```

=====
Sample Name: S98T002568 SAM                               Date: 11/26/1998 02:15:20
Data File  : F:\DATA\98112521.D22
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 22                      Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

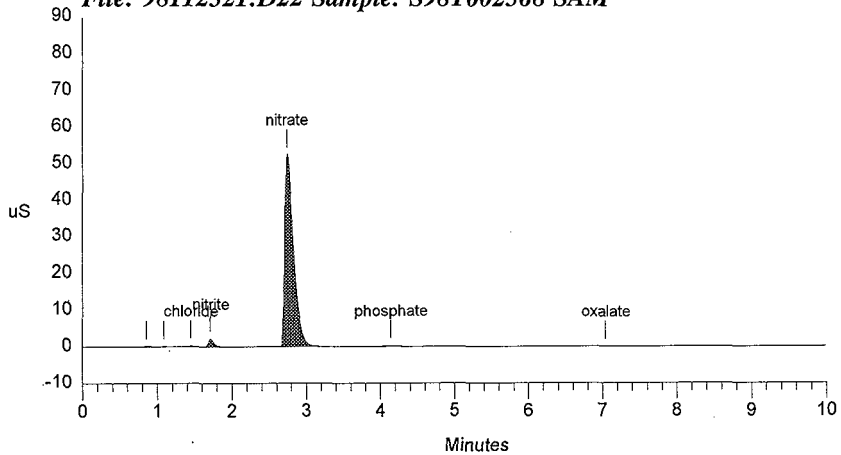
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1          67.67  3000 5Hz  0.00 10.00          30
=====
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	83	365	1	
2	1.09		0.000	42	170	1	
3	1.45	chloride	7.654	286	1303	1	-2.91
4	1.71	nitrite	92.515	2152	11120	1	-4.28
5	2.74	nitrate	3136.269	52442	433980	1	0.00
6	4.14	phosphate	59.808	244	2962	1	-1.43
7	7.04	oxalate	5.098	31	463	1	-1.54
Totals			3301.345	55280	450362		

File: 98112521.D22 Sample: S98T002568 SAM



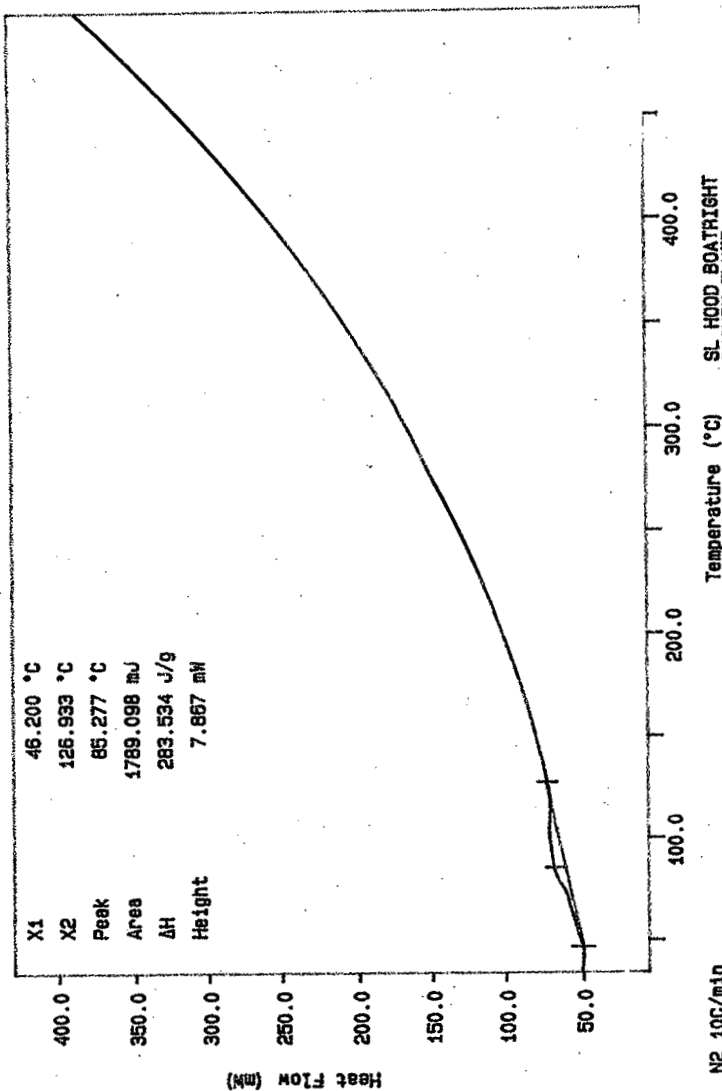
This document was too large to scan as a single document; therefore, it has been divided into smaller sections.

Section 2 of 7

Document Information

Document #	HNF-1661	Revision	0
Title	TANK 241U107 CORES 242 & 242R & 245 ANALYTICAL RESULTS FOR THE FINAL REPORT		
Date	02/01/99		
Originator	STEEN FH	Originator Co.	WMH
Recipient		Recipient Co.	
References	EDT-626133		
Keywords	PUSH MODE, CHARACTERIZATION, U FARM		
Projects	TWRS		
Other Information			

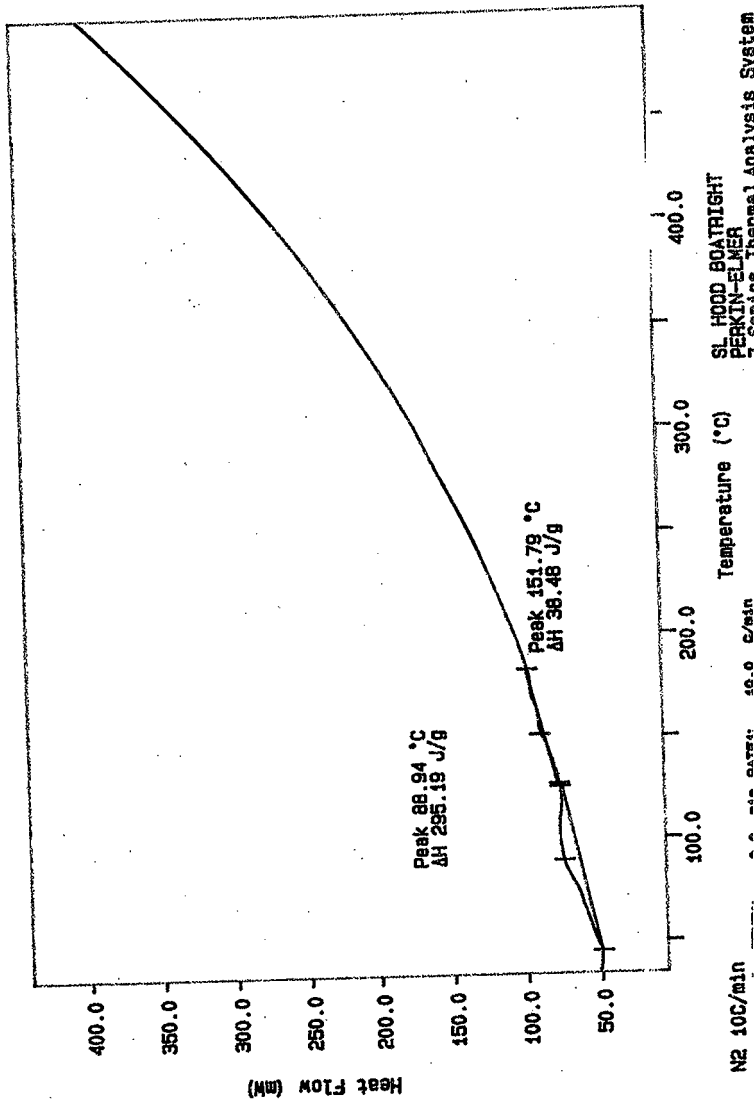
Curve 1: DSC  
 File Info: SAM082305 Sun Aug 23 20:16:24 1998  
 Sample Weight: 5.310 mg  
 S98T002333 SAM



SI HOOD BOATRIGHT  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Sun Aug 23 20:20:52 1998

N2 10C/min  
 TEMPI 388.0 °C  
 TAPEN 0.0 mm  
 RATE 50.0 °C/min

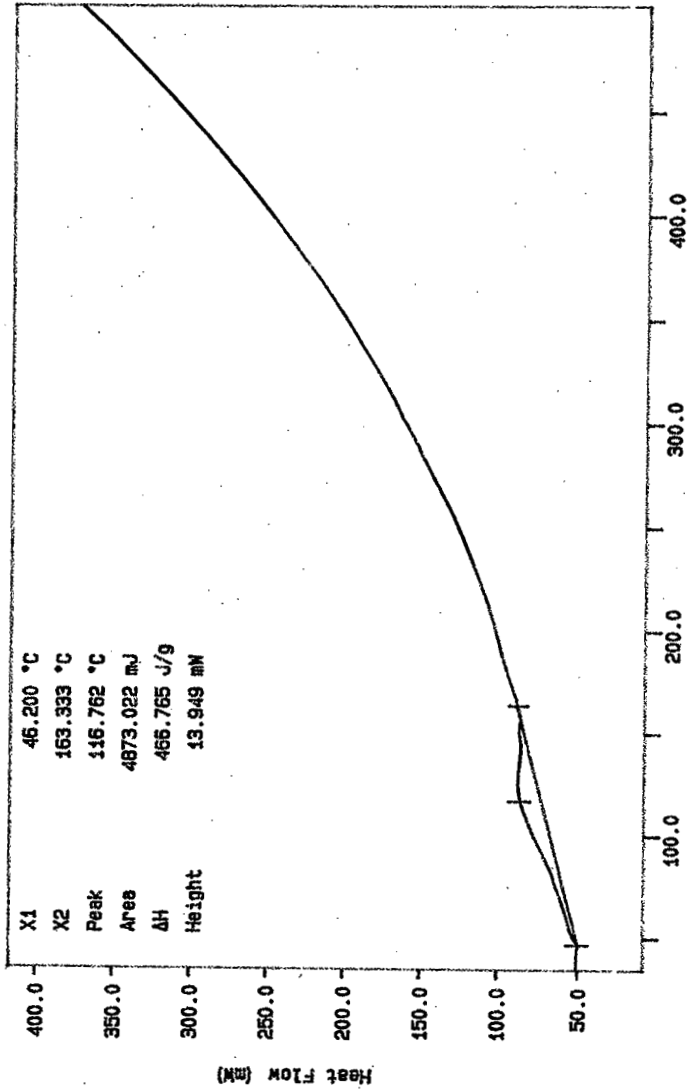
Curve 1: DSC  
File Info: SAM082306 Sun Aug 23 21: 51 1998  
Sample Weight: 8.530 mg  
S98T002333 DUP



SI HOOO BOATRIGT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sun Aug 23 22: 22: 23 1998

N2 10C/min  
TEMP 500.0 °C  
C.C. MAX. RATE: 10.0 C/min

Curve 1: DSC  
File info: SAM082307 Sun Aug 23 23: 14: 27 1998  
Sample Weight: 10.440 mg  
S98T002334 SAM

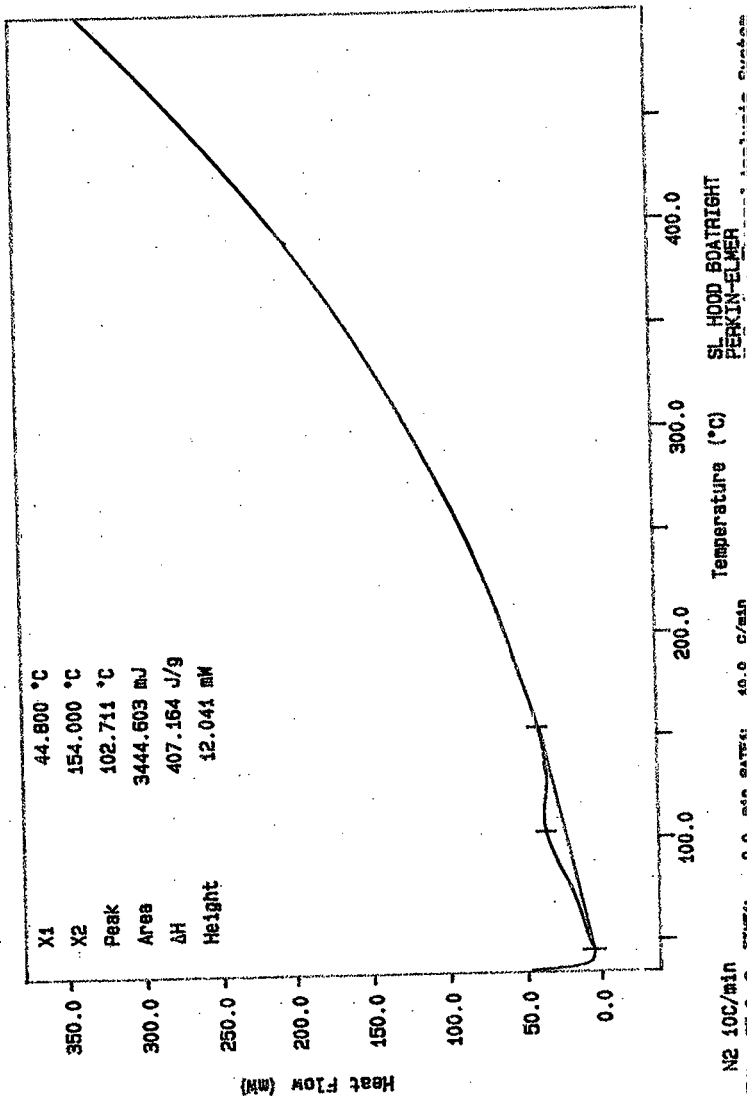


N2 10C/min  
TEMP 266.8 °C  
TIME: 0.0 min RATE: 10.0 C/min

SL HOOD BOATRIGT  
PERFORMED BY  
7 Series Thermal Analysis System  
Sun Aug 23 19: 32 1998



Curve 1: DSC  
File info: SA082308 Mon Aug 24 00:15:59 1998  
Sample Weight: 8.460 mg  
S98T002334 DUP



SL HOOD BOATRIGHT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
MON AUG 24 00:18:23 1998

N2 100/min  
660.0 C

# LABCORE Data Entry Template for Worklist# 25930

Analyst: DNV Instrument: DSC0 3 Book # 12014-8

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, DSC-03, tdm Use  $\leq 15$  mg sample size THIS  
8/31/98

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03	LIQUID	<u>28.45</u>	<u>28.41*</u>	N/A	Joules/g
98000359	U-107 (2)	2 SAMPLE	S98T002251	0 13	DSC-03	LIQUID	N/A	<u>101.1</u>		Joules/g
98000359	U-107 (2)	3 DUP	S98T002251	0	DSC-03	LIQUID	<u>101.1</u>	<u>85.81</u>	N/A	Joules/g
		4 TRI PL					<u>101.1</u>	<u>98.53</u>		

**Final page for worklist # 25930**

Jermoluk 9-25-98  
Analyst Signature Date

[Signature] 9-29-98  
Analyst Signature Date

Validated 9/30/98 [Signature] Machelon

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number. A = Aliquot Code.

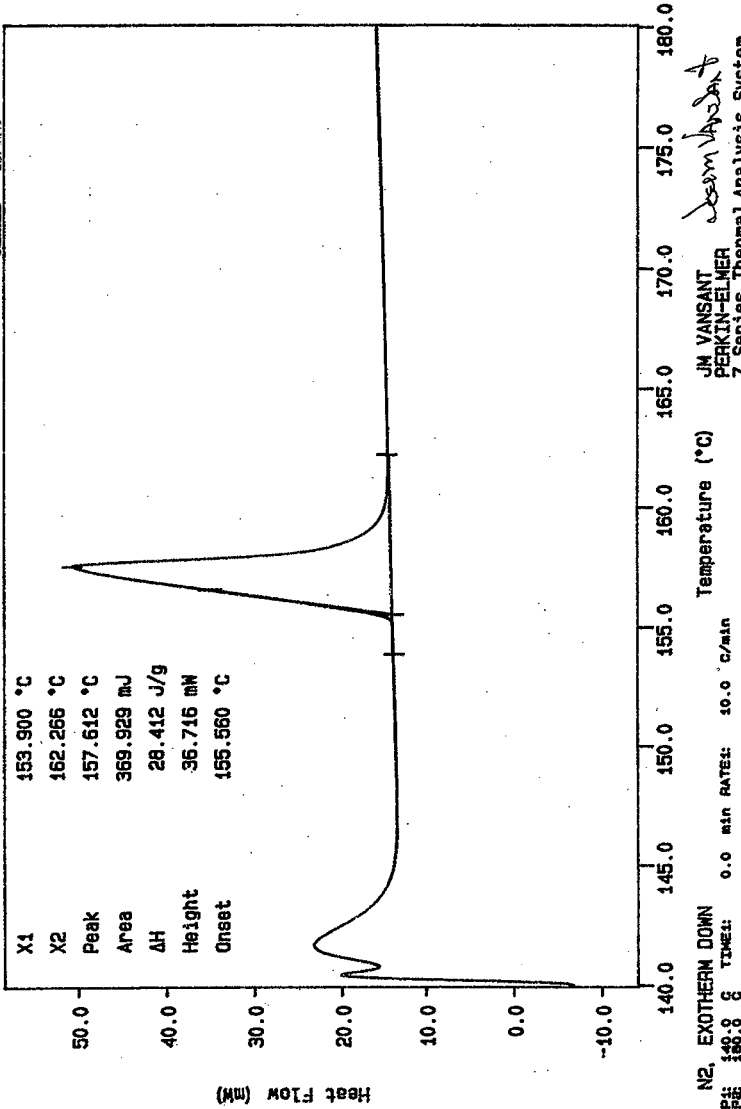
Curve 1: DSC

File Info: 092512 Fri Sep 25 19:16:06 1998

Sample Weight: 13.020 mg

STD 12N14-B

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2.76 TO 2.77.

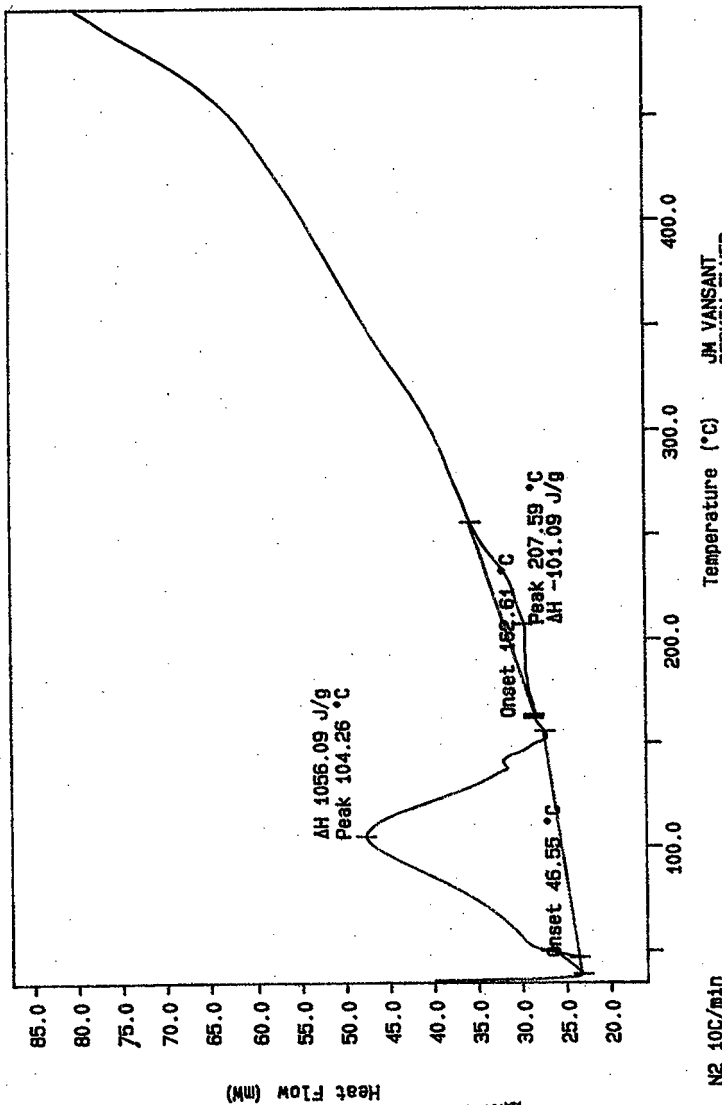


JM VANSANT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Fr:1 Sep 25 19:25:41 1998

N2, EXOTHERM DOWN  
TEMP: 140.0 °C TIME: 0.0 min RATE: 10.0 °C/min  
TEMP: 180.0 °C

276

Curve 1: DSC  
File Info: 092516 Fri Sep 25 22:51:45 1998  
Sample Weight: 6.920 mg  
S98T002251

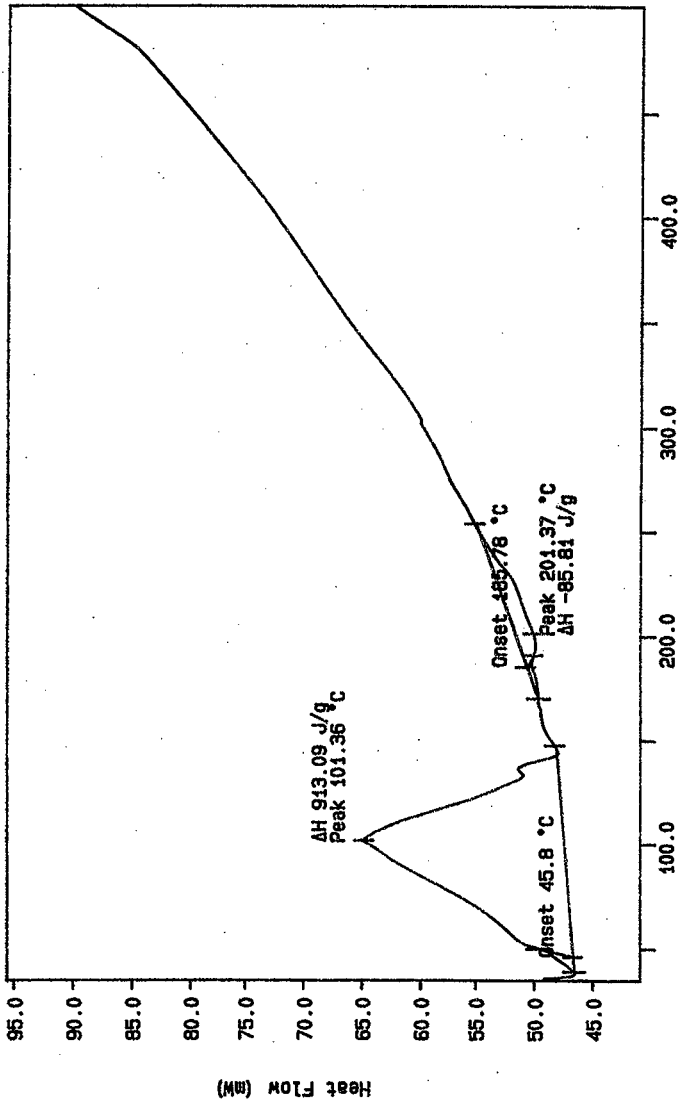


JM VANSANT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Fri Sep 25 22:52:50 1998

N2 10C/min  
TEMP: 500.0 °C  
TIME: 0.0 min RATE: 10.0 C/min

277

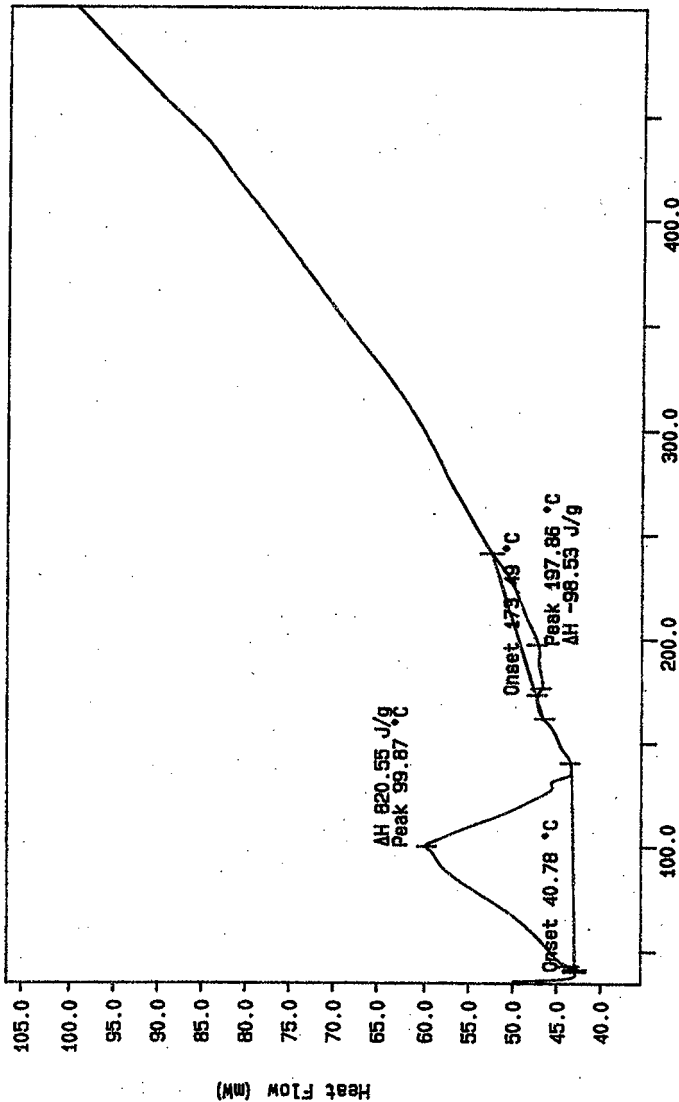
Curve 1: DSC  
File info: SAN092516 Fri Sep 25 23:43:35 1998  
Sample Weight: 5.760 mg  
S98T002251DUP



JM VANSANT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Fri Sep 25 23:51:17 1998

N2 10C/min  
TEMP 35.0 °C  
TIME: 0.0 min RATE: 10.0 C/min

Curve 1: DSC  
File Info: SAM092518 Sat Sep 26 00:45:38 1998  
Sample Weight: 5.590 mg  
S98T002251TRI



JM VANSANT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sat Sep 26 01:12:22 1998

N2 10C/min  
TEMP 505.0 C  
TIME: 0.0 min RATE: 10.0 C/min

**LABCORE Data Entry Template for Worklist# 25931**

Analyst: SJA Instrument: DSC0 3 Book # 12N14-B

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, DSC-03, tdm Use  $\leq 15$  mg sample size. THS 8/31/98

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03	SOLID	<u>28.45</u>	<u>28.51</u>	<u>N/A</u>	Joules/g
98000358	U-107 (2)	2 SAMPLE	S98T002342	0	DSC-03	SOLID	<u>N/A</u>	<u>2.13</u>		Joules/g
98000358	U-107 (2)	3 DUP	S98T002342	0	DSC-03	SOLID	<u>2.13</u>	<u>0</u>	<u>N/A</u>	Joules/g

**Final page for worklist # 25931**

Sandra Hines  
Analyst Signature Date 9-25-98

[Signature]  
Analyst Signature Date 9-29-98

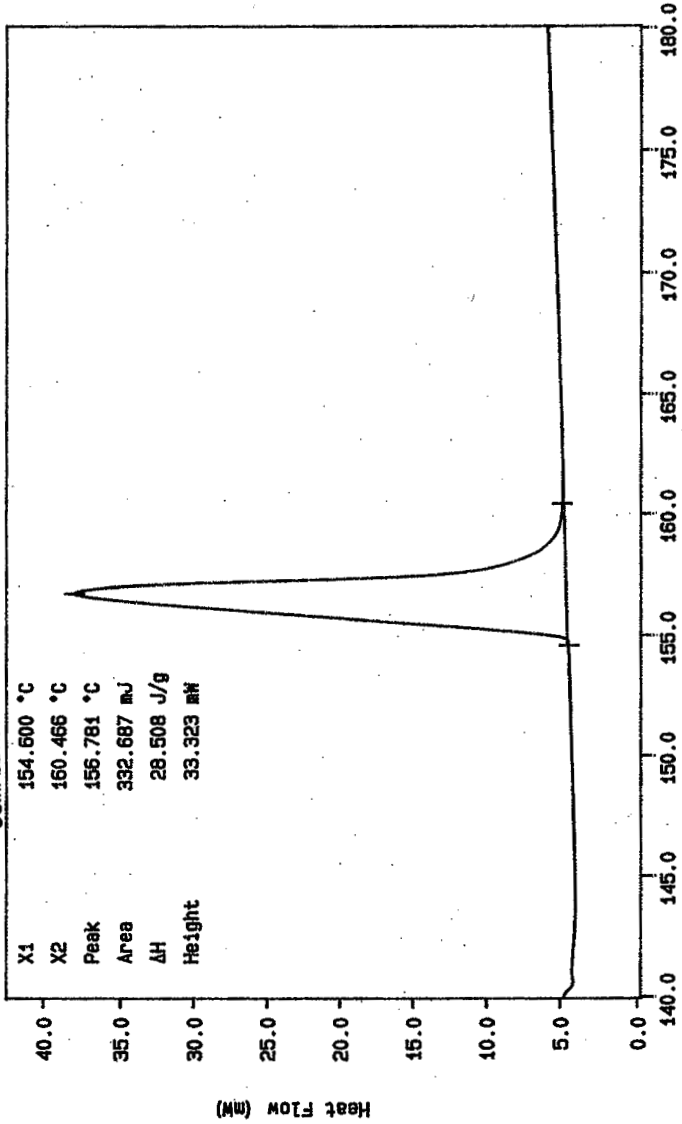
Validated 9/30/98 @ [Signature]

Data Entry Comments:  
High RPD due to sample inhomogeneities. Rerun only at customer request. 9/28/98

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: DSC  
File Info: IND092501 Fri Sep 25 09: 47: 46 1998  
Sample Weight: 11.670 mg  
STD 42N14-B

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 281 TO 283.



Heat Flow (mW)

SL HOOD BOATRIGHT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Fri Sep 25 10: 12: 40 1998

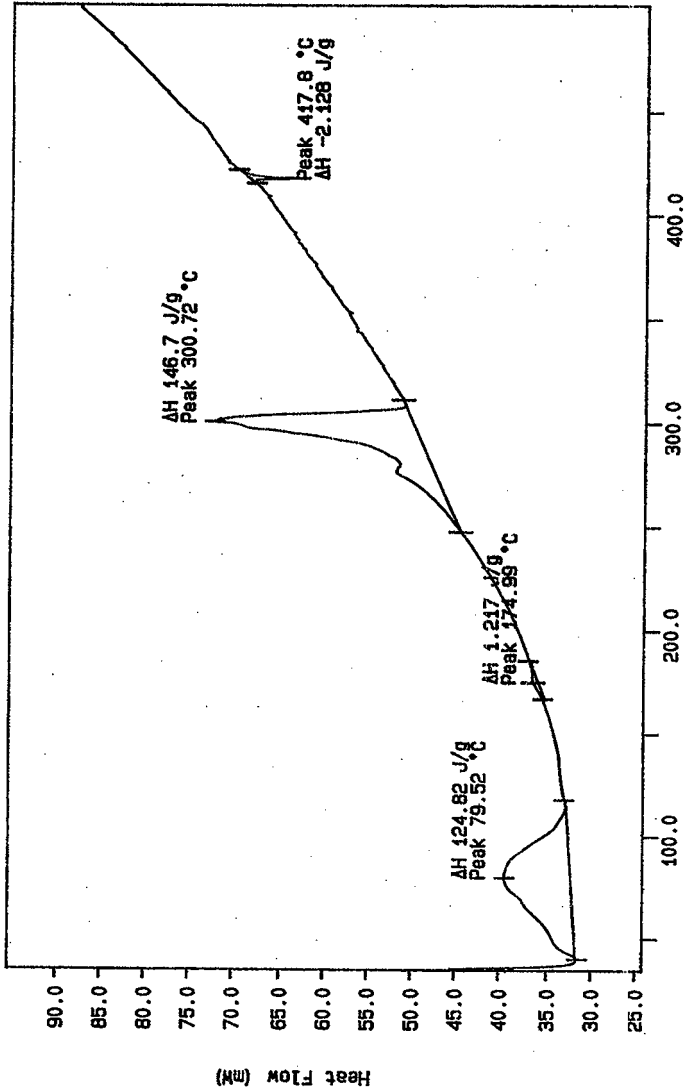
Temperature (°C)

N2, EXOTHERM DOWN  
0.0 scan RATE: 10.0 C/min

TEMP: 160.8 °C  
TIME: 180.8 s

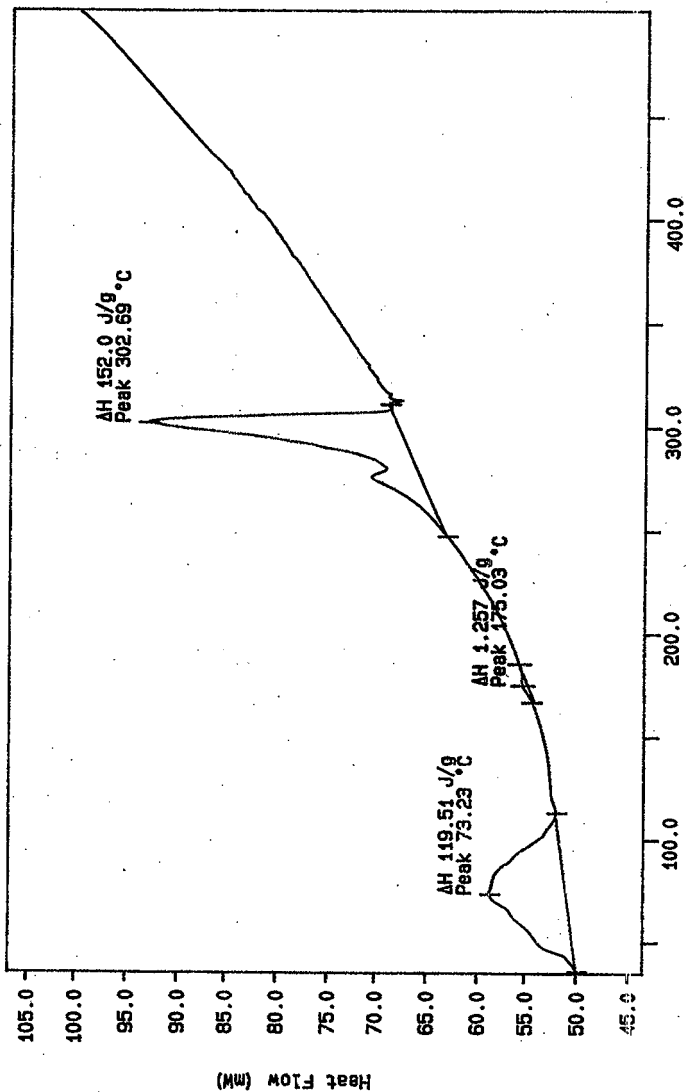


Curve 1: DSC  
File info: SAM092505 Fri Sep 25 11:03:48 1998  
Sample Weight: 14.150 mg  
S98T002342



N2 10C/min  
TEMP: 35.0 C  
TEMP: 500.0 C  
TIME: 0.0 min RATE: 10.0 C/min  
BOATRIGHT  
PDU/TA-CI MFD  
7 Series Thermal Analysis System  
Fri Sep 25 11:12:16 1998

Curve 1: DSC  
File Info: SAM092506 Fri Sep 25 12:04:32 1998  
Sample Weight: 15.630 mg  
S98T002342 DUP



BOATRIGHT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Fri Sep 25 13:07:58 1998

N2 100/min  
TEMP: 35.0 C  
TIME: 500.0 C  
0.0 min RATE: 10.0 C/min

# LABCORE Data Entry Template for Worklist# 26115

Analyst: JLS Instrument: DSC0 3 Bottle # 12/14-B

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, DSC-03, tdm. use < 15 mg SAMPLE SIZE. DM

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03	LIQUID	<u>28.45</u>	<u>27.81</u>	<u>N/A</u>	Joules/g
98000401	U-107 (2)	2 SAMPLE	S98T002465 0		DSC-03	LIQUID	<u>N/A</u>	<u>19.31</u>		Joules/g
98000401	U-107 (2)	3 DUP	S98T002465 0		DSC-03	LIQUID	<u>19.31</u>	<u>17.08</u>	<u>N/A</u>	Joules/g
98000401	U-107 (2)	4 SAMPLE	S98T002524 0		DSC-03	LIQUID	<u>N/A</u>	<u>59.08</u>		Joules/g
98000401	U-107 (2)	5 DUP	S98T002524 0		DSC-03	LIQUID	<u>59.08</u>	<u>69.80</u>	<u>N/A</u>	Joules/g

### Final page for worklist # 26115

Jeff Solbeck 092798  
Analyst Signature Date

JLS 9/24/98  
Analyst Signature Date

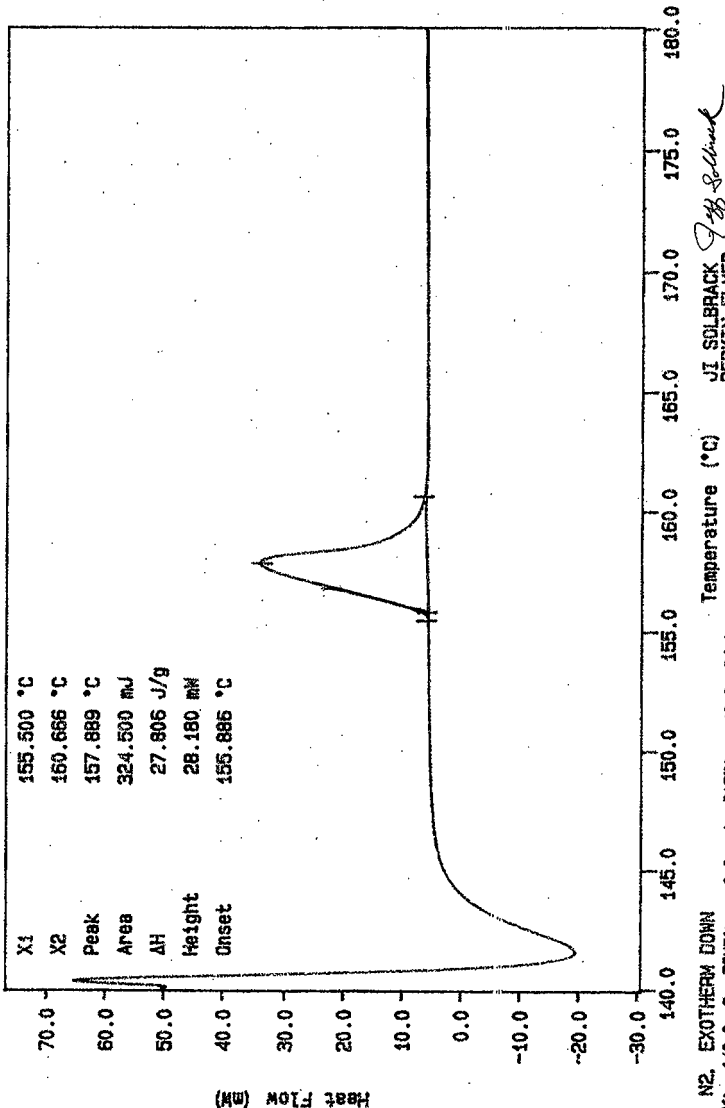
Validated 9/24/98 @ Bachelor

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: DSC  
File Info: IND092301 Wed Sep 23 06: 24: 27 1998  
Sample Weight: 11.670 mg  
STD 12N14-B

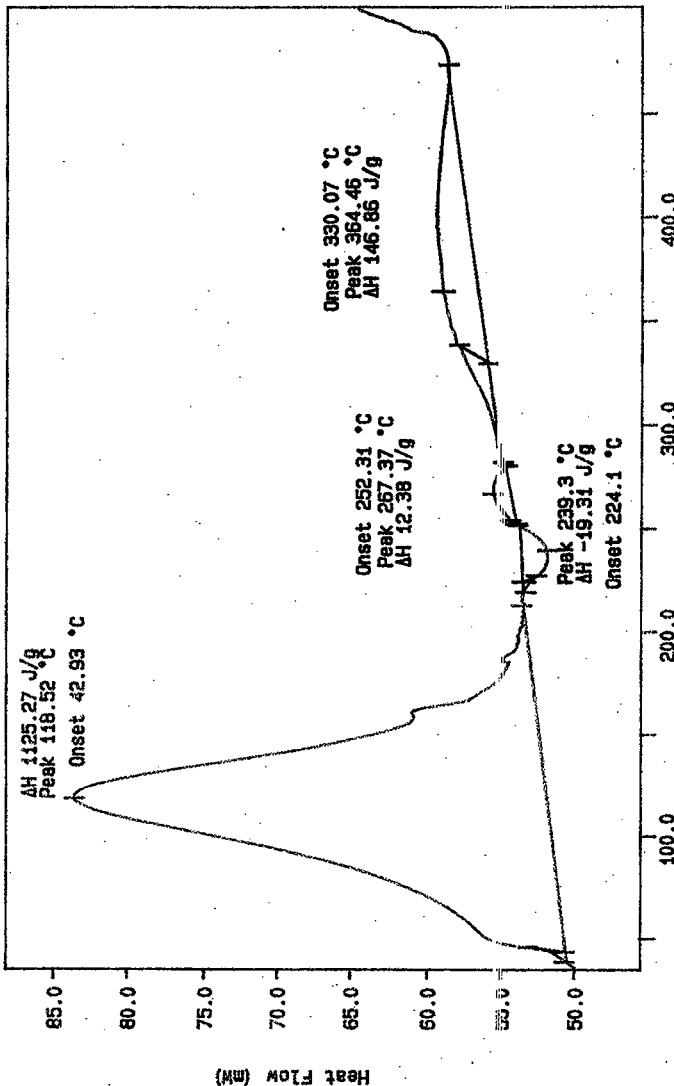
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2, 5 TO 289.



JI SOLBRACK *J. B. Schindler*  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Wed Sep 23 06: 27: 17 1998

N2, EXOTHERM DOWN  
TEMP: 140.0 °C TIME: 0.0 min RATE: 10.0 C/min

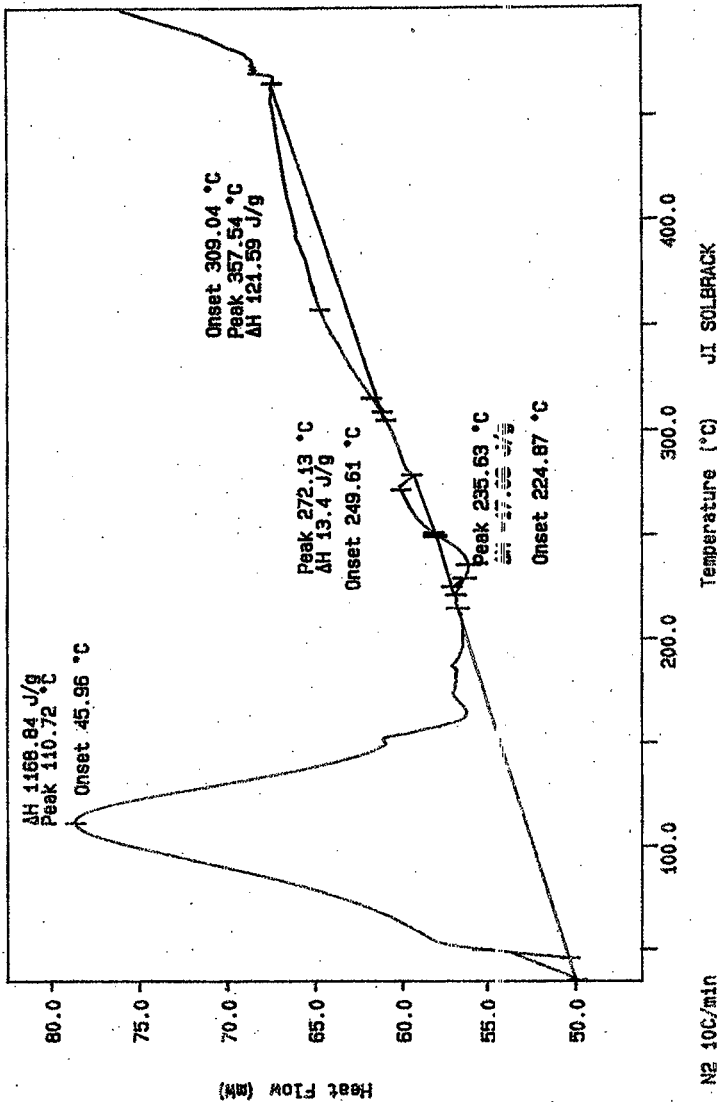
Curve 1: DSC  
File info: SAM092305 Wed Sep 23 11:58:01 1998  
Sample Weight: 10.880 mg  
S98T002465



N2 100/min  
TEMP: 50.0 8  
TIME: 0.0 8  
0.0 min RATE: 10.0 C/min

JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Wed Sep 23 13:23:23 1998

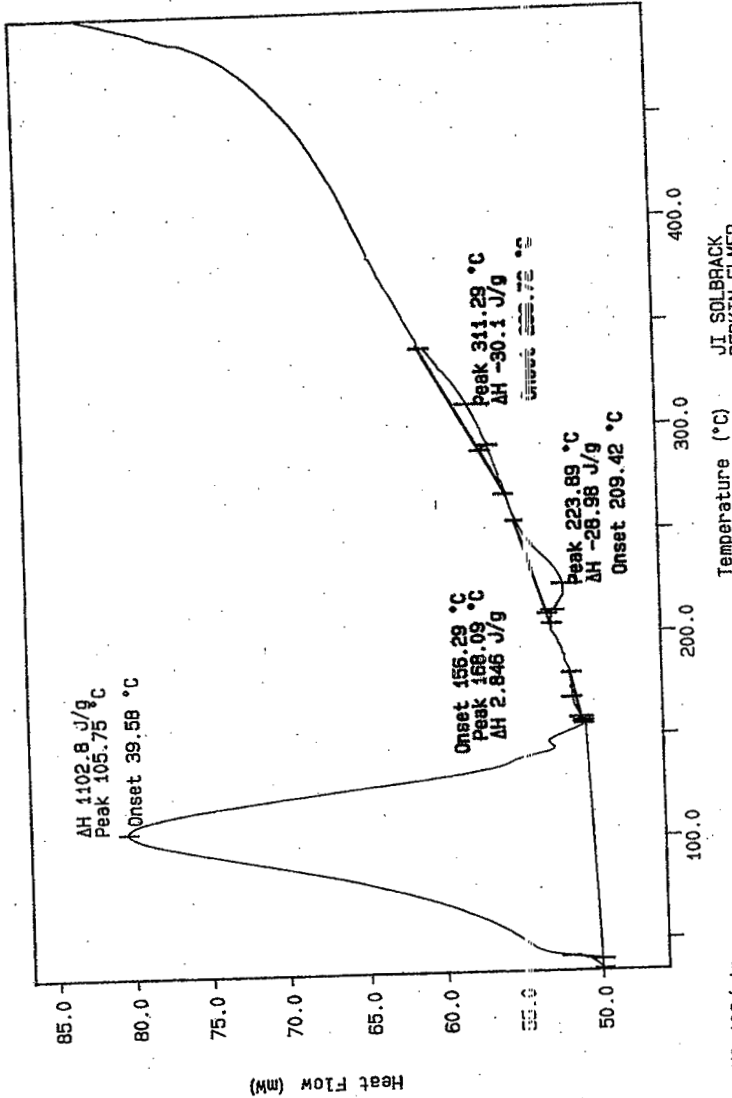
Curve 1: DSC  
File info: SA092306 Wed Sep 23 12:50:03 1998  
Sample Weight: 8.690 mg  
998T002465DUP



N2 100./min  
35.0 g  
TEMPSE 506.0 g  
TIMES: 0.0 min RATE: 10.0 C/min

JJ SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Wed Sep 23 13:42:48 1998

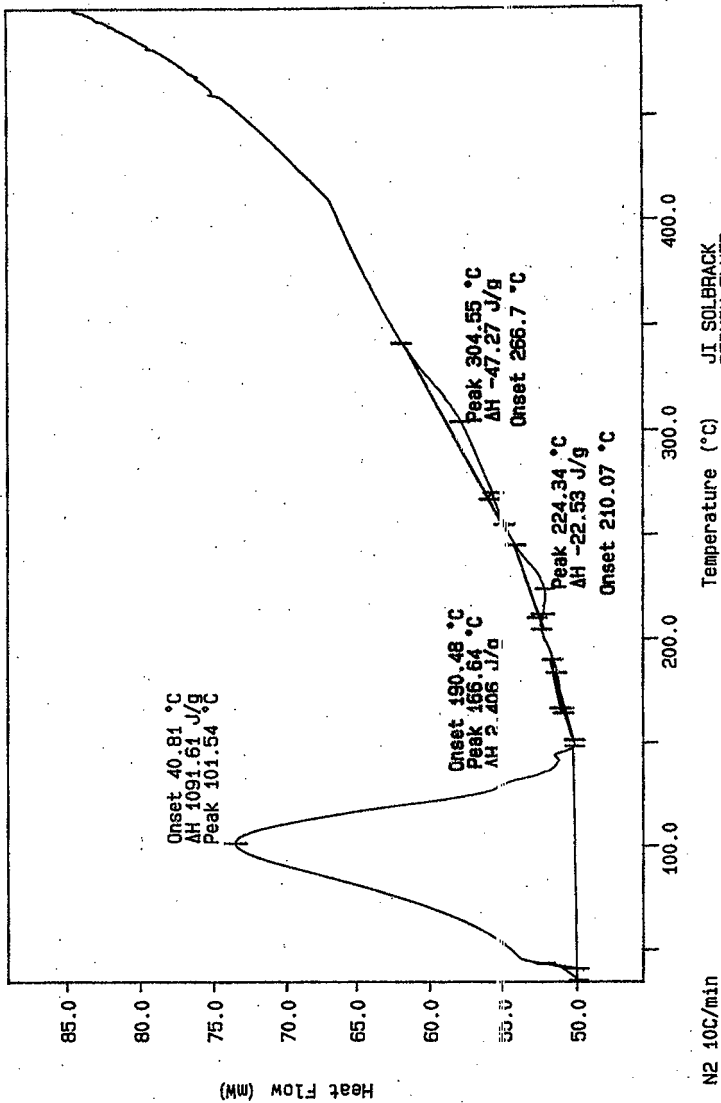
Curve 1: DSC  
File info: SAM092303 Wed Sep 23 10:02:04 1998  
Sample Weight: 8.420 mg  
S98T002524



JT SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Wed Sep 23 14:03:20 1998

N2 10C/min  
TEMP: 35.0 C  
TIME: 500.0 C  
0.0 min RATE: 10.0 C/min

Curve 1: DSC  
File info: SAM092304 Wed Sep 23 11:01:57 1998  
Sample Weight: 6.450 mg  
S98T002524DUP



N2 10C/min  
TEMP: 35.0 C  
TIME: 506.0 C

JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Wed Sep 23 15:25:54 1998



# LABCORE Data Entry Template for Worklist# 26121

Analyst: DMV Instrument: DSC0 3 Book # 12014-B

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, DSC-03, tdm

USE < 15 mg SAMPLE SIZE: 10

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03	LIQUID	<u>28.45</u>	<u>28.41</u>	N/A	Joules/g
98000401	U-107 (2)	2 SAMPLE	S98Y002533	0 22	DSC-03	LIQUID	N/A	<u>26.58</u>		Joules/g
98000401	U-107 (2)	3 DUP	S98Y002533	0	DSC-03	LIQUID	<u>26.58</u>	<u>27.11</u>	N/A	Joules/g

### Final page for worklist # 26121

Analyst Signature DMV Date 9-28-98

Analyst Signature [Signature] Date 9-29-98

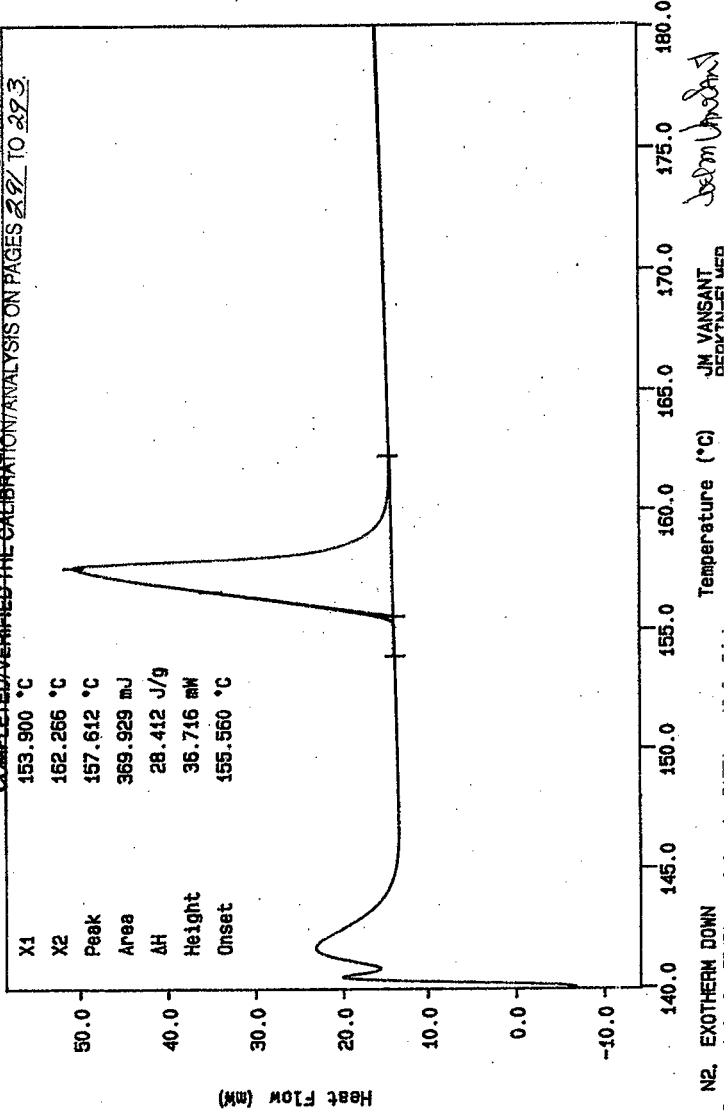
Validated 9/30/98 [Signature] Rachel

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: DSC  
File info: 092512 Fri Sep 25 19: 16: 06 1998  
Sample Weight: 13.020 mg  
STD 12N14-B

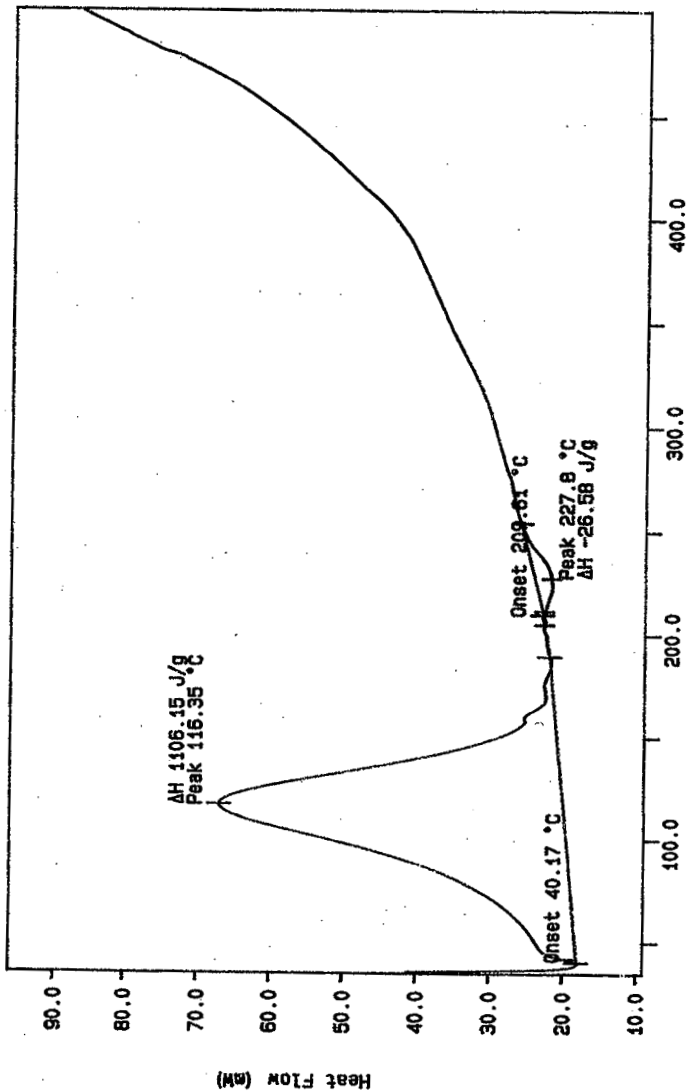
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 29 TO 29.3



JM VANSANT  
CHEMIST  
7 Series Thermal Analysis System  
Fri Sep 25 19:22:09 1998  
*Joselyn Vansant*

N2, EXOTHERM DOWN  
TEMPERATURE 180.0 °C  
HEAT FLOW 180.0 mW  
SCAN RATE 10.0 °C/min  
ONSET 155.560 °C  
PEAK 157.612 °C  
AREA 369.929 mJ

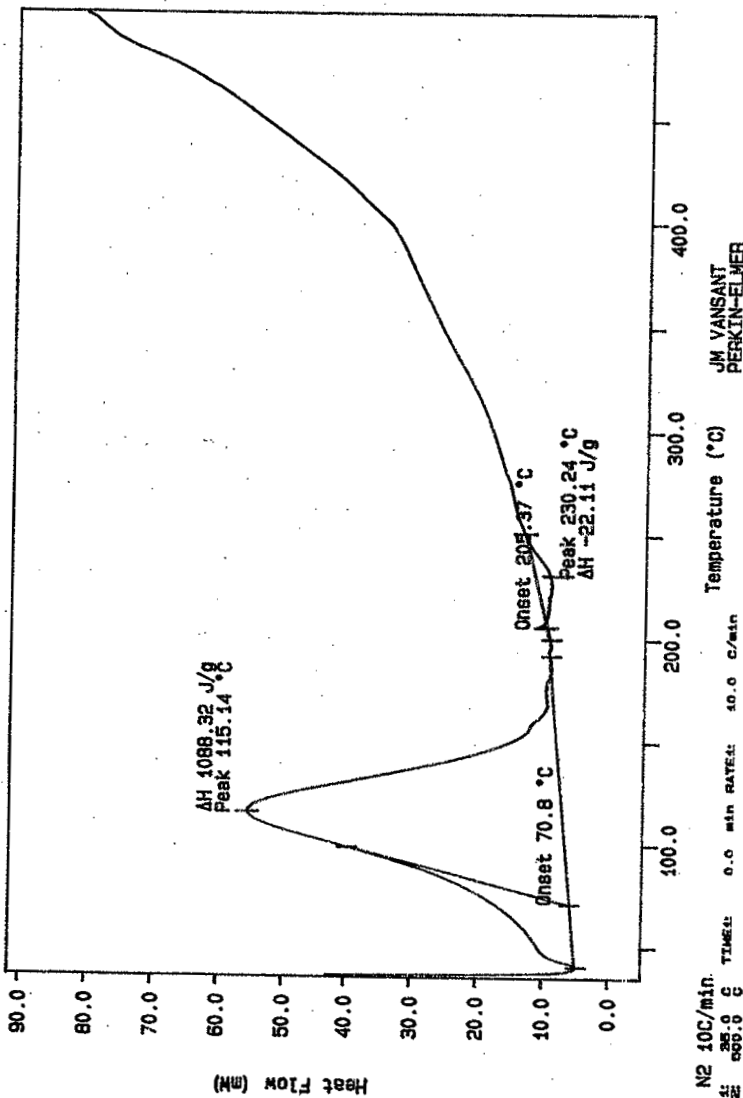
Curve 1: DSC  
 File info: SAM092513 Fri Sep 25 20: 14: 57 1998  
 Sample Weight: 13.700 mg  
 S98T002533



N2 10C/min  
 TEMPERATURE 655.8 °C  
 RATE 0.5 min RATE: 10.0 °/min

JM VANSANT  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Fri Sep 25 20: 22: 14 1998

Curve 1: DSC  
 File info: SAM092514 Fri Sep 25 21: 15: 42 1998  
 Sample Weight: 14.100 mg  
 S98T002533DUP



N2 10C/min.  
 TEMP: 25.0 C  
 TEMPE: 500.0 C  
 TIME: 0.0 min RATE: 10.0 C/min  
 Temperature (°C)  
 JM VANSANT  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Fri Sep 25 21: 29: 34 1998

# LABCORE Data Entry Template for Worklist# 26122

Analyst: JIS Instrument: DSCO 3 Book # 12/114-8

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, DSC-03, tdm USE < 15mg SAMPLE SIZE

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03	SOLID	<u>28.45</u>	<u>27.82X</u>	<u>N/A</u>	Joules/g
98000401	U-107 (2)	2 SAMPLE	S98T002528	0	DSC-03	SOLID	<u>N/A</u>	<u>38.41</u>		Joules/g
98000401	U-107 (2)	3 DUP	S98T002528	0	DSC-03	SOLID	<u>38.41</u>	<u>30.95</u>	<u>N/A</u>	Joules/g
98000401	U-107 (2)	4 SAMPLE	S98T002537	0	DSC-03	SOLID	<u>N/A</u>	<u>82.42</u>		Joules/g
98000401	U-107 (2)	5 DUP	S98T002537	0	DSC-03	SOLID	<u>82.42</u>	<u>126.7</u>	<u>N/A</u>	Joules/g

### Final page for worklist # 26122

J. J. [Signature] 09/24/98  
 Analyst Signature Date  
 Validated 9/30/98 [Signature]

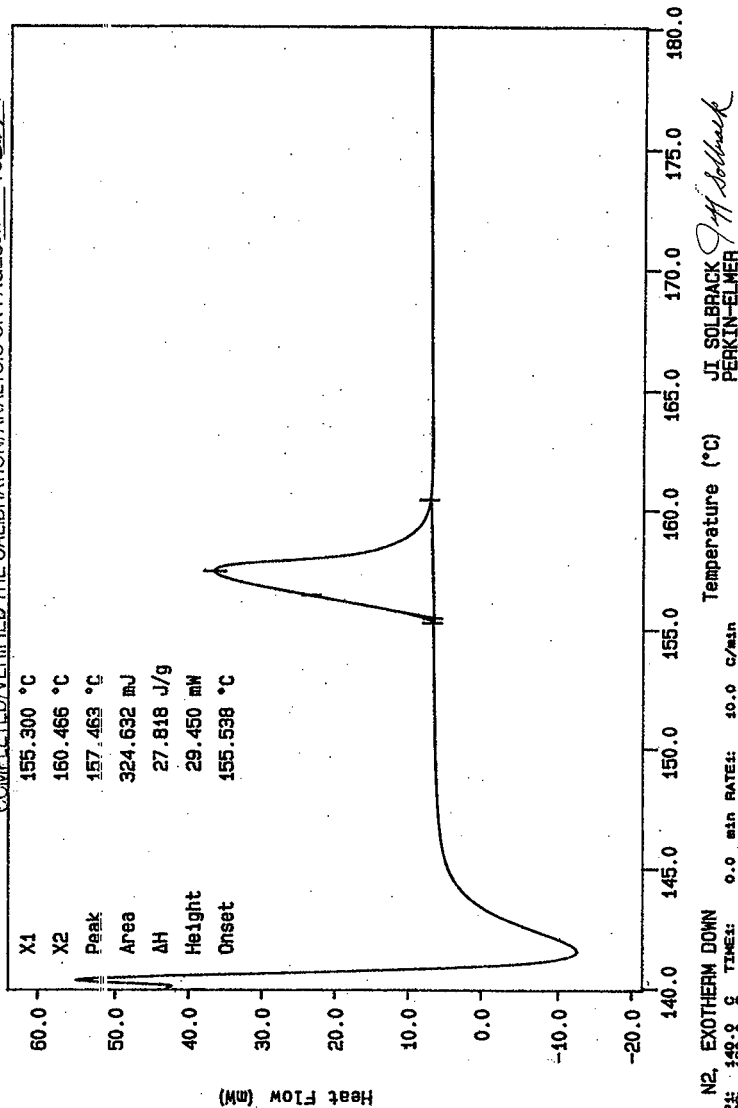
[Signature] 9/29/98  
 Analyst Signature Date

Data Entry Comments:  
High RPD both samples due to sample inhomogeneities. Rerun only  
at customer request. 9/28/98

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: DSC  
File info: IND092401 Thu Sep 24 06: 45: 51 1998  
Sample Weight: 11.670 mg  
STD 12N14-B

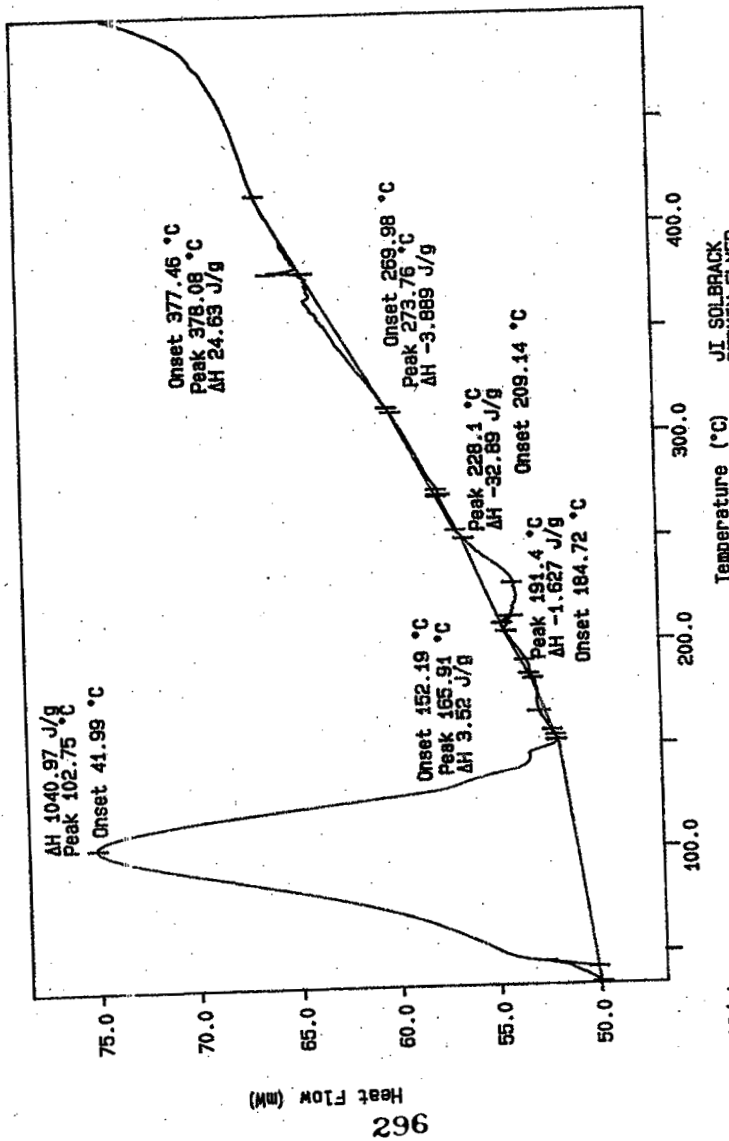
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 295 TO 299



J I SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 06: 54: 52 1998

295

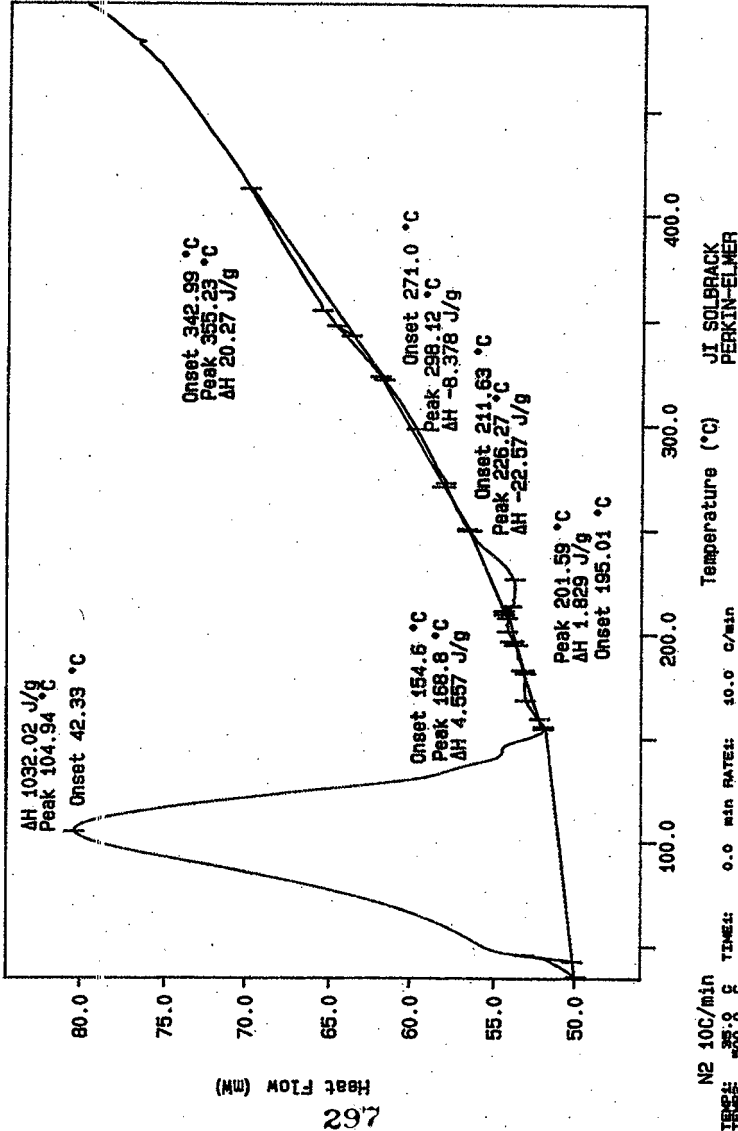
Curve 1: DSC  
File info: SAM092408 Thu Sep 24 13:49:50 1998  
Sample Weight: 7.140 mg  
598T002528



JT SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 15:10:25 1998

N2 10C/min  
TEMPERATURE 500.0 C  
TIME: 0.0 min RATE: 10.0 C/min

Curve 1: DSC  
File info: SAM092409 Thu Sep 24 14: 45: 58 1998  
Sample Weight: 8.870 mg  
S98T002528DUP



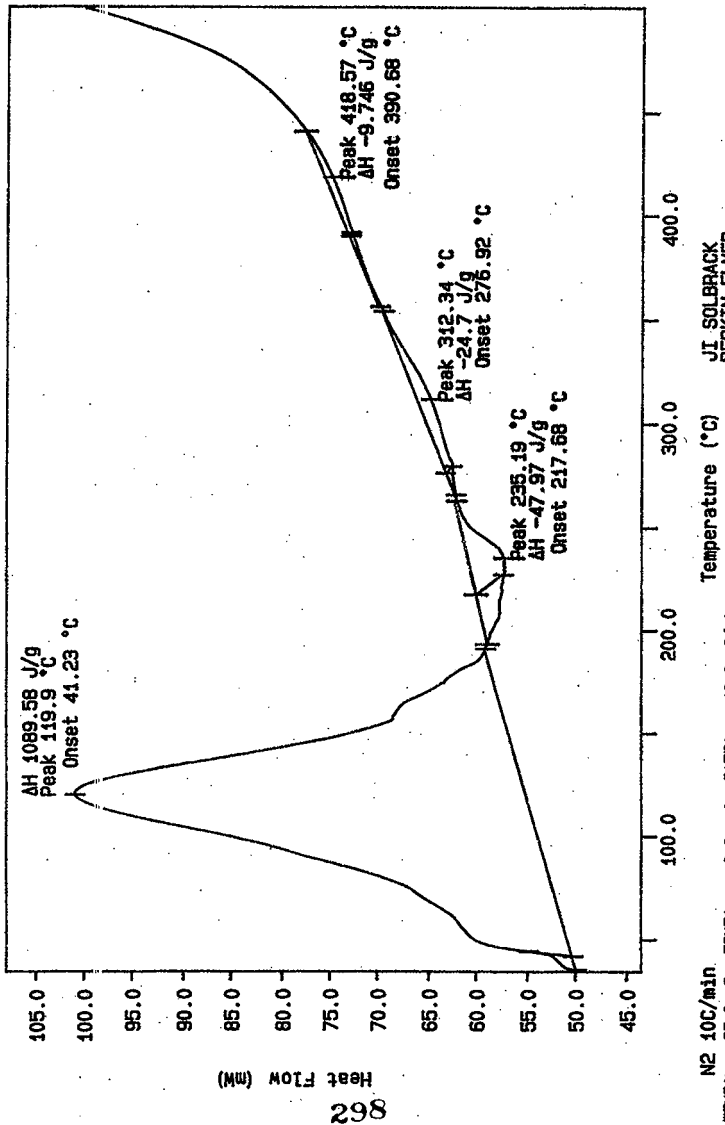
N2 10C/min  
TEMP: 85.0 C  
TIME: 0.0 min RATE: 10.0 C/min

JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System

Thu Sep 24 15: 01: 44 1998

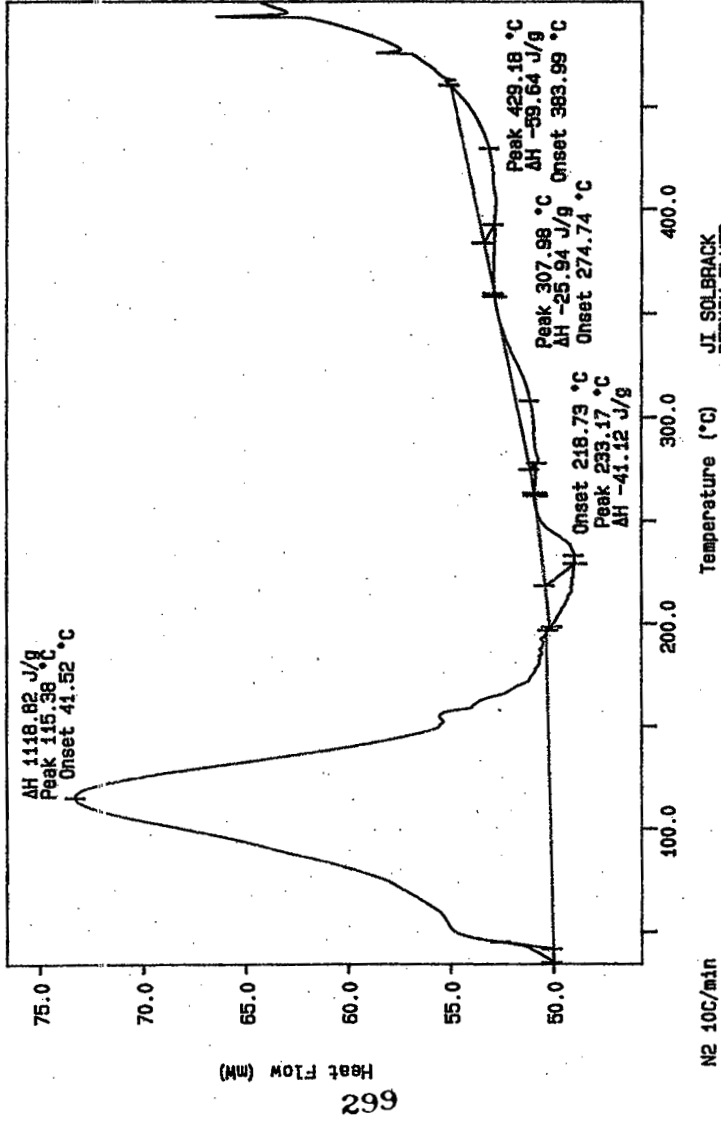


Curve 1: DSC  
 File info: SAM092402 Thu Sep 24 07:52:45 1998  
 Sample Weight: 16.540 mg  
 S98T002537



N2 100/min  
 TEMPERATURE 35.0 °C  
 TIME: 500.0 s  
 0.0 min RATE: 10.0 C/min  
 Temperature (°C)  
 JI SOLBRACK  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Thu Sep 24 08:58 1998

Curve 1: DSC  
File info: SAM092403 Thu Sep 24 08:52:44 1998  
Sample Weight: 7.660 mg  
S98T002537DUP



N2 10C/min  
 RATE 10.0 C/min  
 TIME 8  
 JI SOLBRACK  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Thu Sep 24 13:49:12 1998

692

# LABCORE Data Entry Template for Worklist# 26123

Analyst: JIS Instrument: DSC0 3 Book # 12N14B

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, DSC-03 tdm

USE < 15 mg SAMPLE SIZE

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03	SOLID	<u>28.45</u>	<u>27.82</u>	N/A	Joules/g
98000401	U-107 (2)	2 SAMPLE	S98T002543	0	DSC-03	SOLID	N/A	<u>96.58</u>		Joules/g
98000401	U-107 (2)	3 DUP	S98T002543	0	DSC-03	SOLID	<u>96.58</u>	<u>90.71</u>	N/A	Joules/g
98000401	U-107 (2)	4 SAMPLE	S98T002552	0	DSC-03	SOLID	N/A	<u>26.30</u>		Joules/g
98000401	U-107 (2)	5 DUP	S98T002552	0	DSC-03	SOLID	<u>26.30</u>	<u>36.61</u>	N/A	Joules/g

Final page for worklist # 26123

Jill Soltzack  
Analyst Signature Date 092498

Jill Soltzack  
Analyst Signature Date 092998

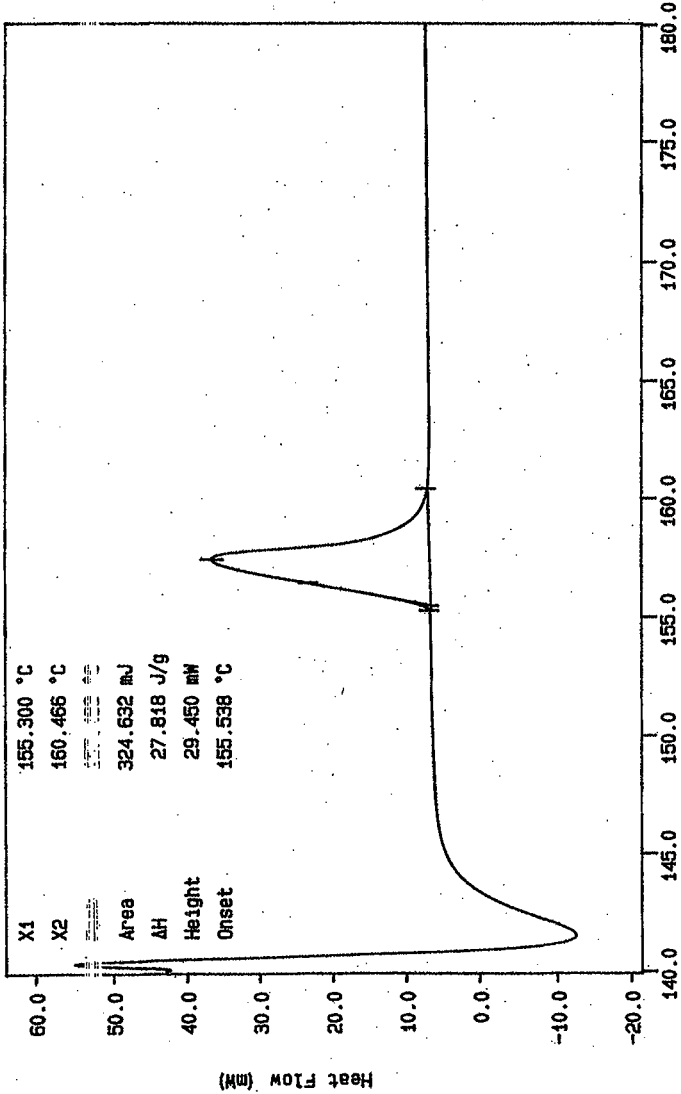
Validated 9/30/98 J. Soltzack

Data Entry Comments:  
High RPD S98T002552 due to sample inhomogeneities. Rerun only at customer request. JIS 9/28/98

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

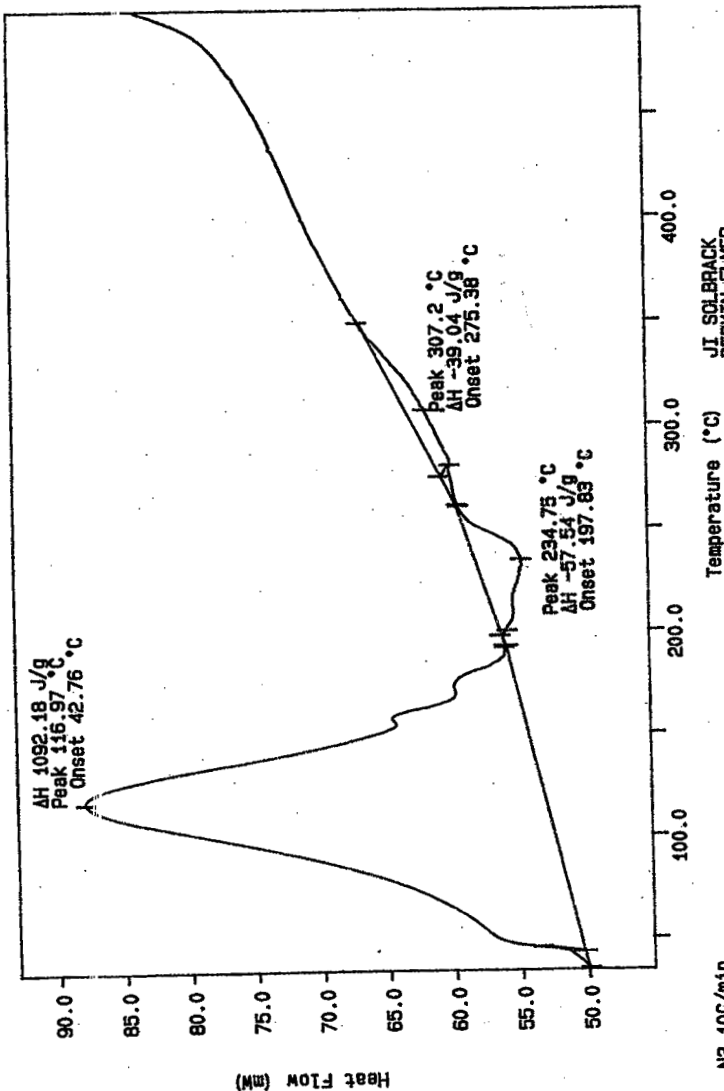
Curve 1: DSC  
File info: IND092401 Thu Sep 24 06:45:51 1998  
Sample Weight: 11.670 mg  
STD 12N14-B

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 301 TO 305.



N2, EXOTHERM DOWN  
 TEMPE 140.0 °C TIME: 0.0 min RATE: 10.0 C/min  
 TEMPE 160.0 °C  
 JI SOLBRACK *J. H. Solbrack*  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Thu Sep 24 06:54:52 1998

Curve 1: DSC  
File info: SAM092404 Thu Sep 24 09: 49: 43 1998  
Sample Weight: 12.500 mg  
S98T002543

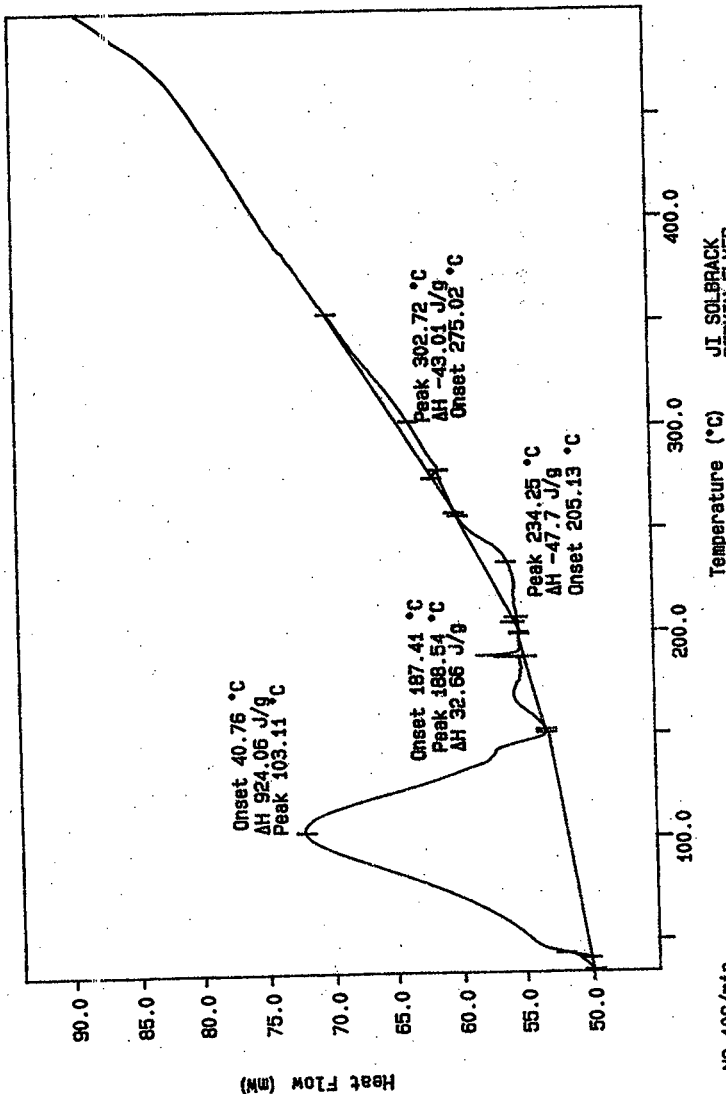


JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 15: 58: 07 1998

N2 10C/min  
TEMP: 35.8 E  
TIME: 666.8 E  
RATE: 0.0 min RATE: 10.0 C/min

302

Curve 1: DSC  
File info: SAM092405 Thu Sep 24 10:58:48 1998  
Sample Weight: 7.490 mg  
S98T002543DUP

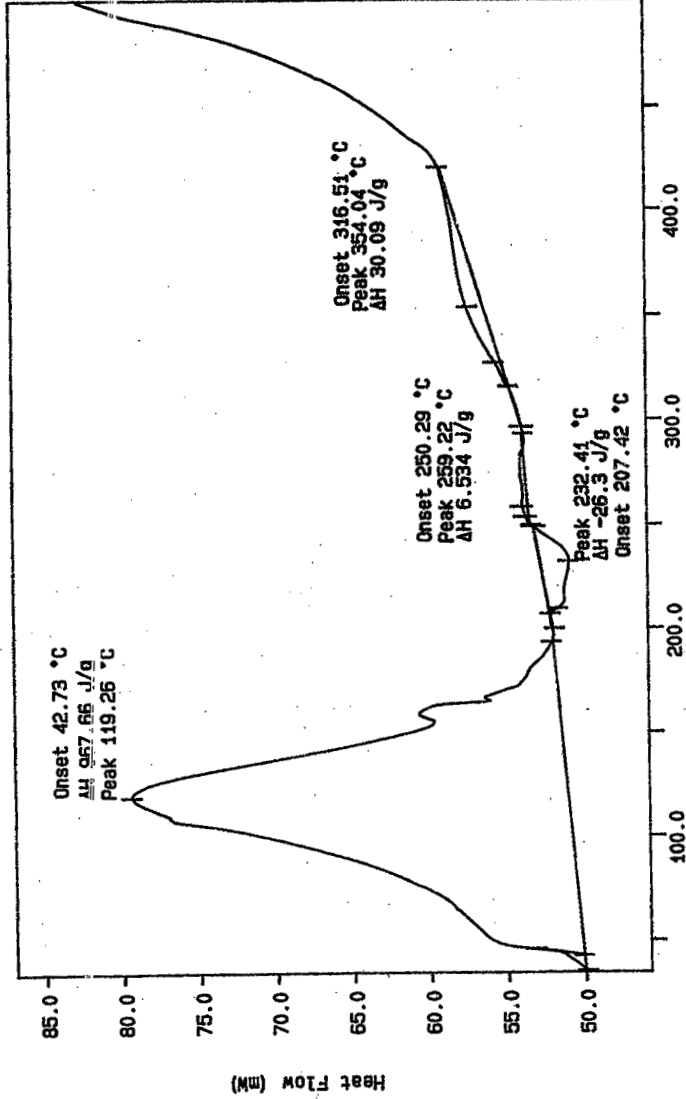


JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 16:07:58 1998

N2 10C/min  
TEMP: 55.8 C  
TIME: 555.8 S  
0.0 min RATE: 10.0 C/min

303

Curve 1: DSC  
File Info: SAM092406 Thu Sep 24 11:54:53 1998  
Sample Weight: 11.600 mg  
S98T002552

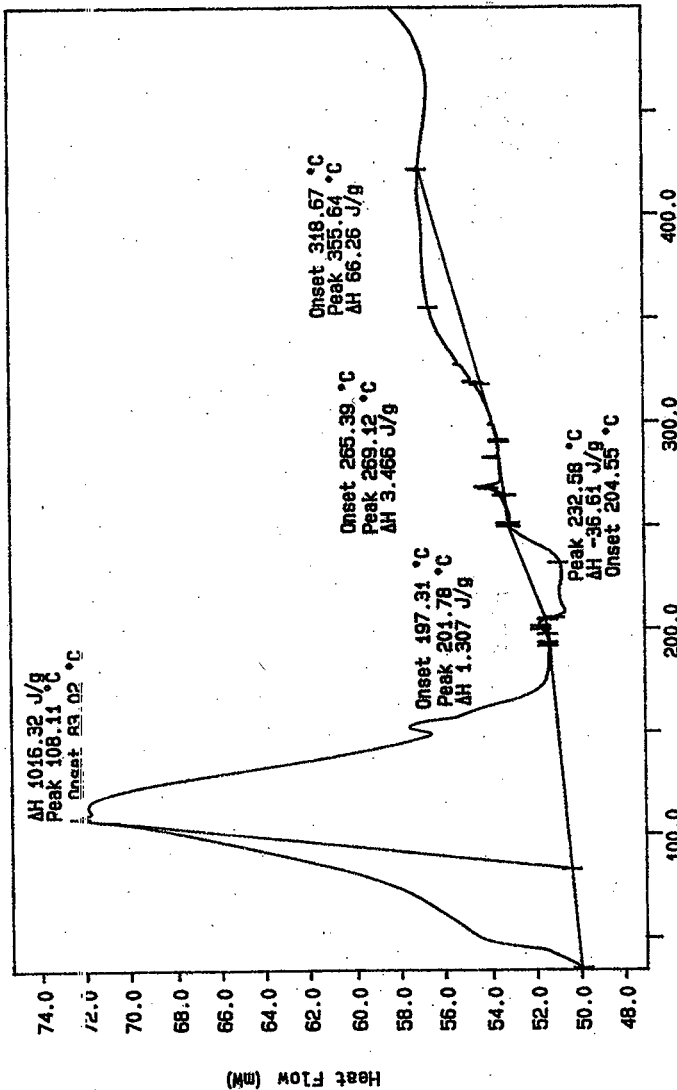


JT SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 13:10:27 1998

N2 10C/min  
TEMP: 35.8 C  
TIME: 06.8 S  
RATE: 0.0 min RATE: 10.0 C/min

304

Curve 1: DSC  
File info: SAM092407 Thu Sep 24 12:53:17 1998  
Sample Weight: 7.850 mg  
S98T002552DUP



J1 SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 16:21:59 1998

N2 10C/min  
TEMPERATURE 355.8 C  
TIME: 0.0 min RATES: 10.0 C/min



# LABCORE Data Entry Template for Worklist# 26124

Analyst: VIS Instrument: DSC0 3 Book # 12N14R

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, DSC-03, tdm

USE 15 mg SAMPLE SIZE TA

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-03	SOLID	<u>20.43</u>	<u>27.81</u>	N/A	Joules/g
98000401	U-107 (2)	2	SAMPLE	S98T002559	0		DSC-03	SOLID	N/A	<u>30.69</u>		Joules/g
98000401	U-107 (2)	3	DUP	S98T002559	0		DSC-03	SOLID	<u>30.6</u>	<u>5.96</u>	<u>9/24/98</u>	Joules/g
98000401	U-107 (2)	4	TRIPL	S98T002565	0		DSC-03	SOLID	<u>5.96</u>	<u>17.35</u>	N/A	Joules/g
98000401	U-107 (2)	4	SAMPLE	S98T002565	0		DSC-03	SOLID	<u>30.6</u>	<u>20.64</u>		Joules/g
98000401	U-107 (2)	5	DUP	S98T002565	0		DSC-03	SOLID	<u>16.69</u>	<u>5.96</u>	<u>9/24/98</u>	Joules/g
98000401	U-107 (2)	5	DUP	S98T002565	0		DSC-03	SOLID	<u>5.96</u>	<u>25.11</u>	N/A	Joules/g

Final page for worklist # 26124

[Signature]  
Analyst Signature Date

[Signature] 9.25.98  
Analyst Signature Date

Validated 9/28/98 [Signature]

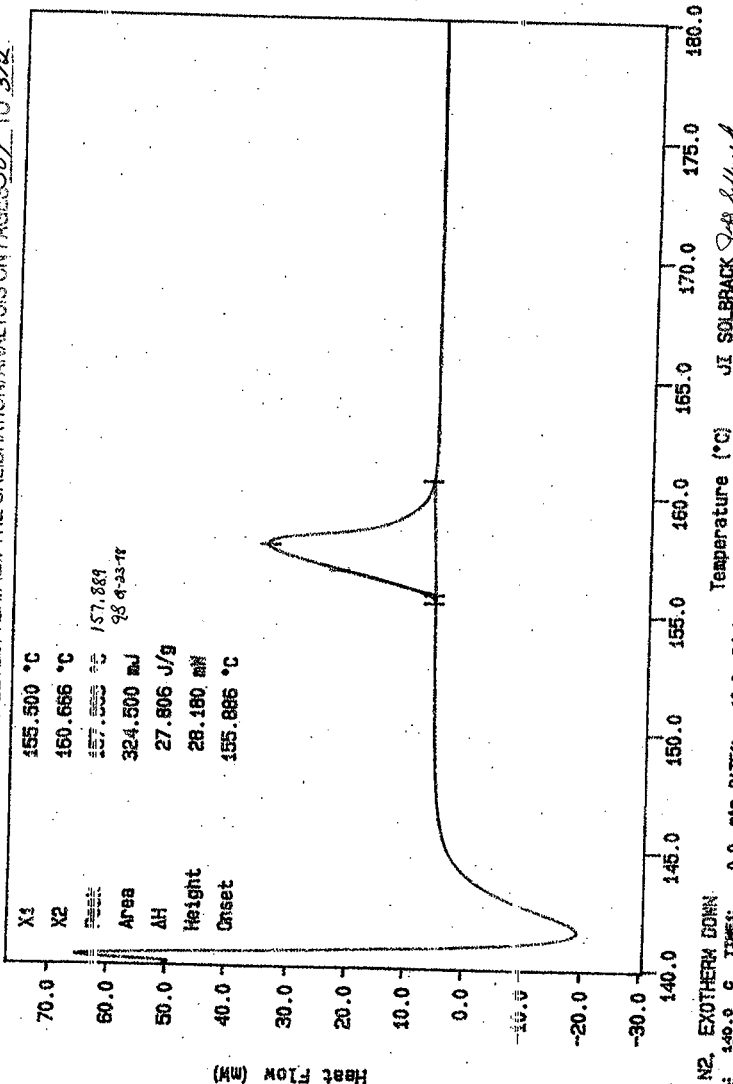
Data Entry Comments:

High RPDs due to sample inhomogeneities. Triplicate run on S98T002559 in good agreement with duplicate. Rerun only at customer request. 9/24/98

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

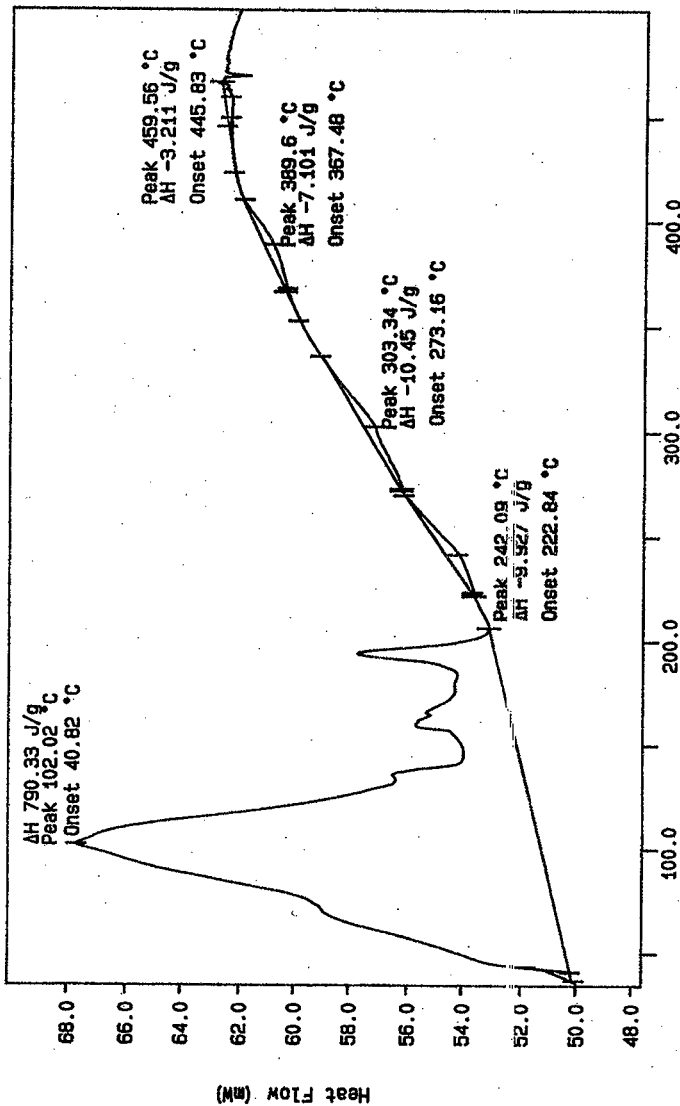
Curve 1: DSC  
 File Info: IND092301 Wed Sep 23 06:24:27 1998  
 Sample Weight: 11.670 mg  
 STD 12N14-B

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 307 TO 312



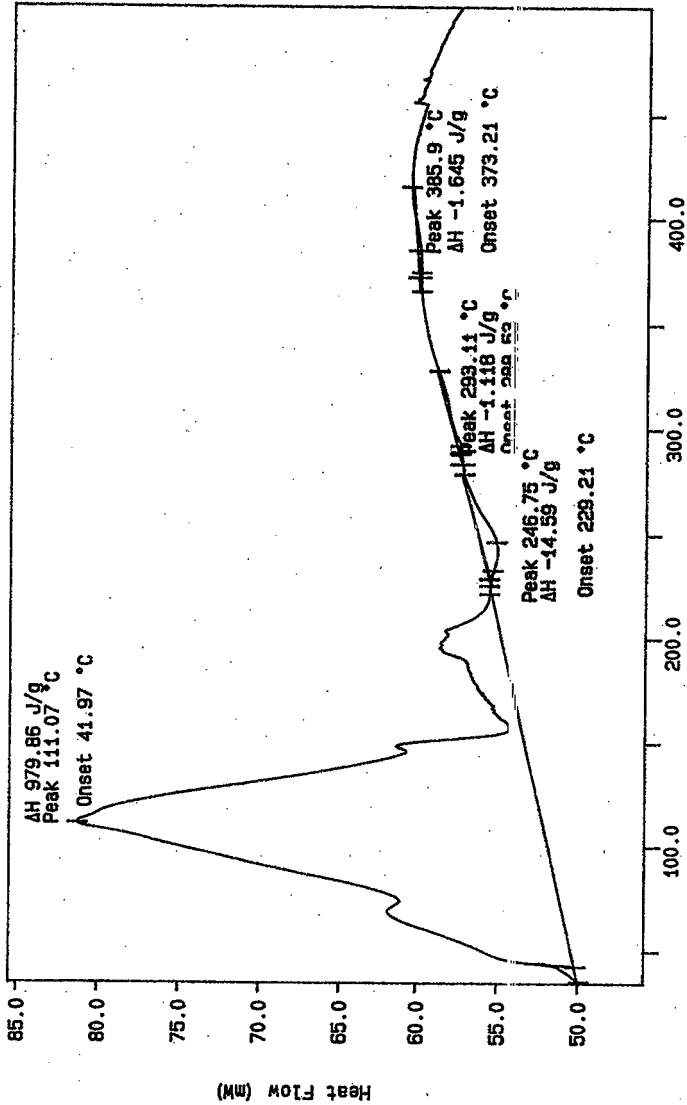
N2, EXOTHERM DOWN  
 TEMP: 149.8 °C TIMES: 0.0 MIN RATE: 10.0 C/min  
 JI SOLBRACK *J. J. Solbrack*  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Mod Sep 23 06:27:17 1998

Curve 1: DSC  
File Info: SAM092309 Med Sep 23 16:02:27 1998  
Sample Weight: 7.860 mg  
S98T002559



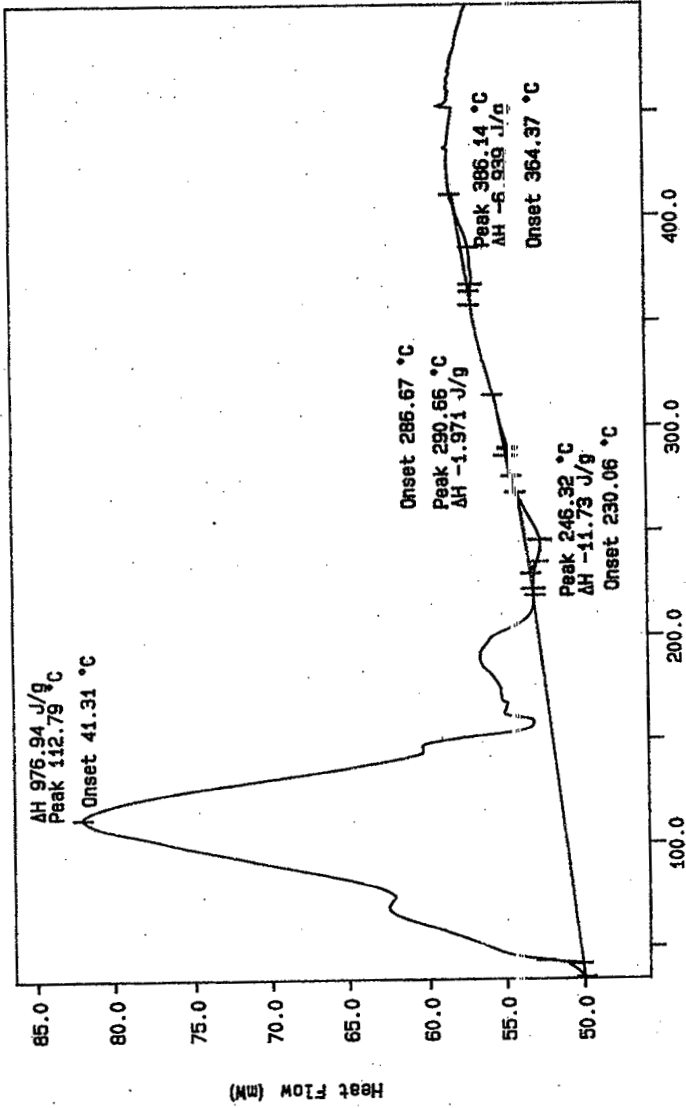
N2 10C/min  
TEMP: 58.8 C  
TIME: 0.0 min RATE: 10.0 C/min  
Temperature (°C)  
JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 09:43:52 1998

Curve 1: DSC  
File Info: SAM092310 Wed Sep 23 17:04:07 1998  
Sample Weight: 10.980 mg  
S98T002559DUP



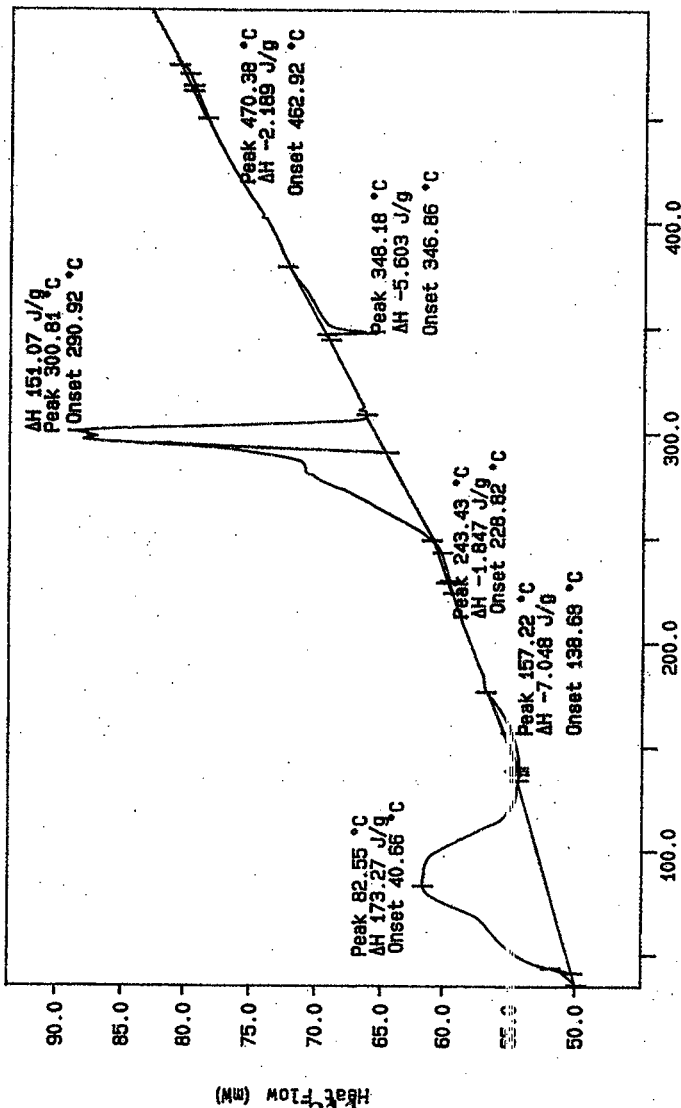
N2 100/min  
TEMPERATURE 35.0 °C  
TIME: 508.0 s  
0.0 min RATE: 10.0 C/min  
Temperature (°C)  
JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 08:47:05 1998

Curve 1: DSC  
File info: SAM092311 Wed Sep 23 18: 13: 15 1998  
Sample Weight: 12.040 mg  
S98T002559TRIP



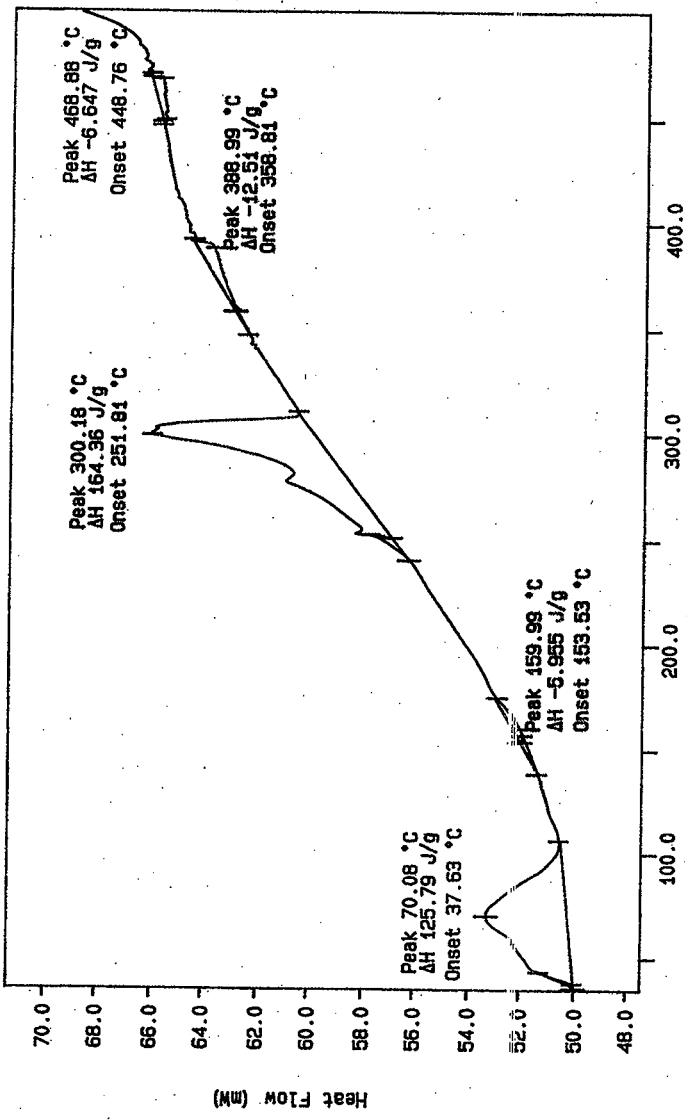
Temperature (°C)  
N2 10C/min  
TIME1: 38.0 C  
TIME2: 666.0 C  
0.0 min RATE1: 10.0 C/min  
JT SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 09: 48: 27 1998

Curve 1: DSC  
File Info: SAM092307 Wed Sep 23 14:00:50 1998  
Sample Weight: 16.650 mg  
S98T002566



N2 10C/min  
TEMP: 506.0 C  
TIME: 0.0 min RATE: 10.0 C/min  
JT SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 09:57:37 1998

Curve 1: DSC  
File Info: SAM092308 Wed Sep 23 14:59:54 1998  
Sample Weight: 5.360 mg  
S98T002565DUP



312

Heat Flow (mW)

Temperature (°C)

N2 10C/min  
TEMPERATURE 500.0 °C  
TIME: 0.0 min RATE: 10.0 C/min

JT SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 09:54:27 1998

# LABCORE Data Entry Template for Worklist# 26125

Analyst: S.H Instrument: DSC0 3 Book # 12N14B

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, DSC-03, tdim USE < 15 mg SAMPLE SIZE TO

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03.	SOLID	<u>28.45</u>	<u>28.51*</u>	N/A	Joules/g
98000401	U-107 (2)	2 SAMPLE	S98T002570	0	DSC-03	SOLID	N/A	0		Joules/g
98000401	U-107 (2)	3 DUP	S98T002570	0	DSC-03	SOLID	0	0	N/A	Joules/g

## Final page for worklist # 26125

Andrew Hood Boatwright  
Analyst Signature Date 9-26-98

[Signature]  
Analyst Signature Date 9-29-98

Validated 9/30/98 [Signature]

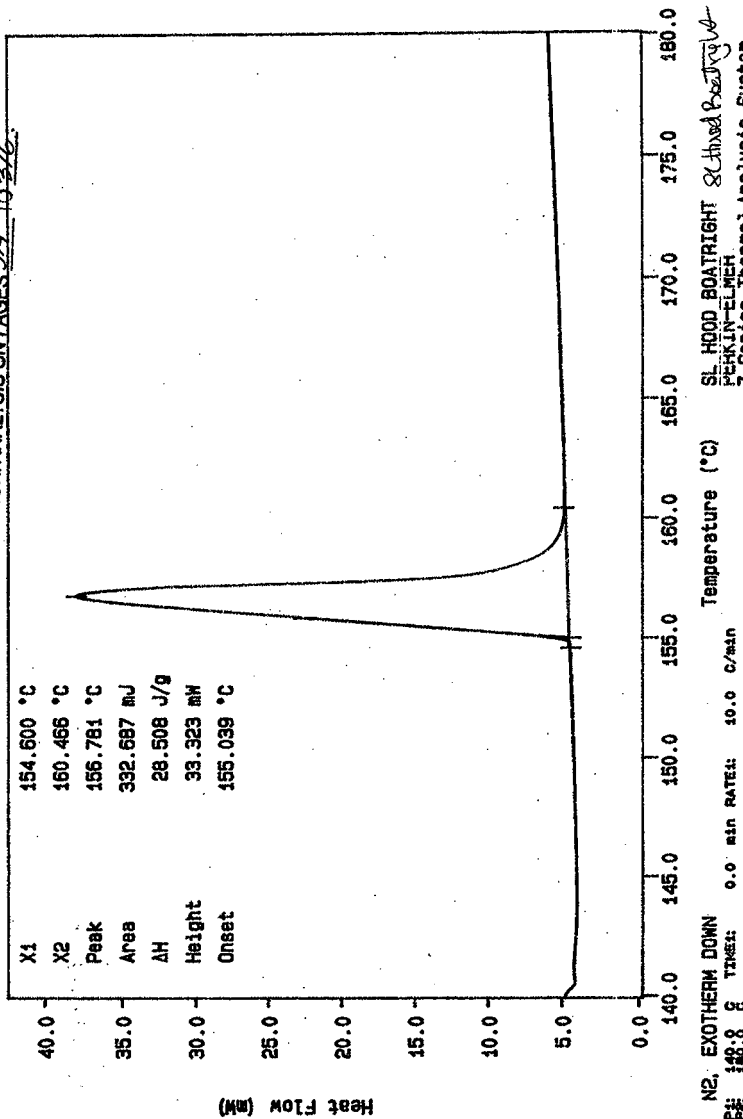
Data Entry Comments: Run Trip on 987002570 9/20/98

Units shown for QC (S<sup>o</sup>K & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



Curve 1: DSC  
 File Info: IND092501 Fri Sep 25 09: 47: 46 1998  
 Sample Weight: 11.670 mg  
 STD 12N14-B

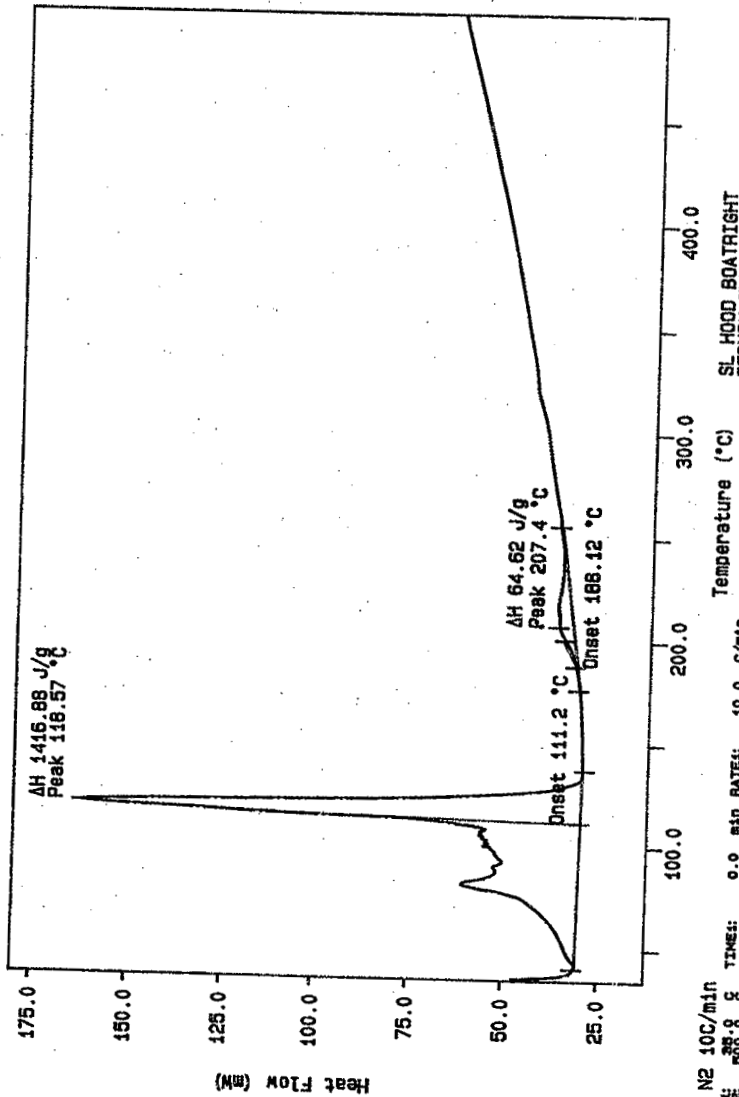
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 314 TO 316.



Heat Flow (mW)  
 314

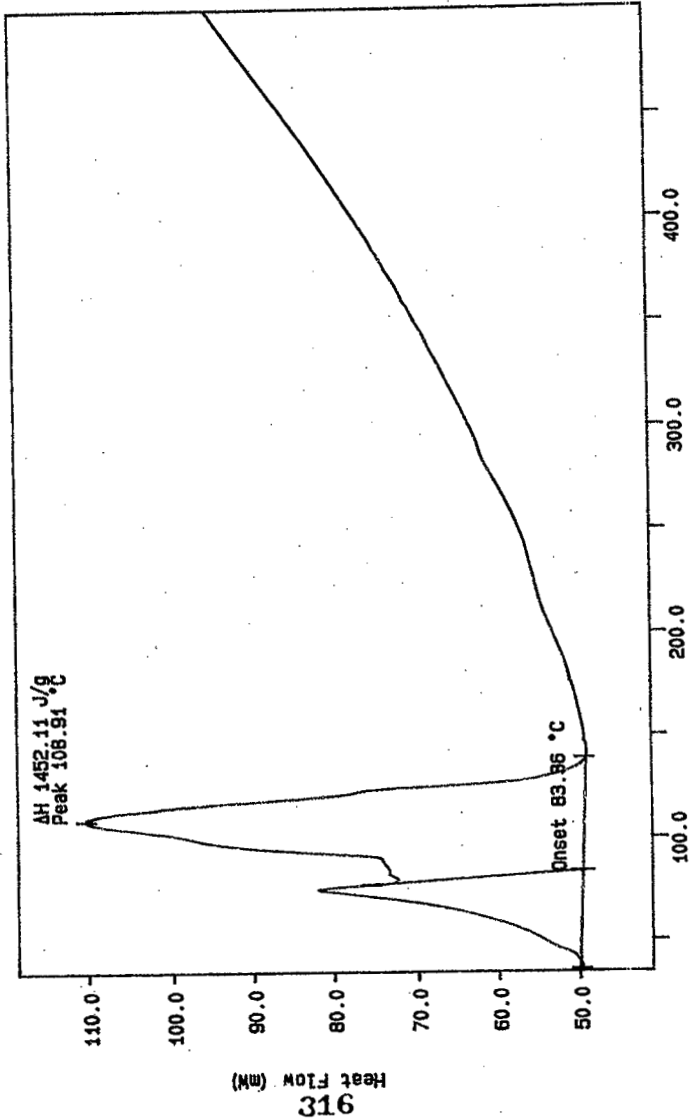
N2, EXOTHERM DOWN  
 TEMPERATURE 160.0 °C  
 TUNING 0.0 min RATE: 10.0 C/min  
 Temperature (°C)  
 SL HOOD BOATRIGHT & CHASED PASTRY Vb  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Sat Sep 26 09:34:17 1998

Curve 1: DSC  
File info: SAM092507 Fri Sep 25 15: 01: 25 1998  
Sample Weight: 9.300 mg  
S98T002570



N2 10C/min  
TEMP 500.0 °C  
TIMES: 0.0 min RATES: 10.0 C/min  
SL HOOD BOATRIGHT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sat Sep 26 09: 47: 36 1998

Curve 1: DSC  
File info: SAM092508 Fri Sep 25 16:02:48 1998  
Sample Weight: 9.890 mg  
S98T002570 DUP



N2 10C/min  
TEMPERATURE 50.0 °C  
TIME 0.0 min RATE 10.0 C/min  
SL HOOD BOATRRIGHT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sat Sep 26 10:12:26 1998

# LABCORE Data Entry Template for Worklist# 26179

Analyst: RSW Instrument: DSC0 03 Book # 120148

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, DSC-03, Use <15mg sample size. tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03	LIQUID	<u>28.45</u>	<u>28.28</u>	N/A	Joules/g
98000401	U-107 (2)	2 SAMPLE	S98T002457 0		DSC-03	LIQUID	N/A	<u>64.45</u>		Joules/g
98000401	U-107 (2)	3 DUP	S98T002457 0		DSC-03	LIQUID	<u>64.45</u>	<u>50.16</u>	N/A	Joules/g
98000401	U-107 (2)	4 SAMPLE	S98T002461 0		DSC-03	LIQUID	N/A	<u>71.38</u>		Joules/g
98000401	U-107 (2)	5 DUP	S98T002461 0		DSC-03	LIQUID	<u>71.38</u>	<u>65.51</u>	N/A	Joules/g

Final page for worklist # 26179

RSW  
Analyst Signature Date 9/24/98

[Signature]  
Analyst Signature Date 9-29-98

Validated 9/30/98 [Signature]

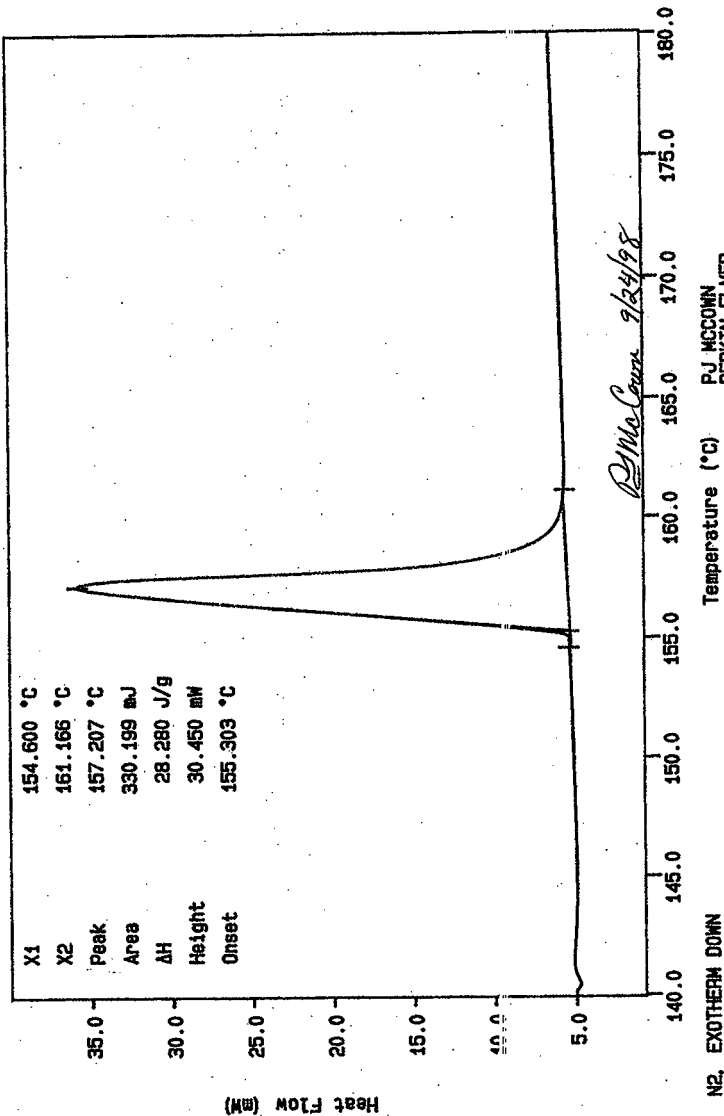
Data Entry Comments:

High RPD 598T002457 due to sample inhomogeneities. No rerun. 9/28/98

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: DSC  
File info: IN0092402, Thu Sep 24 19: 01: 26 1998  
Sample Weight: 11.676 mg  
STD 12N14-B

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 38 TO 322.

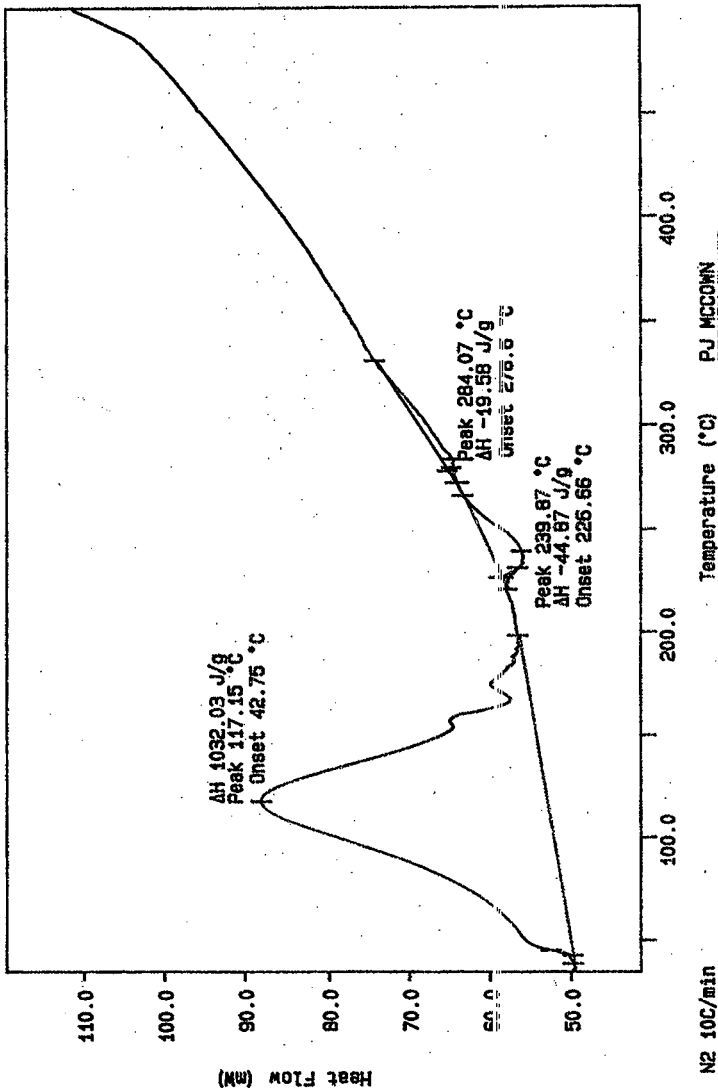


PJ MCCOWN  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 23: 48: 56 1998

N2, EXOTHERM DOWN  
TEMP: 140.0 °C  
TIME: 166.0 s  
0.0 min RATE: 10.0 C/min

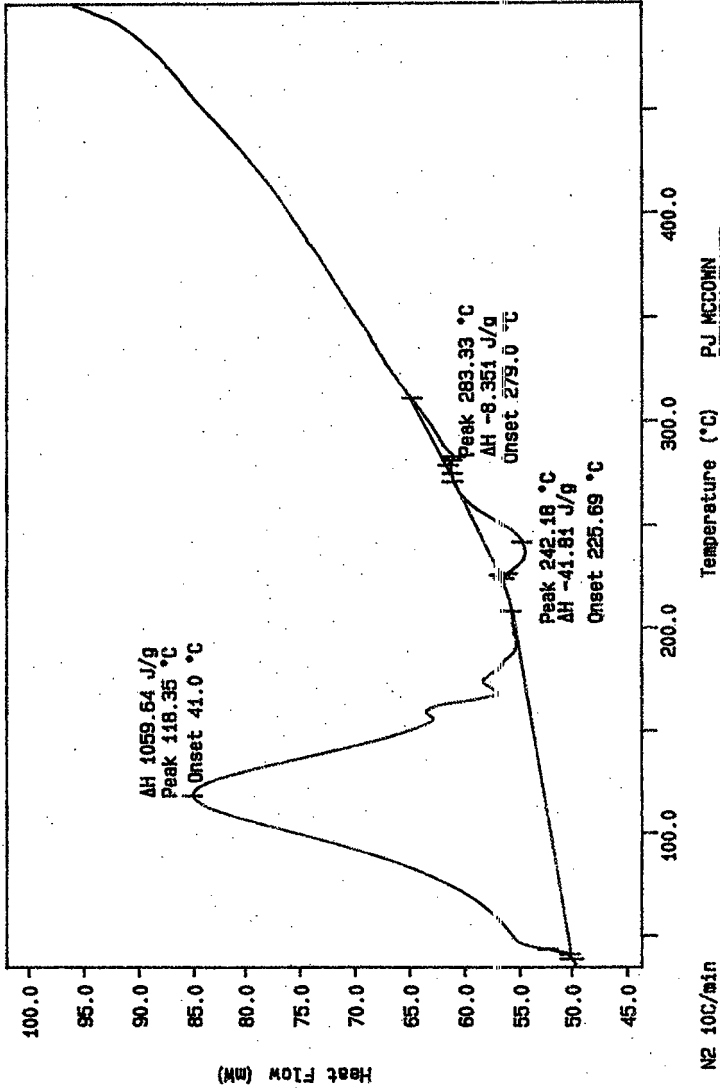
Heat Flow (mW)

Curve 1: DSC  
 File Info: SAM092501 Fri Sep 25 04:18:43 1998  
 Sample Weight: 12.990 mg  
 S98T002457



N2 10C/min  
 TEMPERATURE 50.0 °C  
 TIME: 0.0 min RATE: 10.0 C/min  
 PJ MCCOY  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Mon Sep 28 14:55:52 1998

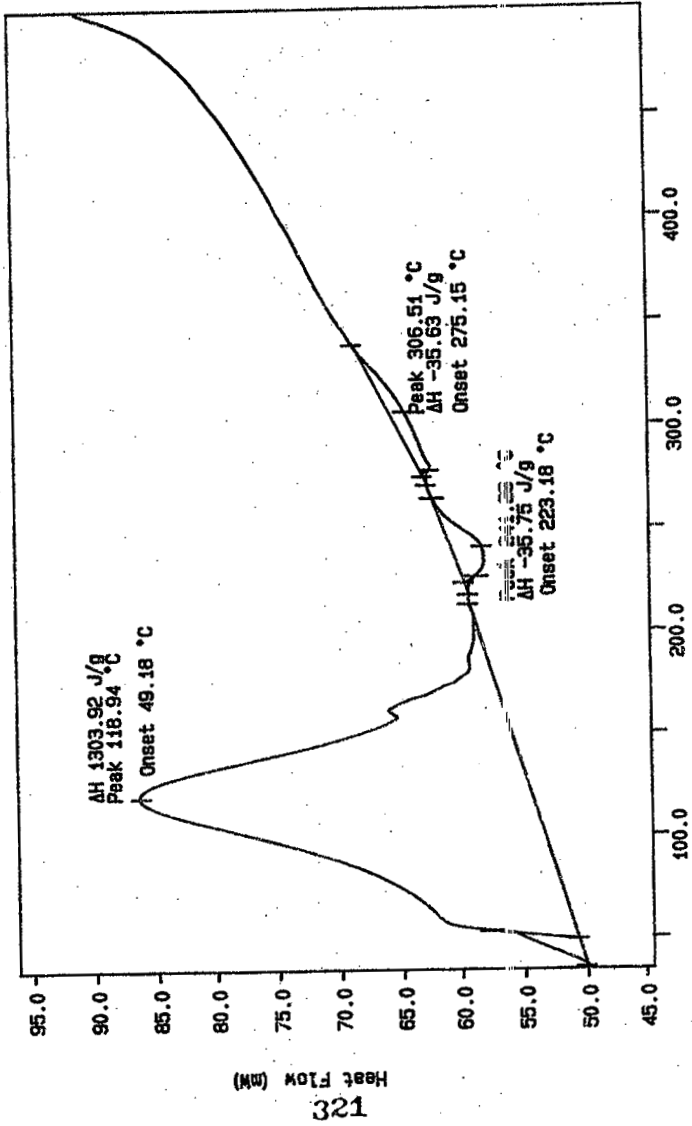
Curve 1: DSC  
File Info: SAM092502 Fri Sep 25 02:39:12 1998  
Sample Weight: 11.720 mg  
S98T002457 DUP



PJ MCCOMM  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Sep 28 15:01:58 1998

N2 10C/min  
TEMP: 50.0 °C  
TIME: 0.0 min RATE: 10.0 C/min  
Temperature (°C)

Curve 1: DSC  
 File info: SAM092503 Fri Sep 25 03:30:32 1988  
 Sample Weight: 10.320 mg  
 S98T002461



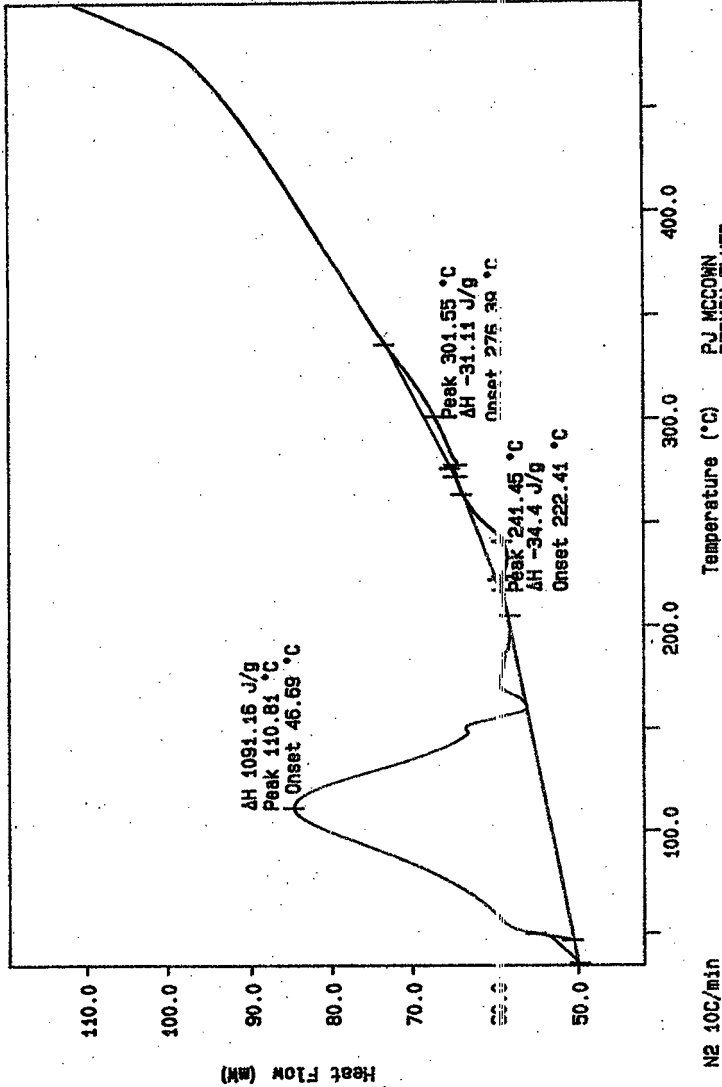
N2 10C/min  
 TEMPE 35.0 C  
 TIME: 000.0 S

0.0 min RATE: 10.0 C/min

PJ MCCOWN  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Mon Sep 28 15:04:05 1988



Curve 1: DSC  
File Info: SAM092504 Fri Sep 25 04:22:33 1998  
Sample Weight: 10.640 mg  
S98T002461 DUP



PJ MCCOWN  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Sep 28 15:06:17 1998

N2 10C/min  
TEMP: 58.8 C  
TIME: 0.0 min RATE: 10.0 C/min

# LABCORE Data Entry Template for Worklist# 26304

Analyst: KRM Instrument: DSC0 3 Block # 12N14B


Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, DSC-03, tdm use < 15mg simple size

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-03	SOLID	<u>28.45</u>	<u>28.46x</u>	<u>N/A</u>	Joules/g
98000359	U-107 (2)	2	SAMPLE	S98T002426	0		DSC-03	SOLID	<u>N/A</u>	<u>0</u>		Joules/g
98000359	U-107 (2)	3	DUP	S98T002426	0		DSC-03	SOLID	<u>0</u>	<u>0</u>	<u>N/A</u>	Joules/g
98000359	U-107 (2)	4	SAMPLE	S98T002432	0		DSC-03	SOLID	<u>N/A</u>	<u>0</u>		Joules/g
98000359	U-107 (2)	5	DUP	S98T002432	0		DSC-03	SOLID	<u>0</u>	<u>0</u>	<u>N/A</u>	Joules/g

**Final page for worklist # 26304**

  
Analyst Signature 9-24-98  
Date

  
Analyst Signature 9-25-98  
Date

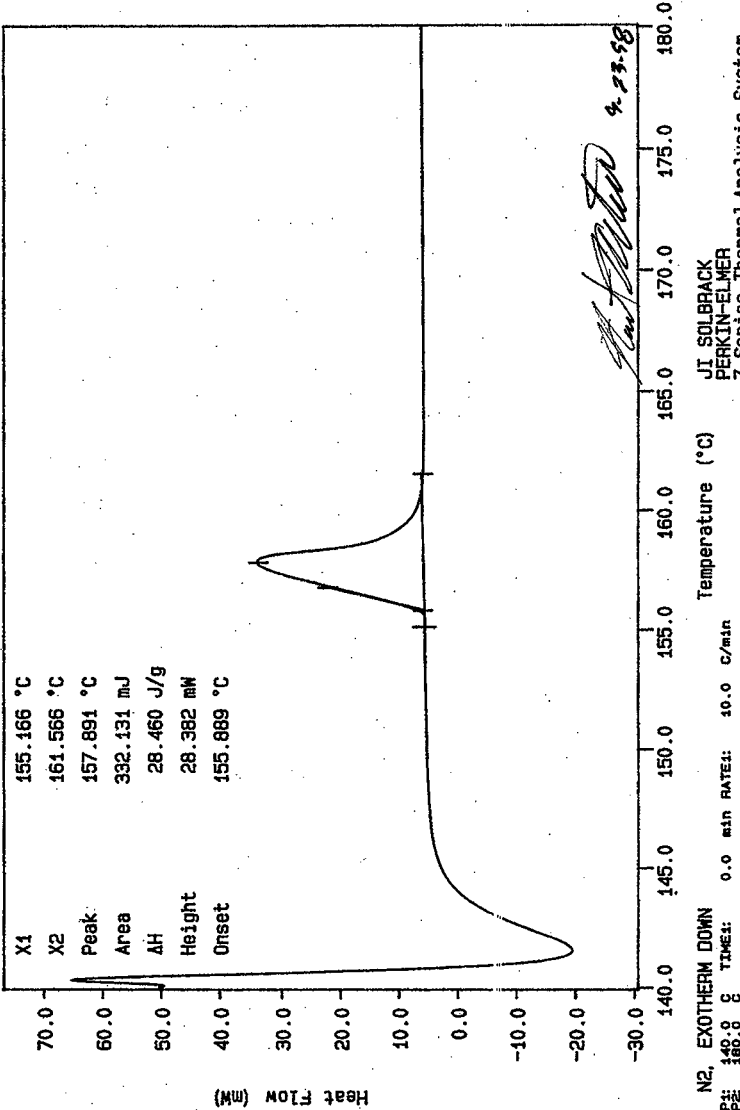
Validated 9/28/98 

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

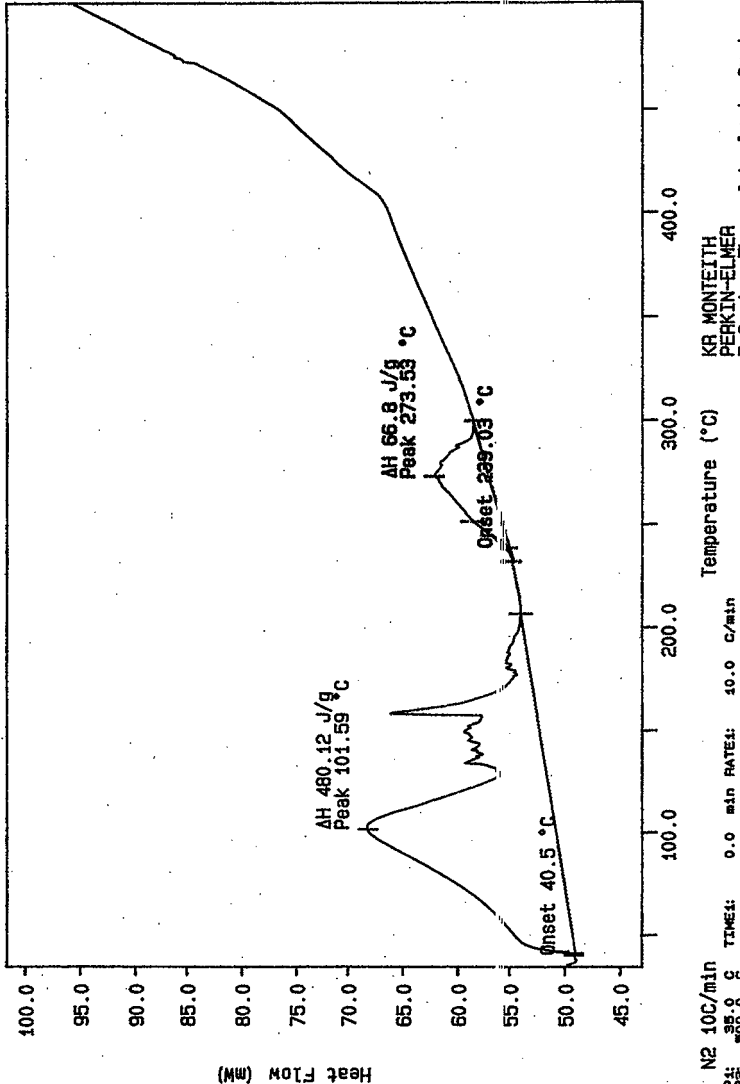
Curve 1: DSC  
File info: IN0092301 Wed Sep 23 06:24:27 1998  
Sample Weight: 11.670 mg  
STD 12N14-B

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 324 TO 328.



JJ SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Wed Sep 23 22:27:35 1998

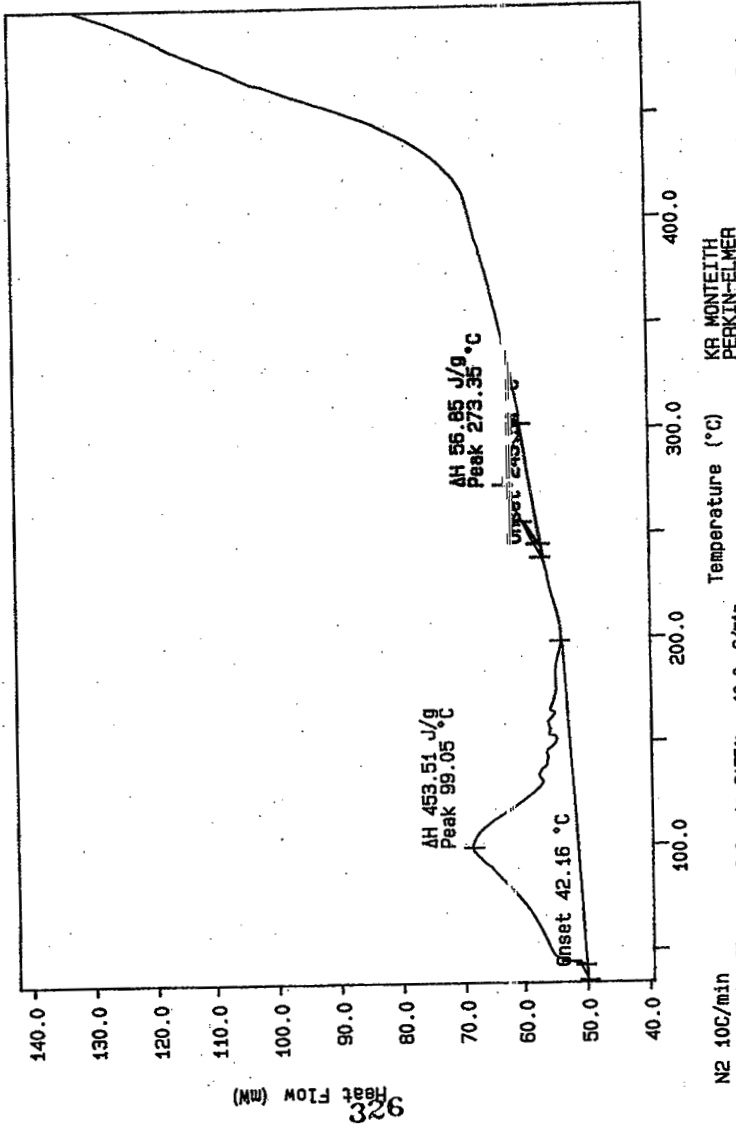
Curve 1: DSC  
File info: SAM092320 Wed Sep 23 22:57:12 1998  
Sample Weight: 14.850 mg  
S98T002426



KR MONTEITH  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Wed Sep 23 23:00:40 1998

N2 10C/min  
TEMP: 35.0 C  
TEMP: 500.0 C  
TIME: 0.0 min  
RATE: 10.0 C/min

Curve 1: DSC  
File info: SAM092321 Wed Sep 23 23:54: 47 1998  
Sample Weight: 14.170 mg  
S98T002426 DUP

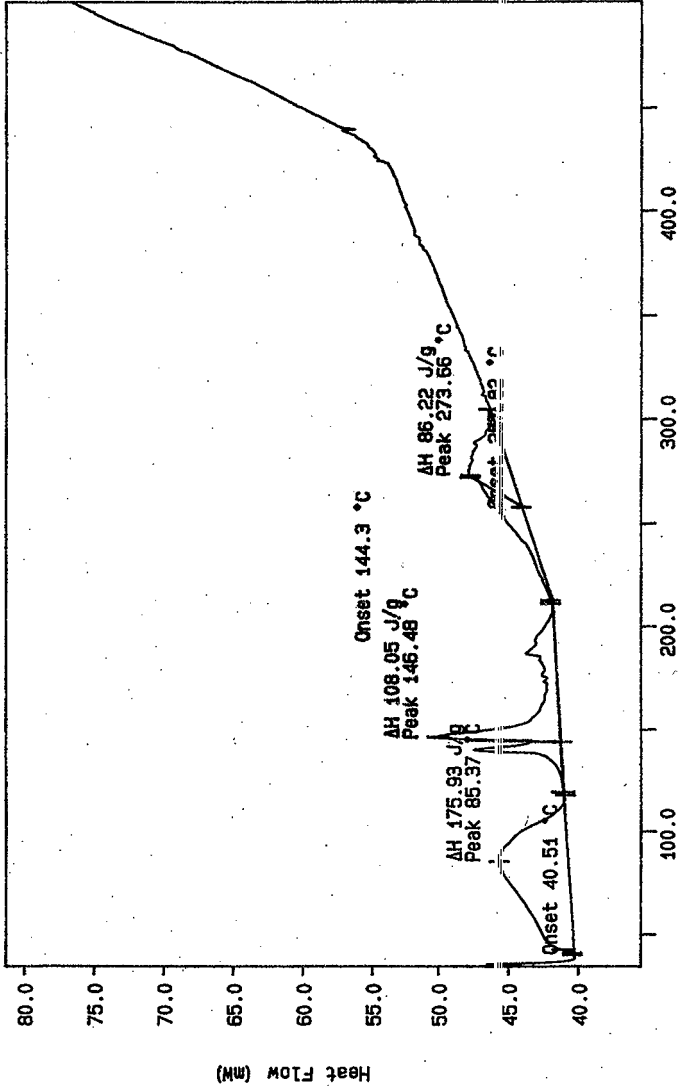


N2 100/min  
TEMP: 35.0 C  
TIME: 500.0 C

0.0 min RATE: 40.0 C/min

KR MONTEITH  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Wed Sep 23 23:59:44 1998

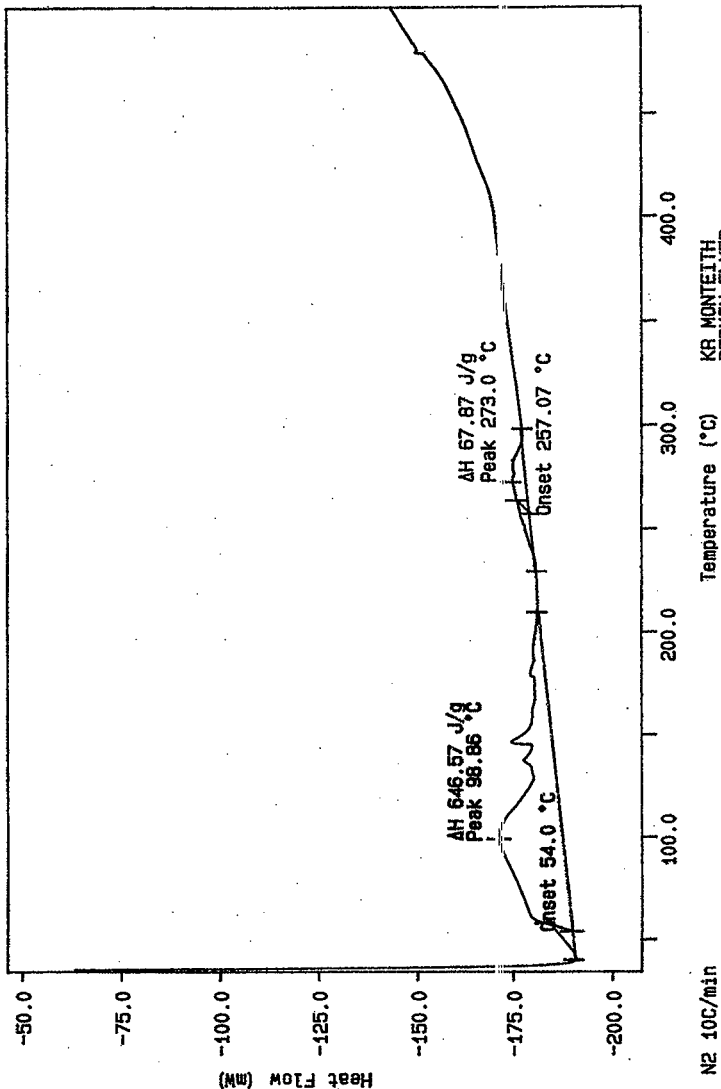
Curve 1: DSC  
File info: SAM092325 Thu Sep 24 03: 48: 36 1998  
Sample Weight: 7.690 mg  
S98T002432



327

N2 10C/min  
 TEMPE: 35.0 C  
 TEMPE: 500.0 C  
 TIMEs: 0.0 min RATEs: 10.0 C/min  
 KR MONTEITH  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Thu Sep 24 03: 48: 36 1998

Curve 1: DSC  
File info: SAM092326 Thu Sep 24 04: 38: 33 1998  
Sample Weight: 11.230 mg  
S98T002432 DUP



KR MONTEITH  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 04: 38: 20 1998

N2 10C/min  
TEMP: 35.8 6  
TEMP: 555.8 6  
TIME: 0.0 min RATE: 10.0 C/min

# LABCORE Data Entry Template for Worklist# 26305

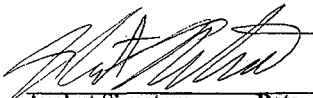
Analyst: KRM Instrument: DSCO 3 Book # 12014B


Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, DSC-03, tdm  
uae < 15 mg sample size

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03	SOLID	<u>28.4g</u>	<u>28.4g</u>	<u>N/A</u>	Joules/g
98000359	U-107 (2)	2 SAMPLE	S98T002438	0	DSC-03	SOLID	<u>N/A</u>	<u>0</u>		Joules/g
98000359	U-107 (2)	3 DUP	S98T002438	0	DSC-03	SOLID	<u>0</u>	<u>0</u>	<u>N/A</u>	Joules/g
98000359	U-107 (2)	4 SAMPLE	S98T002444	0	DSC-03	SOLID	<u>N/A</u>	<u>64.30</u>		Joules/g
98000359	U-107 (2)	5 DUP	S98T002444	0	DSC-03	SOLID	<u>64.30</u>	<u>72.65</u>	<u>N/A</u>	Joules/g

**Final page for worklist # 26305**

  
 Analyst Signature \_\_\_\_\_ Date 9.24.98  
 Validated 9/28/98 SP Michelov

  
 Analyst Signature \_\_\_\_\_ Date 9.25.98

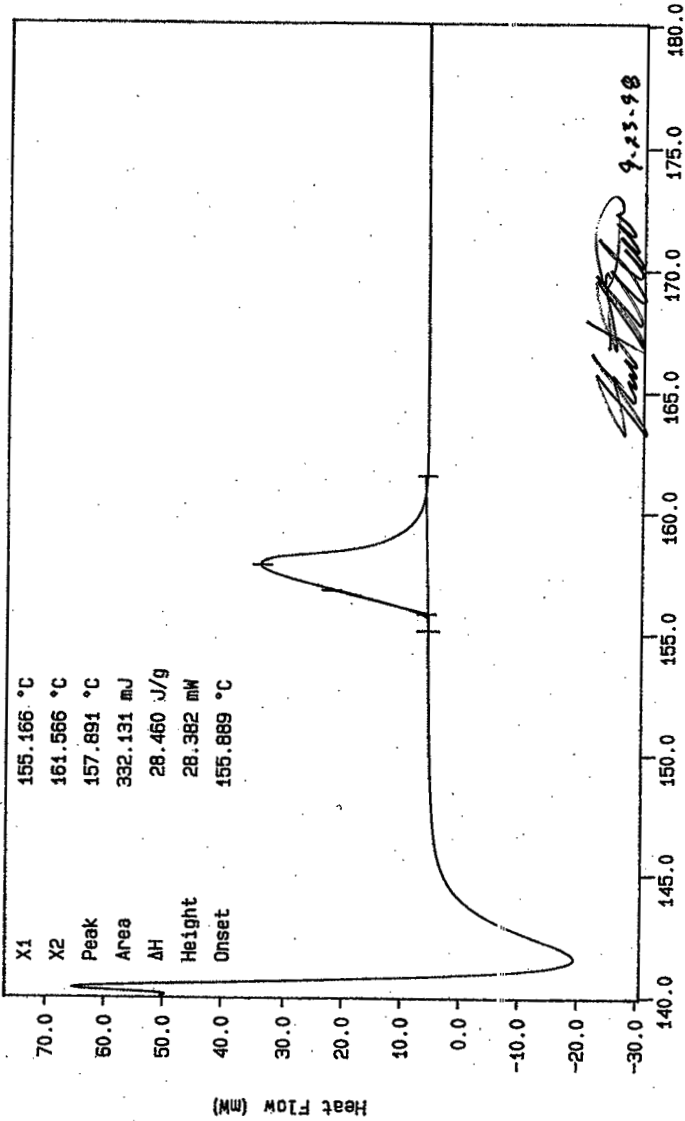
Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



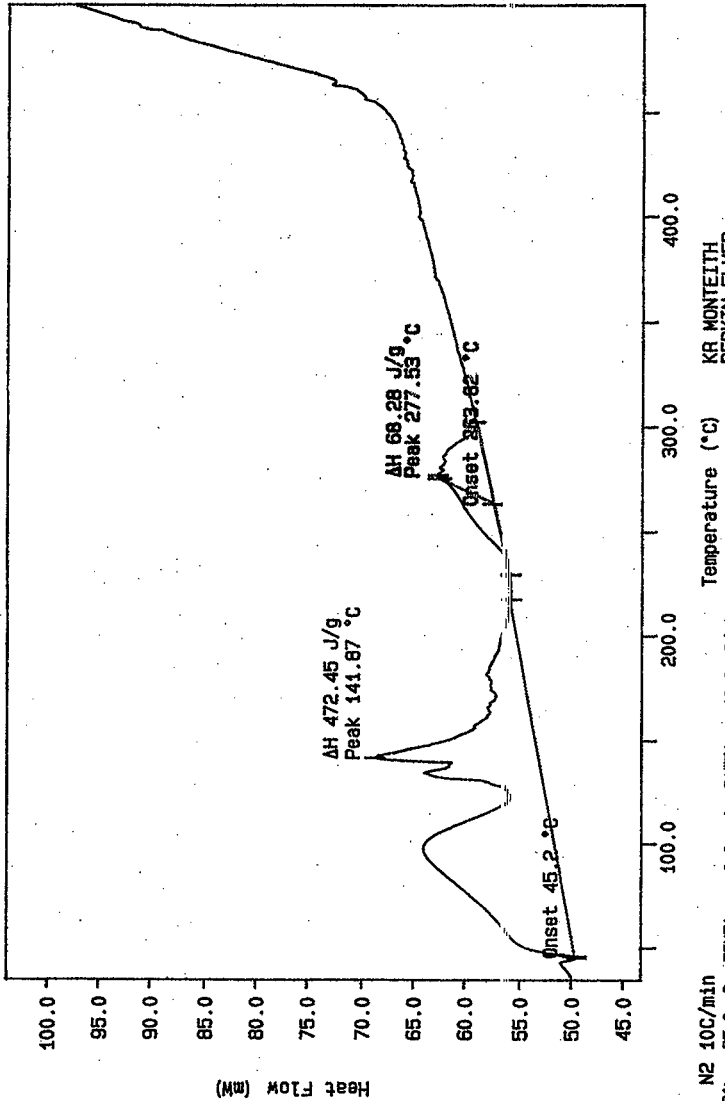
Curve 1: DSC  
File info: IND092301 Wed Sep 23 06:24:27 1998  
Sample Weight: 11.670 mg  
STD 12N14-B

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 330 TO 334



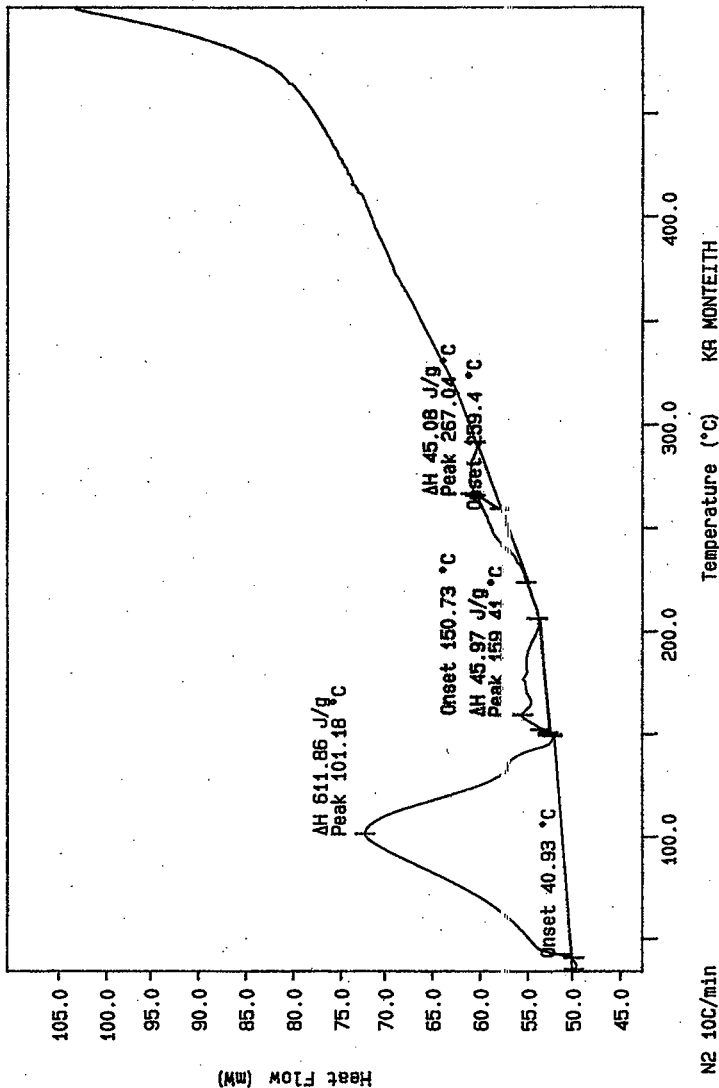
N2, EXOTHERM DOWN  
 TEMPERATURE: 140.0 °C TIME: 0.0 min RATE: 10.0 C/min  
 JI SOLBRACK  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Wed Sep 23 11:38 1998

Curve 1: DSC  
File info: SAM092323 Thu Sep 24 00:51:25 1998  
Sample Weight: 13.750 mg  
S98T002438



N2 10C/min  
TEMP: 50.0 C  
TIME: 500.0 C  
KR MONTEITH  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 01:12:45 1998

Curve 1: DSC  
File info: SAM092324 Thu Sep 24 02: 04: 34 1998  
Sample Weight: 10.980 mg  
S98T002438 DUP

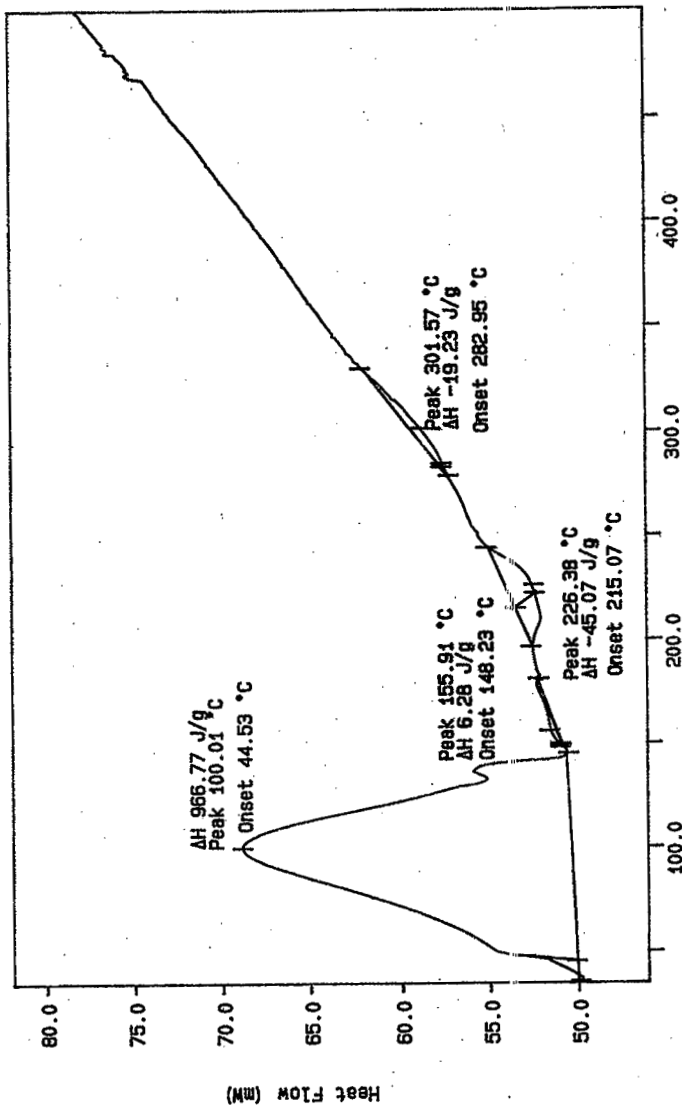


N2 10C/min  
TEMP: 50.0 °C  
TIME: 500.0 s

0.0 min RATE: 10.0 C/min

KR MONTEITH  
PEAKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 02: 55: 26 1998

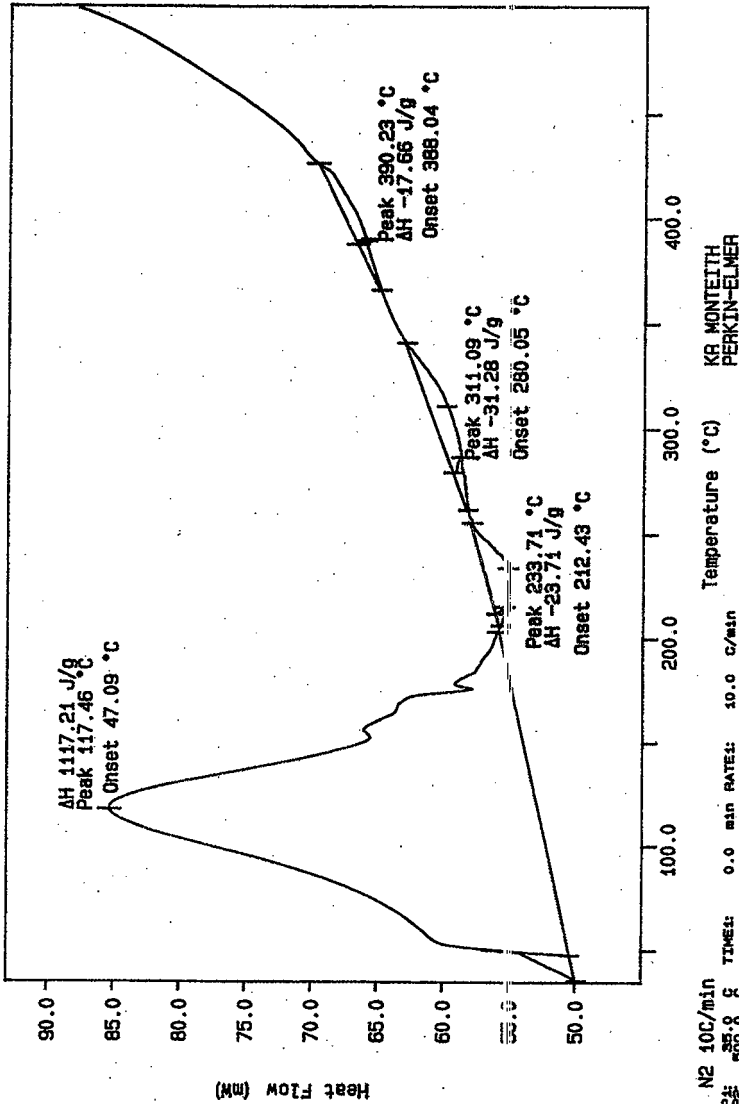
Curve 1: DSC  
 File info: SAM092327 Thu Sep 24 05:31:45 1998  
 Sample Weight: 6.460 mg  
 S98T002444



KR MONTEITH  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Thu Sep 24 10:09:04 1998

N2 10C/min  
 TEMPERATURE 50.0 °C  
 TIME 0.0 min RATE 10.0 C/min

Curve 1: DSC  
File info: SAM092328 Thu Sep 24 06:23:37 1998  
Sample Weight: 12.700 mg  
S98T002444 DUP



N2 10C/min  
TEMP: 500.0 8  
TIME: 0.0 min RATE: 10.0 C/min  
KA MONTEITH  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 10:12:37 1998

# LABCORE Data Entry Template for Worklist# 26306

Analyst: Blu Instrument: DSC0 03 Book # 12N14B

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, DSC-03, tdm *use < 15mg sample size*

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03	SOLID	<u>28.49</u>	<u>28.28</u>	<u>N/A</u>	Joules/g
98000359	U-107 (2)	2 SAMPLE	S98T002450	0	DSC-03	SOLID	<u>N/A</u>	<u>0</u>		Joules/g
98000359	U-107 (2)	3 DUP	S98T002450	0	DSC-03	SOLID	<u>0</u>	<u>0</u>	<u>N/A</u>	Joules/g
98000359	U-107 (2)	4 SAMPLE	S98T002519	0	DSC-03	SOLID	<u>N/A</u>	<u>0</u>		Joules/g
98000359	U-107 (2)	5 DUP	S98T002519	0	DSC-03	SOLID	<u>0</u>	<u>0</u>	<u>N/A</u>	Joules/g

Final page for worklist # 26306

D. McLean 9/24/98  
Analyst Signature Date

Ch. Quinn 10/7/98  
Analyst Signature Date

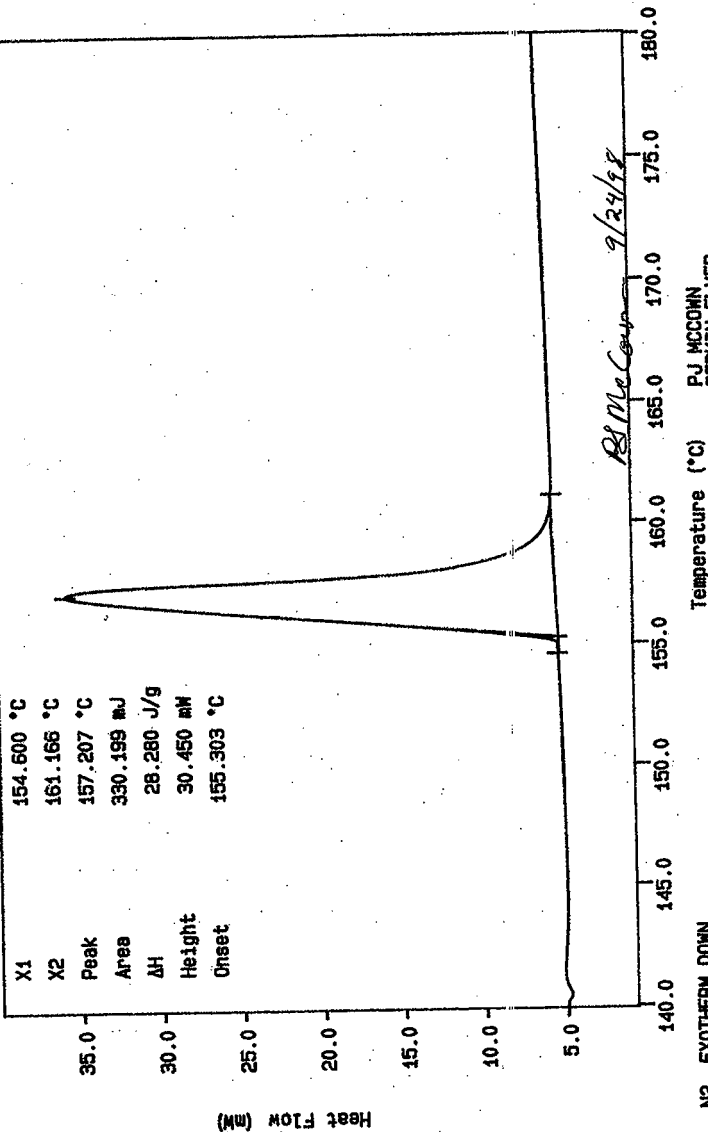
Validated 10/8/98 W. Scheloy

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: DSC  
File info: IND092402 Thu Sep 24 19: 01: 26 1998  
Sample Weight: 11.676 mg  
STD 12M14-B

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 336 TO 340

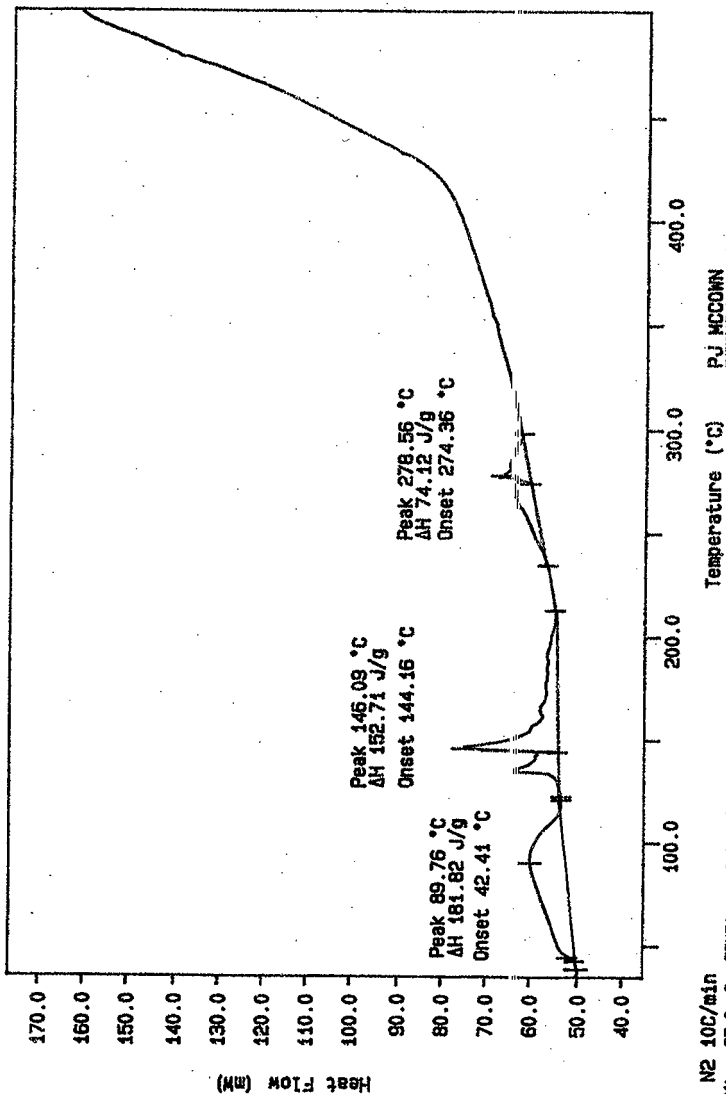


X1	154.600 °C
X2	161.166 °C
Peak	157.207 °C
Area	330.199 mJ
ΔH	28.280 J/g
Height	30.450 mW
Onset	155.303 °C

N2, EXOTHERM DOWN  
TEMPERATURE TIME: 0.0 min RATES: 10.0 C/min  
336.0 C

PJ MCCOWN  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 19: 21: 50 1998

Curve 1: DSC  
File info: SAM092412 Thu Sep 24 23: 19: 10 1998  
Sample Weight: 13.270 mg  
S98T002450

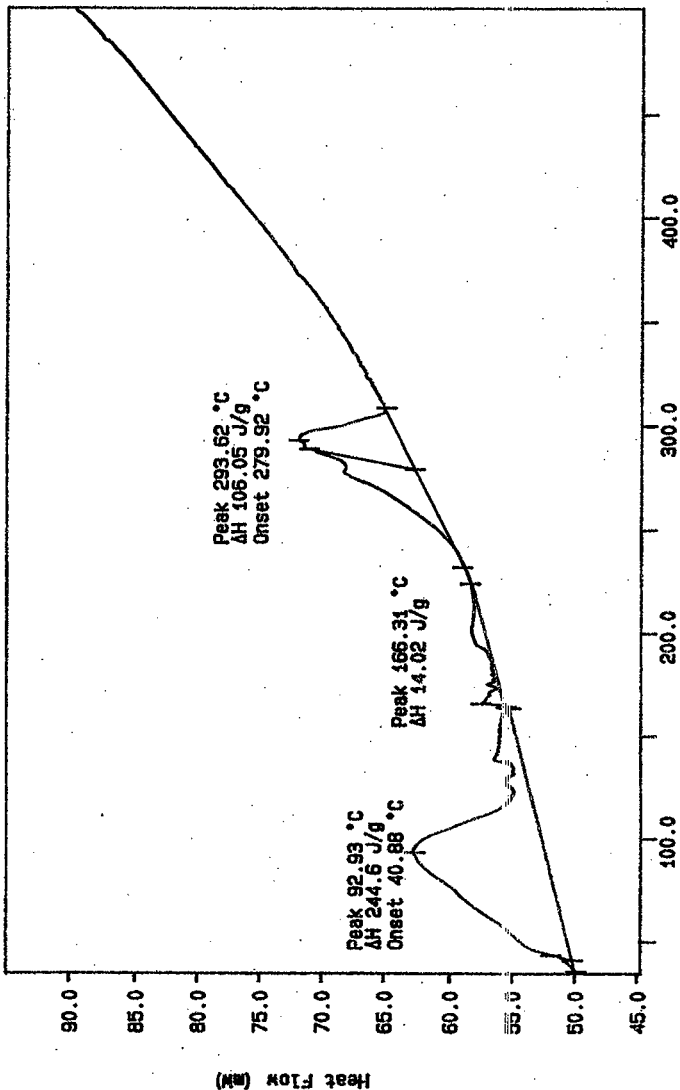


N2 10C/min  
 TEMPE 50.0 C  
 TIME: 0.0 MIN RATE: 10.0 C/MIN  
 P.J. MCCOMBS  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Tue Oct 6 13: 35: 50 1998

332

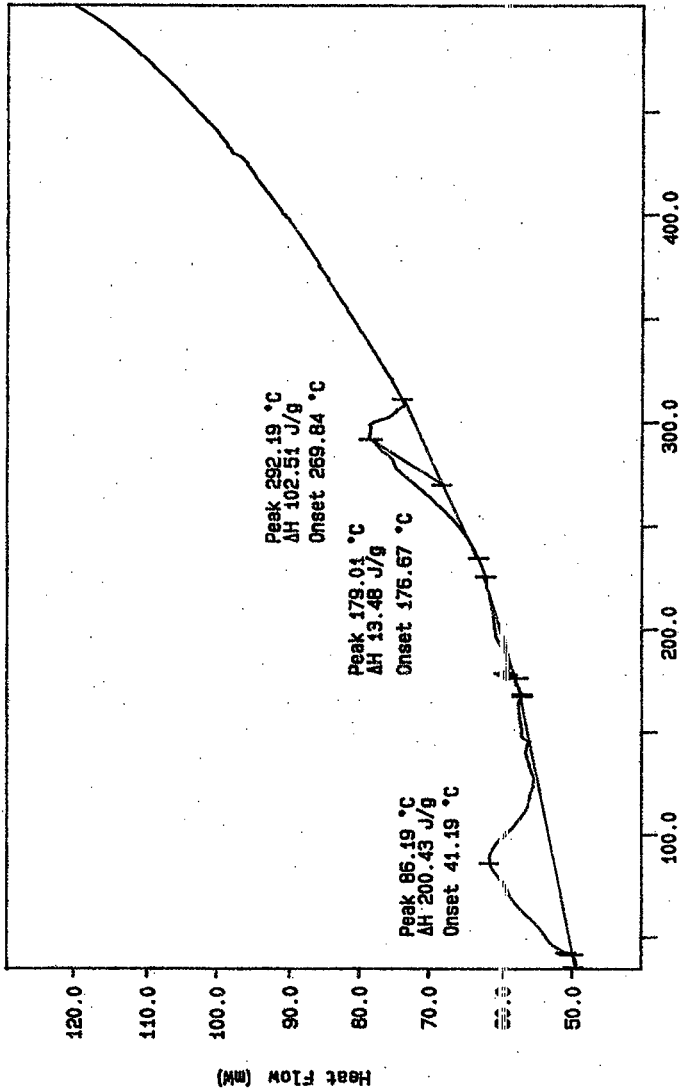


Curve 1: DSC  
File info: SAM092410 Thu Sep 24 20:43:45 1998  
Sample Weight: 13.810 mg  
S98T002519



N2 10C/min  
TEMPERATURE 35.8 g  
TIME 580.8 g  
RATES: 0.0 min RATES: 10.0 C/min  
PJ MCCOMB  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Tue Oct 6 13:31:33 1998

Curve 1: DSC  
File info: SAM092411 Thu Sep 24 22: 24: 59 1998  
Sample Weight: 13.970 mg  
S96T002519 DUP



N2 10C/min  
TEMP 50.0 g  
TIME 500.0 g  
0.0 min RATE: 10.0 C/min  
Temperature (°C)  
PJ MCCOHN  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Tue Oct 6 13: 33: 39 1998



# LABCORE Completed Worklist Report for Worklist# 26413

Analyst: ppb <sup>15-99</sup> LAD Instrument: DSC0 Book#: \_\_\_\_\_

Method: LA-514-11<sup>4</sup>β Rev/Mod D-1

Worklist Comment: U-107(2) DRY-DSC SOLID JRO

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 SAMPLE	S98T002039	0	DSC-02	SOLID	N/A	0		Joules/g Dry
2 DUP	S98T002039	0	DSC-02	SOLID	0	0	0.000 RPD	
3 SAMPLE	S98T002266	0	DSC-02	SOLID	N/A	0		Joules/g Dry
4 DUP	S98T002266	0	DSC-02	SOLID	0	00	0.000 RPD	
5 SAMPLE	S98T002426	0	DSC-02	SOLID	N/A	0		Joules/g Dry
6 DUP	S98T002426	0	DSC-02	SOLID	0	0	0.000 RPD	
7 SAMPLE	S98T002432	0	DSC-02	SOLID	N/A	0		Joules/g Dry
8 DUP	S98T002432	0	DSC-02	SOLID	0	0	0.000 RPD	
9 SAMPLE	S98T002438	0	DSC-02	SOLID	N/A	0		Joules/g Dry
10 DUP	S98T002438	0	DSC-02	SOLID	0	0	0.000 RPD	
11 SAMPLE	S98T002444	0	DSC-02	SOLID	N/A	119.1		Joules/g Dry
12 DUP	S98T002444	0	DSC-02	SOLID	119.1	134.5	12.145 RPD	

Final page for worklist# 26413

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_ *[Signature]* 9-29-98  
Analyst Signature Date

*[Signature]* 9/30/98  
Reviewer Signature Date

# LABCORE Completed Worklist Report for Worklist# 26414

Analyst: ppb <sup>LAD 1-599</sup> Instrument: DSC0 Book#: \_\_\_\_\_

Method: LA-514-11<sup>H</sup> Rev/Mod DI


Worklist Comment: U-107(2) DRY-DSC LIQUID JRO

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 SAMPLE	S98T002045	0	DSC-02	LIQUID	N/A	40.32		Joules/g Dry
2 DUP	S98T002045	0	DSC-02	LIQUID	40.32	45.9	12.944	RPD
3 SAMPLE	S98T002457	0	DSC-02	LIQUID	N/A	121.9		Joules/g Dry
4 DUP	S98T002457	0	DSC-02	LIQUID	121.9	94.87	24.939	RPD
5 SAMPLE	S98T002461	0	DSC-02	LIQUID	N/A	137.3		Joules/g Dry
6 DUP	S98T002461	0	DSC-02	LIQUID	137.3	126	8.583	RPD
7 SAMPLE	S98T002465	0	DSC-02	LIQUID	N/A	36.78		Joules/g Dry
8 DUP	S98T002465	0	DSC-02	LIQUID	36.78	32.53	12.264	RPD
9 SAMPLE	S98T002524	0	DSC-02	LIQUID	N/A	122		Joules/g Dry
10 DUP	S98T002524	0	DSC-02	LIQUID	122	144.2	16.679	RPD

Final page for worklist# 26414

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

 9-29-98  
Analyst Signature Date

 9/30/98  
Reviewer Signature Date

# LABCORE Completed Worklist Report for Worklist# 26418

Analyst: ppb

Instrument: DSCO

Book#: NA

Method: LA-514-11380 Rev/Mod D1

*4*  
*10/1/98*

Worklist Comment: u-107(2) dry-dsc liquid jro

Seq Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 SAMPLE	S98T002235	0		DSC-02	LIQUID	N/A	0		Joules/g Dry
2 DUP	S98T002235	0		DSC-02	LIQUID	0	0	0.000	RPD
3 SAMPLE	S98T002239	0		DSC-02	LIQUID	N/A	0		Joules/g Dry
4 DUP	S98T002239	0		DSC-02	LIQUID	0	0	0.000	RPD
5 SAMPLE	S98T002243	0		DSC-02	LIQUID	N/A	75.60		Joules/g Dry
6 DUP	S98T002243	0		DSC-02	LIQUID	75.60	82.90	9.211	RPD
7 SAMPLE	S98T002247	0		DSC-02	LIQUID	N/A	132.4		Joules/g Dry
8 DUP	S98T002247	0		DSC-02	LIQUID	132.4	146.4	10.043	RPD

### Final page for worklist# 26418

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*Sam P. [Signature]* 10-1-98  
Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*B. [Signature]* 10/1/98  
Reviewer Signature \_\_\_\_\_ Date \_\_\_\_\_

# LABCORE Completed Worklist Report for Worklist# 26419

Analyst: ppb

Instrument: DSCO

Book#: NA


Method: LA-514-113 <sup>4.032 10/1/98</sup> Rev/Mod D-1


Worklist Comment: u-107(2) dry-dsc solid jro

Seq	Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	SAMPLE	S98T002333	0		DSC-02	SOLID	N/A	0		Joules/g Dry
2	DUP	S98T002333	0		DSC-02	SOLID	0	0	0.000	RPD
3	SAMPLE	S98T002334	0		DSC-02	SOLID	N/A	0		Joules/g Dry
4	DUP	S98T002334	0		DSC-02	SOLID	0	0	0.000	RPD

## Final page for worklist# 26419

\_\_\_\_\_  
Analyst Signature                      Date

 9-29-98  
\_\_\_\_\_  
Analyst Signature                      Date

 10/1/98  
\_\_\_\_\_  
Reviewer Signature                      Date

# LABCORE Completed Worklist Report for Worklist# 26516

Analyst: ppb <sup>LAD</sup> <sub>5-49</sub> Instrument: DSCO Book#: NA

Method: LA-514-118 <sup>4</sup> Rev/Mod D-1

Worklist Comment: u-107(2) dry-dsc liquid jro

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	SAMPLE	S98T002031	0	DSC-02	LIQUID	N/A	37.39	Joules/g Dry
2	DUP	S98T002031	0	DSC-02	LIQUID	37.39	37.95	1.487 RPD
3	SAMPLE	S98T002035	0	DSC-02	LIQUID	N/A	48.45	Joules/g Dry
4	DUP	S98T002035	0	DSC-02	LIQUID	48.45	45.99	5.210 RPD
5	SAMPLE	S98T002251	0	DSC-02	LIQUID	N/A	197.62	Joules/g Dry
6	DUP	S98T002251	0	DSC-02	LIQUID	197.62	167.73	16.362 RPD
7	SAMPLE	S98T002533	0	DSC-02	LIQUID	N/A	54.54	Joules/g Dry
8	DUP	S98T002533	0	DSC-02	LIQUID	54.54	45.37	18.357 RPD

Final page for worklist# 26516

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_  
Analyst Signature [Signature] Date 10-8-98

Reviewer Signature [Signature] Date 10/12/98

Units shown for QC (BLK/BKG) may not reflect the actual units.



# LABCORE Completed Worklist Report for Worklist# 26517

Analyst: jds

Instrument: DSC0

Book#: NA

Method: LA-514-11<sup>#</sup>

Rev/Mod D-1

Worklist Comment: U-102(2) dry-dsc solid jro

*Handwritten:* 10/12/98

*Handwritten:* J. K. Sullivan

*Handwritten:* 12.7% 6/8/99

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit	
1 SAMPLE	S98T002272	0	DSC-02	SOLID	N/A	10.15	0.04% 12.677 RPD	Joules/g Dry	
2 DUP	S98T002272	0	DSC-02	SOLID	10.15	10.15	12.677 RPD	Joules/g Dry	
3 SAMPLE	S98T002327	0	DSC-02	SOLID	N/A	0	7.54% 12.7% RPD	Joules/g Dry	
4 DUP	S98T002327	0	DSC-02	SOLID	0	0	12.7% RPD	Joules/g Dry	
5 SAMPLE	S98T002342	0	DSC-02	SOLID	N/A	2.31	0.000 RPD	Joules/g Dry	
6 DUP	S98T002342	0	DSC-02	SOLID	2.31	2.31	0.000 RPD	Joules/g Dry	
7 SAMPLE	S98T002450	0	DSC-02	SOLID	N/A	0	0.000 RPD	Joules/g Dry	
8 DUP	S98T002450	0	DSC-02	SOLID	0	0	0.000 RPD	Joules/g Dry	
9 SAMPLE	S98T002519	0	DSC-02	SOLID	N/A	0	0.000 RPD	Joules/g Dry	
10 DUP	S98T002519	0	DSC-02	SOLID	0	0	0.000 RPD	Joules/g Dry	
11 SAMPLE	S98T002528	0	DSC-02	SOLID	N/A	79.38	63.96	21.515 RPD	Joules/g Dry
12 DUP	S98T002528	0	DSC-02	SOLID	79.38	79.38	63.96	21.515 RPD	Joules/g Dry
13 SAMPLE	S98T002537	0	DSC-02	SOLID	N/A	113.8	174.9	42.328 RPD	Joules/g Dry
14 DUP	S98T002537	0	DSC-02	SOLID	113.8	113.8	174.9	42.328 RPD	Joules/g Dry
15 SAMPLE	S98T002543	0	DSC-02	SOLID	N/A	168.4	158.2	6.246 RPD	Joules/g Dry
16 DUP	S98T002543	0	DSC-02	SOLID	168.4	168.4	158.2	6.246 RPD	Joules/g Dry
17 SAMPLE	S98T002552	0	DSC-02	SOLID	N/A	39.11	54.45	32.792 RPD	Joules/g Dry
18 DUP	S98T002552	0	DSC-02	SOLID	39.11	39.11	54.45	32.792 RPD	Joules/g Dry
19 SAMPLE	S98T002559	0	DSC-02	SOLID	N/A	47.04	27.59	55.548 RPD	Joules/g Dry
20 DUP	S98T002559	0	DSC-02	SOLID	47.04	47.04	27.59	55.548 RPD	Joules/g Dry
21 TRIP	S98T002559	0	DSC-02	SOLID	47.04	47.04	31.63	39.176 RPD	Joules/g Dry
22 SAMPLE	S98T002565	0	DSC-02	SOLID	N/A	18.32	18.32	40.279 RPD	Joules/g Dry
23 DUP	S98T002565	0	DSC-02	SOLID	18.32	18.32	27.56	40.279 RPD	Joules/g Dry

Final page for worklist# 26517

Analyst Signature

Date

Analyst Signature

Date

*Handwritten Signature: J. K. Sullivan*  
Reviewer Signature

*Handwritten Date: 10/12/98*  
Date

*Handwritten:* JAC S 10/12/98

# LABCORE Completed Worklist Report for Worklist# 26556

Analyst: jds

15-98  
LAD

Instrument: DSC0

Book#: NA

Method: LA-514-113

Rev/Mod D-1  
F.P. 10/12/98

Worklist Comment: u-102 (2) dry-dsc solid jds

Seq	Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	SAMPLE	S98T002570	0		DSC-02	SOLID	N/A	0		Joules/g.Dry
2	DUP	S98T002570	0		DSC-02	SOLID	0	0	0.000	RPD

## Final page for worklist# 26556

Analyst Signature

Date

Analyst Signature

Date

*JDS* *Sy* 10/12/98

*RJ McElroy* 10/12/98  
Reviewer Signature Date

# LABCORE Completed Worklist Report for Worklist# 27678

Analyst: slh

Instrument: DSC03

Book#: 12N14B

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107 FOR DSC-03 RTS

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD		0	DSC-03	LIQUID	28.45	27.12	95.325 % Recovery	
2 SAMPLE	S98T002114	0	DSC-03	LIQUID	N/A	0	Joules/g	
3 DUP	S98T002114	0	DSC-03	LIQUID	0	0	0.000 RPD	

Final page for worklist# 27678

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Mary Jean 1-5-99  
Analyst Signature Date

B. Machel 1/7/99  
Reviewer Signature Date

worklistrpt Version 2.1 05/15/95  
12/28/98 13:17

# LABCORE Data Entry Template for Worklist# 27678

Analyst: SLH Instrument: DSC0 3 Book # 26 <sup>SLH</sup> 12-29-98  
 Method: LA-514-114 Rev/Mod D-1 12N14-B  
 Worklist Comment: U107 FOR DSC-03 RTS

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03	LIQUID	<u>28.45</u>	<u>27.12</u>	<u>N/A</u>	Joules/g
98000401	U-107 (2)	2 SAMPLE	S98T002114	0	DSC-03	LIQUID	<u>N/A</u>	<u>0</u>		Joules/g
98000401	U-107 (2)	3 DUP	S98T002114	0	DSC-03	LIQUID	<u>0</u>	<u>0</u>	<u>N/A</u>	Joules/g

**Final page for worklist # 27678**

Sandra Wood Beaty  
 Analyst Signature Date 12-29-98

Mary Jones  
 Analyst Signature Date 1-5-99

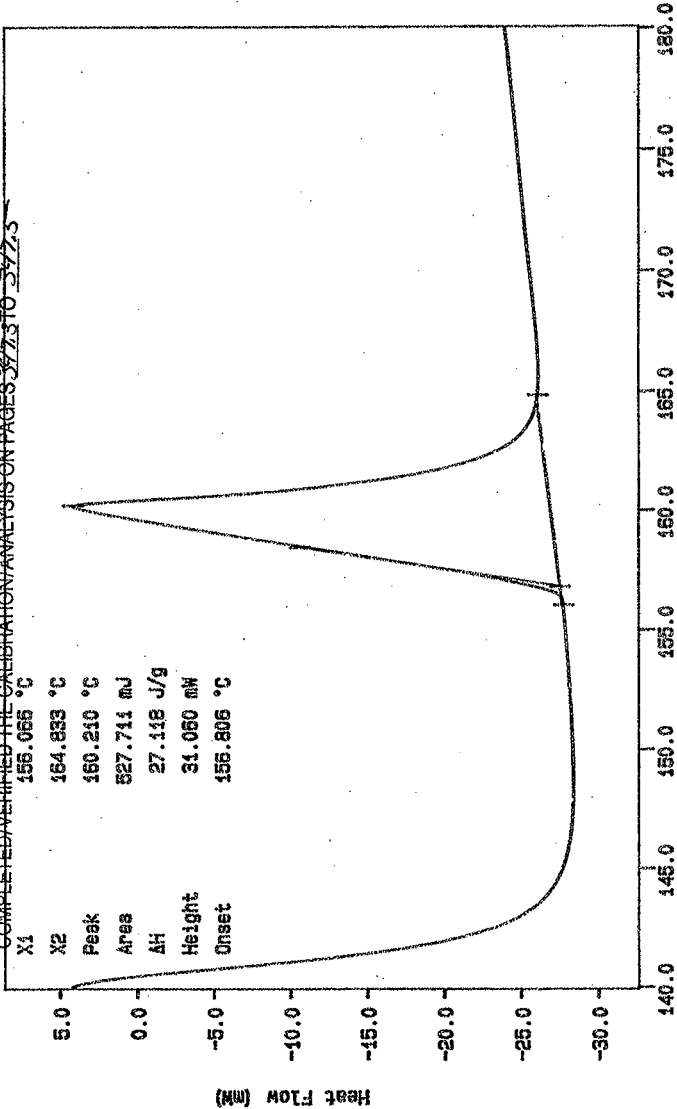
Data Entry Comments:

Run Trip on S98T002114 003 1/5/99

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: DSC  
 File Info: IND122901 Tue Dec 23 06:17:41 1998  
 Sample Weight: 19.460 mg  
 STD 12N14-B

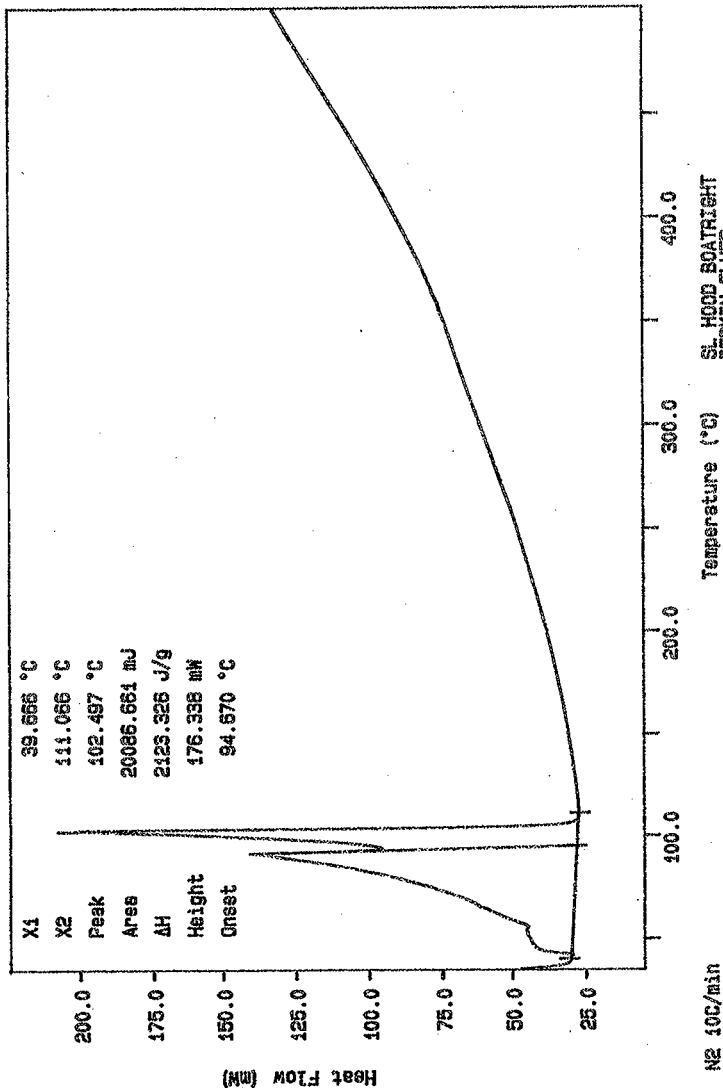
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 3723 TO 3723



N2, EXOTHERM DOWN  
 TEMPS 160.0 & 180.0 °C TUNES: 9.0 MIN RATE: 10.0 °C/min  
 SL HOOD BOATRIGT  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Tue Dec 23 08:03:38 1998

*Judith Hood Beaty*

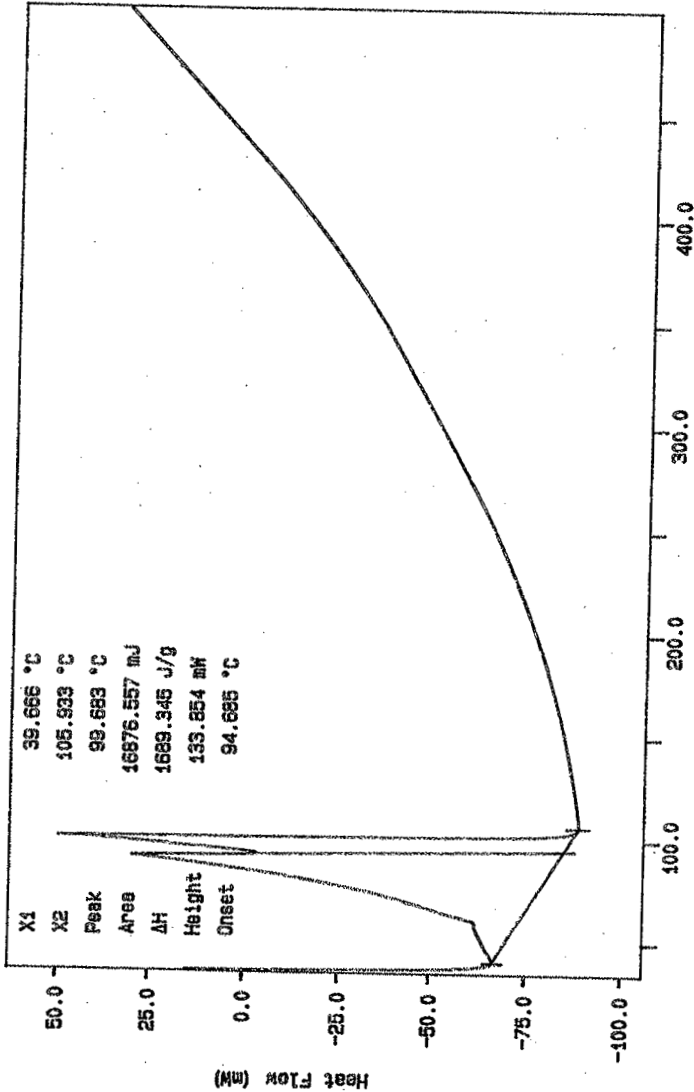
Curve 1: DSC  
 File Info: SAM12201 Tue Dec 29 10:00:19 1998  
 Sample Weight: 9.460 mg  
 S98T002114



N2 100/min  
 TEMP: 25.0 °C  
 TIME: 5.00 min RATE: 10.0 °/min

SL HOOD ROATRACHT  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Wed Dec 30 11:28:28 1998

Curve 1: DSC  
File info: qsav2  
Tue Dec 29 11:31:20 1998  
Sample Weight: 9.990 mg  
S98T002114 DUP



N2 100/min  
 TEMPERATURE 500.0 °C  
 TIME: 0.0 min RATE: 10.0 °C/min  
 SL HOOD BOATRIGHT  
 PEKIN-ELMER  
 7 Series Thermal Analysis System  
 Tue Dec 29 16:40:17 1998

# LABCORE Data Entry Template for Worklist# 27810

Analyst: ppb Instrument: DSC0 \_\_\_\_\_ Book # \_\_\_\_\_

Method: LA-514-113 Rev/Mod D-1

Worklist Comment: U107 DRY DSC LIQUID MF

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
98000401	U-107 (2)	1 SAMPLE	S98T002114	0	DSC-02	LIQUID	N/A	<u>0</u>		Joules/g Dry
98000401	U-107 (2)	2 DUP	S98T002114	0	DSC-02	LIQUID	<u>0</u>	<u>0</u>	N/A	Joules/g Dry

### Final page for worklist # 27810

B. Archelov 1/7/99  
Analyst Signature Date

Mary Franz 1-7-99  
Analyst Signature Date

Data Entry Comments:

---

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Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



# LABCORE Completed Worklist Report for Worklist# 25142

Analyst: jjs Instrument: TGA03 Book# 10318A

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, TGA-03, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0	TGA-03	LIQUID	5.94e01	58.46	98.418 % Recovery	
2 SAMPLE	S98T002031 0	TGA-03	LIQUID	N/A	45.94	%	
3 DUP	S98T002031 0	TGA-03	LIQUID	45.94	49.71	7.883 RPD	
4 SAMPLE	S98T002035 0	TGA-03	LIQUID	N/A	52.13	%	
5 DUP	S98T002035 0	TGA-03	LIQUID	52.13	51.94	0.165 RPD	

Final page for worklist# 25142

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Mary Joay 8-5-98  
Analyst Signature Date

[Signature] 8/5/98  
Reviewer Signature Date

# LABCORE Data Entry Template for Worklist# 25142

Analyst: JLS Instrument: TGA0 3 Book # 103UR-A

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, TGA-03, tdm

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	LIQUID	<u>59.4</u>	<u>58.46</u>	<u>N/A</u>	%
98000358	U-107 (2)	2	SAMPLE	S98T002031	0		TGA-03	LIQUID	<u>N/A</u>	<u>45.94</u>		%
98000358	U-107 (2)	3	DUP	S98T002031	0		TGA-03	LIQUID	<u>45.94</u>	<u>49.71</u>	<u>N/A</u>	%
98000358	U-107 (2)	4	SAMPLE	S98T002035	0		TGA-03	LIQUID	<u>N/A</u>	<u>52.13</u>		%
98000358	U-107 (2)	5	DUP	S98T002035	0		TGA-03	LIQUID	<u>52.13</u>	<u>51.94</u>	<u>N/A</u>	%

Final page for worklist # 25142

JLS  
Analyst Signature  
080398  
Date

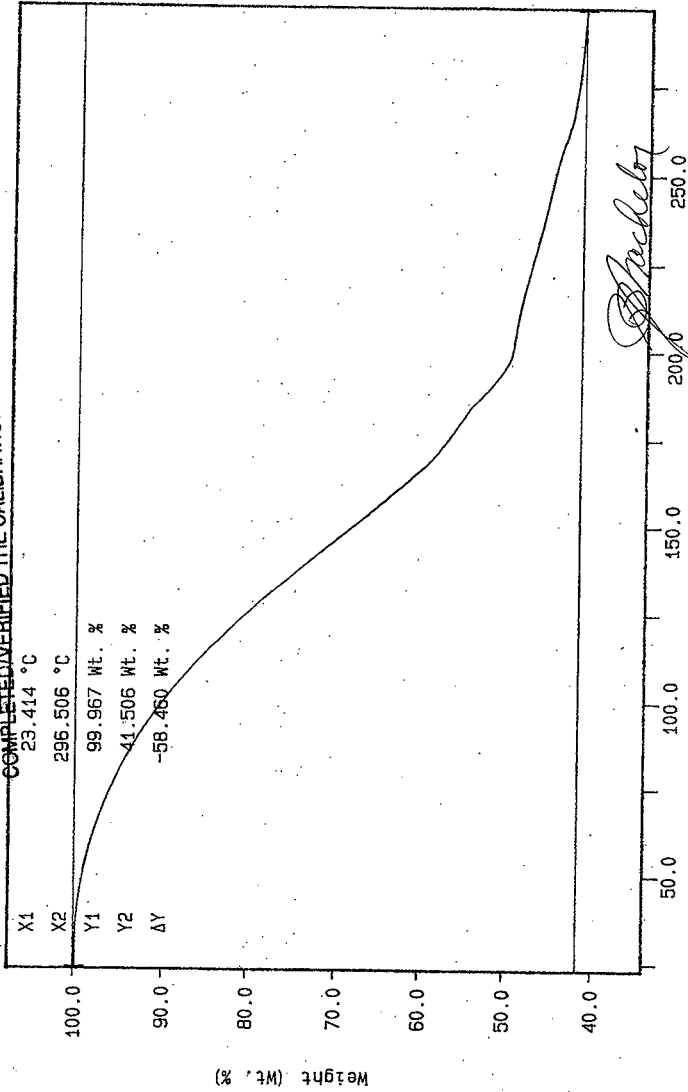
Mary Gray  
Analyst Signature  
8-5-98  
Date

Data Entry Comments:  
Weight loss observed above 200 °C for both samples. 8/3 8/4/98

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: TGA  
File info: STD080301 Mon Aug 3 10:33:52 1998  
Sample Weight: 14.287 mg  
103NB-A STD

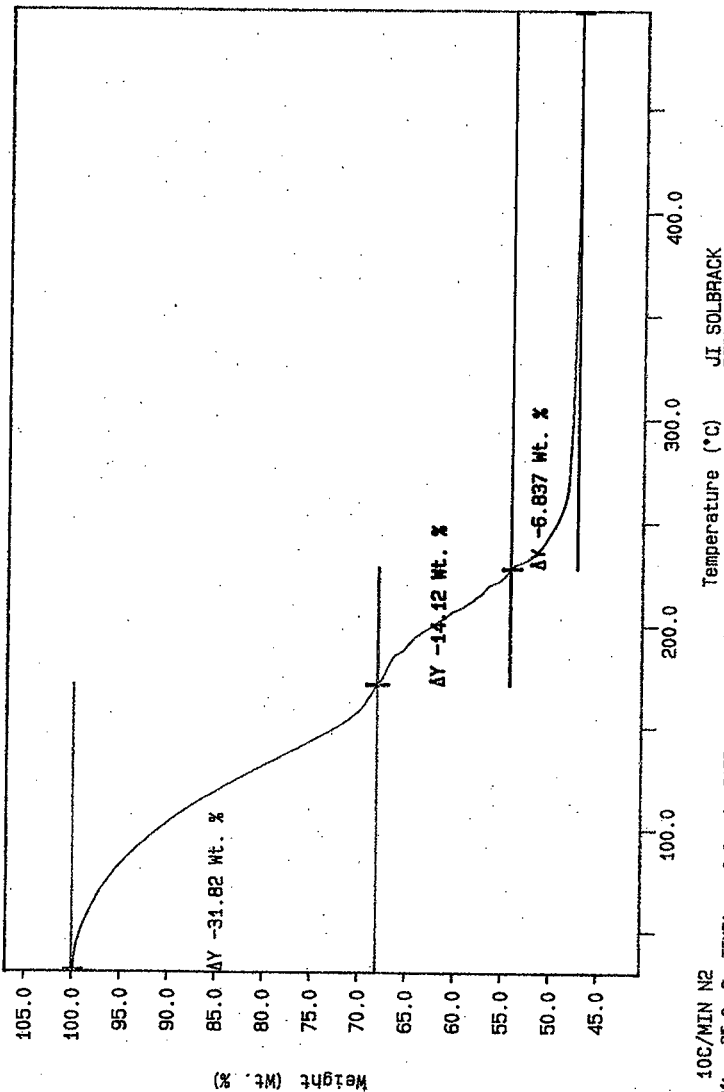
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 350 TO 354.



10C/MIN N2  
TEMP: 30.0 C  
TIME: 0.0 min RATE: 10.0 C/min

J. Pacheco  
JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 3 10:42:08 1998

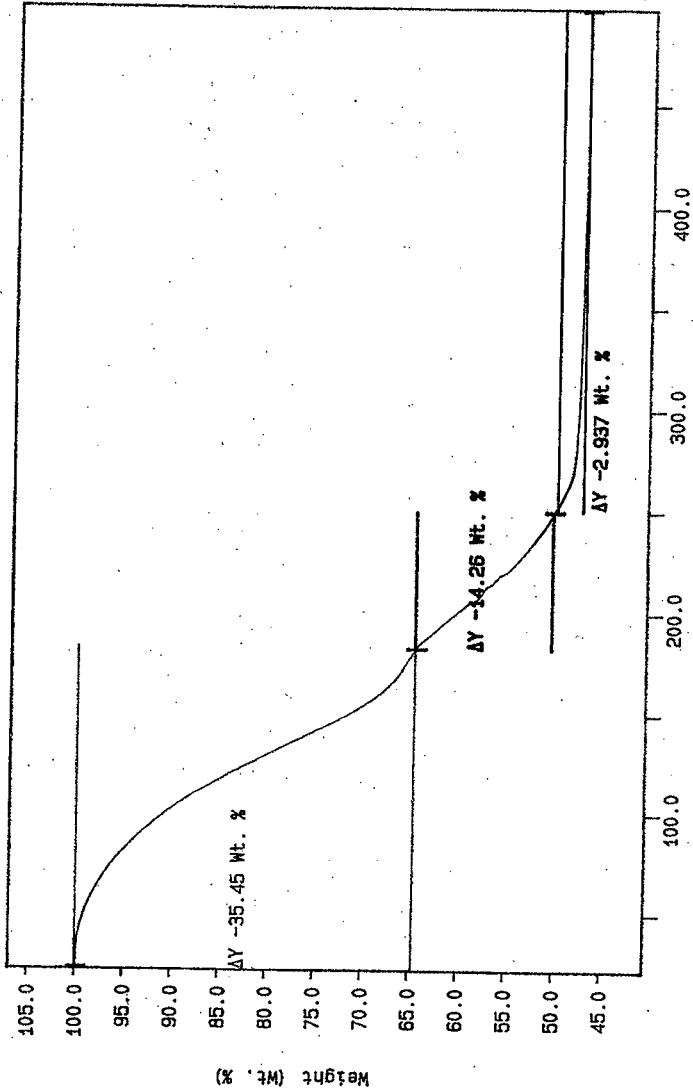
Curve 1: TGA  
File Info: SAM080303 Mon Aug 3 12:15:47 1998  
Sample Weight: 15.808 mg  
S98T002031



10C/MIN N2  
TEMP: 50.0 C  
TIME: 500.0 C

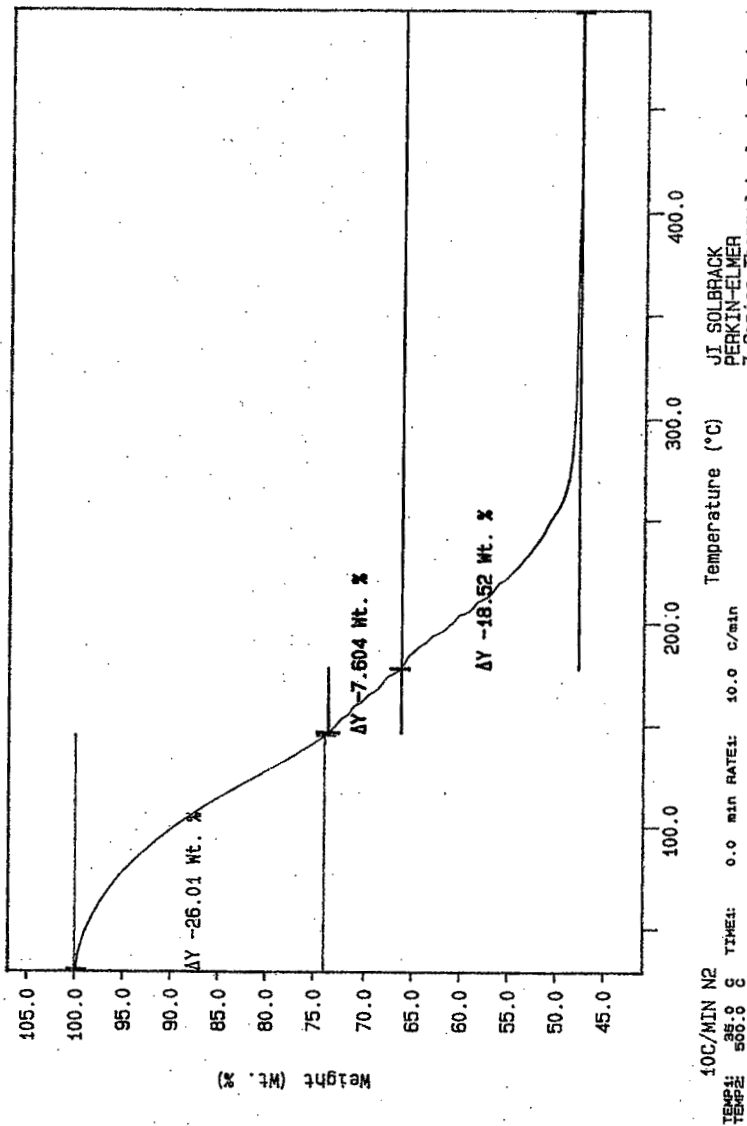
JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Tue Aug 4 06:31:38 1998

Curve 1: TGA  
File info: SAM080304 Mon Aug 3 13:33:29 1998  
Sample Weight: 14.498 mg  
S98T002031DUP



10C/MIN N2  
TEMP: 50.0 S TIME: 0.0 min RATE: 10.0 C/min  
JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Tue Aug 4 08:33:33 1998

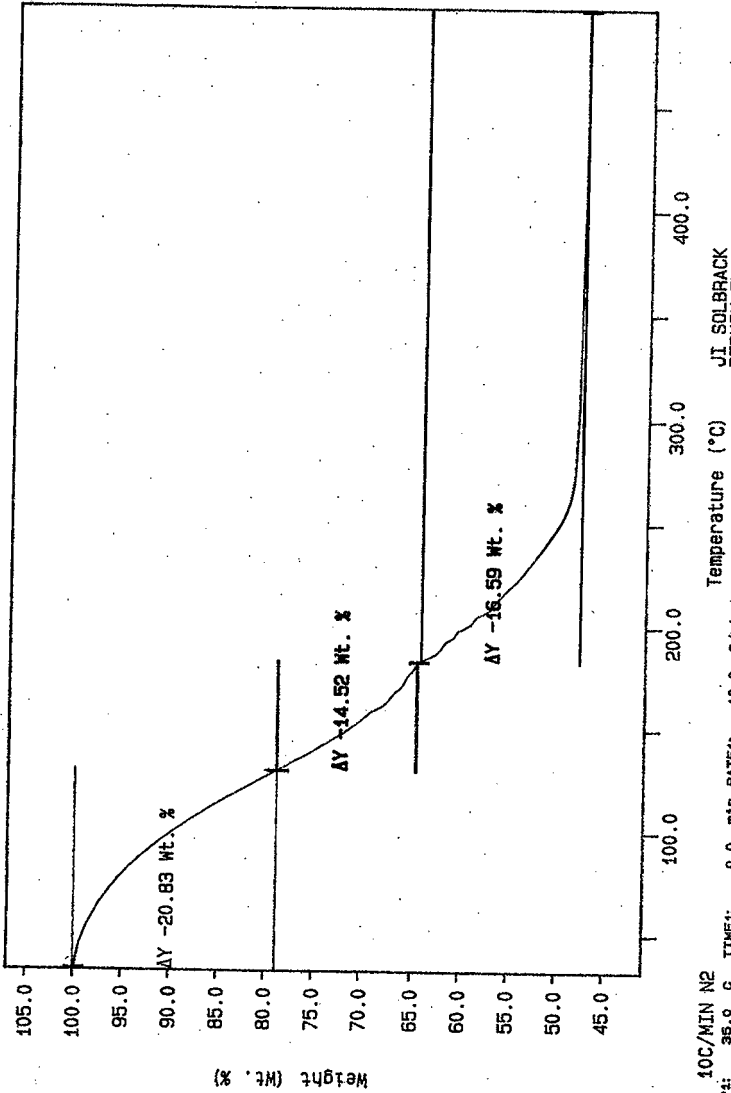
Curve 1: TGA  
File info: SAM080305 Mon Aug 3 14:41:16 1998  
Sample Weight: 14.402 mg  
S98T002035



JT SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Tue Aug 4 08:35:27 1998

10C/MIN N2  
TEMP: 566.0 C TIME: 0.0 min RATE: 10.0 C/min

Curve 1: TGA  
File info: SAM080306 Mon Aug 3 15: 47: 18 1998  
Sample Weight: 14.146 mg  
S98T002035DUP



10C/MIN N2  
TEMP: 566.8 C TIME: 0.0 min RATE: 10.0 C/min  
JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Tue Aug 4 08: 37: 20 1998

# LABCORE Data Entry Template for Worklist# 25143

Analyst: PK Instrument: TGA0 3 Book # 10378-A

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, TGA-03, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-03	LIQUID	<u>59.4</u>	<u>58.52*</u>	N/A	%
98000358	U-107 (2)	2 SAMPLE	S98T002045 0		TGA-03	LIQUID	N/A	<u>51.60</u>		%
98000358	U-107 (2)	3 DUP	S98T002045 0		TGA-03	LIQUID	<u>51.60</u>	<u>51.27</u>	N/A	%

**Final page for worklist # 25143**

PK 8/9/98  
Analyst Signature Date

[Signature] 8-10-98  
Analyst Signature Date

Validated 8/10/98 [Signature]

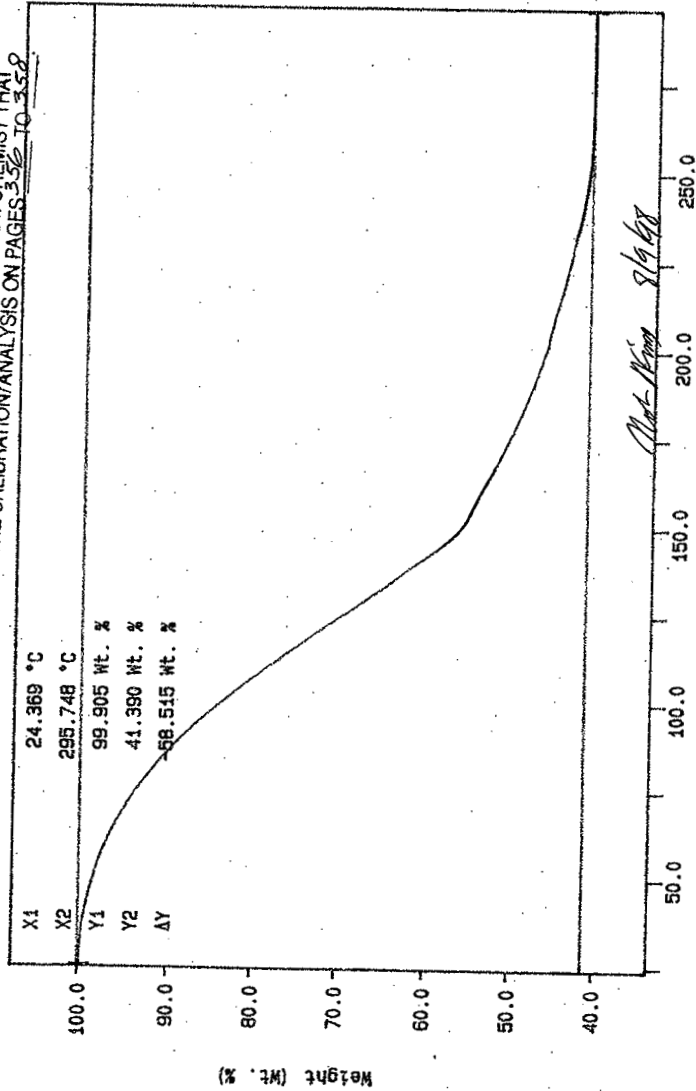
Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



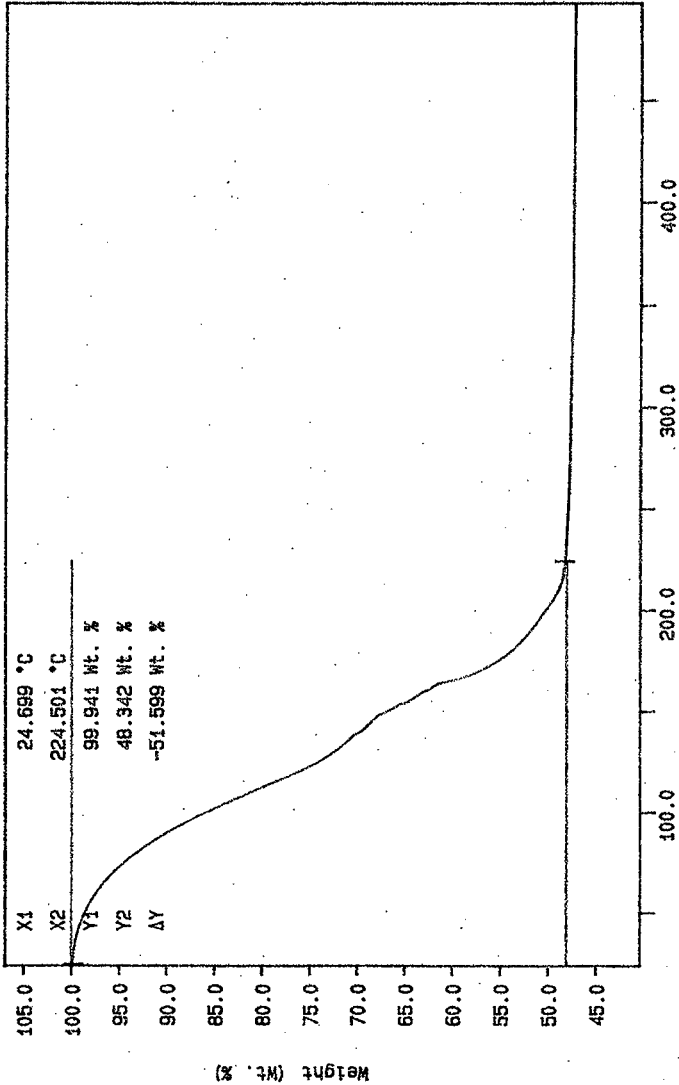
Curve 1: TGA  
File info: TER080901 Sun Aug 9 07: 20: 14 1998  
Sample Weight: 17.452 mg  
103NB-A STD

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 358 TO 358



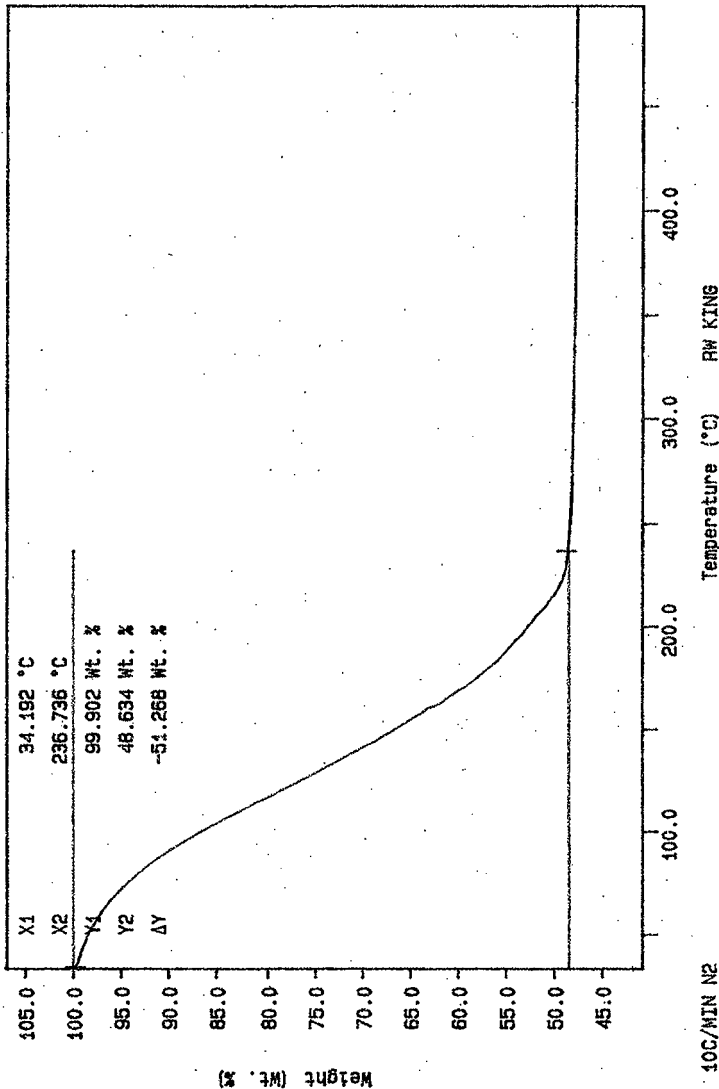
10C/MIN N2  
TEMP: 35.0 C TIME: 0.0 min RATE: 50.0 C/min  
RW KING  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sun Aug 9 07: 28: 11 1998

Curve 1: TGA  
File info: SAM080903 Sun Aug 9 11:00:28 1998  
Sample Weight: 16.821 mg  
S98T002045



10C/MIN N2  
TEMP: 35.0 C  
TEMP: 500.0 C  
TIME: 0.0 MIN RATE: 50.0 C/MIN  
RW KING  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sun Aug 9 11:02:24 1998

Curve 1: TGA  
File Infa: SAM080904 Sun Aug 9 12:04:38 1998  
Sample Weight: 19.485 mg  
S98T002045 Dup.



RW KING  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sun Aug 9 12:14:04 1998

10C/MIN N2  
TEMP: 35.8 C  
TIME: 566.8 S  
0.0 MIN RATE: 40.0 G/MIN

# LABCORE Data Entry Template for Worklist# 25606

Analyst: SH Instrument: TGA0 3 Bock # 103NB-A

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107 (2), TGA-03 Use <15mg SS. Run under nitrogen. skm

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	LIQUID	<u>59.4</u>	<u>59.50</u>	N/A	%
98000359	U-107 (2)	2	SAMPLE	S98T002235	0		TGA-03	LIQUID	N/A	<u>46.48</u>		%
98000359	U-107 (2)	3	DUP	S98T002235	0		TGA-03	LIQUID	<u>46.48</u>	<u>51.76</u>	N/A	%
98000359	U-107 (2)	4	SAMPLE	S98T002239	0		TGA-03	LIQUID	N/A	<u>51.88</u>		%
98000359	U-107 (2)	5	DUP	S98T002239	0		TGA-03	LIQUID	<u>51.88</u>	<u>51.74</u>	N/A	%

### Final page for worklist # 25606

Andrea Howard Boatright  
Analyst Signature Date 8-24-98

Jan R. Olson 8-25-98  
Analyst Signature Date

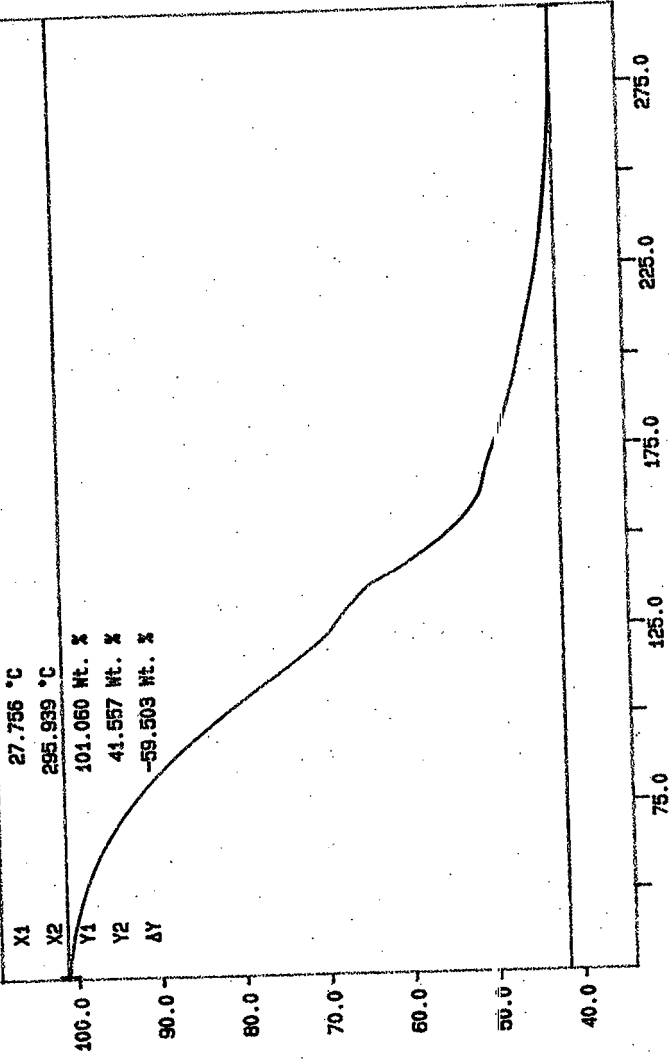
Validated 8/27/98 Gradelor

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: TGA  
File Info: TER082301 Sun Aug 23 19: 12: 10 1998  
Sample Weight: 15.681 mg  
103NB-A STD

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 360 TO 364.



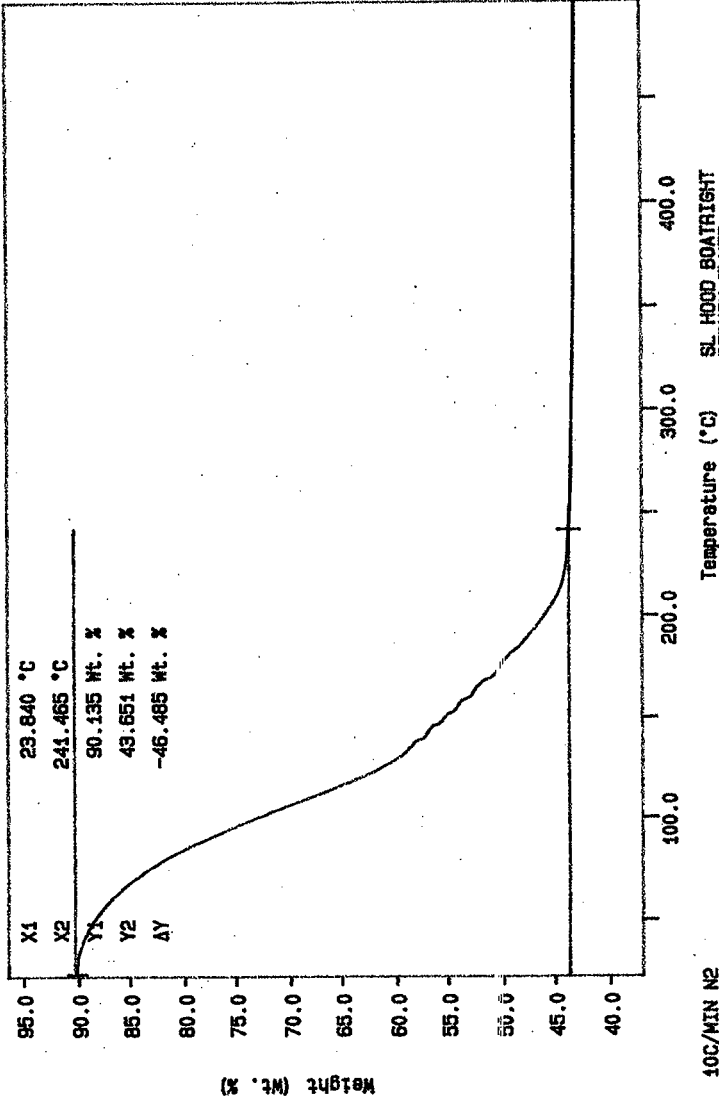
Weight (Mg) 360

SL HOOD BOATRIGT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sun Aug 23 19: 20: 10 1998  
*John Booth*

Temperature (°C)

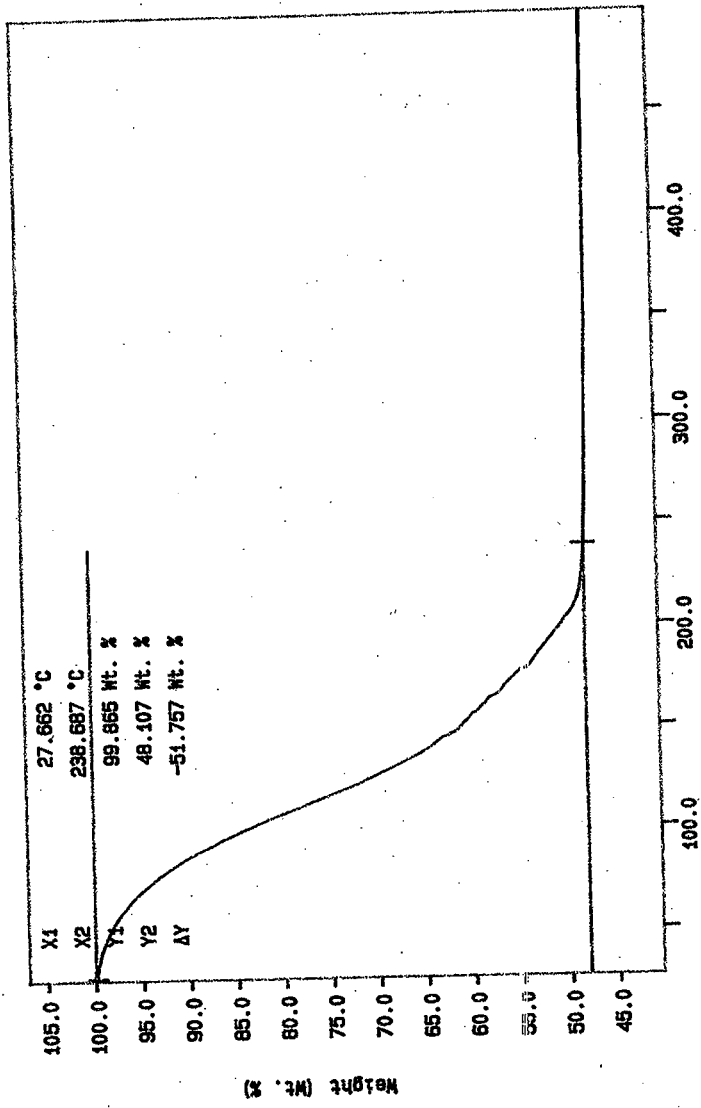
10C/MIN N2  
TIME: 365.0 S  
RATE: 0.0 MIN RATE: 10.0 C/MIN

Curve 1: TGA  
File Info: SAM082305 Sun Aug 23 20:22:19 1998  
Sample Weight: 13.778 mg  
S98T002235 SAM



100./MIN N2  
TEMP: 25.0 °C  
TIME: 555.8 S  
0.0 MIN RATE: 10.0 C/MIN  
Temperature (°C)  
SL HOOD BOATRIGT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sun Aug 23 20:24:53 1998

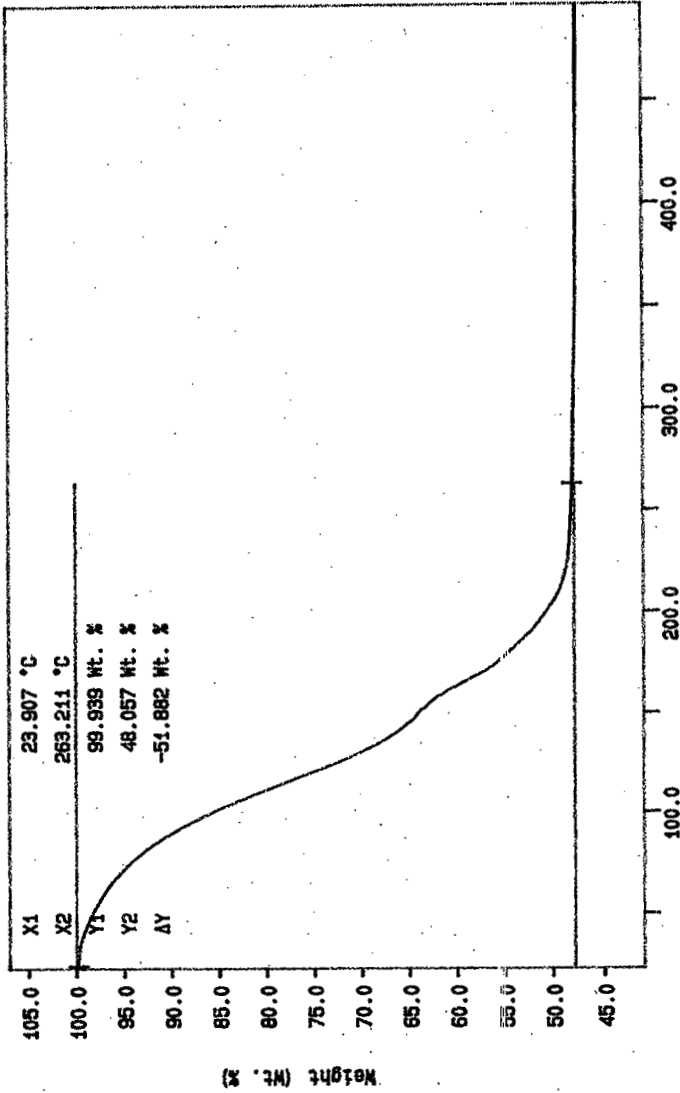
Curve 1: TGA  
File Info: SAH082305 Sun Aug 23 21:31:00 1998  
Sample Weight: 13.460 mg  
S98T002235 DUP



SL HOOD BOATRIGHT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sun Aug 23 22:07:11 1998

10C/MIN N2  
TEMP: 38.8 C  
TIME: 68.8 S  
0.0 min RATE: 10.0 C/min

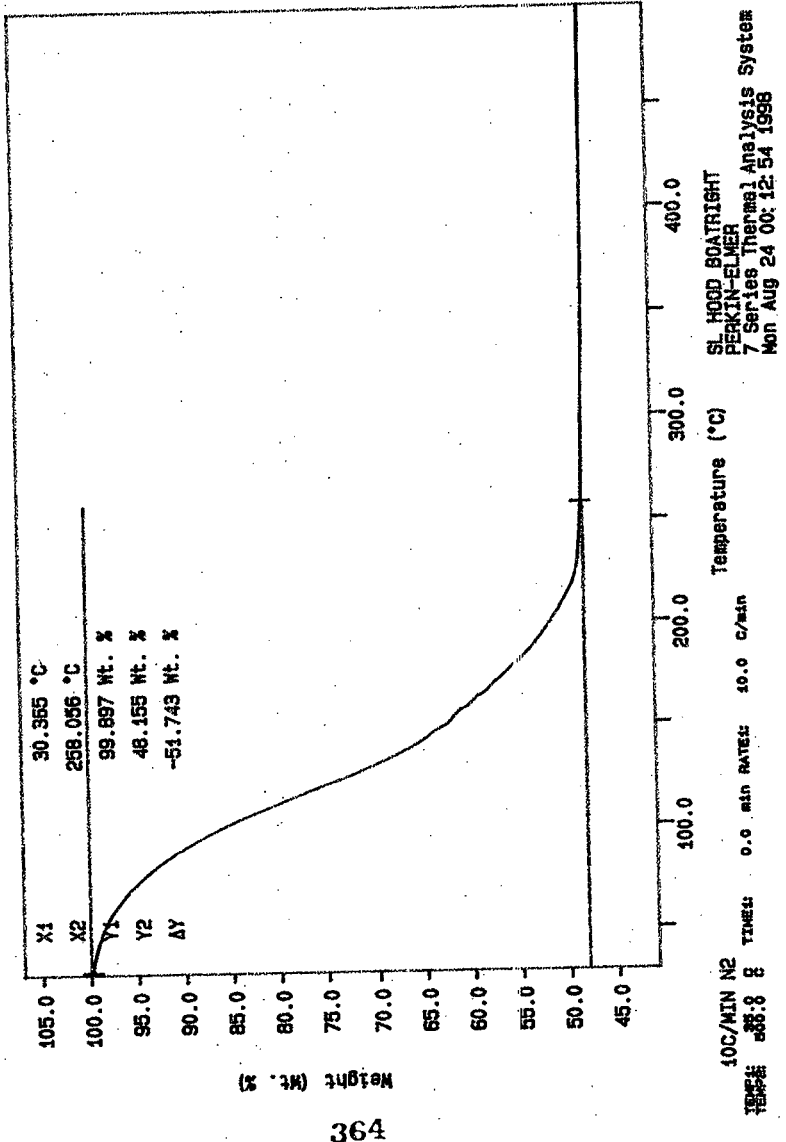
Curve 1: TGA  
File Info: SAM082307 Sun Aug 23 22:58:26 1998  
Sample Weight: 14.317 mg  
S98T002239 SAM



10C/MIN N2  
TEMP: 263.2 °C  
TIME: 266.8 S  
0.0 MIN RATE: 10.0 C/MIN  
SI HOOD BOATRIGHT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sun Aug 23 23:03:51 1998



Curve 1: TGA  
File info: SAM082308 Mon Aug 24 00:05:38 1998  
Sample Weight: 15.417 mg  
S98T002239 DUP



# LABCORE Data Entry Template for Worklist# 25607

Analyst: JMM Instrument: TGA0 3 Book # 103008A

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107 (2), TGA-03 Use <15mg SS. Run under nitrogen. skm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-03	LIQUID	<u>59.4</u>	<u>58.23</u>	N/A	%
98000359	U-107 (2)	2 SAMPLE	S98T002243	0	TGA-03	LIQUID	N/A	<u>50.80</u>		%
98000359	U-107 (2)	3 DUP	S98T002243	0	TGA-03	LIQUID	<u>50.80</u>	<u>46.19</u>	N/A	%
98000359	U-107 (2)	4 SAMPLE	S98T002247	0	TGA-03	LIQUID	N/A	<u>48.32</u>		%
98000359	U-107 (2)	5 DUP	S98T002247	0	TGA-03	LIQUID	<u>48.32</u>	<u>51.58</u>	N/A	%

Final page for worklist # 25607

JMM 8-20-98  
Analyst Signature Date

[Signature] 8-25-98  
Analyst Signature Date

Validated 8/24/98 [Signature]

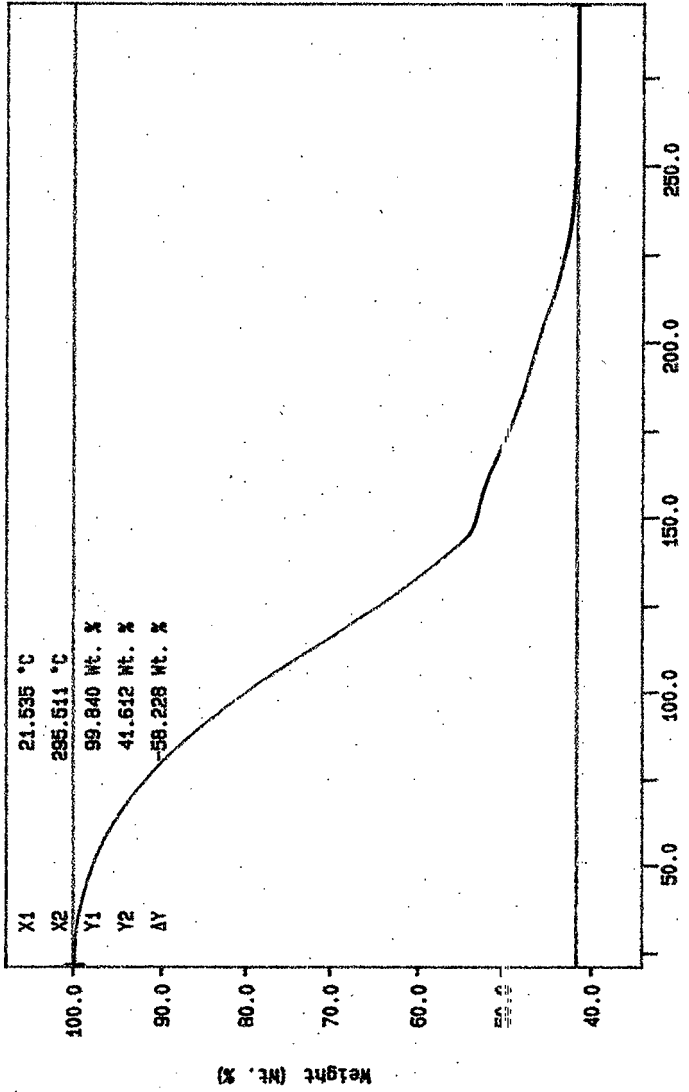
Data Entry Comments:

Weight loss observed above 200 °C for S98T002247. 8/23 8/24/98

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: TGA  
File info: SAM8209810 Thu Aug 20 07: 15: 40 1998  
Sample Weight: 13.513 mg  
103NB-A STD

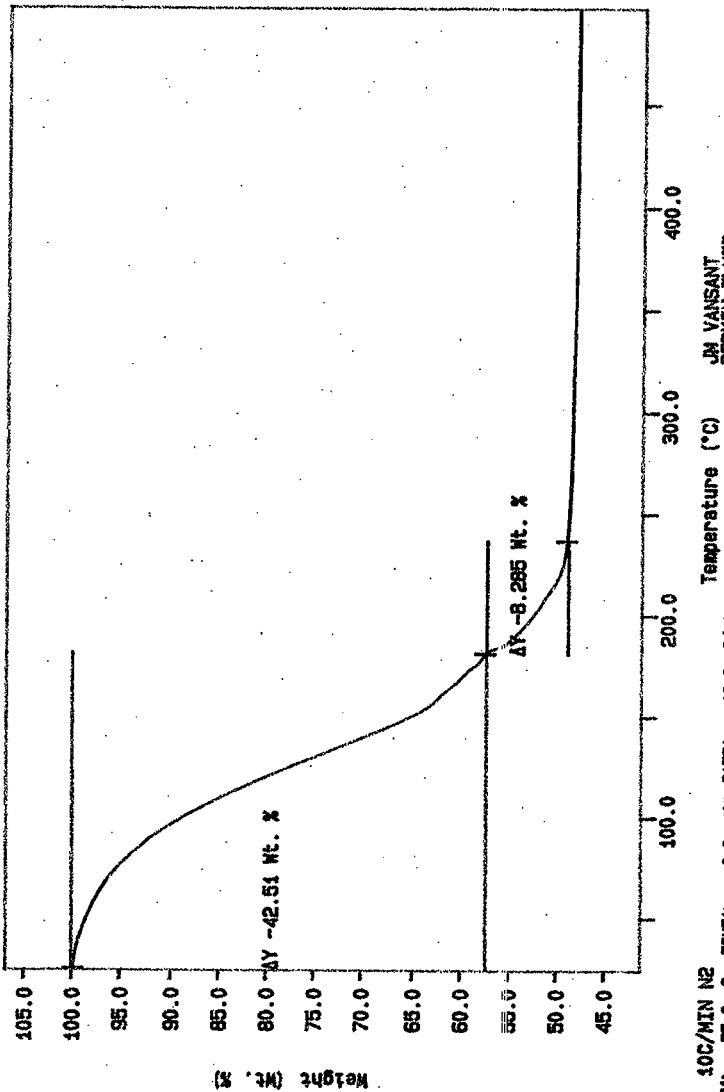
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 366 TO 370.



JM VANSANT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Aug 20 07: 24: 12 1998  
*J. Vansant 8-20-98*

10C/MIN N2  
TEMP 35.0 g  
TIME 308.0 g  
RATE 0.0 min RATE 10.0 C/MIN

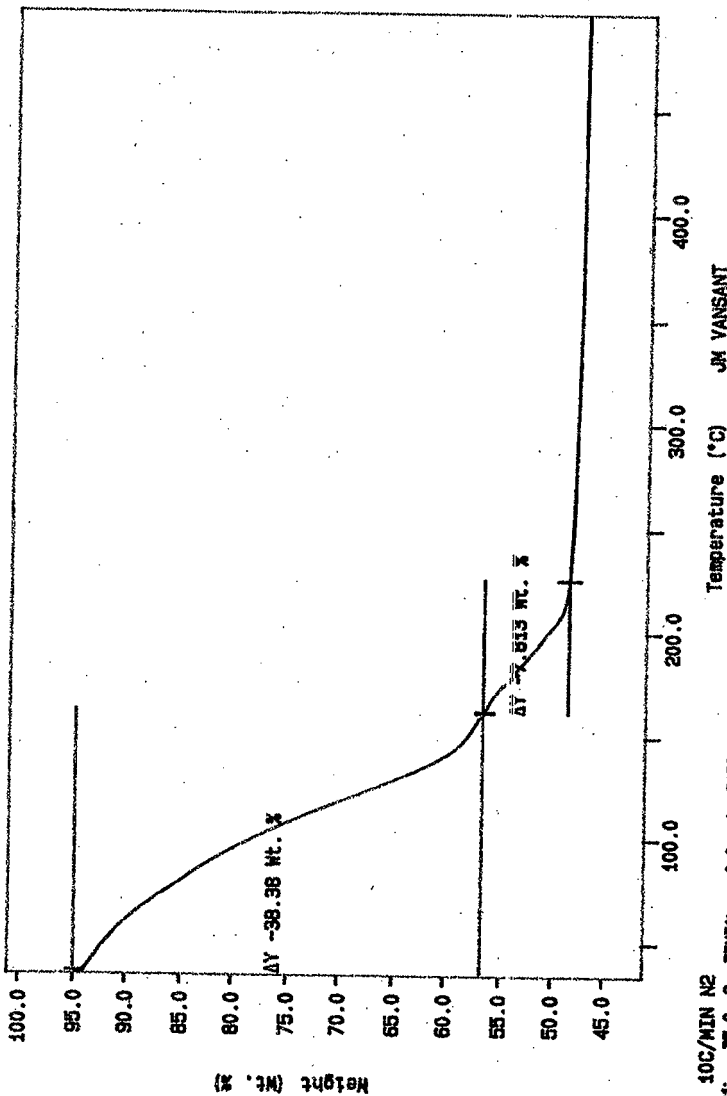
Curve 1: TGA  
File Info: SAM8209811 Thu Aug 20 08:24:00 1998  
Sample Weight: 19.715 mg  
S98T002243



10C/MIN N2  
TEMP: 20.0 C  
TIME: 0.0 min RATE: 10.0 C/min

JM VANSANT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 24 08:26:13 1998

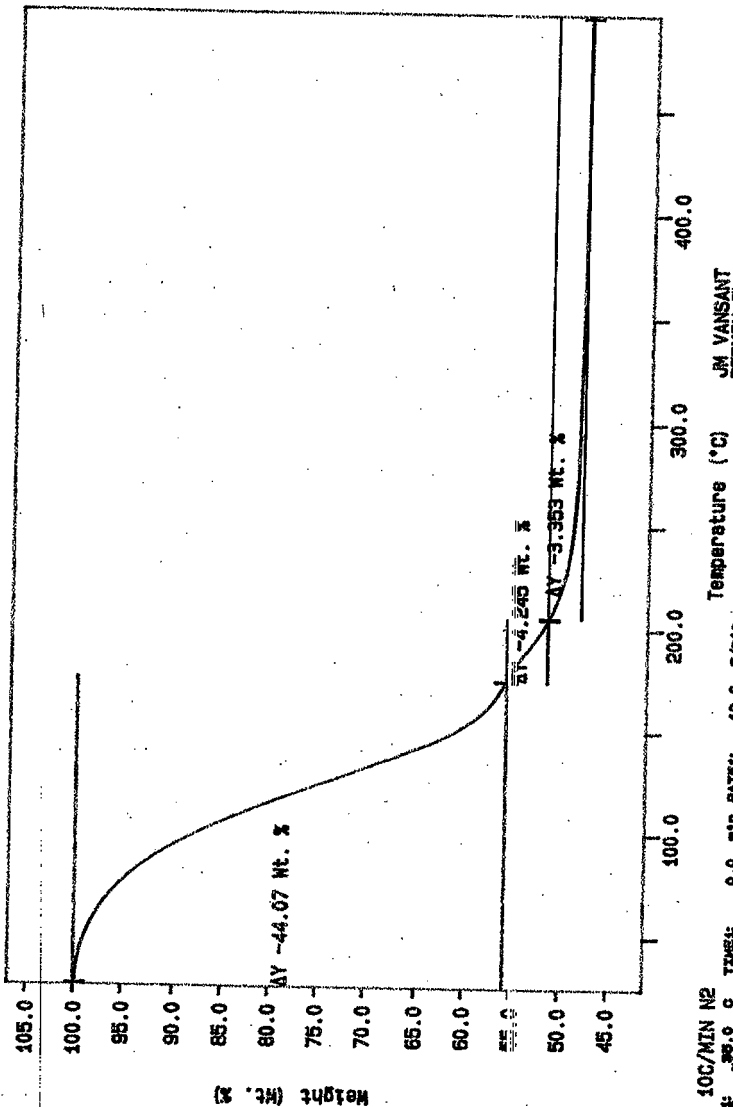
Curve 1: T6A  
File info: SAM8209812 Thu Aug 20 09:26:13 1998  
Sample Weight: 13.827 mg  
S98T002243DIP



JM VANSANT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 24 09:28:03 1998

10C/MIN N2  
TEMP: 25.0 C  
TIME: 0.0 MIN RATE: 10.0 C/MIN

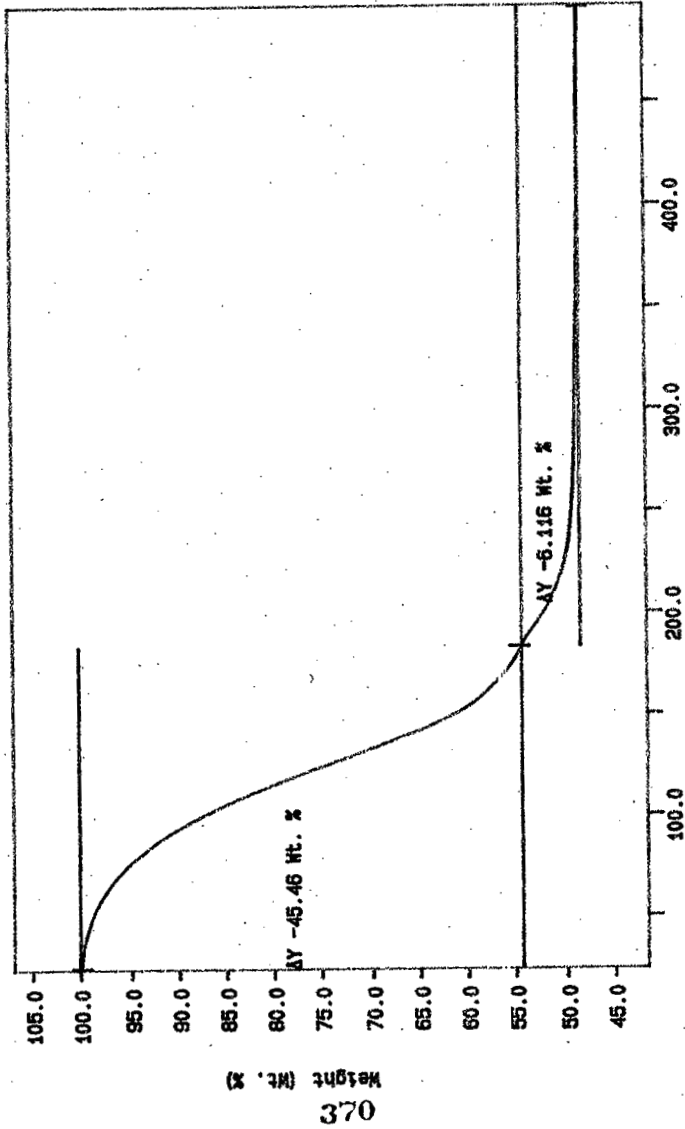
Curve 1: TGA  
File info: SAM8209813 Thu Aug 20 10: 44: 10 1988  
Sample Weight: 14.633 mg  
S98T002247



10C/MIN N2  
TEMPERATURE 500.0 g  
THERM: 0.0 MIN RATE: 10.0 C/MIN

JM VANSANT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 24 09: 30: 24 1988

Curve 1: TGA  
File Info: SAM8209820 Thu Aug 20 13: 40: 43 1998  
Sample Weight: 14.948 mg  
S98T02247DUP



100./MIN N2  
TEMPER 500.0 8  
TIME 5  
0.0 MIN RATE 10.0 C/MIN  
JM VANSANT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 24 09: 32: 21 1998

# LABCORE Data Entry Template for Worklist# 25611

Analyst: RDM Instrument: TGA0 3 Bool # 103N/A

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107 (2), TGA-03 Use <15mg SS. Run under nitrogen. skm

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	SOLID	<u>59.4</u>	<u>58.74</u>	<u>N/A</u>	%
98000358	U-107 (2)	2	SAMPLE	S98T002039	0		TGA-03	SOLID	<u>N/A</u>	<u>51.06</u>		%
98000358	U-107 (2)	3	DUP	S98T002039	0		TGA-03	SOLID	<u>51.06</u>	<u>50.14</u>	<u>N/A</u>	%
98000359	U-107 (2)	4	SAMPLE	S98T002266	0		TGA-03	SOLID	<u>N/A</u>	<u>49.19</u>		%
98000359	U-107 (2)	5	DUP	S98T002266	0		TGA-03	SOLID	<u>49.19</u>	<u>49.74</u>	<u>N/A</u>	%

## Final page for worklist # 25611

RDM 8/24/98  
Analyst Signature Date

R McCon 8/27/98  
Analyst Signature Date

Validated 8/27/98 Bachelo

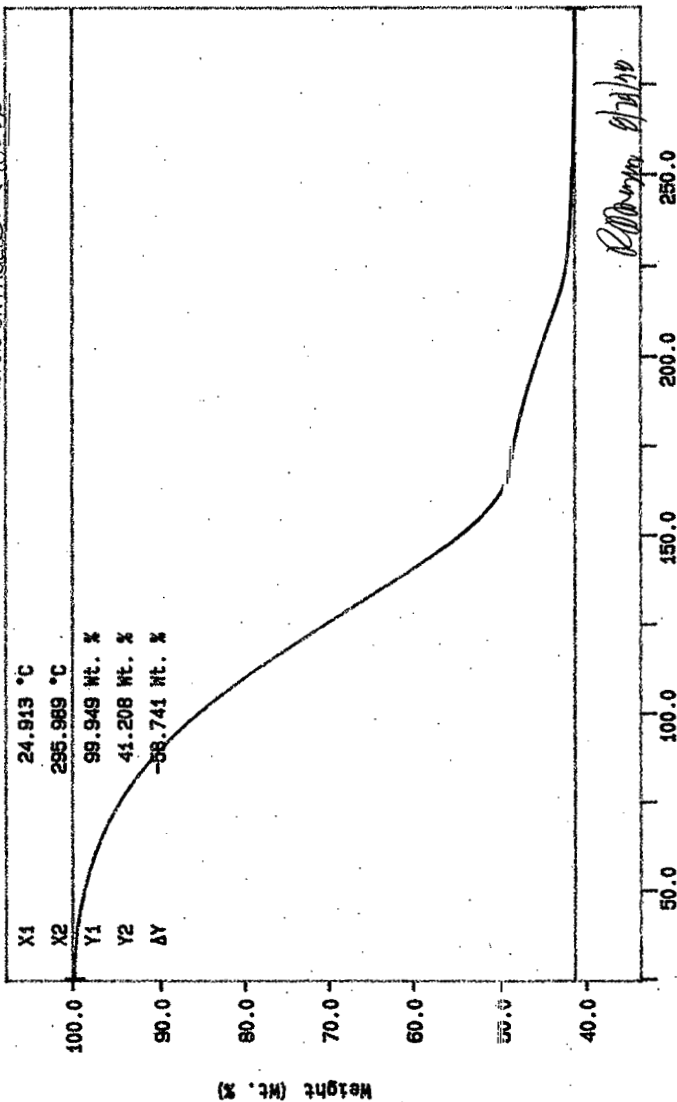
Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



Curve 1: T6A  
 File Info: TER082401 Mon Aug 24 06: 43: 26 1998  
 Sample Weight: 13.830 mg  
 103N8-A STD

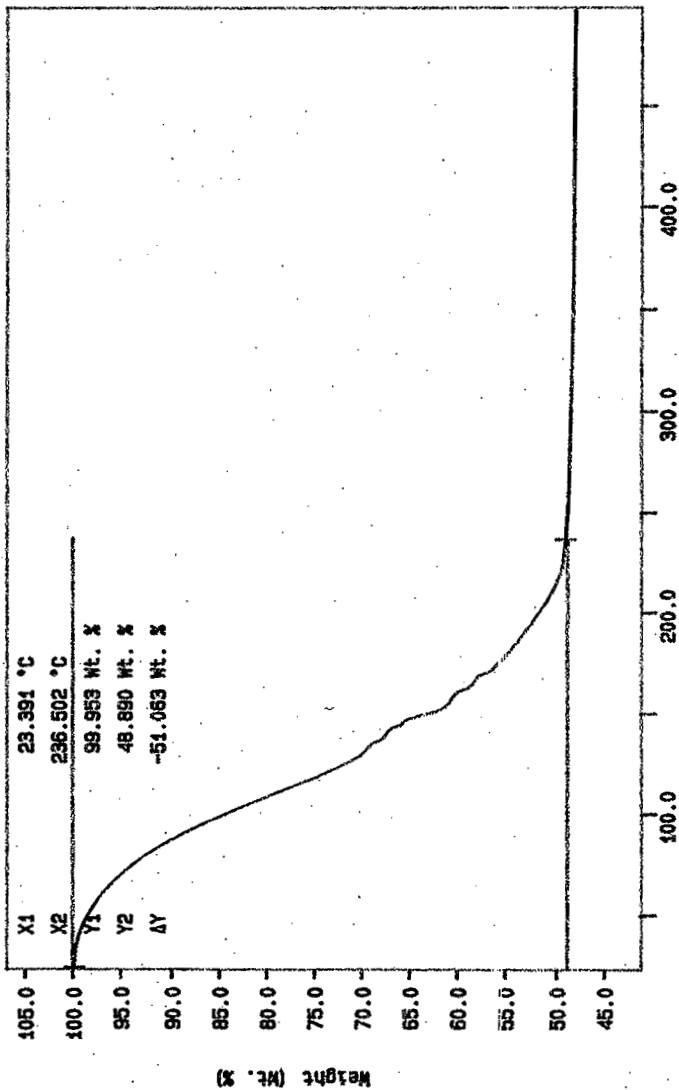
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 372 TO 376



*R. Meyer 8/24/98*

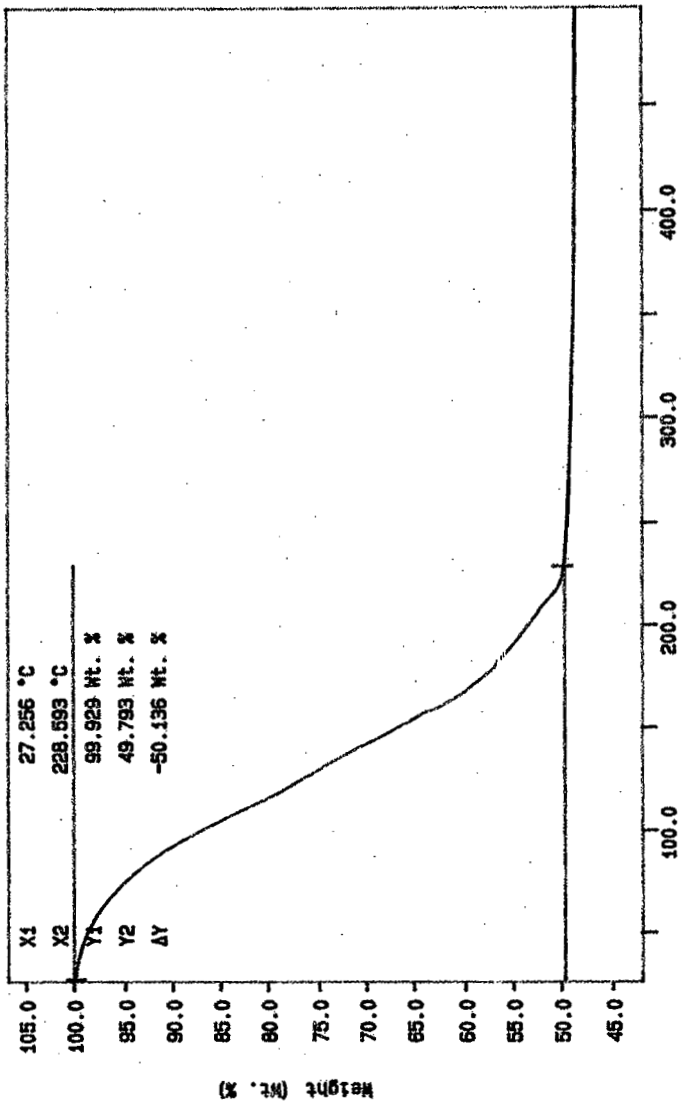
10C/MIN N2  
 THERM: 38.8 g  
 THERM: 38.8 g  
 THERM: 0.0 MIN RATES: 10.0 C/MIN  
 RD MEYERS  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Mon Aug 24 07: 00: 44 1998

Curve 1: TBA  
 File Info: SAM082410 Mon Aug 24 08:58:17 1998  
 Sample Weight: 14.526 mg  
 S98T002039



10C/MIN N2  
 TIME: 55.8 S  
 9.0 AIR RATE: 10.0 C/MIN  
 RD MEYERS  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Mon Aug 24 10:12:46 1998

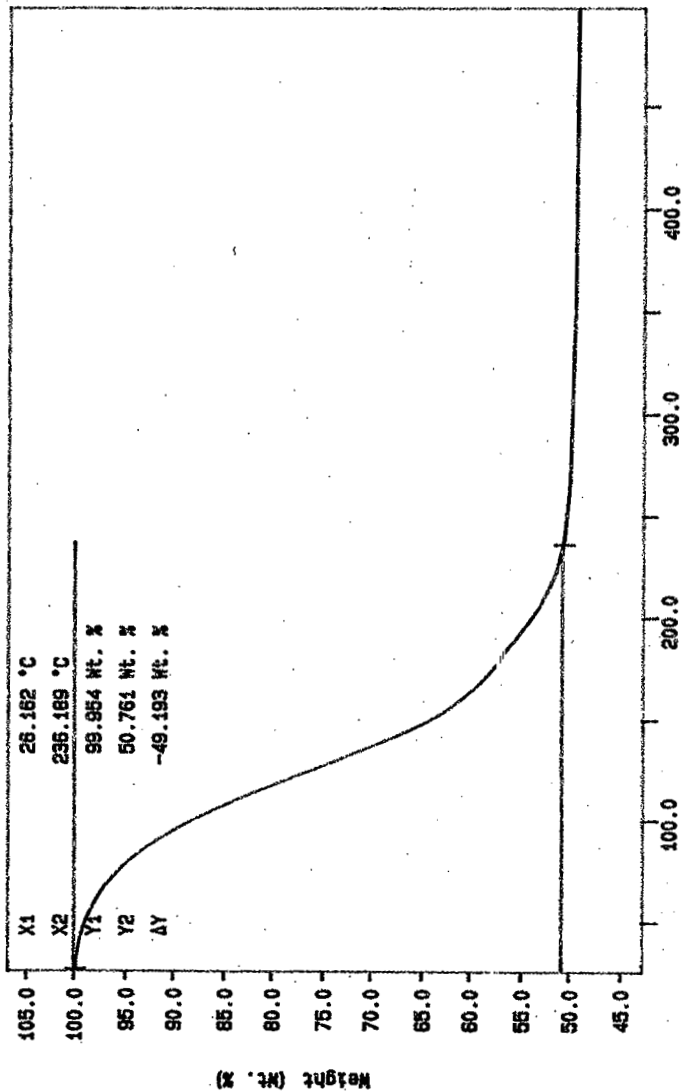
Curve 1: TGA  
 File info: SAM082411 Mon Aug 24 11:05:51 1998  
 Sample Weight: 14.202 mg  
 S98T002039DUP



374

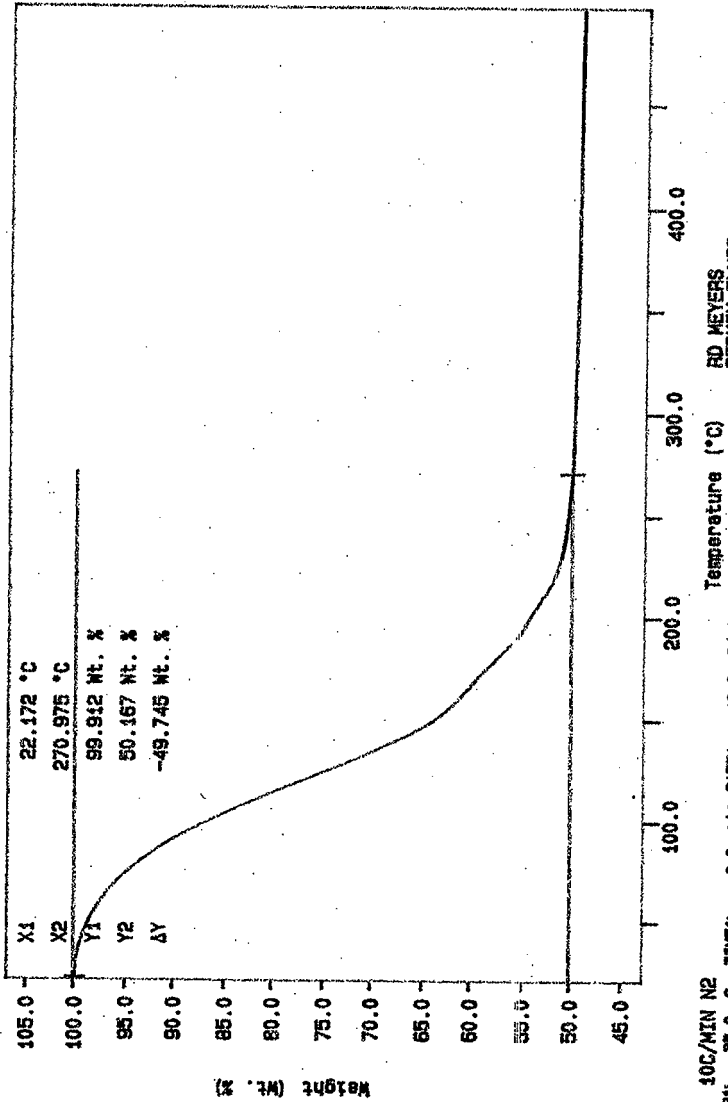
100./MIN N2  
 THERM 25.0 C  
 THERM 500.0 C  
 TIME: 0.0 min RATE: 10.0 C/min  
 RD MEYERS  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Mon Aug 24 12:34:37 1998

Curve 1: TGA  
 File info: SAM082412 Mon Aug 24 13:58:00 1998  
 Sample Weight: 14.854 mg  
 S98T002266



10C/MIN N2  
 TEMPE 88.8 8  
 TIME: 0.0 min RATE: 10.0 C/min  
 RD MEYERS  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Mon Aug 24 14:20:38 1998

Curve 4: TGA  
File Info: SAK082413 Mon Aug 24 15: 16: 30 1998  
Sample Weight: 14.681 mg  
S98T002266DUP



10C/MIN N2  
TBASE 35.0 S  
TBASE 500.0 S  
TIME: 0.0 MIN RATE: 10.0 C/MIN  
RD MEYERS  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 24 15: 29: 17 1998

# LABCORE Data Entry Template for Worklist# 25612

Analyst: JIS Instrument: TGA0 3 Bool: # 1038A-A  
Method: LA-514-114 Rev/Mod D-1  
Worklist Comment: U107 (2), TGA-03 Use <15mg SS. Run under nitrogen. skm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-03	SOLID	<u>59.4</u>	<u>58.58</u>	<u>N/A</u>	%
98000359	U-107 (2)	2 SAMPLE	S98T002272	0	TGA-03	SOLID	<u>N/A</u>	<u>32.38</u>		%
98000359	U-107 (2)	3 DUP	S98T002272	0	TGA-03	SOLID	<u>32.38</u>	<u>33.57</u>	<u>N/A</u>	%
98000358	U-107 (2)	4 SAMPLE	S98T002327	0	TGA-03	SOLID	<u>N/A</u>	<u>9.80</u>		%
98000358	U-107 (2)	5 DUP	S98T002327	0	TGA-03	SOLID	<u>9.80</u>	<u>9.85</u>	<u>N/A</u>	%

Final page for worklist # 25612

Jess Solbeck 8/26/98  
Analyst Signature Date

JM 9/18/98  
Analyst Signature Date

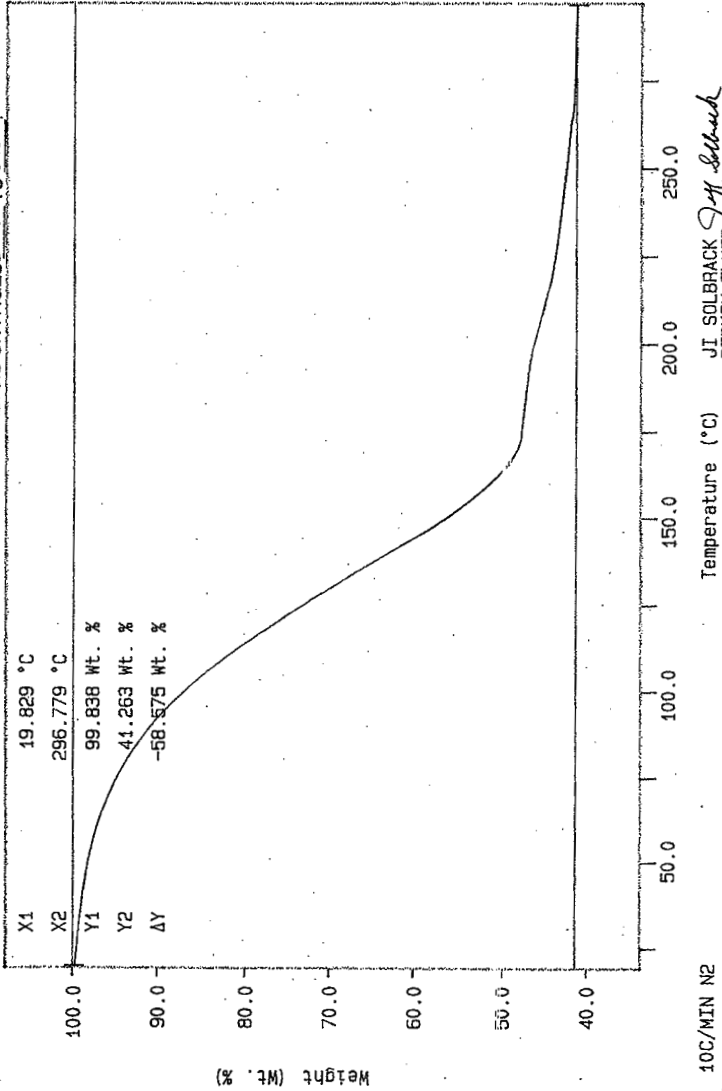
Validated 9/9/98 Machely

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

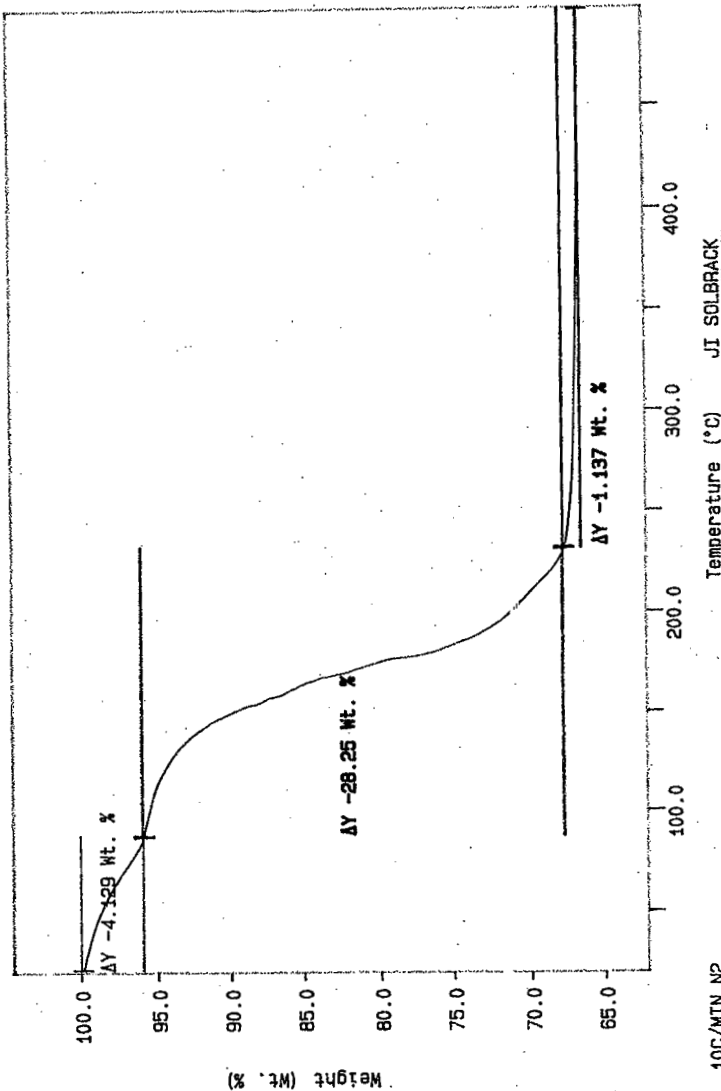
Curve 1: TGA  
File info: TER082601 Wed Aug 26 06:59:34 1998  
Sample Weight: 13.612 mg  
103N8-A STD

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 378 TO 382.



10C/MIN N2  
 TEMP: 35.0 C  
 TIME: 300.0 C  
 0.0 min RATE: 10.0 C/min  
 Temperature (°C)  
 JI SOLBRACK *J. J. Solbrack*  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Wed Aug 26 07:05:38 1998

Curve 1: TGA  
File info: SAM082602 Wed Aug 26 09:17:35 1998  
Sample Weight: 36.391 mg  
S98T002272

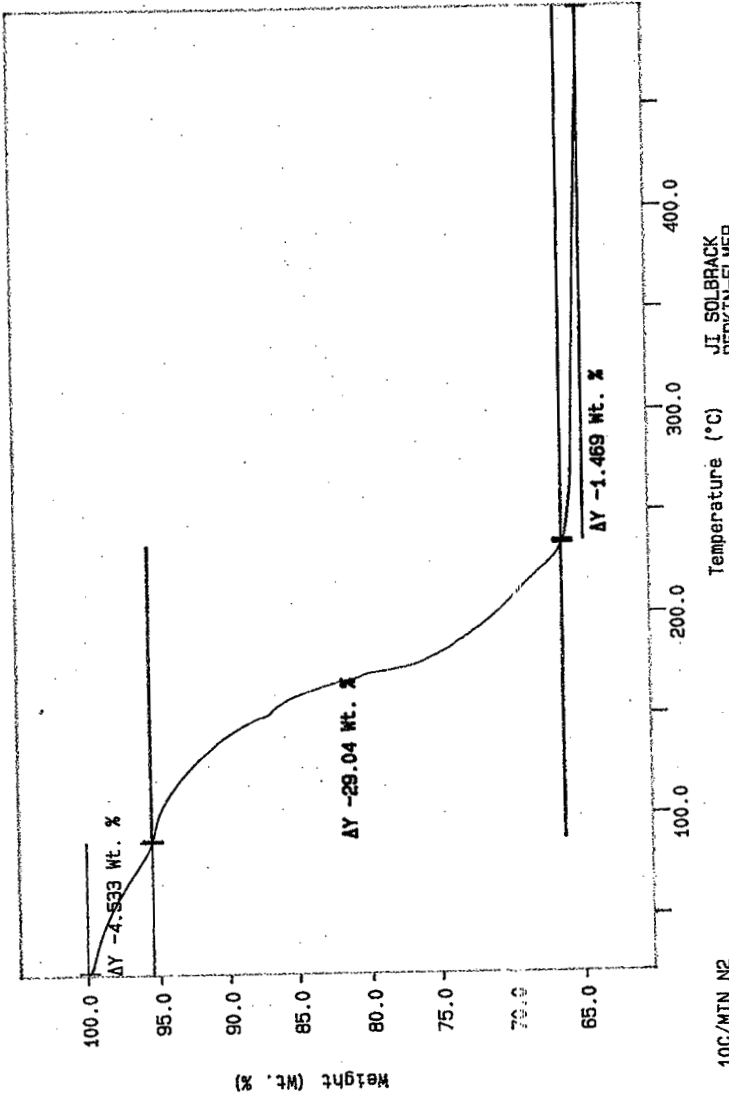


J1 SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 31 08:45:00 1998

10C/MIN N2  
TEMP1: 35.0 C  
TEMP2: 500.0 C  
TIME1: 0.0 min  
RATE1: 10.0 C/min



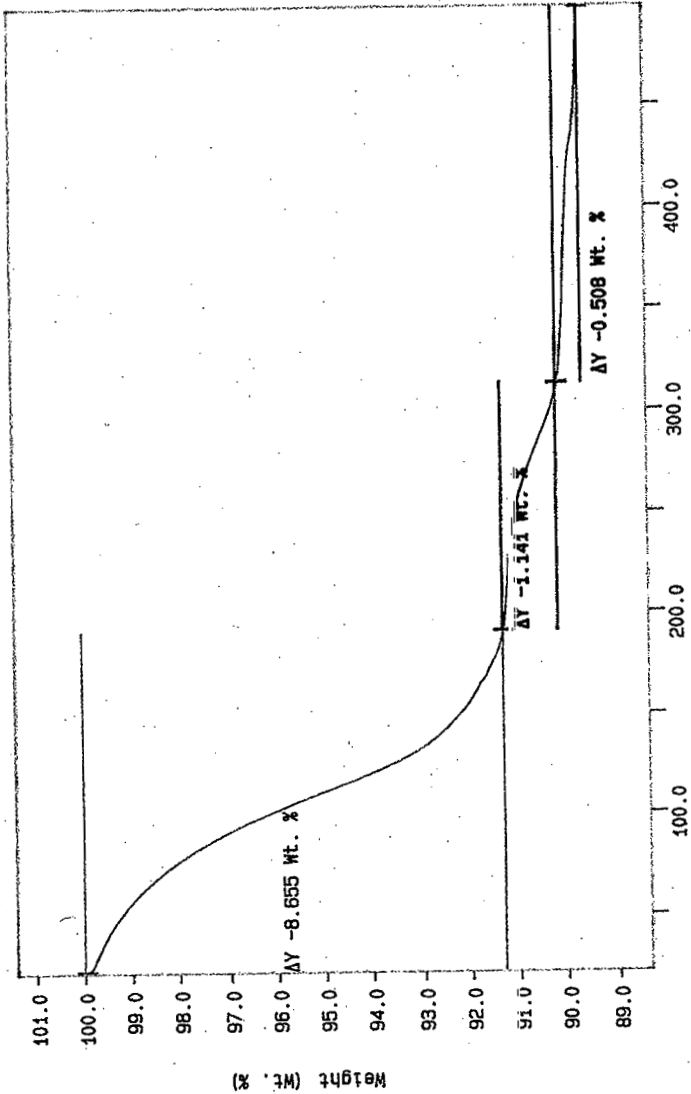
Curve 1: TGA  
File info: SAM082603 Wed Aug 26 10:32:59 1998  
Sample Weight: 23.584 mg  
S98T002272DUP



JJ SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 31 08:46:59 1998

10C/MIN N2  
TEMP: 95.0 C  
TIME: 0  
0.0 min RATE: 10.0 C/min

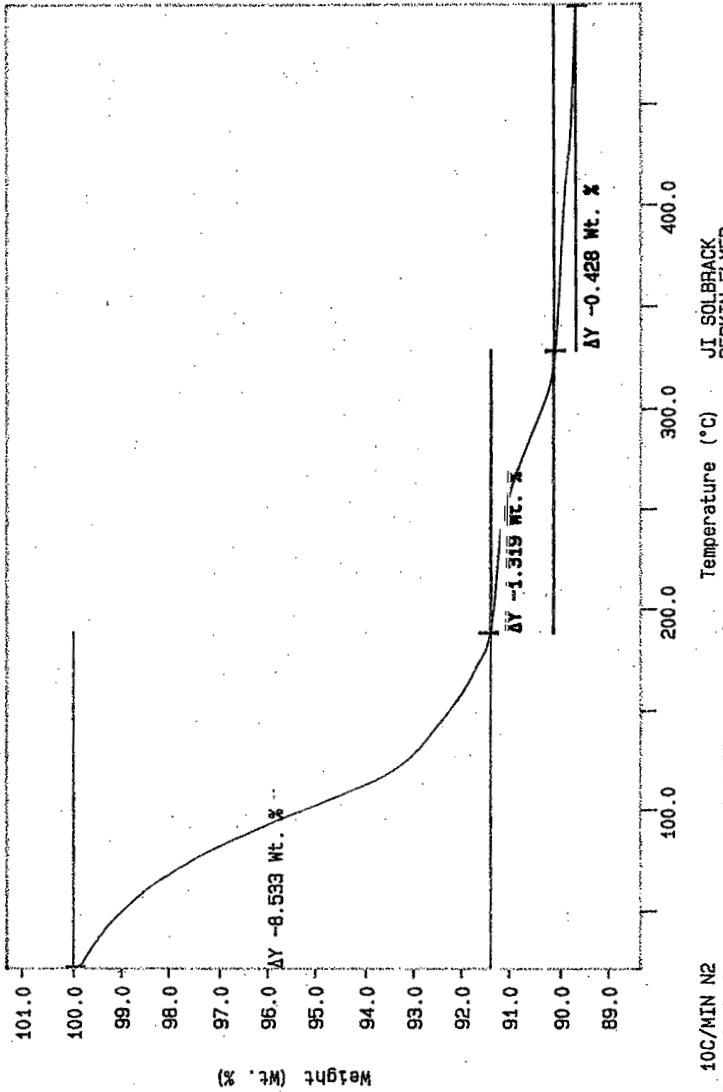
Curve 1: TGA  
File info: SAM082604 Wed Aug 26 11:48:38 1998  
Sample Weight: 22.947 mg  
S98T002327



J1 SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 31 08:48:51 1998

10C/MIN N2  
TEMP: 35.0 C  
TIME: 6  
0.0 min RATE: 10.0 C/min

Curve 1: TGA  
File info: SAM082605 Wed Aug 26 13:06:58 1998  
Sample Weight: 19.864 mg  
S98T002327DUP



10C/MIN N2  
TEMP1: 35.0 C  
TEMP2: 500.0 C  
TIME1: 0.0 min RATE1: 10.0 C/min  
JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 31 08:51 1998

# LABCORE Data Entry Template for Worklist# 25613

Analyst: SLH Instrument: TGA0 3 Bottle # 103 N8-A

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107 (2), TGA-03 Use <15mg SS. Run under nitrogen. skm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-03	SOLID	<u>59.4</u>	<u>59.54</u>	N/A	%
98000358	U-107 (2)	2 SAMPLE	S98T002333	0	TGA-03	SOLID	<u>N/A</u>	<u>39.48</u>		%
98000358	U-107 (2)	3 DUP	S98T002333	0	TGA-03	SOLID	<u>39.48</u>	<u>35.02</u>	N/A	%
98000358	U-107 (2)	4 SAMPLE	S98T002334	0	TGA-03	SOLID	<u>N/A</u>	<u>27.07</u>		%
98000358	U-107 (2)	5 DUP	S98T002334	0	TGA-03	SOLID	<u>27.07</u>	<u>25.99</u>	N/A	%

## Final page for worklist # 25613

Judith Hod Broughton 8/24/98  
Analyst Signature Date

Sam P. Brown 8-25-98  
Analyst Signature Date

Validated 8/29/98 SS Michael

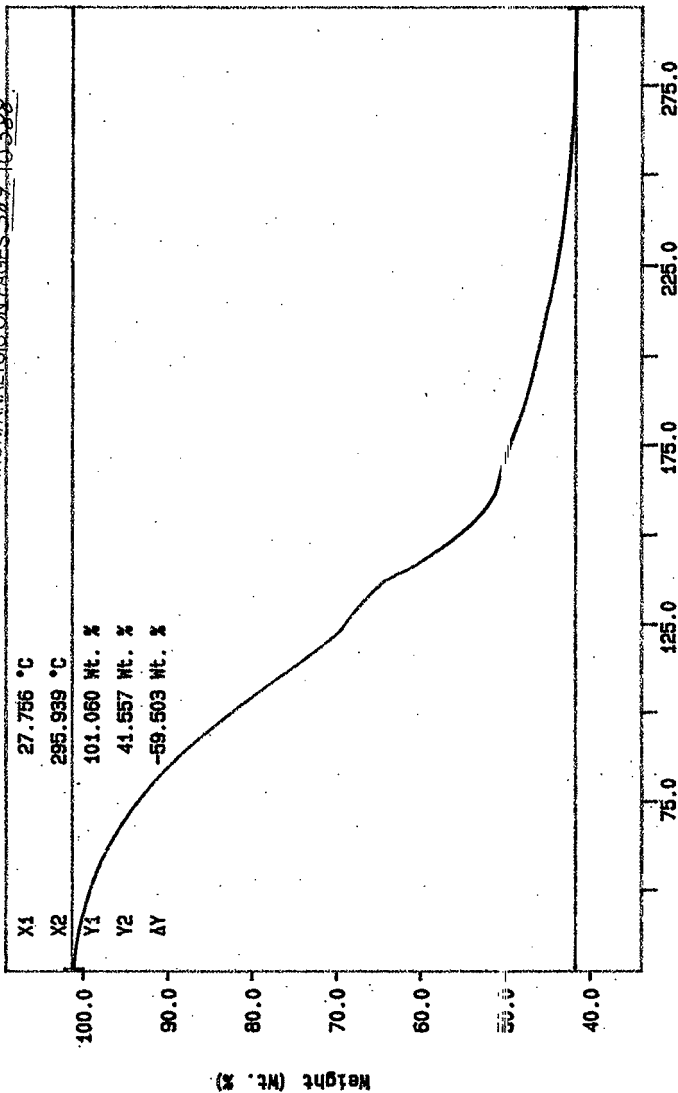
Data Entry Comments:

Weight loss observed above 200°C for both samples. SS 8/24/98

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: TGA  
File info: TER082301 Sun Aug 23 19: 12: 10 1998  
Sample Weight: 15.681 mg  
103NB-A STD

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 387 TO 388



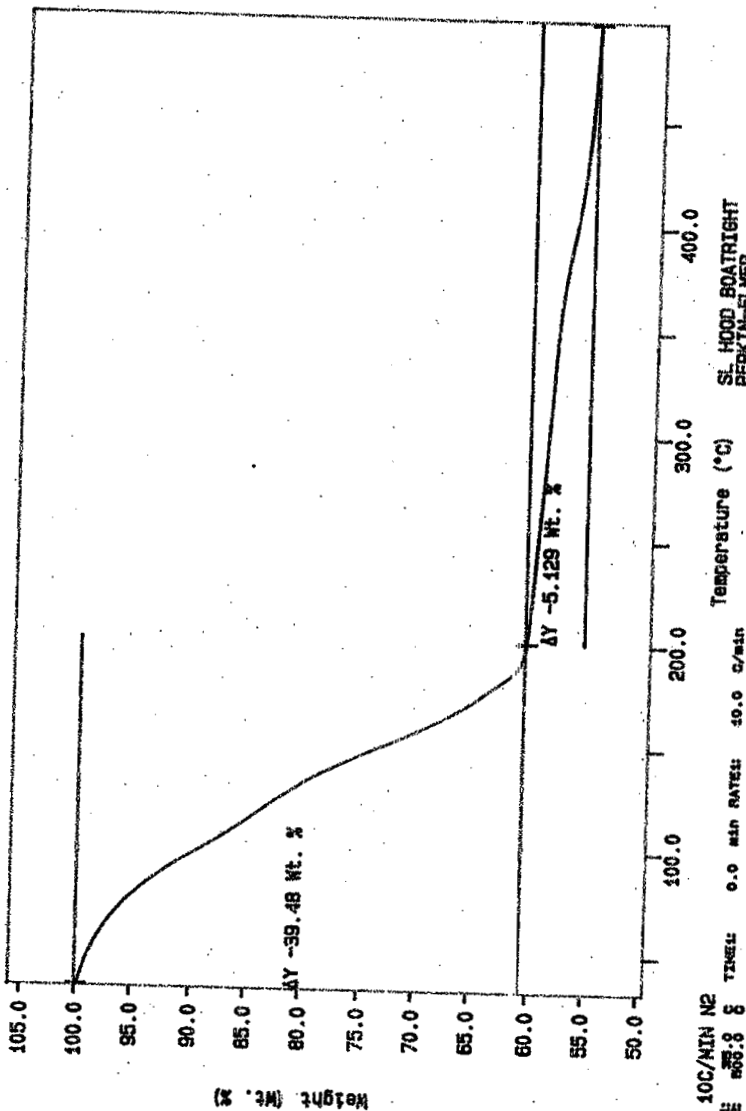
384

SL HOOD BOATRIGHT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sun Aug 23 19: 17: 48 1998

10C/MIN N2  
TEMP 300.0 C  
TIME: 0.0 MIN RATE: 10.0 C/MIN  
Temperature (°C)

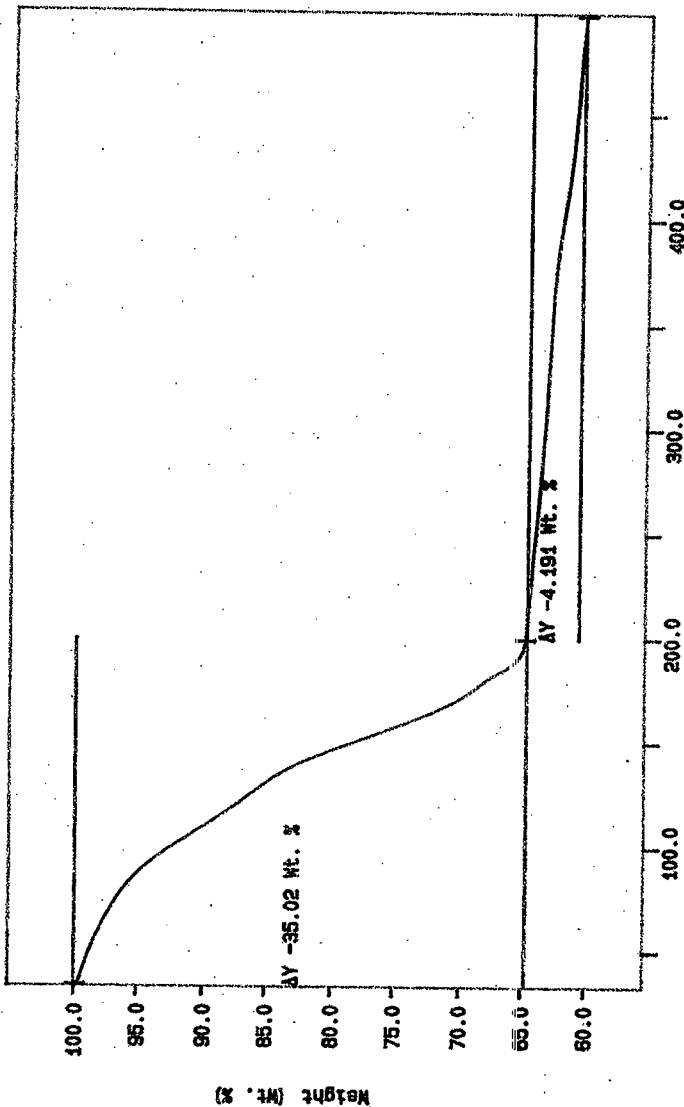
Weight (wt. %)

Curve 1: T6A  
File Info: SAM082401 Mon Aug 24 01:13 1998  
Sample Weight: 8.137 mg  
S98T002333 SAM



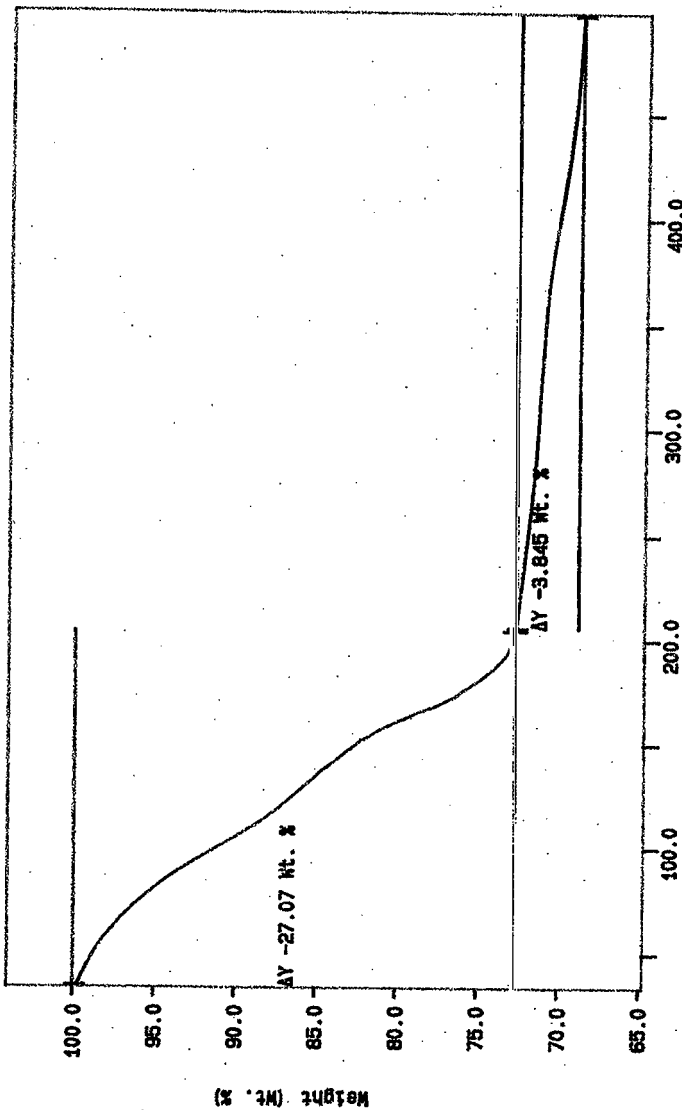
10C/MIN N2  
TEMP 855.0 S  
TIME 0.0 MIN RATE: 10.0 C/MIN  
SL HOOD BOATRIGT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 24 09:11:26 1998

Curve 4: TGA  
File info: SAM082402 Mon Aug 24 02:18:01 1998  
Sample Weight: 13.329 mg  
S98T002333 DUP



100/MIN N2  
TEMPERATURE 350.0 °C  
FLOW RATE 0.0 MIN RATE: 10.0 C/MIN  
SL HOOD BOATRIGT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 24 09:13:18 1998

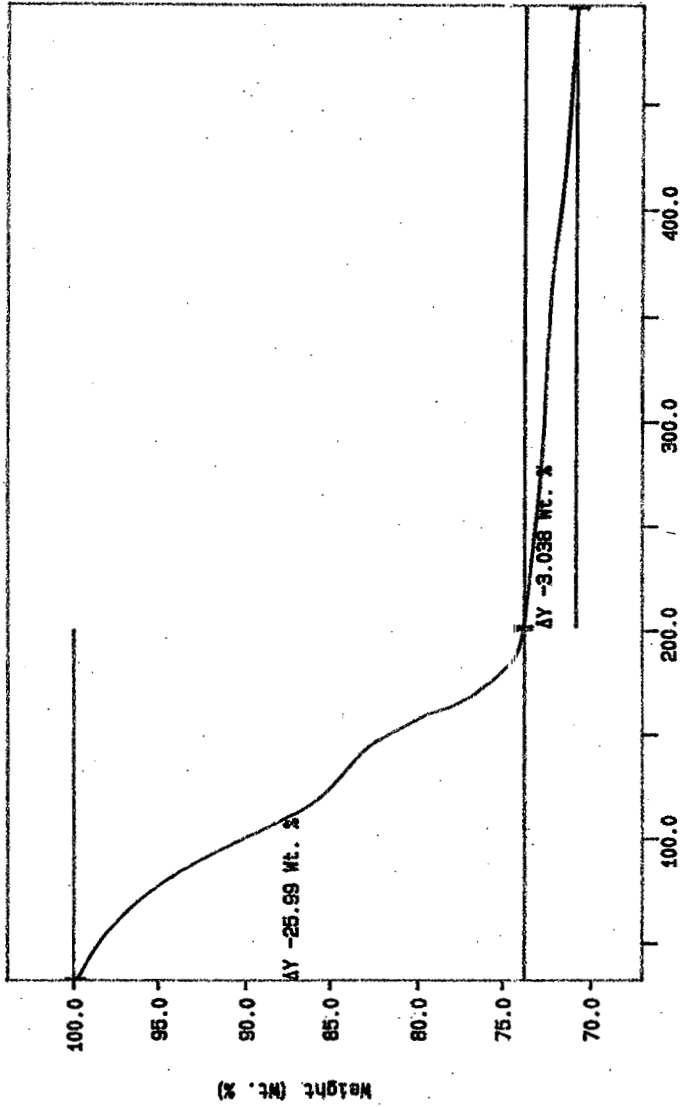
Curve 4: TGA  
File info: SAM082403 Mon Aug 24 03:20:50 1998  
Sample Weight: 14.203 mg  
S98T002334 SAM



100/MIN IN2  
TEMP# 388.8 8 TIME# 0.0 min RATE# 10.0 C/min  
SL HOOD BOATRIGHT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 24 03:15:17 1998



Curve 1: TGA  
File info: SAK082404 Mon Aug 24 04:25:51 1998  
Sample Weight: 13.824 mg  
598T002334 DUP



SL HOOD BOATRIGHT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Mon Aug 24 08:16:59 1998

10C/MIN N2  
TEMP: 500.0 C  
TIME: 0.0 min RATE: 10.0 C/min

# LABCORE Data Entry Template for Worklist# 25938

Analyst: AM Instrument: TGA0 03 Book # 117N8A

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, TGA-03, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-03	LIQUID	<u>59.4</u>	<u>58.90</u>	<u>N/A</u>	%
98000359	U-107 (2)	2 SAMPLE	S98T002251	0	TGA-03	LIQUID	<u>N/A</u>	<u>48.60</u>		%
98000359	U-107 (2)	3 DUP	S98T002251	0	TGA-03	LIQUID	<u>48.60</u>	<u>49.08</u>	<u>N/A</u>	%

Final page for worklist # 25938

AM Analyst Signature 9/20/98 Date

CO. Quinn Analyst Signature 10/2/98 Date

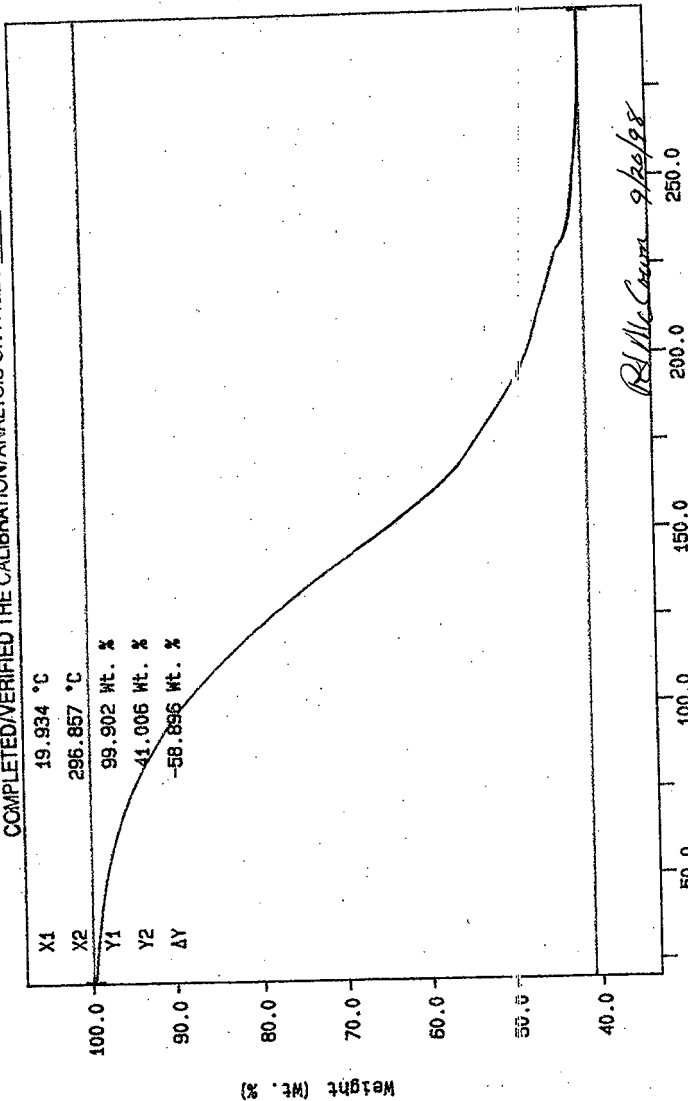
Validated 10/8/98 Machelor

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: TGA  
File info: TER092001 Sun Sep 20 07:08:34 1998  
Sample Weight: 25.948 mg  
117NB-A

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 392 TO 398.

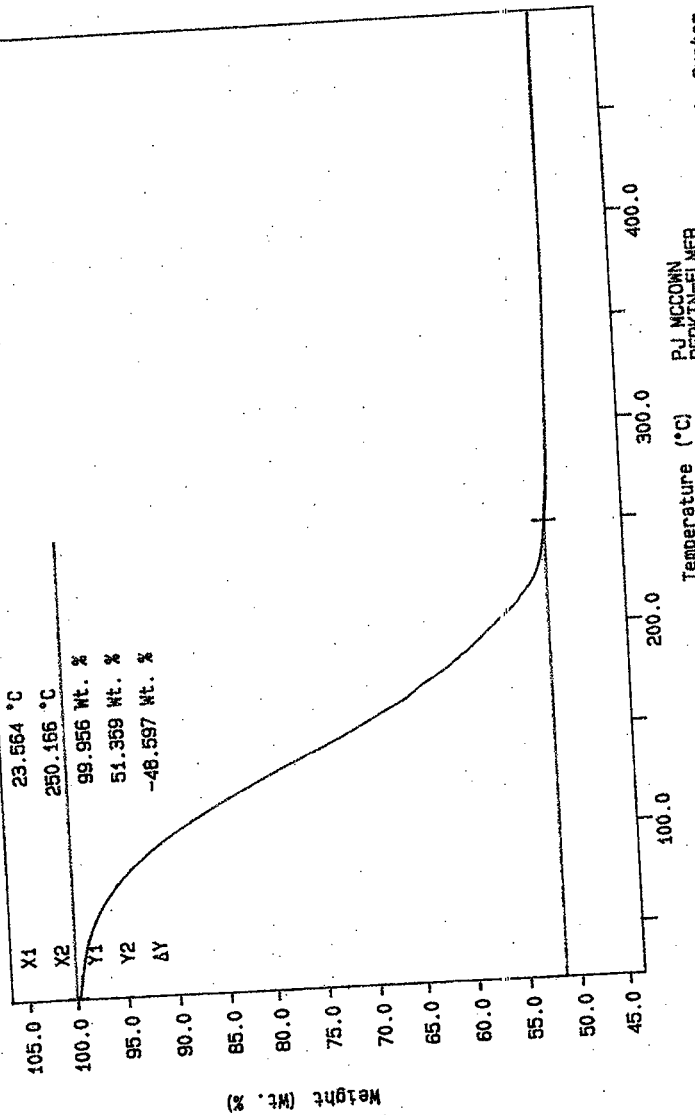


*R. McCarty 9/20/98*

PJ MCCOWN  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sun Sep 20 07:19:04 1998

10C/MIN N2  
TEMP: 350.0 C  
TIME: 0.0 MIN RATE: 10.0 C/MIN

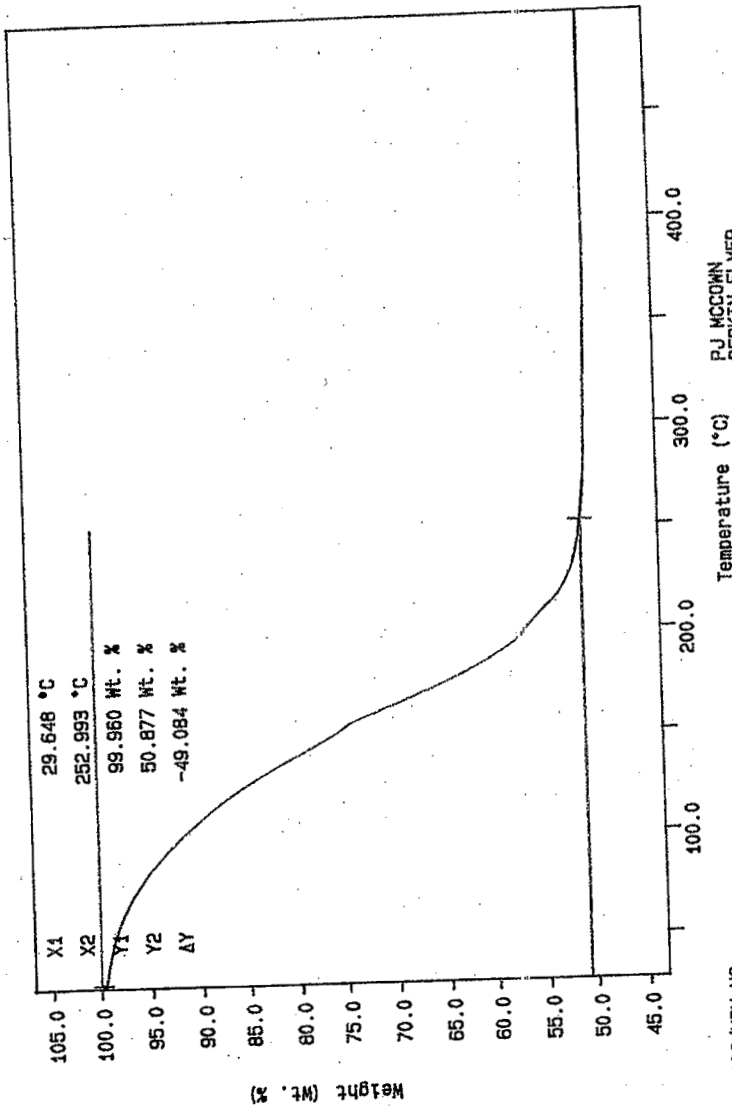
Curve 1: TGA  
File info: SAM092001 Sun Sep 20 08:18:00 1998  
Sample Weight: 15.910 mg  
S98T002251



PJ MCCOMB  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sun Sep 20 08:20:12 1998

10C/MIN N2  
0.0 min RATE: 10.0 C/min  
TIME: 35.8 C  
506.8 C

Curve 1: TGA  
 File info: SAM032002 Sun Sep 20 09:24:33 1998  
 Sample Weight: 26.874 mg  
 S98T002251 DUP



PJ MCCOMM  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Sun Sep 20 10:03:16 1998

100/MIN N2  
 TEM: 50.0 C  
 TIME: 0.0 min RATE: 10.0 C/min

worklist rpt Version 2.1 05/15/95  
08/28/98 08:18

Page: 1

## LABCORE Data Entry Template for Worklist# 25940

Analyst: Bill Instrument: TGA0 03 Booth # 117 N8AMethod: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, TGA-03, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-03	SOLID	<u>59.4</u>	<u>58.90x</u>	<u>N/A</u>	%
98000358	U-107 (2)	2 SAMPLE	S98T002342	0	TGA-03	SOLID	<u>N/A</u>	<u>8.20</u>		%
98000358	U-107 (2)	3 DUP	S98T002342	0	TGA-03	SOLID	<u>8.20</u>	<u>7.55</u>	<u>N/A</u>	%

Final page for worklist # 25940

Bill McCann 9/20/98  
Analyst Signature Date

C.J. Quinn 10/7/98  
Analyst Signature Date

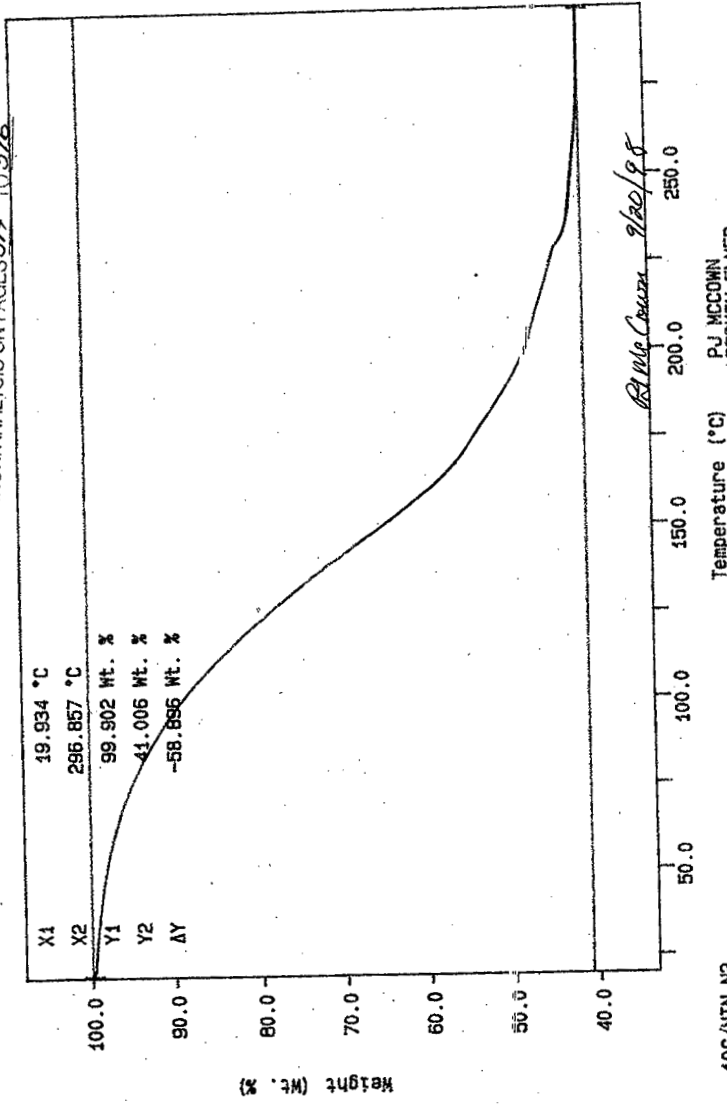
Validated 10/8/98 Michelle

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: T6A  
File info: TER092001 Sun Sep 20 07: 08: 34 1998  
Sample Weight: 25.948 mg  
117NB-A

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 394 TO 396



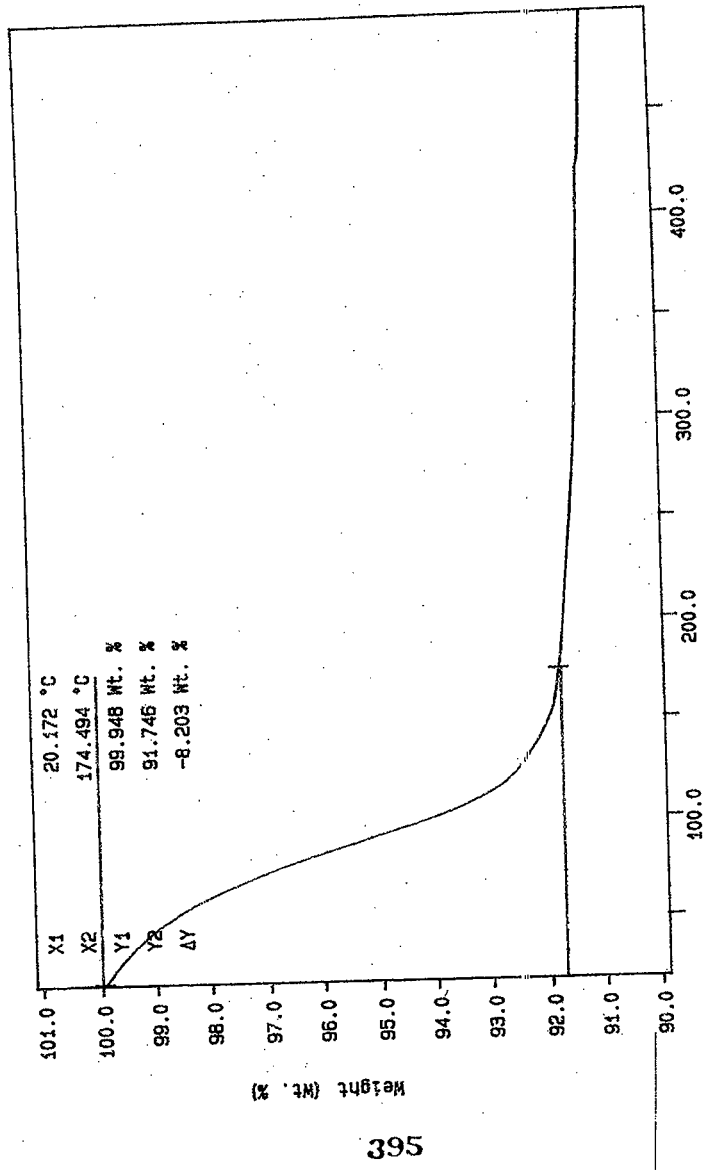
*PJ McCown 9/20/98*

10C/MIN N2  
 TEMP: 35.0 C  
 TIME: 360.0 S  
 10.0 C/min  
 RATE: 0.0 min

Temperature (°C)

PJ MCCOWN  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Sun Sep 20 07: 17: 15 1998

Curve 1: TGA  
File info: SAM092003 Sun Sep 20 10:59:56 1998  
Sample Weight: 12.960 mg  
S98T002342

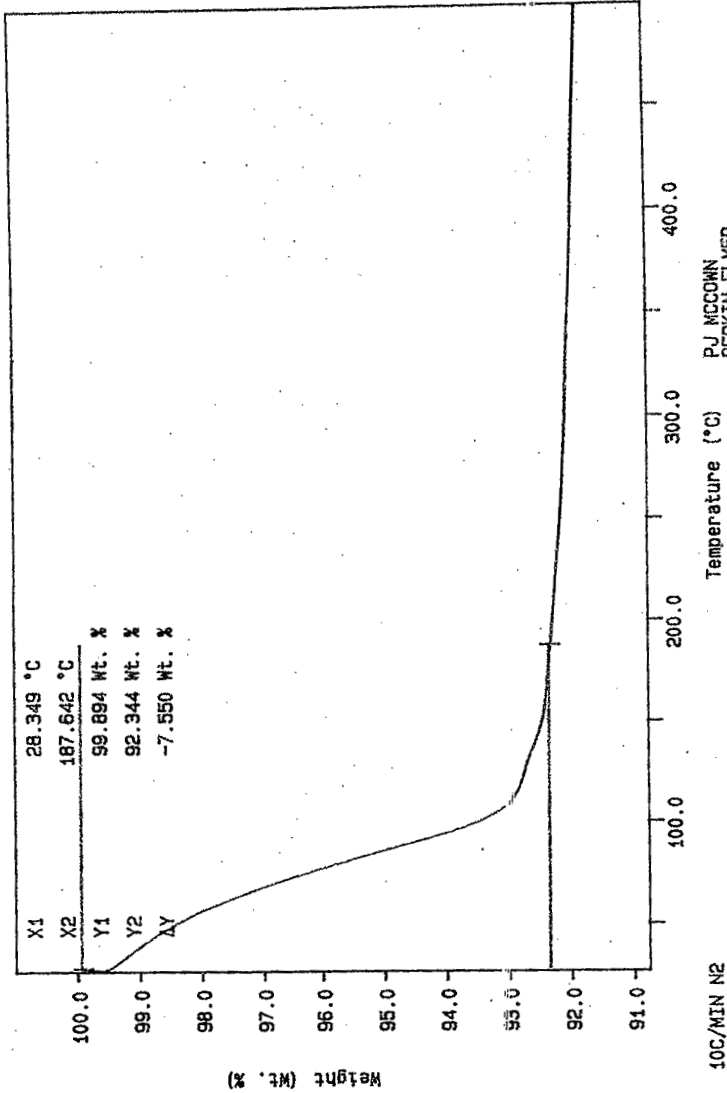


10C/MIN N2  
TEMP: 50.0 °C  
TIME: 0.0 min  
RATES: 10.0 C/min

PJ MCCOWN  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sun Sep 20 11:05:26 1998



Curve 1: TGA  
 File Info: SAM02004 Sun Sep 20 12:07:22 1998  
 Sample Weight: 11.982 mg  
 S98T02342 DUP



PJ MCCOWN  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Sun Sep 20 12:45:13 1998

10C/MIN N2  
 TEMP: 500.0 °C  
 TIME: 0.0 min RATE: 10.0 C/min

# LABCORE Completed Worklist Report for Worklist# 26135

Analyst: jis Instrument: TGA03 Book#: 117N8A


Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, TGA-03, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0	TGA-03	LIQUID	5.94e1	58.74	38.899 % Recovery	
2 SAMPLE	S98T002465 0	TGA-03	LIQUID	N/A	47.92	%	
3 DUE	S98T002465 0	TGA-03	LIQUID	47.92	47.07	1.790 RFD	
4 SAMPLE	S98T002524 0	TGA-03	LIQUID	N/A	51.57	%	
5 DUE	S98T002524 0	TGA-03	LIQUID	51.57	51.59	0.039 RFD	

Final page for worklist# 26135

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

 9/21/98  
Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

 9/23/98  
Reviewer Signature \_\_\_\_\_ Date \_\_\_\_\_

# LABCORE Data Entry Template for Worklist# 26135

Analyst: UJ8 Instrument: TGA0 3 Book # 117N8-A

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, TGA-03, tdm

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	LIQUID	<u>59.4</u>	<u>58.74</u>	<u>N/A</u>	%
98000401	U-107 (2)	2	SAMPLE	S98T002465	0		TGA-03	LIQUID	<u>N/A</u>	<u>47.92</u>		%
98000401	U-107 (2)	3	DUP	S98T002465	0		TGA-03	LIQUID	<u>47.92</u>	<u>47.07</u>	<u>N/A</u>	%
98000401	U-107 (2)	4	SAMPLE	S98T002524	0		TGA-03	LIQUID	<u>N/A</u>	<u>51.57</u>		%
98000401	U-107 (2)	5	DUP	S98T002524	0		TGA-03	LIQUID	<u>51.57</u>	<u>51.59</u>	<u>N/A</u>	%

## Final page for worklist # 26135

Jeff Sedwick  
Analyst Signature Date 091798

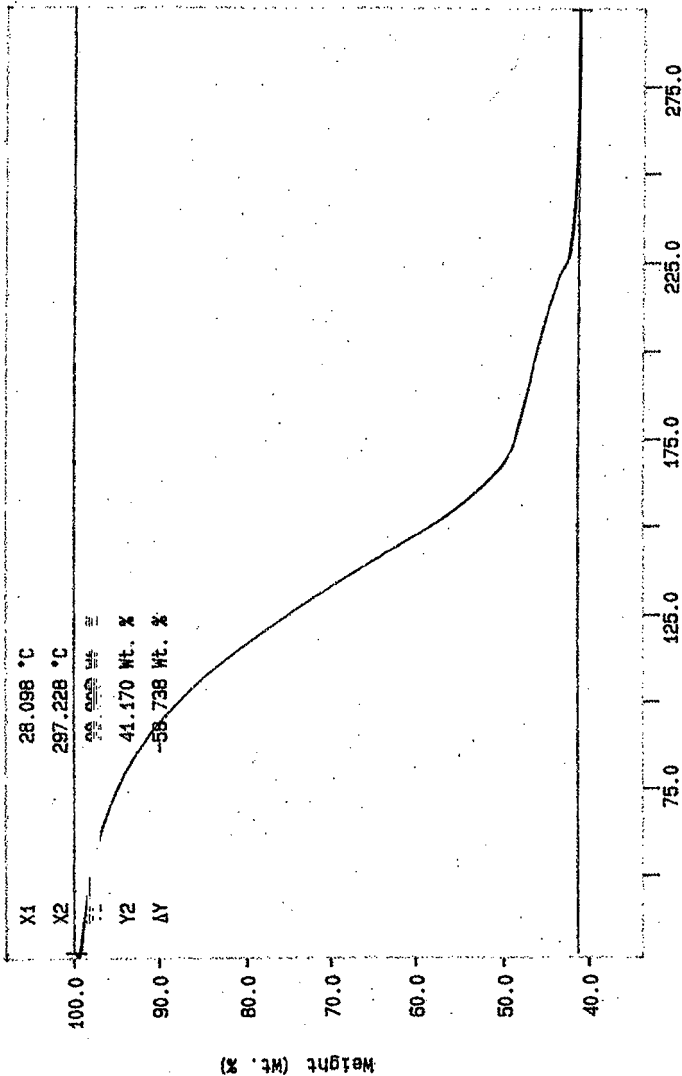
\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments: SAM: S98T002465 Dup was held up at beginning of run  
due to computer glitch

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: TGA  
File info: TER091702 Thu Sep 17 18:54:15 1988  
Sample Weight: 16.430 mg  
117NB-A

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 392 TO 393.



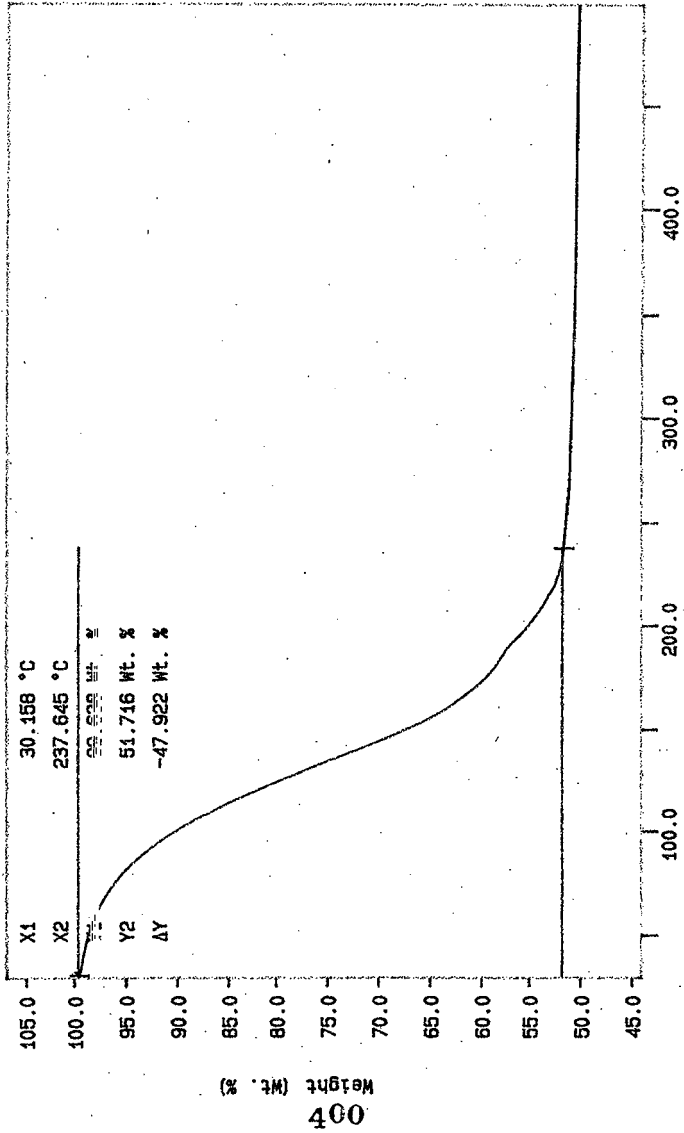
JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 17 18:00:55 1988

Temperature (°C)

100./MIN N2  
TEMP: 35.0 C  
TIME: 0.0 min RATE: 10.0 C/min

666

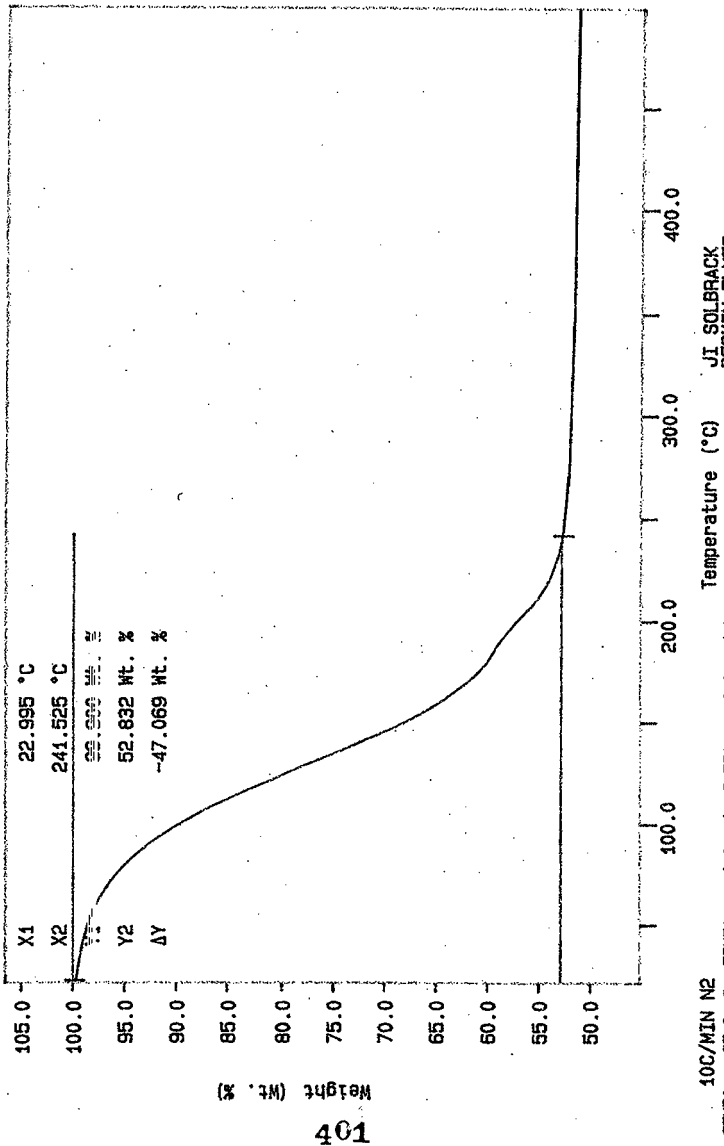
Curve 4: TGA  
File info: SAM091703 Thu Sep 17 19: 57: 55 1998  
Sample Weight: 14.405 mg  
S98T002465



10C/MIN N2  
 TEMP1: 35.0 C  
 TEMP2: 500.0 C  
 TIME1: 0.0 min RATE1: 10.0 C/min  
 TIME2: 400.0 min RATE2: 10.0 C/min

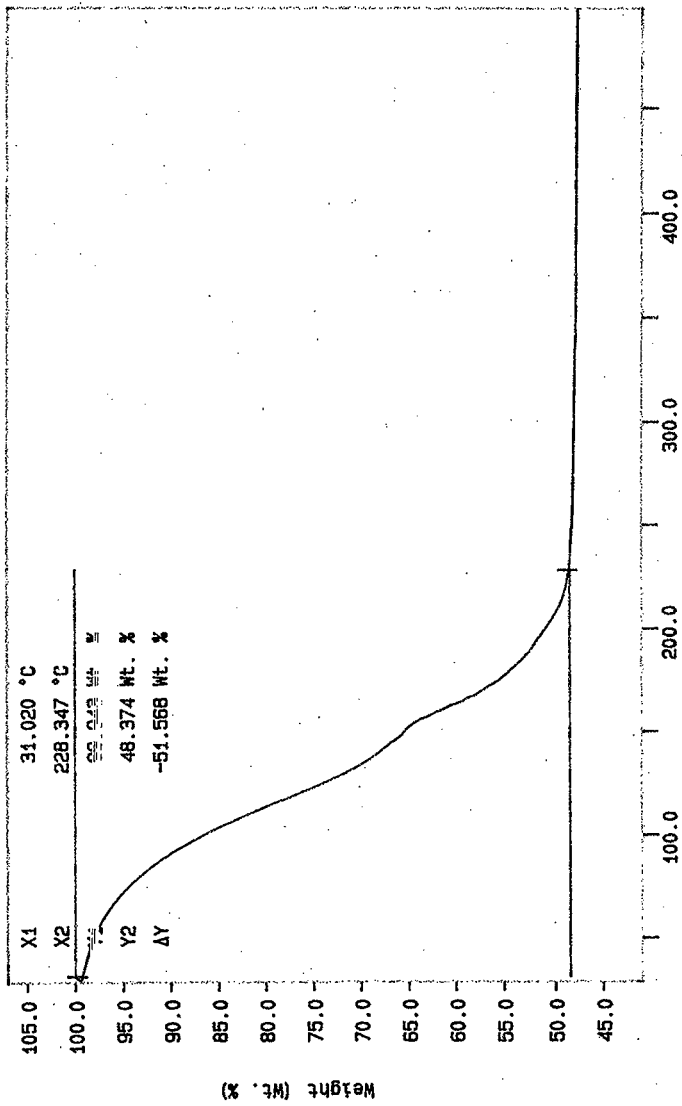
JI SOLBRACK  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Thu Sep 17 20: 00: 13 1998

Curve 1: TGA  
File info: SAM091704 Thu Sep 17 21:09:45 1998  
Sample Weight: 14.878 mg  
S98T002465DUP



10C/MIN N2  
 TEMPE: 35.0 C  
 TEMPE: 500.0 C  
 TIME: 0.0 min RATE: 10.0 C/min  
 JI SOLBRACK  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Thu Sep 17 21:14:45 1998

Curve 1: TGA  
File info: SAM091705 Thu Sep 17 22:15:55 1998  
Sample Weight: 14.361 mg  
S98T002524

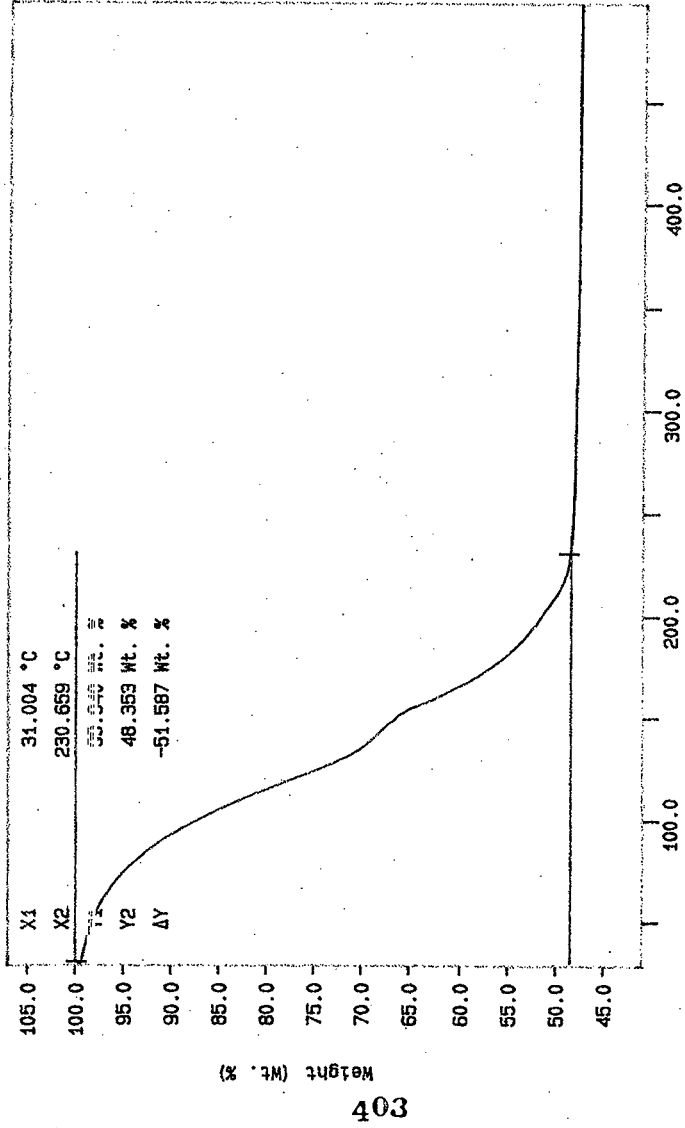


10C/MIN N2  
 TEMP: 35.0 C  
 TIME: 555.0 S  
 0.0 min RATE: 10.0 C/min  
 Temperature (°C)  
 400.0  
 300.0  
 200.0  
 100.0  
 50.0  
 45.0

JI SOLBRACK  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Thu Sep 17 22:21:48 1998

402

Curve 1: TGA  
File info: SAM091706 Thu Sep 17 23: 22: 10 1998  
Sample Weight: 13.956 mg  
S98T002524DUP



JJ SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 17 23: 25: 20 1998

40C/MIN N2  
TEMP: 35.9 C  
TIME: 866.8 S  
RATES: 0.0 min RATE: 10.0 C/min



# LABCORE Data Entry Template for Worklist# 26136

Analyst: SLH Instrument: TGA0 3 Book # 117N8-A

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, TGA-03, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-03	LIQUID	<u>59.4</u>	<u>60.77</u>	<u>N/A</u>	%
98000401	U-107 (2)	2 SAMPLE	S98T002533 0		TGA-03	LIQUID	<u>N/A</u>	<u>51.62</u>		%
98000401	U-107 (2)	3 DUP	S98T002533 0		TGA-03	LIQUID	<u>51.62</u>	<u>50.91</u>	<u>N/A</u>	%

### Final page for worklist # 26136

Andrew Hood Bestright  
Analyst Signature Date

C.J. Quinn 10/7/98  
Analyst Signature Date

9-20-98

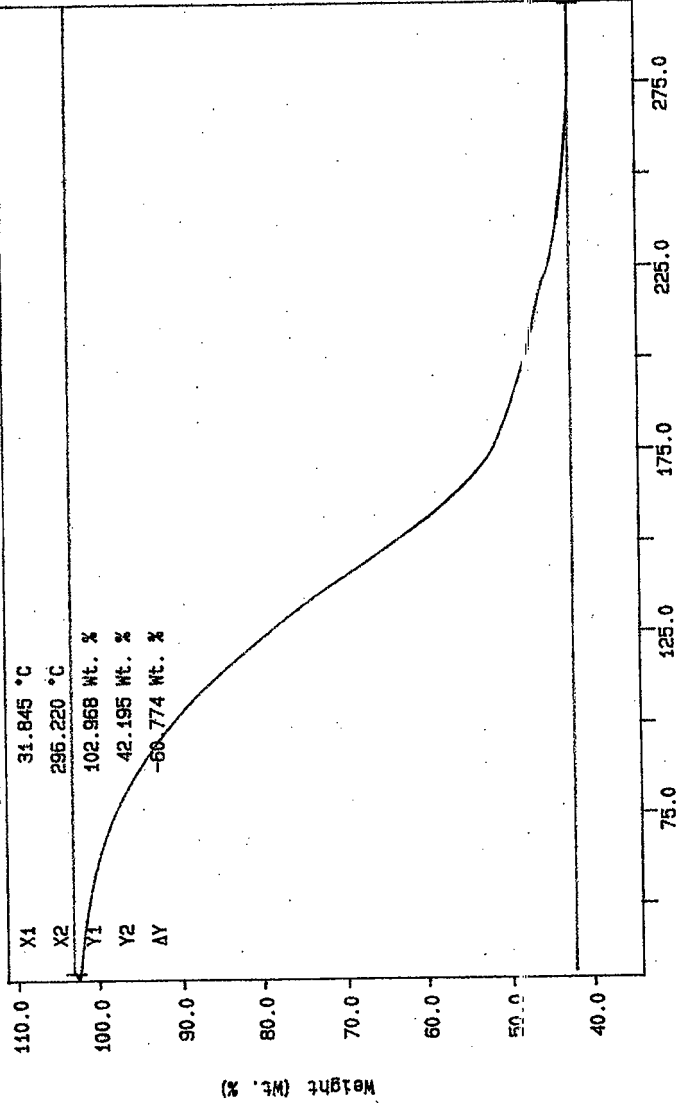
Validated 10/8/98 Bachelor

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: TGA  
File Info: TER031901 Sat Sep 19 02:38:43 1998  
Sample Weight: 19.481 mg  
117NB-A

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 225 TO 226.

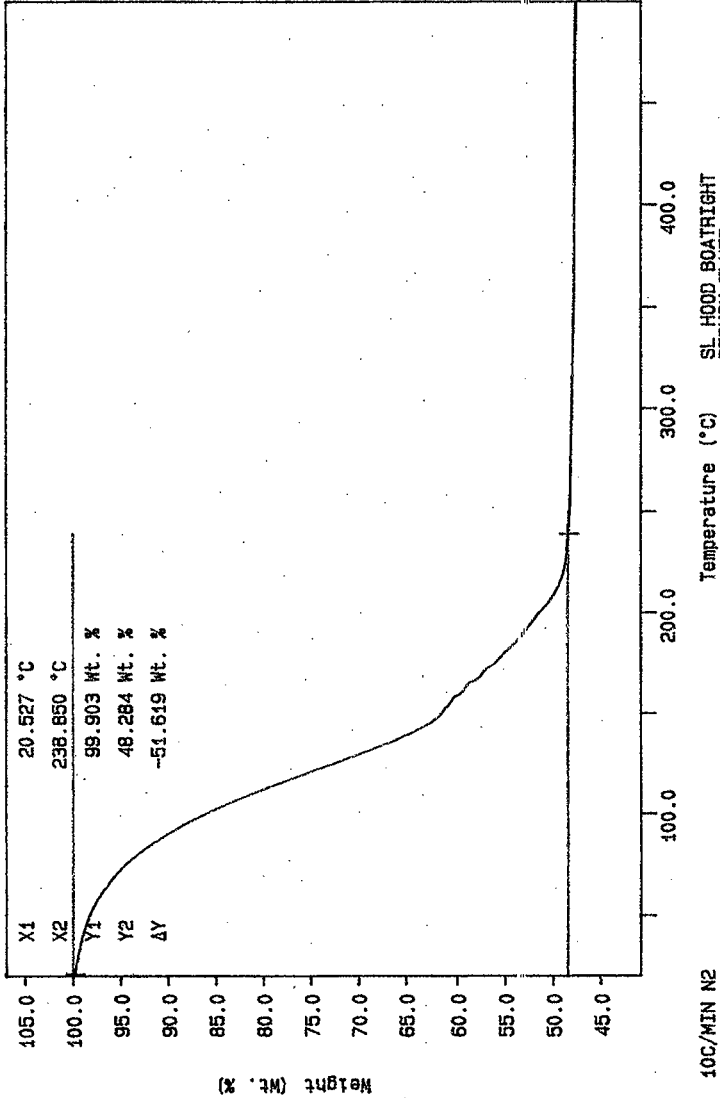


*Signature*  
S. Hood Boatright

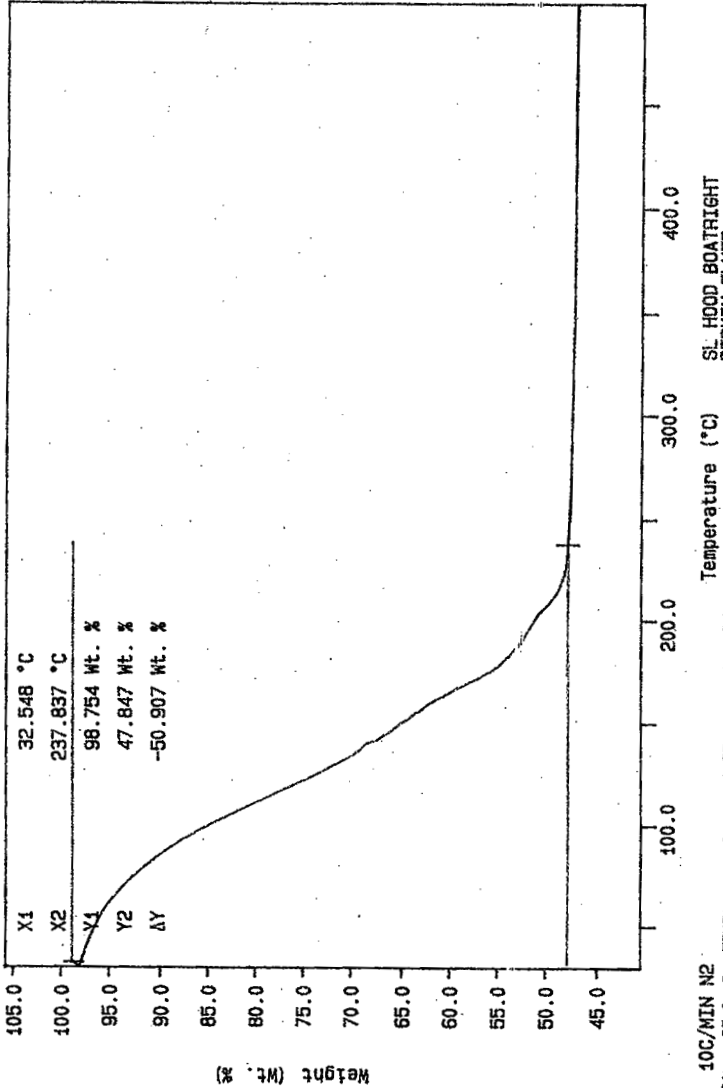
SL HOOD BOATRIGHT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sat Sep 19 20:10:11 1998

100/MIN N2  
TEMP: 50.0 C  
TIME: 300.0 S  
100/MIN N2  
TEMP RATE: 10.0 C/min  
0.0 min RATE: 10.0 C/min

Curve 1: TGA  
File Info: SAM091907 Sat Sep 19 23:14:53 1998  
Sample Weight: 14.196 mg  
S98T002533



Curve 1: T6A  
File info: SAM091908 Sun Sep 20 00:20:46 1998  
Sample Weight: 15.986 mg  
S98T002533 DUP



10C/MIN N2  
TEMP: 400.0 C  
TIME: 886.0 S  
RATES: 0.0 min RATE: 10.0 C/min  
SL: HOOD BOATRIGT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sun Sep 20 00:39:24 1998

# LABCORE Data Entry Template for Worklist# 26137

Analyst: KRM Instrument: TGA0 3 Boks # 117N8A

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, TGA-03, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-03	SOLID	<u>59.4</u>	<u>58.93</u>	N/A	%
98000401	U-107 (2)	2 SAMPLE	S98T002528	0	TGA-03	SOLID	N/A	<u>57.47</u>		%
98000401	U-107 (2)	3 DUP	S98T002528	0	TGA-03	SOLID	<u>51.47</u>	<u>51.75</u>	N/A	%
98000401	U-107 (2)	4 SAMPLE	S98T002537	0	TGA-03	SOLID	N/A	<u>25.90</u>		%
98000401	U-107 (2)	5 DUP	S98T002537	0	TGA-03	SOLID	<u>25.90</u>	<u>29.25</u>	N/A	%

Final page for worklist # 26137

[Signature]  
Analyst Signature Date 9-18-98

[Signature]  
Analyst Signature Date 10/7/98

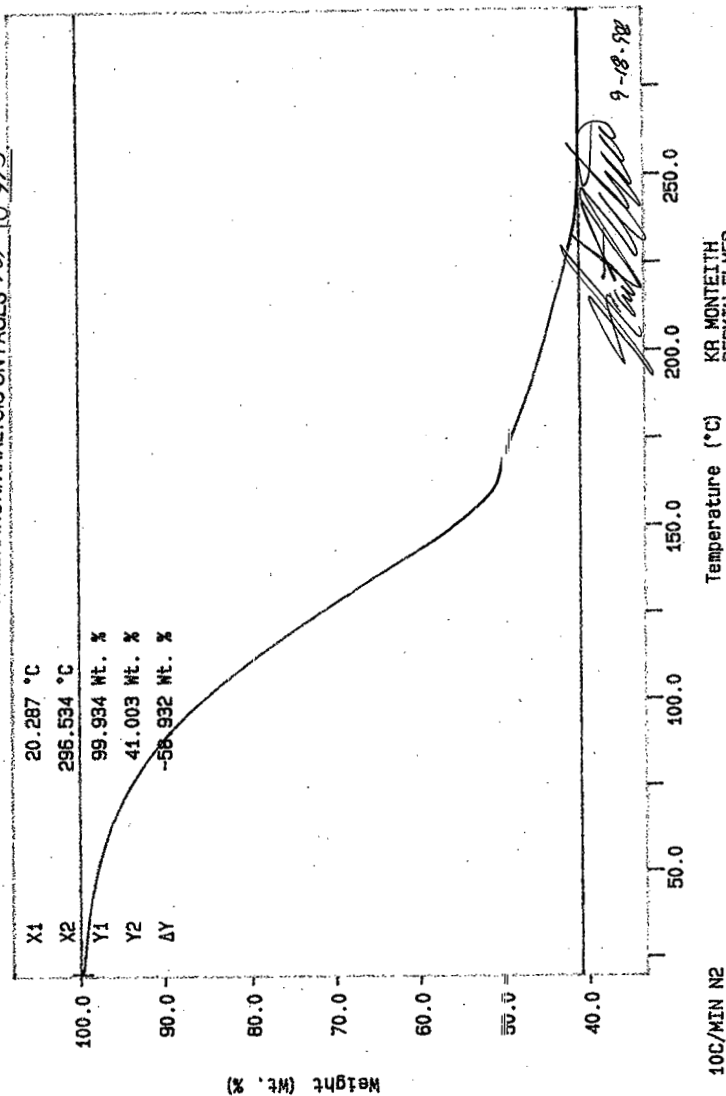
Validated 10/8/98 [Signature]

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: T6A  
 File info: TER091801 Fri Sep 18 06:53:57 1998  
 Sample Weight: 14.173 mg  
 117NB-A

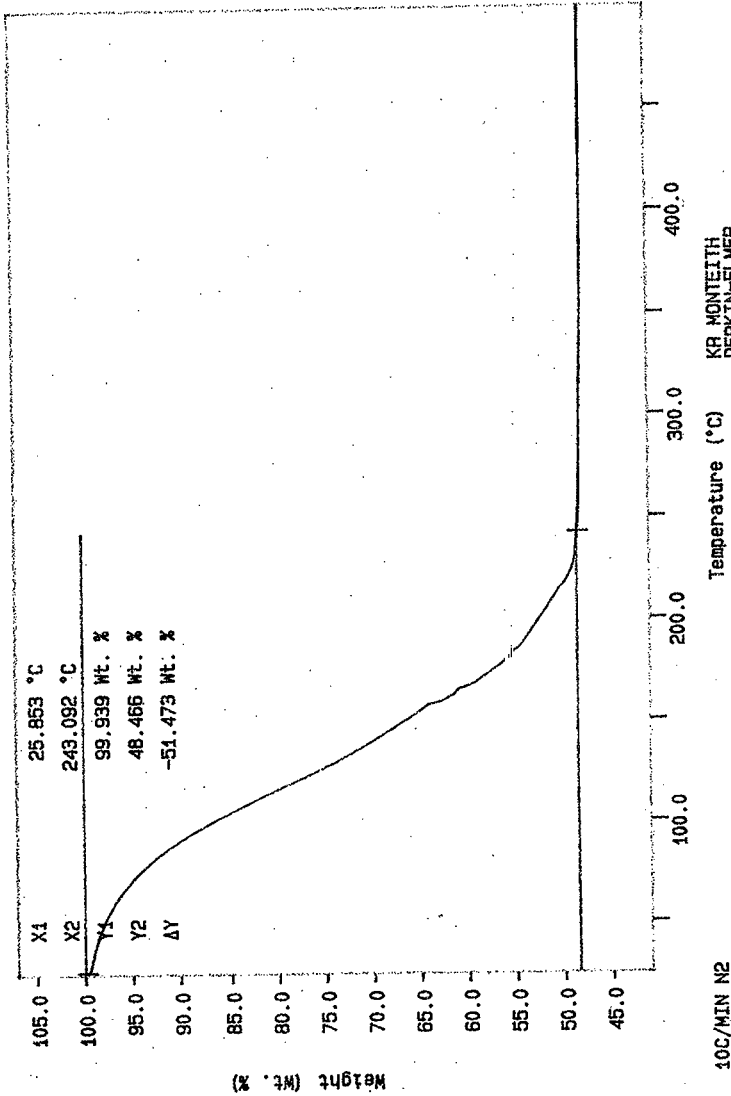
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1/2 TO 4/3



KR MONTEITH  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Fri 1 Sep 18 06:56:19 1998

10C/MIN N2  
 THERM: 300.0 °C  
 TIME: 0.0 min RATE: 10.0 C/min

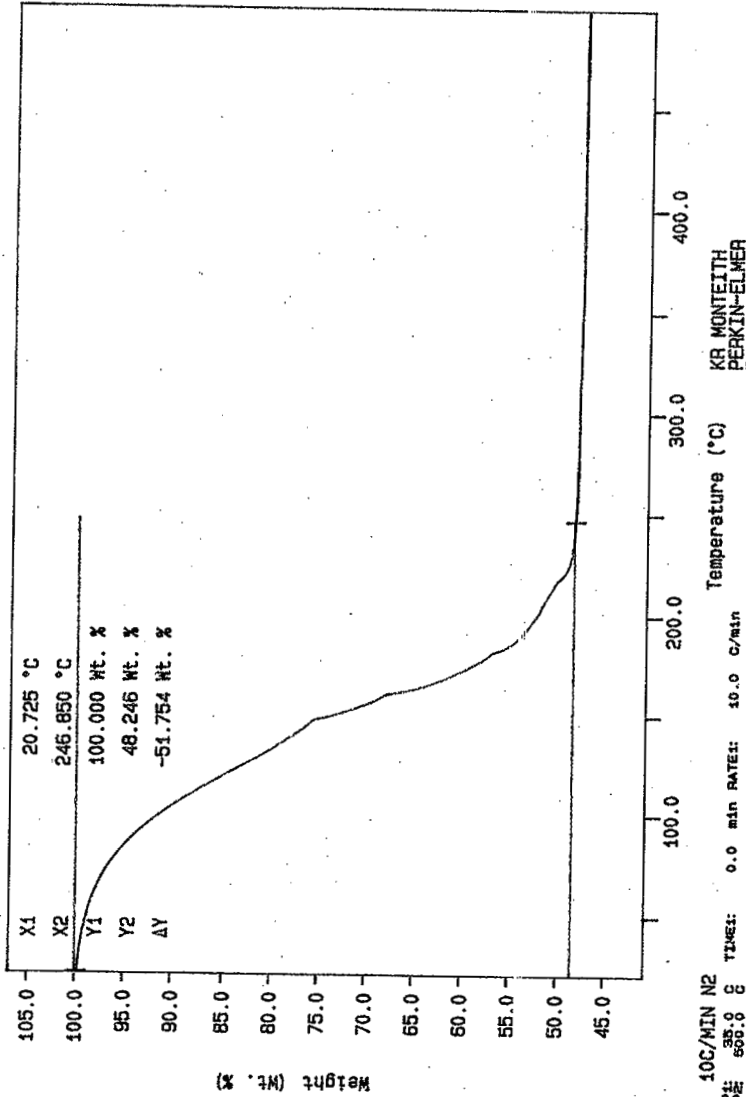
Curve 1: TGA  
 File info: SAM091601 Fri Sep 18 08:04:58 1998  
 Sample Weight: 16.673 mg  
 S98T002528



410

10C/MIN N2  
 TEMPI: 35.0 C  
 TEMPE: 500.0 C  
 TIMES: 0.0 min RATE: 10.0 C/min  
 KR MONTEITH  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Fri Sep 18 10:04:01 1998

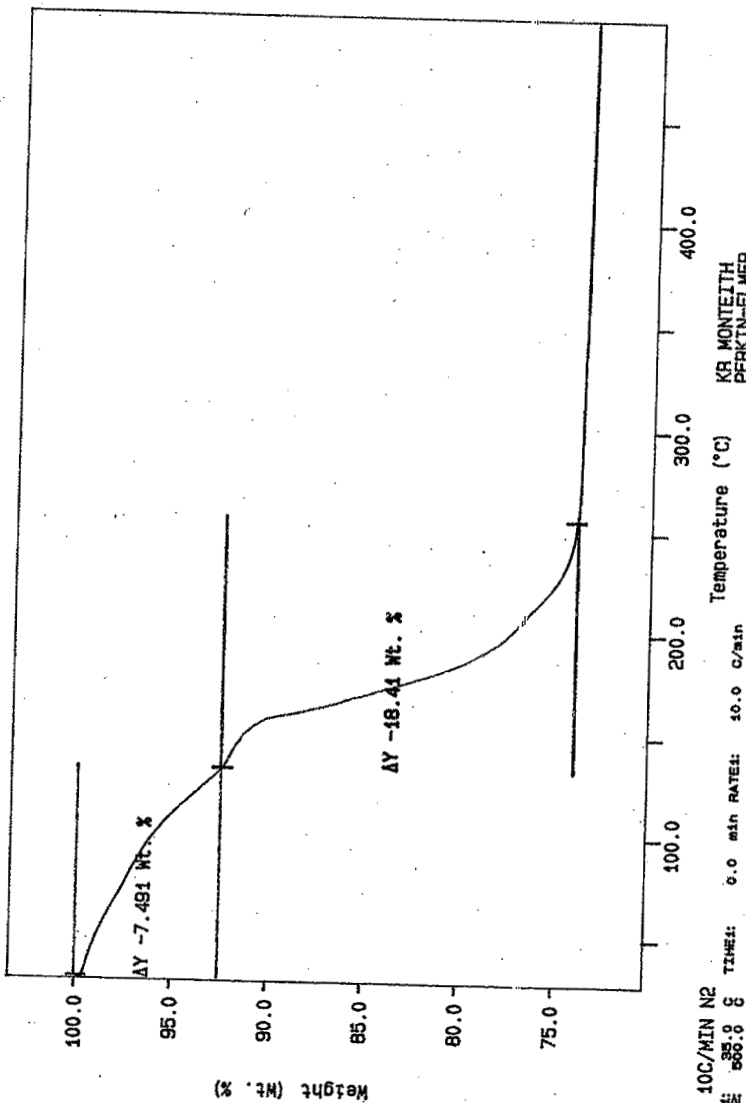
Curve 1: T6A  
File info: SAM091802 Fri Sep 18 11:10:19 1998  
Sample Weight: 23.072 mg  
S98T002528 DUP



10C/MIN N2  
TEMP: 55.0 C TIME: 0.0 min RATE: 10.0 C/min  
KR MONTEITH  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Fri Sep 18 11:12:02 1998



Curve 1: T6A  
File info: SAM091803 Fri Sep 18 12:16:43 1998  
Sample Weight: 38.560 mg  
S98T002537



10C/MIN N2  
TEMP: 35.0 C  
TEMP: 500.0 C

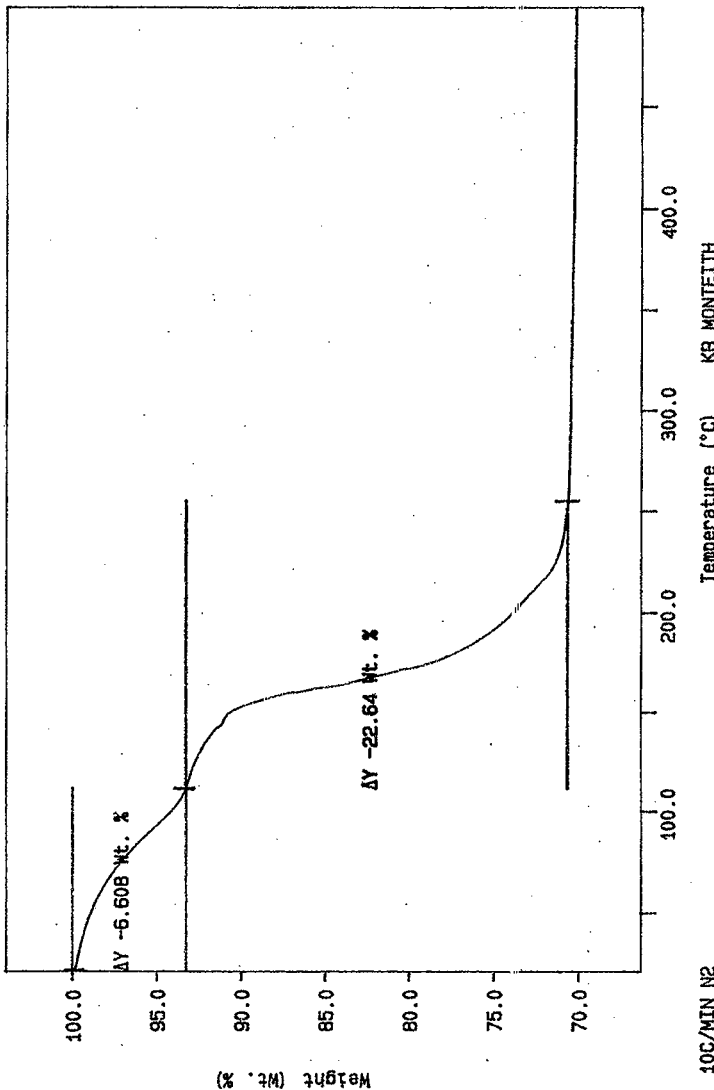
0.0 min RATE: 10.0 C/min

Temperature (°C)

KR MONTEITH  
PERKIN-ELMER

7 Series Thermal Analysis System  
Fri Sep 18 13:34:28 1998

Curve 1: TGA  
File info: SAM091804 Fri Sep 18 14: 23: 36 1998  
Sample Weight: 26.313 mg  
S98T002537 DUP



KR MONTEITH  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Fri Sep 18 14: 38: 50 1998

Temperature (°C)

10.0 C/min

0.0 min RATE:

TIME:

10C/MIN N2

35.0 C

TEMP:

**LABCORE Data Entry Template for Worklist# 26138**

Analyst: SLH Instrument: TGA0 3 Book # 117N8-A

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, TGA-03, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-03	SOLID	<u>59.4</u>	<u>60.77</u>	N/A	%
98000401	U-107 (2)	2 SAMPLE	S98T002543	0	TGA-03	SOLID	N/A	<u>46.36</u>		%
98000401	U-107 (2)	3 DUP	S98T002543	0	TGA-03	SOLID	<u>46.36</u>	<u>36.40</u>	N/A	%
		4 TRIP					<u>46.36</u>	<u>45.19</u>		
98000401	U-107 (2)	5 SAMPLE	S98T002552	0	TGA-03	SOLID	N/A	<u>35.72</u>		%
98000401	U-107 (2)	6 DUP	S98T002552	0	TGA-03	SOLID	<u>35.72</u>	<u>29.80</u>	N/A	%

LAD 1-5-99

**Final page for worklist # 26138**

Jander Alford Bostrom  
Analyst Signature Date 9-19-98

C.J. Quinn  
Analyst Signature Date

Validated 10/8/98 SS Kachelor

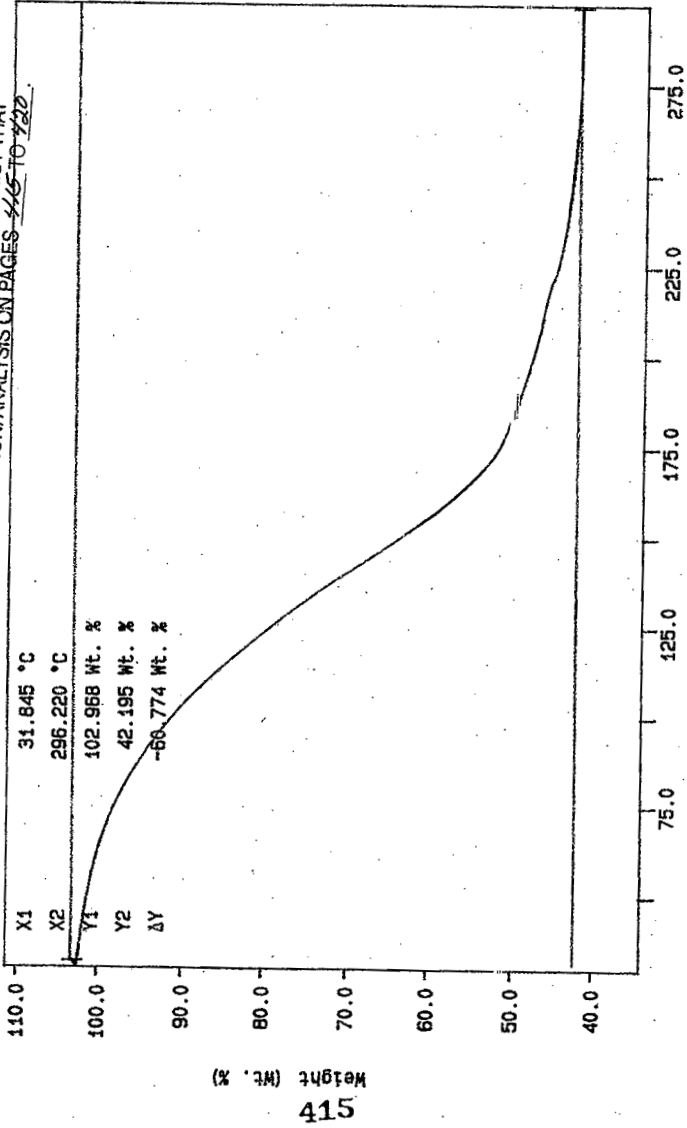
Data Entry Comments: Pen Trip on S98T002543

batch # 98004693

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: TGA  
File Info: TEF091901 Sat Sep 19 02:38:43 1998  
Sample Weight: 19.481 mg  
117NB-A

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 415 TO 422



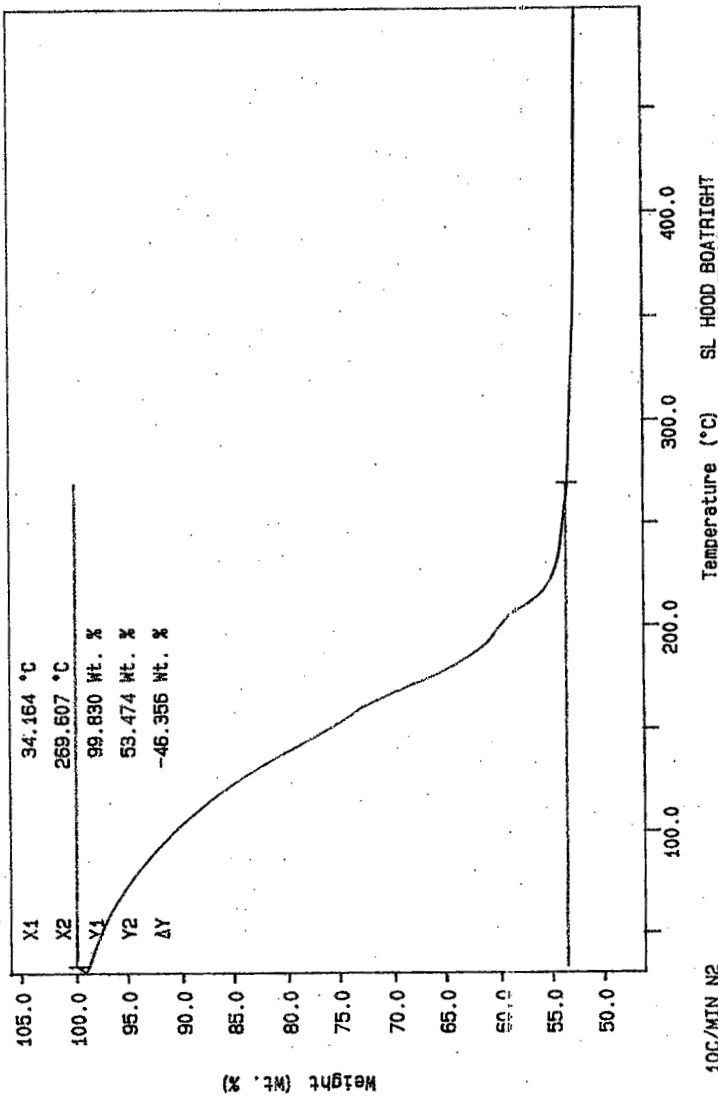
415

100/MIN N2  
 TEMP: 305.0 C  
 TIME: 0.0 min RATE: 10.0 C/min

SL HOOD BOATRIGHT  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Sat Sep 19 02:40:44 1998

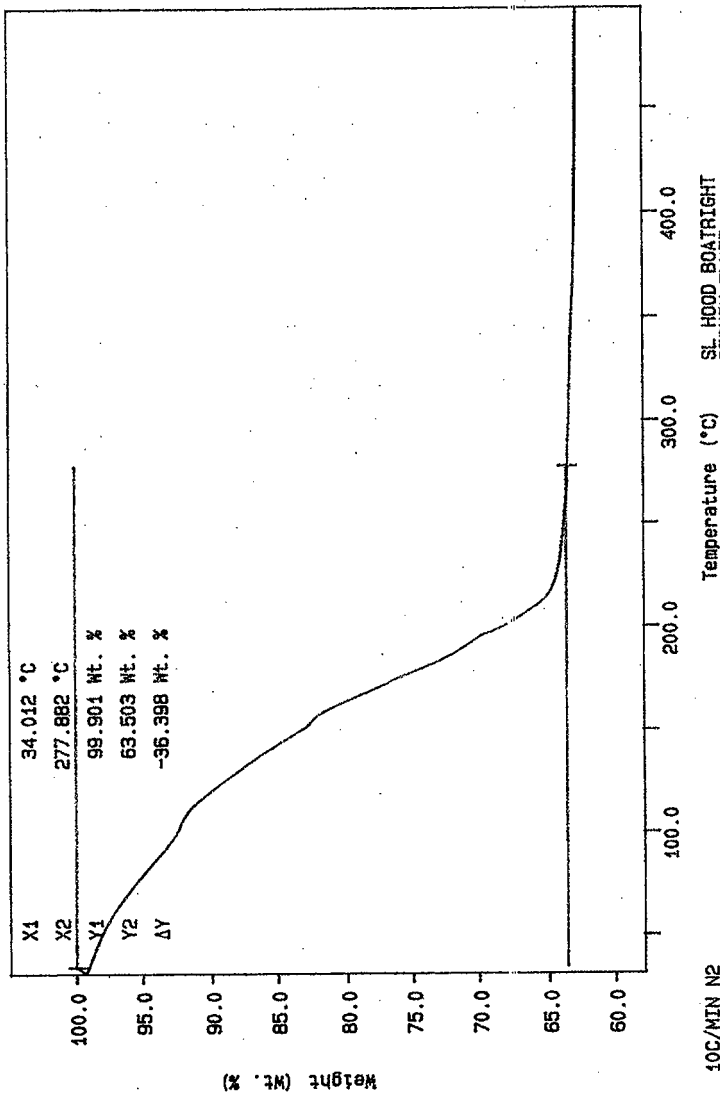
*J. Hood Boatright*

Curve 1: TGA  
 File info: SAM091902 Sat Sep 19 03:41:26 1998  
 Sample Weight: 27.311 mg  
 S98T002543



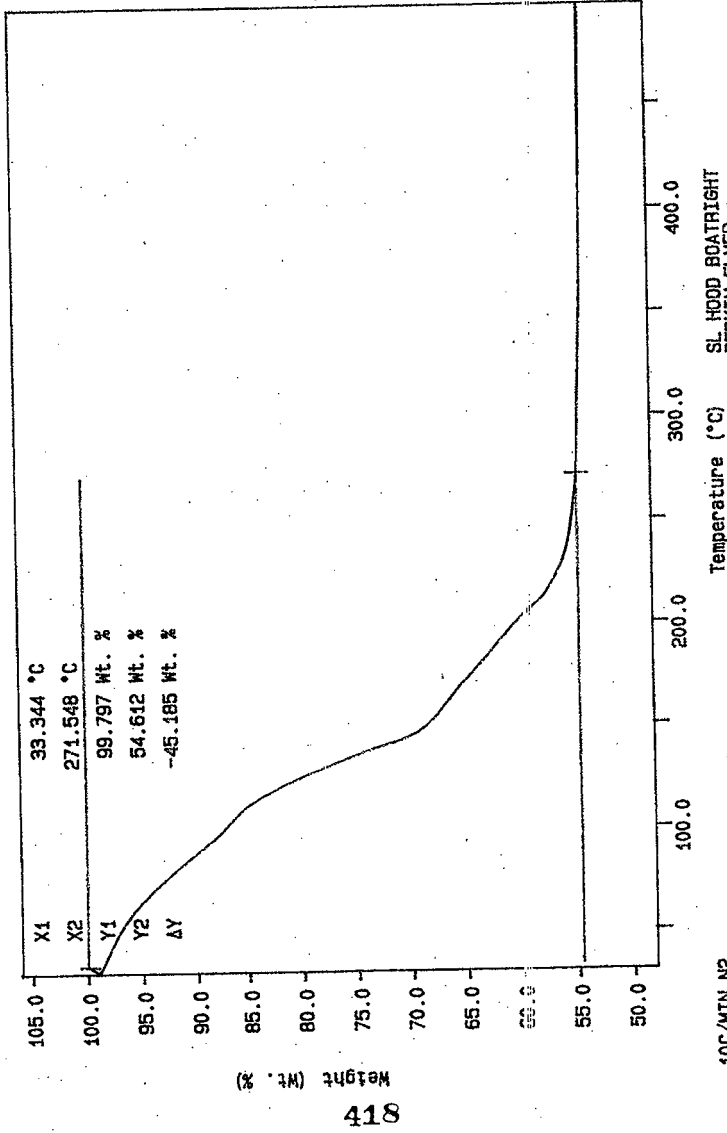
10C/MIN N2  
 TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min  
 TEMP2: 500.0 C

Curve 1: TGA  
File info: SAM091903 Sat Sep 19 04:46:38 1998  
Sample Weight: 26.304 mg  
S98T002543 DUP



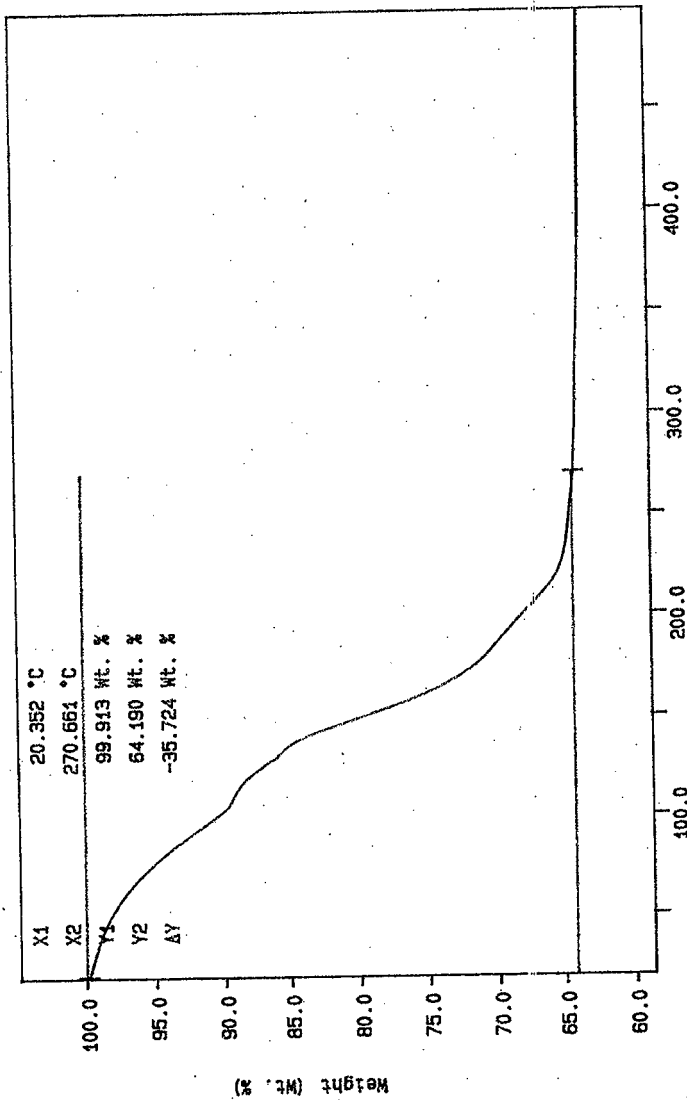
10C/MIN N2  
TEMP: 85.0 C  
TIME: 0.0 min RATE: 10.0 C/min

Curve 1: TGA  
File info: SAM091904 Sat Sep 19 05:52:08 1998  
Sample Weight: 21.950 mg  
S98T002543 TRP



100./MIN N2  
TEMP: 35.0 °C TIME: 556.8 s  
0.0 min RATE: 10.0 C/min  
SL HOOD BOATRIGHT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sat Sep 19 18:14:09 1998

Curve 1: TGA  
File info: SAM091905 Sat Sep 19 20:06:06 1998  
Sample Weight: 15.065 mg  
S98T002552

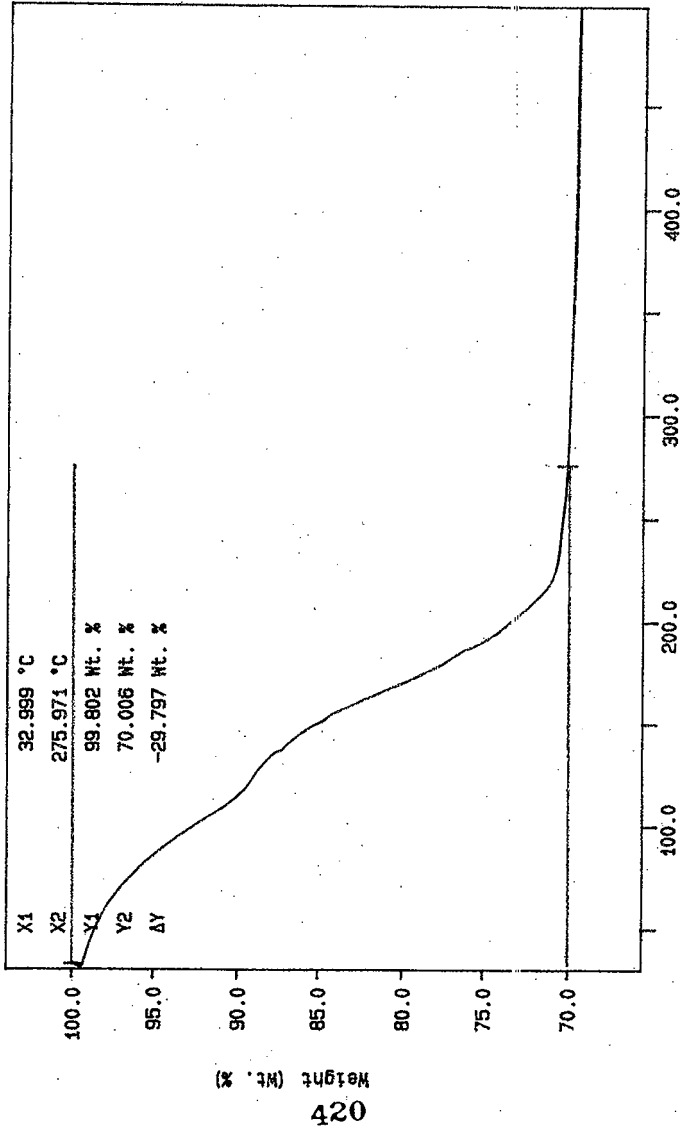


10C/MIN N2  
TEMP: 35.0 C  
TIME: 500.0 S  
0.0 min RATE: 10.0 C/min

SL HOOD BOATRIGHT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sat Sep 19 20:06:39 1998



Curve 1: T6A  
File info: SAM091906 Sat Sep 19 21:11:40 1998  
Sample Weight: 19.178 mg  
S98T002552 DUP



10C/MIN N2  
TEMP: 50.0 C  
TEMP2: 500.0 C  
TIMES: 0.0 min RATE: 10.0 C/min  
SL HOOD BOATRICH  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sat Sep 19 22:12:14 1998

# LABCORE Data Entry Template for Worklist# 26139

Analyst: KRM Instrument: TGA0 3 Book # 117 N/A

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, TGA-03, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-03	SOLID	<u>59.4</u>	<u>58.95x</u>	<u>N/A</u>	%
98000401	U-107 (2)	2 SAMPLE	S98T002559	0	TGA-03	SOLID	<u>N/A</u>	<u>35.71</u>		%
98000401	U-107 (2)	3 DUP	S98T002559	0	TGA-03	SOLID	<u>35.71</u>	<u>33.80</u>	<u>N/A</u>	%
98000401	U-107 (2)	4 SAMPLE	S98T002565	0	TGA-03	SOLID	<u>N/A</u>	<u>8.31</u>		%
98000401	U-107 (2)	5 DUP	S98T002565	0	TGA-03	SOLID	<u>8.31</u>	<u>9.44</u>	<u>N/A</u>	%

Final page for worklist # 26139

[Signature] 9-18-98  
Analyst Signature Date

[Signature] 10/2/98  
Analyst Signature Date

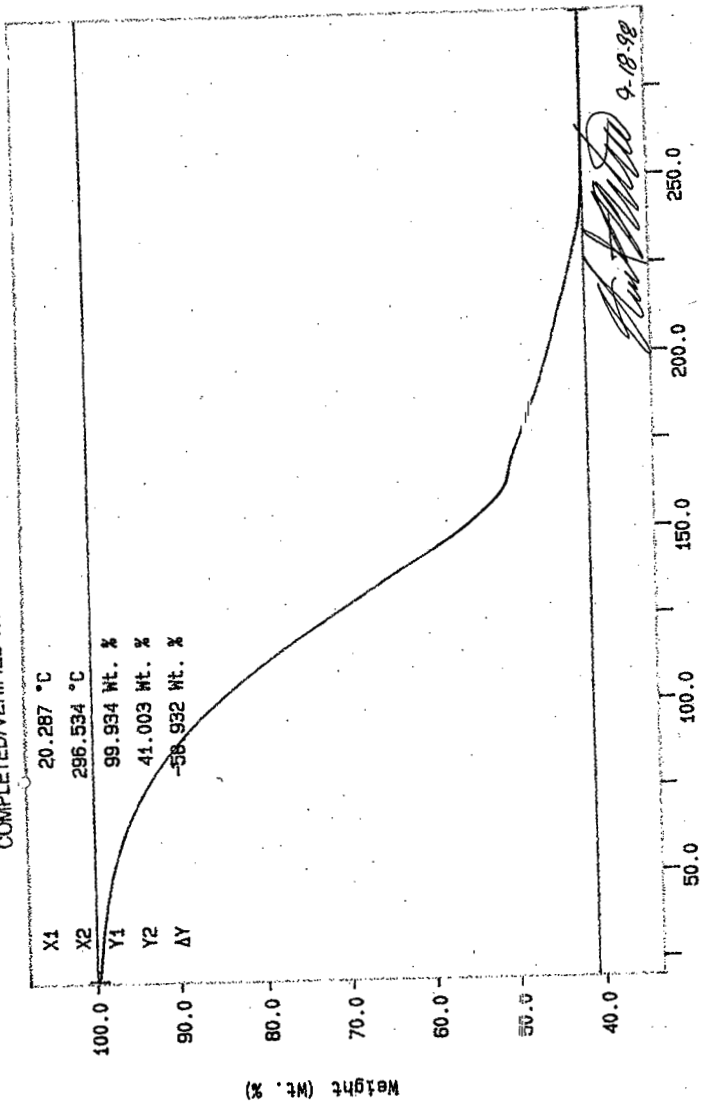
Validated 10/8/98 [Signature]

Data Entry Comments: Run Trip on S98T002565 @ 10/6/98

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: TGA  
File info: TER091801 Fri Sep 18 06:53:57 1998  
Sample Weight: 14.173 mg  
117NB-A

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 522 TO 526



*Handwritten signature*  
9-18-98

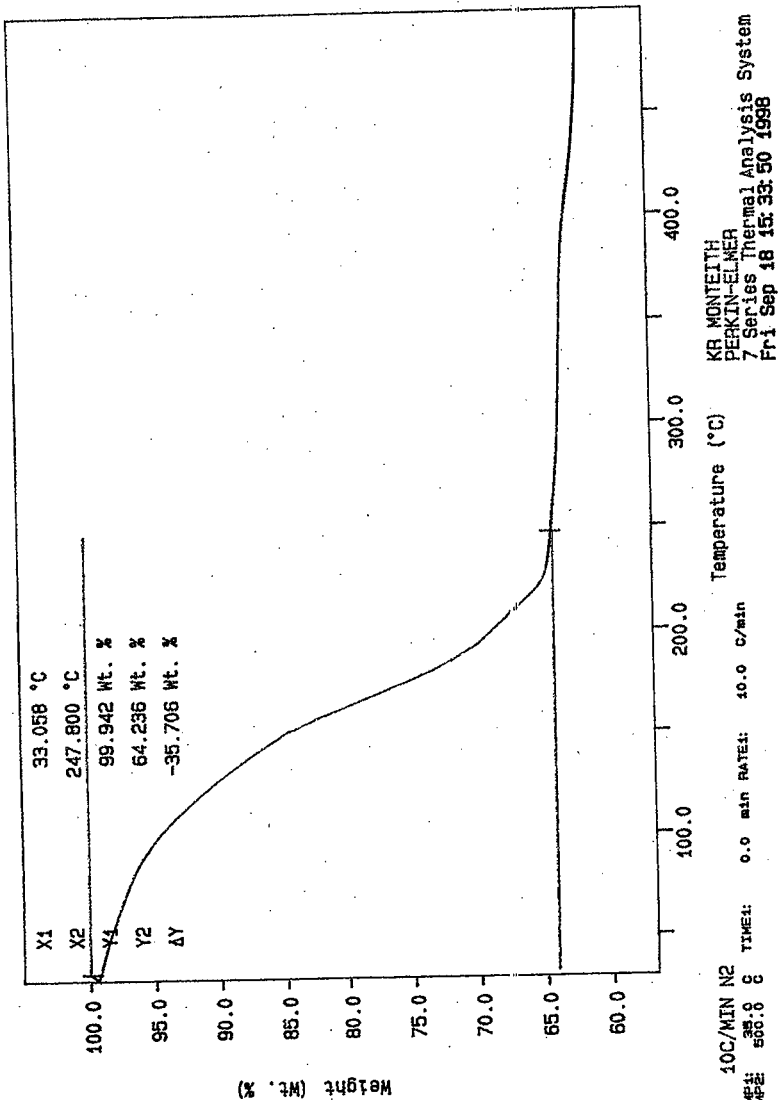
KR MONTEITH  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Fri Sep 18 06:54:44 1998

Temperature (°C)

10C/MIN N2  
TIME: 0.0 min RATE: 40.0 C/min

TEMP: 35.0 C  
TEMP: 360.0 C

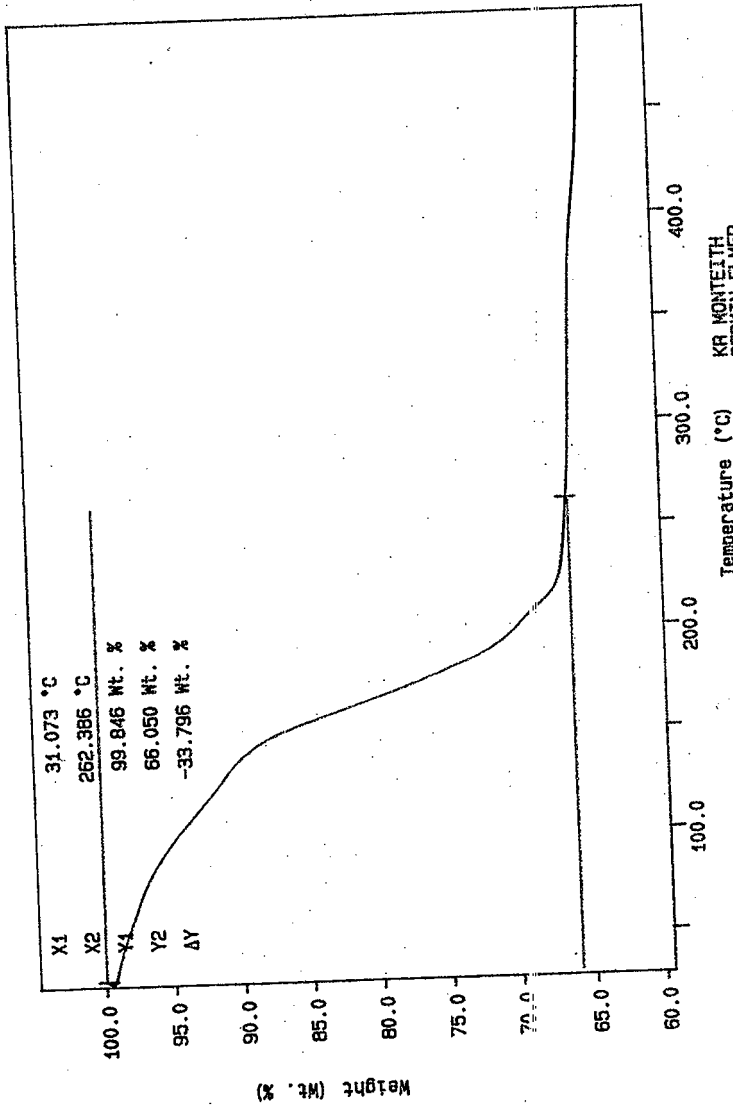
Curve 1: TGA  
File info: SAM091805 Fri Sep 18 15:29:33 1998  
Sample Weight: 29.033 mg  
S98T002559



KB MONTEITH  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Fri Sep 18 15:35:50 1998

10C/MIN N2  
TEMP: 500.0 C  
TIME: 0.0 min RATE: 10.0 C/min

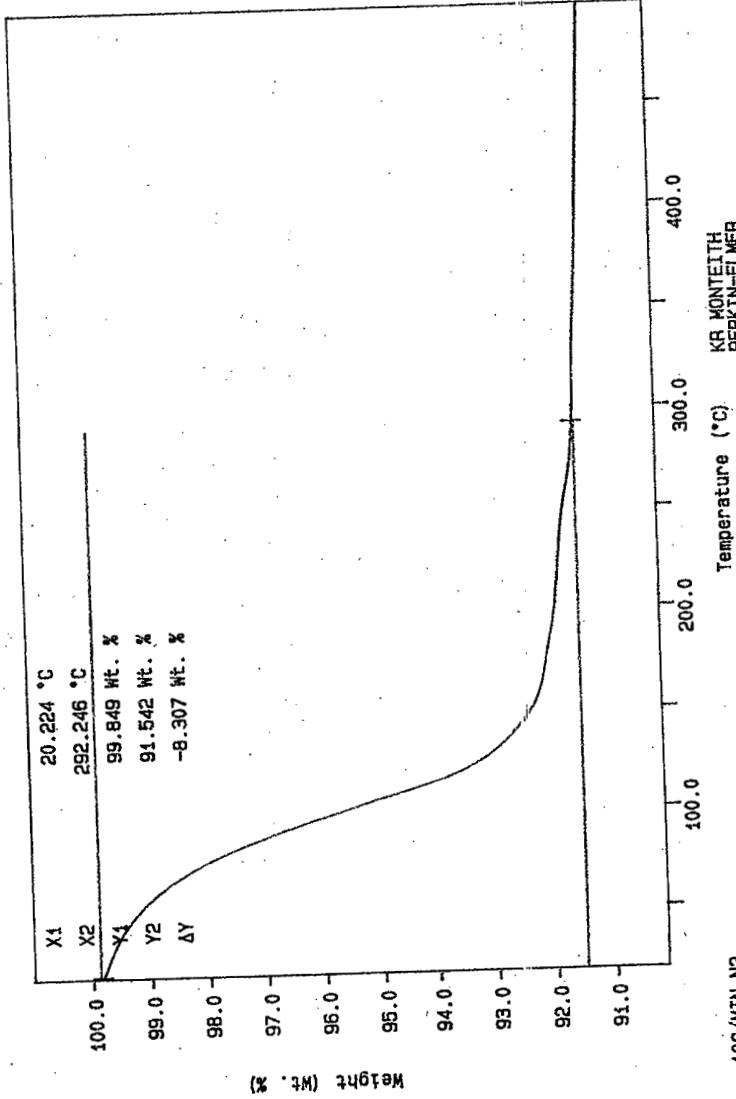
Curve 1: TGA  
File info: SAM091806 Fri Sep 18 16:36:42 1998  
Sample Weight: 24.743 mg  
S98T002559 DUP



KB MONTEITH  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sat Sep 19 23:16:13 1998

10C/MIN N2  
TEMP: 35.0 C  
TIME: 560.0 C  
0.0 min RATE: 10.0 C/min

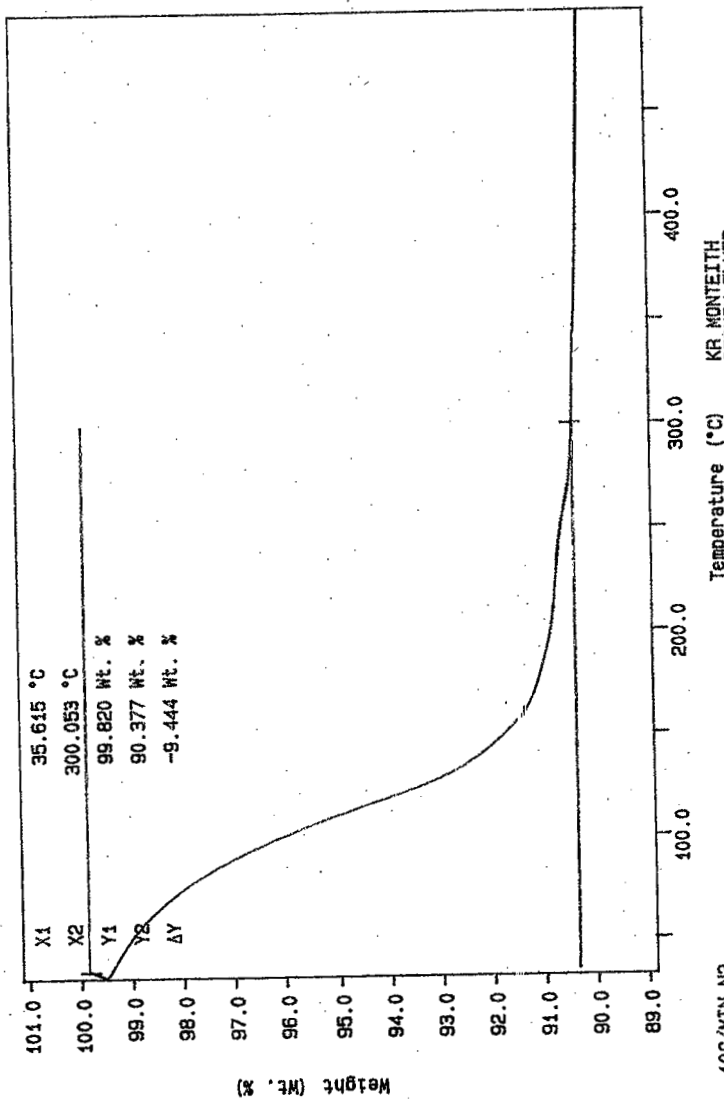
Curve 1: TGA  
 File info: SAM091807 Fri Sep 18 23:42:50 1998  
 Sample Weight: 22.039 mg  
 S98T002565



KR MONTEITH  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Fri Sep 18 23:44:36 1998

100/MIN N2  
 TEMP: 35.8 C  
 TIME: 500.8 C  
 0.0 min RATE: 10.0 C/min

Curve 1: TGA  
 File info: SAM091808 Sat Sep 19 00:47:14 1998  
 Sample Weight: 25.171 mg  
 S98T002565 Dup



KR MONTEITH  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Sat Sep 19 00:51:30 1998

10C/MIN N2  
 TEMP: 50.0 C  
 TIME: 0.0 min RATE: 10.0 C/min

# LABCORE Data Entry Template for Worklist# 26140

Analyst: RLM Instrument: TGA0 03 Book # 11728A  
Method: LA-514-114 Rev/Mod D-1  
Worklist Comment: U107, TGA-03, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-03	SOLID	<u>59.4</u>	<u>58.90*</u>	<u>N/A</u>	%
98000401	U-107 (2)	2 SAMPLE	S98T002570	0	TGA-03	SOLID	<u>N/A</u>	<u>44.73</u>		%
98000401	U-107 (2)	3 DUP	S98T002570	0	TGA-03	SOLID	<u>44.73</u>	<u>51.43</u>	<u>N/A</u>	%

## Final page for worklist # 26140

RLM 9/20/98  
Analyst Signature Date

CD 10/2/98  
Analyst Signature Date

Validated 10/8/98 Michelle

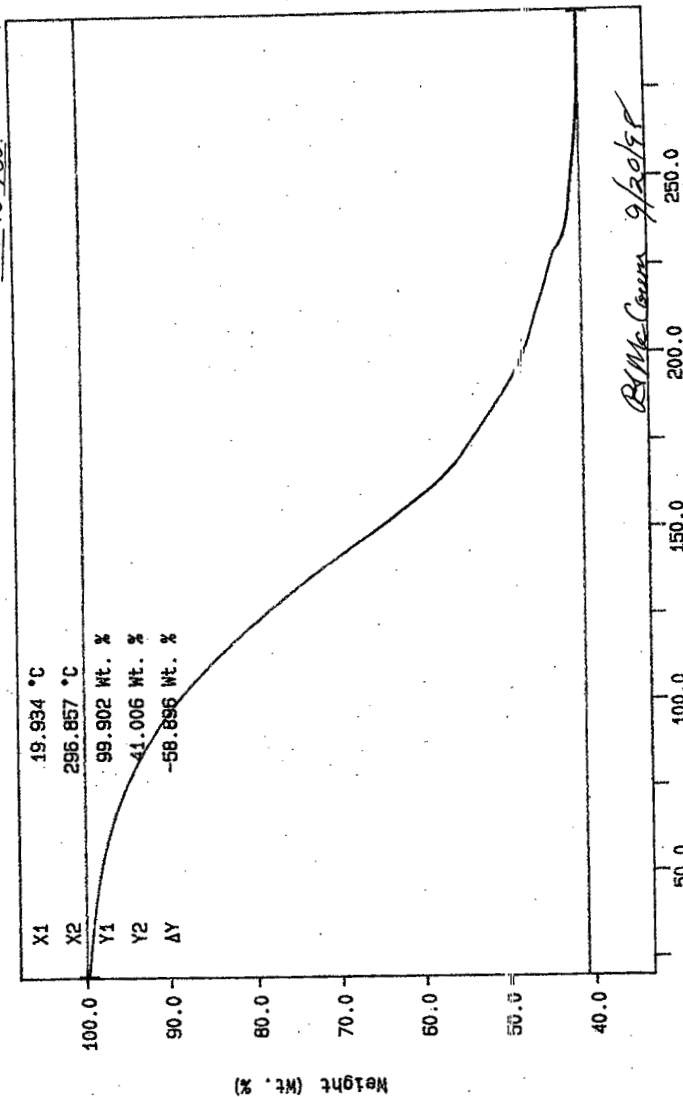
Data Entry Comments:

Units shown for QC (SPE & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



Curve 1: TGA  
 File info: TER092001 Sun Sep 20 07:08:34 1998  
 Sample Weight: 25.948 mg  
 117NB-A

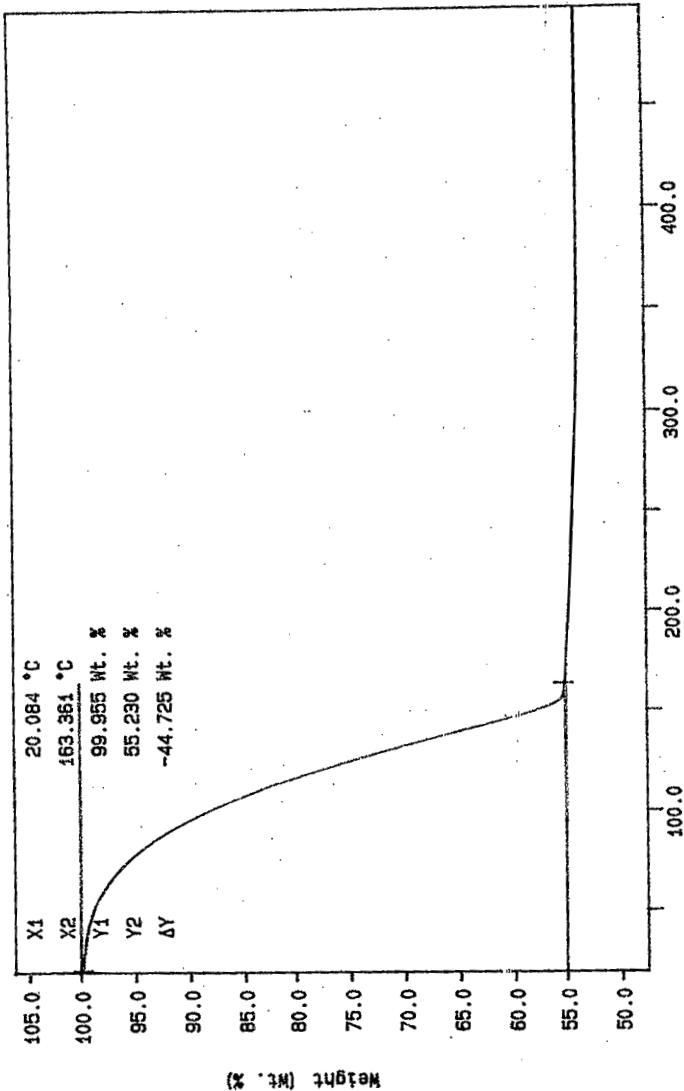
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 428 TO 430.



428  
 Weight (Wt. %)

10C/MIN N2  
 TEMP: 35.0 C  
 RATE: 300.0 C  
 TIME: 0.0 min RATE: 10.0 C/min  
 Temperature (°C)  
 PJ MCCOWN  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Sun Sep 20 07:15:05 1998

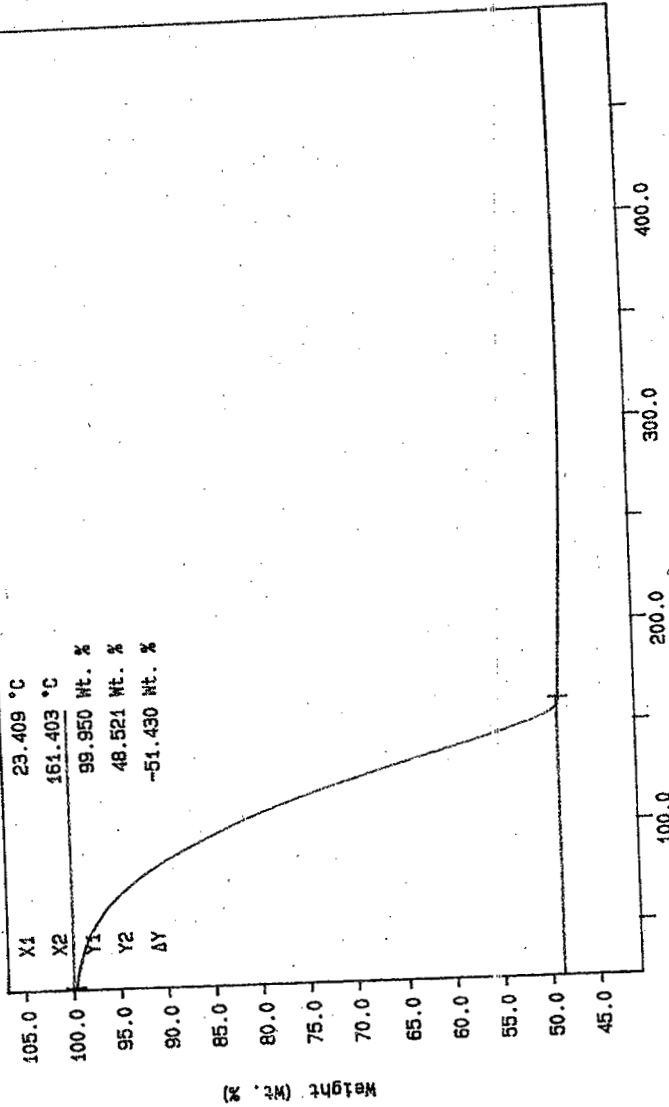
Curve 1: TGA  
File info: SAM92005 Sun Sep 20 13:41:10 1998  
Sample Weight: 11.242 mg  
S98T002570



PJ MCCOY  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sun Sep 20 13:41:47 1998

10C/MIN N2  
TEMP: 500.0 C  
RATE: 0.0 min RATE: 10.0 C/min  
TIME: 0

Curve 1: TGA  
File info: SAM092006 Sun Sep 20 14: 53: 59 1998  
Sample Weight: 11.346 mg  
S98T002570 DUP



PJ MCCOY  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Sun Sep 20 14: 54: 59 1998

Temperature (°C)

100/min N2  
0.0 min RATE: 10.0 C/min

TIME: 588.0 S  
TEMP: 500.0 C



# LABCORE Data Entry Template for Worklist# 26196

Analyst: JIS Instrument: TGA0 3 Book # 117N8-A

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, TGA-03, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-03	LIQUID	<u>59.4</u>	<u>58.74</u>	<u>N/A</u>	%
98000401	U-107 (2)	2 SAMPLE	S98T002457 0		TGA-03	LIQUID	<u>N/A</u>	<u>47.10</u>		%
98000401	U-107 (2)	3 DUP	S98T002457 0		TGA-03	LIQUID	<u>47.10</u>	<u>47.15</u>	<u>N/A</u>	%
98000401	U-107 (2)	4 SAMPLE	S98T002461 0		TGA-03	LIQUID	<u>N/A</u>	<u>48.00</u>		%
98000401	U-107 (2)	5 DUP	S98T002461 0		TGA-03	LIQUID	<u>48.00</u>	<u>48.00</u>	<u>N/A</u>	%

Final page for worklist # 26196

J. J. Sollmack 09/18/98  
Analyst Signature Date

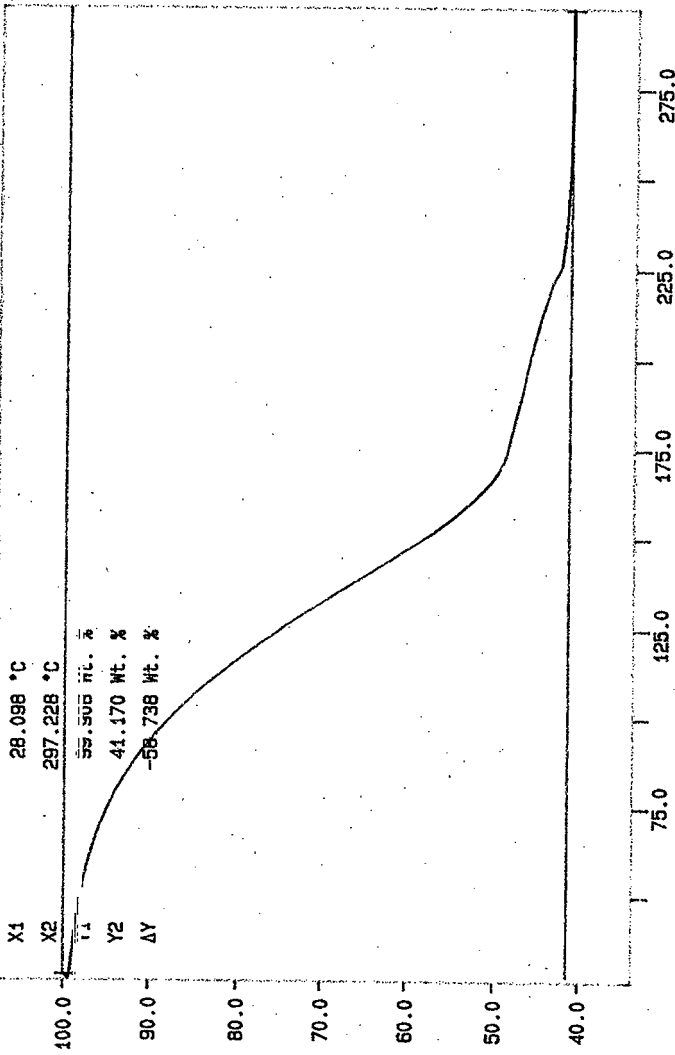
\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: TGA  
File info: TER091702 Thu Sep 17 18:54:15 1998  
Sample Weight: 16.430 mg  
117NB-A

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 433 TO 437.



Weight (Wt. %)

Temperature (°C)

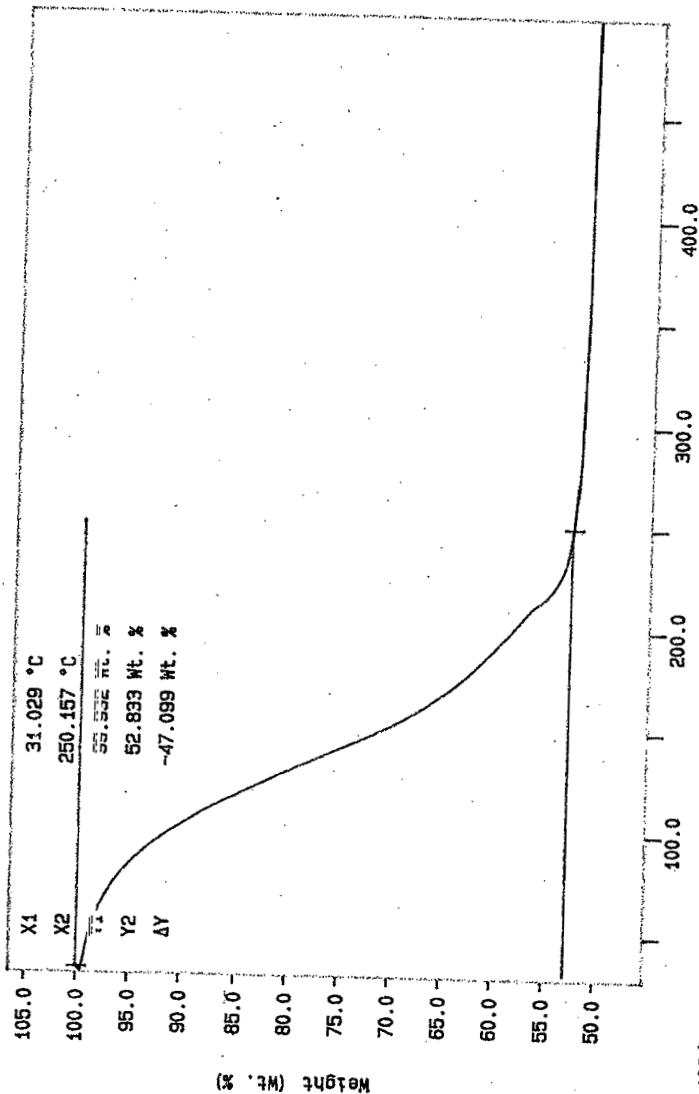
100./MIN N2  
TEMP: 355.8 C  
TIME: 0.0 min RATE: 10.0 C/min

JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 17 19:00:55 1998

*J. M. Schlabach*

433

Curve 1: TGA  
File info: SAM091707 Fri Sep 18 00:28:25 1998  
Sample Weight: 17.138 mg  
SS8T002457



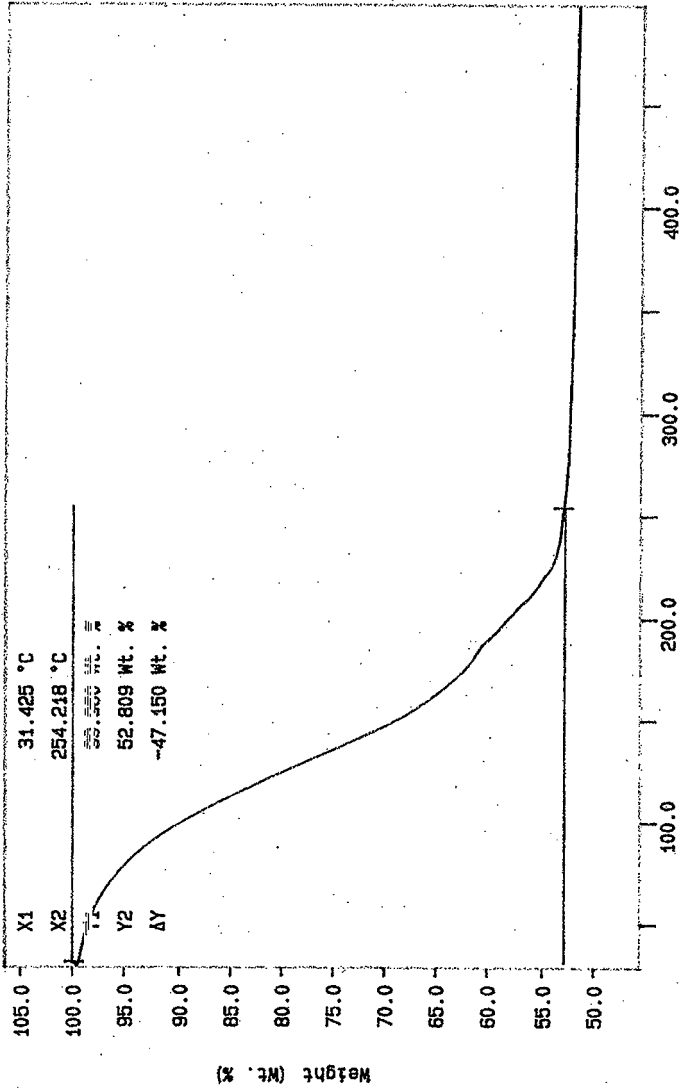
10C/MIN N2  
TEMP: 35.0 °C  
TIME: 500.0 s  
0.0 min RATE: 10.0 c/min

Temperature (°C)

JI SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Fri Sep 18 00:31:42 1998

434

Curve 1: TGA  
File info: SAM091708 Fri Sep 18 01:34:30 1998  
Sample Weight: 15.801 mg  
S98T002457DUP



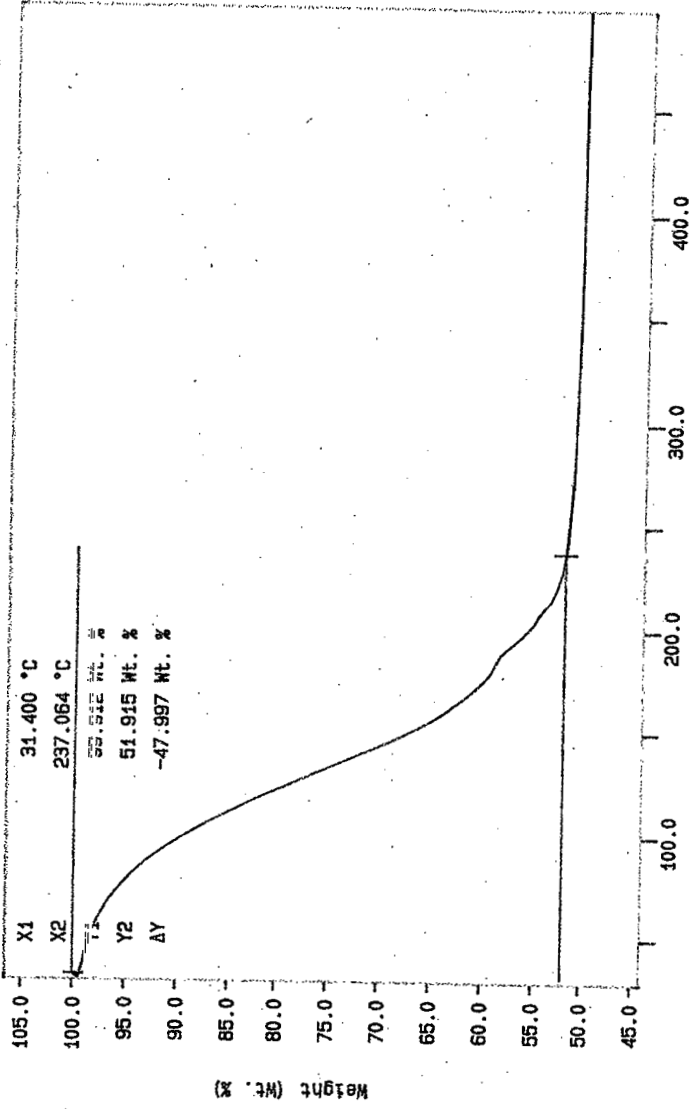
J1 SOLBRACK  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Fri Sep 18 01:35:30 1998

10C/MIN N2  
TEMP: 55.0 °C  
TIME: 0.0 min RATE: 10.0 C/min

435



Curve 1: TGA  
File info: SAM091711 Fri Sep 18 02:40:34 1998  
Sample Weight: 15.293 mg  
S98T002461

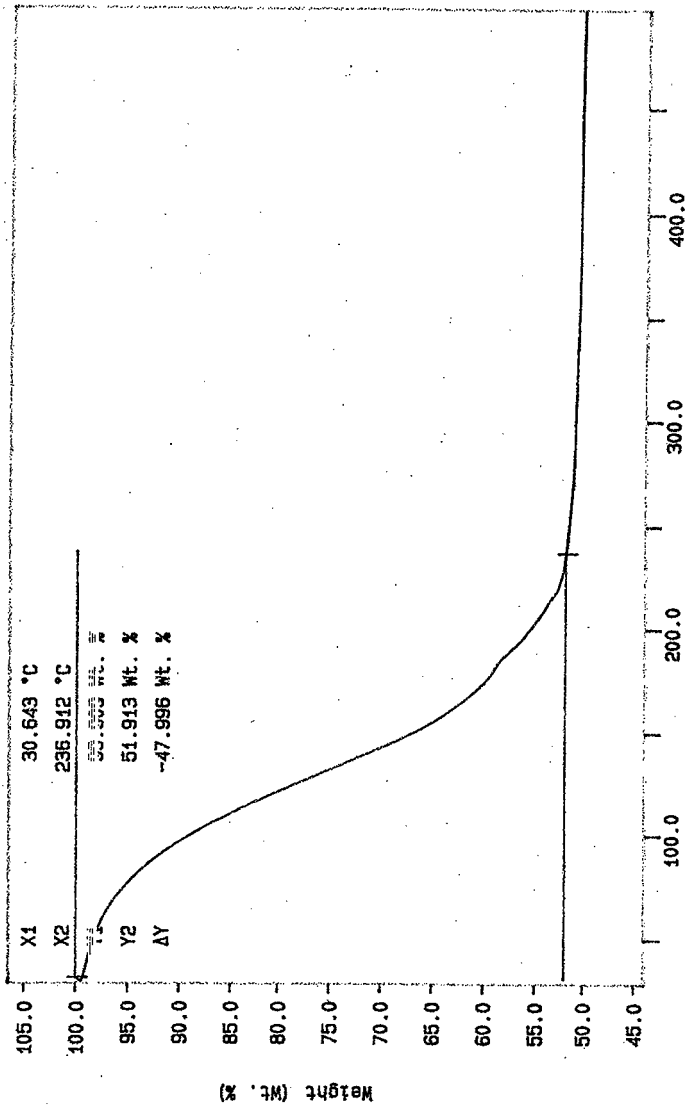


10C/MIN N2  
 TEMP: 35.0 C  
 TIME: 0.0 min RATE: 10.0 C/min

JI SOLBRACK  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Fri Sep 18 02:47:06 1998

436

Curve 1: TGA  
File info: SAM091712 Fri Sep 18 03:46:57 1998  
Sample Weight: 14.557 mg  
S98T002461DUP



10C/MIN N2  
 TEMP: 35.8 C  
 TEMP: 500.0 C  
 TIME: 0.0 min RATE: 10.0 C/min

JT SOLBRACK  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Fri Sep 18 03:49:38 1998

437

# LBCORE Data Entry Template for Worklist# 26307

Analyst: RM Instrument: TGA0 D-1 Booth # 117N8A

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, TGA-03, tdm

OB  
RM  
9/24/98

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-03	SOLID	<u>59.4</u>	<u>58.62</u>	<u>N/A</u>	%
98000359	U-107 (2)	2 SAMPLE	S98T002450	0	TGA-03	SOLID	<u>N/A</u>	<u>20.97</u>		%
98000359	U-107 (2)	3 DUP	S98T002450	0	TGA-03	SOLID	<u>20.97</u>	<u>24.27</u>	<u>N/A</u>	%
98000359	U-107 (2)	4 SAMPLE	S98T002519	0	TGA-03	SOLID	<u>N/A</u>	<u>19.19</u>		%
98000359	U-107 (2)	5 DUP	S98T002519	0	TGA-03	SOLID	<u>19.19</u>	<u>18.24</u>	<u>N/A</u>	%

### Final page for worklist # 26307

RM 9/24/98  
Analyst Signature Date

Ch. Quinn 10/9/98  
Analyst Signature Date

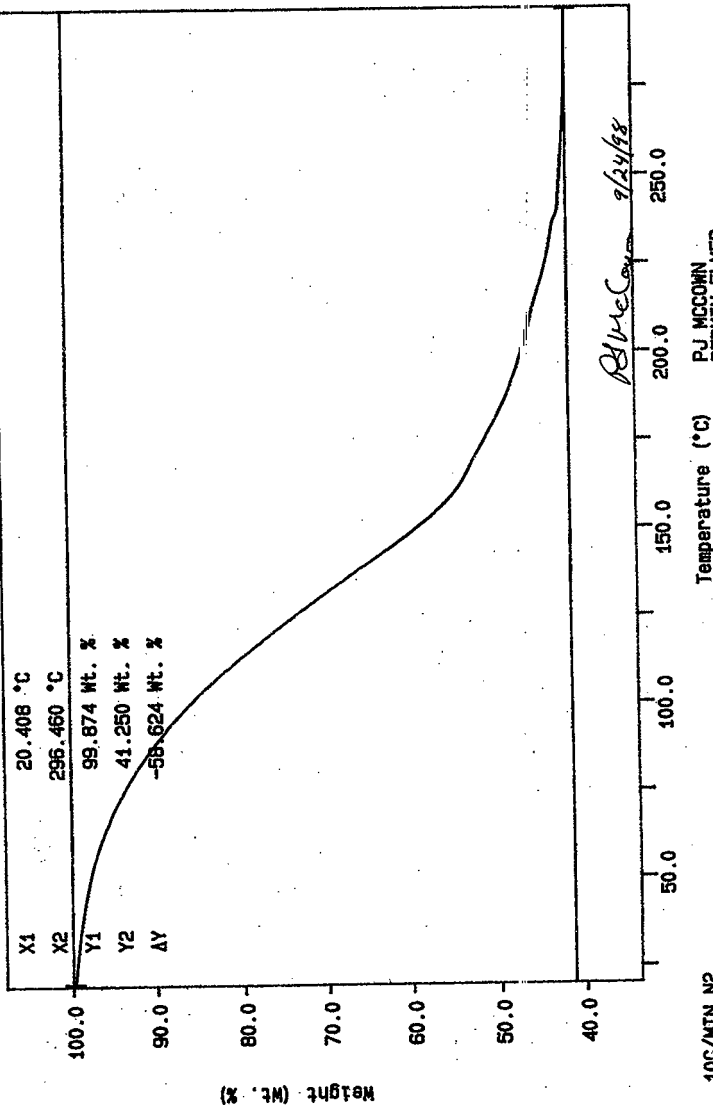
Validated 10/8/98 [Signature]  
Rachelor

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: T6A  
File Info: TER092401 Thu Sep 24 19:23:34 1998  
Sample Weight: 20.079 mg  
117NB-A

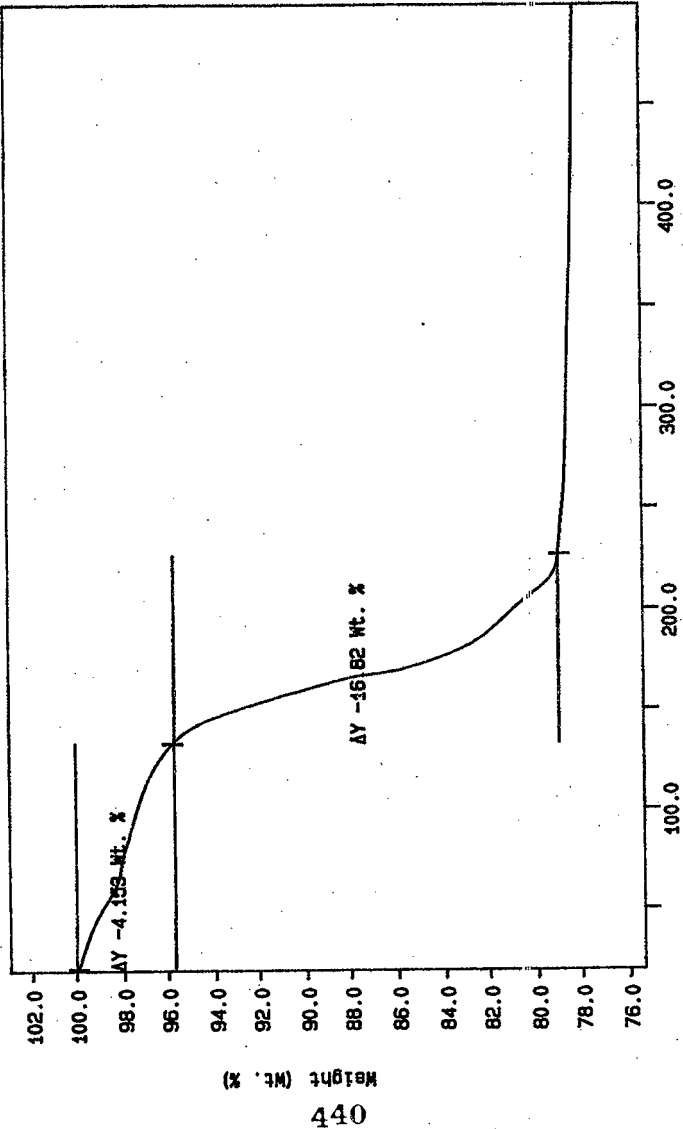
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 439 TO 443



PJ MCCOY  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 19:30:40 1998

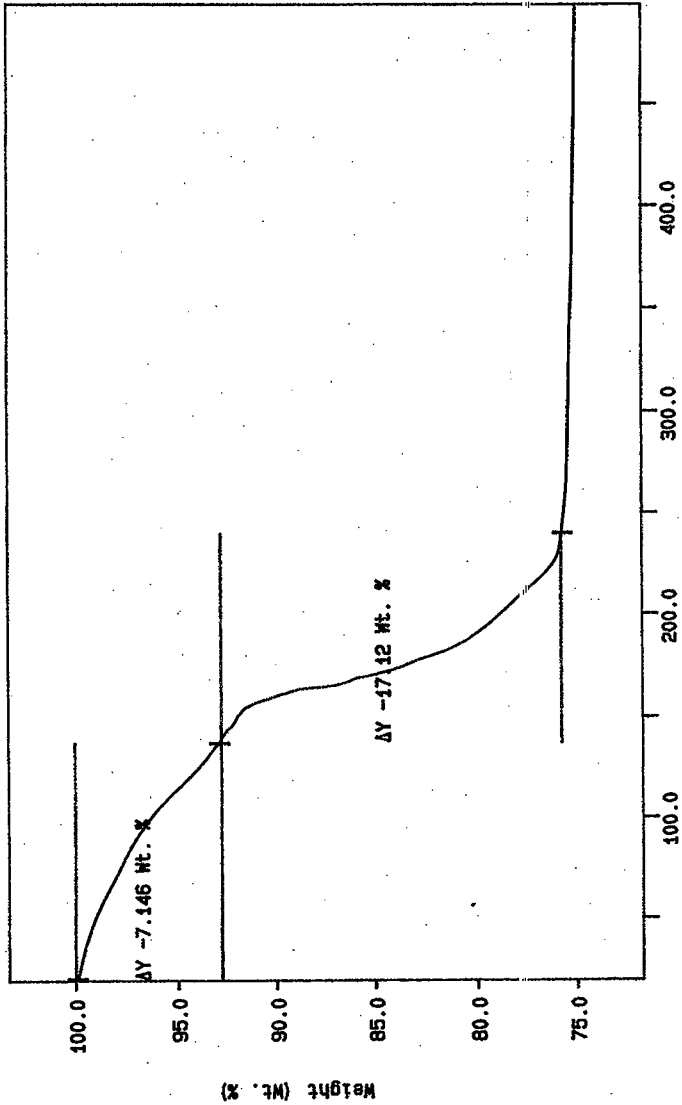
10C/MIN N2  
TEMP: 300.0 C  
TIME: 0.0 min RATE: 10.0 C/min

Curve 1: TGA  
File info: SAM092401 Thu Sep 24 20: 47: 35 1998  
Sample Weight: 21.677 mg  
S98T002450



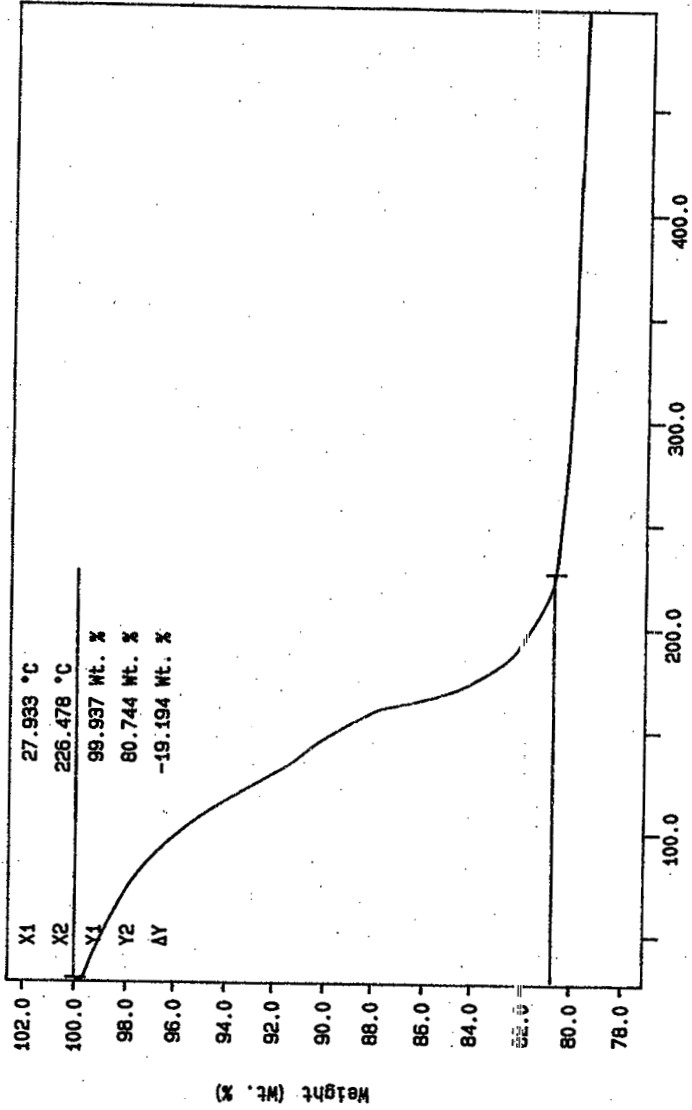
10C/MIN N2  
TEMP: 500.0 C TIME: 0.0 min RATE: 10.0 C/min  
PJ MCCOWN  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 21: 24: 32 1998

Curve 1: TGA  
File info: SAM092402 Thu Sep 24 22:26:25 1998  
Sample Weight: 28.858 mg  
S98T002450 DUP



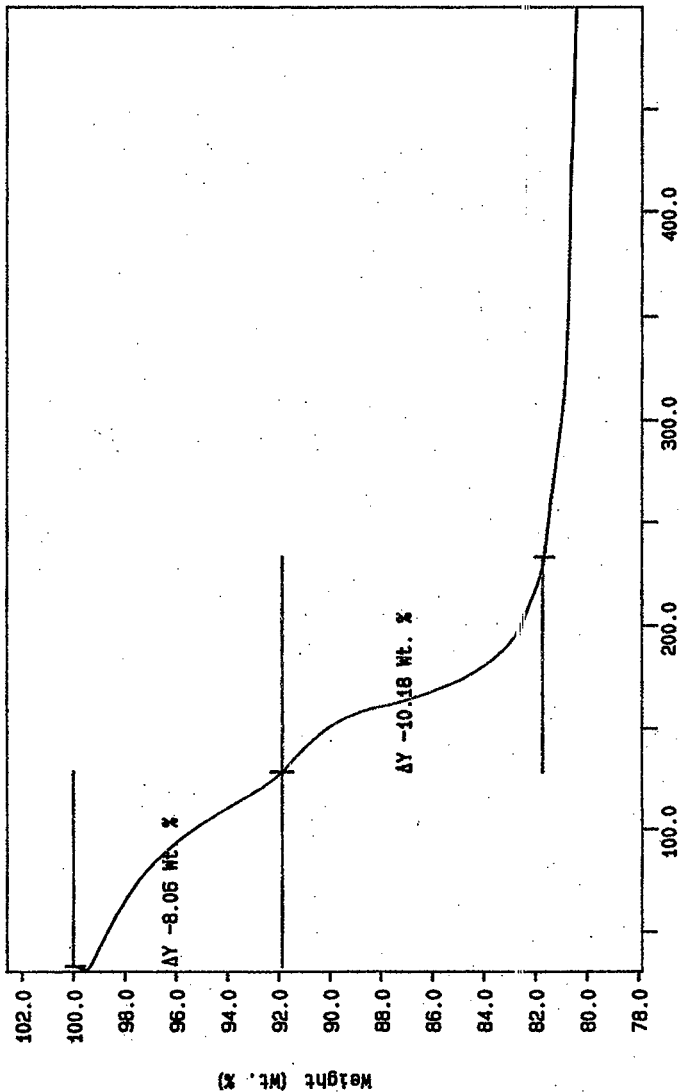
10C/MIN N2  
TEMP: 36.0 C TIME: 0.0 min RATE: 10.0 C/min  
PJ MCCOMB  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 22:26:59 1998

Curve 1: TGA  
 File info: SAM092403 Thu Sep 24 23:34:03 1998  
 Sample Weight: 23.067 mg  
 S98T002519



10C/MIN N2  
 TEMPE 350.0 C  
 TIME: 0.0 min RATE: 10.0 C/min  
 PJ MCCOY  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Thu Sep 24 23:35:24 1998

Curve 1: TGA  
File info: SAM092404 Fri Sep 25 00:39:46 1998  
Sample Weight: 20.037 mg  
S98T002519 DUP



PJ MCCOMB  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Fri Sep 25 01:46:28 1998

Temperature (°C)

10C/MIN N2

TIME: 56.0 S

TEMP: 566.0 C



# LABCORE Data Entry Template for Worklist# 26308

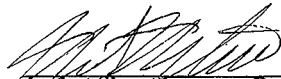
Analyst: KRM Instrument: TGA0 3 Block # 117N8A

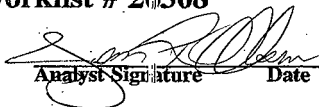
Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, TGA-03, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-03	SOLID	<u>59.4</u>	<u>58.94X</u>	<u>N/A</u>	%
98000359	U-107 (2)	2 SAMPLE	S98T002426 0		TGA-03	SOLID	<u>N/A</u>	<u>16.03</u>		%
98000359	U-107 (2)	3 DUP	S98T002426 0		TGA-03	SOLID	<u>16.03</u>	<u>20.38</u>	<u>N/A</u>	%
98000359	U-107 (2)	4 SAMPLE	S98T002432 0		TGA-03	SOLID	<u>N/A</u>	<u>19.58</u>		%
98000359	U-107 (2)	5 DUP	S98T002432 0		TGA-03	SOLID	<u>19.58</u>	<u>19.00</u>	<u>N/A</u>	%

**Final page for worklist # 26308**

  
 Analyst Signature 9-24-98  
 Date  
 Validated 9/28/98 [Signature]  
 Bachelor

  
 Analyst Signature 9-25-98  
 Date

Data Entry Comments:

---



---

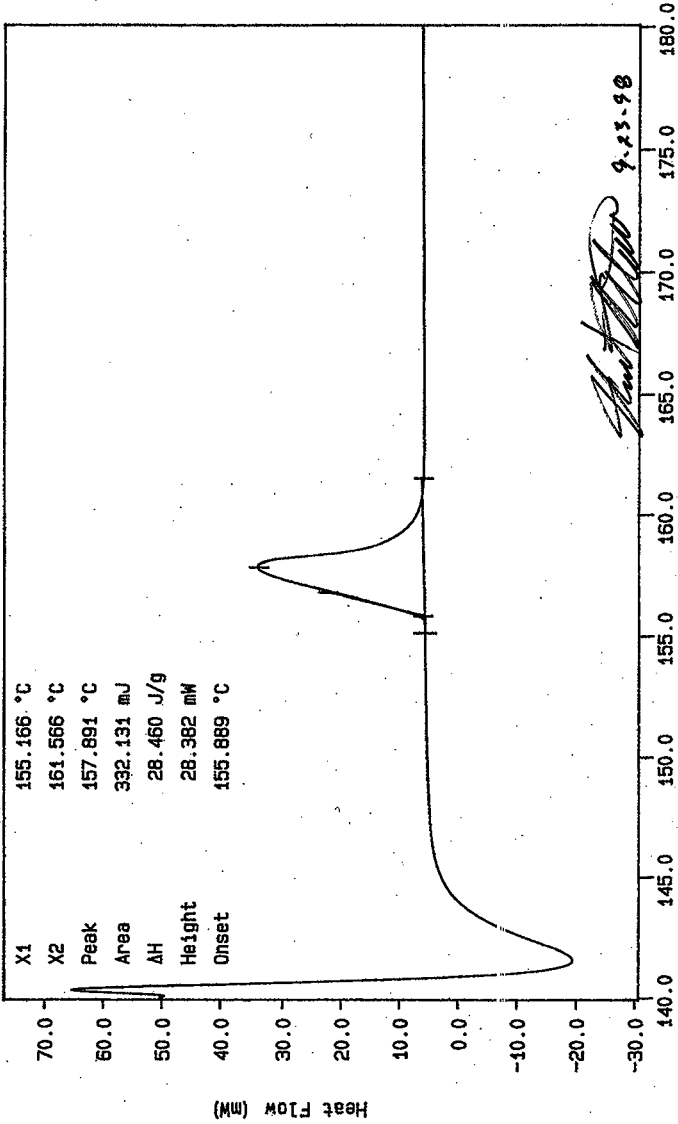


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Units shown for QC (SPE & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

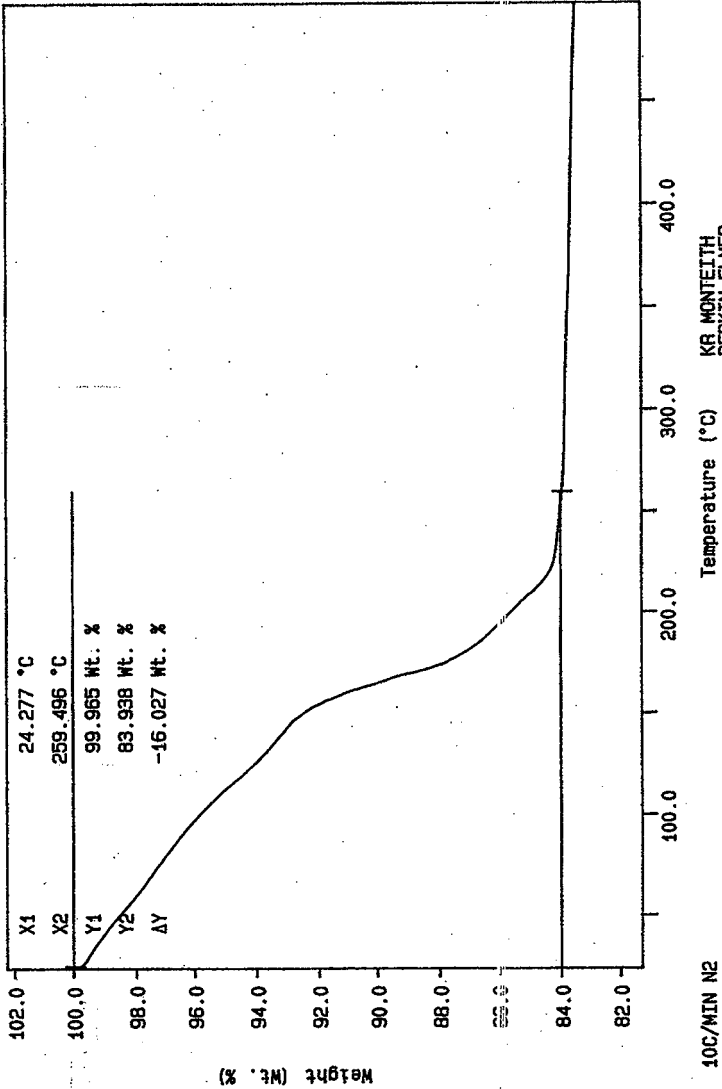
Curve 1: DSC  
File info: IND092301 Wed Sep 23 06:24:27 1998  
Sample Weight: 11.670 mg  
STD 12N14-B

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 5/25 TO 5/19.



N2, EXOTHERM DOWN  
 TEMPERATURE: 140.0 °C TIME: 0.0 min RATE: 10.0 C/min  
 JI SOLBRACK  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Wed Sep 23 11:38 1998

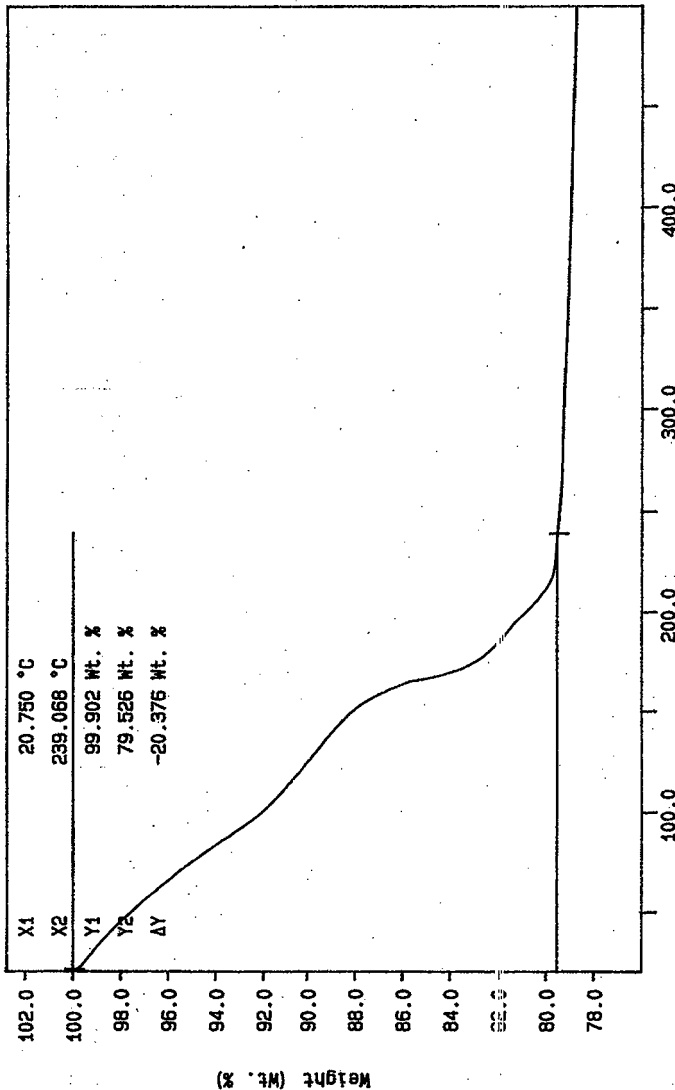
Curve 1: T6A  
File info: SAM092323 Thu Sep 24 02:08:02 1998  
Sample Weight: 16.316 mg  
S98T002426



KR MONTEITH  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 02:52:52 1998

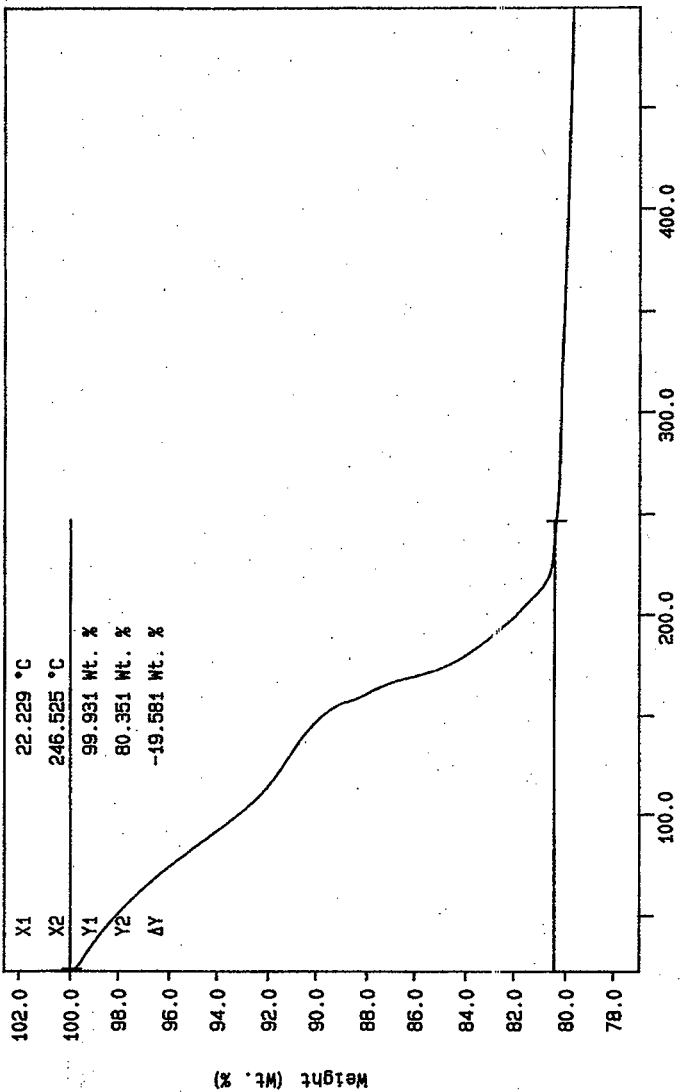
10C/MIN N2  
TEMP: 35.0 C  
TIME: 500.0 S  
0.0 min RATE: 10.0 C/min

Curve 1: TGA  
 File info: SAM092324 Thu Sep 24 03: 44: 07 1998  
 Sample Weight: 13.099 mg  
 S98T002426 DUP



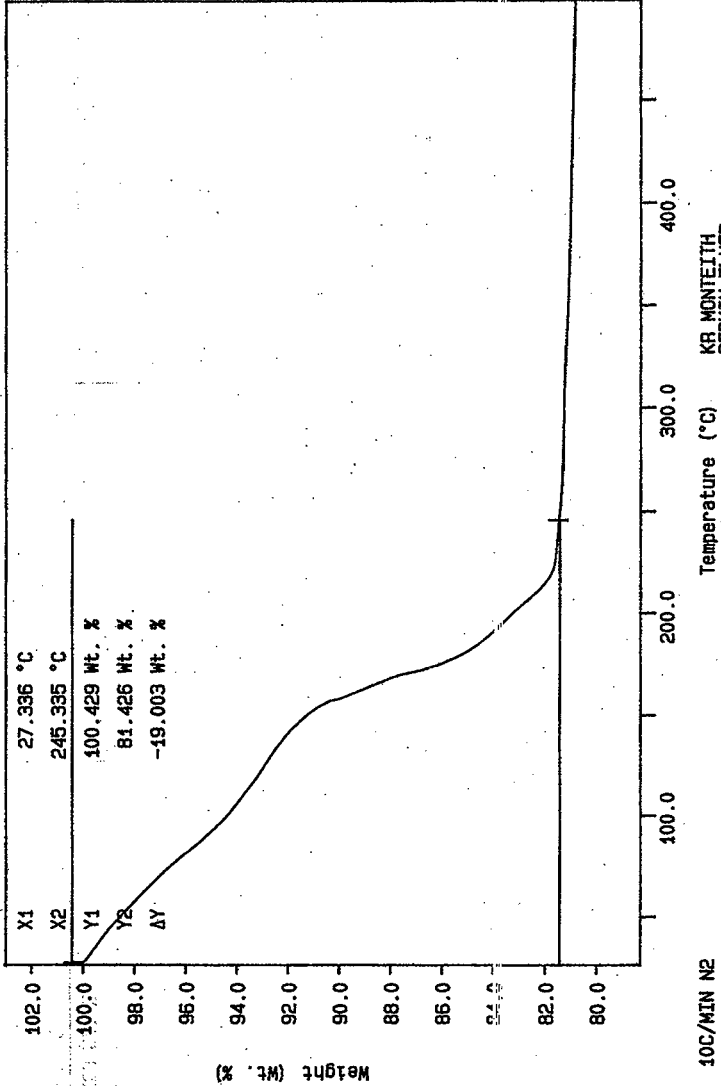
10C/MIN N2  
 TEMPR: 35.0 C  
 TEMPR: 500.0 C  
 TIME: 0.0 min RATES: 10.0 C/min  
 KR MONTEITH  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Thu Sep 24 03: 44: 36 1998

Curve 1: TGA  
File info: SAM092320 Wed Sep 23 23:46:19 1998  
Sample Weight: 15.948 mg  
S98T002432



10C/MIN N2  
TEMP: 25.0 C  
TIME: 58.8 S  
10C/MIN RATE: 10.0 C/min  
Temperature (°C)  
KR MONTEITH  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Wed Sep 23 23:57:51 1998

Curve 1: TGA  
File info: SAM092322 Thu Sep 24 00:55:20 1998  
Sample Weight: 15.948 mg  
998T002432 DUP



KR MONTEITH  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 01:14:39 1998

10C/MIN N2  
TEMP: 35.0 C  
TIME: 558.8 S  
0.0 min RATE: 40.0 C/min

# LABCORE Data Entry Template for Worklist# 26309


Analyst: KRM Instrument: TGA0 3 Book # 117NBA


Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107, TGA-03, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-03	SOLID	<u>59.4</u>	<u>58.94x</u>	<u>N/A</u>	%
98000359	U-107 (2)	2 SAMPLE	S98T002438	0	TGA-03	SOLID	<u>N/A</u>	<u>24.41</u>		%
98000359	U-107 (2)	3 DUP	S98T002438	0	TGA-03	SOLID	<u>24.41</u>	<u>25.82</u>	<u>N/A</u>	%
98000359	U-107 (2)	4 SAMPLE	S98T002444	0	TGA-03	SOLID	<u>N/A</u>	<u>45.29</u>		%
98000359	U-107 (2)	5 DUP	S98T002444	0	TGA-03	SOLID	<u>45.29</u>	<u>46.70</u>	<u>N/A</u>	%

Final page for worklist # 26309

  
 Analyst Signature 9-24-98  
 Date  
 Validated 9/25/98 BB Wachler

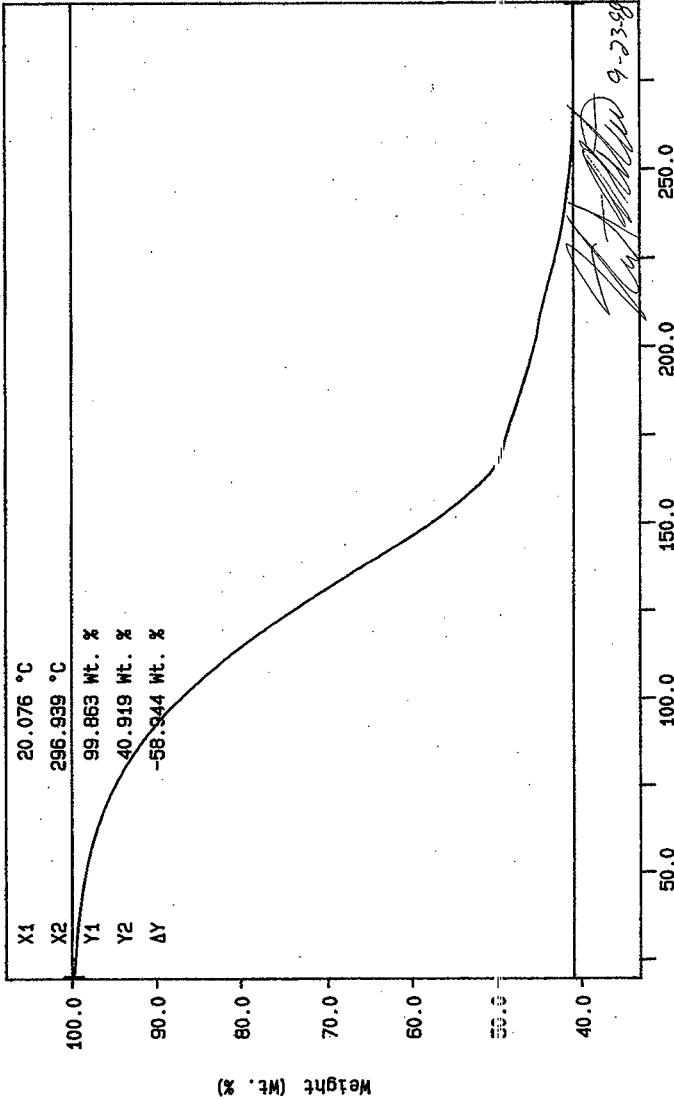
  
 Analyst Signature 9-25-98  
 Date

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: TGA  
File info: TER092301 Wed Sep 23 22: 32: 26 1998  
Sample Weight: 15.561 mg  
117NB-A

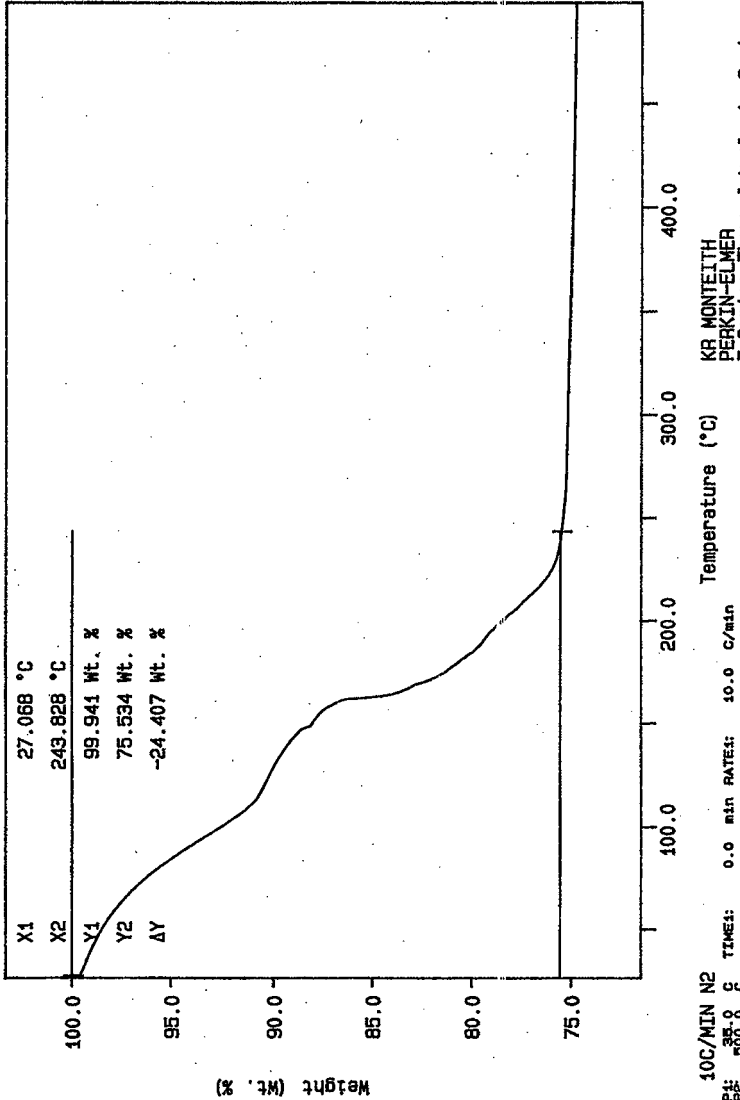
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 451 TO 455.



10C/MIN N2  
TEMP1: 35.0 C  
TEMP2: 300.0 C  
TIME1: 0.0 min  
TIME2: 40.0 C/min  
Temperature (°C)  
KR MONTEITH  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Wed Sep 23 22: 34: 36 1998

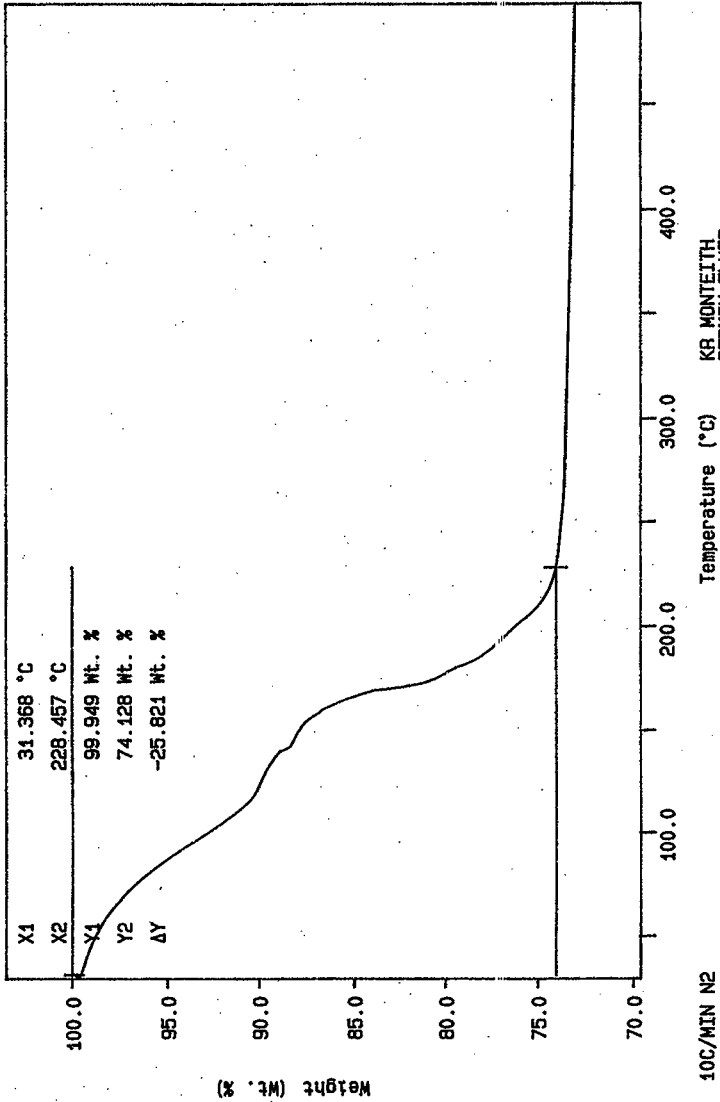


Curve 1: TGA  
 File info: SAM092325 Thu Sep 24 04:53:00 1998  
 Sample Weight: 15.933 mg  
 S98T002438



KR MONTEITH  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Thu Sep 24 04:59:18 1998

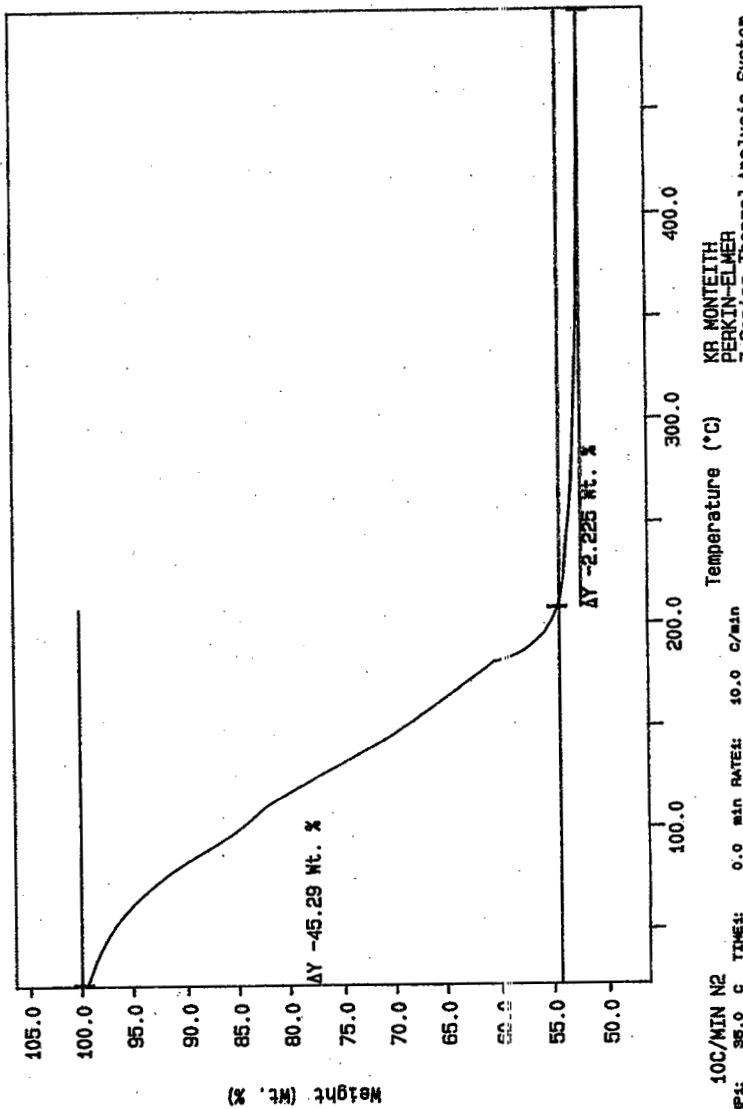
Curve 1: T6A  
File info: SAM092326 Thu Sep 24 05:59:19 1998  
Sample Weight: 16.382 mg  
S98T002438 DUP



KR MONTEITH  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Thu Sep 24 06:03:00 1998

10C/MIN N2  
TEMP: 35.0 C  
TIME: 500.0 S  
0.0 min RATE: 10.0 C/min

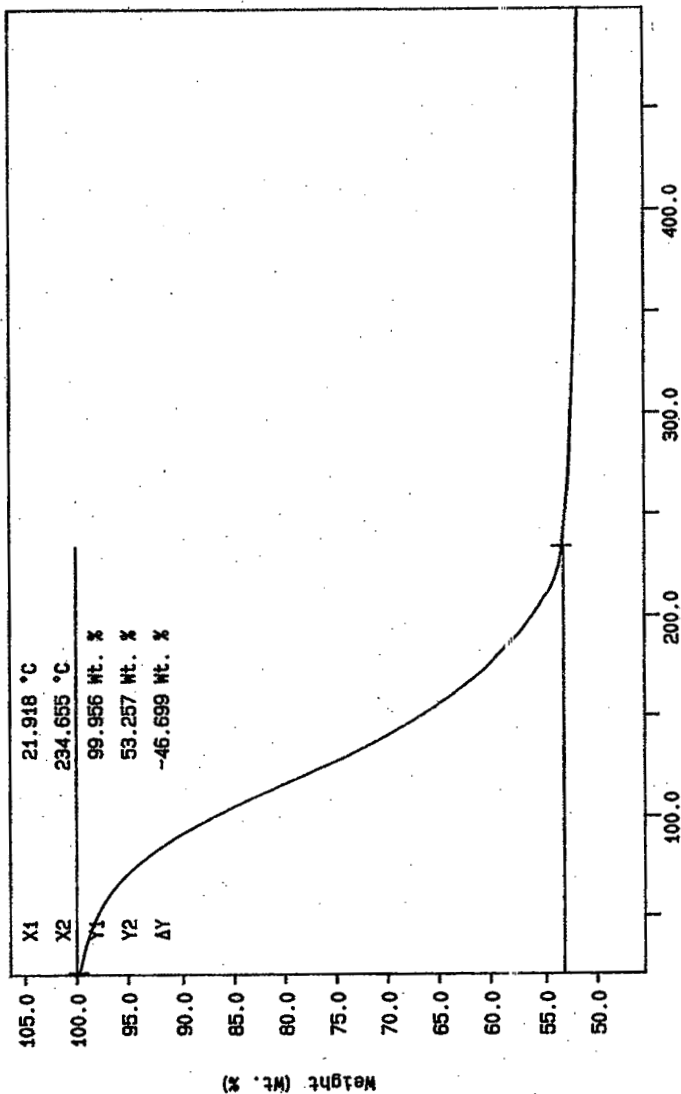
Curve 1: TGA  
 File info: SAM092327 Thu Sep 24 07:11:26 1998  
 Sample Weight: 6.062 mg  
 S98T002444



KB MONTEITH  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Thu Sep 24 10:18:00 1998

10C/MIN N2  
 TEMP: 35.0 °C  
 TIME: 560.0 s  
 0.0 min RATE: 10.0 C/min

Curve 1: TGA  
 File info: SAM092328 Thu Sep 24 11:25:19 1998  
 Sample Weight: 11.394 mg  
 S98T002444DUP



KR MONTEITH  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Thu Sep 24 11:36:15 1998

Temperature (°C)

10.0 C/MIN RATE: 10.0 C/MIN

TIME: 00:00

10C/MIN N2

# LABCORE Completed Worklist Report for Worklist# 27679

Analyst: slh Instrument: TGA03 Book#: 117N8A

Method: LA-514-114 Rev/Mod D-1

Worklist Comment: U107 FOR TGA-03 RTS

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0		TGA-03	LIQUID	5.94e1	58.60	98.652 %	Recovery
2 SAMPLE	S98T002114	0	TGA-03	LIQUID	N/A	99.04	%	
3 DUP	S98T002114	0	TGA-03	LIQUID	99.04	98.94	0.101 RPD	

Final page for worklist# 27679

\_\_\_\_\_  
Analyst Signature Date

Mary Tracy 1-5-99  
\_\_\_\_\_  
Analyst Signature Date

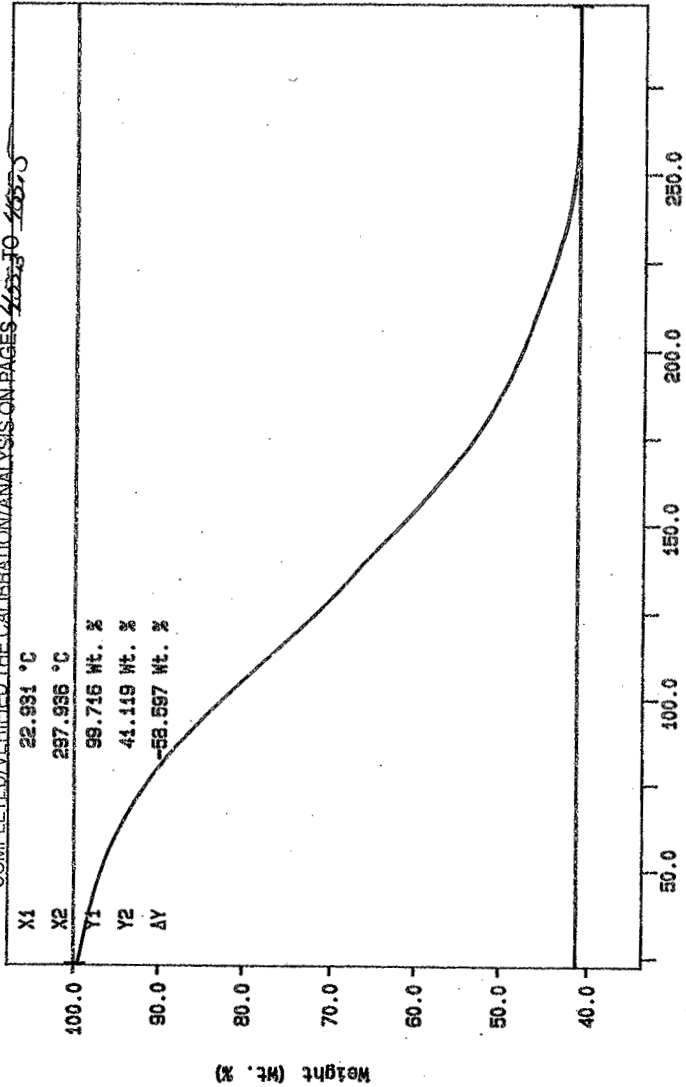
B. Bachelor 1/7/99  
\_\_\_\_\_  
Reviewer Signature Date

Units shown for QC (BLK/BKG) may not reflect the actual units.



Curve 1: TGA  
File Info: TER122901 Tue Dec 29 06:36:42 1998  
Sample Weight: 20.668 mg  
147N8-A

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 455 TO 458

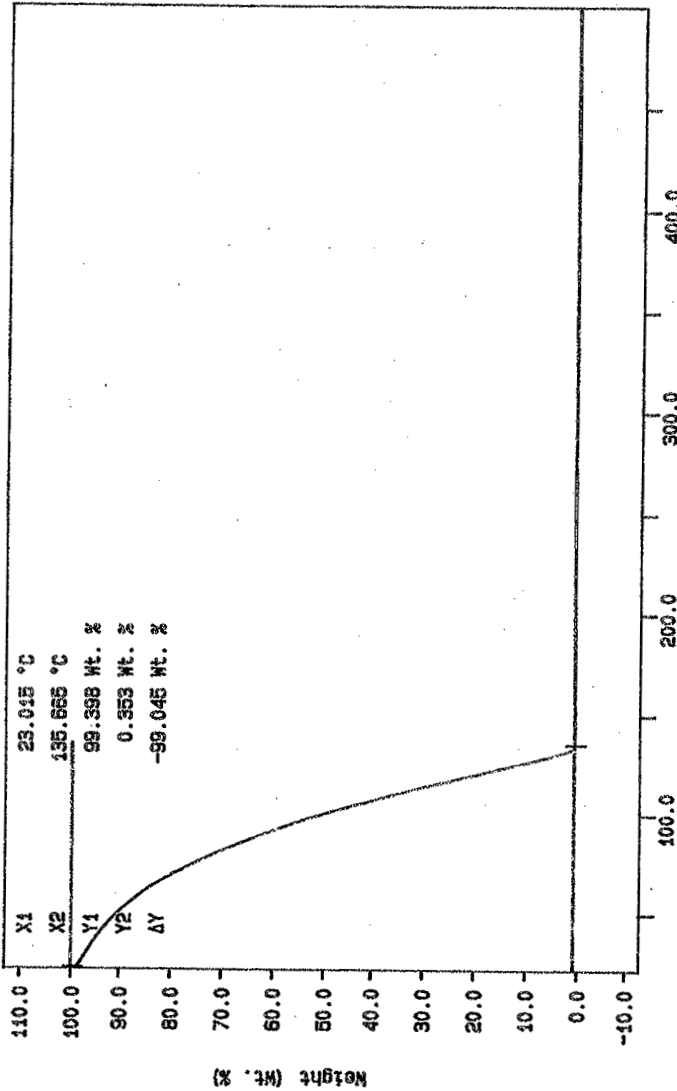


Weight (Wt. %)

10C/MIN N2  
TEMP: 35.0 C TIME: 0.0 min RATE: 10.0 C/min  
SL HOOD BOATRIGT  
PERKIN-ELMER  
7 Series Thermal Analysis System  
Tue Dec 29 06:56:27 1998

*Sandra J. Fred Beaty*

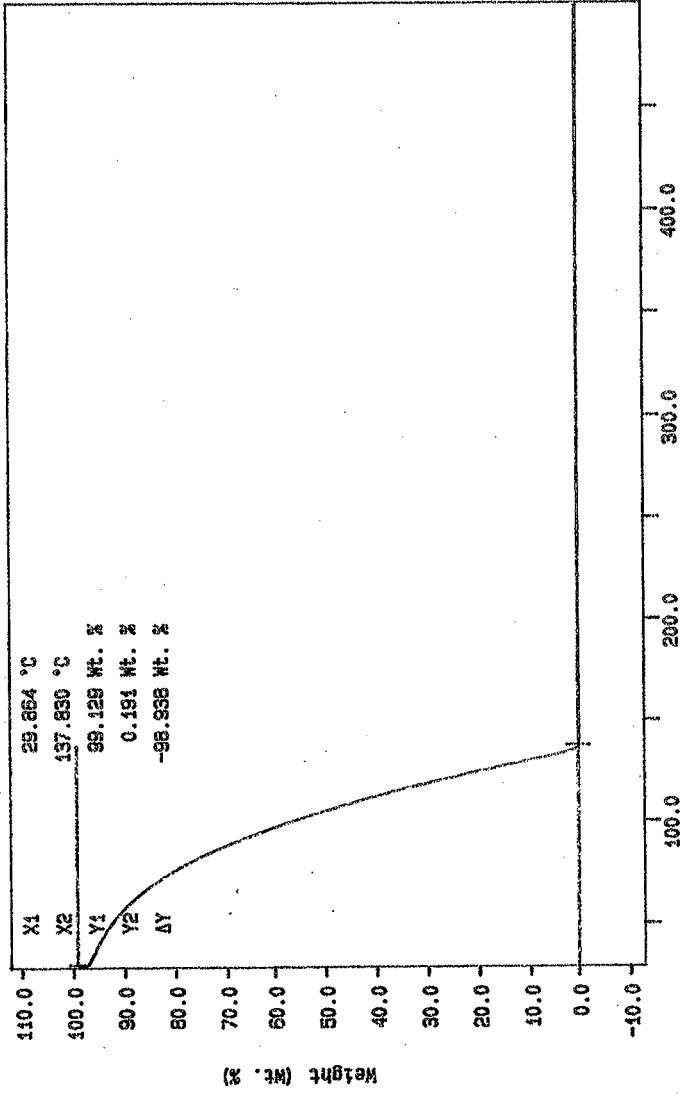
Curve 1: TGA  
File info: SAM22901 Tue Dec 29 09:57:11 1998  
Sample Weight: 9.915 mg  
S98T002114



100%/MIN N2  
 THERM 500.0 S  
 TIME: 0.0 MIN RATE: 10.0 C/MIN  
 SL HOOD BOATRIGT  
 RESKIN-ELMER  
 7 Series Thermal Analysis System  
 Tue Dec 29 10:28:33 1998



Curve 1: TGA  
File info: SAM122902 Tue Dec 29 11:28:10 1998  
Sample Weight: 10.275 mg  
S95T002114 DUP



10C/MIN N2  
 TEMP: 56.0 C TIME: 0.0 min RATE: 10.0 g/min  
 455 5

SL HOOD BOATRIGHT  
 PERKIN-ELMER  
 7 Series Thermal Analysis System  
 Tue Dec 29 16:42:16 1998

**LABCORE Data Entry Template for Worklist# 25153**

Analyst: RAU Instrument: BA001 Book # 134N16C

Method: LA-510-112 Rev/Mod E-D

Worklist Comment: U107, SPG-01, tdm

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				SPG-01	LIQUID	<u>1.3779</u>	<u>1.364</u>	<u>N/A</u>	Sp.G.
98000358	U-107 (2)	2	SAMPLE	S98T002032	0		SPG-01	LIQUID	<u>N/A</u>	<u>1.410</u>		Sp.G.
98000358	U-107 (2)	3	DUP	S98T002032	0		SPG-01	LIQUID	<u>1.410</u>	<u>1.441</u>	<u>N/A</u>	Sp.G.
98000358	U-107 (2)	4	SAMPLE	S98T002036	0		SPG-01	LIQUID	<u>N/A</u>	<u>1.312</u>		Sp.G.
98000358	U-107 (2)	5	DUP	S98T002036	0		SPG-01	LIQUID	<u>1.312</u>	<u>1.304</u>	<u>N/A</u>	Sp.G.
98000358	U-107 (2)	6	SAMPLE	S98T002046	0		SPG-01	LIQUID	<u>N/A</u>	<u>1.335</u>		Sp.G.
98000358	U-107 (2)	7	DUP	S98T002046	0		SPG-01	LIQUID	<u>1.335</u>	<u>1.337</u>	<u>N/A</u>	Sp.G.

**Final page for worklist # 25153**

RA McCann 7/29/98  
Analyst Signature Date

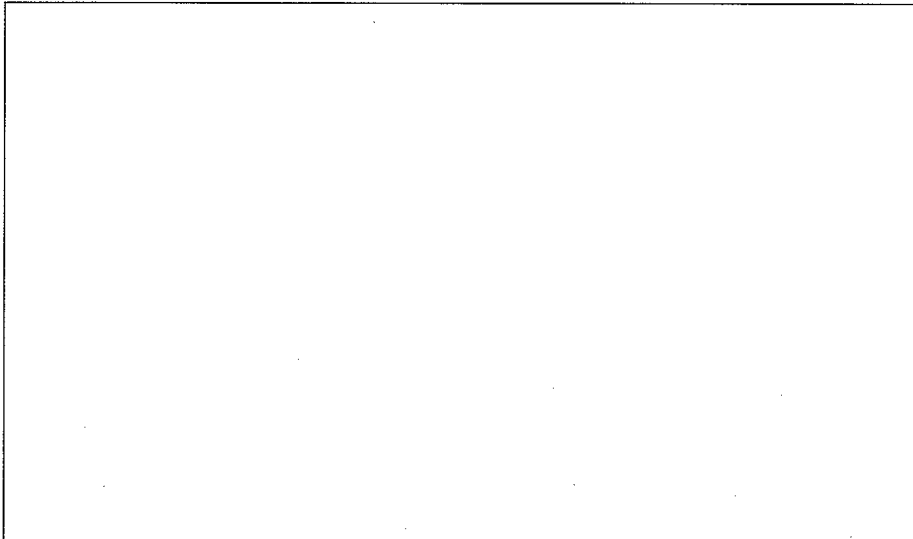
[Signature] 7-31-98  
Analyst Signature Date

Validated 8/3/98 [Signature]

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

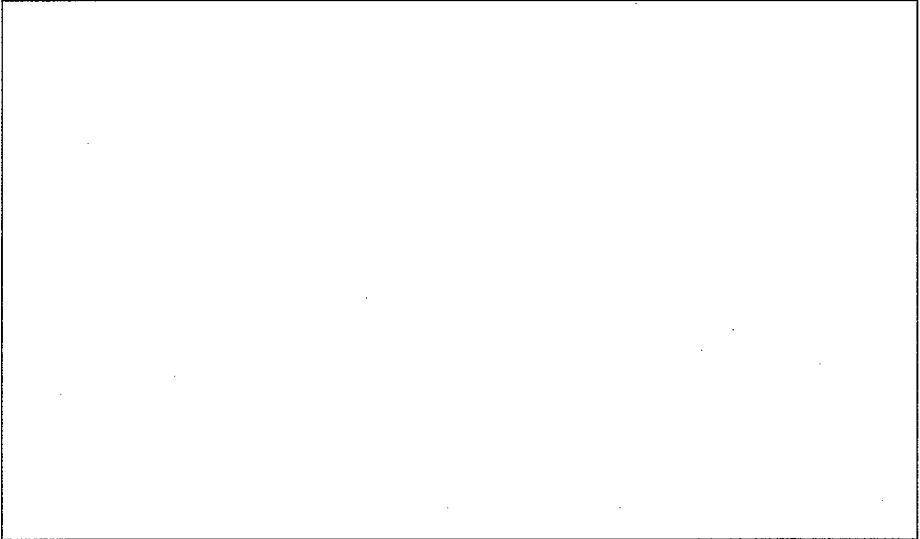


**SPECIFIC GRAVITY : LA-510-112 (B-1)** <sup>E.O. 1-26-98</sup>

Type		STD	REPLICATE
STD	Gross Weight (W2)	1.4888	1.5022
Work List	Tare Weight (W1)	1.3536	1.3646
25153	Weight of Solution (W2-W1)	0.1352	0.1376
Test Code	Volume of Solution $\mu$ L	100.0000	100.0000
SPG-1	Specific Gravity	1.3520	1.3760
Matrix	Specific Gravity (Average)	1.3640	
LIQUID			
Sample #			
134N16C			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
PJM	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L}/\text{mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$		
Date			
07/29/98	v RESULT v		
Time	Specific Gravity Average =	1.364	
11:40 AM			

Data Entry by: \_\_\_\_\_ Date: 07/30/98  
 Approved by: *B. Machelon* Date: 8/3/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

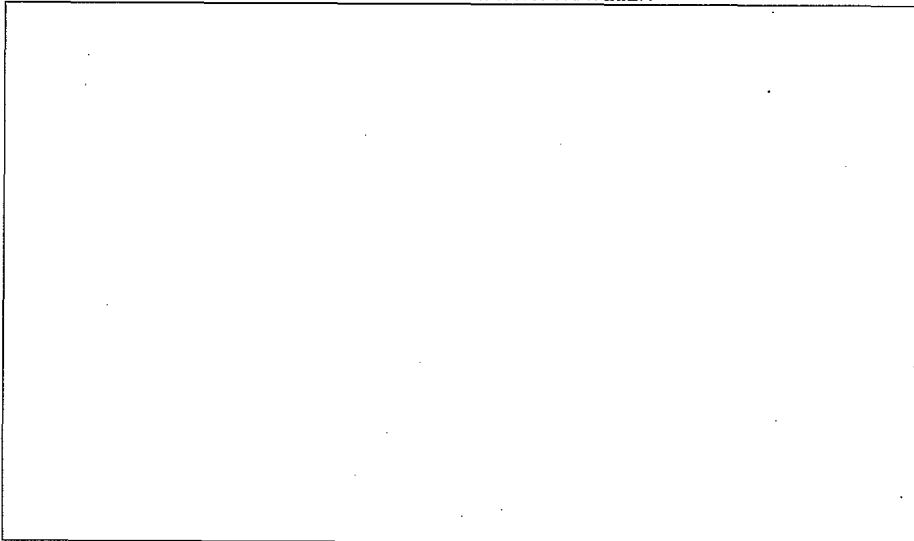


**SPECIFIC GRAVITY : LA-510-112 (D-1)** <sup>E.O. 12958</sup>

Type		SAM	REPLICATE
SAM	Gross Weight (W2)	1.5098	0.0000
Work List	Tare Weight (W1)	1.3688	0.0000
25153	Weight of Solution (W2-W1)	0.141	0
Test Code	Volume of Solution $\mu$ L	100.0000	0.0000
SPG-1	Specific Gravity	1.4100	NA
Matrix			
LIQUID			
Sample #			
S98T002032			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
PJM	Specific Gravity = [(W2-W1) * 1000 $\mu$ L/mL] / [Vol. of Solution $\mu$ L * 1.000 g/mL]		
Date			
07/29/98	v RESULT v		
Time	Specific Gravity =	1.410	
11:40 AM			

Data Entry by:	Date: 07/30/98
Approved by: <i>[Signature]</i>	Date: 8/3/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

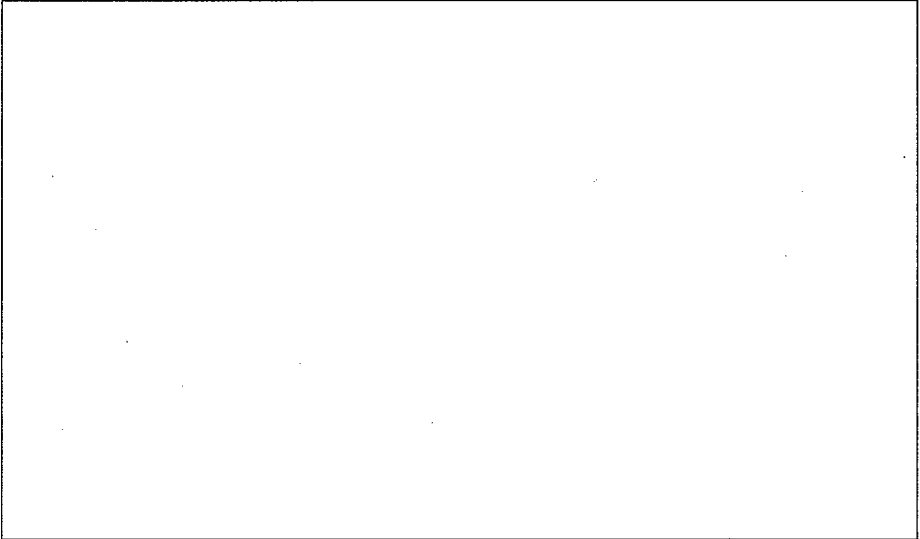


**SPECIFIC GRAVITY : LA-510-112 (D-1)** <sup>E-0</sup> <sup>1-26-99</sup>  
*Med*

Type		DUP	REPLICATE
DUP	Gross Weight (W2)	1.5116	0.0000
Work List	Tare Weight (W1)	1.3675	0.0000
25153	Weight of Solution (W2-W1)	0.1441	0
Test Code	Volume of Solution $\mu$ L	100.0000	0.0000
SPG-1	Specific Gravity	1.4410	NA
Matrix			
LIQUID			
Sample #			
S98T002032			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
PJM	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L/mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$		
Date			
07/29/98	v RESULT v		
Time	Specific Gravity =	1.441	
11:40 AM			

Data Entry by:	Date: 07/30/98
Approved by: <i>JJ Machety</i>	Date: 8/3/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

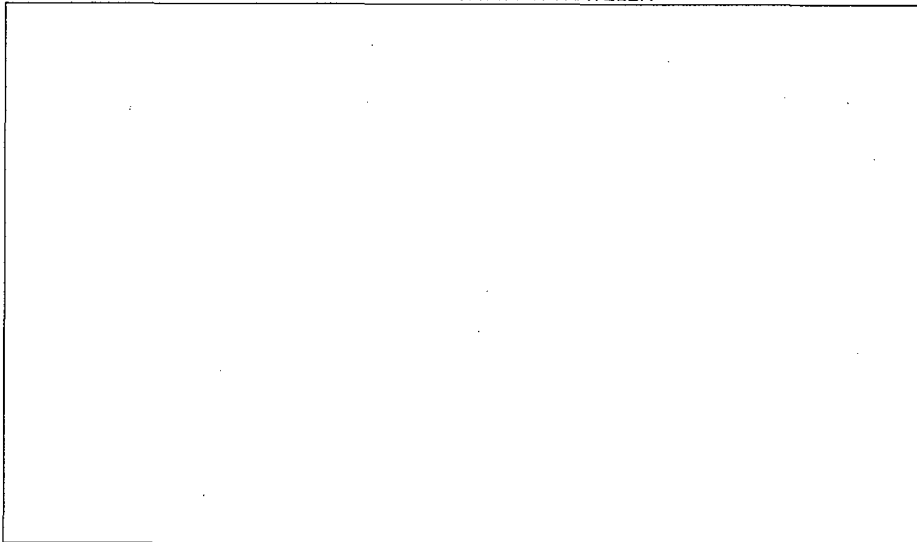


**SPECIFIC GRAVITY : LA-510-112 (D-1)** <sup>E.O. 12812</sup>

Type		SAM	REPLICATE
SAM	Gross Weight (W2)	1.4621	0.0000
Work List	Tare Weight (W1)	1.3309	0.0000
25153	Weight of Solution (W2-W1)	0.1312	0
Test Code	Volume of Solution $\mu$ L	100.0000	0.0000
SPG-1	Specific Gravity	1.3120	NA
Matrix			
LIQUID			
Sample #			
S98T002036			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
PJM	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L}/\text{mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g}/\text{mL}]$		
Date			
07/29/98	v RESULT v		
Time	Specific Gravity =	1.312	
11:40:AM			

Data Entry by:	Date: 07/30/98
Approved by: <i>[Signature]</i>	Date: 8/3/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

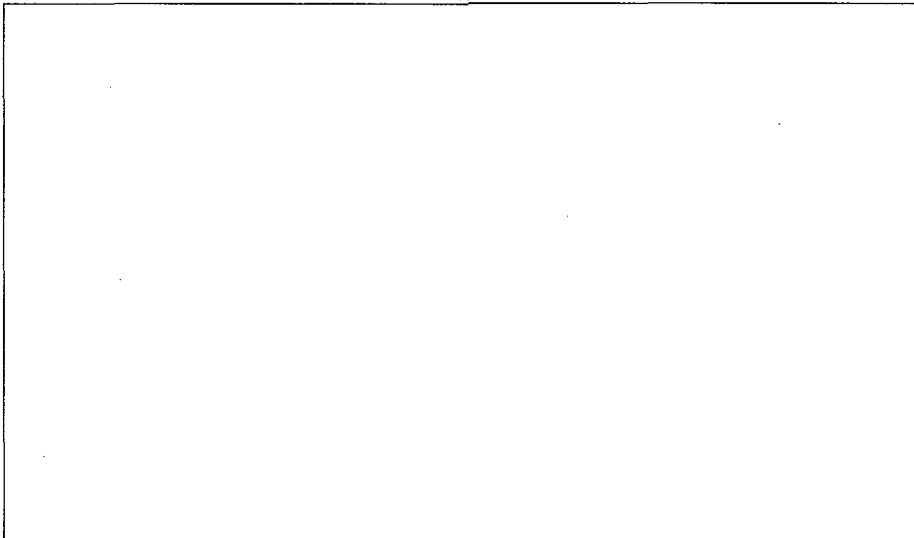


**SPECIFIC GRAVITY : LA-510-112 (D-1)** <sup>F-0</sup> <sub>LS 1-24-99</sub>

Type		DUP	REPLICATE
DUP	Gross Weight (W2)	1.5030	0.0000
Work List	Tare Weight (W1)	1.3726	0.0000
25153	Weight of Solution (W2-W1)	0.1304	0
Test Code	Volume of Solution $\mu$ L	100.0000	0.0000
SPG-1	Specific Gravity	1.3040	NA
Matrix			
LIQUID			
Sample #			
S98T002036			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
PJM	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L}/\text{mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g}/\text{mL}]$		
Date			
07/29/98	v RESULT v		
Time	Specific Gravity =	1.304	
11:40 AM			

Data Entry by:	Date:	07/30/98
Approved by: <i>J. Machelo</i>	Date:	8/3/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER



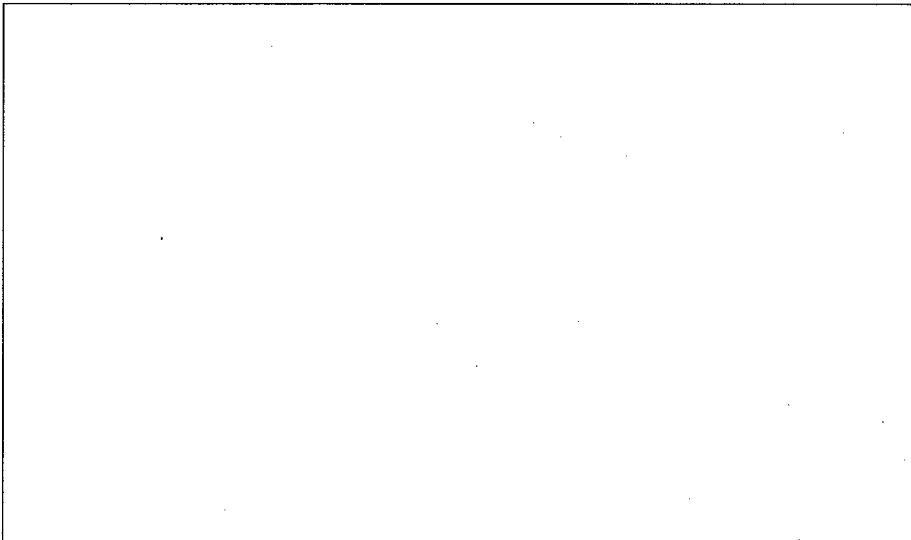
**SPECIFIC GRAVITY : LA-510-112** *(E-O D-1) LAD 1-26-99*

Type		SAM	REPLICATE
SAM	Gross Weight (W2)	1.4598	0.0000
Work List	Tare Weight (W1)	1.3263	0.0000
25153	Weight of Solution (W2-W1)	0.1335	0
Test Code	Volume of Solution $\mu$ L	100.0000	0.0000
SPG-1	Specific Gravity	1.3350	NA
Matrix			
LIQUID			
Sample #			
S98T002046			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
PJM	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L}/\text{mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g}/\text{mL}]$		
Date			
07/29/98	v RESULT v		
Time	Specific Gravity =	1.335	
11:40 AM			

Data Entry by:	Date:	07/30/98
Approved by: <i>B. Hatcher</i>	Date:	8/3/98
Form 510112L1 Rev. 1.1	Page 1 of 1	



PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER



**SPECIFIC GRAVITY : LA-510-112 (D-1)**

*E.O.  
1-30-99  
LAD*

Type		DUP	REPLICATE
DUP	Gross Weight (W2)	1.5170	0.0000
Work List	Tare Weight (W1)	1.3833	0.0000
25153	Weight of Solution (W2-W1)	0.1337	0
Test Code	Volume of Solution $\mu$ L	100.0000	0.0000
SPG-1	Specific Gravity	1.3370	NA
Matrix			
LIQUID			
Sample #			
S98T002046			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
PJM	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L}/\text{mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g}/\text{mL}]$		
Date			
07/29/98	v RESULT v		
Time	Specific Gravity =	1.337	
11:40 AM			

Data Entry by:	Date: 07/30/98
Approved by: <i>PJ Machelen</i>	Date: 8/3/98

# LABCORE Completed Worklist Report for Worklist# 25761

Analyst: jis

Instrument: BA001

Book#: 134N16C

Method: LA-510-112 Rev/Mod \_\_\_\_\_

Worklist Comment: U107, SPG-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0	SPG-01	LIQUID	1.3779	1.359	98.628 % Recovery	
2 SAMPLE	S98T002236 0	SPG-01	LIQUID	N/A	1.254	1.00e-003	Sp.G.
3 DDP	S98T002236 0	SPG-01	LIQUID	1.254	1.261	0.557	RPD
4 SAMPLE	S98T002240 0	SPG-01	LIQUID	N/A	1.391	1.00e-003	Sp.G.
5 DDP	S98T002240 0	SPG-01	LIQUID	1.391	1.391	0.722	RPD
6 SAMPLE	S98T002244 0	SPG-01	LIQUID	N/A	1.385	1.00e-003	Sp.G.
7 DDP	S98T002244 0	SPG-01	LIQUID	1.385	1.425	2.847	RPD
8 SAMPLE	S98T002248 0	SPG-01	LIQUID	N/A	1.393	1.00e-003	Sp.G.
9 DDP	S98T002248 0	SPG-01	LIQUID	1.393	1.434	2.901	RPD
10 SAMPLE	S98T002252 0	SPG-01	LIQUID	N/A	1.304	1.00e-003	Sp.G.
11 DDP	S98T002252 0	SPG-01	LIQUID	1.304	1.410	7.811	RPD

Final page for worklist# 25761

Analyst Signature

Date

Analyst Signature

Date

Reviewer Signature

Date

*JIS* *SPG* 9/16/98

# LABCORE Data Entry Template for Worklist# 25761

Analyst: JIS Instrument: BA001 Book # 134W16-C

Method: LA-510-112 Rev/Mod E-0

Worklist Comment: U107, SPG-01, tdm

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				SPG-01	LIQUID	<u>1362</u>		N/A	Sp.G.
98000359	U-107 (2)	2	SAMPLE	S98T002236	0		SPG-01	LIQUID	N/A			Sp.G.
98000359	U-107 (2)	3	DUP	S98T002236	0		SPG-01	LIQUID			N/A	Sp.G.
98000359	U-107 (2)	4	SAMPLE	S98T002240	0		SPG-01	LIQUID	N/A			Sp.G.
98000359	U-107 (2)	5	DUP	S98T002240	0		SPG-01	LIQUID			N/A	Sp.G.
98000359	U-107 (2)	6	SAMPLE	S98T002244	0		SPG-01	LIQUID	N/A			Sp.G.
98000359	U-107 (2)	7	DUP	S98T002244	0		SPG-01	LIQUID			N/A	Sp.G.
98000359	U-107 (2)	8	SAMPLE	S98T002248	0		SPG-01	LIQUID	N/A			Sp.G.
98000359	U-107 (2)	9	DUP	S98T002248	0		SPG-01	LIQUID			N/A	Sp.G.
98000359	U-107 (2)	10	SAMPLE	S98T002252	0		SPG-01	LIQUID	N/A			Sp.G.
98000359	U-107 (2)	11	DUP	S98T002252	0		SPG-01	LIQUID			N/A	Sp.G.

**Final page for worklist # 25761**

Jill Sellman  
Analyst Signature Date 082598

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

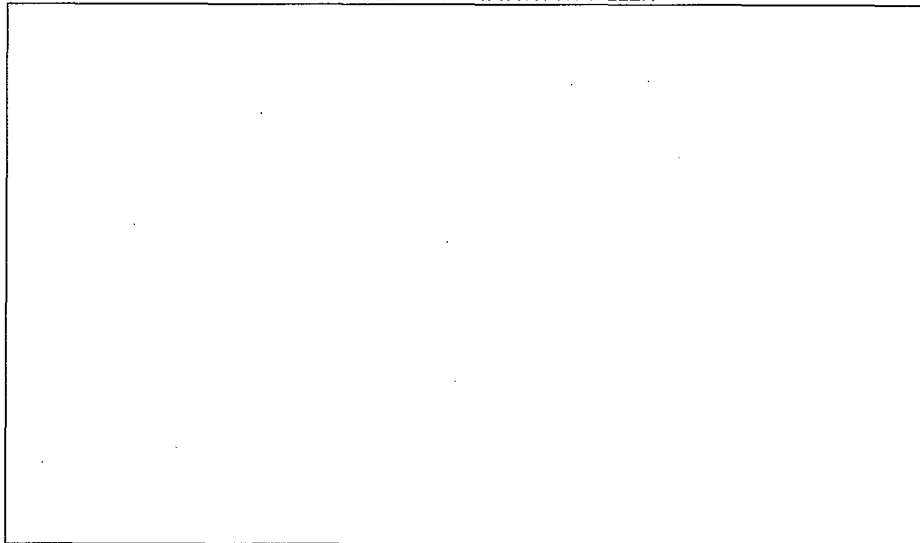
PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

## SPECIFIC GRAVITY : LA-510-112 (D-1)

Type		STD	REPLICATE
STD	Gross Weight (W2)	1.4743	1.4721
Work List	Tare Weight (W1)	1.3381	1.3364
25761	Weight of Solution (W2-W1)	0.1362	0.1357
Test Code	Volume of Solution $\mu$ L	100.0000	100.0000
SPG01	Specific Gravity	1.3620	1.3570
Matrix	Specific Gravity (Average)	1.3595	
LIQUID			
Sample #			
STD			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
JIS	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L}/\text{mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g}/\text{mL}]$		
Date			
08/25/98	v RESULT v		
Time	Specific Gravity Average =	1.359	
03:30 PM			

Data Entry by:	Date:	09/16/98
Approved by: <i>Rachel</i>	Date:	9/17/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

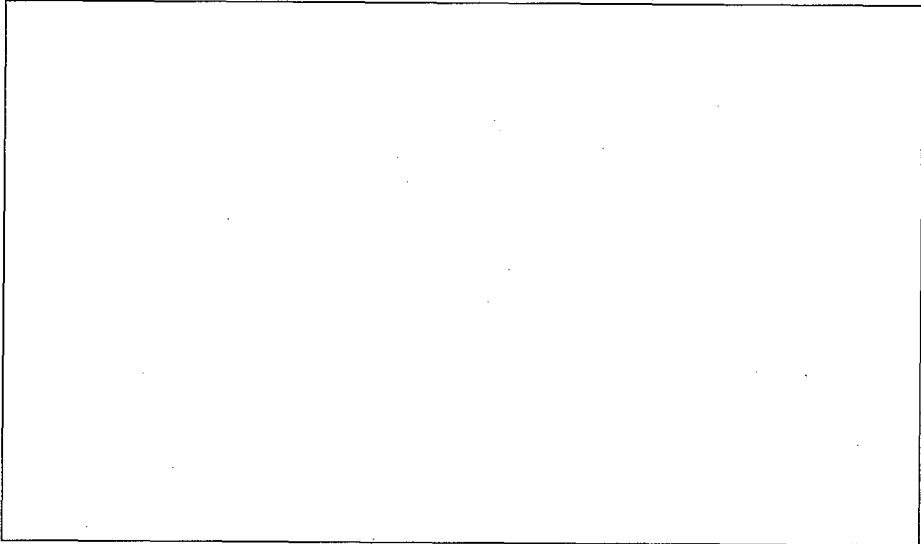


**SPECIFIC GRAVITY : LA-510-112 (D-1)**

Type		SAM	REPLICATE
SAM	Gross Weight (W2)	1.4025	
Work List	Tare Weight (W1)	1.2771	
25761	Weight of Solution (W2-W1)	0.1254	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG01	Specific Gravity	1.2540	NA
Matrix			
LIQUID			
Sample #			
S98T002236			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
JJS	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L}/\text{mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g}/\text{mL}]$		
Date			
08/25/98	v RESULT v		
Time	Specific Gravity =	1.254	
03:30 PM			

Data Entry by:	Date:	09/16/98
Approved by: <i>B. Pacheco</i>	Date:	9/17/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

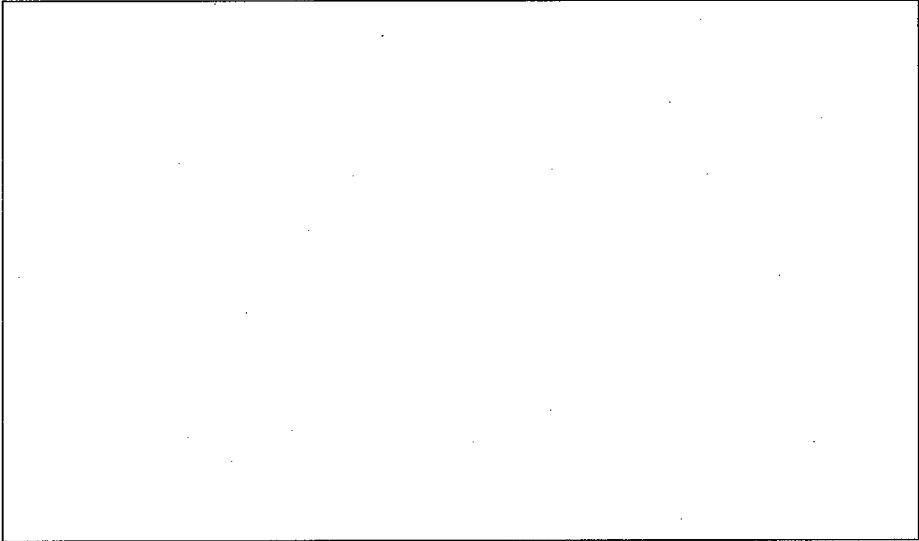


**SPECIFIC GRAVITY : LA-510-112 (D-1)**

Type		SAM	REPLICATE
SAM- <i>Dsp</i>	Gross Weight (W2)	1.4041	
Work List	Tare Weight (W1)	1.2780	
25761	Weight of Solution (W2-W1)	0.1261	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG01	Specific Gravity	1.2610	NA
Matrix			
LIQUID			
Sample #			
S98T002236			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
JIS	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L/mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$		
Date			
08/25/98	v RESULT v		
Time	Specific Gravity =	1.261	
03:30 PM			

Data Entry by:	Date: 09/16/98
Approved by: <i>Machelor</i>	Date: 9/17/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER



**SPECIFIC GRAVITY : LA-510-112 (D-1)**

Type		SAM	REPLICATE
SAM	Gross Weight (W2)	1.4764	
Work List	Tare Weight (W1)	1.3373	
25761	Weight of Solution (W2-W1)	0.1391	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG01	Specific Gravity	1.3910	NA
Matrix			
LIQUID			
Sample #			
S98T002240			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
JIS	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L}/\text{mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$		
Date			
08/25/98	v RESULT v		
Time	Specific Gravity =	1.391	
03:30 PM			

Data Entry by:	Date:	09/16/98
Approved by: <i>B. Kachel</i>	Date:	9/17/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

--

## SPECIFIC GRAVITY : LA-510-112 (D-1)

Type		DUP	REPLICATE
DUP	Gross Weight (W2)	1.4848	
Work List	Tare Weight (W1)	1.3467	
25761	Weight of Solution (W2-W1)	0.1381	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG01	Specific Gravity	1.3810	NA
Matrix			
LIQUID			
Sample #			
S98T002240			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
JIS	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L/mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$		
Date			
08/25/98	v RESULT v		
Time	Specific Gravity =	1.381	
03:30 PM			

Data Entry by:	Date:	09/16/98
Approved by: <i>Rachel</i>	Date:	9/17/98



PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

## SPECIFIC GRAVITY : LA-510-112 (D-1)

Type		SAM	REPLICATE
SAM	Gross Weight (W2)	1.4713	
Work List	Tare Weight (W1)	1.3328	
25761	Weight of Solution (W2-W1)	0.1385	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG01	Specific Gravity	1.3850	NA
Matrix			
LIQUID			
Sample #			
S98T002244			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
JIS	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L}/\text{mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$		
Date			
08/25/98	v RESULT v		
Time	Specific Gravity =	1.385	
03:30 PM			

Data Entry by:

Date: 09/16/98

Approved by:

Date: 9/17/98

Form 510112L1 Rev. 1.1

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

## SPECIFIC GRAVITY : LA-510-112 (D-1)

Type		DUP	REPLICATE
DUP	Gross Weight (W2)	1.4836	
Work List	Tare Weight (W1)	1.3411	
25761	Weight of Solution (W2-W1)	0.1425	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG01	Specific Gravity	1.4250	NA
Matrix			
LIQUID			
Sample #			
S98T002244			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
JIS	Specific Gravity = [(W2-W1) * 1000 $\mu$ L/mL] / [Vol. of Solution $\mu$ L * 1.000 g/mL]		
Date			
08/25/98	v RESULT v		
Time	Specific Gravity =	1.425	
03:30 PM			

Data Entry by:	Date:	09/16/98
Approved by: <i>M. A. Helwig</i>	Date:	9/17/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

## SPECIFIC GRAVITY : LA-510-112 (D-1)

Type		SAM	REPLICATE
SAM	Gross Weight (W2)	1.4600	
Work List	Tare Weight (W1)	1.3207	
25761	Weight of Solution (W2-W1)	0.1393	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG01	Specific Gravity	1.3930	NA
Matrix			
LIQUID			
Sample #			
S98T002248			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
JIS	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L}/\text{mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$		
Date			
08/25/98	v RESULT v		
Time	Specific Gravity =	1.393	
03:30 PM			

Data Entry by:	Date:	09/16/98
Approved by: <i>J. M. Machelon</i>	Date:	9/17/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

## SPECIFIC GRAVITY : LA-510-112 (D-1)

Type		DUP	REPLICATE
DUP	Gross Weight (W2)	1.5042	
Work List	Tare Weight (W1)	1.3608	
25761	Weight of Solution (W2-W1)	0.1434	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG01	Specific Gravity	1.4340	NA
Matrix			
LIQUID			
Sample #			
S98T002248			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
JIS	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L}/\text{mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$		
Date			
08/25/98	v RESULT v		
Time	Specific Gravity =	1.434	
03:30 PM			

Data Entry by:	Date:	09/16/98
Approved by: <i>W. Hatcher</i>	Date:	9/17/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

## SPECIFIC GRAVITY : LA-510-112 (D-1)

Type		SAM	REPLICATE
SAM	Gross Weight (W2)	1.4172	
Work List	Tare Weight (W1)	1.2868	
25761	Weight of Solution (W2-W1)	0.1304	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG01	Specific Gravity	1.3040	NA
Matrix			
LIQUID			
Sample #			
S98T002252			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
JIS	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L}/\text{mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$		
Date			
08/25/98	v RESULT v		
Time	Specific Gravity =	1.304	
03:30 PM			

Data Entry by:	Date: 09/16/98
Approved by: <i>B. Machelon</i>	Date: 9/17/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

## SPECIFIC GRAVITY : LA-510-112 (D-1)

Type		DUP	REPLICATE
DUP	Gross Weight (W2)	1.4280	
Work List	Tare Weight (W1)	1.2870	
25761	Weight of Solution (W2-W1)	0.141	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG01	Specific Gravity	1.4100	NA
Matrix			
LIQUID			
Sample #			
S98T002252			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
JIS	Specific Gravity = [(W2-W1) * 1000 $\mu$ L/mL] / [Vol. of Solution $\mu$ L * 1.000 g/mL]		
Date			
08/25/98	v RESULT v		
Time	Specific Gravity =	1.410	
03:30 PM			

Data Entry by:

Date: 09/16/98

Approved by: *B. Micheloz*

Date: 9/17/98

Form 510112L1 Rev. 1.1

Page 1 of 1

# LABCORE Completed Worklist Report for Worklist# 26126

Analyst: jis

Instrument: BA001

Book#: 134N16C

Method: LA-510-112 Rev/Mod \_\_\_\_\_

Worklist Comment: U107, SPG-01, tdm

Seq Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0			SPG-01	LIQUID	1.3779	1.363	98.319 % Recovery	
2 SAMPLE	S98T002466	0		SPG-01	LIQUID	N/A	1.427	1.00e-003	Sp.G.
3 DUP	S98T002466	0		SPG-01	LIQUID	1.427	1.469	2.901 RPD	
4 SAMPLE	S98T002525	0		SPG-01	LIQUID	N/A	1.395	1.00e-003	Sp.G.
5 DUP	S98T002525	0		SPG-01	LIQUID	1.395	1.421	1.947 RPD	
6 SAMPLE	S98T002534	0		SPG-01	LIQUID	N/A	1.399	1.00e-003	Sp.G.
7 DUP	S98T002534	0		SPG-01	LIQUID	1.399	1.425	1.841 RPD	

## Final page for worklist# 26126

\_\_\_\_\_  
Analyst Signature                      Date

*JAK Spu* 9/16/98  
\_\_\_\_\_  
Analyst Signature                      Date

*B. Bachelor* 9/17/98  
\_\_\_\_\_  
Reviewer Signature                      Date

# LABCORE Data Entry Template for Worklist# 26126

Analyst: JIS Instrument: BA001 Book # 134N16-C

Method: LA-510-112 Rev/Mod E-0

Worklist Comment: U107, SPG-01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			SPG-01	LIQUID			N/A	Sp.G.
98000401	U-107 (2)	2 SAMPLE	S98T002466	0	SPG-01	LIQUID	N/A			Sp.G.
98000401	U-107 (2)	3 DUP	S98T002466	0	SPG-01	LIQUID			N/A	Sp.G.
98000401	U-107 (2)	4 SAMPLE	S98T002525	0	SPG-01	LIQUID	N/A			Sp.G.
98000401	U-107 (2)	5 DUP	S98T002525	0	SPG-01	LIQUID			N/A	Sp.G.
98000401	U-107 (2)	6 SAMPLE	S98T002534	0	SPG-01	LIQUID	N/A			Sp.G.
98000401	U-107 (2)	7 DUP	S98T002534	0	SPG-01	LIQUID			N/A	Sp.G.

## Final page for worklist # 26126

Jeff Seibach 09/12/98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

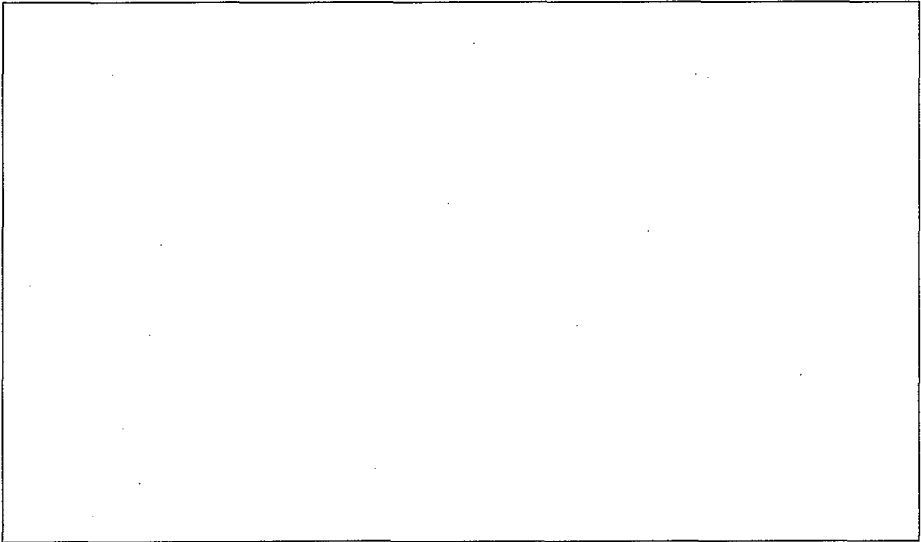
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## SPECIFIC GRAVITY : LA-510-112 (D-1)

Type		STD	REPLICATE
STD	Gross Weight (W2)	1.3266	1.3709
Work List	Tare Weight (W1)	1.1908	1.2340
26126	Weight of Solution (W2-W1)	0.1358	0.1369
Test Code	Volume of Solution $\mu$ L	100.0000	100.0000
SPG01	Specific Gravity	1.3580	1.3690
Matrix	Specific Gravity (Average)	1.3635	
LIQUID			
Sample #			
STD			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
JIS	Specific Gravity = [(W2-W1) * 1000 $\mu$ L/mL] / [Vol. of Solution $\mu$ L * 1.000 g/mL]		
Date			
09/12/98	v RESULT v		
Time	Specific Gravity Average =	1.363	
03:30 PM			

Data Entry by:	Date: 09/16/98
Approved by: <i>B. M. Chelton</i>	Date: 9/17/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

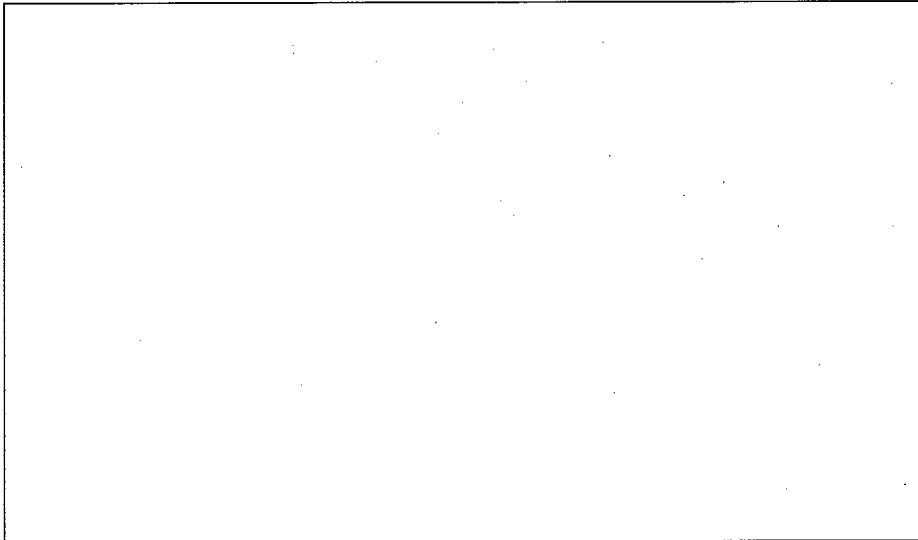


**SPECIFIC GRAVITY : LA-510-112 (D-1)** <sup>E-0</sup>  
<sub>2401-26-99</sub>

Type		SAM	REPLICATE
SAM	Gross Weight (W2)	1.3563	
Work List	Tare Weight (W1)	1.2136	
26126	Weight of Solution (W2-W1)	0.1427	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG01	Specific Gravity	1.4270	NA
Matrix			
LIQUID			
Sample #			
S98T002466			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
JIS	Specific Gravity = [(W2-W1) * 1000 $\mu$ L/mL] / [Vol. of Solution $\mu$ L * 1.000 g/mL]		
Date			
09/12/98	v RESULT v		
Time	Specific Gravity =	1.427	
03:30 PM			

Data Entry by:	Date:	09/16/98
Approved by: <i>R. Rachel</i>	Date:	9/17/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

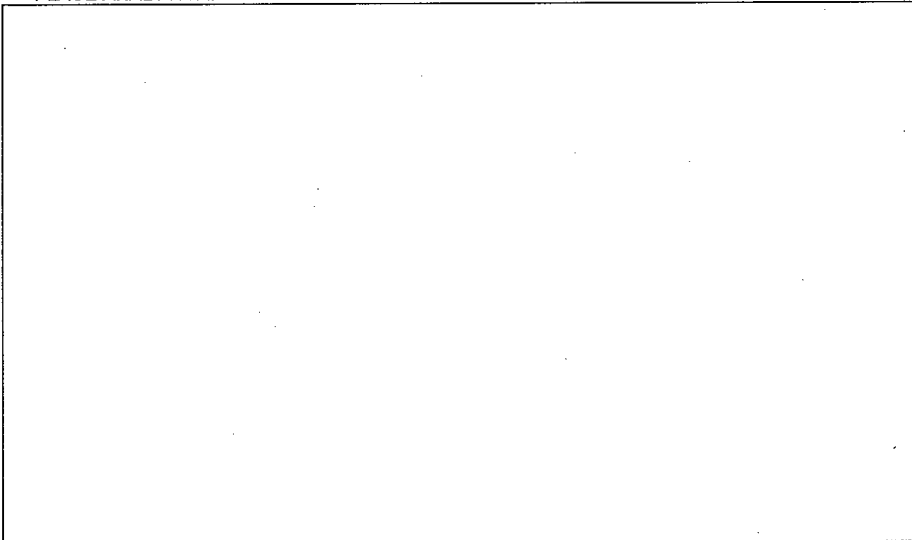


**SPECIFIC GRAVITY : LA-510-112 (D-1)** <sup>EO</sup> <sub>1-26-99</sub> <sub>LD</sub>

Type		DUP	REPLICATE
DUP	Gross Weight (W2)	1.3288	
Work List	Tare Weight (W1)	1.1819	
26126	Weight of Solution (W2-W1)	0.1469	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG01	Specific Gravity	1.4690	NA
Matrix			
LIQUID			
Sample #			
S98T002466			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
JIS	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L}/\text{mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$		
Date			
09/12/98	v RESULT v		
Time	Specific Gravity =	1.469	
03:30 PM			

Data Entry by: \_\_\_\_\_ Date: 09/16/98  
 Approved by: *R. Rachelson* Date: 9/17/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER



**SPECIFIC GRAVITY : LA-510-112 (D-1)** <sup>E=0</sup> <sub>W2</sub> <sup>20°C</sup>

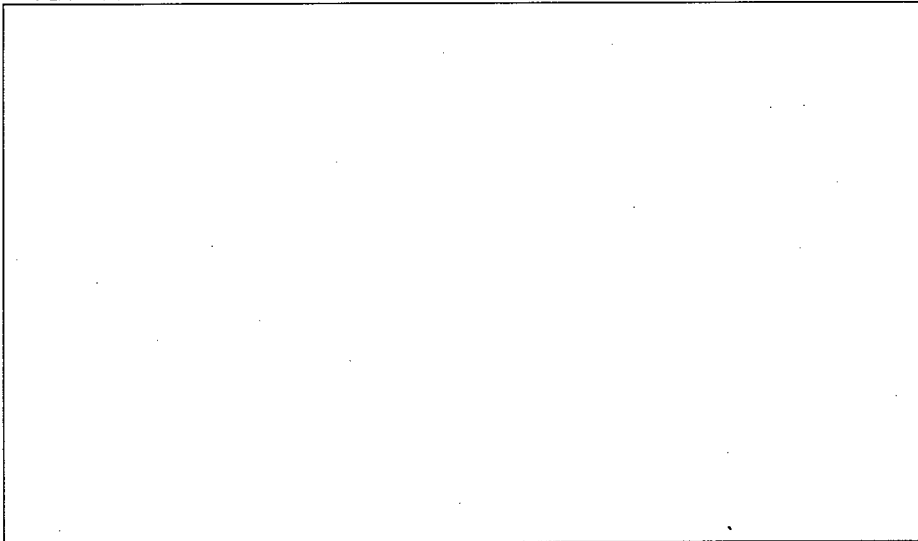
Type		SAM	REPLICATE
SAM	Gross Weight (W2)	1.3549	
Work List	Tare Weight (W1)	1.2154	
26126	Weight of Solution (W2-W1)	0.1395	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG01	Specific Gravity	1.3950	NA
Matrix			

LIQUID
Sample #
S98T002525
Instrument Code
BA001
Analyst
JIS
Date
09/12/98
Time
03:30 PM

Gross Weight (W2) = Wt. of vial + cap + cotton + solution  
 Tare Weight (W1) = Wt. of vial + cap + cotton  
 Specific Gravity =  $[(W2-W1) * 1000 \mu\text{L}/\text{mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$   
 v RESULT v  
 Specific Gravity = 1.395

Data Entry by:	Date:	09/16/98
Approved by: <i>Machelo</i>	Date:	9/17/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER



**SPECIFIC GRAVITY : LA-510-112**

*E.O. LAD 1-26-99*

Type		DUP	REPLICATE
DUP	Gross Weight (W2)	1.3347	
Work List	Tare Weight (W1)	1.1926	
26126	Weight of Solution (W2-W1)	0.1421	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG01	Specific Gravity	1.4210	NA
Matrix			
LIQUID			
Sample #			
S98T002525			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
JIS	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L}/\text{mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g}/\text{mL}]$		
Date			
09/12/98	v RESULT v		
Time	Specific Gravity =	1.421	
03:30 PM			

Data Entry by: \_\_\_\_\_ Date: 09/16/98  
 Approved by: *[Signature]* Date: 9/17/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

E.O  
1-26-99  
LH

**SPECIFIC GRAVITY : LA-510-112 (D-1)**

Type		SAM	REPLICATE
SAM	Gross Weight (W2)	1.3430	
Work List	Tare Weight (W1)	1.2031	
26126	Weight of Solution (W2-W1)	0.1399	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG01	Specific Gravity	1.3990	NA
Matrix			
LIQUID			
Sample #			
S98T002534			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
JIS	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L/mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$		
Date			
09/12/98	v RESULT v		
Time	Specific Gravity =	1.399	
03:30 PM			

Data Entry by:

Date: 09/16/98

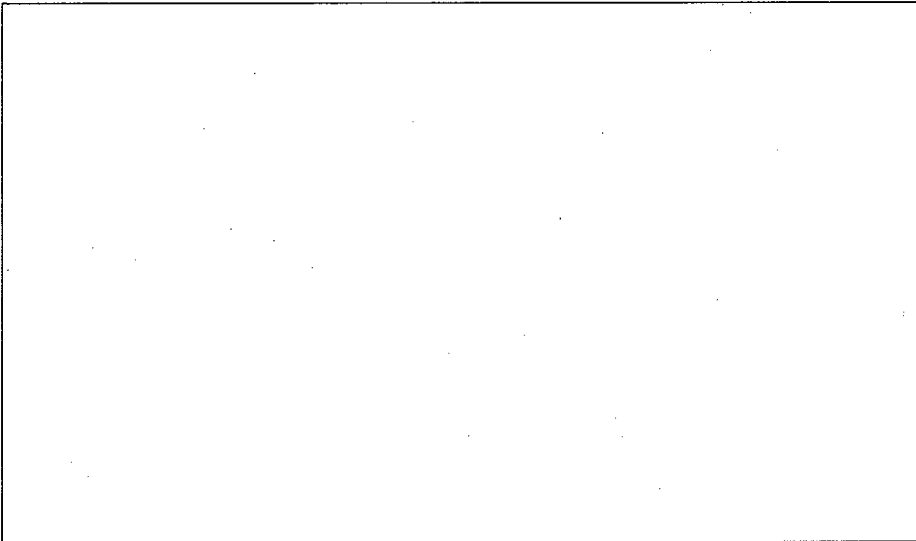
Approved by: *Machelor*

Date: 9/17/98

Form 510112L1 Rev. 1.1

Page 1 of 1

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER



**SPECIFIC GRAVITY : LA-510-112 (D-1)**

*ED*  
*LHO 1-26-99*

Type		DUP	REPLICATE
DUP	Gross Weight (W2)	1.3486	
Work List	Tare Weight (W1)	1.2061	
26126	Weight of Solution (W2-W1)	0.1425	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG01	Specific Gravity	1.4250	NA
Matrix			
LIQUID			
Sample #			
S98T002534			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
JIS	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L}/\text{mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$		
Date			
09/12/98	v RESULT v		
Time	Specific Gravity =	1.425	
03:30 PM			

Data Entry by: \_\_\_\_\_ Date: 09/16/98  
 Approved by: *R. Micheloz* Date: *9/12/98*

# LABCORE Completed Worklist Report for Worklist# 26182

Analyst: rwk Instrument: BA001 Book#: 134N16C

Method: LA-510-112 Rev/Mod \_\_\_\_\_

Worklist Comment: U107, SPG-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0	SPG-01	LIQUID	1.3779	1.368	99.282 % Recovery	
2 SAMPLE	S98T002458 0	SPG-01	LIQUID	N/A	1.494	1.00e-003	Sp.G.
3 DUP	S98T002458 0	SPG-01	LIQUID	1.494	1.451	2.920 RPD	
4 SAMPLE	S98T002462 0	SPG-01	LIQUID	N/A	1.472	1.00e-003	Sp.G.
5 DUP	S98T002462 0	SPG-01	LIQUID	1.472	1.476	0.271 RPD	

Final page for worklist# 26182

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

 9/21/98  
Analyst Signature Date

 9/23/98  
Reviewer Signature Date



# LABCORE Data Entry Template for Worklist# 26182

Analyst: AK Instrument: BA001 Book # 134716-C

Method: LA-510-112 Rev/Mod R-0

Worklist Comment: U107, SPG-01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			SPG-01	LIQUID			N/A	Sp.G.
98000401	U-107 (2)	2 SAMPLE	S98T002458	0	SPG-01	LIQUID	N/A			Sp.G.
98000401	U-107 (2)	3 DUP	S98T002458	0	SPG-01	LIQUID			N/A	Sp.G.
98000401	U-107 (2)	4 SAMPLE	S98T002462	0	SPG-01	LIQUID	N/A			Sp.G.
98000401	U-107 (2)	5 DUP	S98T002462	0	SPG-01	LIQUID			N/A	Sp.G.

Final page for worklist # 26182

AK 9/17/98  
Analyst Signature Date

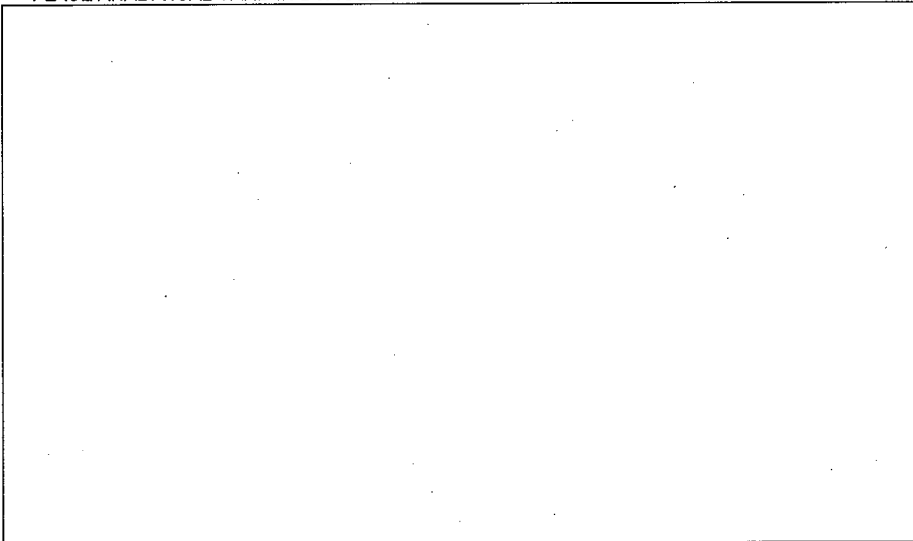
\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

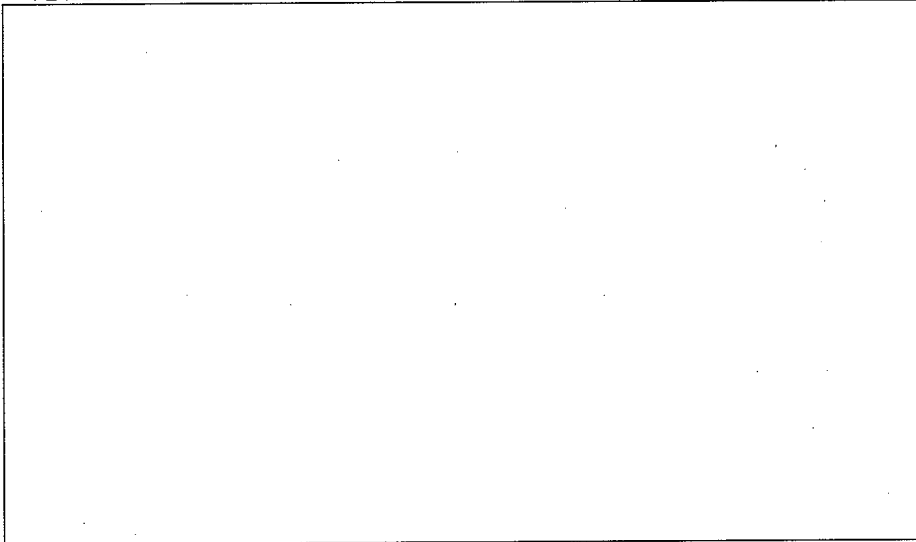


**SPECIFIC GRAVITY : LA-510-112 (D-1)** <sup>F.O</sup>  
*LA 11-26-98*

Type		STD	REPLICATE
STD	Gross Weight (W2)	2.0370	1.8919
Work List	Tare Weight (W1)	1.8999	1.7554
26182	Weight of Solution (W2-W1)	0.1371	0.1365
Test Code	Volume of Solution $\mu$ L	100.0000	100.0000
SPG-01	Specific Gravity	1.3710	1.3650
Matrix	Specific Gravity (Average)	1.3680	
LIQUID			
Sample #			
STD			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
RWK	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L/mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$		
Date			
09/17/98	v RESULT v		
Time	Specific Gravity Average =	1.368	
11:00 AM			

Data Entry by:	Date: 09/21/98
Approved by: <i>R. M. Machelon</i>	Date: 9/22/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

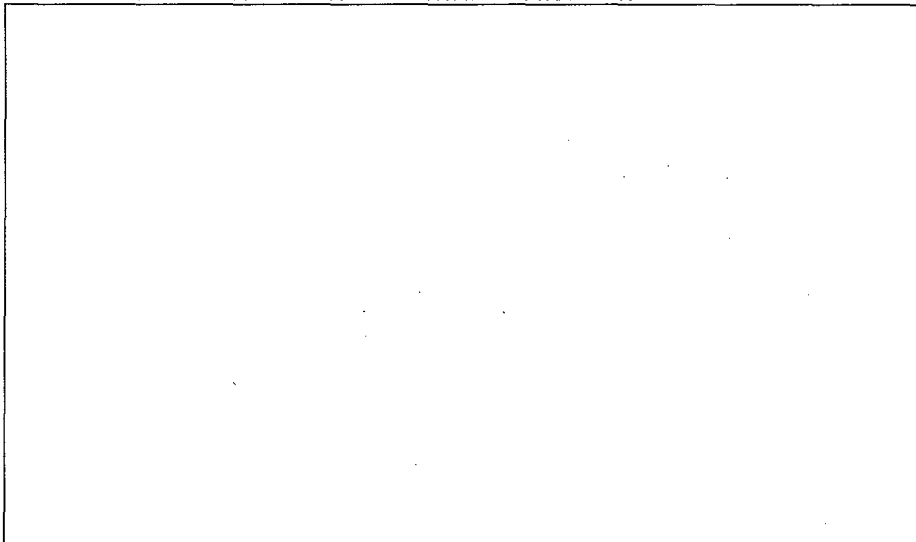


**SPECIFIC GRAVITY : LA-510-112 (D-1)** <sup>E-O</sup>  
*LAD 1-26-99*

Type		SAM	REPLICATE
SAM	Gross Weight (W2)	1.9248	
Work List	Tare Weight (W1)	1.7754	
26182	Weight of Solution (W2-W1)	0.1494	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG-01	Specific Gravity	1.4940	NA
Matrix			
LIQUID			
Sample #			
S98T002458			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
RWK	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L/mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$		
Date			
09/17/98	v RESULT v		
Time	Specific Gravity =	1.494	
11:00 AM			

Data Entry by:	Date: 09/21/98
Approved by: <i>RJ Michelon</i>	Date: 9/23/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

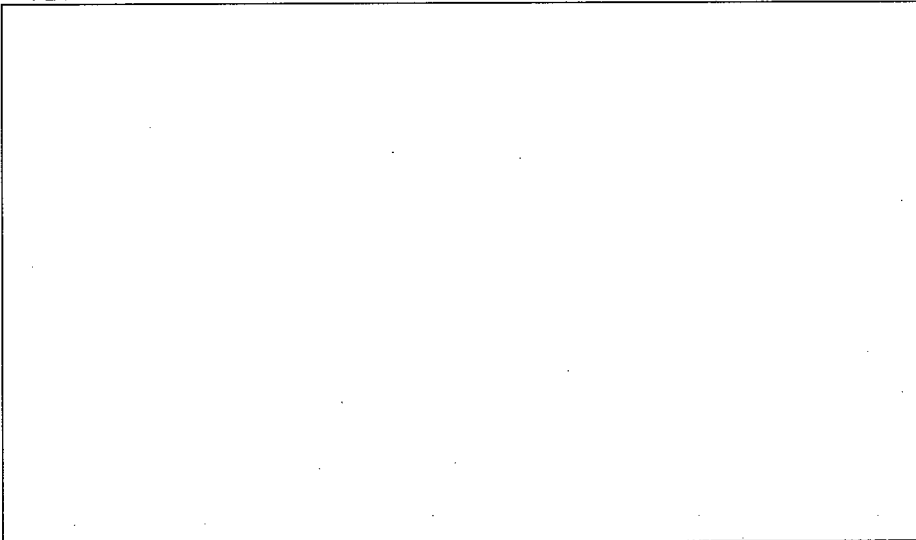


**SPECIFIC GRAVITY : LA-510-112 (D-1)** <sup>E-O</sup>  
*AD 1-26-99*

Type		DUP	REPLICATE
DUP	Gross Weight (W2)	2.0114	
Work List	Tare Weight (W1)	1.8663	
26182	Weight of Solution (W2-W1)	0.1451	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG-01	Specific Gravity	1.4510	NA
Matrix			
LIQUID			
Sample #			
S98T002458			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution.		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
RWK	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L/mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$		
Date			
09/17/98	v RESULT v		
Time	Specific Gravity =	1.451	
11:00 AM			

Data Entry by:	Date:	09/21/98
Approved by: <i>B. Macheloz</i>	Date:	9/23/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER



**SPECIFIC GRAVITY : LA-510-112** <sup>E-O</sup> ~~(D-1)~~  
 1-26-99  
 20)

Type		SAM	REPLICATE
SAM	Gross Weight (W2)	1.9922	
Work List	Tare Weight (W1)	1.8450	
26182	Weight of Solution (W2-W1)	0.1472	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG-01	Specific Gravity	1.4720	NA
Matrix			
LIQUID			
Sample #			
S98T002462			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
RWK	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L/mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$		
Date			
09/17/98	v RESULT v		
Time	Specific Gravity =	1.472	
11:00 AM			

Data Entry by: \_\_\_\_\_ Date: 09/21/98  
 Approved by: *B. Machelon* Date: 9/23/98

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

## SPECIFIC GRAVITY : LA-510-112 (D-1)

Type		DUP	REPLICATE
DUP	Gross Weight (W2)	1.9230	
Work List	Tare Weight (W1)	1.7754	
26182	Weight of Solution (W2-W1)	0.1476	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG-01	Specific Gravity	1.4760	NA
Matrix			
LIQUID			
Sample #			
S98T002462			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
RWK	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L/mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$		
Date			
09/17/98	v RESULT v		
Time	Specific Gravity =	1.476	
11:00 AM			

Data Entry by:

Date: 09/21/98

Approved by: *R. K. Chubb*

Date: 9/23/98

# LABCORE Completed Worklist Report for Worklist# 27682

Analyst: rwk

Instrument: BA001

Book#: 134N16C

Method: LA-510-112 Rev/Mod \_\_\_\_\_

Worklist Comment: U107 FOR SPG-01 RTS

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0	SPG-01	LIQUID	1.3779	1.361	98.773 % Recovery	
2 SAMPLE	S98T002114 0	SPG-01	LIQUID	N/A	0.9860	1.00e-003 Sp.G.	
3 DUP	S98T002114 0	SPG-01	LIQUID	0.9860	0.9970	1.109 RPD	

Final page for worklist# 27682

Analyst Signature

Date

*Mary Franz* 12-31-98  
Analyst Signature Date

*D. Pachel*  
Reviewer Signature

1/4/99  
Date

# LABCORE Data Entry Template for Worklist# 27682

Analyst: WR Instrument: BA001 \_\_\_\_\_ Book # 1341216-C

Method: LA-510-112 Rev/Mod E-D

Worklist Comment: U107 FOR SPG-01 RTS

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			SPG-01	LIQUID	_____	_____	N/A	Sp.G.
98000401	U-107 (2)	2 SAMPLE	S98T002114	0	SPG-01	LIQUID	N/A	_____	_____	Sp.G.
98000401	U-107 (2)	3 DUP	S98T002114	0	SPG-01	LIQUID	_____	_____	N/A	Sp.G.

## Final page for worklist # 27682

Not Kim 12/29/98  
Analyst Signature Date

Mary Tracy 12-31-98  
Analyst Signature Date

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



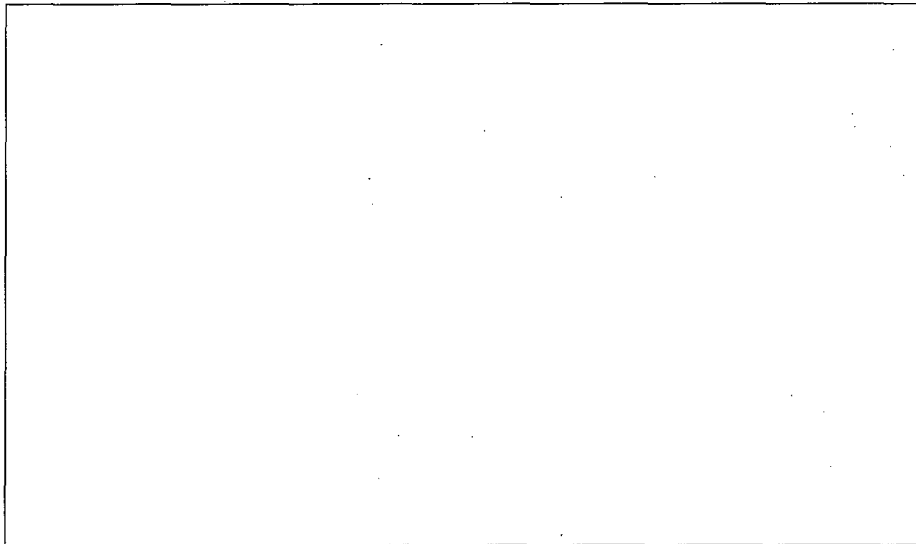
PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

**SPECIFIC GRAVITY : LA-510-112 (E-0)**

Type		STD	REPLICATE
STD	Gross Weight (W2)	2.0810	1.9760
Work List	Tare Weight (W1)	1.9451	1.8397
27682	Weight of Solution (W2-W1)	0.1359	0.1363
Test Code	Volume of Solution $\mu$ L	100.0000	100.0000
SPG-01	Specific Gravity	1.3590	1.3630
Matrix	Specific Gravity (Average)	1.3610	
LIQUID			
Sample #			
STD			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
RWK	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L/mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g/mL}]$		
Date			
12/29/98	v RESULT v		
Time	Specific Gravity Average =	1.361	
05:00 AM			

Data Entry by:	Date:	12/31/98
Approved by: <i>NA</i>	Date:	

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

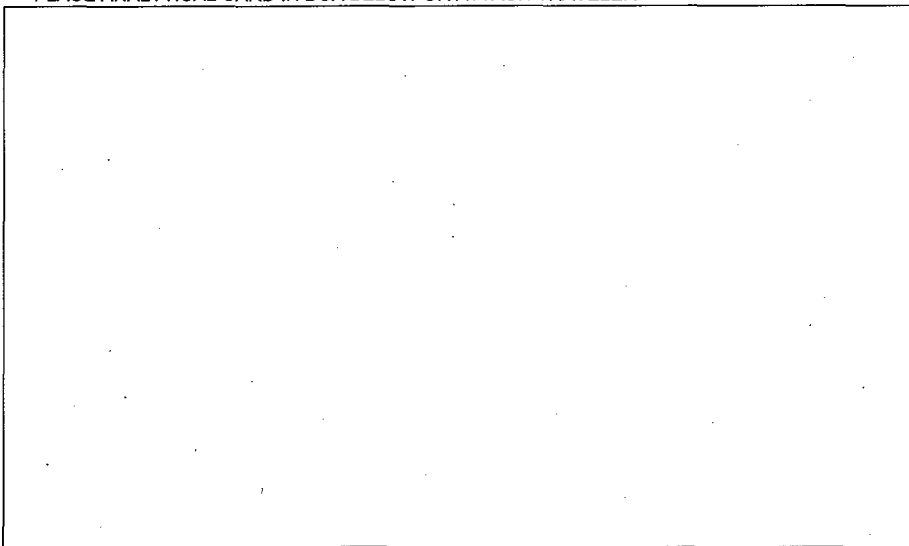


**SPECIFIC GRAVITY : LA-510-112 (E-0)**

Type		SAMPLE	REPLICATE
SAMPLE	Gross Weight (W2)	2.0155	
WorkList	Tare Weight (W1)	1.9169	
27682	Weight of Solution (W2-W1)	0.0986	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG-01	Specific Gravity	0.9860	NA
Matrix			
LIQUID			
Sample #			
S98T002114			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
RWK	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L}/\text{mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g}/\text{mL}]$		
Date			
12/29/98	v RESULT v		
Time	Specific Gravity =	0.986	
05:00 AM			

Data Entry by:	Date:	12/31/98
Approved by: <i>NA</i>	Date:	

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER



**SPECIFIC GRAVITY : LA-510-112 (E-0)**

Type		DUP	REPLICATE
DUP	Gross Weight (W2)	1.9982	
Work List	Tare Weight (W1)	1.8985	
27682	Weight of Solution (W2-W1)	0.0997	0
Test Code	Volume of Solution $\mu$ L	100.0000	
SPG-01	Specific Gravity	0.9970	NA
Matrix			
LIQUID			
Sample #			
S98T002114			
Instrument Code	Gross Weight (W2) = Wt. of vial + cap + cotton + solution		
BA001	Tare Weight (W1) = Wt. of vial + cap + cotton		
Analyst			
RWK	Specific Gravity = $[(W2-W1) * 1000 \mu\text{L}/\text{mL}] / [\text{Vol. of Solution } \mu\text{L} * 1.000 \text{ g}/\text{mL}]$		
Date			
12/29/98	v RESULT v		
Time	Specific Gravity =	0.997	
05:00 AM			

Data Entry by:	Date:	12/31/98
Approved by:	Date:	

*NA*

# LABCORE Completed Worklist Report for Worklist# 27511

Analyst: jds Instrument: PH01 Book#: 111N8

Method: LA-211-102 Rev/Mod \_\_\_\_\_

Worklist Comment: U107, OH-01, tdm

Seq Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0			OH-01	SOLID	1.72e4	1.70e4	98.837 % Recovery	
2 BLNK-PREP	0			OH-01	SOLID	1	<8.40e+3		ug/g
3 SAMPLE	S98T002043	0	W	OH-01	SOLID	N/A	<	8.33e+3	8330.000 ug/g
4 DUP	S98T002043	0	W	OH-01	SOLID	<8.33e+3	<8.33e+3		RPD

## Final page for worklist# 27511

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

  
Reviewer Signature \_\_\_\_\_ Date 12/18/98

# LABCORE Data Entry Template for Worklist# 27511

Analyst: Jds Instrument: PH01 Book # 11118

Method: LA-211-102 Rev/Mod D0

Worklist Comment: U107, OH-01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			OH-01	SOLID		<u>1.7<sup>E4</sup></u>	N/A	ug/g
		2 BLNK-PREP			OH-01	SOLID			N/A	ug/g
98000358	U-107 (2)	3 SAMPLE	S98T002043	0 W	OH-01	SOLID	N/A			ug/g
98000358	U-107 (2)	4 DUP	S98T002043	0 W	OH-01	SOLID			N/A	ug/g

## Final page for worklist # 27511

Jds 12/10/98  
Analyst Signature Date

Cf. Quinn 12/16/98  
Analyst Signature Date

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

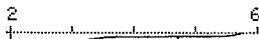
Pre?

date 98-12-10 time 23:04  
 GET pH 12 # 300  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 5.74  
 V/ml pH  
 EP1 .008 4.72  
 stop volt.reached  
 =====

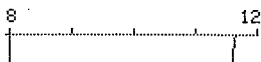
STP  
 date 98-12-10 time 23:07  
 GET pH 12 # 301  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 11.62  
 V/ml pH  
 EP1 .258 9.85  
 manual stop  
 =====

date 98-12-10 time 23:11  
 GET pH 12 # 302  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 7.60  
 V/ml pH  
 EP1 .007 6.02  
 stop volt.reached  
 =====

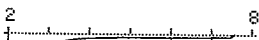
date 98-12-10 time 23:04  
 GET pH 12 # 300  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



date 98-12-10 time 23:08  
 GET pH 12 # 301  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml

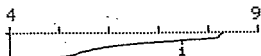


date 98-12-10 time 23:11  
 GET pH 12 # 302  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



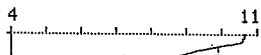
2043 3ml  
 date 98-12-10 time 23:21  
 GET pH 12 # 305  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 8.31  
 V/ml pH  
 EP1 .017 7.47  
 manual stop  
 =====

date 98-12-10 time 23:21  
 GET pH 12 # 305  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



2043 3ml  
 date 98-12-10 time 23:17  
 GET pH 12 # 304  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 10.64  
 V/ml pH  
 EP1 .026 9.89  
 EP2 .069 7.36  
 EP3 .094 5.59  
 manual stop  
 =====

date 98-12-10 time 23:17  
 GET pH 12 # 304  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

## OH (AUTO) : LA-211-102 (D-0)

		STD
Type	Sample Size (mL) SS	0.050
STD	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.258
27511	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	9.98E-01
OH-01	OH in Sample in µg/mL (PPM)	1.70E+04
Matrix		
SOLID		
Sample #	Detection Limit = 125µg / SS * DF	
STD		
Instrument Code	Detection Limit (µg/mL)	2.50E+03
PH01		
Analyst	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL*Dilution Factor	
JDS		
Date	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*((1000000µg/g)/(100mL/L))	
12/10/98		
Time		STD
07:00 PM	Concentration of OH in Sample (Molarity)	9.98E-01
	OH in Sample in µg/mL (PPM)	1.70E+04

Data Entry by:	Date:	12/15/98
Approved by: <i>MA</i>	Date:	

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

--

## OH (AUTO) : LA-211-102 (D-0)

		BLK
Type	Sample Size (mL) SS	3.000
BLK	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.008
27511	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	5.16E-04
OH-01	OH in Sample in µg/mL (PPM)	8.77E+00
Matrix		
SOLID		
Sample #	Detection Limit = 125µg / SS * DF	
BLK		
Instrument Code	Detection Limit (µg/mL)	4.17E+01
PH01		
Analyst	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL*Dilution Factor	
JDS		
Date	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*((1000000µg/g)/(1000mL/L))	
12/10/98		
Time		BLK
07:00 PM	Concentration of OH in Sample (Molarity)	5.16E-04
	OH in Sample in µg/mL (PPM)	<42

The Result is &lt; Detection Limit

Data Entry by:	Date:	12/15/98
Approved by:	Date:	



OH (AUTO) : LA-211-102 (D-0)

		BLK
Type	Sample Size (mL) SS	3.000
BLK	Concentration of Titrant (Molarity)	0.1934
Work List	Titrant volume at end-point in mL	0.008
27511	*** Enter Dilution Factor (DF) or 1 ***	1
Test Code	***Enter Digest Factor (DDF) in g/L***	5
OH-01	Concentration of Sample Prep (MOLARITY)	5.16E-04
Matrix	Concentration of Sample in PPM	1.75E+03
SOLID		
Sample #		
BLK	Detection Limit= $((125\mu\text{g} / \text{SS}) * \text{DF}) * 1000 / \text{DDF}$	
Instrument Code		
PH01	Detection Limit (PPM)	8.33E+03
Analyst		
JDS	OH Molarity = $((\text{mL HNO}_3) * (\text{M HNO}_3)) / \text{Sample Size in mL} * \text{Dilution Factor}$	
Date		
12/11/98	OH in $\mu\text{g/g}$ = $(\text{OH MOLARITY}) * (17\text{g/mole}) * (1000000 \mu\text{g/g}) / \text{DDF}$	
Time		
01:00 AM		BLK
		5.16E-04
	Concentration of Sample in PPM	<8333
The Result is < Detection Limit		

NA

## OH (AUTO) : LA-211-102 (D-0)

		SAM
Type	Sample Size (mL) SS	3.000
SAM	Concentration of Titrant (Molarity)	0.1934
Work List	Titrant volume at end-point in mL	0.026
27511	*** Enter Dilution Factor (DF) or 1 ***	1
Test Code	***Enter Digest Factor (DDF) in g/L***	5
OH-01	Concentration of Sample Prep (MOLARITY)	1.68E-03
Matrix	Concentration of Sample in PPM	5.70E+03
SOLID		
Sample #		
S98T002043	Detection Limit= $((125\mu\text{g} / \text{SS}) * \text{DF}) * 1000 / \text{DDF}$	
Instrument Code		
PH01	Detection Limit (PPM)	8.33E+03
Analyst		
JDS	OH Molarity = $((\text{mL HNO}_3) * (\text{M HNO}_3)) / \text{Sample Size in mL} * \text{Dilution Factor}$	
Date		
12/11/98	OH in $\mu\text{g/g} = (\text{OH MOLARITY}) * (17\text{g/mole}) * (1000000 \mu\text{g/g}) / \text{DDF}$	
Time		
01:00 AM		
		SAM
		1.68E-03
	Concentration of Sample in PPM	<8333

The Result is &lt; Detection Limit

OH (AUTO) : LA-211-102 (D-0)

		DUP
Type	Sample Size (mL) SS	3.000
DUP	Concentration of Titrant (Molarity)	0.1934
Work List	Titrant volume at end-point in mL	0.00 0.017
27511	*** Enter Dilution Factor (DF) or 1 ***	1
Test Code	***Enter Digest Factor (DDF) in g/L***	5
OH-01	Concentration of Sample Prep (MOLARITY)	0.00 -1.40E-03
Matrix	Concentration of Sample in PPM	0.00 -3.73E+03
SOLID		
Sample #		
S98T002043	Detection Limit= $((125\mu\text{g} / \text{SS}) * \text{DF}) * 1000 / \text{DDF}$	
Instrument Code		
PH01	Detection Limit (PPM)	8.33E+03
Analyst		
JDS	OH Molarity = $((\text{mL HNO}_3) * (\text{M HNO}_3)) / \text{Sample Size in mL} * \text{Dilution Factor}$	
Date		
12/11/98	OH in $\mu\text{g/g}$ = $(\text{OH MOLARITY}) * (17\text{g/mole}) * (1000000 \mu\text{g/g}) / \text{DDF}$	
Time		
01:00 AM		
		DUP
		1.10E-03
	Concentration of Sample in PPM	<8333

The Result is < Detection Limit

# LABCORE Completed Worklist Report for Worklist# 27512

Analyst: jds

Instrument: PH01

Book#: 111N8

Method: LA-211-102 Rev/Mod \_\_\_\_\_

Worklist Comment: U107, OH-01, tdm

Seq	Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	STD	0			OH-01	SOLID	1.72e+4	1.72e+4	100.000 %	Recovery
2	BLK-PREP	0			OH-01	SOLID	1	<8.76e+3		ug/g
3	SAMPLE	S98T002531	0	W	OH-01	SOLID	N/A	1.76e+4	8690.000	ug/g
4	DUP	S98T002531	0	W	OH-01	SOLID	1.76e+4	1.79e+4	1.690	RPD

## Final page for worklist# 27512

Analyst Signature

Date

Analyst Signature

Date

  
Reviewer Signature

12/18/98  
Date

# LABCORE Data Entry Template for Worklist# 27512

Analyst: JDS Instrument: PH01 \_\_\_\_\_ Book # 111N8

Method: LA-211-102 Rev/Mod DO

Worklist Comment: U107, OH-01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			OH-01	SOLID	_____	_____	N/A	ug/g
		2 BLNK-PREP			OH-01	SOLID	_____	_____	N/A	ug/g
98000401	U-107 (2)	3 SAMPLE	S98T002531	0 W	OH-01	SOLID	N/A	_____	_____	ug/g
98000401	U-107 (2)	4 DUP	S98T002531	0 W	OH-01	SOLID	_____	_____	N/A	ug/g

## Final page for worklist # 27512

JDS JDS 12/11/98  
Analyst Signature Date

C. J. Quinn 12/17/98  
Analyst Signature Date

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

BK

date 98-12-11 time 02:45  
 GET pH 12 # 317  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 5.70  
 V/ml pH  
 EP1 .006 4.71  
 stop volt. reached  
 =====

date 98-12-11 time 02:46  
 GET pH 12 # 317  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml

STD

date 98-12-11 time 02:50  
 GET pH 12 # 318  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 11.61  
 V/ml pH  
 EP1 .262 9.93  
 manual stop  
 =====

date 98-12-11 time 02:50  
 GET pH 12 # 318  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml

Pcp

date 98-12-11 time 02:52  
 GET pH 12 # 319  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 7.90  
 V/ml pH  
 EP1 .009 6.09  
 stop volt. reached  
 =====

date 98-12-11 time 02:52  
 GET pH 12 # 319  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml

253/

date 98-12-11 time 02:57  
 GET pH 12 # 320  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 11.05  
 V/ml pH  
 EP1 .077 10.17  
 EP2 .152 8.53  
 EP3 .182 7.33  
 manual stop  
 =====

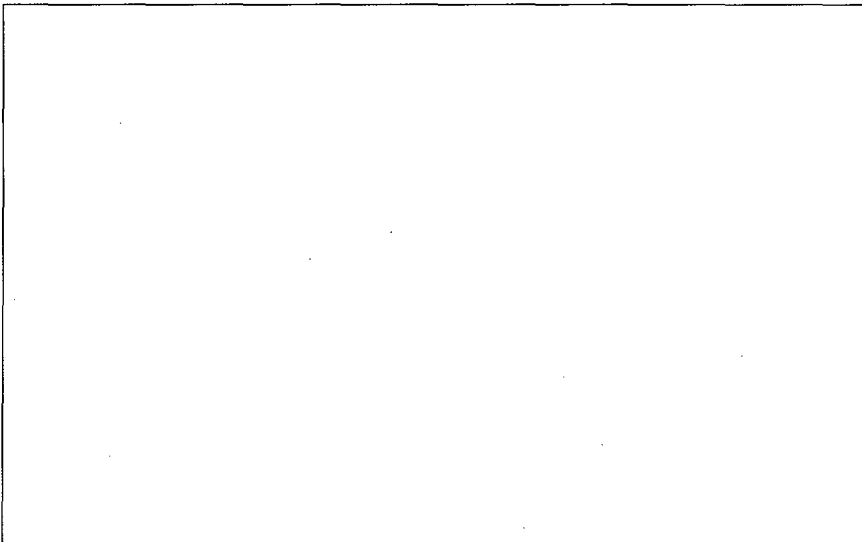
date 98-12-11 time 02:57  
 GET pH 12 # 320  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml

date 98-12-11 time 03:03  
 GET pH 12 # 321  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml

253/Dep

date 98-12-11 time 03:02  
 GET pH 12 # 321  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 11.15  
 V/ml pH  
 EP1 .083 10.21  
 EP2 .181 7.98  
 manual stop  
 =====

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER



**OH (AUTO) : LA-211-102 (D-0)**

		STANDARD
Type	Sample Size (mL) SS	0.050
STANDARD	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.262
27512	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	1.01E+00
OH-01	OH in Sample in µg/mL (PPM)	1.72E+04

Matrix	
SOLID	
Sample #	
STD	
Instrument Code	
PH01	
Analyst	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL*Dilution Factor
JDS	
Date	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*((1000000µg/g)/(1000mL/L))
12/11/98	

		STANDARD
02:00 AM	Concentration of OH in Sample (Molarity)	1.01E+00
	OH in Sample in µg/mL (PPM)	1.72E+04

Data Entry by:		Date:	12/17/98
Approved by:	<i>N/A</i>	Date:	

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

$$\frac{42 \times 1000}{4.797} = 8.76 \text{ E}+3 \text{ } \mu\text{g/ml}$$

## OH (AUTO) : LA-211-102 (D-0)

		PREP-BLANK
Type	Sample Size (mL) SS	3.000
PREP-BLANK	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.009
27512	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	5.80E-04
OH-01	OH in Sample in $\mu\text{g/mL}$ (PPM)	9.86E+00
Matrix		
SOLID		
Sample #	Detection Limit = $125 \mu\text{g} / \text{SS} * \text{DF}$	
BLNK		
Instrument Code	Detection Limit ( $\mu\text{g/mL}$ )	4.17E+01
PH01		
Analyst	OH Molarity = $((\text{mL HNO}_3) * (\text{M HNO}_3)) / \text{Sample Size in mL} * \text{Dilution Factor}$	
JDS		
Date	OH in $\mu\text{g/mL}$ = $(\text{OH MOLARITY}) * (17.0 \text{g/mole}) * ((1000000 \mu\text{g/g}) / (1000 \text{mL/L}))$	
12/11/98		
Time		PREP-BLANK
02:00 AM	Concentration of OH in Sample (Molarity)	5.80E-04
	OH in Sample in $\mu\text{g/mL}$ (PPM)	<42

The Result is &lt; Detection Limit

Data Entry by:	Date:	12/17/98
Approved by:	Date:	



PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

$$\frac{8.44E+1 \times 1000}{4.797} = 1.76E+4 \mu\text{g}/\text{ml}$$

## OH (AUTO) : LA-211-102 (D-0)

		SAM
Type	Sample Size (mL) SS	3.000
SAM	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.077
27512	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	4.96E-03
OH-01	OH in Sample in $\mu\text{g}/\text{mL}$ (PPM)	8.44E+01
Matrix		
SOLID		
Sample #	Detection Limit = $125\mu\text{g} / \text{SS} * \text{DF}$	8.69E3
S98T002531		
Instrument Code	Detection Limit ( $\mu\text{g}/\text{mL}$ )	4.17E+01
PH01		
Analyst	OH Molarity = $((\text{mL HNO3}) * (\text{M HNO3})) / \text{Sample Size in mL} * \text{Dilution Factor}$	
JDS		
Date	OH in $\mu\text{g}/\text{mL}$ = $(\text{OH MOLARITY}) * (17.0\text{g}/\text{mole}) * ((1000000\mu\text{g}/\text{g}) / (1000\text{mL}/\text{L}))$	
12/11/98		
Time		SAM
02:00 AM	Concentration of OH in Sample (Molarity)	4.96E-03
	OH in Sample in $\mu\text{g}/\text{mL}$ (PPM)	8.44E+01

Data Entry by:	Date:	12/17/98
Approved by: <i>NA</i>	Date:	

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

$$\frac{91.0 \times 1000}{5.073} = 1.79E+4$$

**OH (AUTO) : LA-211-102 (D-0)**

		DUP
Type	Sample Size (mL) SS	3.000
DUP	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.083
27512	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	5.35E-03
OH-01	OH in Sample in µg/mL (PPM)	9.10E+01

Matrix: SOLID

Sample # S98T002531  
 Detection Limit = 125µg / SS \* DF

Instrument Code PH01  
 Detection Limit (µg/mL) 4.47E+04

Analyst  
 OH Molarity = ((mL HNO3)\*(M HNO3))/Sample Size in mL\*Dilution Factor

JDS  
 Date: 12/11/98  
 OH in µg/mL = (OH MOLARITY)\*(17.0g/mole)\*((1000000µg/g)/(1000mL/L))

		DUP
Time: 02:00 AM	Concentration of OH in Sample (Molarity)	5.35E-03
	OH in Sample in µg/mL (PPM)	9.10E+01

8.22 E3  
 m/L  
 12/18/98

Data Entry by: \_\_\_\_\_ Date: 12/17/98  
 Approved by: *N/A* Date: \_\_\_\_\_

# LABCORE Completed Worklist Report for Worklist# 27513

Analyst: jds Instrument: PH01 Book#: 111N8

Method: LA-211-102 Rev/Mod \_\_\_\_\_

Worklist Comment: U107, OH-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0	OH-01	SOLID	1.72e4	1.72e4	100.000 % Recovery	
2 BLNK-PREP	0	OH-01	SOLID	1	<8.40e+3		ug/g
3 SAMPLE	298T002568 0 W	OH-01	SOLID	N/A	<	8330	8330.000 ug/g
4 DUF	298T002568 0 W	OH-01	SOLID	<8330	<8330		RPD

Final page for worklist# 27513

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

  
Reviewer Signature \_\_\_\_\_ Date 12/18/98

# LABCORE Data Entry Template for Worklist# 27513

Analyst: JDS Instrument: PH01 Book # 111N8

Method: LA-211-102 Rev/Mod DO

Worklist Comment: U107, OH-01, tdm

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				OH-01	SOLID		<u>1.72E+4</u>	N/A	ug/g
		2	BLNK-PREP				OH-01	SOLID		<u>&lt;8.40E+3</u>	N/A	ug/g
98000401	U-107 (2)	3	SAMPLE	S98T002568	0	W	OH-01	SOLID	N/A	<u>1.03E+4</u>		ug/g
98000401	U-107 (2)	4	DUP	S98T002568	0	W	OH-01	SOLID	<u>1.03E+4</u>	<u>1.10E+4</u>	N/A	ug/g

## Final page for worklist # 27513

JDS 12/11/98  
Analyst Signature Date

C.J. O'Brien 12/10/98  
Analyst Signature Date

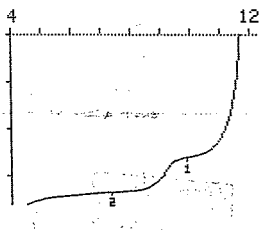
Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

STD

date 98-12-11 time 02:26  
 GET pH 12 # 312  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 11.66  
 V/ml pH  
 EP1 .261 9.89  
 EP2 .336 7.38  
 manual stop  
 =====

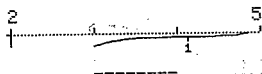
date 98-12-11 time 02:26  
 GET pH 12 # 312  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



Bik

date 98-12-11 time 02:20  
 GET pH 12 # 311  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 4.82  
 V/ml pH  
 EP1 .008 4.12  
 stop volt.reached  
 =====

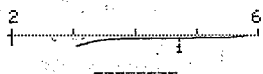
date 98-12-11 time 02:20  
 GET pH 12 # 311  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



Prep

date 98-12-11 time 02:28  
 GET pH 12 # 313  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 5.83  
 V/ml pH  
 EP1 .006 4.71  
 stop volt.reached  
 =====

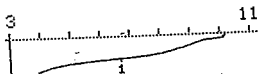
date 98-12-11 time 02:28  
 GET pH 12 # 313  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



2568

date 98-12-11 time 02:33  
 GET pH 12 # 315  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 10.17  
 V/ml pH  
 EP1 .047 6.72  
 manual stop  
 =====

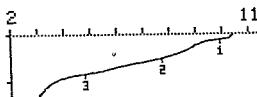
date 98-12-11 time 02:33  
 GET pH 12 # 315  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



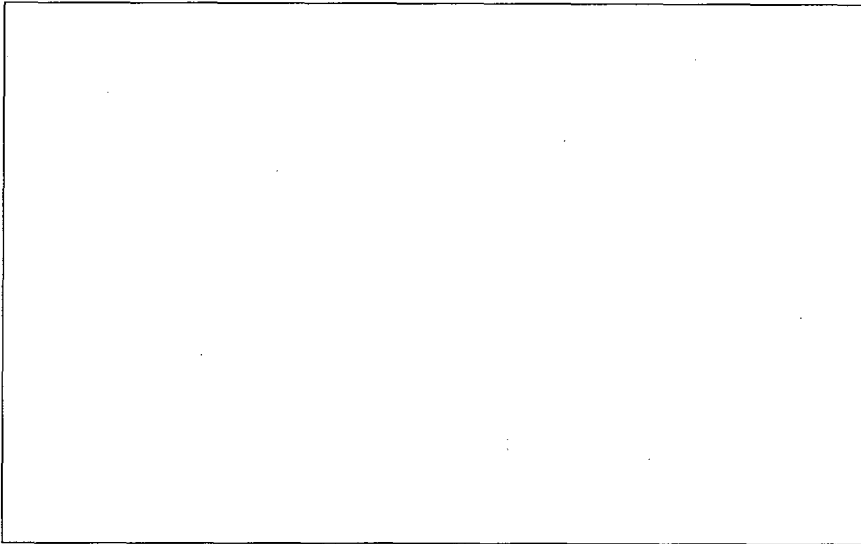
2568.DUP

date 98-12-11 time 02:42  
 GET pH 12 # 316  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 10.40  
 V/ml pH  
 EP1 .012 9.91  
 EP2 .050 7.73  
 EP3 .084 4.79  
 stop volt.reached  
 =====

date 98-12-11 time 02:43  
 GET pH 12 # 316  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER



**OH (AUTO) : LA-211-102 (D-0)**

		STANDARD
Type	Sample Size (mL) SS	0.050
STANDARD	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.261
27513	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	1.01E+00
OH-01	OH in Sample in µg/mL (PPM)	1.72E+04
Matrix		
SOLID		
Sample #		
STD		
Instrument Code		
PH01		
Analyst	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL*Dilution Factor	
JDS		
Date	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*((1000000µg/g)/(1000mL/L))	
12/11/98		
Time		STANDARD
01:00 AM	Concentration of OH in Sample (Molarity)	1.01E+00
	OH in Sample in µg/mL (PPM)	1.72E+04

Data Entry by:	Date:	12/16/98
Approved by:	Date:	

*MA*

OH (AUTO) : LA-211-102 (D-0)

		BLK
Type	Sample Size (mL) SS	3.000
BLK	Concentration of Titrant (Molarity)	0.1934
Work List	Titrant volume at end-point in mL	0.006
27513	*** Enter Dilution Factor (DF) or 1 ***	1
Test Code	***Enter Digest Factor (DDF) in g/L***	5.002
OH-01	Concentration of Sample Prep (MOLARITY)	3.87E-04
Matrix	Concentration of Sample in PPM	1.31E+03
SOLID		
Sample #		
PREP-BLANK	Detection Limit= $((125\mu\text{g} / \text{SS}) * \text{DF}) * 1000 / \text{DDF}$	
Instrument Code		
PH01	Detection Limit (PPM)	8.33E+03
Analyst		
JDS	OH Molarity = $((\text{mL HNO}_3) * (\text{M HNO}_3)) / \text{Sample Size in mL} * \text{Dilution Factor}$	
Date		
12/11/98	OH in $\mu\text{g/g}$ = $(\text{OH MOLARITY}) * (17\text{g/mole}) * (1000000 \mu\text{g/g}) / \text{DDF}$	
Time		
01:00 AM		BLK
		3.87E-04
	Concentration of Sample in PPM	<8330

The Result is &lt; Detection Limit

**OH (AUTO) : LA-211-102 (D-0)**

		SAM
Type	Sample Size (mL) SS	3.000
SAM	Concentration of Titrant (Molarity)	0.1934
Work List	Titrant volume at end-point in mL	0.000
27513	*** Enter Dilution Factor (DF) or 1 ***	1
Test Code	***Enter Digest Factor (DDF) in g/L***	5.002
OH-01	Concentration of Sample Prep (MOLARITY)	0.00E+00
Matrix	Concentration of Sample in PPM	0.00E+00
SOLID		
Sample #		
S98T002568	Detection Limit= $((125\mu\text{g} / \text{SS}) * \text{DF}) * 1000 / \text{DDF}$	
Instrument Code		
PH01	Detection Limit (PPM)	8.33E+03
Analyst		
JDS	OH Molarity = $((\text{mL HNO}_3) * (\text{M HNO}_3)) / \text{Sample Size in mL} * \text{Dilution Factor}$	
Date		
12/11/98	OH in $\mu\text{g/g} = (\text{OH MOLARITY}) * (17\text{g/mole}) * (1000000 \mu\text{g/g}) / \text{DDF}$	
Time		
01:00 AM		
		SAM
		0.00E+00
	Concentration of Sample in PPM	<8330

The Result is < Detection Limit



OH (AUTO) : LA-211-102 (D-0)

		DUP
Type	Sample Size (mL) SS	3.000
DUP	Concentration of Titrant (Molarity)	0.1934
Work List	Titrant volume at end-point in mL	0.012
27513	*** Enter Dilution Factor (DF) or 1 ***	1
Test Code	***Enter Digest Factor (DDF) in g/L***	5.002
OH-01	Concentration of Sample Prep (MOLARITY)	7.74E-04
Matrix	Concentration of Sample in PPM	2.63E+03
SOLID		
Sample #		
S98T002568	Detection Limit= $((125\mu\text{g} / \text{SS}) * \text{DF}) * 1000 / \text{DDF}$	
Instrument Code		
PH01	Detection Limit (PPM)	8.33E+03
Analyst		
JDS	OH Molarity = $((\text{mL HNO}_3) * (\text{M HNO}_3)) / \text{Sample Size in mL} * \text{Dilution Factor}$	
Date		
12/11/98	OH in $\mu\text{g/g}$ = $(\text{OH MOLARITY}) * (17\text{g/mole}) * (1000000 \mu\text{g/g}) / \text{DDF}$	
Time		
01:00 AM		
		DUP
		7.74E-04
	Concentration of Sample in PPM	<8330

The Result is &lt; Detection Limit

# LABCORE Completed Worklist Report for Worklist# 27514

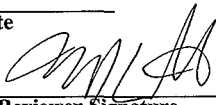
Analyst: jds Instrument: PH01 Book#: 111N8

Method: LA-211-102 Rev/Mod \_\_\_\_\_

Worklist Comment: U107, OH-01, tdm

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0		OH-01	SOLID	1.72e+4	1.72e+4	100.000 % Recovery	
2 BLNK-PREP	0		OH-01	SOLID	1	<8.27e+3		ug/g
3 SAMPLE	S98T002574	0 W	OH-01	SOLID	N/A	<8.27e+3	8270.000	ug/g
4 DUP	S98T002574	0 W	OH-01	SOLID	<8.27e+3	<8.40e+3		RPD

## Final page for worklist# 27514

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_  
Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_  
Reviewer Signature  Date 12/18/98

# LABCORE Data Entry Template for Worklist# 27514

Analyst: Jds Instrument: PH01 Book # 111N8

Method: LA-211-102 Rev/Mod D-0

Worklist Comment: U107, OH-01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			OH-01	SOLID		<u>1.72E+4</u>	N/A	ug/g
		2 BLNK-PREP			OH-01	SOLID		<u>&lt;8.27E+3</u>	N/A	ug/g
98000401	U-107 (2)	3 SAMPLE	S98T002574	0 W	OH-01	SOLID	N/A	<u>&lt;8.27E+3</u>		ug/g
98000401	U-107 (2)	4 DUP	S98T002574	0 W	OH-01	SOLID	<u>&lt;8.27E+3</u>	<u>&lt;8.40E+3</u>	N/A	ug/g

## Final page for worklist # 27514

Jds 12/11/98  
Analyst Signature Date

Ch. Quinn 12/16/98  
Analyst Signature Date

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Bik.

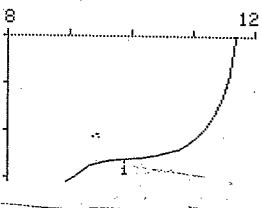
5TD

date 98-12-10 time 23:24  
 GET pH 12 # 306  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 5.84  
 V/ml pH  
 EP1 .006 4.94  
 stop volt.reached  
 =====

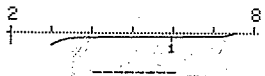
date 98-12-10 time 23:27  
 GET pH 12 # 307  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 11.68  
 V/ml pH  
 EP1 .261 9.89  
 manual stop  
 =====

*Dres*  
 date 98-12-10 time 23:30  
 GET pH 12 # 308  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 7.58  
 V/ml pH  
 EP1 .008 5.97  
 stop volt.reached  
 =====

date 98-12-10 time 23:27  
 GET pH 12 # 307  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



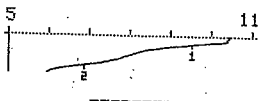
date 98-12-10 time 23:31  
 GET pH 12 # 308  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



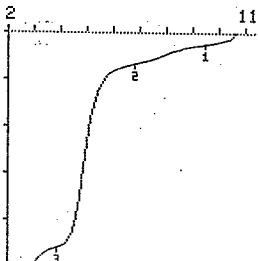
*2574 3A*  
 date 98-12-10 time 23:34  
 GET pH 12 # 309  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 10.41  
 V/ml pH  
 EP1 .018 9.53  
 EP2 .063 6.79  
 manual stop  
 ! =====

*2574 2A*  
 date 98-12-10 time 23:40  
 GET pH 12 # 310  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 10.59  
 V/ml pH  
 EP1 .024 9.48  
 EP2 .067 6.79  
 EP3 .459 3.83  
 stop volt.reached  
 =====

date 98-12-10 time 23:34  
 GET pH 12 # 309  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



date 98-12-11 time 00:18  
 GET pH 12 # 310  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

--	--

## OH (AUTO) : LA-211-102 (D-0)

		STANDARD
Type	Sample Size (mL) SS	0.050
STANDARD	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.261
27514	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	1.01E+00
OH-01	OH in Sample in µg/mL (PPM)	1.72E+04
Matrix		
SOLID		
Sample #		
STD		
Instrument Code		
PH01		
Analyst	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL *Dilution Factor	
JDS		
Date	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*((1000000µg/g)/(1000mL/L))	
12/11/98		
Time	STANDARD	
12:30 AM	Concentration of OH in Sample (Molarity)	1.01E+00
	OH in Sample in µg/mL (PPM)	1.72E+04

Data Entry by:	Date:	12/16/98
Approved by: <i>NA</i>	Date:	

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

$$\frac{< 42 \text{ ppm} \times 1000}{5.079} = 18.27 \text{ E}+3 \text{ } \mu\text{g/l}$$

**OH (AUTO) : LA-211-102 (D-0)**

		PREP BLNK
Type	Sample Size (mL) SS	3.000
PREP BLNK	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.008
27514	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	5.16E-04
OH-01	OH in Sample in $\mu\text{g/mL}$ (PPM)	8.77E+00
Matrix		
SOLID		
Sample #	Detection Limit = $125 \mu\text{g} / \text{SS} * \text{DF}$	
PREP BLNK		
Instrument Code	Detection Limit ( $\mu\text{g/mL}$ )	4.17E+01
PH01		
Analyst	OH Molarity = $((\text{mL HNO3}) * (\text{M HNO3})) / \text{Sample Size in mL} * \text{Dilution Factor}$	
JDS		
Date	OH in $\mu\text{g/mL}$ = $(\text{OH MOLARITY}) * (17.0\text{g/mole}) * ((1000000 \mu\text{g/g}) / (1000\text{mL/L}))$	
12/11/98		
Time		PREP BLNK
12:30 AM	Concentration of OH in Sample (Molarity)	5.16E-04
	OH in Sample in $\mu\text{g/mL}$ (PPM)	<42

The Result is < Detection Limit

Data Entry by:	Date:	12/16/98
Approved by: <i>AAE</i>	Date:	

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

$$\frac{<42 \mu\text{g}/\text{ml} \times 1000 \text{ ml}/\text{l}}{5.079 \text{ g}/\text{l}} = <8.27 \text{E}+3 \mu\text{g}/\text{l}$$

**OH (AUTO) : LA-211-102 (D-0)**

		SAM
Type	Sample Size (mL) SS	3.000
SAM	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.018
27514	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	1.16E-03
OH-01	OH in Sample in µg/mL (PPM)	1.97E+01
Matrix		
SOLID		
Sample #	Detection Limit = 125µg / SS * DF	
S98T002574		
Instrument Code	Detection Limit (µg/mL)	4.17E+01
PH01		
Analyst	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL*Dilution Factor	
JDS		
Date	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*((1000000µg/g)/(1000mL/L))	
12/11/98		
Time		SAM
12:30 AM	Concentration of OH in Sample (Molarity)	1.16E-03
	OH in Sample in µg/mL (PPM)	<42

The Result is < Detection Limit

Data Entry by:	Date:	12/16/98
Approved by:	Date:	

NA

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

$$\frac{242 \times 1000}{5.001} = 48.40 \text{ E}+3 \mu\text{g/l}$$

## OH (AUTO) : LA-211-102 (D-0)

		DUP
Type	Sample Size (mL) SS	3.000
DUP	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.024
27514	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	1.55E-03
OH-01	OH in Sample in $\mu\text{g/mL}$ (PPM)	2.63E+01
Matrix		
SOLID		
Sample #	Detection Limit = $125\mu\text{g} / \text{SS} * \text{DF}$	
S98T002574		
Instrument Code	Detection Limit ( $\mu\text{g/mL}$ )	4.17E+01
PH01		
Analyst	OH Molarity = $((\text{mL HNO}_3) * (\text{M HNO}_3)) / \text{Sample Size in mL} * \text{Dilution Factor}$	
JDS		
Date	OH in $\mu\text{g/mL}$ = $(\text{OH MOLARITY}) * (17.0\text{g/mole}) * ((1000000\mu\text{g/g}) / (1000\text{mL/L}))$	
12/11/98		
Time		DUP
12:30 AM	Concentration of OH in Sample (Molarity)	1.55E-03
	OH in Sample in $\mu\text{g/mL}$ (PPM)	<42

The Result is &lt; Detection Limit

Data Entry by:	Date:	12/16/98
Approved by:	Date:	



HNF-1661 REV. 0

# LABCORE Completed Worklist Report for Worklist# 27539

Analyst: jds

Instrument: PH01

Book#: 111N8

Method: LA-211-102 Rev/Mod \_\_\_\_\_

Worklist Comment: U107, OH-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0	OH-01	LIQUID	1.72e4	1.81e+4	105.233 % Recovery	
2 BLNK	0	OH-01	LIQUID	1	<5000.00		ug/mL
3 SAMPLE	S98T003326 0	OH-01	LIQUID	N/A	3.49e+4	5000.000	ug/mL
4 DUP	S98T003326 0	OH-01	LIQUID	3.49e+4	3.30e+4	5.596 RPD	
5 SAMPLE	S98T003331 0	OH-01	LIQUID	N/A	3.35e+4	5000.000	ug/mL
6 DUP	S98T003331 0	OH-01	LIQUID	3.35e+4	3.47e+4	3.519 RPD	

Final page for worklist# 27539

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

  
12/18/98  
Reviewer Signature \_\_\_\_\_ Date \_\_\_\_\_

12/10/98 13:19

## LABCORE Data Entry Template for Worklist# 27539

Analyst: ids Instrument: PH01 Book # 111/18Method: LA-211-102 Rev/Mod D-0

Worklist Comment: U107, OH-01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			OH-01	LIQUID		<u>1.81E+4</u>	N/A	ug/mL
		2 BLNK			OH-01	LIQUID		<u>&lt;5000</u>	N/A	ug/mL
98000358	U-107 (2)	3 SAMPLE	S98T003326	0	OH-01	LIQUID	N/A	<u>3.49E+4</u>		ug/mL
98000358	U-107 (2)	4 DUP	S98T003326	0	OH-01	LIQUID	<u>3.49E+4</u>	<u>3.30E+4</u>	N/A	ug/mL
98000359	U-107 (2)	5 SAMPLE	S98T003331	0	OH-01	LIQUID	N/A	<u>3.35E+4</u>		ug/mL
98000359	U-107 (2)	6 DUP	S98T003331	0	OH-01	LIQUID	<u>3.35E+4</u>	<u>3.47E+4</u>	N/A	ug/mL

Final page for worklist # 27539

Analyst Signature

Date

12/10/98

Analyst Signature

Date

12/10/98

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

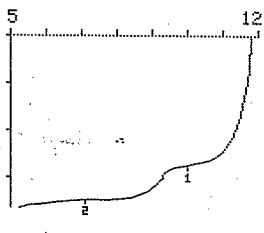
date 98-12-10 time 20:45  
 GET pH 12 # 288  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 5.78  
 V/ml pH  
 EP1 .006 4.71  
 stop volt.reached  
 =====

date 98-12-10 time 20:45  
 GET pH 12 # 288  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



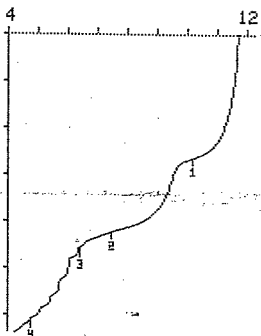
date 98-12-10 time 20:52  
 GET pH 12 # 289  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 11.80  
 V/ml pH  
 EP1 .275 9.98  
 EP2 .350 7.11  
 manual stop  
 =====

date 98-12-10 time 20:54  
 GET pH 12 # 289  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



date 98-12-10 time 22:04  
 GET pH 12 # 296  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 11.67  
 V/ml pH  
 EP1 .265 10.15  
 EP2 .424 7.45  
 EP3 .453 6.43  
 EP4 .608 4.79  
 manual stop  
 =====

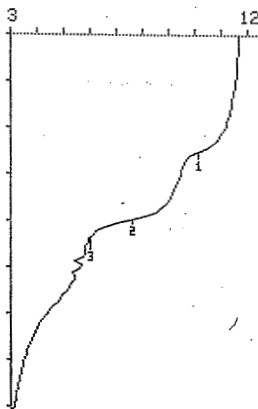
date 98-12-10 time 22:05  
 GET pH 12 # 296  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



3320 D.P. 025

date 98-12-10 time 22:14  
 GET pH 12 # 297  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 11.64  
 V/ml pH  
 EP1 .251 10.14  
 EP2 .397 7.57  
 EP3 .433 5.98  
 stop volt. reached  
 =====

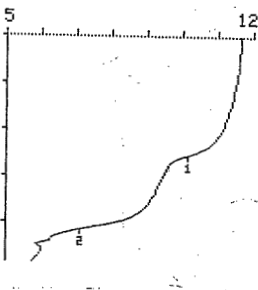
date 98-12-10 time 22:35  
 GET pH 12 # 297  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



- 3331, 025

date 98-12-10 time 22:44  
 GET pH 12 # 298  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 11.64  
 V/ml pH  
 EP1 .255 10.13  
 EP2 .416 7.09  
 manual stop  
 =====

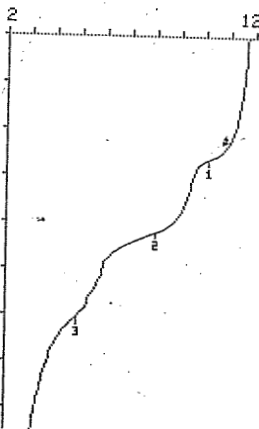
date 98-12-10 time 22:44  
 GET pH 12 # 298  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



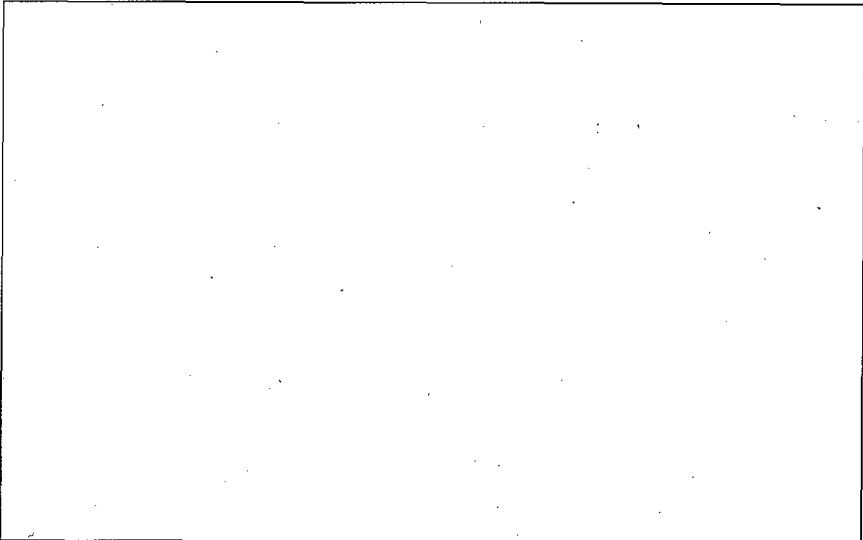
3331 Dup

date 98-12-10 time 22:54  
 GET pH 12 # 299  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 11.66  
 V/ml pH  
 EP1 .264 10.16  
 EP2 .421 8.03  
 EP3 .603 4.83  
 stop volt. reached  
 =====

date 98-12-10 time 22:59  
 GET pH 12 # 299  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

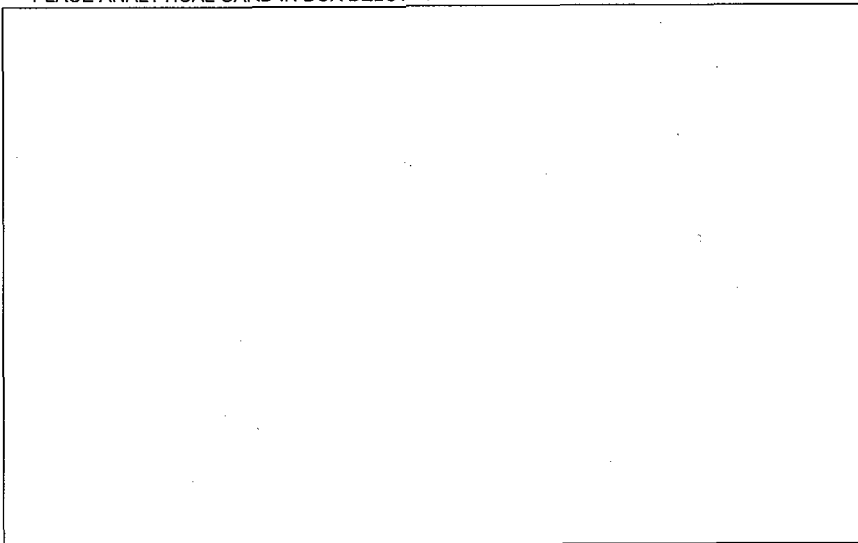


**OH (AUTO) : LA-211-102 (D-0)**

		STD
Type	Sample Size (mL) SS	0.050
STD	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.275
27539	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	1.06E+00
OH-01	OH in Sample in µg/mL (PPM)	1.81E+04
Matrix		
LIQUID		
Sample #	Detection Limit = 125µg / SS * DF	
STD		
Instrument Code	Detection Limit (µg/mL)	2.50E+03
PH01		
Analyst	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL*Dilution Factor	
JDS		
Date	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*((1000000µg/g)/(1000mL/L))	
12/10/98		
Time		STD
06:00 PM	Concentration of OH in Sample (Molarity)	1.06E+00
	OH in Sample in µg/mL (PPM)	1.81E+04

Data Entry by:	NA	Date:	12/16/98
Approved by:	NA	Date:	

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER



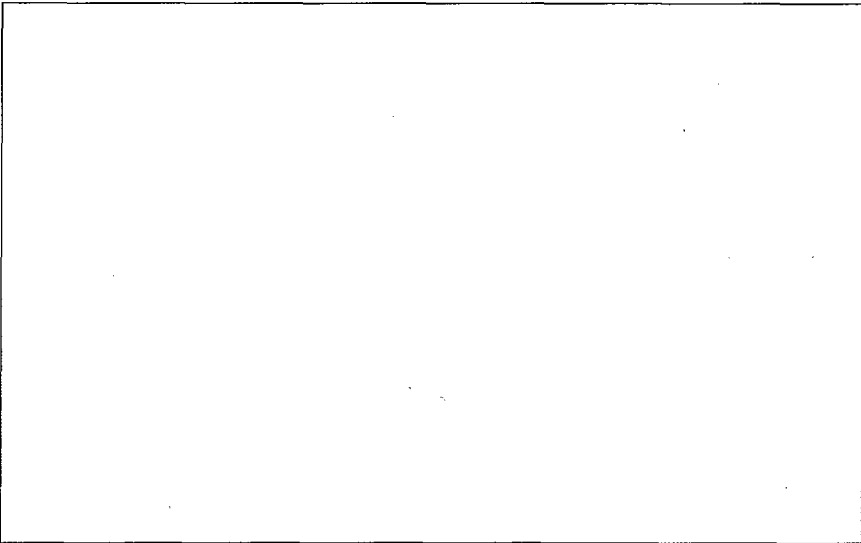
**OH (AUTO) : LA-211-102 (D-0)**

		BLNK
Type	Sample Size (mL) SS	0.025
BLNK	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.006
27539	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	4.64E-02
OH-01	OH in Sample in µg/mL (PPM)	7.89E+02
Matrix		
LIQUID		
Sample #	Detection Limit = 125µg / SS * DF	
BLANK		
Instrument Code	Detection Limit (µg/mL)	5.00E+03
PH01		
Analyst	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL*Dilution Factor	
JDS		
Date	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*((1000000µg/g)/(1000mL/L))	
12/10/98		
Time		BLNK
06:00 PM	Concentration of OH in Sample (Molarity)	4.64E-02
	OH in Sample in µg/mL (PPM)	<5000

The Result is < Detection Limit

Data Entry by:	Date: 12/16/98
Approved by: <i>NA</i>	Date:

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

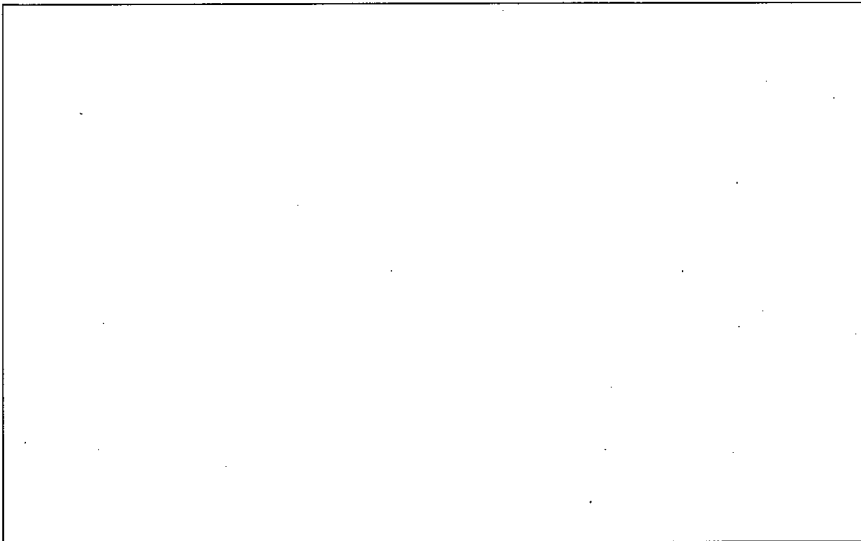


**OH (AUTO) : LA-211-102 (D-0)**

		SAMPLE
Type	Sample Size (mL) SS	0.025
SAMPLE	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.265
27539	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	2.05E+00
OH-01	OH in Sample in µg/mL (PPM)	3.49E+04
Matrix		
LIQUID		
Sample #	Detection Limit = 125µg / SS * DF	
S98T003326		
Instrument Code	Detection Limit (µg/mL)	5.00E+03
PH01		
Analyst	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL*Dilution Factor	
JDS		
Date	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*((1000000µg/g)/(1000mL/L))	
12/10/98		
Time		SAMPLE
06:00 PM	Concentration of OH in Sample (Molarity)	2.05E+00
	OH in Sample in µg/mL (PPM)	3.49E+04

Data Entry by:	Date:	12/16/98
Approved by: <i>NA</i>	Date:	

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER



**OH (AUTO) : LA-211-102 (D-0)**

		DUP
Type	Sample Size (mL) SS	0.025
DUP	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.251
27539	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	1.94E+00
OH-01	OH in Sample in µg/mL (PPM)	3.30E+04
Matrix		
LIQUID		
Sample #	Detection Limit = 125µg / SS * DF	
S98T003326		
Instrument Code	Detection Limit (µg/mL)	5.00E+03
PH01		
Analyst	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL*Dilution Factor	
JDS		
Date	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*((1000000µg/g)/(1000mL/L))	
12/10/98		
Time		
06:00 PM		
		DUP
Concentration of OH in Sample (Molarity)		1.94E+00
OH in Sample in µg/mL (PPM)		3.30E+04

Data Entry by:		Date:	12/16/98
Approved by:		Date:	



PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

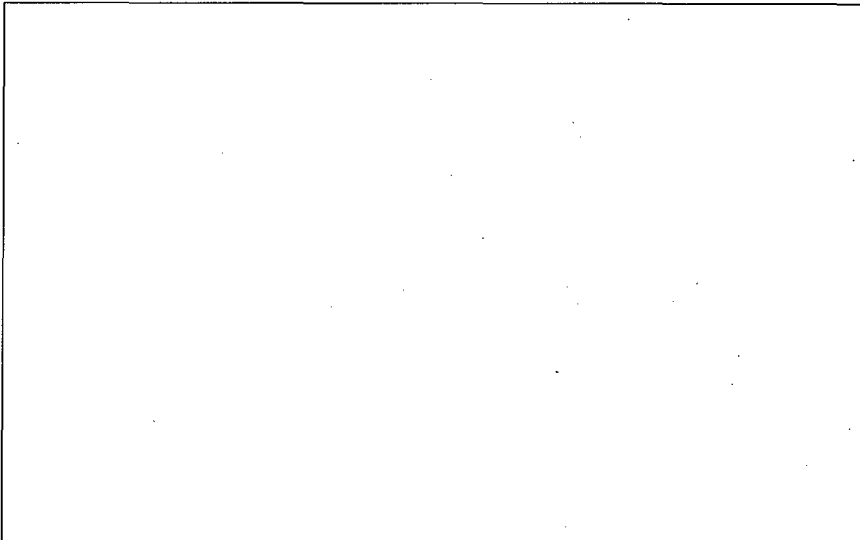
--	--

## OH (AUTO) : LA-211-102 (D-0)

		SAMPLE
Type	Sample Size (mL) SS	0.025
SAMPLE	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.255
27539	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	1.97E+00
OH-01	OH in Sample in µg/mL (PPM)	3.35E+04
Matrix		
LIQUID		
Sample #	Detection Limit = 125µg / SS * DF	
S98T003331		
Instrument Code	Detection Limit (µg/mL)	5.00E+03
PH01		
Analyst	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL*Dilution Factor	
JDS		
Date	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*((1000000µg/g)/(1000mL/L))	
12/10/98		
Time		
06:00 PM		
		SAMPLE
Concentration of OH in Sample (Molarity)		1.97E+00
OH in Sample in µg/mL (PPM)		3.35E+04


Data Entry by:		Date:	12/16/98
Approved by:	<i>NA</i>	Date:	

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER



**OH (AUTO) : LA-211-102 (D-0)**

		DUP
Type	Sample Size (mL) SS	0.025
DUP	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.264
27539	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	2.04E+00
OH-01	OH in Sample in µg/mL (PPM)	3.47E+04
Matrix		
LIQUID		
Sample #	Detection Limit = 125µg / SS * DF	
S98T003331		
Instrument Code	Detection Limit (µg/mL)	5.00E+03
PH01		
Analyst	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL*Dilution Factor	
JDS		
Date	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*((1000000µg/g)/(1000mL/L))	
12/10/98		
Time		DUP
06:00 PM	Concentration of OH in Sample (Molarity)	2.04E+00
	OH in Sample in µg/mL (PPM)	3.47E+04

Data Entry by:		Date:	12/16/98
Approved by:		Date:	

# LABCORE Data Entry Template for Worklist# 27540

Analyst: sds Instrument: PH01 Book # 111N8

Method: LA-211-102 Rev/Mod D-0

Worklist Comment: U107, OH-01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			OH-01	LIQUID		<u>1.74E4</u>	N/A	ug/mL
		2 BLNK			OH-01	LIQUID		<u>2.50E3</u>	N/A	ug/mL
98000401	U-107 (2)	3 SAMPLE	S98T003340	0	OH-01	LIQUID	N/A	<u>3.06E4</u>		ug/mL
98000401	U-107 (2)	4 DUP	S98T003340	0	OH-01	LIQUID	<u>3.06E4</u>	<u>3.04E4</u>	N/A	ug/mL
98000401	U-107 (2)	5 SAMPLE	S98T003356	0	OH-01	LIQUID	N/A	<u>4.50E4</u>		ug/mL
98000401	U-107 (2)	6 DUP	S98T003356	0	OH-01	LIQUID	<u>4.50E4</u>	<u>4.64E4</u>	N/A	ug/mL

## Final page for worklist # 27540

[Signature] [Signature] 12/10/98  
Analyst Signature Date

[Signature] 12/17/98  
Analyst Signature Date

[Signature] 12/18/98  
REVIEWER SIGNATURE DATE

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

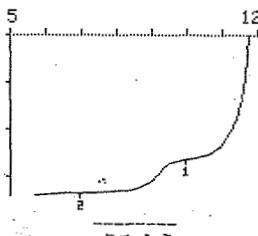
B/K

STD

date 98-12-10 time 21:00  
 GET pH 12 # 291  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 11.71

V/ml - pH  
 EP1 .264 9.94  
 EP2 .336 6.94  
 manual stop  
 =====

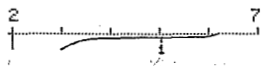
date 98-12-10 time 21:00  
 GET pH 12 # 291  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



date 98-12-10 time 20:56  
 GET pH 12 # 290  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 6.18

V/ml pH  
 EP1 .008 5.05  
 stop volt.reached  
 =====

date 98-12-10 time 20:56  
 GET pH 12 # 290  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml

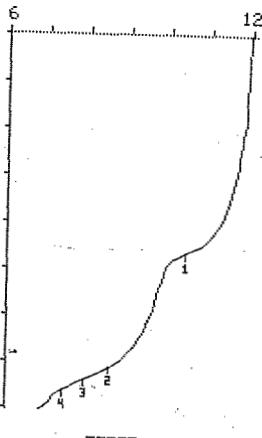


3340 550

date 98-12-10 time 21:09  
 GET pH 12 # 292  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 11.92

V/ml pH  
 EP1 .465 10.39  
 EP2 .712 8.54  
 EP3 .738 7.93  
 EP4 .764 7.48  
 manual stop  
 =====

date 98-12-10 time 21:09  
 GET pH 12 # 292  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



3340  
P.050

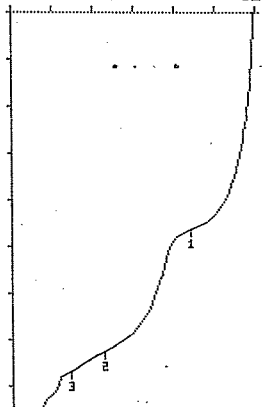
date 98-12-10 time 21:17  
 GET pH 12 # 293  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 11.93

	V/ml	pH
EP1	.463	10.37
EP2	.726	8.24
EP3	.771	7.42

manual stop  
 =====

date 98-12-10 time 21:17  
 GET pH 12 # 293  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml

6 12

3350  
P.025

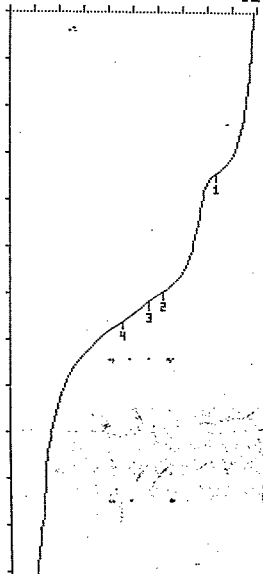
date 98-12-10 time 21:29  
 GET pH 12 # 294  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 11.83

	V/ml	pH
EP1	.342	10.38
EP2	.596	8.19
EP3	.618	7.61
EP4	.661	6.59

stop volt.reached  
 =====

date 98-12-10 time 21:35  
 GET pH 12 # 294  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml

2 12

3350  
P.025

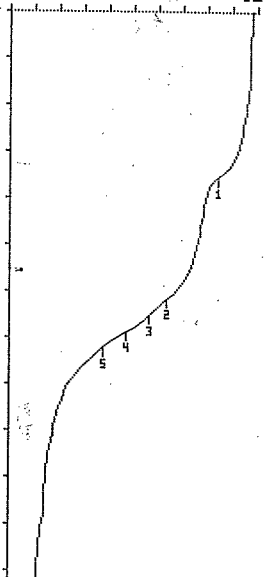
date 98-12-10 time 21:46  
 GET pH 12 # 295  
 Id.#1 0030  
 Id.#2 .1934  
 pH(init) 11.74

	V/ml	pH
EP1	.353	10.44
EP2	.616	8.37
EP3	.652	7.64
EP4	.687	6.73
EP5	.720	5.80

stop volt.reached  
 =====

date 98-12-10 time 21:54  
 GET pH 12 # 295  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml

2 12



PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

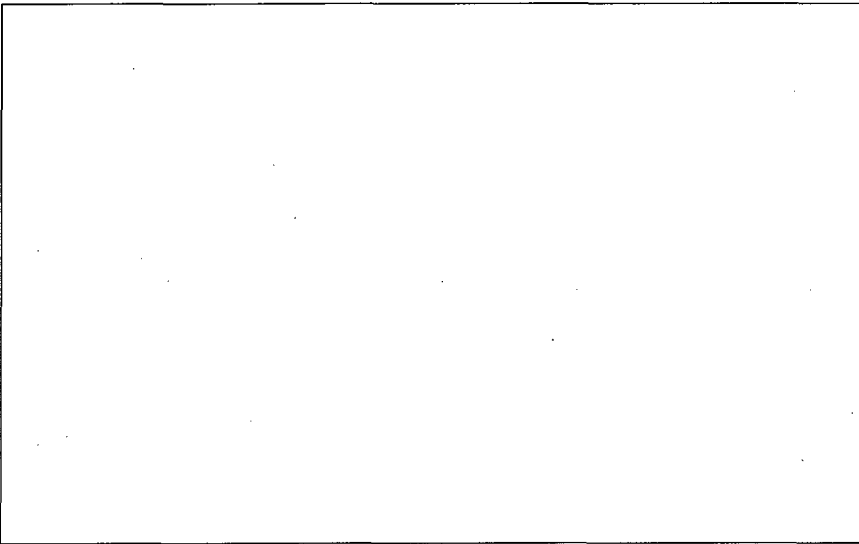
--	--

## OH (AUTO) : LA-211-102 (D-0)

		STANDARD
Type	Sample Size (mL) SS	0.050
STANDARD	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.264
27540	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	1.02E+00
OH-01	OH in Sample in µg/mL (PPM)	1.74E+04
Matrix		
LIQUID		
Sample #		
STD		
Instrument Code		
PH01		
Analyst	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL*Dilution Factor	
JDS		
Date	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*((1000000µg/g)/(1000mL/L))	
12/10/98		
Time		
06:30 PM		
		STANDARD
Concentration of OH in Sample (Molarity)		1.02E+00
OH in Sample in µg/mL (PPM)		1.74E+04

Data Entry by:	Date:	12/17/98
Approved by:	Date:	

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER



**OH (AUTO) : LA-211-102 (D-0)**

		BLANK
Type	Sample Size (mL) SS	0.050
BLANK	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.008
27540	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	3.09E-02
OH-01	OH in Sample in µg/mL (PPM)	5.26E+02

Matrix		
LIQUID		
Sample #	Detection Limit = 125µg / SS * DF	
BLANK		
Instrument Code	Detection Limit (µg/mL)	2.50E+03
PH01		
Analyst	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL*Dilution Factor	
JDS		
Date	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*((1000000µg/g)/(1000mL/L))	
12/10/98		
Time		BLANK
06:30 PM	Concentration of OH in Sample (Molarity)	3.09E-02
	OH in Sample in µg/mL (PPM)	<2500

The Result is < Detection Limit

Data Entry by:	Date:	12/17/98
Approved by: <i>NA</i>	Date:	

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

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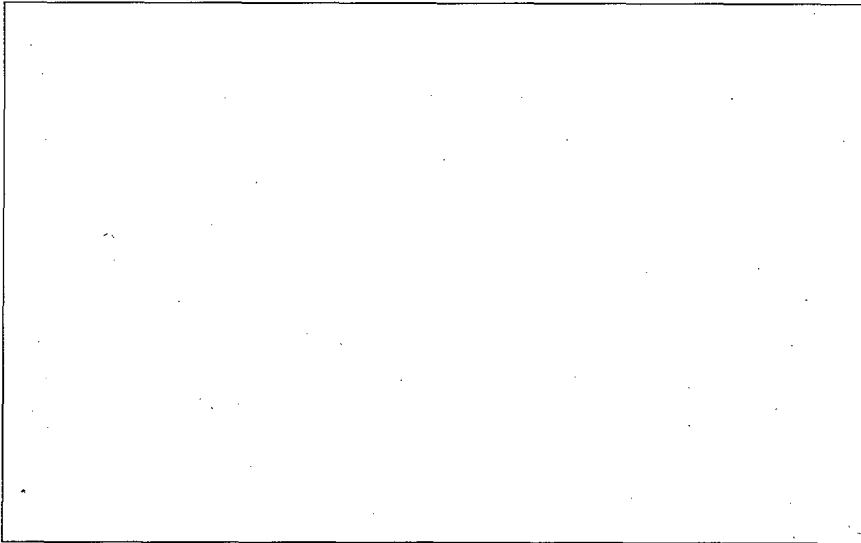
## OH (AUTO) : LA-211-102 (D-0)

		SAM
Type	Sample Size (mL) SS	0.050
SAM	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.465
27540	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	1.80E+00
OH-01	OH in Sample in µg/mL (PPM)	3.06E+04
Matrix		
LIQUID		
Sample #	Detection Limit = 125µg / SS * DF	
S98T003340		
Instrument Code	Detection Limit (µg/mL)	2.50E+03
PH01		
Analyst	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL*Dilution Factor	
JDS		
Date	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*((1000000µg/g)/(1000mL/L))	
12/10/98		
Time		SAM
06:30 PM	Concentration of OH in Sample (Molarity)	1.80E+00
	OH in Sample in µg/mL (PPM)	3.06E+04

Data Entry by:	Date:	12/17/98
Approved by:	Date:	



PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

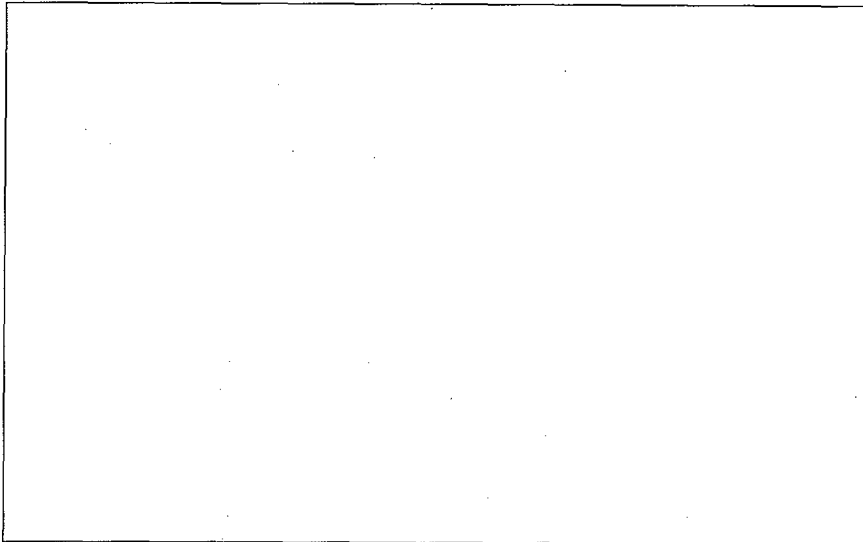


**OH (AUTO) : LA-211-102 (D-0)**

		DUP
Type	Sample Size (mL) SS	0.050
DUP	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.463
27540	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	1.79E+00
OH-01	OH in Sample in µg/mL (PPM)	3.04E+04
Matrix		
LIQUID		
Sample #	Detection Limit = 125µg / SS * DF	
S98T003340		
Instrument Code	Detection Limit (µg/mL)	2.50E+03
PH01		
Analyst	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL*Dilution Factor	
JDS		
Date	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*((1000000µg/g)/(1000mL/L))	
12/10/98		
Time		DUP
06:30 PM	Concentration of OH in Sample (Molarity)	1.79E+00
	OH in Sample in µg/mL (PPM)	3.04E+04

Data Entry by:	Date:	12/17/98
Approved by:	Date:	

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER

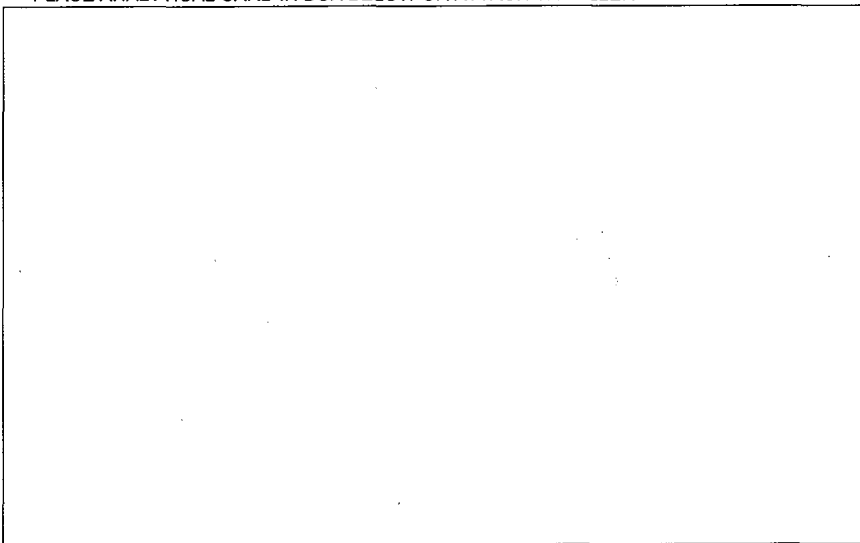


**OH (AUTO) : LA-211-102 (D-0)**

		SAM
Type	Sample Size (mL) SS	0.025
SAM	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.342
27540	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	2.65E+00
OH-01	OH in Sample in µg/mL (PPM)	4.50E+04
Matrix		
LIQUID		
Sample #	Detection Limit = 125µg / SS * DF	
S98T003356		
Instrument Code	Detection Limit (µg/mL)	5.00E+03
PH01		
Analyst	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL*Dilution Factor	
JDS		
Date	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*((1000000µg/g)/(1000mL/L))	
12/10/98		
Time		SAM
06:30 PM	Concentration of OH in Sample (Molarity)	2.65E+00
	OH in Sample in µg/mL (PPM)	4.50E+04

Data Entry by:	Date: 12/17/98
Approved by: <i>N/A</i>	Date:

PLACE ANALYTICAL CARD IN BOX BELOW OR ATTACH TRAVELER



**OH (AUTO) : LA-211-102 (D-0)**

		DUP
Type	Sample Size (mL) SS	0.025
DUP	Concentration of HNO3 (Molarity)	0.1934
Work List	HNO3 Titrant at OH end-point in mL	0.353
27540	Dilution Factor DF	1
Test Code	Concentration of OH in Sample (Molarity)	2.73E+00
OH-01	OH in Sample in µg/mL (PPM)	4.64E+04
Matrix		
LIQUID		
Sample #	Detection Limit = 125µg / SS * DF	
S98T003356		
Instrument Code	Detection Limit (µg/mL)	5.00E+03
PH01		
Analyst	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL*Dilution Factor	
JDS		
Date	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*((1000000µg/g)/(1000mL/L))	
12/10/98		
Time		DUP
06:30 PM	Concentration of OH in Sample (Molarity)	2.73E+00
	OH in Sample in µg/mL (PPM)	4.64E+04

Data Entry by:	Date:	12/17/98
Approved by:	Date:	

*NA*  
540

# LABCORE Completed Worklist Report for Worklist# 27691

Analyst: rwk Instrument: PH01 Book#: 111N8

Method: LA-211-102 Rev/Mod \_\_\_\_\_

Worklist Comment: U107 FOR OH-01 RTS

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0		OH-01	SOLID	1.72e4	1.73E4	100.581 % Recovery	
2 BLNK-PREP	0		OH-01	SOLID	1	<8372	ug/g	
3 SAMPLE	898T003338	0 W	OH-01	SOLID	N/A	1.3E4	8370.000 ug/g	
4 DUP	898T003338	0 W	OH-01	SOLID	1.30E4	1.27E4	2.335 RPD	

Final page for worklist# 27691

\_\_\_\_\_  
Analyst Signature Date

*Mary Tracy* 12-31-98  
\_\_\_\_\_  
Analyst Signature Date

*[Signature]* 12/31/98  
\_\_\_\_\_  
Reviewer Signature Date

# LABCORE Data Entry Template for Worklist# 27691

Analyst: RM Instrument: PH01 Book # 11178

Method: LA-211-102 Rev/Mod \_\_\_\_\_

Worklist Comment: U107 FOR OH-01 RTS

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				OH-01	SOLID	_____	_____	N/A	ug/g
		2	BLNK-PREP				OH-01	SOLID	_____	_____	N/A	ug/g
98000401	U-107 (2)	3	SAMPLE	S98T003338	0	W	OH-01	SOLID	N/A	_____	_____	ug/g
98000401	U-107 (2)	4	DUP	S98T003338	0	W	OH-01	SOLID	_____	_____	N/A	ug/g

## Final page for worklist # 27691

RM 12/29/98  
Analyst Signature Date

Mary Tracy 12-31-98  
Analyst Signature Date

Data Entry Comments:

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Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

calibration data  
 date 98-12-29  
 pH(S) 1 7.00  
 pH(S) 2 10.00  
 t.cal. 26.0 °C  
 slope(rel) 1.001  
 U(as) 45.5 mV  
 electr. input 1  
 =====

*ifd*

Id.#1 0000  
 C00= .05ml

date 98-12-29 time 21:52  
 GET pH 12 # 333  
 Id.#1 0000  
 Id.#2 .1934  
 pH(init) 11.72

	V/ml	pH
EP1	.263	9.84
EP2	.341	6.85

stop volt.reached  
 =====

*Yump BLK*

date 98-12-29 time 22:06  
 GET pH 12 # 336  
 Id.#1 0000  
 Id.#2 .1934  
 pH(init) 5.47

	V/ml	pH
EP1	.008	4.61

manual stop  
 =====

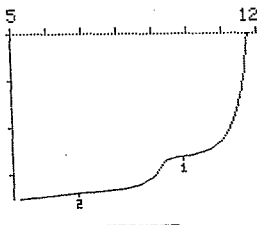
*BLK*

date 98-12-29 time 22:02  
 GET pH 12 # 335  
 Id.#1 0000  
 Id.#2 .1934  
 pH(init) 5.47

	V/ml	pH
EP1	.008	4.62

manual stop  
 =====

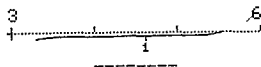
date 98-12-29 time 21:53  
 GET pH 12 # 333  
 .10ml/div ΔpH=1/div  
 start V .000 ml



date 98-12-29 time 22:06  
 GET pH 12 # 336  
 .10ml/div ΔpH=1/div  
 start V .000 ml

3 6  
 +-----+  
-----
 +-----+  
 1

date 98-12-29 time 22:03  
 GET pH 12 # 335  
 .10ml/div ΔpH=1/div  
 start V .000 ml



*SAM*

Id.#1 3338-1  
 C00= 3ml

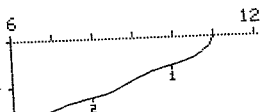
date 98-12-29 time 22:11  
 GET pH 12 # 337  
 Id.#1 3338-1  
 Id.#2 .1934  
 pH(init) 10.98  
           V/ml           pH  
 EP1 .059 9.95  
 EP2 .125 7.96  
 manual stop  
 =====

*DUP*

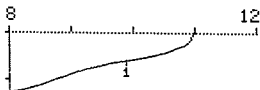
Id.#1 3338-2  
 C00= 3ml

date 98-12-29 time 22:15  
 GET pH 12 # 338  
 Id.#1 3338-2  
 Id.#2 .1934  
 pH(init) 10.98  
           V/ml           pH  
 EP1 .060 9.89  
 manual stop  
 =====

date 98-12-29 time 22:12  
 GET pH 12 # 337  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



date 98-12-29 time 22:15  
 GET pH 12 # 338  
 .10ml/div  $\Delta$ pH=1/div  
 start V .000 ml



OH (AUTO) : LA-211-102 (D-1)

		STD
TYPE	Sample Size (mL) SS	0.050
STD	Concentration of Titrant (Molarity)	0.193
WorkList	Titrant volume at end-point in mL	0.263
27691	*** Enter Dilution Factor (DF) or 1 ***	1.000
Test Code		
PH01	Concentration of Sample Prep (MOLARITY)	1.017
Matrix	Concentration of Sample in PPM	17293.828
SOLID		
Sample #		
STD		
Instrument Code		
OH-01	Detection Limit (PPM)	
Analyst		
RWK	OH Molarity = ((mL HNO3)*(M HNO3))/Sample Size in mL*Dilution Factor	
Date		
12/29/98	OH in µg/mL = (OH MOLARITY)*(17.0g/mole)*(1000000µg/g)/(1000mL/L)	
Time		
10:00 PM		
		STD
		1.017
	Concentration of Sample in PPM	17293.828



OH (AUTO) : LA-211-102 (D-1)

		BLNK
TYPE	Sample Size (mL) SS	3.000
BLNK	Concentration of Titrant (Molarity)	0.193
Work List	Titrant volume at end-point in mL	0.008
27691	*** Enter Dilution Factor (DF) or 1 ***	1.000
Test Code	*** Enter Digest Factor (DDF) in g/L ***	4.977
PH01	Concentration of Sample Prep (MOLARITY)	0.001
Matrix	Concentration of Sample in PPM	1761.597
SOLID		
Sample #		
BLNK	Detection Limit= $((125\mu\text{g} / \text{SS}) * \text{DF}) * 1000 / \text{DDF}$	
Instrument Code		
OH-01	Detection Limit (PPM)	8371.844
Analyst		
RWK	OH Molarity = $((\text{mL HNO}_3) * (\text{M HNO}_3)) / \text{Sample Size in mL} * \text{Dilution Factor}$	
Date		
12/29/98	OH in $\mu\text{g/g}$ = $(\text{OH MOLARITY}) * (17\text{g/mole}) * (1000000 \mu\text{g/g}) / \text{DDF}$	
Time		
10:00 PM		
		BLNK
		<del>0.001</del>
	Concentration of Sample in PPM	<8372

The Result is < Detection Limit

*m/L  
12/31/98*

OH (AUTO) : LA-211-102 (D-1)

		SAMPLE
TYPE	Sample Size (mL) SS	3.000
SAMPLE	Concentration of Titrant (Molarity)	0.193
Work List	Titrant volume at end-point in mL	0.059
27691	*** Enter Dilution Factor (DF) or 1 ***	1.000
Test Code	***Enter Digest Factor (DDF) in g/L***	4.977
PH01	Concentration of Sample Prep (MOLARITY)	0.004
Matrix	Concentration of Sample in PPM	12991.776
SOLID		
Sample #		
S98T003338	Detection Limit= $((125\mu\text{g} / \text{SS}) * \text{DF}) * 1000 / \text{DDF}$	
Instrument Code		
OH-01	Detection Limit (PPM)	8371.844
Analyst		
RWK	OH Molarity = $((\text{mL HNO}_3) * (\text{M HNO}_3)) / \text{Sample Size in mL} * \text{Dilution Factor}$	
Date		
12/29/98	OH in $\mu\text{g/g}$ = $(\text{OH MOLARITY}) * (17\text{g/mole}) * (1000000 \mu\text{g/g}) / \text{DDF}$	
Time		
10:00 PM		
		SAMPLE
		<del>0.004</del> <i>M/L 12/29/98</i>
	Concentration of Sample in PPM	12991.776

1.30E4

OH (AUTO) : LA-211-102 (D-1)

		DUP
TYPE	Sample Size (mL) SS	3.000
DUP	Concentration of Titrant (Molarity)	0.193
Work List	Titrant volume at end-point in mL	0.060
27691	*** Enter Dilution Factor (DF) or 1 ***	1.000
Test Code	***Enter Digest Factor (DDF) in g/L***	5.160
PH01	Concentration of Sample Prep (MOLARITY)	0.004
Matrix	Concentration of Sample in PPM	12743.411
SOLID		
Sample #		
S98T003338	Detection Limit= $((125\mu\text{g} / \text{SS}) * \text{DF}) * 1000 / \text{DDF}$	
Instrument Code		
OH-01	Detection Limit (PPM)	8074.935
Analyst		
RWK	OH Molarity = $((\text{mL HNO}_3) * (\text{M HNO}_3)) / \text{Sample Size in mL} * \text{Dilution Factor}$	
Date		
12/29/98	OH in $\mu\text{g/g} = (\text{OH MOLARITY}) * (17\text{g/mole}) * (1000000 \mu\text{g/g}) / \text{DDF}$	
Time		
10:00 PM		
		DUP
		<del>0.004</del>
	Concentration of Sample in PPM	12743.411

(2/31/98

# LABCORE Completed Worklist Report for Worklist# 27684

Analyst: pjm Instrument: NH301 Book#: \_\_\_\_\_

Method: LA-631-001 Rev/Mod \_\_\_\_\_

Worklist Comment: U107 FOR NH3-01 RTS

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 BLNK	0	NH3-01	LIQUID	1	<0.00E+0		ug/mL
2 STD	0	NH3-01	LIQUID	3.98E+02	3.89E+2	97.739 % Recovery	
3 SAMPLE	898T002114	0	NH3-01	LIQUID	N/A	2.24E+01	1.00E+002 ug/mL
4 DUP	898T002114	0	NH3-01	LIQUID	2.24E+1	7.26E+0	102.090 RPD
5 TRIP1	898T002114	0	NH3-01	LIQUID	2.24E+1	9.31E+0	82.561 RPD
6 STD	0	NH3-01	LIQUID	3.98E+02	4.72E+2	118.593 % Recovery	

**Final page for worklist# 27684**

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*Emily Fry* 1-4-99  
Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*[Signature]* 1/7/99  
Reviewer Signature \_\_\_\_\_ Date \_\_\_\_\_

## LABCORE Data Entry Template for Worklist# 27684

Analyst: RLM Instrument: NH301 \_\_\_\_\_ Book# 50N19FMethod: LA-631-001 Rev/Mod C-1

Worklist Comment: U107 FOR NH3-01 RTS

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	BLNK				NH3-01	LIQUID		
2	STD				NH3-01	LIQUID		
3	SAMPLE	S98T002114	0		NH3-01	LIQUID	98000401	U-107 (2)
		Analytes Requested: NH3-01						
4	DUP	S98T002114	0		NH3-01	LIQUID		
5	STD				NH3-01	LIQUID		

Final page for worklist # 27684

RLM 12/31/98  
Analyst Signature Date

Mary Jane 1-4-99  
Analyst Signature Date

Data Entry Comments: 598T002114 run in triplicate

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WORKBOOK PAGE: BLANK1

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		BLNK
Type	Instrument Data (µg/mL)	ID 0.000
BLNK	Blank Result from the Instrument (µg/mL)	BR 0.039
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
27684	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code		
NH3-01		
Matrix		
LIQUID	Dilution Factor DF	1.000
Batch Number		
98006320		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL) NH3 CONC	< 0.00E+00
Sample #		
BLNK	Detection Limit (µg/mL)	0.00E+00
Instrument Code		
NH3-01	Detection Limit = 0.000µg * (FVOL/VSAM)	
Prepared By		
MF	NH3 Concentration (µg/mL) = (BR) * (FVOL / VSAM) * DDF	
Chemist		
MJL		
Analyst		
PJM		
Date Complete		
01/04/99		
Analysis Date		
12/31/99		
Analysis Time		
04:30 AM		
Sample Point	NH3 Concentration (µg/mL)	< 0.00E+00
U107		

Analyst:	PJM Date: 01/04/99
Signature of Chemist:	MJL Date:

WORKBOOK PAGE: STD2

**AMMONIA (NH3) : LA-631-001 (C-0)**

**LIQUIDS/SOLIDS**

			STD
Type	Instrument Data (µg/mL)	ID	15.600
STD	Blank Result from the Instrument (µg/mL)	BR	0.039
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
27684	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code	LCS Standard Book Number	LCS	50N19F
NH3-01	LCS Standard Concentration (µg/mL)	STD VAL	3.98E+02
Matrix			
Batch Number			
98006320			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	3.89E+02
Sample #			
STD	Detection Limit (µg/mL)	0.00E+00	
Instrument Code			
NH3-01	Detection Limit = 0.000µg * (FVOL/VSAM)		
Prepared By			
MF	NH3 Concentration (µg/mL) = (ID-BR)*(FVOL /VSAM)		
Chemist			
MJL	QC ACTUAL = STD VAL		
Analyst	QC FOUND = (ID-BR) * (FVOL/VSAM)		
PJM			
Date Complete			
01/04/99			
Analysis Date	QC ACTUAL (µg)		3.98E+02
12/31/99	QC FOUND (µg)		3.89E+02
Analysis Time			
04:30 AM			
Sample Point			
U107			

Analyst:	PJM	Date:	01/04/99
Signature of Chemist:	MJL	Date:	

SAMPLE.WB1 REV 1.0

631001ML

WORKBOOK PAGE: SAM3

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		SAMPLE
Type	Instrument Data (µg/mL)	ID 0.933
SAMPLE	Blank Result from the Instrument (µg/mL)	BR 0.039
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
27684	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code		
NH3-01		
Matrix		
LIQUID	Dilution Factor DF	1.000
Batch Number		
98006320		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL) NH3 CONC	2.24E+01
Sample #		
S98T002114	Detection Limit (µg/mL) 0.00E+00	
Instrument Code		
NH3-01	Detection Limit = 0.000µg * (FVOL/VSAM) * DF	
Prepared By		
MF	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF	
Chemist		
MJL		
Analyst		
PJM		
Date Complete		
01/04/99		
Analysis Date		
12/31/99		
Analysis Time		
04:30 AM		
Sample Point	NH3 Concentration (µg/mL)	2.24E+01
U107		

Analyst:	PJM Date: 01/04/99
Signature of Chemist:	MJL Date:



WORKBOOK PAGE: DUP4

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		DUP
Type	Instrument Data (µg/mL)	ID 0.329
DUP	Blank Result from the Instrument (µg/mL)	BR 0.039
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
27684	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code		
NH3-01		
Matrix		
LIQUID	Dilution Factor	DF 1.000
Batch Number		
98006320		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 7.26E+00
Sample #		
S98T002114	Detection Limit (µg/mL)	0.00E+00
Instrument Code		
NH3-01	Detection Limit = 0.000µg * (FVOL/VSAM) * DF	
Prepared By		
MF	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF	
Chemist		
MJL		
Analyst		
PJM		
Date Complete		
01/04/99		
Analysis Date		
12/31/99		
Analysis Time		
04:30 AM		
Sample Point	NH3 Concentration (µg/mL)	7.26E+00
U107		

Analyst:	PJM	Date:	01/04/99
Signature of Chemist:	MJL	Date:	

WORKBOOK PAGE: TRIPL5

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

TRIPL

Type	Instrument Data (µg/mL)	ID	0.411
TRIPL	Blank Result from the Instrument (µg/mL)	BR	0.039
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
27684	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98006320			
Retun			
0			
Sample/Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	9.31E+00
Sample #			
S98T002114	Detection Limit (µg/mL)		0.00E+00
Instrument Code			
NH3-01	Detection Limit = 0.000µg * (FVOL/VSAM) * DF		
Prepared By			
MF	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF		
Chemist			
MJL			
Analyst			
PJM			
Date Complete			
01/04/99			
Analysis Date			
12/31/99			
Analysis Time			
04:30 AM			
Sample Point	NH3 Concentration (µg/mL)		9.31E+00
U107			

Analyst:	PJM Date:	01/04/99
Signature of Chemist:	MJL Date:	

SAMPLE.WB1 REV 1.0

631001ML

WORKBOOK PAGE: ST\_END6

**AMMONIA (NH3) : LA-631-001 (C-0)**

**LIQUIDS/SOLIDS**

		STD
Type	Instrument Data (µg/mL)	ID 18.900
STD	Blank Result from the Instrument (µg/mL)	BR 0.039
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
27684	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code	LCS Standard Book Number	LCS 50N19F
NH3-01	LCS Standard Concentration (µg/mL)	STD VAL 3.98E+02
Matrix		
Batch Number		
98006320		
Retun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 4.72E+02
Sample #		
STD	Detection Limit (µg/mL)	0.00E+00
Instrument Code		
NH3-01	Detection Limit = 0.000µg * (FVOL/VSAM)	
Prepared By		
MF	NH3 Concentration (µg/mL) = (ID-BR)*(FVOL /VSAM)	
Chemist		
MJL	QC ACTUAL = STD VAL	
Analyst	QC FOUND = (ID-BR) * (FVOL/VSAM)	
PJM		
Date Complete		
01/04/99		
Analysis Date	QC ACTUAL (µg)	3.98E+02
12/31/99	QC FOUND (µg)	4.72E+02
Analysis Time		
04:30 AM		
Sample Point		
U107		

Analyst:	PJM	Date:	01/04/99
Signature of Chemist:	MJL	Date:	

SAMPLE.WB1 REV 1.0

631001ML

JBLE KNOWN ADDITION SELECTED  
T 23:26, 12-30-98

STD 50019 F

HNF-1661 REV. 0

1.0 mL

Blair

AMPLE VOL= 25.000 AT 23:27, 12-30-98  
TERED

F= 40.6 mV AT 23:28, 12-30-98

F= 40.6 mV AT 23:28, 12-30-98  
TERED

D CONC= 1000 AT 23:28, 12-30-98  
TERED

D VOL= .25000 AT 23:29, 12-30-98  
TERED

F= 28.8 mV AT 23:29, 12-30-98

F= 28.8 mV AT 23:29, 12-30-98  
TERED

D VOL= 2.5000 AT 23:30, 12-30-98  
TERED

F=-7.6 mV AT 23:31, 12-30-98

F=-7.6 mV AT 23:31, 12-30-98  
TERED

NH3 SLOPE=-56.1 mV/DEC  
AT 23:31, 12-30-98

NH3 CONC= 15.6

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*Blank*

DOUBLE KNOWN ADDITION SELECTED  
AT 23:11, 12-30-98

AMPLE VOL= 25.000 AT 23:12, 12-30-98  
ENTERED

MF= 201.3 mV AT 23:16, 12-30-98

MF= 200.5 mV AT 23:17, 12-30-98

MF= 200.5 mV AT 23:17, 12-30-98  
ENTERED

TD CONCEN= 1000 AT 23:17, 12-30-98  
ENTERED

TD VOL= .25000 AT 23:17, 12-30-98  
ENTERED

MF= 58.0 mV AT 23:19, 12-30-98

MF= 58.0 mV AT 23:19, 12-30-98  
ENTERED

TD VOL= 2.5000 AT 23:20, 12-30-98  
ENTERED

MF=-1.1 mV AT 23:22, 12-30-98

MF=-1.1 mV AT 23:22, 12-30-98  
ENTERED

:NH3 SLOPE=-59.2 mV/DEC  
AT 23:23, 12-30-98

:NH3 CONCEN= .0388

BEST AVAILABLE COPY

598T002114 1.0ML

DOUBLE KNOWN ADDITION SELECTED

AT 02:29, 12-31-98

SAMPLE VOL= 25.000 AT 02:29, 12-31-98

ENTERED

MF= 112.6 mV AT 02:32, 12-31-98

MF= 112.7 mV AT 02:32, 12-31-98

ENTERED

TD CONC= 1000 AT 02:32, 12-31-98

ENTERED

TD VOL= .25000 AT 02:32, 12-31-98

ENTERED

MF= 50.6 mV AT 02:35, 12-31-98

MF= 50.4 mV AT 02:35, 12-31-98

ENTERED

TD VOL= 2.5000 AT 02:35, 12-31-98

ENTERED

MF=-6.0 mV AT 02:37, 12-31-98

MF=-6.1 mV AT 02:37, 12-31-98

ENTERED

NH3 SLOPE=-58.5 mV/DEC

AT 02:38, 12-31-98

NH3 CONC= .933

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5987002114 Dup 1.0 mL

SAMPLE KNOWN ADDITION SELECTED

T 02:40, 12-31-98

SAMPLE VOL= 25.000 AT 02:41, 12-31-98

TERED

F= 133.5 mV AT 02:50, 12-31-98

F= 133.5 mV AT 02:50, 12-31-98

TERED

&gt; CONCEN= 1000 AT 02:50, 12-31-98

TERED

D VOL= .25000 AT 02:50, 12-31-98.

TERED

F= 48.8 mV AT 02:52, 12-31-98

F= 48.7 mV AT 02:52, 12-31-98

TERED

D VOL= 2.5000 AT 02:53, 12-31-98

TERED

F=-7.3 mV AT 02:55, 12-31-98

F=-7.4 mV AT 02:55, 12-31-98

TERED

NH3 SLOPE=-56.8 mV/DEC

T 02:55, 12-31-98

NH3 CONCEN= .329

BEST AVAILABLE COPY

5987002114 TRIP 1.0 ml

DOUBLE KNOWN ADDITION SELECTED

AT 02:59, 12-31-98

SAMPLE VOL= 25.000 AT 02:59, 12-31-98

ENTERED

MF= 109.0 mV AT 02:59, 12-31-98

MF= 108.9 mV AT 03:00, 12-31-98

MF= 126.2 mV AT 03:05, 12-31-98

MF= 126.7 mV AT 03:05, 12-31-98

MF= 126.7 mV AT 03:05, 12-31-98

ENTERED

ED CONC= 1000 AT 03:06, 12-31-98

ENTERED

ED VOL= .25000 AT 03:06, 12-31-98

ENTERED

MF= 47.2 mV AT 03:08, 12-31-98

MF= 47.1 mV AT 03:08, 12-31-98

ENTERED

ED VOL= 2.5000 AT 03:09, 12-31-98

ENTERED

MF=-8.8 mV AT 03:11, 12-31-98

MF=-8.9 mV AT 03:11, 12-31-98

ENTERED

■ NH3 SLOPE=-56.9 mV/DEC

AT 03:11, 12-31-98

■ NH3 CONC= .411

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STD 1.0ML 50N19F RAMECO

DOUBLE KNOWN ADDITION SELECTED  
AT 03:47, 12-31-98

SAMPLE VOL= 25.000 AT 03:47, 12-31-98  
ENTERED

MF= 36.3 mV AT 03:49, 12-31-98

MF= 36.2 mV AT 03:49, 12-31-98  
ENTERED

STD CONC= 1000 AT 03:49, 12-31-98  
ENTERED

STD VOL= .25000 AT 03:49, 12-31-98  
ENTERED

MF= 25.4 mV AT 03:51, 12-31-98

MF= 25.3 mV AT 03:51, 12-31-98  
ENTERED

STD VOL= 2.5000 AT 03:51, 12-31-98  
ENTERED

MF=-11.4 mV AT 03:53, 12-31-98

MF=-11.5 mV AT 03:53, 12-31-98  
ENTERED

NH3 SLOPE=-60.5 mV/DEC  
AT 03:53, 12-31-98

NH3 CONC= 18.9

BEST AVAILABLE COPY

# LABCORE Completed Worklist Report for Worklist# 25161

Analyst: rwk Instrument: NH301 Book#:           

Method: LA-631-001 Rev/Mod           

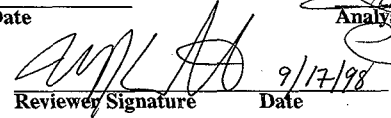
Worklist Comment: U107, NH3-01, tdm

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0		NH3-01	LIQUID	3.85E+02	3.37E+2	103.117 % Recovery	
2 BLNK	0		NH3-01	LIQUID	1	<5.00E+0		ug/mL
3 SAMPLE	S98T002032	0	NH3-01	LIQUID	N/A	5.00E+00	5.000	ug/mL
4 DUP	S98T002032	0	NH3-01	LIQUID	<5.00E+0	5.18E+0		RPD
5 SPK	S98T002032	0	NH3-01	LIQUID	1.93E+02	1.93E+02	100.000 % Recovery	
6 SAMPLE	S98T002036	0	NH3-01	LIQUID	N/A	5.78E+00	5.000	ug/mL
7 DUP	S98T002036	0	NH3-01	LIQUID	5.78E+0	<5.00E+0		RPD
8 SPK	S98T002036	0	NH3-01	LIQUID	1.93E+02	1.92E+02	99.482 % Recovery	
9 SAMPLE	S98T002046	0	NH3-01	LIQUID	N/A	5.08E+01	5.000	ug/mL
10 DUP	S98T002046	0	NH3-01	LIQUID	5.08E+1	5.10E+1	0.393 RPD	
11 STD	0		NH3-01	LIQUID	3.85E+02	3.32E+2	99.221 % Recovery	

**Final page for worklist# 25161**

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

 9-15-98  
Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

 9/17/98  
Reviewer Signature \_\_\_\_\_ Date \_\_\_\_\_

Units shown for QC (BLK/BKG) may not reflect the actual units.

## LABCORE Data Entry Template for Worklist# 25161

Analyst: ML Instrument: NH301 Book # 50119-13Method: LA-631-001 Rev/Mod C-D

Worklist Comment: U107, NH3-01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			NH3-01	LIQUID			N/A	ug/mL
		2 BLNK			NH3-01	LIQUID			N/A	ug/mL
98J00358	U-107 (2)	3 SAMPLE	S98T002032	0	NH3-01	LIQUID	N/A			ug/mL
98000358	U-107 (2)	4 DUP	S98T002032	0	NH3-01	LIQUID			N/A	ug/mL
98000358	U-107 (2)	5 SPK	S98T002032	0	NH3-01	LIQUID			N/A	ug/mL
98000358	U-107 (2)	6 SAMPLE	S98T002036	0	NH3-01	LIQUID	N/A			ug/mL
98000358	U-107 (2)	7 DUP	S98T002036	0	NH3-01	LIQUID			N/A	ug/mL
98000358	U-107 (2)	8 SPK	S98T002036	0	NH3-01	LIQUID			N/A	ug/mL
98000358	U-107 (2)	9 SAMPLE	S98T002046	0	NH3-01	LIQUID	N/A			ug/mL
98000358	U-107 (2)	10 DUP	S98T002046	0	NH3-01	LIQUID			N/A	ug/mL
		11 STD			NH3-01	LIQUID			N/A	ug/mL

Final page for worklist # 25161

ML 9/14/98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number,  
R = Replicate Number, A = Aliquot Code.

DOUBLE KNOWN ADDITION SELECTED  
AT 07:33, 09-14-98

SAMPLE VOL= 25.000 AT 07:35, 09-14-98  
ENTERED

EMF= 39.4 mV AT 07:37, 09-14-98

EMF= 39.1 mV AT 07:37, 09-14-98

EMF= 39.1 mV AT 07:37, 09-14-98  
ENTERED

STD CONC= 1000 AT 07:37, 09-14-98  
ENTERED

STD VOL= .25000 AT 07:38, 09-14-98  
ENTERED

EMF= 27.2 mV AT 07:39, 09-14-98

EMF= 27.0 mV AT 07:39, 09-14-98

EMF= 26.8 mV AT 07:40, 09-14-98

EMF= 26.8 mV AT 07:40, 09-14-98  
ENTERED

STD VOL= 2.5000 AT 07:41, 09-14-98  
ENTERED

EMF=-11.3 mV AT 07:42, 09-14-98

EMF=-11.5 mV AT 07:43, 09-14-98

EMF=-11.5 mV AT 07:43, 09-14-98  
ENTERED

*Std*

1:NH3 SLOPE=-59.4 mV/DEC  
AT 07:43, 09-14-98

1:NH3 CONC= 15.9

DOUBLE KNOWN ADDITION SELECTED  
AT 07:14, 09-14-98

SAMPLE VOL= 25.000 AT 07:14, 09-14-98  
ENTERED

EMF= 238.5 mV AT 07:19, 09-14-98

EMF= 231.9 mV AT 07:23, 09-14-98

EMF= 229.1 mV AT 07:26, 09-14-98

EMF= 229.0 mV AT 07:26, 09-14-98  
ENTERED

STD CONCEN= 1000 AT 07:26, 09-14-98  
ENTERED

STD VOL= .25000 AT 07:26, 09-14-98  
ENTERED

EMF= 52.3 mV AT 07:28, 09-14-98

EMF= 52.0 mV AT 07:29, 09-14-98

EMF= 52.0 mV AT 07:29, 09-14-98  
ENTERED

*BLK*

STD VOL= 2.5000 AT 07:29, 09-14-98  
ENTERED

EMF=-6.5 mV AT 07:30, 09-14-98

EMF=-6.8 mV AT 07:31, 09-14-98

EMF=-6.8 mV AT 07:31, 09-14-98  
ENTERED

~~1:NH3 SLOPE= 58.8 mV/DEC~~  
AT 07:31, 09-14-98

1:NH3 CONCEN= .00968

DOUBLE KNOWN ADDITION SELECTED  
AT 11:07. 09-14-98

SAMPLE VOL= 25.000 AT 11:12. 09-14-98.  
ENTERED

EMF= 160.3 mV AT 11:14. 09-14-98

EMF= 161.1 mV AT 11:15. 09-14-98

EMF= 161.9 mV AT 11:15. 09-14-98

EMF= 162.0 mV AT 11:15. 09-14-98  
ENTERED

STD CONCEN= 1000 AT 11:16. 09-14-98  
ENTERED

STD VOL= .25000 AT 11:16. 09-14-98  
ENTERED

EMF= 61.4 mV AT 11:19. 09-14-98

EMF= 61.1 mV AT 11:19. 09-14-98

EMF= 60.8 mV AT 11:20. 09-14-98

EMF= 60.8 mV AT 11:20. 09-14-98  
ENTERED

STD VOL= 2.5000 AT 11:20. 09-14-98  
ENTERED

EMF= 3.2 mV AT 11:23. 09-14-98

EMF= 2.8 mV AT 11:23. 09-14-98

EMF= 2.6 mV AT 11:24. 09-14-98

EMF= 2.6 mV AT 11:24. 09-14-98  
ENTERED

1:NH3 SLOPE=-58.6 mV/DEC  
AT 11:24. 09-14-98

1:NH3 CONCEN= .189

5987002032  
/mL

DOUBLE KNOWN ADDITION SELECTED  
AT 11:24, 09-14-98

SAMPLE VOL= 25.000 AT 11:27, 09-14-98  
ENTERED

EMF= 160.5 mV AT 11:40, 09-14-98

EMF= 161.2 mV AT 11:40, 09-14-98

EMF= 161.3 mV AT 11:40, 09-14-98  
ENTERED

STD CONC= 1000 AT 11:41, 09-14-98  
ENTERED

STD VOL= .25000 AT 11:41, 09-14-98  
ENTERED

EMF= 63.2 mV AT 11:44, 09-14-98

EMF= 62.8 mV AT 11:44, 09-14-98

EMF= 62.7 mV AT 11:44, 09-14-98  
ENTERED

STD VOL= 2.5000 AT 11:45, 09-14-98  
ENTERED

EMF= 4.7 mV AT 11:47, 09-14-98

EMF= 4.4 mV AT 11:48, 09-14-98

EMF= 4.1 mV AT 11:48, 09-14-98

EMF= 4.1 mV AT 11:48, 09-14-98  
ENTERED

1:NH3 SLOPE=-59.1 mV/DEC  
AT 11:48, 09-14-98

1:NH3 CONC= .217

598T002032 Dup  
1ml

DOUBLE KNOWN ADDITION SELECTED  
AT 11:53, 09-14-98

~~SAMPLE VOL= .25.000 AT 11:53, 09-14-98~~  
ENTERED

EMF= 69.1 mV AT 11:55, 09-14-98

EMF= 68.8 mV AT 11:55, 09-14-98

EMF= 68.8 mV AT 11:55, 09-14-98  
ENTERED

STD CONC= 1000 AT 11:56, 09-14-98  
ENTERED

STD VOL= .25000 AT 11:56, 09-14-98  
ENTERED

EMF= 48.6 mV AT 11:57, 09-14-98

EMF= 48.3 mV AT 11:58, 09-14-98

EMF= 48.3 mV AT 11:58, 09-14-98  
ENTERED

STD VOL= 2.5000 AT 11:58, 09-14-98  
ENTERED

EMF= 3.1 mV AT 12:01, 09-14-98

EMF= 2.9 mV AT 12:01, 09-14-98

EMF= 2.9 mV AT 12:01, 09-14-98  
ENTERED

1:NH3 SLOPE=-58.4 mV/DEC  
AT 12:02, 09-14-98

1:NH3 CONC= 7.89

*598T00 2032 SPK*  
*1ML*  
*.500 ML SPK*



This document was too large to scan as a single document; therefore, it has been divided into smaller sections.

Section 5 of 7

Document Information

Document #	HNF-1661	Revision	0
Title	TANK 241U107 CORES 242 & 242R & 245 ANALYTICAL RESULTS FOR THE FINAL REPORT		
Date	02/01/99		
Originator	STEEN FH	Originator Co.	WMH
Recipient		Recipient Co.	
References	EDT-626133		
Keywords	PUSH MODE, CHARACTERIZATION, U FARM		
Projects	TWRS		
Other Information			

Data Reprocessed On 11/30/1998 14:11:29

```

=====
Sample Name: S98T002568 DUP                               Date: 11/26/1998 02:26:52
Data File  : F:\DATA\98112521.D23
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 23                      Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

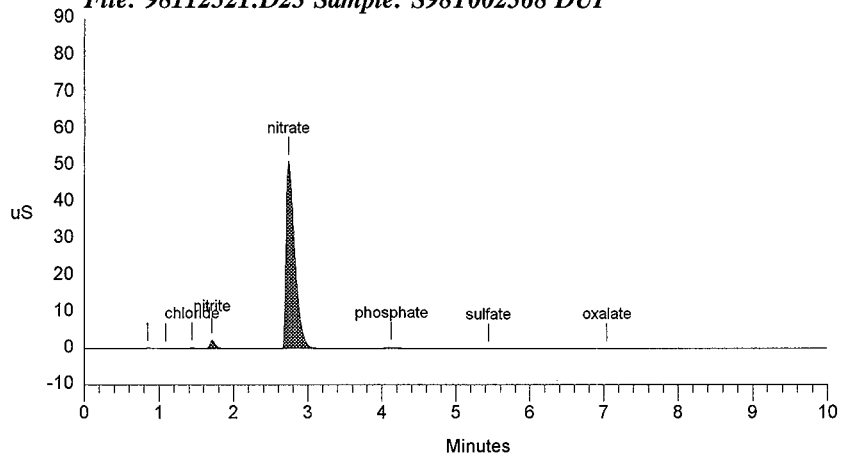
```

-----
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
-----
External           1           67.67  3000  5Hz   0.00  10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	113	495	1	
2	1.09		0.000	41	192	1	
3	1.44	chloride	8.280	313	1418	1	-3.36
4	1.71	nitrite	100.187	2325	12090	1	-4.66
5	2.73	nitrate	3063.386	51028	422291	1	0.12
6	4.13	phosphate	89.775	385	4557	1	-1.75
7	5.44	sulfate	5.306	22	297	1	-0.91
8	7.04	oxalate	6.643	36	630	1	-1.54
Totals			3273.577	54263	441971		

File: 98112521.D23 Sample: S98T002568 DUP



# LABCORE Completed Worklist Report for Worklist# 27367

Analyst: adp

Instrument: IC45S2

Book#: 35N21C

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107 (2), @IC4G-01, Rerun, Try 1111 DF. skm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB 0	@IC4G-QC F*4	QC	1	<1.10e-2		ug/mL
1	CCB 0	@IC4G-QC ACETATE2	QC	1	<2.00e-2		ug/mL
1	CCB 0	@IC4G-QC FORMATE2	QC	1	<2.10e-2		ug/mL
1	CCB 0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2		ug/mL
2	LCS-INST 0	@IC4G-QC F*4	QC	5.89e1	5.58e+01	94.737 %	Recovery
2	LCS-INST 0	@IC4G-QC ACETATE2	QC	1.24e2	1.05e+02	84.677 %	Recovery
2	LCS-INST 0	@IC4G-QC FORMATE2	QC	1.19e2	1.08e+02	90.756 %	Recovery
2	LCS-INST 0	@IC4G-QC GLYCOLT1	QC	1.07e2	9.12e+01	85.234 %	Recovery
3	CCV 0	@IC4G-QC F*4	QC	6.21e1	5.95e+01	95.813 %	Recovery
3	CCV 0	@IC4G-QC ACETATE2	QC	1.23e2	1.22e+02	99.187 %	Recovery
3	CCV 0	@IC4G-QC FORMATE2	QC	1.30e2	1.34e+02	103.077 %	Recovery
3	CCV 0	@IC4G-QC GLYCOLT1	QC	1.02e2	9.62e+01	94.314 %	Recovery
4	SAMPLE S98T002976 0	@IC4G-01 F*4-01	LIQUID	<u>N/A</u>	3.444e+01	34.440	ug/mL
4	SAMPLE S98T002976 0	@IC4G-01 ACETATE2	LIQUID	<u>N/A</u>	7.479e+02	64.440	ug/mL
4	SAMPLE S98T002976 0	@IC4G-01 FORMATE2	LIQUID	<u>N/A</u>	3.079e+03	68.880	ug/mL
4	SAMPLE S98T002976 0	@IC4G-01 GLYCOLT1	LIQUID	<u>N/A</u>	2.663e+03	62.220	ug/mL
5	DUP S98T002976 0	@IC4G-01 F*4-01	LIQUID	<3.44e1	3.48e+01		RPD
5	DUP S98T002976 0	@IC4G-01 ACETATE2	LIQUID	7.48e+02	8.12e+02	8.205	RPD
5	DUP S98T002976 0	@IC4G-01 FORMATE2	LIQUID	3.08e+03	3.22e+03	4.444	RPD
5	DUP S98T002976 0	@IC4G-01 GLYCOLT1	LIQUID	2.66e+03	2.76e+03	3.690	RPD
6	SPK S98T002976 0	@IC4G-01 F*4-01	LIQUID	5.89e1	5.26e+01	89.304 %	Recovery
6	SPK S98T002976 0	@IC4G-01 ACETATE2	LIQUID	1.24e2	1.11e+02	89.516 %	Recovery
6	SPK S98T002976 0	@IC4G-01 FORMATE2	LIQUID	1.19e2	1.34e+02	112.605 %	Recovery
6	SPK S98T002976 0	@IC4G-01 GLYCOLT1	LIQUID	1.07e2	1.03e+02	96.262 %	Recovery

Final page for worklist# 27367

Analyst Signature

Date

Analyst Signature

Date

*John F. ...*  
Reviewer Signature Date 12/18/98

HNF-1661 REV. 0

12/01/98 14:20  
A-0004-1

Page: 1 <sup>2</sup>

# LABCORE Data Entry Template for Worklist# 27367

Analyst: ADD Instrument: IC 4552 Book# 35N21-C <sup>ADD</sup> eev LCS  
Method: LA-533-105 Rev/Mod F-0 34N21-A OCV

Worklist Comment: U107 (2), @IC4G-01, Rerun, Try 1111 DF. skm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC4G-QC	QC		
2	LCS-INST		@IC4G-QC	QC		
3	CCV		@IC4G-QC	QC		
4	SAMPLE	S98T002976 0	@IC4G-01	LIQUID	98000401	U-107 (2)
Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCOLT1						
5	DUP	S98T002976 0	@IC4G-01	LIQUID		
6	SPK	S98T002976 0	@IC4G-01	LIQUID		

## Final page for worklist # 27367

Anthony Perumal 12-12-98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments:  
uploaded 12-14-98 validated 12/16/98 mtg  
J.W. Howell  
27367 DEC.CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

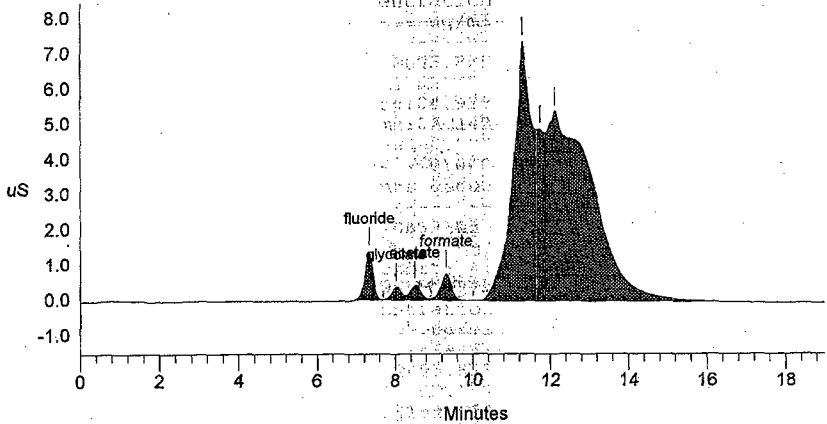
=====  
 Sample Name: 35N21-C LCS Date: 12/12/1998 20:17:41  
 Data File : C:\DX\DATA\98121301.D02  
 Method : C:\DX\METHOD\MAS14GLY.MET  
 ACI Address: 1 System: 2 Inject#: 2 Detector: CDM-1  
 Analyst : *John Parviz* Column: AG14A-SC, AS14A-SC, SRS  
 =====

=====  
 Calibration Volume Dilution Points Rate Start Stop Area Reject  
 External 1 101 5700 5Hz 0.00 19.00 0  
 =====

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	7.33	fluoride	55.829	1370	19665	2	0.00
2	8.03	glycolate	91.154	372	6608	2	-0.00
3	8.51	acetate	104.928	421	8216	2	0.00
4	9.31	formate	107.540	754	14403	2	0.00
5	11.28		0.000	7333	246737	2	
6	11.73		0.000	4860	55034	2	
7	12.11		0.000	5356	442461	2	
Totals			359.451	20466	793124		

File: 98121301.D02 Sample: 35N21-C LCS



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1173 TO 1178

HNF-1661 REV. 0

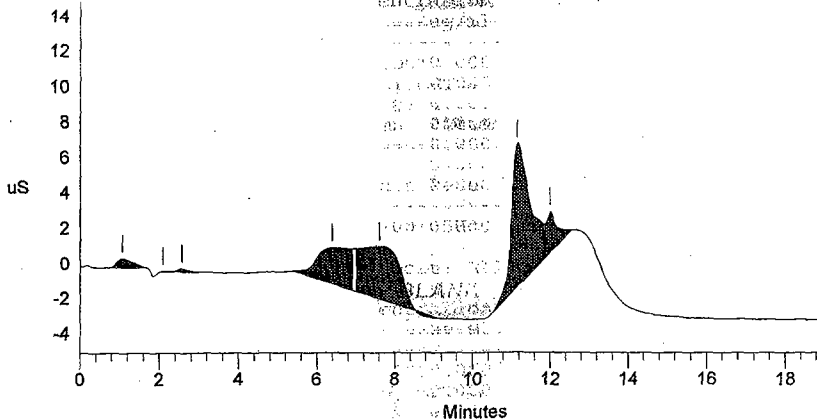
Sample Name: BLANK Date: 12/12/1998 19:54:04  
 Data File : C:\DX\DATA\98121301.D01  
 Method : C:\DX\METHOD\MAS14GLY.MET  
 ACI Address: 1 System: 2 Inject#: 1 Detector: CDM-1  
 Analyst : Column: AG14A-SC, AS14A-SC, SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
external	1	1	5700	5Hz	0.00	19.00		0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.07		0.000	523	14485	1	
2	2.10		0.000	30	389	2	
3	2.57		0.000	162	3280	2	
4	6.39		0.000	2030	123235	2	
5	7.60		0.000	2984	206730	2	
6	11.15		0.000	8142	270577	2	
7	12.00		0.000	2291	45102	2	
Totals			0.000	16161	663798		

File: 98121301.D01 Sample: BLANK



## HNF-1661 REV.0

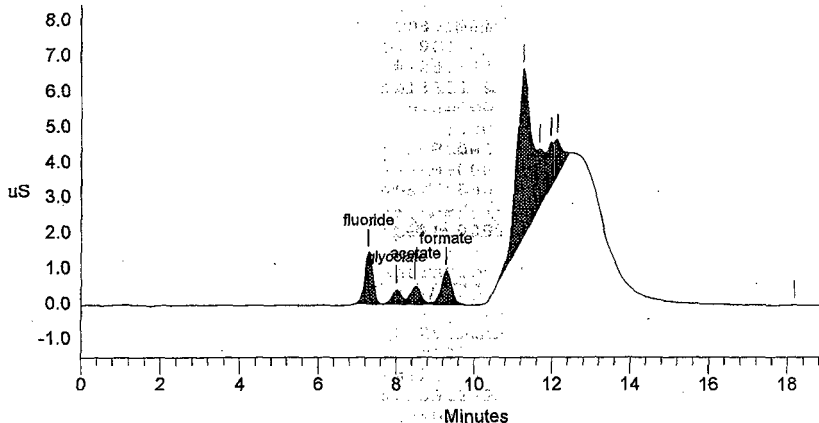
Sample Name: 34N21-A CCV Date: 12/12/1998 22:26:28  
 Data File : C:\DX\DATA\98121301.D04  
 Method : C:\DX\METHOD\MAS14GLY.MET  
 ACI Address: 1 System: 2 Inject#: 4 Detector: CDM-1  
 Analyst : Column: AG14A-SC, AS14A-SC, SRS

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	5700	5Hz	0.00	19.00		0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	7.28	fluoride	59.531	1424	21046	2	0.00
2	8.00	glycolate	96.163	388	6998	2	-0.02
3	8.48	acetate	122.343	498	9651	2	0.02
4	9.28	formate	133.869	931	18162	2	0.00
5	11.28		0.000	4700	119900	2	
6	11.71		0.000	1603	19721	2	
7	12.00		0.000	1209	13174	2	
8	12.16		0.000	970	12111	2	
9	18.19		0.000	8	131	1	
Totals			411.905	11730	220894		

File: 98121301.D04 Sample: 34N21-A CCV



Data Reprocessed On 12/14/1998 09:42:13

```

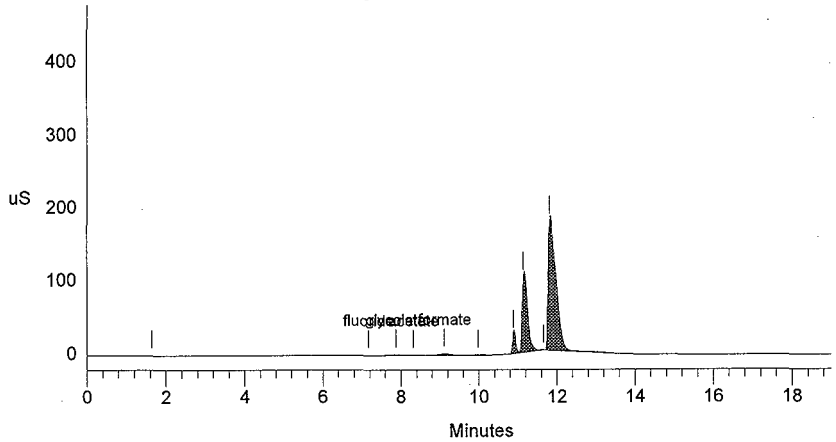
=====
Sample Name: S98T002976 SAM                               Date: 12/12/1998 22:50:44
Data File  : E:\DATA\98121301.D05
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 5                       Detector: CDM-1
Analyst    :                                               Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1111	5700	5Hz	0.00	19.00		0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.63		0.000	91	988	1	
2	7.17	fluoride	31.060	11	68	1	0.00
3	7.87	glycolate	2663.225	988	18640	2	0.00
4	8.32	acetate	747.874	289	5156	2	0.00
5	9.12	formate	3079.107	2032	39414	2	0.00
6	9.97		0.000	192	3316	1	
7	10.88		0.000	25435	171944	2	
8	11.15		0.000	103086	1079257	3	
9	11.65		0.000	636	2584	4	
10	11.81		0.000	177649	2618172	1	
Totals			6521.266	310408	3939539		

File: 98121301.D05 Sample: S98T002976 SAM





```

=====
Sample Name: S98T002976 DUP                      Date: 12/12/1998 23:10:40
Data File  : C:\DX\DATA\98121301.D06
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 6              Detector: CDM-1
Analyst    :                                     Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

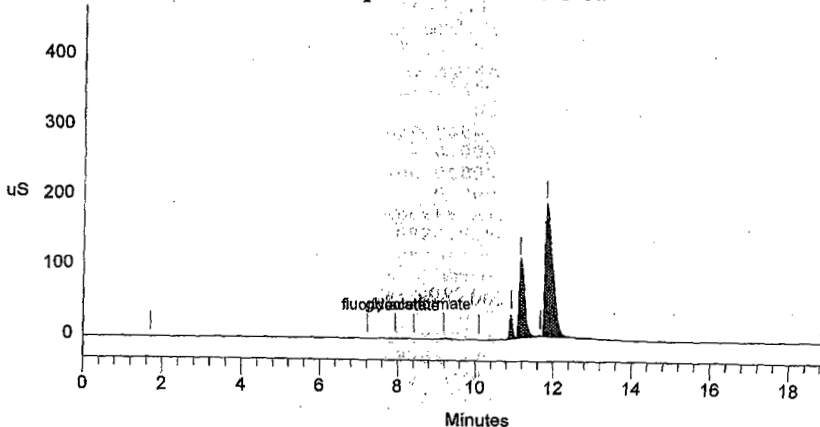
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          1111    5700 5Hz    0.00 19.00          0
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.70		0.000	92	1002	1	
2	7.20	fluoride	341841	19	194	1	0.00
3	7.92	glycolate	2757.470	1032	19341	2	-0.08
4	8.40	acetate	811.765	311	5638	2	0.08
5	9.17	formate	3216.483	2072	41264	2	0.00
6	10.08		0.000	165	2702	1	
7	10.91		0.000	33023	175931	2	
8	11.15		0.000	107875	1107010	3	
9	11.65		0.000	646	2634	4	
10	11.81		0.000	185866	2567720	1	
Totals			6820.558	331100	3923438		

File: 98121301.D06 Sample: S98T002976 DUP



1177

```

=====
Sample Name: S98T002976 SPK                               Date: 12/12/1998 23:30:22
Data File  : C:\DX\DATA\98121301.D07
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 7                       Detector: CDM-1
Analyst    :                                             Column: AG14A-SC, AS14A-SC, SRS
=====

```

```

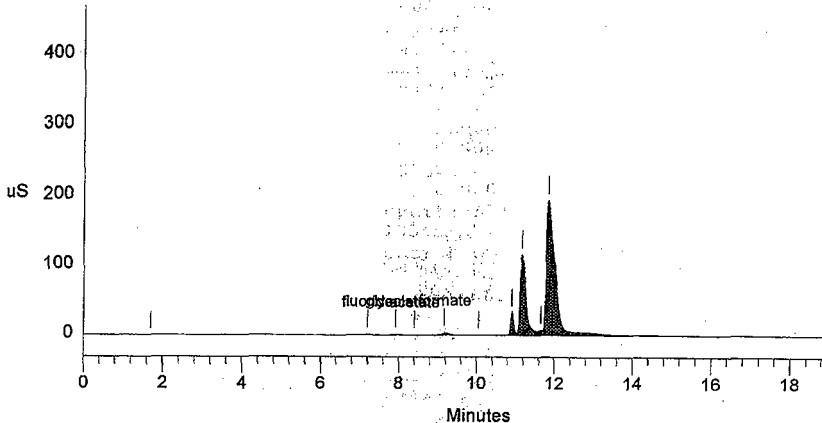
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          1111  5700  5Hz   0.00 19.00          0
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.70		0.000	88	946	1	
2	7.20	fluoride	531.548	1157	16871	2	0.00
3	7.92	glycolate	3703.124	1452	26494	2	-0.08
4	8.40	acetate	1868.503	717	13546	2	0.08
5	9.17	formate	4437.103	2897	57942	2	0.00
6	10.05		0.000	219	4107	2	
7	10.91		0.000	32332	220018	2	
8	11.17		0.000	116242	1237749	3	
9	11.65		0.000	6832	48925	4	
10	11.84		0.000	193043	3155346	2	
Totals			10540.277	354979	4781944		

File: 98121301.D07 Sample: S98T002976 SPK



1178

# LBCORE Completed Worklist Report for Worklist# 27681

Analyst: adp

Instrument: IC40S2

Book#: 28N21D

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107 FOR @IC-01 RTS

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	①IC-QC	F	QC	1	<1.20e-2	ug/mL
1	CCB	0	①IC-QC	CL	QC	1	<1.70e-2	ug/mL
1	CCB	0	①IC-QC	NO2	QC	1	<1.08e-1	ug/mL
1	CCB	0	①IC-QC	BR	QC	1	<1.25e-1	ug/mL
1	CCB	0	①IC-QC	NO3	QC	1	<1.39e-1	ug/mL
1	CCB	0	①IC-QC	PO4	QC	1	<1.20e-1	ug/mL
1	CCB	0	①IC-QC	SO4	QC	1	<1.38e-1	ug/mL
1	CCB	0	①IC-QC	OXALATE2	QC	1	<1.05e-1	ug/mL
2	LCS-INST	0	①IC-QC	F	QC	5.90e1	6.21e+01	105.254 % Recovery
2	LCS-INST	0	①IC-QC	CL	QC	8.00e1	8.14e+01	101.750 % Recovery
2	LCS-INST	0	①IC-QC	NO2	QC	5.38e2	4.29e+02	79.740 % Recovery
2	LCS-INST	0	①IC-QC	BR	QC	5.86e2	5.73e+02	97.782 % Recovery
2	LCS-INST	0	①IC-QC	NO3	QC	5.92e2	6.45e+02	108.953 % Recovery
2	LCS-INST	0	①IC-QC	PO4	QC	5.47e2	4.83e+02	88.300 % Recovery
2	LCS-INST	0	①IC-QC	SO4	QC	6.38e2	6.23e+02	97.649 % Recovery
2	LCS-INST	0	①IC-QC	OXALATE2	QC	5.30e2	4.97e+02	93.774 % Recovery
3	CCV	0	①IC-QC	F	QC	6.40e1	6.37e+01	99.531 % Recovery
3	CCV	0	①IC-QC	CL	QC	9.00e1	9.13e+01	101.444 % Recovery
3	CCV	0	①IC-QC	NO2	QC	5.34e2	5.03e+02	94.195 % Recovery
3	CCV	0	①IC-QC	BR	QC	6.30e2	6.32e+02	100.317 % Recovery
3	CCV	0	①IC-QC	NO3	QC	6.98e2	6.69e+02	95.845 % Recovery
3	CCV	0	①IC-QC	PO4	QC	6.32e2	5.98e+02	94.620 % Recovery
3	CCV	0	①IC-QC	SO4	QC	6.99e2	7.06e+02	101.001 % Recovery
3	CCV	0	①IC-QC	OXALATE2	QC	5.12e2	4.87e+02	95.117 % Recovery
4	SAMPLE	S98T002116	①IC-01	F-02	LIQUID	N/A	< 1.224e+02	122.400 ug/mL
4	SAMPLE	S98T002116	①IC-01	CL-02	LIQUID	N/A	< 1.734e+02	173.400 ug/mL
4	SAMPLE	S98T002116	①IC-01	BR-02	LIQUID	N/A	< 2.189e+04	1275.000 ug/mL
4	SAMPLE	S98T002116	①IC-01	NO3-02	LIQUID	N/A	< 1.418e+03	1418.000 ug/mL
4	SAMPLE	S98T002116	①IC-01	PO4-02	LIQUID	N/A	< 1.224e+03	1224.000 ug/mL
4	SAMPLE	S98T002116	①IC-01	SO4-02	LIQUID	N/A	< 1.671e+03	1409.000 ug/mL
4	SAMPLE	S98T002116	①IC-01	OXALATE2	LIQUID	N/A	< 1.071e+03	1071.000 ug/mL
5	DUP	S98T002116	①IC-01	F-02	LIQUID	<1.22e2	<1.22e2	RPD
5	DUP	S98T002116	①IC-01	CL-02	LIQUID	<1.73e2	<1.73e2	RPD
5	DUP	S98T002116	①IC-01	NO2-02	LIQUID	<1.10e3	<1.10e3	RPD
5	DUP	S98T002116	①IC-01	BR-02	LIQUID	2.19e+04	2.16e+04	1.379 RPD
5	DUP	S98T002116	①IC-01	NO3-02	LIQUID	<1.42e3	<1.42e3	RPD
5	DUP	S98T002116	①IC-01	PO4-02	LIQUID	<1.22e3	<1.22e3	RPD
5	DUP	S98T002116	①IC-01	SO4-02	LIQUID	1.67e+03	<1.41e3	RPD
5	DUP	S98T002116	①IC-01	OXALATE2	LIQUID	<1.07e3	<1.07e3	RPD
6	SAMPLE	S98T002114	①IC-01	F-02	LIQUID	N/A	< 1.200e-02	1.20e-002 ug/mL
6	SAMPLE	S98T002114	①IC-01	CL-02	LIQUID	N/A	< 1.700e-02	1.70e-002 ug/mL

Units shown for QC (BLK/BKG) may not reflect the actual units.

# LABCORE Completed Worklist Report for Worklist# 27681

Seq Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
6 SAMPLE	S98T002114	0		@IC-01	BR-02	LIQUID	N/A <	1.250e-01	0.125 ug/mL
6 SAMPLE	S98T002114	0		@IC-01	NO3-02	LIQUID	N/A <	1.390e-01	0.139 ug/mL
6 SAMPLE	S98T002114	0		@IC-01	FO4-02	LIQUID	N/A <	1.200e-01	0.120 ug/mL
6 SAMPLE	S98T002114	0		@IC-01	SO4-02	LIQUID	N/A	1.850e-01	0.138 ug/mL
6 SAMPLE	S98T002114	0		@IC-01	OXALATE2	LIQUID	N/A <	1.050e-01	0.105 ug/mL
7 DUP	S98T002114	0		@IC-01	F-02	LIQUID	<1.20e-2	<1.20e-2	RPD
7 DUP	S98T002114	0		@IC-01	CL-02	LIQUID	<1.70e-2	4.20e-02	RPD
7 DUP	S98T002114	0		@IC-01	NO2-02	LIQUID	<1.08e-1	<1.08e-1	RPD
7 DUP	S98T002114	0		@IC-01	BR-02	LIQUID	<1.25e-1	<1.25e-1	RPD
7 DUP	S98T002114	0		@IC-01	NO3-02	LIQUID	<1.39e-1	<1.39e-1	RPD
7 DUP	S98T002114	0		@IC-01	FO4-02	LIQUID	<1.20e-1	2.02e-01	RPD
7 DUP	S98T002114	0		@IC-01	SO4-02	LIQUID	1.85e-01	1.48e-01	22.222 RPD
7 DUP	S98T002114	0		@IC-01	OXALATE2	LIQUID	<1.05e-1	<1.05e-1	RPD

Final page for worklist# 27681

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*James M. Ely* 12/30/98  
Reviewer Signature Date

12/28/98 13:19  
A-0004-1

# LABCORE Data Entry Template for Worklist# 27681

Analyst: ASP Instrument: IC 4052 Book# 29N21-D LCS  
 Method: LA-533-105 Rev/Mod F-0 28N21-D CC ✓  
 Worklist Comment: U107 FOR @IC-01 RTS

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC-QC	QC		
2	LCS-INST		@IC-QC	QC		
3	CCV		@IC-QC	QC		
4	SAMPLE	S98T002116 0	@IC-01	LIQUID	98000401	U-107 (2)
		Analytes Requested: BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02				
5	DUP	S98T002116 0	@IC-01	LIQUID		
6	SAMPLE	S98T002114 0	@IC-01	LIQUID	98000401	U-107 (2)
		Analytes Requested: BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02				
7	DUP	S98T002114 0	@IC-01	LIQUID		

## Final page for worklist # 27681

Anthony Parente  
 Analyst Signature Date 12-29-98

\_\_\_\_\_  
 Analyst Signature Date

Data Entry Comments: uploaded 12-29-98 Validated 12/30/98 JMT/ys  
John Howell NO<sub>2</sub> rejected on both samples  
27681DEC.CSV due to standard failure.

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

*Samples reanalyzed on worklist # 27726.*

*J. Steer 1/15/99*

Data Reprocessed On 12/29/1998 14:11:52

```

=====
Sample Name: 29N21-D LCS                               Date: 12/29/1998 09:12:17
Data File  : F:\DATA\98122921.D02
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 2                   Detector:CDM-1
Analyst    : SM Column: AG4A/AS4A anion column
            : 10/3/98
=====
    
```

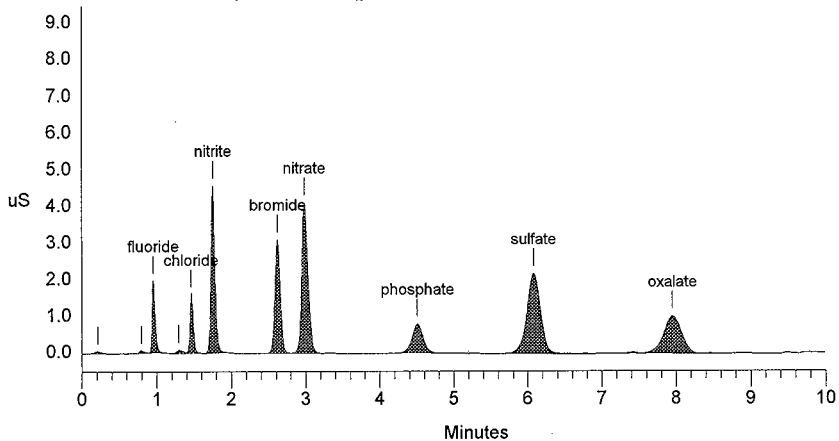
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          101    3000  5Hz   0.00 10.00          30
-----
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.21		0.000	60	415	1	
2	0.79		0.000	63	240	2	
3	0.95	fluoride	62.126	1976	5580	2	0.35
4	1.29		0.000	90	487	2	
5	1.46	chloride	81.355	1603	4786	2	-1.79
6	1.75	nitrite	429.483	4578	16808	1	-2.59
7	2.62	bromide	572.663	3119	15620	1	-5.42
8	2.98	nitrate	644.833	4129	24331	1	0.00
9	4.51	phosphate	483.206	801	8430	1	2.42
10	6.08	sulfate	622.953	2201	28063	1	3.58
11	7.95	oxalate	497.249	1027	17722	1	2.80
Totals			3393.867	19646	122482		

File: 98122921.D02 Sample: 29N21-D LCS



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1182 TO 1183.

```

=====
Sample Name: INSTR BLANK           Date: 12/29/1998 08:58:32
Data File  : C:\DX\DATA\98122921.D01
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 1   Detector: CDM-1
Analyst    :                       Column: AG4A/AS4A anion column
=====

```

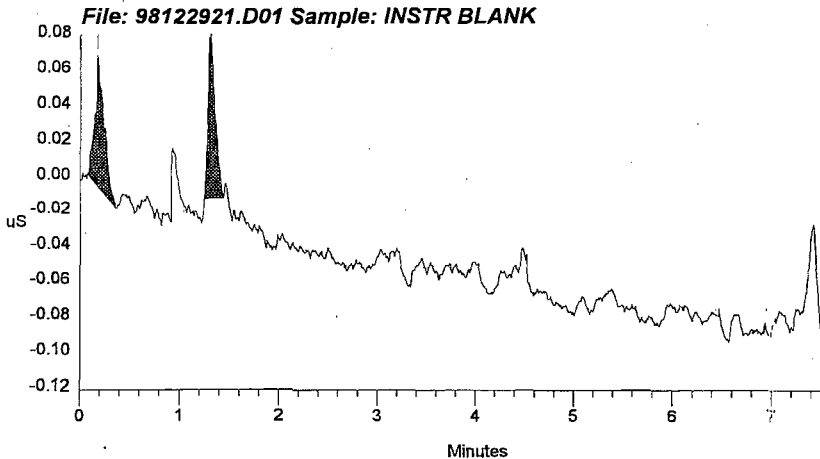
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          1 2265 5Hz 0.00 7.55          30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	73	472	1	
2	1.30		0.000	92	462	1	
Totals			0.000	165	933		



```

=====
Sample Name: 28N21-D CCV                               Date: 12/29/1998 10:29:52
Data File  : F:\DATA\98122921.D05
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 5                    Detector:CDM-1
Analyst    :                                           Column: AG4A/AS4A anion column
=====
    
```

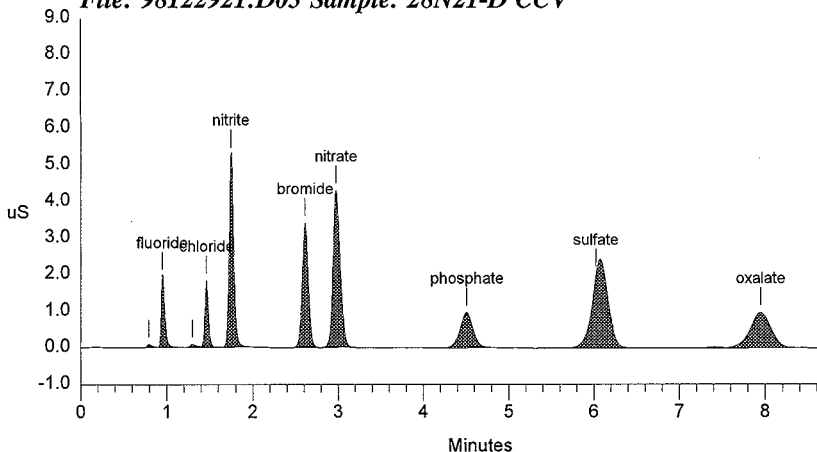
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          101    2607 5Hz   0.00  8.69          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	78	330	2	
2	0.95	fluoride	63.668	1922	5722	2	-0.35
3	1.30		0.000	84	455	2	
4	1.46	chloride	91.303	1827	5374	2	-1.79
5	1.75	nitrite	503.160	5263	19790	1	-2.96
6	2.61	bromide	631.651	3406	17283	1	-5.66
7	2.97	nitrate	668.885	4296	25272	1	0.11
8	4.51	phosphate	597.589	968	10464	1	2.42
9	6.03	sulfate	705.786	2032	31891	1	2.67
10	7.95	oxalate	486.892	982	17350	1	2.80
Totals			3748.933	20858	133931		

File: 98122921.D05 Sample: 28N21-D CCV





## HNF-1661 REV. 0

```

=====
Sample Name: S98T002116                               Date: 12/29/1998 10:20:14
Data File  : C:\DX\DATA\98122921.D04
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 4                   Detector: CDM-1
Analyst    :                                           Column: AG4A/AS4A anion column
=====

```

```

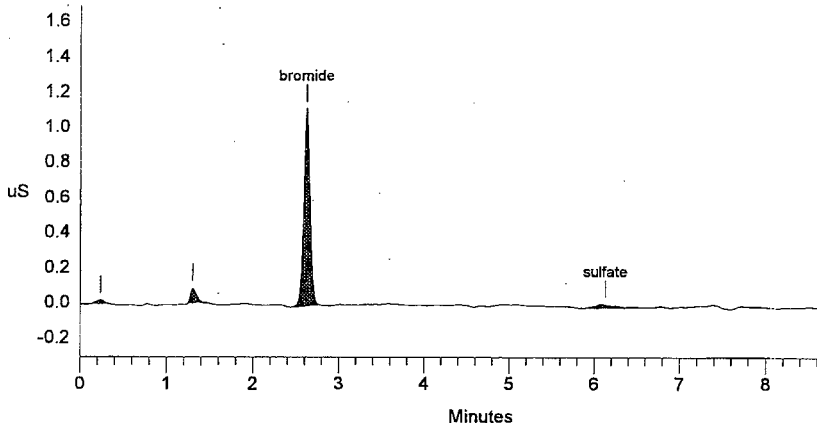
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           10201   2612 5Hz   0.00  8.70           30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	21	136	1	
2	1.30		0.000	85	393	1	
3	2.62	bromide	21887.152	1120	5711	1	-5.42
4	6.13	sulfate	1671.361	21	409	1	4.49
Totals			23558.513	1247	6648		

**File: 98122921.D04 Sample: S98T002116**



HNF-1661 REV. 0

```

=====
Sample Name: S98T002116 DUP                      Date: 12/29/1998 10:39:46
Data File  : C:\DX\DATA\98122921.D06
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 6              Detector: CDM-1
Analyst    :                                     Column: AG4A/AS4A anion column
=====

```

```

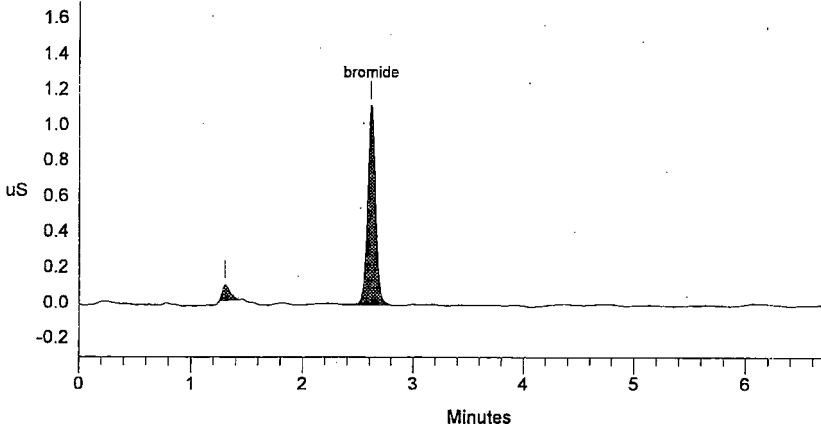
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1      10201      2016 5Hz   0.00  6.72      30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.30		0.000	87	416	1	
2	2.61	bromide	21641.131	1119	5644	1	-5.66
Totals			21641.131	1206	6060		

File: 98122921.D06 Sample: S98T002116 DUP



```

=====
Sample Name: S98T002114 SAM                      Date: 12/29/1998 12:35:04
Data File  : C:\DX\DATA\98122921.D09
Method     : C:\DX\METHOD\4000SYS2.MET
ACT Address: 1 System: 2 Inject#: 9              Detector: CDM-1
Analyst    :                                     Column: AG4A/AS4A anion column
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----

```

```

External      1      1      3000 5Hz  0.00 10.00      30
-----

```

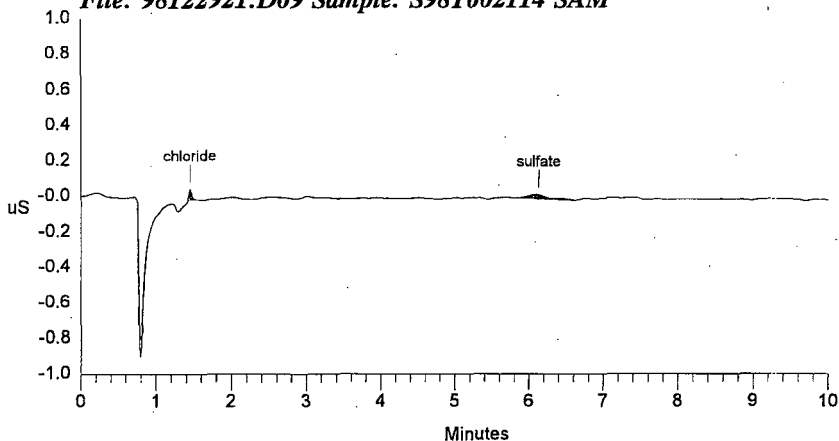
```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.45	chloride	0.015	59	155	1	-2.24
2	6.13	sulfate	0.185	24	503	1	4.49
Totals			0.199	83	658		

File: 98122921.D09 Sample: S98T002114 SAM



```

=====
Sample Name: S98T002114 DUP                      Date: 12/29/1998 12:47:30
Data File  : C:\DX\DATA\98122921.D10
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 10              Detector: CDM-1
Analyst    :                                     Column: AG4A/AS4A anion column
=====

```

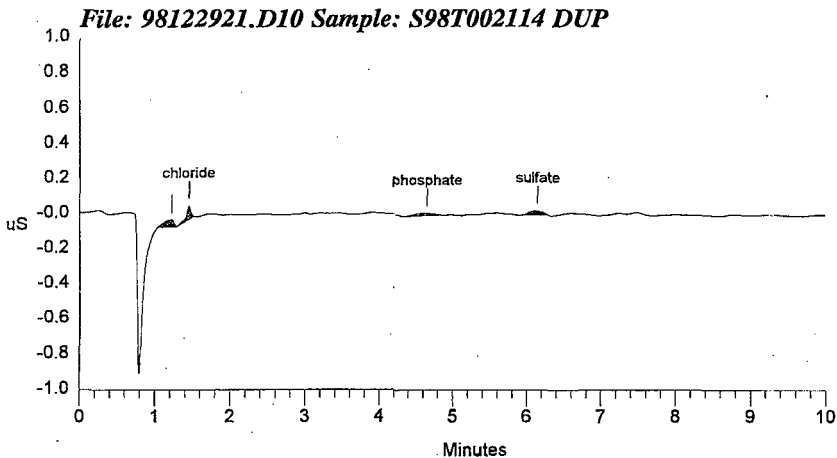
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1 3000 5Hz  0.00 10.00          30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.23		0.000	42	376	1	
2	1.45	chloride	0.042	77	313	1	-2.24
3	4.64	phosphate	0.202	15	285	1	5.45
4	6.13	sulfate	0.148	27	337	1	4.49
Totals			0.392	162	1311		



# LABCORE Completed Worklist Report for Worklist# 27683

Analyst: adp

Instrument: IC45S2

Book#: 34N21A

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107 FOR @IC4G-01 RTS

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	@IC4G-QC F*4	QC	1	<1.10e-2		ug/mL
1	CCB	0	@IC4G-QC ACETATE2	QC	1	<2.00e-2		ug/mL
1	CCB	0	@IC4G-QC FORMATE2	QC	1	<2.10e-2		ug/mL
1	CCB	0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2		ug/mL
2	LCS-INST	0	@IC4G-QC F*4	QC	5.89e1	6.44e+01	109.338 % Recovery	
2	LCS-INST	0	@IC4G-QC ACETATE2	QC	1.24e2	1.18e+02	95.161 % Recovery	
2	LCS-INST	0	@IC4G-QC FORMATE2	QC	1.19e2	1.19e+02	100.000 % Recovery	
2	LCS-INST	0	@IC4G-QC GLYCOLT1	QC	1.07e2	1.06e+02	99.065 % Recovery	
3	CCV	0	@IC4G-QC F*4	QC	6.21e1	6.34e+01	102.093 % Recovery	
3	CCV	0	@IC4G-QC ACETATE2	QC	1.23e2	1.18e+02	95.935 % Recovery	
3	CCV	0	@IC4G-QC FORMATE2	QC	1.30e2	1.25e+02	96.154 % Recovery	
3	CCV	0	@IC4G-QC GLYCOLT1	QC	1.02e2	1.00e+02	98.039 % Recovery	
4	SAMPLE	S98T002114	@IC4G-01 F*4-01	LIQUID	N/A	< 3.100e-02	3.10e-002	ug/mL
4	SAMPLE	S98T002114	@IC4G-01 ACETATE2	LIQUID	N/A	< 5.800e-02	5.80e-002	ug/mL
4	SAMPLE	S98T002114	@IC4G-01 FORMATE2	LIQUID	N/A	< 6.200e-02	6.20e-002	ug/mL
4	SAMPLE	S98T002114	@IC4G-01 GLYCOLT1	LIQUID	N/A	< 5.600e-02	5.60e-002	ug/mL
5	DUP	S98T002114	@IC4G-01 F*4-01	LIQUID	<3.10e-2	<3.10e-2		RPD
5	DUP	S98T002114	@IC4G-01 ACETATE2	LIQUID	<5.80e-2	<5.80e-2		RPD
5	DUP	S98T002114	@IC4G-01 FORMATE2	LIQUID	<6.20e-2	<6.20e-2		RPD
5	DUP	S98T002114	@IC4G-01 GLYCOLT1	LIQUID	<5.60e-2	<5.60e-2		RPD

Final page for worklist# 27683

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*James M. Feys* 1/4/99  
 Reviewer Signature \_\_\_\_\_ Date \_\_\_\_\_

HNF-1661 REV. 0

12/28/98 13:21  
A-0004-1

Page: 1

## LABCORE Data Entry Template for Worklist# 27683

Analyst: ADP Instrument: IC 4552 Book# 35N21-C LCS  
 Method: LA-533-105 Rev/Mod FO 34N21-A LCS  
CCV

Worklist Comment: U107 FOR @IC4G-01 RTS

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	CCB				@IC4G-QC	QC		
2	LCS-INST				@IC4G-QC	QC		
3	CCV				@IC4G-QC	QC		
4	SAMPLE	S98T002114	0		@IC4G-01 LIQUID		98000401	U-107 (2)
		Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCOLT1						
5	DUP	S98T002114	0		@IC4G-01 LIQUID			

Final page for worklist # 27683

ADP  
 Analyst Signature 12-30-98  
 Date

\_\_\_\_\_  
 Analyst Signature Date

Data Entry Comments:

spike S98T002114 Added TOWL

uploaded 1-7-99

John Howell

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

27683 DEC. CSV

Validated 1/14/99 JML/ey

1190

HNF-1661 REV. 0

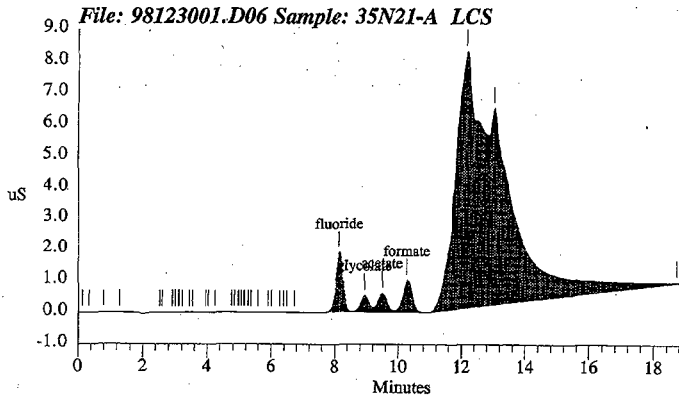
Data Reprocessed On 12/30/1998 11:48:46

-----  
 Sample Name: 35N21-A LCS Date: 12/30/1998 11:31:32  
 Data File : C:\DX\DATA\98123001.D06  
 Method : C:\DX\METHOD\MAS14GLY.MET  
 ACI Address: 1 System 2 Inject#: 6 Detector: CDM-2  
 Analyst : *Autry Parv* Column: AG14A-SC, AS14A-SC, SRS  
 -----

-----  
 Calibration Volume Dilution Points Rate Start Stop Area Reject  
 -----  
 External 1 101 5700 5HZ 0.00 19.00 16000  
 -----

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
2	0.33		0.000	1624	17101	2	
4	1.27		0.000	1310	35562	2	
7	2.91		0.000	2958	16696	2	
10	3.21		0.000	3073	34877	2	
11	3.43		0.000	4570	21426	2	
12	3.52		0.000	4829	116481	2	
13	3.93		0.000	4903	27511	2	
14	4.01		0.000	4842	51419	2	
15	4.23		0.000	4699	94590	2	
25	6.00		0.000	1813	22969	2	
29	6.72		0.000	1746	39218	2	
30	8.13	fluoride	64.423	1852557	27692280	2	0.00
31	8.93	glycolate	105.565	503767	9400126	2	0.00
32	9.49	acetate	117.528	581844	11757164	2	0.00
33	10.27	formate	119.165	988850	20026346	2	0.00
34	12.16		0.000	8131342	450296644	2	
35	13.01		0.000	6227824	391040146	3	
36	18.72		0.000	1475	18467	4	
Totals			406.681	18324025	910709024		



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1197 TO 1196.

Data Reprocessed On 01/04/1999 12:31:27

```

=====
Sample Name: BLANK                               Date: 12/30/1998 08:40:42
Data File  : E:\DATA\98123001.D01
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 1
Analyst    :                                     Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

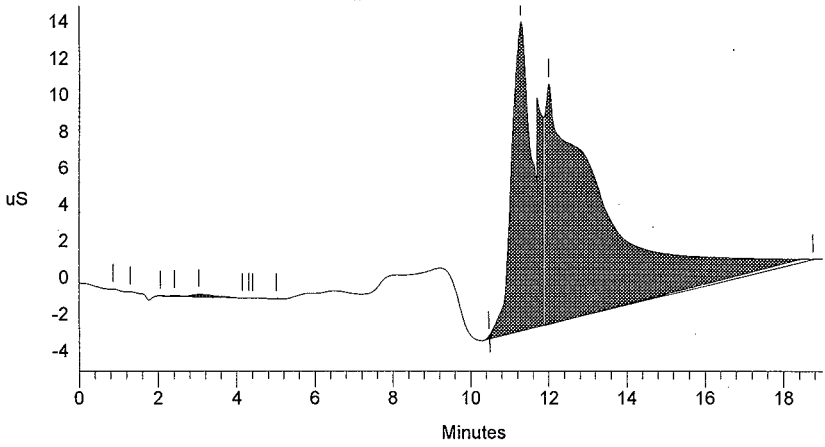
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           1 5700 5Hz 0.00 19.00      16000
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.87		0.000	19661	97880	1	
2	1.30		0.000	30380	164120	1	
3	2.07		0.000	23249	343555	2	
4	2.41		0.000	65113	1071855	2	
5	3.04		0.000	155575	6710842	2	
6	4.15		0.000	4667	24800	1	
7	4.31		0.000	2889	18200	1	
9	5.01		0.000	20235	123000	1	
10	10.45		0.000	157570	712958	2	
11	11.28		0.000	16863424	687842493	2	
12	12.00		0.000	13144426	1404090966	3	
Totals			0.000	30487188	2101200668		

File: 98123001.D01 Sample: BLANK





Data Reprocessed On 12/30/1998 11:36:26

```

=====
Sample Name: 34N21-A CCV                               Date: 12/30/1998 11:09:28
Data File  : C:\DX\DATA\98123001.D05
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 5                     Detector: CDM-2
Analyst    :                                           Column: AG14A-SC,AS14A-SC, SRS
=====

```

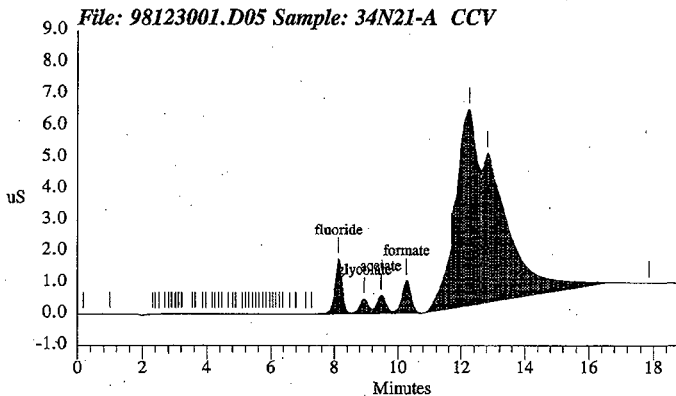
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          101  5700  5Hz  0.00 19.00  16000
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	1924	30678	1	
2	1.00		0.000	1657	68204	1	
5	2.51		0.000	2412	23806	2	
10	3.11		0.000	3253	18074	2	
11	3.21		0.000	3514	54538	2	
13	3.63		0.000	2477	23123	2	
15	3.97		0.000	2167	23448	2	
40	8.13	fluoride	63.445	1742332	27259185	2	0.00
41	8.93	glycolate	100.162	469831	8916806	2	0.00
42	9.47	acetate	118.251	573831	11827822	2	0.00
43	10.27	formate	124.828	1057930	20996264	2	0.00
44	12.24		0.000	6233397	306400163	2	
45	12.83		0.000	4773211	290506869	2	
46	17.87		0.000	1352	25200	1	
Totals			406.686	14869288	666174180		



```

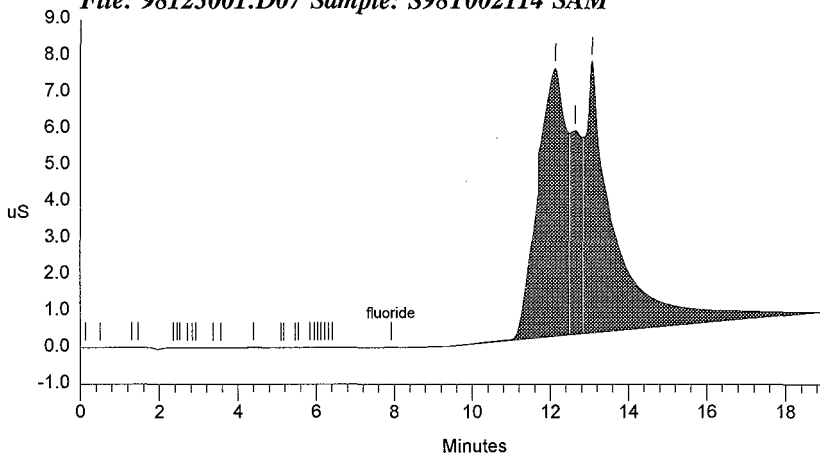
Sample Name: S98T002114 SAM                               Date: 12/30/1998 12:05:16
Data File  : E:\DATA\98123001.D07
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 7                       Detector: CDM-2
Analyst    :                                               Column: AG14A-SC,AS14A-SC, SRS
    
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	5700	5Hz	0.00	19.00	16000	

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
10	2.92		0.000	2730	55620	2	
11	3.37		0.000	1891	19740	2	
12	3.57		0.000	2096	29918	2	
13	4.40		0.000	16012	455989	2	
18	5.84		0.000	1418	17998	2	
24	6.41		0.000	1336	40475	2	
25	7.92	fluoride	0.012	6034	166230	1	0.00
26	12.13		0.000	7330899	360025775	2	
27	12.64		0.000	5595080	106112739	2	
28	13.07		0.000	7431127	392153025	2	
Totals			0.012	20388622	859077509		

*File: 98123001.D07 Sample: S98T002114 SAM*



Data Reprocessed On 12/31/1998 13:55:08

```

=====
Sample Name: S98T002114 DUP                               Date: 12/30/1998 12:25:39
Data File  : E:\DATA\98123001.D08
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 8                       Detector: CDM-2
Analyst    :                                               Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

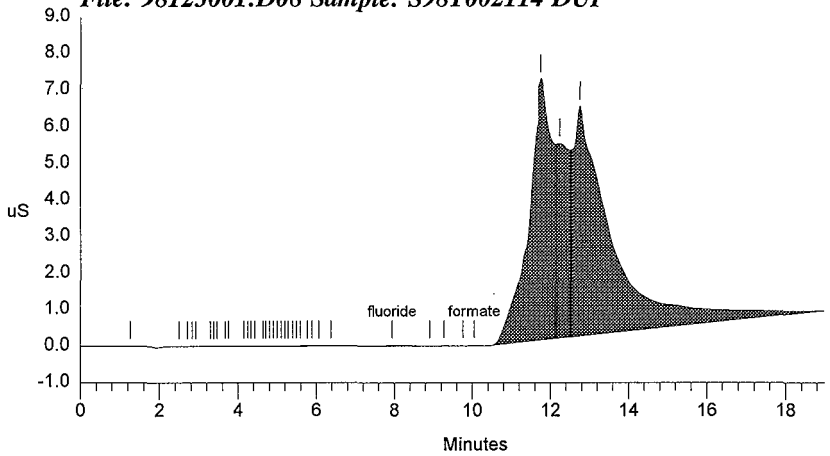
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1             1 5700 5Hz  0.00 19.00 16000
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.27		0.000	941	22904	1	
10	3.76		0.000	2248	26211	2	
30	7.95	fluoride	0.011	3683	110276	1	0.00
32	9.28		0.000	1575	22100	3	
34	10.05	formate	0.005	2511	41024	1	0.00
35	11.73		0.000	7115736	293854794	2	
36	12.24		0.000	5321313	109107415	2	
37	12.75		0.000	6278890	448671078	2	
Totals			0.016	18726897	851855802		

File: 98123001.D08 Sample: S98T002114 DUP



Data Reprocessed On 12/31/1998 13:44:49

```

=====
Sample Name: S98T002114 SPK                               Date: 12/30/1998 12:48:18
Data File  : E:\DATA\98123001.D09
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 9                       Detector: CDM-2
Analyst    :                                               Column: AG14A-SC, AS14A-SC, SRS
=====
    
```

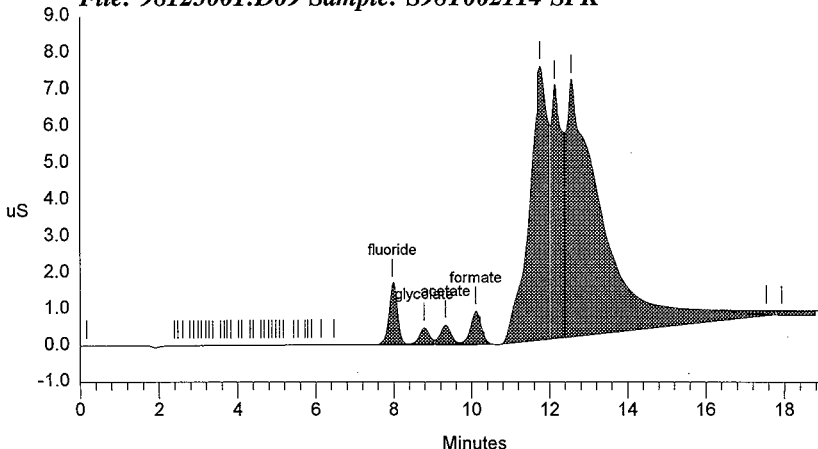
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          1.01    5700 5Hz   0.00 19.00    16000
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.17		0.000	5275	292884	1	
27	5.44		0.000	3154	36811	2	
28	5.55		0.000	2198	16179	2	
31	5.89		0.000	1727	22673	2	
32	6.13		0.000	2610	62231	2	
33	6.47		0.000	3708	78398	2	
34	7.97	fluoride	0.622	1674271	26714030	2	0.00
35	8.77	glycolate	1.007	464778	8968565	2	0.00
36	9.33	acetate	1.090	539364	10927155	2	0.00
37	10.11	formate	1.083	905458	18175671	2	0.00
38	11.76		0.000	7466717	241714579	2	
39	12.13		0.000	6903641	128934115	2	
40	12.56		0.000	6996411	477264059	3	
41	17.55		0.000	2118	32161	4	
42	17.92		0.000	2303	36086	4	
Totals			3.803	24973734	913275597		

File: 98123001.D09 Sample: S98T002114 SPK



# LABCORE Completed Worklist Report for Worklist# 27726

Analyst: kjt

Instrument: IC40S2

Book#: 46N21A

Method: LA-533-105

Rev/Mod F-D

Worklist Comment: Rerun U107 @IC-01. Use 10201 for 2116, but run 2114 direct.

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit		
1	CCB	0	@IC-QC	F	QC	1	<1.20e-2	ug/mL	
1	CCB	0	@IC-QC	CL	QC	1	<1.70e-2	ug/mL	
1	CCB	0	@IC-QC	NO2	QC	1	<1.08e-1	ug/mL	
1	CCB	0	@IC-QC	BR	QC	1	<1.25e-1	ug/mL	
1	CCB	0	@IC-QC	NO3	QC	1	<1.39e-1	ug/mL	
1	CCB	0	@IC-QC	PO4	QC	1	<1.20e-1	ug/mL	
1	CCB	0	@IC-QC	SO4	QC	1	<1.38e-1	ug/mL	
1	CCB	0	@IC-QC	OXALATE2	QC	1	<1.05e-1	ug/mL	
2	LCS-INST	0	@IC-QC	F	QC	5.92e1	6.23e+01	105.236 % Recovery	
2	LCS-INST	0	@IC-QC	CL	QC	7.96e1	8.29e+01	104.146 % Recovery	
2	LCS-INST	0	@IC-QC	NO2	QC	5.57e2	5.56e+02	99.820 % Recovery	
2	LCS-INST	0	@IC-QC	BR	QC	5.86e2	5.93e+02	101.195 % Recovery	
2	LCS-INST	0	@IC-QC	NO3	QC	5.92e2	5.47e+02	92.399 % Recovery	
2	LCS-INST	0	@IC-QC	PO4	QC	5.48e2	5.41e+02	98.723 % Recovery	
2	LCS-INST	0	@IC-QC	SO4	QC	6.38e2	6.45e+02	101.097 % Recovery	
2	LCS-INST	0	@IC-QC	OXALATE2	QC	5.56e2	5.54e+02	99.640 % Recovery	
3	CCV	0	@IC-QC	F	QC	6.40e1	6.38e+01	99.688 % Recovery	
3	CCV	0	@IC-QC	CL	QC	8.95e1	9.25e+01	103.352 % Recovery	
3	CCV	0	@IC-QC	NO2	QC	5.65e2	5.45e+02	96.460 % Recovery	
3	CCV	0	@IC-QC	BR	QC	6.30e2	6.25e+02	99.206 % Recovery	
3	CCV	0	@IC-QC	NO3	QC	7.00e2	6.60e+02	94.286 % Recovery	
3	CCV	0	@IC-QC	PO4	QC	6.35e2	6.21e+02	97.795 % Recovery	
3	CCV	0	@IC-QC	SO4	QC	7.00e2	6.85e+02	97.857 % Recovery	
3	CCV	0	@IC-QC	OXALATE2	QC	5.42e2	5.13e+02	94.649 % Recovery	
4	SAMPLE	S98T002116	0	@IC-01	NO2-02	LIQUID	N/A	< 1.200e+02	120.000 ug/mL
5	DUP	S98T002116	0	@IC-01	F-02	LIQUID	?	<1.13e1	RPD
5	DUP	S98T002116	0	@IC-01	CL-02	LIQUID	?	<1.89e1	RPD
5	DUP	S98T002116	0	@IC-01	NO2-02	LIQUID	<1.20e2	<1.20e2	RPD
5	DUP	S98T002116	0	@IC-01	BR-02	LIQUID	?	2.38e+04	RPD
5	DUP	S98T002116	0	@IC-01	NO3-02	LIQUID	?	<1.54e2	RPD
5	DUP	S98T002116	0	@IC-01	PO4-02	LIQUID	?	<1.33e2	RPD
5	DUP	S98T002116	0	@IC-01	SO4-02	LIQUID	?	<1.53e2	RPD
5	DUP	S98T002116	0	@IC-01	OXALATE2	LIQUID	?	<1.17e2	RPD
6	SAMPLE	S98T002114	0	@IC-01	NO2-02	LIQUID	N/A	1.210e-01	0.108 ug/mL
7	DUP	S98T002114	0	@IC-01	F-02	LIQUID	?	<1.20e-2	RPD
7	DUP	S98T002114	0	@IC-01	CL-02	LIQUID	?	3.30e-02	RPD
7	DUP	S98T002114	0	@IC-01	NO2-02	LIQUID	1.21e-01	1.22e-01	0.823 RPD
7	DUP	S98T002114	0	@IC-01	BR-02	LIQUID	?	<1.25e-1	RPD
7	DUP	S98T002114	0	@IC-01	NO3-02	LIQUID	?	1.79e-01	RPD
7	DUP	S98T002114	0	@IC-01	PO4-02	LIQUID	?	<1.20e-1	RPD
7	DUP	S98T002114	0	@IC-01	SO4-02	LIQUID	?	<1.38e-1	RPD

Units shown for QC (BLK/BKG) may not reflect the actual units.

# LABCORE Completed Worklist Report for Worklist# 27726

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
7 DUP	S98T002114	0	@IC-01	OXALATE2 LIQUID	?	<1.05e-1		RPD

Final page for worklist# 27726

Analyst Signature

Date

Analyst Signature

Date

  
\_\_\_\_\_  
Reviewer Signature      Date

HNF-1661 REV. 0

Sample Name: CCB Date: 01/04/1999 09:30:25  
 Data File : C:\DX\DATA\99010401.D01  
 Method : C:\DX\METHOD\4000SYS2.MET  
 ACI Address: A System: 2 Inject#: 1 Detector: CDM-1  
 Analyst: *J.S. Andrade* Column: AG4A/AS4A anion column

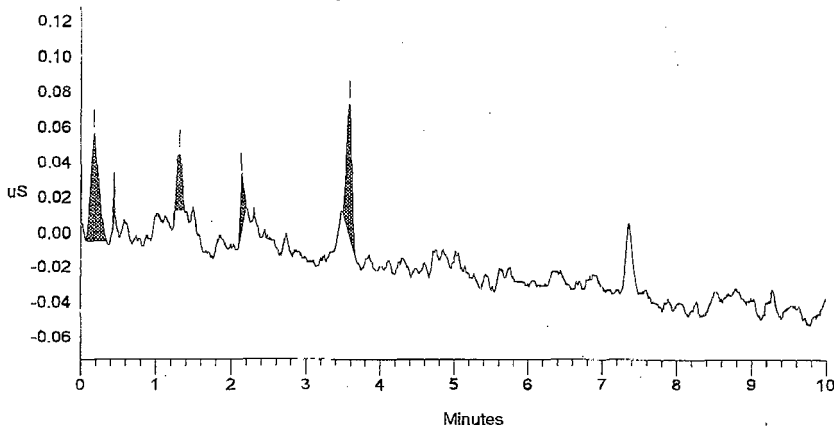
Calibration Volume Dilution Points Rate Start Stop Area Reject

External 1 1 3000 5Hz 0.00 10.00 30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.18		0.000	60	439	1	
2	1.31		0.000	32	157	1	
3	2.13		0.000	31	93	1	
4	3.59		0.000	75	370	1	
Totals			0.000	198	1059		

File: 99010401.D01 Sample: CCB



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1199 TO 1206.

HNF-1661 REV. 0

12/30/98 10:10

A-0004-1

Page: 1

**LABCORE Data Entry Template for Worklist# 27726**Analyst: KST Instrument: IC 4052 Book# 47wa1AMethod: LA-533-105 Rev/Mod F-O

Worklist Comment: Rerun U107 @IC-01. Use 10201 for 2116, but run 2114 direct.

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	CCB				@IC-QC	QC		
2	LCS-INST				@IC-QC	QC		
3	CCV				@IC-QC	QC		
4	SAMPLE	S98T002116 0			@IC-01	LIQUID	98000401	U-107 (2)
		Analytes Requested: NO2-02						
5	DUP	S98T002116 0			@IC-01	LIQUID		
6	SAMPLE	S98T002114 0			@IC-01	LIQUID	98000401	U-107 (2)
		Analytes Requested: NO2-02						
7	DUP	S98T002114 0			@IC-01	LIQUID		

**Final page for worklist # 27726**

K. S. Thorne 1-4-99  
 Analyst Signature Date

\_\_\_\_\_  
 Analyst Signature Date

Data Entry Comments:

uploaded 1-4-99  
John Howell  
27726TAN.CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

1200



Data Reprocessed On 01/04/1999 09:50:18

```

=====
Sample Name: LCS 47N21A                      Date: 01/04/1999 09:43:49
Data File  : C:\DX\DATA\99010401.D02
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 2          Detector: CDM-1
Analyst    :                               Column: AG4A/AS4A anion column
=====

```

```

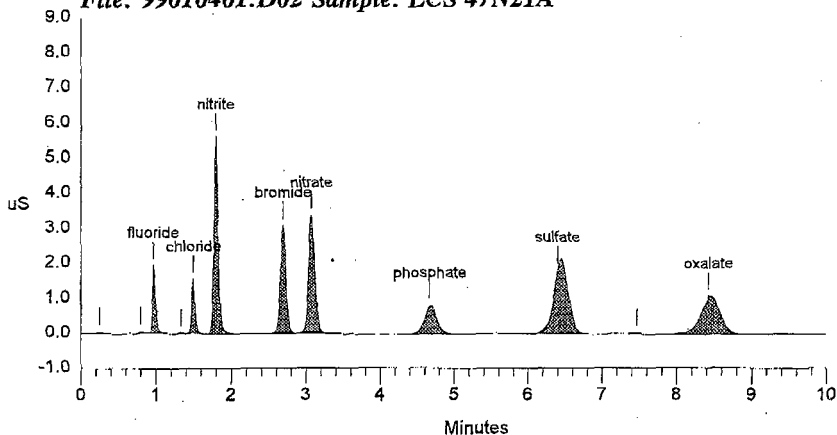
=====
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
-----
External            1             101  3000  5Hz   0.00 10.00          30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.25		0.000	69	398	1	
2	0.79		0.000	63	252	2	
3	0.97	fluoride	62.279	1940	5594	2	1.75
4	1.33		0.000	20	86	1	
5	1.49	chloride	82.852	1552	4874	1	0.45
6	1.79	nitrite	556.163	5612	21940	1	-0.37
7	2.69	bromide	592.935	3083	16191	1	-3.01
8	3.07	nitrate	547.407	3372	20528	1	-3.26
9	4.67	phosphate	540.881	809	9454	1	6.06
10	6.40	sulfate	645.388	1824	29098	1	9.03
11	7.47		0.000	37	267	1	
12	8.43	oxalate	554.160	1084	19771	1	-0.04
Totals			3582.065	19467	128455		

File: 99010401.D02 Sample: LCS 47N21A



1201

HNF-1661 REV.0

Data Reprocessed On 01/04/1999 10:31:03

```

=====
Sample Name: CCV UN21A Date: 01/04/1999 10:21:50
Data File : C:\DX\DATA\99010401.D05
Method : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 5 Detector: CDM-1
Analyst : Column: AG4A/AS4A anion column
=====

```

```

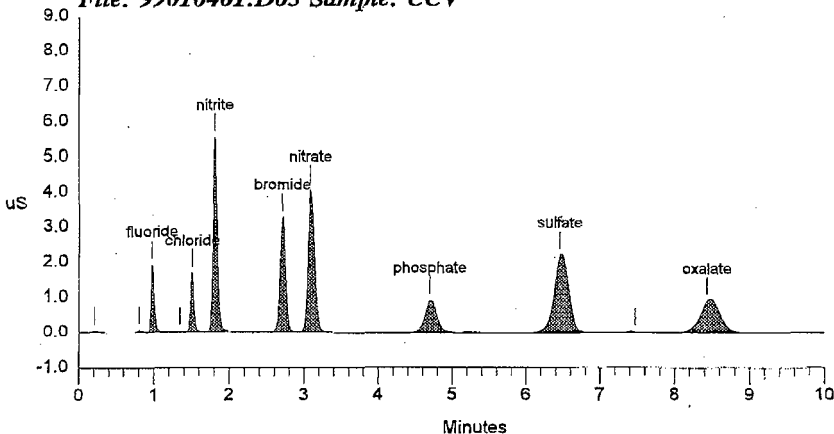
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
External 1 101 3000 5Hz 0.00 10.00 30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.21		0.000	63	411	1	
2	0.81		0.000	72	327	2	
3	0.97	fluoride	63.754	1931	5730	2	2.46
4	1.35		0.000	28	150	2	
5	1.51	chloride	92.547	1688	5448	2	1.35
6	1.81	nitrite	545.415	5525	21504	1	0.37
7	2.71	bromide	625.020	3276	17096	1	-2.29
8	3.09	nitrate	660.427	4074	24941	1	-2.63
9	4.69	phosphate	620.701	915	10876	1	6.67
10	6.45	sulfate	684.706	2196	30916	1	9.94
11	7.47		0.000	29	363	1	
12	8.43	oxalate	513.329	895	18301	1	-0.04
Totals			3805.899	20693	136062		

File: 99010401.D05 Sample: CCV



1202

## HNF-1661 REV. 0

```

=====
Sample Name: S98T002116           Date: 01/04/1999 13:16:32
Data File  : C:\DX\DATA\99010401.D09
Method     : C:\DX\METHOD\4000SYS2.MBT
ACI Address: 1 System: 2 Inject#: 9   Detector: CDM-1
Analyst    :                       Column: AG4A/AS4A anion column
=====

```

```

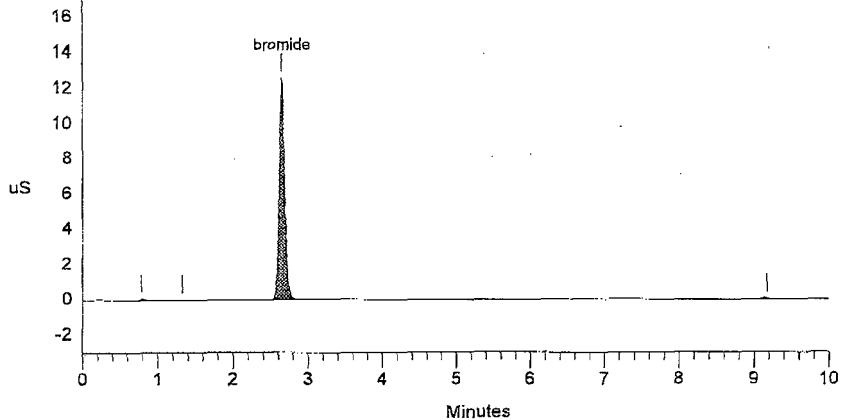
-----
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
-----
External           1           1111  3000  5Hz   0.00  10.00           30

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	32	142	1	
2	1.33		0.000	16	69	1	
3	2.65	bromide	24257.359	12569	64071	1	-4.45
4	9.17		0.000	40	730	1	
Totals			24257.359	12657	65012		

File: 99010401.D09 Sample: S98T002116



```

=====
Sample Name: S98T002116 DUP           Date: 01/04/1999 13:29:01
Data File  : C:\DX\DATA\99010401.D10
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 10   Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====

```

```

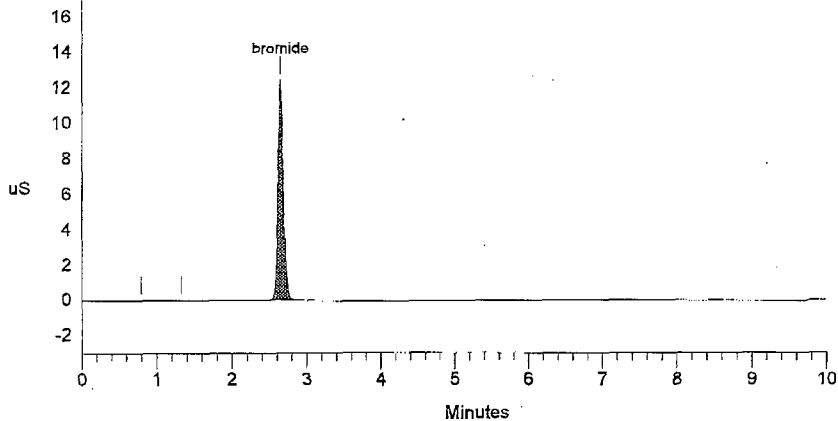
=====
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
-----
External           1           1111  3000  5Hz   0.00  10.00           30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	37	180	1	
2	1.32		0.000	21	92	1	
3	2.64	bromide	23793.901	12392	62750	1	-4.69
Totals			23793.901	12450	63022		

File: 99010401.D10 Sample: S98T002116 DUP



```

=====
Sample Name: S98T002114           Date: 01/04/1999 10:47:17
Data File  : C:\DX\DATA\99010401.D07
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 7
Analyst    :                      Column: AG4A/AS4A anion column
Detector: CDM-1
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----

```

```

External      1      1      3000  5Hz  0.00 10.00      30
-----

```

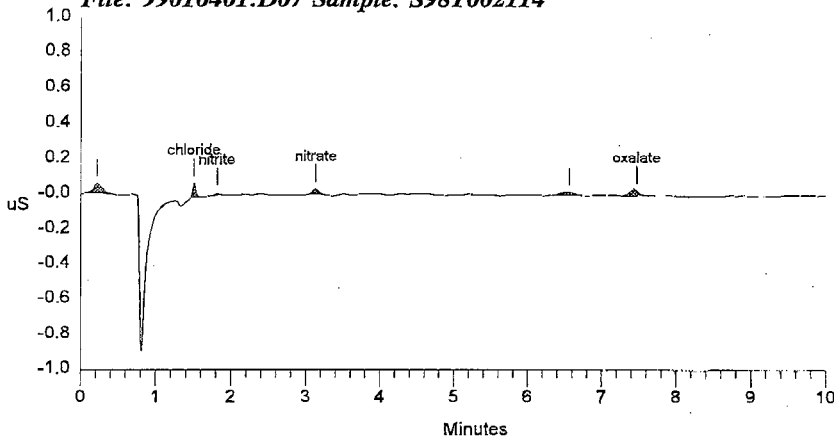
```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.22		0.000	52	431	1	
2	1.51	chloride	0.030	80	246	1	1.35
3	1.81	nitrite	0.121	16	55	1	0.74
4	3.13	nitrate	0.181	29	144	1	-1.16
5	6.56		0.000	21	293	1	
6	7.47	oxalate	0.113	29	316	1	-3.41
Totals			0.445	227	1485		

File: 99010401.D07 Sample: S98T002114



## HNF-1661 REV.0

```

=====
Sample Name: S98T002114 DUP           Date: 01/04/1999 10:58:42
Data File  : C:\DX\DATA\99010401.D08
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 8   Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====

```

```

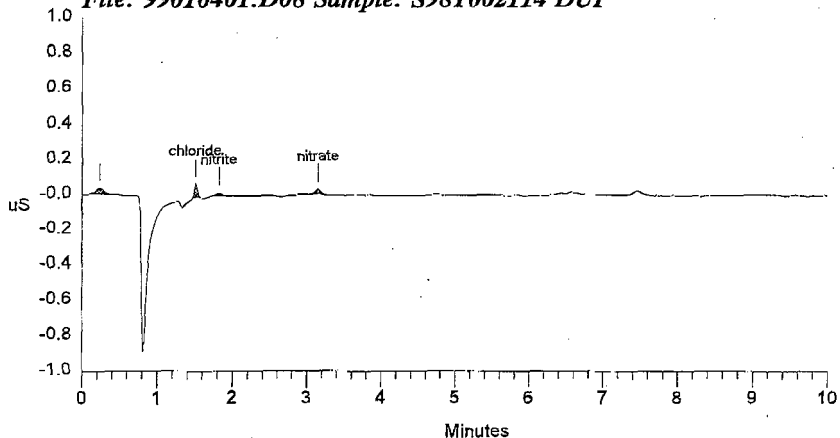
-----
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1             1 3000 5Hz  0.00 10.00           30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	37	232	1	
2	1.51	chloride	0.033	80	258	1	1.35
3	1.82	nitrite	0.122	17	59	1	1.11
4	3.14	nitrate	0.179	30	139	1	-0.95
Totals			0.334	164	689		

File: 99010401.D08 Sample: S98T002114 DUP



# LABCORE Completed Worklist Report for Worklist# 27875

Analyst: adp

Instrument: IC45S2

Book#: 35N21C

Method: LA-533-105

Rev/Mod F-0

Worklist Comment: Rerun U-107 @ic4g-01, Use df 6. jmf

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit	
1	CCB	0	@IC4G-QC F*4	QC	1	<1.10e-2	ug/mL	
1	CCB	0	@IC4G-QC ACETATE2	QC	1	<2.00e-2	ug/mL	
1	CCB	0	@IC4G-QC FORMATE2	QC	1	<2.10e-2	ug/mL	
1	CCB	0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2	ug/mL	
2	LCS-INST	0	@IC4G-QC F*4	QC	5.89e1	5.94e+01	100.849 % Recovery	
2	LCS-INST	0	@IC4G-QC ACETATE2	QC	1.24e2	1.11e+02	89.516 % Recovery	
2	LCS-INST	0	@IC4G-QC FORMATE2	QC	1.19e2	1.06e+02	89.076 % Recovery	
2	LCS-INST	0	@IC4G-QC GLYCOLT1	QC	1.07e2	1.12e+02	104.673 % Recovery	
3	CCV	0	@IC4G-QC F*4	QC	6.21e1	6.74e+01	108.535 % Recovery	
3	CCV	0	@IC4G-QC ACETATE2	QC	1.23e2	1.24e+02	100.813 % Recovery	
3	CCV	0	@IC4G-QC FORMATE2	QC	1.30e2	1.47e+02	113.077 % Recovery	
3	CCV	0	@IC4G-QC GLYCOLT1	QC	1.02e2	1.17e+02	114.706 % Recovery	
4	BLNK-PREP	0	@IC4G-01 F*4-01	SOLID	1	<3.10e-2	ug/g	
4	BLNK-PREP	0	@IC4G-01 ACETATE2	SOLID	1	<2.00e-2	ug/g	
4	BLNK-PREP	0	@IC4G-01 FORMATE2	SOLID	1	<6.20e-2	ug/g	
4	BLNK-PREP	0	@IC4G-01 GLYCOLT1	SOLID	1	<5.60e-2	ug/g	
5	SAMPLE	S98T002541	0 W	@IC4G-01 F*4-01	SOLID	<u>N/A</u>	8.815e+01	36.430 ug/g
5	SAMPLE	S98T002541	0 W	@IC4G-01 ACETATE2	SOLID	<u>N/A</u>	3.367e+02	23.510 ug/g
5	SAMPLE	S98T002541	0 W	@IC4G-01 GLYCOLT1	SOLID	<u>N/A</u>	7.728e+02	65.820 ug/g
6	DUP	S98T002541	0 W	@IC4G-01 F*4-01	SOLID	8.82e+01	4.87e+01	57.706 RPD
6	DUP	S98T002541	0 W	@IC4G-01 ACETATE2	SOLID	3.37e+02	2.89e+02	15.335 RPD
6	DUP	S98T002541	0 W	@IC4G-01 FORMATE2	SOLID	?	1.13e+03	RPD
6	DUP	S98T002541	0 W	@IC4G-01 GLYCOLT1	SOLID	7.73e+02	7.02e+02	9.627 RPD
7	SAMPLE	S98T002547	0 W	@IC4G-01 F*4-01	SOLID	<u>N/A</u>	3.188e+02	37.150 ug/g
8	DUP	S98T002547	0 W	@IC4G-01 F*4-01	SOLID	3.19e+02	1.48e+02	73.233 RPD
8	DUP	S98T002547	0 W	@IC4G-01 ACETATE2	SOLID	?	3.02e+02	RPD
8	DUP	S98T002547	0 W	@IC4G-01 FORMATE2	SOLID	?	1.22e+03	RPD
8	DUP	S98T002547	0 W	@IC4G-01 GLYCOLT1	SOLID	?	6.75e+02	RPD
9	SPK	S98T002547	0 W	@IC4G-01 F*4-01	SOLID	5.89e1	6.55e+01	111.205 % Recovery
9	SPK	S98T002547	0 W	@IC4G-01 ACETATE2	SOLID	1.24e2	0.00e+00	0.000 % Recovery
9	SPK	S98T002547	0 W	@IC4G-01 FORMATE2	SOLID	1.19e2	0.00e+00	0.000 % Recovery
9	SPK	S98T002547	0 W	@IC4G-01 GLYCOLT1	SOLID	1.07e2	0.00e+00	0.000 % Recovery

Final page for worklist# 27875

Analyst Signature

Date

Analyst Signature

Date

*Joan M. Lyle 1/18/99*

01/14/99 07:52  
A-0004-1

HNF-1661 REV. 0

Page: 1

**LABCORE Data Entry Template for Worklist# 27875**

Analyst: ADP Instrument: IC 4552 Book# 35N21-C LCS  
 Method: LA-533-105 Rev/Mod F-0 34N21-A CCV

Worklist Comment: Rerun U-107 @ic4g-01, Use df 6. jmf

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC4G-QC	QC		
2	LCS-INST		@IC4G-QC	QC		
3	CCV		@IC4G-QC	QC		
4	BLNK-PREP		@IC4G-01	SOLID		
5	SAMPLE	S98T002541	0 W	@IC4G-01	SOLID	98000401 U-107 (2)
		Analytes Requested: ACETATE2, F*4-01				GLYCOLT1
6	DUP	S98T002541	0 W	@IC4G-01	SOLID	
7	SAMPLE	S98T002547	0 W	@IC4G-01	SOLID	98000401 U-107 (2)
		Analytes Requested: F*4-01				
8	DUP	S98T002547	0 W	@IC4G-01	SOLID	
9	SPK	S98T002547	0 W	@IC4G-01	SOLID	

**Final page for worklist # 27875**

  
 Analyst Signature Date 1-16-99

\_\_\_\_\_  
 Analyst Signature Date

Data Entry Comments:

uploaded 1-18-99John W. Howell27875-JAN.CSV

Validated, F still nonconforming  
1/18/99 Jmf

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



Data Reprocessed On 01/16/1999 08:43:11

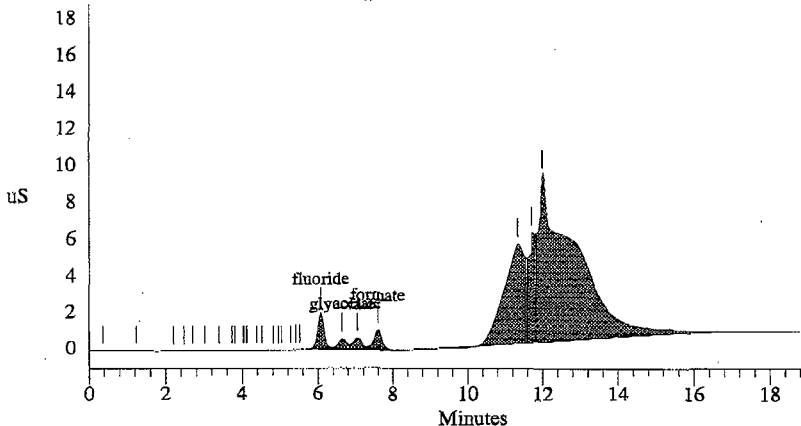
=====  
 Sample Name: 35N21-C LCS Date: 01/16/1999 08:31:53  
 Data File : C:\DX\DATA\99011601.D03  
 Method : C:\DX\METHOD\MAS14GLY.MET  
 ACI Address: 1 System: 2 Inject#: 3 Detector: CDM-2  
 Analyst : *Atkinson* Column: AG14A-SC, AS14A-SC, SRS  
 1-16-99  
 =====

=====  
 Calibration Volume Dilution Points Rate Start Stop Area Reject  
 -----  
 External 1 101 5700 5Hz 0.00 19.00 16000  
 =====

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.37		0.000	14505	395294	2	
4	2.48		0.000	2877	38504	2	
5	2.71		0.000	3235	46082	2	
6	3.01		0.000	2312	35108	2	
16	5.03		0.000	3204	28502	2	
20	6.07	fluoride	59.404/00.36	2010688	25473040	2	0.00
21	6.64	glycolate	111.565/04.27	613680	9938378	2	0.00
22	7.04	acetate	110.98789.51	653786	11117564	2	0.00
23	7.60	formate	105.70988.93	1119794	17727767	2	0.00
24	11.33		0.000	5469134	203579010	2	
25	11.71		0.000	6005434	68017336	2	
26	12.00		0.000	9097955	650583059	2	
Totals			387.665	24996605	986979642		

File: 99011601.D03 Sample: 35N21-C LCS



SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1207 TO 1201.

Data Reprocessed On 01/18/1999 12:50:01

```

=====
Sample Name: BLANK                               Date: 01/16/1999 08:09:14
Data File  : E:\DATA\99011601.D02
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 2             Detector: CDM-2
Analyst    :                                     Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

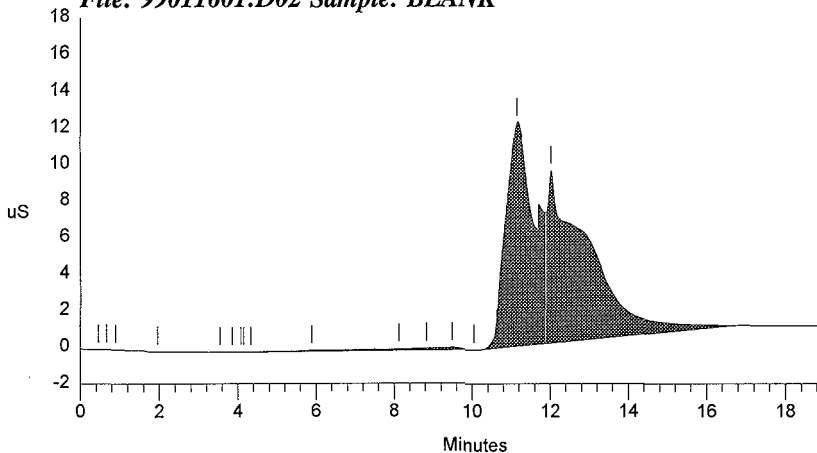
Calibration Volume Dilution Points Rate Start Stop Area Reject

External 1 1 5700 5Hz 0.00 19.00 16000

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.47		0.000	6936	78108	2	
3	0.90		0.000	3913	24400	1	
4	1.97		0.000	18667	394240	1	
10	5.89		0.000	61557	2730794	2	
11	8.13		0.000	72232	6913054	2	
12	8.83		0.000	96893	4053970	2	
13	9.49		0.000	115548	4678402	3	
15	11.15		0.000	12238032	611088698	2	
16	12.03		0.000	9423638	706468976	2	
Totals			0.000	22037415	1336430641		

File: 99011601.D02 Sample: BLANK



Data Reprocessed On 01/16/1999 09:02:29

```

=====
Sample Name: 34N21-A CCV                               Date: 01/16/1999 08:58:37
Data File  : C:\DX\DATA\99011601.D04
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 4                     Detector: CDM-2
Analyst    :                                           Column: AG14A-SC, AS14A-SC, SRS
=====

```

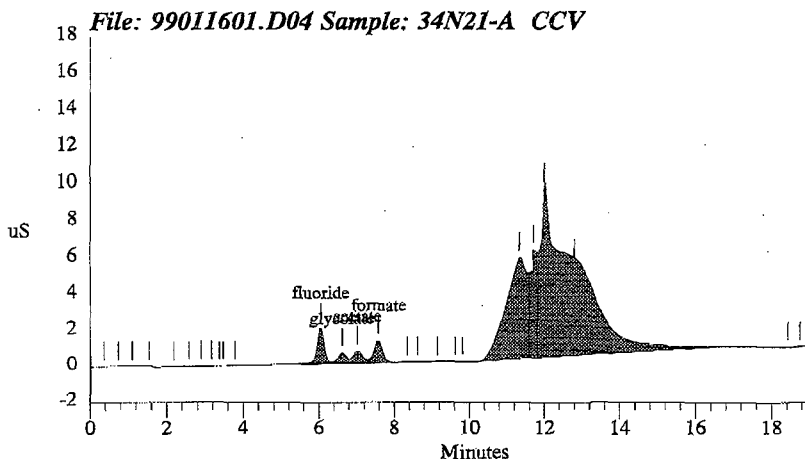
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External           1           101 5700 5Hz 0.00 19.00 16000
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.37		0.000	2752	41111	2	
6	2.57		0.000	5692	60867	2	
7	2.89		0.000	5915	126761	2	
8	3.16		0.000	2557	37137	2	
12	6.04	fluoride	67.389	2034733	29006656	2	0.00
13	6.61	glycolate	116.842	614774	10412923	2	0.00
14	7.01	acetate	123.871	699886	12377078	2	0.00
15	7.57	formate	147.036	1295064	24814149	3	0.00
21	11.33		0.000	5545799	214188770	2	
22	11.71		0.000	5926778	69018184	2	
23	12.00		0.000	9197833	630408378	2	
24	18.43		0.000	7564	86734	2	
Totals			455.138	25339348	990578747		



Data Reprocessed On 01/18/1999 12:46:22

```

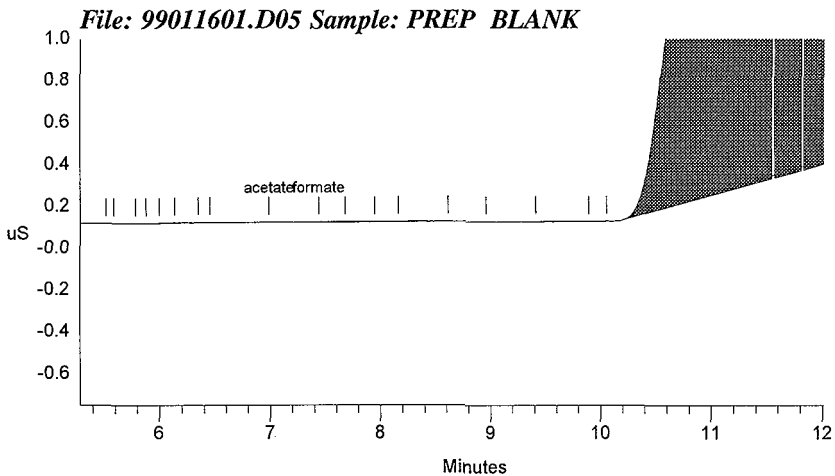
=====
Sample Name: PREP BLANK                               Date: 01/16/1999 09:31:12
Data File  : E:\DATA\99011601.D05
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 5                   Detector: CDM-2
Analyst    :                                           Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           1    5700  5Hz   5.29 12.02      16000
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.57		0.000	61873	4369356	1	
3	2.79		0.000	3034	55608	2	
4	2.91		0.000	3169	30328	2	
29	6.99	acetate	-0.019	2251	33957	2	0.00
30	7.44	formate	0.004	2130	24893	2	0.00
31	7.68		0.000	1855	16776	2	
33	8.16		0.000	3104	73394	2	
34	8.61		0.000	1784	16051	2	
35	8.96		0.000	1600	24720	1	
36	9.41		0.000	1761	16760	1	
39	11.33		0.000	5516162	209134382	2	
40	11.71		0.000	6049782	76083518	2	
41	12.00		0.000	10270055	654855125	2	
Totals			-0.015	21918558	944734869		



Data Reprocessed On 01/18/1999 12:42:57

```

=====
Sample Name: S98T002541 SAM                      Date: 01/16/1999 10:13:32
Data File  : E:\DATA\99011601.D06
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 6              Detector: CDM-2
Analyst    :                                     Column: AG14A-SC,AS14A-SC, SRS
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          6   5700  5Hz  5.20 10.82   16000
-----

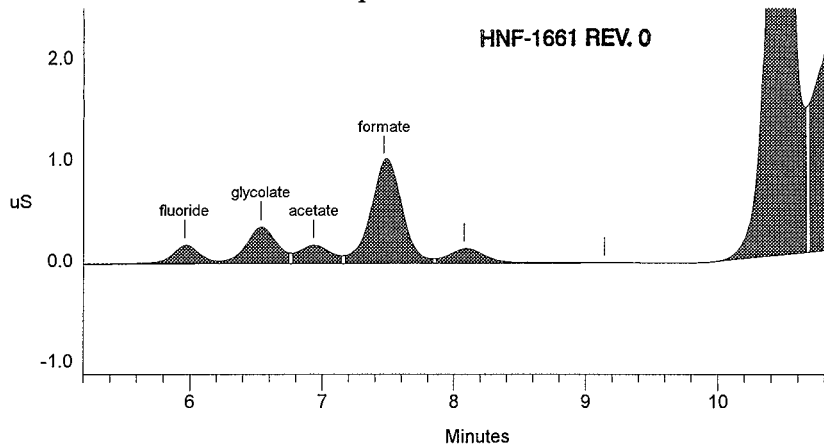
```

```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.33		0.000	1555	45184	1	
3	1.67		0.000	125274	1623368	1	
4	2.77		0.000	19140	518784	2	
5	3.12		0.000	20079	278032	2	
6	3.27		0.000	18804	290721	2	
7	3.60		0.000	17281	787094	2	
8	4.49		0.000	13873	113185	2	
9	4.59		0.000	14088	111905	2	
10	4.71		0.000	13629	88022	2	
11	4.83		0.000	14429	292602	2	
12	5.96	fluoride	0.450	184832	2896623	2	0.00
13	6.53	glycolate	3.945	362610	5924179	2	0.00
14	6.93	acetate	1.719	182078	3070623	2	0.00
15	7.47	formate	6.060	1011669	17097708	2	0.00
16	8.08		0.000	145033	3133538	3	
17	9.15		0.000	3656	80331	4	
18	10.45		0.000	6437959	82855863	2	
19	10.96		0.000	73827303	725014519	2	
20	11.49		0.000	369486086	6873269093	3	
Totals			12.173	451899377	7717491374		



Data Reprocessed On 01/18/1999 12:41:25

```

=====
Sample Name: S98T002541 DUP                      Date: 01/16/1999 10:35:44
Data File  : E:\DATA\99011601.D07
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 7
Analyst    :                               Column: AG14A-SC,AS14A-SC, SRS
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           6 5700 5Hz  5.70 10.44      16000
-----

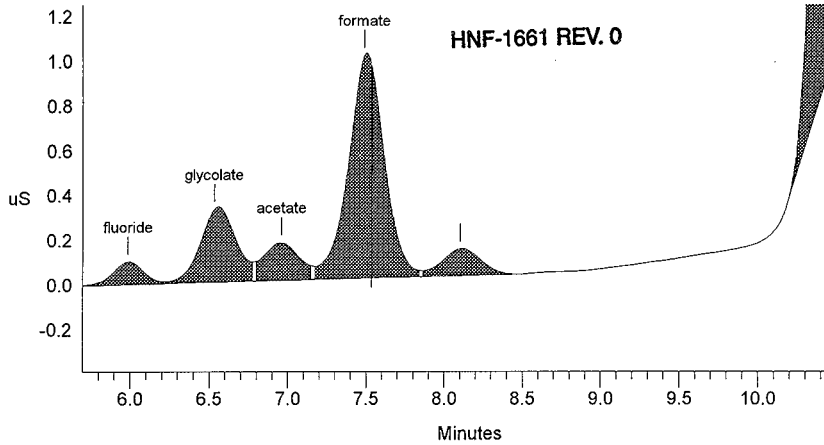
```

```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.27		0.000	4656	58984	1	
4	1.70		0.000	91255	1051840	1	
5	2.57		0.000	6613	68044	2	
6	2.68		0.000	2480	16419	2	
9	2.93		0.000	3499	25343	2	
12	3.31		0.000	4350	51806	2	
13	3.55		0.000	6209	75795	2	
14	3.85		0.000	4274	24601	2	
15	4.04		0.000	6320	43481	2	
16	4.12		0.000	7499	70718	2	
17	4.32		0.000	6298	84502	2	
18	4.60		0.000	6597	30672	2	
19	4.73		0.000	8370	187790	2	
21	5.99	fluoride	0.243	102423	1401183	2	0.00
22	6.53	glycolate	3.501	325484	5267703	2	0.00
23	6.96	acetate	1.443	169326	2614153	2	0.00
24	7.49	formate	5.630	995729	15866802	2	0.00
25	8.11		0.000	120478	2094737	2	
26	10.45		0.000	5273531	54711410	1	
27	10.96		0.000	67203095	554391768	3	
28	11.36		0.000	154991	835535	4	
29	11.52		0.000	362351277	5767564200	1	
Totals			10.817	436854758	6406537486		





Data Reprocessed On 01/18/1999 12:39:40

```

=====
Sample Name: S98T002547 SAM                               Date: 01/16/1999 10:56:13
Data File  : E:\DATA\99011601.D08
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 8
Analyst    :                               Column: AG14A-SC,AS14A-SC, SRS
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           6   5700  5Hz  5.52 10.48   16000
-----

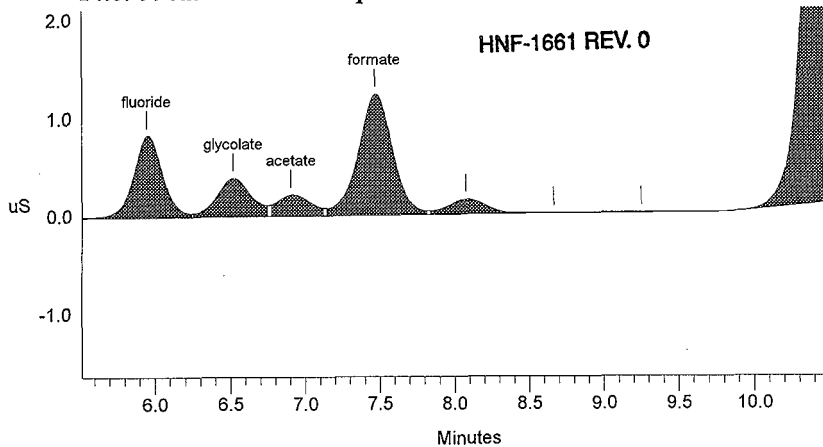
```

```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	2279	18246	2	
4	1.67		0.000	83754	978347	2	
5	2.63		0.000	17763	205724	2	
6	2.85		0.000	20525	246914	2	
7	2.95		0.000	21224	255458	2	
8	3.16		0.000	21219	105259	2	
9	3.24		0.000	21069	416374	2	
10	3.61		0.000	17584	202838	2	
11	3.83		0.000	16518	222470	2	
12	4.12		0.000	14043	78044	2	
13	4.25		0.000	14667	258441	2	
14	4.56		0.000	15400	448316	2	
16	5.95	fluoride	1.596	834268	11229770	2	0.00
17	6.52	glycolate	4.148	390301	6225243	2	0.00
18	6.91	acetate	1.891	215146	3355551	2	0.00
19	7.47	formate	7.026	1232208	19874089	2	0.00
20	8.08		0.000	152552	2951624	3	
23	10.43		0.000	6621137	88960235	2	
24	10.93		0.000	72778204	802604255	2	
25	11.52		0.000	358000282	5804941474	3	
26	12.24		0.000	2688092	347586520	4	
Totals			14.661	443178235	7091165193		



Data Reprocessed On 01/18/1999 12:37:01

```

=====
Sample Name: S98T002547 DUP                               Date: 01/16/1999 11:18:18
Data File  : E:\DATA\99011601.D09
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 9
Analyst    :                               Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

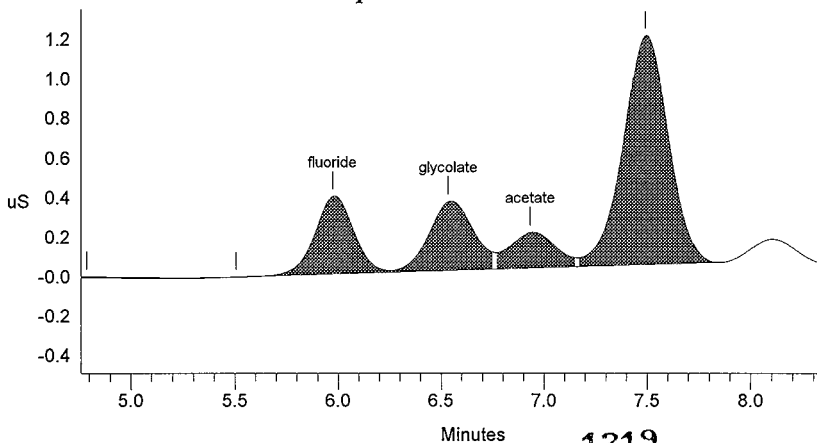
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           6 5700 5Hz 4.76 8.36 16000
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.50		0.000	12881	391054	2	
2	1.13		0.000	3752	41604	2	
4	1.70		0.000	95619	1017572	1	
5	2.96		0.000	6779	289651	2	
6	3.13		0.000	3096	19168	2	
8	3.47		0.000	1489	47575	2	
10	4.17		0.000	4965	99025	2	
11	4.53		0.000	6695	117140	2	
12	4.79		0.000	7133	132742	2	
14	5.97	fluoride	0.761	391881	5150632	2	0.00
15	6.53	glycolate	3.474	347828	5228372	2	0.00
16	6.93	acetate	1.554	181104	2798142	2	0.00
17	7.49	formate	6.288	1155151	17752418	2	0.00
18	10.45		0.000	6758639	86480540	2	
19	11.52		0.000	379103364	6541372907	2	
Totals			12.077	388080376	6660938540		

File: 99011601.D09 Sample: S98T002547 DUP



Data Reprocessed On 01/18/1999 11:02:52

```

=====
Sample Name: S98T002547 SPK                               Date: 01/16/1999 11:38:32
Data File  : E:\DATA\99011601.D10
Method     : C:\DX\METHOD\MAS14GLY.MET
ACI Address: 1 System: 2 Inject#: 10                      Detector: CDM-2
Analyst    :                                               Column: AG14A-SC,AS14A-SC, SRS
=====
    
```

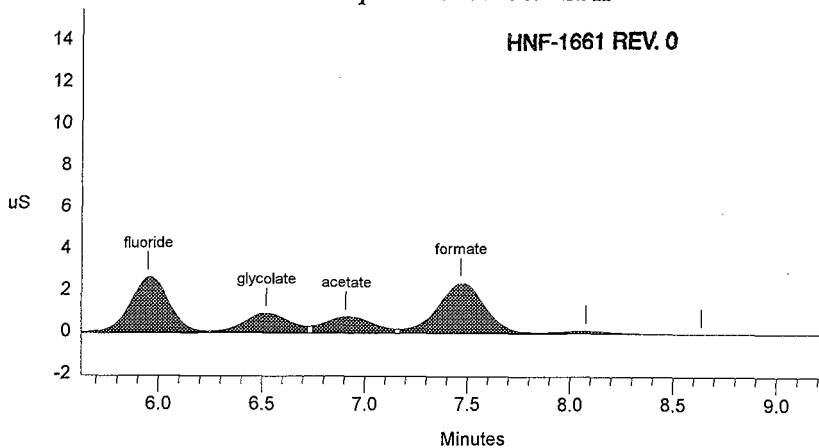
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           6   5700  5Hz   5.63  9.24   16000
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
5	1.67		0.000	85612	1039999	2	
6	2.77		0.000	13569	313496	2	
7	2.88		0.000	13191	173648	2	
8	3.16		0.000	8924	86938	2	
9	3.41		0.000	5862	70046	2	
10	3.56		0.000	3838	31221	3	
12	3.88		0.000	4443	63620	2	
13	4.25		0.000	3283	28759	2	
14	4.40		0.000	4201	86059	2	
15	4.73		0.000	6060	140116	2	
16	5.95	fluoride	4.872	2690590	35516372	2	0.00
17	6.52	glycolate	9.957	963694	15040849	2	0.00
18	6.91	acetate	7.841	797590	13170026	2	0.00
19	7.47	formate	13.735	2426815	39499650	3	0.00
20	8.08		0.000	148024	2465245	4	
22	9.23		0.000	3678	65038	2	
24	10.45		0.000	6937164	89102157	2	
25	10.93		0.000	73034357	802172069	2	
26	11.52		0.000	358223927	6235487913	2	
-----							
Totals			36.404	445374822	7234553220		

HNF-1661 REV. 0



File #: 981111C.TXT

HNF-1661 REV. 0

07/31/98 12:17

Page: 1

A-0004-1

## LABCORE Data Entry Template for Worklist# 25261

Analyst: JK Scto Instrument: ICP01 3 24 9-15-98 Book# 75B48BMethod: LA-505-151/161 Rev/Mod C-2 3 24 9-15-98Insure dose rate at 30 cm is  $\leq 50 \mu\text{R}/\text{hr}$   
prior to performing this analysis.Worklist Comment: ICP U-107 (DIRECT)

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	ICV				@ICP-QC	QC		
2	ICB				@ICP-QC	QC		
3	LLS				@ICP-QC	QC		
4	ICSA				@ICP-QC	QC		
5	ICSAB				@ICP-QC	QC		
6	SERDIL	S98T002032	0	D	@ICP-D01	LIQUID		
7	SAMPLE	S98T002032	0	D	@ICP-D01	LIQUID	98000358	U-107 (2)
		Analytes Requested: AG-D-01, AL-D-01, AS-D-01, B-D-01, BA-D-01, BE-D-01, BI-D-01, CA-D-01, CD-D-01, CE-D-01, CO-D-01, CR-D-01, CU-D-01, FE-D-01, K-D-01, LA-D-01, LI-D-01, MG-D-01, MN-D-01, MO-D-01, NA-D-01, ND-D-01, NI-D-01, P-D-01, PB-D-01, S-D-01, SB-D-01, SE-D-01, SI-D-01, SM-D-01, SR-D-01, TI-D-01, TL-D-01, U-D-01, V-D-01, ZN-D-01, ZR-D-01						
8	DUP	S98T002032	0	D	@ICP-D01	LIQUID		
9	SPK, (1 ppm) Spike K Spike GY (10 ppm) 24 9-15-98	S98T002032	0	D	@ICP-D01	LIQUID		
10	CCV				@ICP-QC	QC		
11	CCB				@ICP-QC	QC		
12	SERDIL	S98T002036	0	D	@ICP-D01	LIQUID		
13	SAMPLE	S98T002036	0	D	@ICP-D01	LIQUID	98000358	U-107 (2)
		Analytes Requested: AG-D-01, AL-D-01, AS-D-01, B-D-01, BA-D-01, BE-D-01, BI-D-01, CA-D-01, CD-D-01, CE-D-01, CO-D-01, CR-D-01, CU-D-01, FE-D-01, K-D-01, LA-D-01, LI-D-01, MG-D-01, MN-D-01, MO-D-01, NA-D-01, ND-D-01, NI-D-01, P-D-01, PB-D-01, S-D-01, SB-D-01, SE-D-01, SI-D-01						

Data Entry Comments:

uploaded 11-12-98  
J. H. HowellValidated by:  
Sal M. Pang  
11/16/98

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

07/31/98 12:17  
A-0004-1

HNF-1661 REV. 0

Page: 2

# LABCORE Data Entry Template for Worklist# 25261

S Type	Sample#	R A	Test	Matrix	Group#	Project
			SM-D-01 ,	SR-D-01 ,	TI-D-01 ,	TL-D-01 , U-D-01 , V-D-01 ,
			ZN-D-01 ,	ZR-D-01		
14 DUP	S98T002036	0 D	@ICP-D01	LIQUID		
15 SPK (100%) SCALE 2 SPK 2X (100%) DK 9.15-18	S98T002036	0 D	@ICP-D01	LIQUID		
16 SAMPLE	S98T002046	0 D	@ICP-D01	LIQUID	98000358	U-107 (2)
	<b>Analytes Requested:</b>		AG-D-01 ,	AL-D-01 ,	AS-D-01 ,	B-D-01 , BA-D-01 ,
			BE-D-01 ,	BI-D-01 ,	CA-D-01 ,	CD-D-01 , CE-D-01 , CO-D-01 ,
			CR-D-01 ,	CU-D-01 ,	FE-D-01 ,	K-D-01 , LA-D-01 , LI-D-01 ,
			MG-D-01 ,	MN-D-01 ,	MO-D-01 ,	NA-D-01 , ND-D-01 , NI-D-01 ,
			P-D-01 ,	PB-D-01 ,	S-D-01 ,	SB-D-01 , SE-D-01 , SI-D-01 ,
			SM-D-01 ,	SR-D-01 ,	TI-D-01 ,	TL-D-01 , U-D-01 , V-D-01 ,
			ZN-D-01 ,	ZR-D-01		
17 DUP	S98T002046	0 D	@ICP-D01	LIQUID		
18 ICSEA			@ICP-QC	QC		
19 IC SAB			@ICP-QC	QC		
20 CCV			@ICP-QC	QC		
21 CCB			@ICP-QC	QC		

## Final page for worklist # 25261

DK 100 11-11-98

Analyst Signature	Date
S987002036-L	025-15-28, JF 3005
S987002036	025-15 601
S987002036-D	025-15 601
S987002036-Q	025-15 601
S987002036-X	025-15-19 6010
S987002036-QX	025-15-19 6010

Analyst Signature	Date
S987002036-L	025-15-28, JF 3005
S987002036	025-15 601
S987002036-D	025-15 601
S987002036-Q	025-15 601
S987002036-X	025-15-19 6010
S987002036-QX	025-15-19 6010
S987002046	025-15, JF 601
S987002046-D	025-15 601

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

$$C_r = 6.94 \text{ } \mu\text{g} \text{ } \frac{\mu\text{g}}{\text{ml}}$$

$$\text{Spike: } C_r = \frac{\left(\frac{1260.4}{601}\right) - \left(\frac{694.93}{601}\right)}{1} \times 100 = 94.1\%$$

Post Spike:

$$Al = \frac{\left(\frac{80801}{6010}\right) - \left(\frac{22493}{6010}\right)}{10} \times 100 = 97.02\%$$

$$Na = \frac{\left(\frac{281320}{6010}\right) - \left(\frac{222190}{6010}\right)}{10} \times 100 = 98.4\%$$

S98T00 2036

$$\text{Spike: } Fe = \frac{\left(\frac{631.21}{601}\right) - (0)}{1} \times 100 = 105.0\%$$

Post Spike:

$$Al = \frac{\left(\frac{80442}{6010}\right) - \left(\frac{21887}{6010}\right)}{10} \times 100 = 97.4\%$$

$$Cr = \frac{\left(\frac{60581}{6010}\right) - \left(\frac{688.58}{6010}\right)}{10} \times 100 = 99.65\%$$

$$Na = \frac{\left(\frac{281720}{6010}\right) - \left(\frac{225790}{6010}\right)}{10} \times 100 = 93.1\%$$



## HNF-1661 REV. 0

Analysis Report

Summary

Wed 11-11-98 03:08:56 PM

page 1

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981111C	ICP2	11/11/98	13:03	DKS	Q	CONC
2	ICB	981111C	ICP2	11/11/98	13:06	DKS	Q	CONC
3	LLS	981111C	ICP2	11/11/98	13:09	DKS	Q	CONC
4	ICSA	981111C	ICP2	11/11/98	13:12	DKS	Q	CONC
5	ICSAB	981111C	ICP2	11/11/98	13:15	DKS	Q	CONC
6	S98T002032_L	981111C	ICP2	11/11/98	13:18	DKS	S	CONC
7	S98T002032	981111C	ICP2	11/11/98	13:21	DKS	S	CONC
8	S98T002032_D	981111C	ICP2	11/11/98	13:24	DKS	S	CONC
9	S98T002032_A	981111C	ICP2	11/11/98	13:27	DKS	S	CONC
10	S98T002032_X	981111C	ICP2	11/11/98	13:31	DKS	S	CONC
11	S98T002032_AX	981111C	ICP2	11/11/98	13:36	DKS	S	CONC
12	CCV	981111C	ICP2	11/11/98	14:03	DKS	Q	CONC
13	CCB	981111C	ICP2	11/11/98	14:06	DKS	Q	CONC
14	S98T002036_L	981111C	ICP2	11/11/98	14:09	DKS	S	CONC
15	S98T002036	981111C	ICP2	11/11/98	14:12	DKS	S	CONC
16	S98T002036_D	981111C	ICP2	11/11/98	14:15	DKS	S	CONC
17	S98T002036_A	981111C	ICP2	11/11/98	14:18	DKS	S	CONC
18	S98T002036_X	981111C	ICP2	11/11/98	14:24	DKS	S	CONC
19	S98T002036_AX	981111C	ICP2	11/11/98	14:27	DKS	S	CONC
20	S98T002046	981111C	ICP2	11/11/98	14:49	DKS	S	CONC
21	S98T002046_D	981111C	ICP2	11/11/98	14:52	DKS	S	CONC
22	ICSA	981111C	ICP2	11/11/98	14:55	DKS	Q	CONC
23	ICSAB	981111C	ICP2	11/11/98	14:59	DKS	Q	CONC
24	CCV	981111C	ICP2	11/11/98	15:02	DKS	Q	CONC
25	CCB	981111C	ICP2	11/11/98	15:05	DKS	Q	CONC



11-11-98

Work list # 25261

u-107

598T002032

598T002036

598T002046

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1225 TO 1229.

## HNF-1661 REV. 0

Analysis Report

Averages

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#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	5.0124	4.9342	5.1375	5.0504	4.9654	5.0559
2	ICB	.00115	.00480	.00196	.00656	.00006	.00008
3	LLS	.02319	.11381	.20258	.10697	.10012	.01048
4	ICSA	.00277	244.42	-.01034	-.00317	.00026	.00022
5	IC SAB	.95039	243.49	.00633	-.00123	.46261	.47918
6	S98T002032_L	17.656	22445.	-48.577	100.06	.48886	.67414
7	S98T002032	15.812	21939.	-38.812	96.688	.14681	.21825
8	S98T002032_D	15.664	21826.	-35.408	93.305	.12162	.19113
9	S98T002032_A	574.53	22011.	592.64	682.28	573.86	599.18
10	S98T002032_X	40.276	22493.	-80.613	121.21	.98494	1.0707
11	S98T002032_AX	55181.	80801.	60501.	60024.	60380.	59821.
12	CCV	4.9691	4.9474	5.1340	5.0294	4.9769	5.0571
13	CCB	.00523	.01113	.01043	.00516	.00006	.00022
14	S98T002036_L	19.351	21498.	-52.428	90.201	.20115	.40736
15	S98T002036	15.107	21069.	-29.598	90.204	.10543	.16421
16	S98T002036_D	15.615	21169.	-37.689	89.923	.08055	.19012
17	S98T002036_A	551.34	22064.	592.33	672.43	570.27	595.33
18	S98T002036_X	17.449	21887.	-61.169	129.64	.10925	1.0792
19	S98T002036_AX	54817.	80442.	60878.	60435.	60947.	60209.
20	S98T002046	16.152	20253.	-33.878	89.073	.06074	.19131
21	S98T002046_D	15.968	20482.	-41.136	91.610	.05249	.32514
22	ICSA	.01805	242.73	.01769	-.00689	.00030	.00035
23	IC SAB	.95513	242.57	.00494	.00002	.45930	.47393
24	CCV	4.9956	5.0053	5.1701	5.0697	5.0641	5.1039
25	CCB	.00420	.00592	.00598	.00656	.00019	.00013

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	5.0051	5.0113	5.0725	5.0502	5.0016	4.9596
2	ICB	-.02827	-.00104	-.00062	.00577	.00122	-.00198
3	LLS	.21595	.21044	.01022	.21468	.04013	.01914
4	ICSA	-.01305	253.39	.00533	.00250	.00021	-.00347
5	IC SAB	-.01224	254.38	.94337	.01383	.46374	.46543
6	S98T002032_L	12.040	97.883	3.3702	18.308	2.9399	709.58
7	S98T002032	-11.908	97.610	.80160	7.1866	-.21744	694.93
8	S98T002032_D	-1.1743	88.397	.80946	4.6562	.44392	691.34
9	S98T002032_A	574.94	683.19	598.37	599.41	587.64	1260.4
10	S98T002032_X	-179.67	90.031	1.5012	48.279	1.4701	702.04
11	S98T002032_AX	61664.	60661.	59736.	60446.	59239.	60741.
12	CCV	4.9866	4.9546	5.0305	5.0459	4.9555	4.9184
13	CCB	-.02245	-.00154	.00079	.00771	-.00146	-.00103
14	S98T002036_L	-21.808	92.053	1.5288	-1.9541	1.4758	689.71
15	S98T002036	-9.4842	95.810	.28207	4.2906	.44475	684.84
16	S98T002036_D	-11.031	84.717	1.1314	5.2389	-.14718	680.24
17	S98T002036_A	583.82	701.62	600.41	595.71	588.02	1594.8
18	S98T002036_X	-64.852	59.693	3.7568	-17.934	-7.4374	688.58
19	S98T002036_AX	61311.	60182.	59688.	60752.	59368.	60581.
20	S98T002046	1.4903	83.619	.80400	4.8491	.95484	640.58
21	S98T002046_D	-8.1906	79.367	.72400	-.61052	-.52355	638.37
22	ICSA	-.02992	255.82	.00634	.00913	.00095	-.00247
23	IC SAB	-.03112	254.61	.93463	.00840	.46082	.46451
24	CCV	5.0228	4.9551	5.0365	5.1274	4.9724	4.9322

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#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
25	CCB	-.00698	-.00043	.00135	.00606	-.00183	-.00192

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.7540	.00765	4.8869	4.9805	4.9974	5.0385
2	ICB	-.00099	.00005	.00109	-.09471	.00038	.00000
3	LLS	.01682	-.00027	.09905	.48188	.10322	.02161
4	ICSA	.00325	.02151	92.595	-.06387	-.00418	.00193
5	ICSAB	.46845	.02109	92.600	.08944	-.00362	.98733
6	S98T002032_L	4.5411	.94917	7.9365	3485.6	1.0428	.61072
7	S98T002032	1.5626	.75217	5.8264	3048.5	.68457	.73171
8	S98T002032_D	1.8455	.44725	5.4170	2938.4	.30158	.48711
9	S98T002032_A	559.97	1.1309	578.39	3436.6	591.66	585.82
10	S98T002032_X	3.9826	.34439	11.822	3564.1	3.4539	3.0517
11	S98T002032_AX	56196.	90.753	57403.	63237.	60134.	60442.
12	CCV	4.7711	.00720	4.8678	5.1033	5.0041	5.1298
13	CCB	-.00087	.00008	.00144	-.00295	.00057	-.00010
14	S98T002036_L	2.8350	.68267	6.2604	3028.5	-.30892	.91487
15	S98T002036	1.8251	.69899	4.5532	2916.1	.33381	.73130
16	S98T002036_D	1.4167	.38219	4.0420	2910.5	.31740	.24297
17	S98T002036_A	553.93	1.4186	631.21	3473.4	587.10	569.76
18	S98T002036_X	.82559	-5.1832	10.227	2348.9	-4.8128	-3.6508
19	S98T002036_AX	56955.	86.490	57477.	63300.	60582.	61013.
20	S98T002046	1.5788	.31942	3.7201	2808.0	.28695	.30479
21	S98T002046_D	1.0239	-.24116	3.3195	2733.4	-.73965	-.06093
22	ICSA	.00289	.01399	92.649	.03395	-.00413	.00244
23	ICSAB	.46301	.01813	92.165	.08378	-.00360	.98469
24	CCV	4.8521	.00725	4.8833	4.9515	5.0849	5.2668
25	CCB	-.00060	-.00021	.00131	.02592	-.00003	-.00020

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.0501	4.9199	5.0632	5.1482	4.8936	4.9779
2	ICB	.00753	.00008	.00272	.03016	-.00266	-.00480
3	LLS	.21470	.02010	.10309	.22063	.20125	.03915
4	ICSA	249.45	-.00528	-.01380	193.17	-.00301	-.00937
5	ICSAB	248.36	.43995	-.01850	191.65	-.00139	.92665
6	S98T002032_L	21.664	1.5290	91.466	221380.	-6.2304	-3.1005
7	S98T002032	5.8735	1.4821	89.155	210380.	-.17776	10.029
8	S98T002032_D	2.3647	1.3921	90.317	209600.	-1.6765	8.7171
9	S98T002032_A	590.33	568.87	689.97	207640.	577.02	600.08
10	S98T002032_X	46.215	1.2490	104.96	222190.	-11.926	-4.1749
11	S98T002032_AX	61567.	59455.	59629.	281320.	58687.	59716.
12	CCV	5.0530	4.8745	5.0401	5.2121	4.9154	4.9052
13	CCB	.00785	.00011	.00416	.03821	-.00170	-.00949
14	S98T002036_L	7.6373	2.7170	94.846	218380.	-5.7309	-.00264
15	S98T002036	2.2702	2.5628	86.463	207040.	-.21449	11.670
16	S98T002036_D	3.0221	2.0927	87.910	207910.	-1.6815	11.812
17	S98T002036_A	591.72	599.85	691.42	208500.	575.29	598.44
18	S98T002036_X	-24.012	1.0070	92.356	225790.	-29.096	-21.931
19	S98T002036_AX	62019.	59369.	59853.	281720.	59242.	59984.
20	S98T002046	5.6789	1.1657	85.301	208920.	.53934	8.8582

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#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
21	S98T002046_D	-.72675	.96720	85.205	214130.	-2.6486	9.6835
22	ICSA	248.09	-.00504	-.01540	189.41	-.00051	-.01044
23	IC SAB	247.46	.43828	-.01465	190.39	-.00148	.91562.
24	CCV	5.0970	4.8988	5.0595	5.3424	5.0083	4.9560
25	CCB	.00344	.00000	.00272	.01507	-.00468	-.00572

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	5.0059	5.0196	4.8787	5.0738	4.7124	4.9335
2	ICB	.01070	-.00095	.00282	.00338	.02564	.00171
3	LLS	.39130	.21609	.20972	.09640	.21676	Q.17109
4	ICSA	.02434	.02139	-.02041	.01225	.05639	-.00467
5	IC SAB	.03324	.99680	-.01668	.01201	.05716	-.00884
6	S98T002032_L	1100.9	37.657	2489.9	8.7893	49.225	189.84
7	S98T002032	1091.5	11.446	2493.0	3.3342	42.223	185.16
8	S98T002032_D	1112.6	3.0545	2445.6	3.6657	50.714	173.69
9	S98T002032_A	1683.5	596.67	2961.2	610.29	657.75	768.09
10	S98T002032_X	1051.9	33.150	2477.8	26.854	127.22	223.17
11	S98T002032_AX	60361.	60398.	60730.	60131.	58903.	60295.
12	CCV	4.9805	4.9832	4.8278	5.0449	4.7750	4.8959
13	CCB	.01169	.00727	.00822	-.00293	.02249	.00287
14	S98T002036_L	1142.1	27.670	2448.9	2.6705	95.951	126.90
15	S98T002036	1115.6	15.182	2399.1	.76890	49.934	111.62
16	S98T002036_D	1136.8	8.3506	2385.4	2.0458	51.523	107.55
17	S98T002036_A	1748.2	614.89	2973.6	609.44	653.64	736.27
18	S98T002036_X	1183.7	-56.924	2484.0	-25.233	125.79	116.32
19	S98T002036_AX	60953.	60310.	60625.	60533.	59053.	59928.
20	S98T002046	1087.8	15.819	2309.6	.63561	41.089	324.16
21	S98T002046_D	1089.9	10.717	2288.7	-.47076	40.231	322.62
22	ICSA	.02637	.03186	-.03581	.00235	.08861	-.01126
23	IC SAB	.04377	1.0026	-.01783	.01091	.07315	.00496
24	CCV	5.0149	4.9510	4.8818	5.0749	4.8063	4.9280
25	CCB	.01231	-.00557	.00123	.00256	.02499	.00928

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.8905	5.0171	.22936	5.0745	4.8325	9.7293
2	ICB	-.00109	-.00004	.00531	.00001	.00759	.00093
3	LLS	.19188	.02019	.01598	.02000	.40635	.45245
4	ICSA	-.02203	.00185	-.00489	.00088	-.01037	-.05353
5	IC SAB	-.02121	.00181	.01172	.00162	.00347	-.05513
6	S98T002032_L	-6.2280	-.13030	22.739	-1.2795	13.389	-4.5187
7	S98T002032	4.9950	.12244	4.7604	.15306	-.87489	16.044
8	S98T002032_D	1.4189	.12211	4.1153	-.26609	6.1807	23.440
9	S98T002032_A	574.15	590.99	28.514	598.15	580.42	1158.2
10	S98T002032_X	-7.5665	-.25862	30.556	-1.2594	68.481	10.495
11	S98T002032_AX	58472.	59646.	2646.3	59410.	59103.	113320.
12	CCV	4.9023	5.0245	.22724	5.0636	4.9792	9.7734
13	CCB	.00240	.00000	.00508	-.00020	.01105	-.00109
14	S98T002036_L	1.3154	.12266	3.1884	.00593	-2.1026	15.809
15	S98T002036	3.9549	.17275	.42036	-.00467	8.0676	23.581
16	S98T002036_D	.58520	.09686	.68136	-.14401	3.0812	22.587

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## Analysis Report

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#	Sample Name	Sm	Sr	Th	Ti	Tl	U
17	S98T002036_A	571.90	585.79	28.329	593.93	568.78	1164.6
18	S98T002036_X	-61.036	-1.0005	13.298	-6.7189	-1.7667	-224.52
19	S98T002036_AX	58996.	60113.	2621.5	59693.	59285.	114980.
20	S98T002046	.66450	.07271	4.7378	.15062	6.1996	8.2388
21	S98T002046_D	-4.9355	.02286	2.4983	-.40434	9.1507	-2.1322
22	ICSA	-.01551	.00176	.00487	.00092	-.03580	-.04179
23	ICCSAB	-.01706	.00180	.00728	.00137	-.03456	-.03844
24	CCV	4.9963	5.1063	.21531	5.1177	4.8687	9.9536
25	CCB	-.00243	-.00008	.00852	-.00041	.01314	-.01820

#	Sample Name	V	Y	Zn	Zr
1	ICV	5.0115	.00754	4.8075	4.8488
2	ICB	.00032	.00007	-.00004	-.00070
3	LLS	.09856	.00004	.02029	.01731
4	ICSA	-.00072	.00723	-.00419	-.00384
5	ICCSAB	.46591	.00746	.93256	-.00489
6	S98T002032_L	1.3981	.23741	2.6449	-1.7374
7	S98T002032	1.4089	.27577	1.3879	.30608
8	S98T002032_D	.97779	.17843	1.0407	-.01619
9	S98T002032_A	589.87	.92074	576.50	576.34
10	S98T002032_X	.80712	.46653	4.9752	-2.3329
11	S98T002032_AX	59026.	95.962	56138.	58908.
12	CCV	4.9829	.00720	4.7484	4.8311
13	CCB	-.00001	.00007	.00049	-.00038
14	S98T002036_L	1.9299	.69976	1.9133	.61500
15	S98T002036	1.4103	.31966	.80488	.81008
16	S98T002036_D	.46752	.17879	.22493	.24190
17	S98T002036_A	589.96	1.2477	580.88	575.06
18	S98T002036_X	-13.360	-3.6725	2.8733	-8.1483
19	S98T002036_AX	59221.	93.373	55898.	59284.
20	S98T002046	.48657	.04359	.86940	-.04791
21	S98T002046_D	-.63959	-.18749	1.0594	-.60126
22	ICSA	.00150	.00769	-.00363	-.00338
23	ICCSAB	.46498	.00785	.93350	-.00301
24	CCV	5.0222	.00705	4.7441	4.8863
25	CCB	-.00068	-.00014	.00070	-.00153

*DK*  
11-11-98

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File #: 981103 C.TYT

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## LABCORE Data Entry Template for Worklist# 25648

Analyst: DK Safo Instrument: ICP01 3 11-15-98 Book# 77B30Method: LA-505-151/161 Rev/Mod C-3 11-01-98Ensure dose rate at 30cm is  $\leq 50 \mu\text{R/hr}$   
prior to performing this analysis

Worklist Comment: ICP U-107 (DIRECT)

S	Type	Sample#	R	A	Test	Matrix	Group#	Project	
1	ICV				@ICP-QC	QC			
2	ICB				@ICP-QC	QC			
3	LLS				@ICP-QC	QC			
4	ICSA				@ICP-QC	QC			
5	ICSAB				@ICP-QC	QC			
6	SERDIL	S98T002236	0	D	@ICP-D01	LIQUID			
7	SAMPLE	S98T002236	0	D	@ICP-D01	LIQUID	98000359	U-107 (2)	
					Analytes Requested: AG-D-01, AL-D-01, AS-D-01, B-D-01, BA-D-01, BE-D-01, BI-D-01, CA-D-01, CD-D-01, CE-D-01, CO-D-01, CR-D-01, CU-D-01, FE-D-01, K-D-01, LA-D-01, LI-D-01, MG-D-01, MN-D-01, MO-D-01, NA-D-01, ND-D-01, NI-D-01, P-D-01, PB-D-01, S-D-01, SB-D-01, SE-D-01, SI-D-01, SM-D-01, SR-D-01, TI-D-01, TL-D-01, U-D-01, V-D-01, ZN-D-01, ZR-D-01				
8	DUP	S98T002236	0	D	@ICP-D01	LIQUID			
9	SPK	S98T002236	0	D	@ICP-D01	LIQUID			
					5640 (10 ppb) (10 ppb) DK 9-15-98				
10	CCV				@ICP-QC	QC			
11	CCB				@ICP-QC	QC			
12	SAMPLE	S98T002240	0	D	@ICP-D01	LIQUID	98000359	U-107 (2)	
					Analytes Requested: AG-D-01, AL-D-01, AS-D-01, B-D-01, BA-D-01, BE-D-01, BI-D-01, CA-D-01, CD-D-01, CE-D-01, CO-D-01, CR-D-01, CU-D-01, FE-D-01, K-D-01, LA-D-01, LI-D-01, MG-D-01, MN-D-01, MO-D-01, NA-D-01, ND-D-01, NI-D-01, P-D-01, PB-D-01, S-D-01, SB-D-01, SE-D-01, SI-D-01, SM-D-01, SR-D-01, TI-D-01, TL-D-01, U-D-01, V-D-01, ZN-D-01, ZR-D-01				

Data Entry Comments:

up loaded 12-3-98  
John Worell

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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A-0004-1

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## LABCORE Data Entry Template for Worklist# 25648

S Type	Sample#	R A	Test	Matrix	Group#	Project
13 DUP	S98T002240	0 D	@ICP-D01	LIQUID		
14 ICSA			@ICP-QC	QC		
15 IC SAB			@ICP-QC	QC		
16 CCV			@ICP-QC	QC		
17 CCB			@ICP-QC	QC		

Final page for worklist # 25648

DK *[Signature]* 11.03.98

Analyst Signature	Date	
S98T002236-L	.015-15-28	DF 3005
S98T002236	.015-15	601
S98T002236-D	.015-15	601
S98T002236-Q	.015-15	601
S98T002236-X	.015-15-19	6010
S98T002236-QX	.015-15-19	6010
S98T002240	.015-15	DF 601
S98T002240-D	.015-15	601

Analyst Signature	Date
-------------------	------

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

1231

HNF-1661 REV. 0

Analysis Report

Summary

Thu 12-03-98 02:43:06 PM

page 1

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981203C	ICP2	12/03/98	13:10	DKS	Q	CONC
2	ICB	981203C	ICP2	12/03/98	13:13	DKS	Q	CONC
3	LLS	981203C	ICP2	12/03/98	13:16	DKS	Q	CONC
4	ICSA	981203C	ICP2	12/03/98	13:19	DKS	Q	CONC
5	ICSAB	981203C	ICP2	12/03/98	13:21	DKS	Q	CONC
6	S98T002236_L	981203C	ICP2	12/03/98	13:25	DKS	S	CONC
7	S98T002236	981203C	ICP2	12/03/98	13:28	DKS	S	CONC
8	S98T002236_D	981203C	ICP2	12/03/98	13:31	DKS	S	CONC
9	S98T002236_A	981203C	ICP2	12/03/98	13:34	DKS	S	CONC
10	S98T002236_X	981203C	ICP2	12/03/98	13:39	DKS	S	CONC
11	S98T002236_AX	981203C	ICP2	12/03/98	13:42	DKS	S	CONC
12	CCV	981203C	ICP2	12/03/98	14:09	DKS	Q	CONC
13	CCB	981203C	ICP2	12/03/98	14:15	DKS	Q	CONC
14	S98T002240	981203C	ICP2	12/03/98	14:18	DKS	S	CONC
15	S98T002240_D	981203C	ICP2	12/03/98	14:21	DKS	S	CONC
16	ICSA	981203C	ICP2	12/03/98	14:24	DKS	Q	CONC
17	ICSAB	981203C	ICP2	12/03/98	14:27	DKS	Q	CONC
18	CCV	981203C	ICP2	12/03/98	14:30	DKS	Q	CONC
19	CCB	981203C	ICP2	12/03/98	14:40	DKS	Q	CONC

JK *[Signature]*

6.107

12-03-98

S98T002236

Worklist # 25648

S98T002240

$$S98T002236 \quad C_2 = 6.40 \text{ g} + 2 \frac{\text{ug}}{\text{ml}}$$

$$\text{Spk: } C_2 = \frac{\left(\frac{1218.3}{601}\right) - \left(\frac{639.57}{601}\right)}{1} \times 100 = 96.3\%$$

Post Spk:

$$AL = \frac{\left(\frac{78572}{6010}\right) - \left(\frac{21520}{6010}\right)}{10} \times 100 = 94.9\%$$

$$Na = \frac{\left(\frac{271620}{6010}\right) - \left(\frac{221810}{6010}\right)}{10} \times 100 = 82.9\%$$

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1232 TO 1235

1232



## HNF-1661 REV. 0

Analysis Report

Averages

Thu 12-03-98 02:43:06 PM

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#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.8954	4.8142	4.9928	4.9783	4.7702	5.0540
2	ICB	.00116	.00841	-.01040	.00331	.00006	.00013
3	LLS	.02129	.10091	.19632	.09892	.09703	.01051
4	ICSA	.00406	239.59	.02661	-.00900	.00049	.00032
5	ICSAB	.94655	239.78	.01218	-.01083	.45470	.47569
6	S98T002236_L	20.588	20992.	-22.794	65.407	.45480	.55207
7	S98T002236_	15.186	20830.	-29.997	71.371	.16439	.19720
8	S98T002236_D	14.659	20605.	-35.723	72.226	.15606	.22456
9	S98T002236_A	558.41	20943.	576.41	649.88	544.73	592.28
10	S98T002236_X	21.840	21520.	-80.448	73.896	-.09056	.55476
11	S98T002236_AX	53208.	78572.	60034.	58886.	59273.	59270.
12	CCV	4.9272	4.8706	5.0213	5.0322	4.8214	5.0755
13	CCB	.00428	.01146	-.00214	.00236	.00010	.00013
14	S98T002240	16.227	21223.	-42.757	69.662	.12130	.22458
15	S98T002240_D	16.587	21216.	-30.574	65.684	.18309	.19625
16	ICSA	.00355	240.33	.06014	-.01086	.00025	.00032
17	ICSAB	.95116	242.80	.01861	-.00744	.46097	.47799
18	CCV	4.9596	4.9246	5.0387	5.0791	4.8930	5.1287
19	CCB	.00089	.00466	.00254	-.00047	.00005	.00000

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	4.9295	5.0966	5.0296	4.9475	4.9097	4.9279
2	ICB	-.00132	.00599	.00011	.00433	.00125	.00007
3	LLS	.21374	.22733	.00891	.20047	.04292	.02060
4	ICSA	.00696	251.13	.00550	.01727	.00475	-.00113
5	ICSAB	-.00037	251.95	.93825	.00664	.46113	.46553
6	S98T002236_L	33.540	109.91	2.3636	29.333	7.2080	653.87
7	S98T002236_	6.8251	93.842	.30207	2.2242	1.5790	639.57
8	S98T002236_D	3.8174	84.708	.15988	1.1858	-.38942	633.77
9	S98T002236_A	602.04	697.25	594.61	586.83	577.85	1218.3
10	S98T002236_X	68.427	79.100	-6.6257	-26.416	-.86398	664.06
11	S98T002236_AX	59858.	59947.	59010.	59579.	59077.	59918.
12	CCV	5.0133	5.1079	5.0351	4.9791	4.9288	4.9476
13	CCB	.00864	.00707	.00023	.01035	.00062	.00036
14	S98T002240	13.962	91.814	.14992	3.0349	2.4082	633.14
15	S98T002240_D	6.4032	86.551	.78630	7.8553	1.8802	636.85
16	ICSA	-.01336	252.07	.00447	.01165	.00161	-.00205
17	ICSAB	.00996	251.45	.93229	.00695	.46088	.46559
18	CCV	5.0590	5.1450	5.0678	5.0682	4.9584	4.9785
19	CCB	.00865	.00469	-.00006	.00130	.00174	.00033

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.6584	.00671	4.7391	4.9386	4.9743	4.9076
2	ICB	-.00022	-.00008	.00578	-.20061	.00067	-.00010
3	LLS	.01746	.00027	.09567	.52176	.10013	.02109
4	ICSA	.00327	.01011	91.700	.40708	-.00230	.00273
5	ICSAB	.45855	.01116	91.647	.21184	-.00347	.96684
6	S98T002236_L	.62887	3.8333	7.5902	3340.9	2.9344	4.4152
7	S98T002236_	1.4215	.34832	6.9141	2814.6	.05456	2.5259

## HNF-1661 REV. 0

Analysis Report Averages Thu 12-03-98 02:43:06 PM page 3

#	Sample Name	Cu	Eu	Fe	K	La	Li
8	S98T002236_D	.73295	-.28168	8.0202	2675.2	-.15354	2.7791
9	S98T002236_A	541.93	1.2399	562.95	3463.7	582.56	558.59
10	S98T002236_X	.52379	-5.3214	8.5999	1830.8	-3.4248	.01058
11	S98T002236_AX	55858.	74.000	56627.	61887.	59445.	59049.
12	CCV	4.7124	.00627	4.7618	4.9678	5.0089	5.0714
13	CCB	-.00022	-.00009	.00653	.15641	.00112	-.00010
14	S98T002240	1.8985	.00369	6.3992	2924.8	.09274	.25230
15	S98T002240_D	1.8840	.03287	7.0201	3061.9	.72509	.37829
16	ICSA	.00287	.00828	91.789	.12619	-.00381	.00273
17	ICSAB	.46471	.01468	91.880	.28016	-.00370	1.0016
18	CCV	4.7702	.00664	4.7954	5.1186	5.0848	5.1496
19	CCB	.00038	-.00044	.00548	.00204	-.00002	.00000

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.0629	4.8449	4.9817	4.8675	4.8362	4.9150
2	ICB	.00250	-.00024	-.00016	.02870	-.00042	.00058
3	LLS	.20834	.01967	.09815	.20035	.19981	.04089
4	ICSA	245.47	-.00503	-.01538	188.67	.00303	-.00538
5	ICSAB	245.43	.43845	-.01641	188.15	.00329	.91221
6	S98T002236_L	41.288	1.3847	84.495	211950.	5.1386	17.263
7	S98T002236	2.2318	.89837	82.761	207150.	.50242	16.267
8	S98T002236_D	4.0704	1.2033	82.264	205440.	-1.2039	14.012
9	S98T002236_A	599.05	560.13	674.81	199990	565.03	591.33
10	S98T002236_X	-17.734	-1.7208	71.441	221810.	-7.2408	48.097
11	S98T002236_AX	60873.	58775.	59252.	271620.	57860.	59133.
12	CCV	5.1383	4.8522	5.0119	5.0157	4.8810	4.9119
13	CCB	.01051	-.00015	-.00049	.04542	.00025	.00729
14	S98T002240	10.825	1.4800	83.851	208680.	2.3657	13.359
15	S98T002240_D	8.5837	1.5142	84.053	207140.	1.9901	15.068
16	ICSA	246.28	-.00513	-.01818	188.68	.00011	.00207
17	ICSAB	248.17	.43857	-.01856	192.99	.00384	.91351
18	CCV	5.1676	4.9017	5.0540	5.1254	4.9519	4.9389
19	CCB	.00180	-.00033	-.00199	.04980	-.00010	.00364

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	4.9825	4.9756	4.7845	5.0246	4.8120	5.1622
2	ICB	.01716	-.00567	.01897	.00698	.00903	-.00224
3	LLS	.40627	.20702	.20208	.10417	.19936	Q.13279
4	ICSA	.04422	.03831	-.01962	.01724	.06091	-.00823
5	ICSAB	.04437	1.0065	-.01299	.01565	.08042	-.00730
6	S98T002236_L	1055.5	26.521	2310.1	7.4970	80.532	154.22
7	S98T002236	1001.3	9.5621	2311.5	.37290	30.914	140.29
8	S98T002236_D	1009.1	-1.1802	2255.3	3.7775	39.948	158.76
9	S98T002236_A	1595.8	606.28	2843.8	604.47	662.23	781.81
10	S98T002236_X	1023.1	-.69306	2315.0	18.492	109.43	184.83
11	S98T002236_AX	60282.	59716.	60406.	59775.	58206.	61068.
12	CCV	4.9620	4.9796	4.8509	5.0642	4.8307	5.1933
13	CCB	.01449	-.00060	.00887	.00084	.00935	-.00106
14	S98T002240	1031.8	34.317	2311.2	4.4442	34.268	114.44
15	S98T002240_D	1034.5	29.767	2313.7	1.1982	47.335	122.02

## HNF-1661 REV. 0

Analysis Report

Averages

Thu 12-03-98 02:43:06 PM

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#	Sample Name	P	Pb	S	Sb	Se	Si
16	ICSA	.05272	.02404	-.03771	.00546	.08860	-.00414
17	ICSAB	.03960	1.0003	-.02312	.00465	.06915	-.00773
18	CCV	5.0622	5.0141	4.8659	5.1027	4.8989	5.2325
19	CCB	.01654	.00275	.00637	.00806	.00220	-.00508

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.8258	4.8527	.20009	5.0366	4.7354	9.5368
2	ICB	-.00368	-.00004	-.00147	-.00047	.00318	-.00545
3	LLS	.19665	.01988	.00419	.02028	.41173	.48351
4	ICSA	-.01714	.00183	.00807	.00186	-.01073	-.00555
5	ICSAB	-.01344	.00185	.00725	.00210	.01873	-.00236
6	S98T002236_L	27.185	.25147	3.2055	.69420	54.653	110.47
7	S98T002236	-1.0132	.10194	-.47228	-.00787	1.0299	8.9713
8	S98T002236_D	-6.6691	-.00279	-.74021	-.29111	-7.5643	-1.8962
9	S98T002236_A	560.04	564.58	29.702	588.40	546.01	1128.2
10	S98T002236_X	-61.442	-.78065	-39.895	-2.9361	75.614	-196.03
11	S98T002236_AX	57764.	58926.	2413.9	59338.	58525.	112900.
12	CCV	4.8691	4.9009	.19037	5.0819	4.7274	9.6405
13	CCB	-.00229	-.00004	.00540	-.00021	.00567	-.00023
14	S98T002240	-2.1144	.04925	-.99706	.04918	11.804	6.1697
15	S98T002240_D	-2.3989	.07540	2.5912	.27952	-4.8038	12.265
16	ICSA	-.01480	.00185	-.00184	.00113	.03528	-.00654
17	ICSAB	-.01732	.00191	.00073	.00160	-.00100	.00168
18	CCV	4.9580	4.9660	.20129	5.1278	4.8043	9.7922
19	CCB	-.00874	-.00008	-.00052	.00000	.00678	-.01606

#	Sample Name	V	Y	Zn	Zr
1	ICV	4.9295	.00778	4.6704	4.8103
2	ICB	-.00016	.00000	.00013	.00011
3	LLS	.09875	.00042	.01933	.01938
4	ICSA	.00110	.00752	-.00429	-.00363
5	ICSAB	.46383	.00768	.92337	-.00369
6	S98T002236_L	5.5793	2.3081	5.7481	5.2800
7	S98T002236	.19464	-.00381	3.3292	.35194
8	S98T002236_D	-.96537	-.28180	2.9743	-.75208
9	S98T002236_A	580.20	1.1219	564.19	566.82
10	S98T002236_X	-14.675	-3.2137	3.6914	-4.4589
11	S98T002236_AX	58812.	91.906	55693.	58795.
12	CCV	4.9526	.00758	4.6848	4.8279
13	CCB	-.00072	.00007	.00062	-.00040
14	S98T002240	-.12327	-.09682	1.9698	.96382
15	S98T002240_D	-.14326	-.00521	2.4233	-.45016
16	ICSA	.00176	.00760	-.00337	-.00259
17	ICSAB	.46348	.00728	.92290	-.00354
18	CCV	4.9984	.00751	4.7019	4.8898
19	CCB	-.00121	-.00022	.00020	-.00057

*JK*  
12-03-98

File #: 981112B.TXT

HNF-1661 REV. 0

Page: 1

08/14/98 15:21  
A-0004-1

# LABCORE Data Entry Template for Worklist# 25649

Analyst: BK Sato Instrument: ICP01-2 # 7-15-98 Book# 75B48B

Method: LA-505-151/161 Rev/Mod C-3 # 7-15-98

Ensure dose rate of 30 c/h is < 50 urem/hr prior to performing this analysis.

Worklist Comment: ICP U-107 (DIRECT)

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	ICV		@ICP-QC	QC		
2	ICB		@ICP-QC	QC		
3	LLS		@ICP-QC	QC		
4	ICSA		@ICP-QC	QC		
5	ICSAB		@ICP-QC	QC		
6	SAMPLE	S98T002244	0 D	@ICP-D01	LIQUID	98000359 U-107 (2)
Analytes Requested: AG-D-01, AL-D-01, AS-D-01, B-D-01, BA-D-01, BE-D-01, BI-D-01, CA-D-01, CD-D-01, CE-D-01, CO-D-01, CR-D-01, CU-D-01, FE-D-01, K-D-01, LA-D-01, LI-D-01, MG-D-01, MN-D-01, MO-D-01, NA-D-01, ND-D-01, NI-D-01, P-D-01, PB-D-01, S-D-01, SB-D-01, SE-D-01, SI-D-01, SM-D-01, SR-D-01, TI-D-01, TL-D-01, U-D-01, V-D-01, ZN-D-01, ZR-D-01						
7	DUP	S98T002244	0 D	@ICP-D01	LIQUID	
8	SERDIL	S98T002248	0 D	@ICP-D01	LIQUID	
9	SAMPLE	S98T002248	0 D	@ICP-D01	LIQUID	98000359 U-107 (2)
Analytes Requested: AG-D-01, AL-D-01, AS-D-01, B-D-01, BA-D-01, BE-D-01, BI-D-01, CA-D-01, CD-D-01, CE-D-01, CO-D-01, CR-D-01, CU-D-01, FE-D-01, K-D-01, LA-D-01, LI-D-01, MG-D-01, MN-D-01, MO-D-01, NA-D-01, ND-D-01, NI-D-01, P-D-01, PB-D-01, S-D-01, SB-D-01, SE-D-01, SI-D-01, SM-D-01, SR-D-01, TI-D-01, TL-D-01, U-D-01, V-D-01, ZN-D-01, ZR-D-01						
10	DUP	S98T002248	0 D	@ICP-D01	LIQUID	
11	SPK	S98T002248	0 D	@ICP-D01	LIQUID	
12	CCV			@ICP-QC	QC	

Data Entry Comments:

uploaded 11-12-98  
John Warrall

Validated by:  
Sal M. Poy

11/16/98

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

08/14/98 15:21  
A-0004-I

HNF-1661 REV. 0

Page: 2

## LABCORE Data Entry Template for Worklist# 25649

S Type	Sample#	R A	Test	Matrix	Group#	Project
13 CCB			@ICP-QC	QC		
14 SERDIL	S98T002252	0 D	@ICP-D01	LIQUID		
15 SAMPLE	S98T002252	0 D	@ICP-D01	LIQUID	98000359	U-107 (2)
	<b>Analytes Requested:</b>					
			AG-D-01	AL-D-01	AS-D-01	B-D-01
			BE-D-01	BI-D-01	CA-D-01	CD-D-01
			CE-D-01	CO-D-01	CR-D-01	CU-D-01
			FE-D-01	K-D-01	LA-D-01	LI-D-01
			MG-D-01	MN-D-01	MO-D-01	NA-D-01
			ND-D-01	NI-D-01	P-D-01	PB-D-01
			SE-D-01	SI-D-01	SM-D-01	SR-D-01
			TI-D-01	TL-D-01	U-D-01	V-D-01
			ZN-D-01	ZR-D-01		
16 DUP	S98T002252	0 D	@ICP-D01	LIQUID		
17 SPK (17ppm)	S98T002252	0 D	@ICP-D01	LIQUID		
	5ppm of X 5ppm of Y (10 ppm) JK 9-15-98					
18 ICSA			@ICP-QC	QC		
19 ICSAB			@ICP-QC	QC		
20 CCV			@ICP-QC	QC		
21 CCB			@ICP-QC	QC		

Final page for worklist # 25649

DK JD  
11-12-98

Analyst Signature	Date
5987002244	025-15
5987002244-D	025-15
5987002248-L	025-15-2-8
5987002248	025-15
5987002248-D	025-15
5987002248-Q	025-15
5987002248-Y	025-15-1-9
5987002248-QY	025-15-1-9

Analyst Signature	Date
5987002252-L	025-15-2-8
5987002252	025-15
5987002252-D	025-15
5987002252-Q	025-15
5987002252-X	025-15-1-9
5987002252-QX	025-15-1-9

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

1237

598T002248

$$C_2 = 5.08 e + 2 \frac{\mu\text{g}}{\text{ml}}$$

$$\text{Spike: } C_2 = \frac{\left(\frac{1059.1}{601}\right) - \left(\frac{507.81}{601}\right)}{1} \times 100 = 91.7\%$$

Post Spike:

$$Al = \frac{\left(\frac{86297}{6010}\right) - \left(\frac{28628}{6010}\right)}{10} \times 100 = 96.0\%$$

$$Na = \frac{\left(\frac{295920}{6010}\right) - \left(\frac{242040}{6010}\right)}{10} \times 100 = 89.7\%$$

598T002252

$$C_2 = 7.42 e + 2 \frac{\mu\text{g}}{\text{ml}}$$

$$\text{Spike: } C_2 = \frac{\left(\frac{1215.7}{601}\right) - \left(\frac{742.41}{601}\right)}{1} \times 100 = 78.8\%$$

Post Spike:

$$Al = \frac{\left(\frac{94401}{6010}\right) - \left(\frac{36087}{6010}\right)}{10} \times 100 = 97.0\%$$

$$Na = \frac{\left(\frac{300250}{6010}\right) - \left(\frac{244050}{6010}\right)}{10} \times 100 = 93.5\%$$

## HNF-1661 REV. 0

Analysis Report

Summary

Thu 11-12-98 02:35:03 PM

page 1

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981112B	ICP2	11/12/98	12:43	DKS	Q	CONC
2	ICB	981112B	ICP2	11/12/98	12:46	DKS	Q	CONC
3	LLS	981112B	ICP2	11/12/98	12:49	DKS	Q	CONC
4	ICSA	981112B	ICP2	11/12/98	12:52	DKS	Q	CONC
5	ICSAB	981112B	ICP2	11/12/98	12:55	DKS	Q	CONC
6	S98T002244	981112B	ICP2	11/12/98	12:58	DKS	S	CONC
7	S98T002244_D	981112B	ICP2	11/12/98	13:02	DKS	S	CONC
8	S98T002248_L	981112B	ICP2	11/12/98	13:05	DKS	S	CONC
9	S98T002248	981112B	ICP2	11/12/98	13:08	DKS	S	CONC
10	S98T002248_D	981112B	ICP2	11/12/98	13:11	DKS	S	CONC
11	S98T002248_A	981112B	ICP2	11/12/98	13:19	DKS	S	CONC
12	S98T002248_X	981112B	ICP2	11/12/98	13:26	DKS	S	CONC
13	S98T002248_AX	981112B	ICP2	11/12/98	13:30	DKS	S	CONC
14	CCV	981112B	ICP2	11/12/98	13:46	DKS	Q	CONC
15	CCB	981112B	ICP2	11/12/98	13:49	DKS	Q	CONC
16	S98T002252_L	981112B	ICP2	11/12/98	13:52	DKS	S	CONC
17	S98T002252	981112B	ICP2	11/12/98	13:55	DKS	S	CONC
18	S98T002252_D	981112B	ICP2	11/12/98	13:58	DKS	S	CONC
19	S98T002252_S	981112B	ICP2	11/12/98	14:01	DKS	S	CONC
20	S98T002252_X	981112B	ICP2	11/12/98	14:07	DKS	S	CONC
21	S98T002252_AX	981112B	ICP2	11/12/98	14:10	DKS	S	CONC
22	ICSA	981112B	ICP2	11/12/98	14:22	DKS	Q	CONC
23	ICSAB	981112B	ICP2	11/12/98	14:25	DKS	Q	CONC
24	CCV	981112B	ICP2	11/12/98	14:28	DKS	Q	CONC
25	CCB	981112B	ICP2	11/12/98	14:31	DKS	Q	CONC

JK

11-12-98

Work/15f #25649

6-107

5987002244

5987002248

5987002252

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1239 TO 1243.

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Analysis Report

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#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.9308	4.9265	5.0908	5.0010	4.9100	5.0163
2	ICB	-.00113	.00169	.00409	.00046	.00006	.00008
3	LLS	.02060	.10756	.20805	.10385	.09827	.01038
4	ICSA	.00271	243.47	-.02249	-.00748	.00035	.00026
5	ICSAB	.93273	241.53	.00087	-.00762	.45476	.47059
6	S98T002244	15.433	22334.	-34.475	74.252	.15206	.24495
7	S98T002244_D	14.827	22110.	-30.610	76.793	.05285	.32436
8	S98T002248_L	16.231	28588.	-29.927	84.692	.27665	.54159
9	S98T002248	16.046	27830.	-41.097	82.727	.27950	.29895
10	S98T002248_D	16.204	27459.	-43.194	81.880	.23608	.29781
11	S98T002248_A	569.65	27419.	575.26	668.44	561.26	590.86
12	S98T002248_X	15.654	28628.	-8.5893	110.08	.36108	.54018
13	S98T002248_AX	55234.	86297.	59628.	59680.	59076.	59101.
14	CCV	4.9196	4.9412	5.1128	5.0250	4.9755	5.0468
15	CCB	.00025	.00444	.00356	.00140	.00013	.00013
16	S98T002252_L	17.637	35602.	-62.186	100.27	.70336	.40413
17	S98T002252	16.164	35241.	-42.900	97.743	.57870	.35314
18	S98T002252_D	16.877	36600.	-53.521	101.11	.45587	.37996
19	S98T002252_S	551.65	37296.	578.39	690.50	571.08	595.75
20	S98T002252_X	20.301	36086.	31.396	81.873	1.1089	1.0767
21	S98T002252_AX	57131.	94401.	60070.	60555.	60477.	59794.
22	ICSA	.00270	244.09	-.00683	-.00731	.00026	.00013
23	ICSAB	.93779	241.27	.00916	-.00927	.45719	.47228
24	CCV	4.9497	4.9637	5.1280	5.1053	5.0251	5.0860
25	CCB	-.00077	.00274	-.00373	.00000	.00005	.00008

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	4.9636	4.9070	4.9773	5.0156	4.9125	4.8734
2	ICB	-.02435	.00593	-.00011	.00000	.00206	.00068
3	LLS	.18988	.21807	.01160	.20561	.04166	.02007
4	ICSA	-.01803	247.83	.00670	.00568	.00118	-.00122
5	ICSAB	-.03695	247.13	.91925	.00244	.45310	.45595
6	S98T002244	-13.656	83.347	.69372	2.1156	1.0091	643.54
7	S98T002244_D	8.4555	84.329	.60439	.19376	1.8147	638.31
8	S98T002248_L	-68.796	114.92	2.1422	2.9055	1.7957	525.17
9	S98T002248	-.47099	102.18	1.4144	5.0453	.50356	507.81
10	S98T002248_D	-8.5540	96.949	1.4599	5.8330	1.2315	500.77
11	S98T002248_A	569.51	684.90	589.62	585.58	579.87	1059.1
12	S98T002248_X	-229.82	93.528	5.6432	13.419	6.5115	524.81
13	S98T002248_AX	60065.	59775.	58624.	59306.	58557.	59652.
14	CCV	4.9136	4.8783	4.9665	5.0522	4.9156	4.8609
15	CCB	-.00380	.00731	.00089	-.00096	.00158	-.00033
16	S98T002252_L	-89.966	152.01	5.1901	18.483	5.1048	764.63
17	S98T002252	2.8321	149.19	2.1595	.22302	.93846	742.41
18	S98T002252_D	-11.831	131.86	1.9966	.01704	.49772	619.60
19	S98T002252_S	578.28	725.80	592.67	590.72	581.19	1215.7
20	S98T002252_X	-131.90	152.82	7.4032	40.485	11.576	774.49
21	S98T002252_AX	60869.	60019.	59229.	60365.	59332.	60381.
22	ICSA	-.00679	249.80	.00675	-.00224	.00013	-.00221
23	ICSAB	-.02378	250.48	.92835	.00812	.46003	.45972
24	CCV	5.0023	4.9283	5.0153	5.0877	4.9534	4.9000

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#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
25	CCB	-.01310	.00523	.00020	-.00133	-.00013	-.00039

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.7410	.00675	4.8209	5.0475	4.9741	5.0926
2	ICB	.00164	-.00021	-.00063	.08766	-.00067	-.00030
3	LLS	.01804	-.00076	.09614	.45768	.10143	.02139
4	ICSA	.00352	.02899	91.255	-.00409	-.00367	.00143
5	ICSAB	.46515	.03071	90.617	.17536	-.00397	1.0008
6	S98T002244	1.5535	-.34603	6.5641	3059.7	-.04422	-.18400
7	S98T002244_D	1.8187	-.36100	5.4916	3036.9	-.57659	-.12300
8	S98T002248_L	6.0470	-1.0754	10.676	3660.3	.22977	-1.5375
9	S98T002248	2.0647	.11682	9.6715	3490.3	.60173	-.06164
10	S98T002248_D	2.5793	-.05673	9.8473	3450.0	.69722	.12286
11	S98T002248_A	552.09	.85420	569.84	3973.3	582.24	584.62
12	S98T002248_X	2.7713	-3.5133	6.5178	3658.5	-3.6877	-1.8413
13	S98T002248_AX	5551.7	89.622	5651.4	6246.4	59160.	59792.
14	CCV	4.7858	.00640	4.8294	4.9501	5.0156	5.1813
15	CCB	.00125	-.00001	-.00039	.04635	-.00092	.00000
16	S98T002252_L	2.7141	-.14676	147.98	4279.8	2.6908	-.30829
17	S98T002252	4.0319	.22068	150.21	3905.8	1.3168	-.06215
18	S98T002252_D	4.1717	-.11206	103.11	4005.5	.92217	.12292
19	S98T002252_S	560.85	.78368	668.72	4657.2	589.87	587.33
20	S98T002252_X	11.821	-5.3593	155.58	4428.5	5.7433	-3.0683
21	S98T002252_AX	5667.4	87.479	57208.	6333.4	6028.4	60653.
22	ICSA	.00322	.02764	91.730	.10162	-.00502	.00194
23	ICSAB	.46207	.02692	91.285	.19127	-.00376	.98770
24	CCV	4.8155	.00692	4.8487	5.0077	5.0545	5.1870
25	CCB	.00052	-.00095	.00078	-.07759	-.00126	-.00092

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.0489	4.8482	4.9738	5.1766	4.8587	4.8350
2	ICB	-.00464	.00009	.00285	.01765	.00210	-.00022
3	LLS	.20909	.01965	.10126	.22035	.20022	.04085
4	ICSA	249.90	-.00576	-.01255	193.27	.00063	-.00829
5	ICSAB	247.53	.43175	-.01579	192.46	.00356	.89248
6	S98T002244	3.5847	2.6007	87.996	221550.	.89312	13.523
7	S98T002244_D	-1.1153	1.8689	87.526	218420.	1.0858	14.463
8	S98T002248_L	15.112	29.748	111.62	239360.	12.820	13.239
9	S98T002248	2.5318	29.302	104.42	227880.	.38203	18.280
10	S98T002248_D	6.7370	18.573	103.09	224880.	2.3201	20.655
11	S98T002248_A	586.12	569.71	690.29	220670.	566.48	586.48
12	S98T002248_X	26.993	29.419	107.78	242040.	4.5757	23.156
13	S98T002248_AX	61271.	58858.	58812.	295920.	57488.	58693.
14	CCV	5.0679	4.8516	4.9627	5.2274	4.9002	4.8568
15	CCB	-.00236	.00008	.00634	.01199	.00086	-.00441
16	S98T002252_L	13.381	81.270	120.25	237340.	8.3536	25.794
17	S98T002252	7.3170	80.616	120.46	229720.	2.5975	26.838
18	S98T002252_D	6.4639	59.866	126.19	238700.	1.7920	27.929
19	S98T002252_S	589.90	610.91	722.73	239290.	574.59	592.59
20	S98T002252_X	46.916	81.341	138.23	244050.	24.294	17.033

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#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
21	S98T002252_AX	62145.	59419.	59459.	300250.	58533.	59158.
22	ICSA	250.47	-.00554	-.01589	193.17	.00051	-.01182
23	ICSAB	247.70	.43598	-.01357	190.03	.00026	.89533
24	CCV	5.0896	4.8885	5.0152	5.2506	4.9265	4.8883
25	CCB	-.00290	-.00028	.00283	.02506	.00019	-.00202

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	4.8724	4.9138	4.8014	4.9924	4.6665	4.8628
2	ICB	.00849	.00174	-.00046	-.00496	-.00656	-.00098
3	LLS	.38135	.20841	.20856	.08974	.19223	Q.16383
4	ICSA	.02768	.01619	-.01384	.00414	.02734	-.01205
5	ICSAB	.02902	.97094	-.02226	.00297	.02731	-.01192
6	S98T002244	1034.4	10.034	2402.0	-2.0880	24.784	112.28
7	S98T002248_D	1021.8	15.449	2355.2	-.78078	34.615	111.64
8	S98T002248_X	1105.9	37.475	2510.0	-7.7914	15.388	133.21
9	S98T002248	1110.1	15.883	2452.4	5.0859	32.819	128.75
10	S98T002248_D	1106.3	8.6883	2410.1	-2.6547	32.740	126.25
11	S98T002248_A	1692.5	582.25	2911.8	591.51	619.05	706.81
12	S98T002248_X	1216.5	-7.7030	2460.7	-39.121	18.572	123.98
13	S98T002248_AX	5995.4	59520.	60663.	59386.	57808.	59142.
14	CCV	4.8818	4.8805	4.7984	5.0005	4.7199	4.8595
15	CCB	-.00039	-.00205	.00954	-.00264	-.00832	.00201
16	S98T002252_L	1245.5	49.918	2214.8	-15.133	30.232	240.47
17	S98T002252	1240.4	35.884	2155.4	.82316	30.163	236.27
18	S98T002252_D	1172.0	30.286	2226.1	.53913	38.659	235.14
19	S98T002252_S	1852.3	611.30	2794.9	600.23	637.28	830.83
20	S98T002252_X	1269.8	57.272	2192.7	-25.646	17.843	264.77
21	S98T002252_AX	60305.	60025.	60564.	60144.	58456.	61661.
22	ICSA	.02908	.01723	-.01813	.00700	.03335	.00264
23	ICSAB	.03665	.98652	-.01526	.00247	.03150	.00017
24	CCV	4.9794	4.9508	4.8392	5.0369	4.7336	4.9106
25	CCB	.00887	-.01181	.00666	-.00812	-.00992	.00514

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.8911	4.9884	.22283	5.0465	4.7137	9.7034
2	ICB	-.00069	.00000	.00043	.00045	.00036	-.00767
3	LLS	.19019	.01993	.01366	.02067	.40926	.44268
4	ICSA	-.02714	.00188	.00910	.00136	-.01316	-.01943
5	ICSAB	-.02741	.00195	-.00481	.00243	.00946	-.02087
6	S98T002244	-5.1919	.04934	2.1589	.27970	3.0916	-14.578
7	S98T002244_D	-4.7774	.04833	-2.7853	.25584	16.004	-3.4440
8	S98T002248_L	-15.479	.12734	8.0545	1.3890	32.087	-44.516
9	S98T002248	-.43705	.22576	2.6335	.00892	-1.5414	.82932
10	S98T002248_D	-2.5893	.22549	.17893	.26546	.25192	6.0064
11	S98T002248_A	567.53	580.99	27.235	590.55	549.82	1129.5
12	S98T002248_X	-25.922	.00751	17.844	4.1674	-30.431	-122.63
13	S98T002248_AX	57560.	58655.	2579.1	58841.	58223.	112190.
14	CCV	4.9369	5.0241	.22074	5.0695	4.7310	9.8126
15	CCB	.00106	.00000	.00254	.00068	.00512	-.00093
16	S98T002252_L	3.1189	.75890	5.1904	1.3797	35.914	5.6745

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Analysis Report

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#	Sample Name	Sm	Sr	Th	Ti	Tl	U
17	S98T002252	- .49893	.78408	1.5624	.95075	-.26041	10.272
18	S98T002252_D	-2.2476	.60673	-.15081	.53696	-3.0800	4.8626
19	S98T002252_S	573.79	588.17	22.375	595.01	551.12	1146.1
20	S98T002252_X	-60.351	.01352	47.776	5.6358	12.473	-214.47
21	S98T002252_AX	58796.	59685.	2624.1	59810.	58408.	114630.
22	ICSA	-.02552	.00190	.00064	.00133	-.00163	-.02900
23	ICSAB	-.02172	.00183	.00356	.00203	-.03370	-.03587
24	CCV	4.9814	5.0582	.21606	5.1041	4.8316	9.8898
25	CCB	-.00979	-.00008	-.00200	-.00023	-.00849	-.03451

#	Sample Name	V	Y	Zn	Zr
1	ICV	4.9437	.00708	4.6973	4.8006
2	ICB	-.00051	-.00015	.00043	-.00033
3	LLS	.09692	-.00026	.02066	.01717
4	ICSA	-.00235	.00674	-.00357	-.00538
5	ICSAB	.45519	.00706	.90933	-.00380
6	S98T002244	-.93224	-.37061	.95648	-.94046
7	S98T002244_D	-.73020	-.28114	1.0248	-.39816
8	S98T002248_L	-1.6567	-.45209	5.3749	-1.5567
9	S98T002248	.16265	-.04745	4.0882	-.08200
10	S98T002248_D	-.25617	-.09675	3.3169	-.08770
11	S98T002248_A	581.51	.79168	568.43	567.30
12	S98T002248_X	-7.2663	-1.3609	2.1914	-6.8059
13	S98T002248_AX	58329.	94.093	55598.	58227.
14	CCV	4.9505	.00687	4.6744	4.8263
15	CCB	.00050	.00007	.00007	.00011
16	S98T002252_L	-.21916	.23308	9.5759	1.3553
17	S98T002252	-.00905	.08983	8.7366	.33891
18	S98T002252_D	-.40870	-.09626	7.3272	-.26545
19	S98T002252_S	584.75	.78465	571.89	573.51
20	S98T002252_X	-11.426	-2.7349	9.4690	-10.815
21	S98T002252_AX	59129.	93.529	55872.	59284.
22	ICSA	-.00196	.00698	-.00423	-.00480
23	ICSAB	.46087	.00722	.91944	-.00388
24	CCV	4.9889	.00684	4.7096	4.8612
25	CCB	-.00184	-.00045	.00022	-.00104

JK  
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08/31/98 13:54  
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File #: 981027B.TXT

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## LABCORE Data Entry Template for Worklist# 25964

Analyst: JK 5/10 Instrument: ICPO1.2 All 9/15-98

Book# 75848B

Method: LA-505-151/161 Rev/Mod C-13 10-27-98

Ensure dose rate of 30 cpm  $\leq$  30 mrem/hr  
prior to performing this analysis

Worklist Comment: ICP U-107 (FUSION)

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	ICV		@ICP-QC	QC		
2	ICB		@ICP-QC	QC		
3	LIS		@ICP-QC	QC		
4	ICSA		@ICP-QC	QC		
5	ICSAB		@ICP-QC	QC		
6	PREPBLKTJA		@ICP-F01	SOLID		
7	SAMPLE	S98T002335	0 F	@ICP-F01	SOLID	98000358 U-107 (2)
		<b>Analytes Requested:</b>				
		AG-F-01	, AL-F-01	, AS-F-01	, B-F-01	, BA-F-01
		BE-F-01	, BI-F-01	, CA-F-01	, CD-F-01	, CE-F-01
		CO-F-01	, CR-F-01	, CU-F-01	, FE-F-01	, LA-F-01
		LI-F-01	, MG-F-01	, MN-F-01	, MO-F-01	, NA-F-01
		ND-F-01	, P-F-01	, PB-F-01	, S-F-01	, SB-F-01
		SE-F-01	, SI-F-01	, SM-F-01	, SR-F-01	, TI-F-01
		TL-F-01	, U-F-01	, V-F-01	, ZN-F-01	, ZR-F-01
8	DUP	S98T002335	0 F	@ICP-F01	SOLID	
9	SAMPLE	S98T002336	0 F	@ICP-F01	SOLID	98000358 U-107 (2)
		<b>Analytes Requested:</b>				
		AG-F-01	, AL-F-01	, AS-F-01	, B-F-01	, BA-F-01
		BE-F-01	, BI-F-01	, CA-F-01	, CD-F-01	, CE-F-01
		CO-F-01	, CR-F-01	, CU-F-01	, FE-F-01	, LA-F-01
		LI-F-01	, MG-F-01	, MN-F-01	, MO-F-01	, NA-F-01
		ND-F-01	, P-F-01	, PB-F-01	, S-F-01	, SB-F-01
		SE-F-01	, SI-F-01	, SM-F-01	, SR-F-01	, TI-F-01
		TL-F-01	, U-F-01	, V-F-01	, ZN-F-01	, ZR-F-01
10	DUP	S98T002336	0 F	@ICP-F01	SOLID	
11	SAMPLE	S98T002343	0 F	@ICP-F01	SOLID	98000358 U-107 (2)
		<b>Analytes Requested:</b>				
		AG-F-01	, AL-F-01	, AS-F-01	, B-F-01	, BA-F-01
		BE-F-01	, BI-F-01	, CA-F-01	, CD-F-01	, CE-F-01
		CO-F-01	, CR-F-01	, CU-F-01	, FE-F-01	, LA-F-01
		LI-F-01	, MG-F-01	, MN-F-01	, MO-F-01	, NA-F-01
		ND-F-01	, NI-F-01	, P-F-01		

Data Entry Comments:

up labeled 10-28-98  
John H. HowellValidated by:  
Saul M. Pary  
10/28/98

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

1244

HNF-1661 REV. 0

08/31/98 13:54


A-0004-1

Page: 2

## LABCORE Data Entry Template for Worklist# 25964

S Type	Sample#	R A	Test	Matrix	Group#	Project
				PB-F-01 , S-F-01 , SE-F-01 , SI-F-01 , SM-F-01 , SR-F-01 , TI-F-01 , TL-F-01 , U-F-01 , V-F-01 , ZN-F-01 , ZR-F-01		
12 DUP	S98T002343	0 F	@ICP-F01	SOLID		
13 ICSA			@ICP-QC	QC		
14 ICSAB			@ICP-QC	QC		
15 CCV			@ICP-QC	QC		
16 CCB			@ICP-QC	QC		

### Final page for worklist # 25964

JK  10-27-98

Analyst Signature	Date
<i>[Signature]</i>	10-25-10
5987002335	10-25-10
5987002335-D	10-25-10
5987002336	10-25-10
5987002336-D	10-25-10
5987002343	10-25-10
5987002343-D	10-25-10

Analyst Signature	Date

Data Entry Comments:

---



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S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

1245

HNF-1661 REV. 0

Analysis Report

Summary

Tue 10-27-98 02:01:34 PM

page 1

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981027B	ICP2	10/27/98	13:12	DKS	Q	CONC
2	ICB	981027B	ICP2	10/27/98	13:15	DKS	Q	CONC
3	LLS	981027B	ICP2	10/27/98	13:18	DKS	Q	CONC
4	ICSA	981027B	ICP2	10/27/98	13:21	DKS	Q	CONC
5	ICSAB	981027B	ICP2	10/27/98	13:23	DKS	Q	CONC
6	PREPBLKTJA	981027B	ICP2	10/27/98	13:27	DKS	Q	CONC
7	S98T002335	981027B	ICP2	10/27/98	13:30	DKS	S	CONC
8	S98T002335_D	981027B	ICP2	10/27/98	13:33	DKS	S	CONC
9	S98T002336	981027B	ICP2	10/27/98	13:36	DKS	S	CONC
10	S98T002336_D	981027B	ICP2	10/27/98	13:39	DKS	S	CONC
11	S98T002343	981027B	ICP2	10/27/98	13:42	DKS	S	CONC
12	S98T002343_D	981027B	ICP2	10/27/98	13:45	DKS	S	CONC
13	ICSA	981027B	ICP2	10/27/98	13:49	DKS	Q	CONC
14	ICSAB	981027B	ICP2	10/27/98	13:52	DKS	Q	CONC
15	CCV	981027B	ICP2	10/27/98	13:55	DKS	Q	CONC
16	CCB	981027B	ICP2	10/27/98	13:58	DKS	Q	CONC

*DK*  
*10-27-98*  
 Worklist #25964

6.107  
 598T002335  
 598T002336  
 598T002343

S98T002335

$$\text{AL} = 49.466 \frac{\mu\text{g}}{\text{ml}} \times \frac{1}{2.0296 \frac{\text{g}}{\text{L}} \times \frac{1\text{L}}{1000\text{ml}}} = 2.44 \text{e} + 4 \frac{\mu\text{g}}{\text{g}}$$

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1246 TO 1249.

## HNF-1661 REV. 0

Analysis Report Averages Tue 10-27-98 02:01:34 PM page 2

#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	5.1266	5.0350	5.1705	5.0238	5.1395	5.1858
2	ICB	-.00036	.00093	.00610	.00290	.00005	.00033
3	LLS	.02022	.10690	.19570	.10591	.10118	.01090
4	ICSA	.00247	245.74	.00512	-.00334	.00033	.00052
5	IC SAB	.96929	247.07	.03770	-.00693	.47222	.48745
6	PREPBLKTJA	.00033	.01219	.00543	.00480	.00008	.00038
7	S98T002335	.02629	49.466	.22383	.10338	.03804	.01578
8	S98T002335_D	.09786	48.278	.48345	.16241	.03422	.01568
9	S98T002336	.05548	49.940	.55209	.16816	.07080	.01179
10	S98T002336_D	.06272	110.40	-.06876	.08931	.06114	.01766
11	S98T002343	.03731	11.803	-.05179	.09896	.00582	.01773
12	S98T002343_D	.01518	12.536	.27872	.03977	.00885	.01578
13	ICSA	.00367	247.16	.02132	-.01044	.00033	.00057
14	IC SAB	.97417	248.98	.01231	-.00779	.47759	.49006
15	CCV	5.1591	5.0788	5.1994	5.0277	5.1949	5.2170
16	CCB	-.00037	.00685	.00722	.00337	.00001	.00033

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	5.0983	5.1941	5.1925	5.2275	5.1022	5.0948
2	ICB	-.01238	.00178	.00232	.00701	-.00087	.00019
3	LLS	.21842	.21970	.01194	.21168	.04180	.02083
4	ICSA	-.02549	262.99	.00765	.01150	.00024	-.00238
5	IC SAB	-.01943	264.49	.96568	.00778	.47252	.47723
6	PREPBLKTJA	.00584	.00364	.00141	.00691	.00220	.00040
7	S98T002335	-.24334	1.2744	.05675	.15559	-.01493	16.925
8	S98T002335_D	-.15493	.71324	.09007	.51377	.07260	17.151
9	S98T002336	.42764	9.8385	.11760	.36043	.08451	19.258
10	S98T002336_D	-.63186	7.7976	.08792	.14249	-.06044	19.334
11	S98T002343	-.22191	.75555	.05681	.06802	-.10810	4.8285
12	S98T002343_D	.75802	.46030	.06196	.08406	.04761	5.6346
13	ICSA	.01925	262.91	.00828	.01599	-.00052	-.00236
14	IC SAB	.00111	264.62	.96173	.01055	.47252	.47888
15	CCV	5.0948	5.2229	5.2001	5.2875	5.1217	5.1178
16	CCB	-.01801	.00054	.00116	.00664	.00053	.00043

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.7964	.00623	5.0272	5.2581	5.1905	5.0746
2	ICB	-.00063	.00172	-.00031	-.10609	.00134	.00073
3	LLS	.01613	.00167	.10018	.50870	.10564	.02232
4	ICSA	.00233	-.01184	94.655	.23052	-.00304	.00293
5	IC SAB	.46526	-.01025	95.192	.18011	-.00247	.98511
6	PREPBLKTJA	.00047	.00119	.00183	Q273.64	.00135	.00052
7	S98T002335	.00522	.03890	13.406	1231.6	.06741	.02159
8	S98T002335_D	.05801	.07329	12.554	11178.	.11335	.04301
9	S98T002336	.03092	-.10105	27.368	11313.	.30815	.05154
10	S98T002336_D	.03401	.04388	25.335	11627.	.28380	.00003
11	S98T002343	-.01088	.01654	1.5737	11344.	-.00347	-.00416
12	S98T002343_D	.04329	.02563	2.1038	11783.	.03770	.00871
13	ICSA	.00279	-.01018	94.988	.18948	-.00221	.00241

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Analysis Report Averages Tue 10-27-98 02:01:34 PM page 3

#	Sample Name	Cu	Eu	Fe	K	La	Li
14	ICSAB	.46926	-.00816	95.494	.32863	-.00285	1.0076
15	CCV	4.8438	.00619	5.0546	5.1629	5.2599	5.1633
16	CCB	-.00037	.00106	.00026	.08932	.00142	.00094

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.1349	5.0826	5.1414	5.2248	5.0775	5.0462
2	ICB	.00611	.00067	.00489	-.00774	-.00092	-.00438
3	LLS	.21712	.02129	.10425	.19824	.20330	.03982
4	ICSA	250.75	-.00419	-.01744	194.15	-.00121	-.00812
5	ICSAB	252.07	.45517	-.01514	193.17	-.00078	.92221
6	PREPBLKTJA	.00897	.00183	.00080	.06114	.00021	Q.27803
7	S98T002335	.78535	2.5467	.10898	422.70	.00924	10.176
8	S98T002335_D	1.2680	2.5995	.11671	419.46	.09078	43.330
9	S98T002336	2.0756	14.314	.18598	382.37	.22997	40.854
10	S98T002336_D	1.8868	13.193	.17815	348.21	.03742	30.757
11	S98T002343	.20469	.46781	.17066	502.66	-.20098	17.455
12	S98T002343_D	.28767	.60755	.06736	497.47	.04201	12.030
13	ICSA	251.69	-.00448	-.01676	196.02	-.00200	-.01402
14	ICSAB	253.44	.45506	-.01447	195.94	-.00118	.92648
15	CCV	5.1609	5.1081	5.1470	5.2844	5.1482	5.0729
16	CCB	.00924	.00043	.00470	.00366	.00131	-.00717

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	5.0370	5.1041	4.8973	5.1218	4.8530	4.9875
2	ICB	.00499	.00286	.00723	-.00105	.00956	.00953
3	LLS	.41298	.21352	.20401	.10055	.21940	Q.15980
4	ICSA	.03383	.03202	-.02423	.00630	.06417	.00223
5	ICSAB	.04004	1.0224	-.01945	.00904	.06037	-.00060
6	PREPBLKTJA	.00536	-.00068	-.00148	-.00224	.01185	.01011
7	S98T002335	35.727	.32453	1.1978	-.05722	.54998	3.0508
8	S98T002335_D	35.822	1.2126	1.2412	.21874	1.0591	3.8847
9	S98T002336	28.997	1.6122	1.2327	.27031	1.3157	5.7225
10	S98T002336_D	30.836	1.2904	1.6228	.10819	.98174	4.7786
11	S98T002343	13.336	-.21799	.44021	.00541	.17573	.95839
12	S98T002343_D	10.530	.21915	.70050	.02034	.85405	1.1298
13	ICSA	.01873	.04648	-.04299	.00301	.06679	-.00059
14	ICSAB	.02933	1.0176	-.03299	.00118	.08057	-.00050
15	CCV	5.0811	5.1218	4.9457	5.1287	4.8616	5.0136
16	CCB	.00935	.00884	.00392	-.00271	.01396	.00496

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	5.0701	5.1984	.17582	5.1980	4.8801	10.004
2	ICB	.01402	.00022	-.00118	.00045	.00173	.06611
3	LLS	.21464	.02095	.00772	.02155	.40133	.54881
4	ICSA	-.01039	.00201	-.00329	.00165	-.00564	-.01436
5	ICSAB	-.00947	.00205	-.00006	.00190	-.01438	-.01782
6	PREPBLKTJA	.00683	.00023	.01104	.00055	-.00583	-.04471
7	S98T002335	.23029	.03199	.42778	.08104	.38989	-1.4741

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Analysis Report Averages Tue 10-27-98 02:01:34 PM page 4

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
8	S98T002335_D	.59077	.03372	.40133	.10012	-.10305	.34936
9	S98T002336	.81268	.10272	.48316	.19792	-.44691	1.8150
10	S98T002336_D	.16124	.09175	.41853	.13925	1.0501	-.68226
11	S98T002343	.01828	.00770	.16181	-.01762	-.49286	-2.5773
12	S98T002343_D	.10677	.00954	.29826	.05130	.19082	-2.0640
13	ICSA	-.00930	.00205	.00807	.00145	.04821	-.00781
14	ICSAB	-.01105	.00222	.00311	.00215	.02029	-.01408
15	CCV	5.1389	5.2682	.17247	5.2470	4.9721	10.146
16	CCB	.00808	.00017	.00156	.00047	.01377	.03632

#	Sample Name	V	Y	Zn	Zr
1	ICV	5.1185	.00781	4.8778	4.9929
2	ICB	.00449	.00075	.00046	.00263
3	LLS	.10717	.00102	.01937	.02176
4	ICSA	.00482	.00792	-.00376	-.00154
5	ICSAB	.47824	.00807	.94481	-.00161
6	PREPBLKTJA	.00282	.00048	-.00030	.00019
7	S98T002335	.11205	.01990	.14749	.03576
8	S98T002335_D	.18468	.04161	.08211	.11647
9	S98T002336	.23879	.06027	.73849	.16167
10	S98T002336_D	.07736	.01956	.70102	.04851
11	S98T002343	.05665	.00430	.04252	.03048
12	S98T002343_D	.08566	.01372	.02465	.03304
13	ICSA	.00392	.00776	-.00346	-.00241
14	ICSAB	.48011	.00799	.94478	-.00154
15	CCV	5.1475	.00767	4.8807	5.0388
16	CCB	.00287	.00045	.00065	.00115

JK

10-27-98

File #: 981119C.TXT

HNF-1661 REV. 0

08/31/98 13:58  
A-0004-1

Page: 1

# LABCORE Data Entry Template for Worklist# 25965

Analyst: DK Scb Instrument: ICP01 2 9-23-98 Book# 756488

Method: LA-505-151/161 Rev/Mod C-3 #  
7-13-98 #A-99

Ensure dose rate at 30 cm is  $\leq 50$   $\mu$ rem/hr  
prior to performing this analysis.

Worklist Comment: ICP U-107 (FUSION)

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	ICV		@ICP-QC	QC		
2	ICB		@ICP-QC	QC		
3	LLS		@ICP-QC	QC		
4	ICSA		@ICP-QC	QC		
5	ICSAB		@ICP-QC	QC		
6	PREPBLKTJA		@ICP-F01	SOLID		
7	SAMPLE	S98T002328	0 F	@ICP-F01	SOLID	98000358 U-107 (2)
	Analytes Requested: AG-F-01, AL-F-01, AS-F-01, B-F-01, BA-F-01, BE-F-01, BI-F-01, CA-F-01, CD-F-01, CE-F-01, CO-F-01, CR-F-01, CU-F-01, FE-F-01, LA-F-01, LI-F-01, MG-F-01, MN-F-01, MO-F-01, NA-F-01, ND-F-01, P-F-01, PB-F-01, S-F-01, SB-F-01, SE-F-01, SI-F-01, SM-F-01, SR-F-01, TI-F-01, TL-F-01, U-F-01, V-F-01, ZN-F-01, ZR-F-01					
8	DUP	S98T002328	0 F	@ICP-F01	SOLID	
9	SAMPLE	S98T002268	0 F	@ICP-F01	SOLID	98000359 U-107 (2)
	Analytes Requested: AG-F-01, AL-F-01, AS-F-01, B-F-01, BA-F-01, BE-F-01, BI-F-01, CA-F-01, CD-F-01, CE-F-01, CO-F-01, CR-F-01, CU-F-01, FE-F-01, LA-F-01, LI-F-01, MG-F-01, MN-F-01, MO-F-01, NA-F-01, ND-F-01, NI-F-01, P-F-01, PB-F-01, S-F-01, SB-F-01, SE-F-01, SI-F-01, SM-F-01, SR-F-01, TI-F-01, TL-F-01, U-F-01, V-F-01, ZN-F-01, ZR-F-01					
10	DUP	S98T002268	0 F	@ICP-F01	SOLID	
11	CCV		@ICP-QC	QC		
12	CCB		@ICP-QC	QC		

Data Entry Comments:  
up loaded 11-19-98  
John Howell

Validated by:  
Saul M. Parry  
11/20/98

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

HNF-1661 REV. 0

08/31/98 13:58

A-0004-1

Page: 2

## LABCORE Data Entry Template for Worklist# 25965

S Type	Sample#	R A	Test	Matrix	Group#	Project
13 SERDIL	S98T002274	0 F	@ICP-F01	SOLID		
14 SAMPLE	S98T002274	0 F	@ICP-F01	SOLID	98000359	U-107 (2)
<b>Analytes Requested:</b>						
AG-F-01, AL-F-01, AS-F-01, B-F-01, BA-F-01, BE-F-01, BI-F-01, CA-F-01, CD-F-01, CE-F-01, CO-F-01, CR-F-01, CU-F-01, FE-F-01, LA-F-01, LI-F-01, MG-F-01, MN-F-01, MO-F-01, NA-F-01, ND-F-01, NI-F-01, P-F-01, PB-F-01, S-F-01, SB-F-01, SE-F-01, SI-F-01, SM-F-01, SR-F-01, TI-F-01, TL-F-01, U-F-01, V-F-01, ZN-F-01, ZR-F-01						
15 DUP	S98T002274	0 F	@ICP-F01	SOLID		
16 SPK (10ppm)	S98T002274	0 F	@ICP-F01	SOLID		
17 ICSA	Spk 9.23.98		@ICP-QC	QC		
18 ICSAB			@ICP-QC	QC		
19 CCV			@ICP-QC	QC		
20 CCB			@ICP-QC	QC		

Final page for worklist # 25965

JK JLD 11-19-98

Analyst Signature	Date
Prep blkJTG	.25.10, DF 1
5987002274	.25.10, DF 41
5987002274-D	.25.10, 41
5987002274	.25.10, DF 41
5987002274-D	.25.10, 41
5987002274-L	.25.10-2.8, DF 205
5987002274	.25.10, 41
5987002274-D	.25.10, 41
5987002274-R	.25.10, 41
5987002274-X	.25.10-1.9, 410
5987002274-GX	.25.10-1.9, 410

Analyst Signature	Date
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Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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HNF-1661 REV. 0

Analysis Report

Summary

Thu 11-19-98 02:44:39 PM

page 1

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981119C	ICP2	11/19/98	13:12	DKS	Q	CONC
2	ICB	981119C	ICP2	11/19/98	13:15	DKS	Q	CONC
3	LLS	981119C	ICP2	11/19/98	13:18	DKS	Q	CONC
4	ICSA	981119C	ICP2	11/19/98	13:21	DKS	Q	CONC
5	ICSAB	981119C	ICP2	11/19/98	13:24	DKS	Q	CONC
6	PREPBLKTJA	981119C	ICP2	11/19/98	13:27	DKS	Q	CONC
7	S98T002328	981119C	ICP2	11/19/98	13:31	DKS	S	CONC
8	S98T002328_D	981119C	ICP2	11/19/98	13:34	DKS	S	CONC
9	S98T002268	981119C	ICP2	11/19/98	13:37	DKS	S	CONC
10	S98T002268_D	981119C	ICP2	11/19/98	13:39	DKS	S	CONC
11	CCV	981119C	ICP2	11/19/98	13:44	DKS	Q	CONC
12	CCB	981119C	ICP2	11/19/98	13:47	DKS	Q	CONC
13	S98T002274_L	981119C	ICP2	11/19/98	13:50	DKS	S	CONC
14	S98T002274	981119C	ICP2	11/19/98	13:53	DKS	S	CONC
15	S98T002274_D	981119C	ICP2	11/19/98	13:56	DKS	S	CONC
16	S98T002274_A	981119C	ICP2	11/19/98	13:59	DKS	S	CONC
17	S98T002274_X	981119C	ICP2	11/19/98	14:04	DKS	S	CONC
18	S98T002274_AX	981119C	ICP2	11/19/98	14:07	DKS	S	CONC
19	ICSA	981119C	ICP2	11/19/98	14:30	DKS	Q	CONC
20	ICSAB	981119C	ICP2	11/19/98	14:33	DKS	Q	CONC
21	CCV	981119C	ICP2	11/19/98	14:37	DKS	Q	CONC
22	CCB	981119C	ICP2	11/19/98	14:41	DKS	Q	CONC

*JK Lab*

*11-19-98*

*Worklist # 25965*

*U-107*

*5987002328*

*5987002268*

*5987002274*

*S98T002274*

$$\text{QR} = 24.434 \frac{\mu\text{g}}{\mu\text{L}} \times \frac{1}{2.0164 \frac{\text{g}}{\text{L}} \times \frac{1\text{L}}{1000\text{L}}} = 1.212e + 4 \frac{\mu\text{g}}{\text{g}}$$

*Spike:*

$$\text{QR} = \frac{(63.702)}{41} - \frac{(24.434)}{41} \times 100 = 95.8\%$$

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1252 TO 1256

## HNF-1661 REV.0

Analysis Report

Averages

Thu 11-19-98 02:44:39 PM

page 2

#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.9910	5.0055	5.1506	5.1011	5.0129	5.1262
2	ICB	.00000	.00717	-.01030	.00047	.00000	.00013
3	LLS	.02129	.11601	.19001	.10095	.09935	.01074
4	ICSA	.00291	244.04	-.00994	-.00548	.00021	.00036
5	ICSAB	.95182	242.93	-.00048	-.00649	.45666	.47686
6	PREPBLKTJA	.00146	.01774	-.00181	-.00191	.00014	.00018
7	S98T002328	.02506	35.440	-.04199	.01951	.00462	.00569
8	S98T002328_D	-.02836	33.476	-.28459	-.09726	.00250	.00571
9	S98T002268	.00634	22.756	-.32470	.05892	.00651	.00569
10	S98T002268_D	.06422	24.867	-.22395	.00000	.00747	.00199
11	CCV	4.9669	4.8490	5.0717	4.9239	4.7899	4.9803
12	CCB	.00080	.01195	.00045	.00048	.00016	.00013
13	S98T002274_L	.09239	26.675	-1.9053	.10024	.02759	.00898
14	S98T002274	-.01010	24.434	-.93326	-.00576	.00971	.00198
15	S98T002274_D	.00009	23.790	-.45399	-.07755	.00649	.00202
16	S98T002274_A	35.364	63.702	40.424	39.066	37.384	39.337
17	S98T002274_X	.04031	29.664	1.3705	.00328	-.00597	.00547
18	S98T002274_AX	2669.2	3979.1	4097.0	4096.3	4027.2	4054.4
19	ICSA	.01015	243.54	.01870	-.00661	.00027	.00018
20	ICSAB	.94744	242.41	.04732	-.00998	.45860	.47694
21	CCV	5.0362	4.9973	5.1438	5.0815	5.0071	5.1231
22	CCB	.00256	.00995	-.00637	.00000	-.00003	.00017

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	5.0089	4.9684	5.0546	5.1218	4.9562	4.9340
2	ICB	.00282	.00497	.00016	.00197	.00048	.00052
3	LLS	.19487	.22222	.01120	.21154	.04206	.02052
4	ICSA	-.01306	254.69	.00539	.00824	.00327	-.00098
5	ICSAB	-.02016	255.79	.93966	.01260	.46253	.46527
6	PREPBLKTJA	-.00666	.01149	.00145	.01250	.00217	.00063
7	S98T002328	-.29785	.58145	.02602	.04058	.07304	2.6779
8	S98T002328_D	-.68981	.82517	.02469	-.16061	.01798	2.6155
9	S98T002268	-.04562	1.1282	.04129	-.03862	-.00821	3.6032
10	S98T002268_D	-.50165	.73224	.01231	.20261	.04034	3.8020
11	CCV	4.8944	5.0612	5.0484	4.9074	4.9472	4.9299
12	CCB	-.02490	.00894	.00141	.00868	.00259	.00090
13	S98T002274_L	.36144	3.1976	.24223	2.1907	.35373	6.4108
14	S98T002274	.15071	1.7404	-.01212	.04373	-.05344	6.0807
15	S98T002274_D	.14212	.91899	.03877	-.03920	.00056	5.9935
16	S98T002274_A	38.886	41.755	40.524	39.281	39.762	45.812
17	S98T002274_X	-.48956	2.5866	.33869	.30338	.45533	6.6145
18	S98T002274_AX	4150.6	4141.5	4065.0	4050.3	4073.5	4082.0
19	ICSA	-.01296	253.45	.00567	.00946	.00132	-.00237
20	ICSAB	-.00552	253.59	.93433	.01343	.46106	.46376
21	CCV	5.0491	5.0771	5.1064	5.0914	5.0091	4.9901
22	CCB	-.01405	.00495	.00074	.00528	-.00012	-.00119

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#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.8341	.00588	4.9019	5.0109	5.0837	5.1729
2	ICB	.00094	-.00042	.00091	.02123	.00016	-.00063
3	LLS	.01829	-.00027	.09918	Q.65944	.10370	.02054
4	ICSA	.00452	.01467	92.976	.23680	-.00331	.00201
5	ICSAB	.46048	.01359	92.591	.37922	-.00217	.98770
6	PREPBLKTJA	.00143	.00092	.00920	Q263.60	.00203	.00021
7	S98T002328	.05417	.03847	1.1183	10958.	.01244	.00442
8	S98T002328_D	.04274	.07364	1.0046	10992.	-.03651	.05651
9	S98T002268	.03338	.06779	1.0142	10741.	.04090	.04782
10	S98T002268_D	.06026	.03994	.95141	10572.	.05888	.01312
11	CCV	4.5843	.00864	4.8301	4.9544	4.8598	4.8017
12	CCB	.00074	.00165	.00079	.12136	.00142	.00148
13	S98T002274_L	.18632	.45195	1.6914	10301.	.29350	.41215
14	S98T002274	.05032	.08562	1.4858	10095.	.02471	.05647
15	S98T002274_D	.01279	.06664	1.4928	10686.	.02083	.04348
16	S98T002274_A	36.564	.13386	40.223	10167.	38.497	37.462
17	S98T002274_X	.36019	.59086	1.6917	10584.	.00042	.34671
18	S98T002274_AX	3803.0	6.0176	3891.5	14398.	4035.0	3982.9
19	ICSA	.00401	.01777	92.474	.17775	-.00339	.00169
20	ICSAB	.46176	.01917	92.146	.18100	-.00255	.98674
21	CCV	4.7852	.00772	4.9194	5.0561	5.0612	5.1041
22	CCB	.00073	.00030	.00063	.07785	.00092	.00010

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.1368	4.9062	5.0384	5.2909	4.9699	4.9324
2	ICB	.00290	-.00002	.00144	.01497	.00150	.00207
3	LLS	.21866	.02008	.10282	.22186	.20339	.04138
4	ICSA	250.75	-.00522	-.01161	192.41	.00372	.00035
5	ICSAB	249.30	.44074	-.01375	191.12	.00225	.92440
6	PREPBLKTJA	.01427	.00179	.00141	.08184	.00246	Q.33922
7	S98T002328	.12231	.30267	.09131	475.44	.07949	5.1016
8	S98T002328_D	.04840	.33800	.05273	451.87	-.04338	6.7863
9	S98T002268	.37673	.37039	.12514	425.90	.05481	9.1032
10	S98T002268_D	.45381	.41539	.19037	433.34	.06693	11.798
11	CCV	4.9833	4.8839	4.9967	4.9202	4.7180	4.9209
12	CCB	.01080	.00063	.00035	.01605	.00349	.00033
13	S98T002274_L	2.8863	.83995	.46826	413.85	.89432	9.9553
14	S98T002274	.15244	.70883	.15204	408.45	.02972	10.373
15	S98T002274_D	.08323	.69068	.07896	411.96	-.00216	12.062
16	S98T002274_A	39.734	39.122	40.367	449.55	37.421	49.606
17	S98T002274_X	1.2746	.89378	.07427	416.17	1.0274	10.848
18	S98T002274_AX	4189.4	4045.0	4072.6	4382.4	3898.5	4058.8
19	ICSA	249.81	-.00524	-.01419	191.61	.00201	-.00534
20	ICSAB	248.31	.43766	-.01474	190.96	.00463	.91913
21	CCV	5.1011	4.9506	5.0665	5.2240	4.9335	5.0017
22	CCB	.00229	.00002	-.00047	-.00477	.00094	-.00034

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#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	5.0247	4.9744	4.8774	5.0696	4.8404	4.8937
2	ICB	.00717	-.00048	-.00669	.00394	.01879	.00014
3	LLS	.39269	.21722	.18312	.10024	.19985	Q.16793
4	ICSA	.02586	.02749	-.04180	.01661	.08940	-.00580
5	ICSAB	.03845	1.0036	-.01717	.00259	.07672	-.00406
6	PREPBLKTJA	.00891	.01311	.00658	.00286	.00980	.01487
7	S98T002328	4.7675	.37459	.72432	-.00954	1.1649	2.0153
8	S98T002328_D	5.0112	.25958	.46477	-.34540	1.6179	2.4103
9	S98T002268	5.5014	-.20402	1.4731	.00270	1.3295	1.0799
10	S98T002268_D	5.0139	.29708	1.6878	.04437	.90351	1.4455
11	CCV	4.8897	5.0013	4.8519	5.0094	4.7367	4.8559
12	CCB	.01235	.01849	.00486	.01166	.03415	.01050
13	S98T002274_L	19.428	2.2572	2.6288	1.6846	6.7605	4.1144
14	S98T002274	16.267	.19855	1.7098	-.11895	1.0972	2.1885
15	S98T002274_D	17.403	-.31590	1.2842	-.00303	1.4514	2.2090
16	S98T002274_A	56.434	40.656	41.811	40.600	39.727	41.727
17	S98T002274_X	16.687	5.6645	2.9890	-1.4901	7.8319	5.6445
18	S98T002274_AX	4066.3	4096.4	4037.6	4124.3	4012.6	4001.2
19	ICSA	.03219	.02956	-.03908	.01897	.07511	-.00618
20	ICSAB	.02407	.99824	-.04548	.01150	.08638	-.00512
21	CCV	4.9820	5.0409	4.9088	5.0763	4.8394	4.9242
22	CCB	.00319	.00074	.00294	.00370	.01378	.00214

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	5.0028	5.0925	.22873	5.1354	4.8443	9.8920
2	ICB	-.00255	-.00004	.00374	.00001	.00349	-.00298
3	LLS	.19442	.02019	.01420	.02090	.38586	.46481
4	ICSA	-.01729	.00185	.01158	.00277	-.00412	-.03204
5	ICSAB	-.01314	.00190	.01433	.00210	-.03182	-.02442
6	PREPBLKTJA	.00399	.00004	.01412	.00054	-.00631	-.04856
7	S98T002328	.29748	.00901	.19617	.06755	-.07265	-1.5150
8	S98T002328_D	.75576	.01600	.11418	.00157	-.30179	-.07340
9	S98T002268	.63415	.01421	.12042	.02954	.14193	-.09507
10	S98T002268_D	.33927	.00901	.42076	.00286	-.34378	-1.5131
11	CCV	4.7614	4.8686	.22257	4.9748	4.7258	9.3872
12	CCB	.01668	.00025	.00564	.00092	-.00847	.07182
13	S98T002274_L	4.5215	.06980	.73676	.18924	-1.6009	14.863
14	S98T002274	.91008	.01946	.10045	.02008	-.31737	.72276
15	S98T002274_D	.61742	.01423	.18129	.02981	-.23066	-.22117
16	S98T002274_A	38.045	38.413	1.9517	39.666	37.737	74.250
17	S98T002274_X	5.4150	.06944	.99342	.18926	1.9844	19.273
18	S98T002274_AX	3929.1	3991.5	182.02	4060.6	3953.0	7661.4
19	ICSA	-.01799	.00190	.01214	.00140	-.02561	-.03310
20	ICSAB	-.01857	.00189	.01455	.00233	.01255	-.04495
21	CCV	4.9668	5.0710	.22537	5.1381	4.8109	9.8277
22	CCB	.00064	-.00004	.00599	.00001	-.00420	.00783

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#	Sample Name	V	Y	Zn	Zr
1	ICV	5.0049	.00700	4.7187	4.8743
2	ICB	-.00088	-.00023	-.00023	-.00027
3	LLS	.09763	-.00011	.02066	.01828
4	ICSA	.00031	.00753	-.00358	-.00350
5	ICSAB	.46526	.00784	.92705	-.00288
6	PREPBLKTJA	.00092	.00041	.00005	.00084
7	S98T002328	.05933	.01992	.03957	.06261
8	S98T002328_D	.14338	.04501	.03630	.11822
9	S98T002268	.14322	.04181	.04740	.11771
10	S98T002268_D	.04428	.01992	.05382	.07137
11	CCV	4.9225	.00854	4.7920	4.7423
12	CCB	.00388	.00106	.00104	.00291
13	S98T002274_L	.94081	.26680	.60293	.75485
14	S98T002274	.18483	.05752	.05426	.14370
15	S98T002274_D	.15048	.03865	.08594	.12614
16	S98T002274_A	39.566	.10982	38.987	37.656
17	S98T002274_X	1.2567	.31312	.20474	1.0502
18	S98T002274_AX	4036.0	6.6727	3855.9	4020.8
19	ICSA	.00032	.00745	-.00367	-.00381
20	ICSAB	.46321	.00746	.91719	-.00377
21	CCV	5.0322	.00781	4.7926	4.8784
22	CCB	-.00038	.00015	-.00009	.00047

*DK LD*

11-19-98



File #: 981106E.TXT

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A-0004-1

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## LABCORE Data Entry Template for Worklist# 26273

Analyst: DK Sato Instrument: ICP012 # 11-02-78 Book# 75B48BMethod: LA-505-451/161 Rev/Mod C3Ensure close rate of 30 ea is  $\leq 50$  mm/hr  
Prior to performing this analysis.Worklist Comment: ICP U-107 (SOLID ACID DIGEST)

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	ICV		@ICP-QC	QC		
2	ICB		@ICP-QC	QC		
3	LLS		@ICP-QC	QC		
4	ICSA		@ICP-QC	QC		
5	ICSAB		@ICP-QC	QC		
6	PREPSTDTJA		@ICP-A01	SOLID		
7	PREPBLKTJA		@ICP-A01	SOLID		
8	SAMPLE	S98T002042 0 A	@ICP-A01	SOLID	98000358	U-107 (2)
			Analytes Requested: AG-A-01 , AL-A-01 , AS-A-01 , B-A-01 , BA-A-01 , BE-A-01 , BI-A-01 , CA-A-01 , CD-A-01 , CE-A-01 , CO-A-01 , CR-A-01 , CU-A-01 , FE-A-01 , K-A-01 , LA-A-01 , LI-A-01 , MG-A-01 , MN-A-01 , MO-A-01 , NA-A-01 , ND-A-01 , NI-A-01 , P-A-01 , PB-A-01 , S-A-01 , SB-A-01 , SE-A-01 , SI-A-01 , SM-A-01 , SR-A-01 , TI-A-01 , TL-A-01 , U-A-01 , V-A-01 , ZN-A-01 , ZR-A-01			
9	DUP	S98T002042 0 A	@ICP-A01	SOLID		
10	ICSA		@ICP-QC	QC		
11	ICSAB		@ICP-QC	QC		
12	CCV		@ICP-QC	QC		
13	CCB		@ICP-QC	QC		

Data Entry Comments:

Validated by:

Shal P. Pang

11/10/98

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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**LABCORE Data Entry Template for Worklist# 26273**

S Type	Sample#	R A	Test	Matrix	Group#	Project
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**Final page for worklist # 26273**

Analyst Signature	Date
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<i>JK [Signature]</i>	11-06-98
prop 61K7Dg	Direct, DF 1
prop 61K7Dg	Direct, 1
5987002092	3-6, DF 3
5987002092-D	3-6, 3

Analyst Signature	Date
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Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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Summary

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981106E	ICP2	11/06/98	14:54	DKS	Q	CONC
2	ICB	981106E	ICP2	11/06/98	14:57	DKS	Q	CONC
3	LLS	981106E	ICP2	11/06/98	15:00	DKS	Q	CONC
4	ICSA	981106E	ICP2	11/06/98	15:03	DKS	Q	CONC
5	ICSAB	981106E	ICP2	11/06/98	15:06	DKS	Q	CONC
6	PREPSTDJJA	981106E	ICP2	11/06/98	15:09	DKS	Q	CONC
7	PREPBLKTJA	981106E	ICP2	11/06/98	15:13	DKS	Q	CONC
8	S98T002042	981106E	ICP2	11/06/98	15:16	DKS	S	CONC
9	S98T002042_D	981106E	ICP2	11/06/98	15:19	DKS	S	CONC
10	ICSA	981106E	ICP2	11/06/98	15:23	DKS	Q	CONC
11	ICSAB	981106E	ICP2	11/06/98	15:25	DKS	Q	CONC
12	CCV	981106E	ICP2	11/06/98	15:28	DKS	Q	CONC
13	CCB	981106E	ICP2	11/06/98	15:31	DKS	Q	CONC

JK (initials)

11-06-98

worklist # 26273

u-107

5987002042

5987002042

$$QR = 44.223 \frac{\mu\text{g}}{\text{ml}} \times \frac{1}{5.09 \frac{\mu\text{g}}{\text{L}} + \frac{1\text{L}}{1000\text{ml}}} = 8.69 \text{e} + 3 \frac{\mu\text{g}}{\text{ml}}$$

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETELY VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1259 TO 1262

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#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.9900	4.9335	5.0882	4.9672	4.9784	4.9975
2	ICB	.00425	.00469	-.00051	-.00046	.00003	.00026
3	LLS	.02374	.09941	.20316	.09832	.09686	.01022
4	ICSA	.00506	241.12	.00189	-.00794	.00027	.00018
5	ICSAB	.94737	242.22	.02516	-.01305	.45716	.46698
6	PREPSTDTJA	.89780	4.6432	4.6359	5.0810	4.7873	5.0031
7	PREPBLKTJA	.00195	Q.10151	.00738	Q.43549	.00069	.00004
8	S98T002042	.07378	44.223	-.07425	.64734	.01484	.00078
9	S98T002042_D	.07395	34.877	-.02572	.63646	.00961	.00065
10	ICSA	.00290	240.22	.04100	-.00818	.00032	.00018
11	ICSAB	.95458	240.88	.02854	-.01098	.45209	.46578
12	CCV	5.0645	4.9338	5.1168	4.9741	4.9727	5.0134
13	CCB	.00129	.00190	.00624	.00233	.00007	.00004

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	4.9162	4.9727	5.0145	5.0464	4.9251	4.9097
2	ICB	-.00006	-.00288	-.00023	-.00128	-.00049	.00026
3	LLS	.21907	.22023	.00997	.19911	.04006	.02064
4	ICSA	.00685	256.23	.00593	-.00045	.00157	-.00121
5	ICSAB	-.03177	254.46	.92429	-.00187	.45408	.46032
6	PREPSTDTJA	4.3992	4.7258	4.4809	4.8731	4.5005	4.5771
7	PREPBLKTJA	.00586	Q.17386	.00103	.00759	-.00016	.00388
8	S98T002042	.05636	.74260	.01683	.01402	.00521	11.066
9	S98T002042_D	.09737	.59230	.01475	.01970	.00224	8.8083
10	ICSA	.00119	261.75	.00542	.00375	.00208	-.00228
11	ICSAB	-.01971	259.88	.93399	-.00053	.45842	.46634
12	CCV	5.0463	5.0956	5.0748	5.0424	4.9826	4.9807
13	CCB	-.02782	-.00111	-.00022	.00064	-.00024	.00000

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.7183	.00772	4.8461	4.9604	4.9934	5.0858
2	ICB	-.00016	.00029	.00023	-.14215	.00000	.00000
3	LLS	.01715	.00084	.09576	.45524	.09950	.02105
4	ICSA	.00313	.01037	91.586	-.00045	-.00382	.00268
5	ICSAB	.45766	.01765	91.452	.02465	-.00529	.98137
6	PREPSTDTJA	4.4482	.00669	4.5583	4.5392	4.8371	4.8803
7	PREPBLKTJA	.00401	-.00178	.03795	.02500	.00009	-.00198
8	S98T002042	-.00046	.00100	15.847	4.1393	.01703	.00533
9	S98T002042_D	-.00335	.00040	5.4119	3.7358	.01364	.00325
10	ICSA	.00272	.00085	92.195	.26800	-.00369	.00318
11	ICSAB	.44892	.00653	91.993	.00851	-.00534	.95004
12	CCV	4.6988	.00880	4.8885	4.8812	4.9888	4.9752
13	CCB	-.00056	.00049	.00058	-.07601	.00006	.00029

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#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.0469	4.8832	4.9898	5.1867	4.8874	4.9136
2	ICB	-.00366	.00006	.00241	.01493	-.00049	.00534
3	LLS	.19343	.01999	.10276	.19464	.19409	.04439
4	ICSA	245.90	-.00473	-.01276	188.47	-.00065	-.00568
5	ICSAB	246.58	.43684	-.01426	190.31	-.00139	.91779
6	PREPSTDTJA	4.5559	4.5241	4.6424	5.8606	4.7697	4.4647
7	PREPBLKTJA	.01496	.00005	.00381	Q.70779	.00042	.01162
8	S98T002042	.19654	1.0938	.12332	1055.3	.03680	-.13843
9	S98T002042_D	.11118	.80996	.10734	1039.8	.02773	.10781
10	ICSA	245.15	-.00402	-.01212	184.51	-.00220	-.00846
11	ICSAB	245.59	.44079	-.01072	185.75	-.00159	.91518
12	CCV	5.0455	4.9490	5.0491	5.0858	4.8755	4.9555
13	CCB	-.00182	.00002	.00161	.00000	-.00134	.00335

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	4.9786	4.9856	4.8606	5.0199	4.7217	4.9025
2	ICB	.01379	.00169	.00489	-.00314	.00381	.00204
3	LLS	.39528	.21223	.19016	.09636	.19822	Q.21758
4	ICSA	.03586	.02434	-.02327	.00366	.06441	-.00280
5	ICSAB	.03878	1.0003	-.01935	.00062	.05579	-.00358
6	PREPSTDTJA	4.4675	4.3607	4.3119	4.4068	4.3923	6.5144
7	PREPBLKTJA	.03975	.00189	Q.11118	.00019	.02684	Q.66762
8	S98T002042	22.437	.27145	3.3047	-.01954	.07118	2.1090
9	S98T002042_D	14.897	.16481	2.7632	-.00299	.09481	1.5884
10	ICSA	.05512	.03325	-.03013	.00788	.06184	.01129
11	ICSAB	.05366	.99622	-.02436	.01138	.07397	.00859
12	CCV	4.9925	5.0572	4.9221	5.0602	4.7422	4.9741
13	CCB	.01220	-.00564	.00380	.00001	.01389	.00581

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.8925	5.0039	.22642	5.0153	4.7730	9.6574
2	ICB	.00001	-.00008	-.00036	.00044	-.01423	-.00006
3	LLS	.19982	.01970	.00788	.01959	.38844	.48138
4	ICSA	-.01217	.00173	.00249	.00183	-.01879	-.09453
5	ICSAB	-.01696	.00184	-.00103	.00114	.00788	-.09710
6	PREPSTDTJA	4.7778	4.8388	.20286	4.7348	4.3864	9.3016
7	PREPBLKTJA	-.02033	-.00012	.00575	.00092	.00166	-.07725
8	S98T002042	-.00325	.00801	.06512	.01611	-.00547	.56239
9	S98T002042_D	.00484	.00562	.05169	.01276	.01092	.45322
10	ICSA	-.00177	.00167	.00672	.00186	.01056	-.10084
11	ICSAB	-.00859	.00165	-.00238	.00160	-.00669	-.10368
12	CCV	4.8753	5.0026	.22372	5.0467	4.8000	9.6091
13	CCB	.00275	.00004	-.00315	-.00001	.01355	.00477

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Analysis Report

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#	Sample Name	V	Y	Zn	Zr
1	ICV	4.9439	.00749	4.7227	4.8048
2	ICB	.00034	.00000	.00004	.00033
3	LLS	.10047	.00057	.01994	.01934
4	ICSA	.00226	.00787	-.00271	-.00253
5	ICSAB	.45876	.00748	.91928	-.00265
6	PREPSTDTJA	4.7447	.00599	4.0969	4.5248
7	PREPBLKTJA	-.00409	-.00122	.00922	-.00188
8	S98T002042	.00470	.00634	.07451	.03340
9	S98T002042_D	.00560	.00521	.04856	.02942
10	ICSA	.00485	.00858	-.00304	-.00081
11	ICSAB	.46384	.00842	.93742	-.00081
12	CCV	4.9939	.00806	4.8173	4.8298
13	CCB	.00087	.00023	.00036	.00145

*MAD*

11-06-98

File #: 981109.B.TXT

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A-0004-1

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## LABCORE Data Entry Template for Worklist# 26277

Analyst: DK Seto Instrument: ICP013 11/02/98 Book# 758488  
 Method: LA-505-151/161 Rev/Mod C-3  
 Worklist Comment: ICP U-107 (DIRECT) Ensure dose rate at 30 cm is  $\leq 50$   $\mu$ rem/hr prior to performing this analysis.

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	ICV		@ICP-QC	QC		
2	ICB		@ICP-QC	QC		
3	LLS		@ICP-QC	QC		
4	ICSA		@ICP-QC	QC		
5	ICSAB		@ICP-QC	QC		
6	SAMPLE	S98T002458 0 D	@ICP-D01	LIQUID	98000401 U-107 (2)	
			Analytes Requested: AG-D-01, AL-D-01, AS-D-01, B-D-01, BA-D-01, BE-D-01, BI-D-01, CA-D-01, CD-D-01, CE-D-01, CO-D-01, CR-D-01, CU-D-01, FE-D-01, K-D-01, LA-D-01, LI-D-01, MG-D-01, MN-D-01, MO-D-01, NA-D-01, ND-D-01, NI-D-01, P-D-01, PB-D-01, S-D-01, SB-D-01, SE-D-01, SI-D-01, SM-D-01, SR-D-01, TI-D-01, TL-D-01, U-D-01, V-D-01, ZN-D-01			
7	DUP	S98T002458 0 D	@ICP-D01	LIQUID		
8	SAMPLE	S98T002462 0 D	@ICP-D01	LIQUID	98000401 U-107 (2)	
			Analytes Requested: AG-D-01, AL-D-01, AS-D-01, B-D-01, BA-D-01, BE-D-01, BI-D-01, CA-D-01, CD-D-01, CE-D-01, CO-D-01, CR-D-01, CU-D-01, FE-D-01, K-D-01, LA-D-01, LI-D-01, MG-D-01, MN-D-01, MO-D-01, NA-D-01, ND-D-01, NI-D-01, P-D-01, PB-D-01, S-D-01, SB-D-01, SE-D-01, SI-D-01, SM-D-01, SR-D-01, TI-D-01, TL-D-01, U-D-01, V-D-01, ZN-D-01			
9	DUP	S98T002462 0 D	@ICP-D01	LIQUID		
10	SAMPLE	S98T002466 0 D	@ICP-D01	LIQUID	98000401 U-107 (2)	
			Analytes Requested: AG-D-01, AL-D-01, AS-D-01, B-D-01, BA-D-01, BE-D-01, BI-D-01, CA-D-01, CD-D-01, CE-D-01, CO-D-01, CR-D-01, CU-D-01, FE-D-01, K-D-01, LA-D-01, LI-D-01, MG-D-01, MN-D-01, MO-D-01, NA-D-01, ND-D-01, NI-D-01			

Data Entry Comments:

Validated by:  
 Salt M. Pany  
 11/10/98

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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## LABCORE Data Entry Template for Worklist# 26277

S Type	Sample#	R A	Test	Matrix	Group#	Project
			P-D-01	, PB-D-01	, S-D-01	, SB-D-01 , SE-D-01 , SI-D-01 , SM-D-01 , SR-D-01 , TI-D-01 , TL-D-01 , U-D-01 , V-D-01 , ZN-D-01 , ZR-D-01
11 DUP	S98T002466	0 D	@ICP-D01	LIQUID		
12 CCV			@ICP-QC	QC		
13 CCB			@ICP-QC	QC		
14 SAMPLE	S98T002469	0 D	@ICP-D01	LIQUID	98000401	U-107 (2)
	<b>Analytes Requested:</b>		AG-D-01	, AL-D-01	, AS-D-01	, B-D-01 , BA-D-01 , BE-D-01 , BI-D-01 , CA-D-01 , CD-D-01 , CE-D-01 , CO-D-01 , CR-D-01 , CU-D-01 , FE-D-01 , K-D-01 , LA-D-01 , LI-D-01 , MG-D-01 , MN-D-01 , MO-D-01 , NA-D-01 , ND-D-01 , NI-D-01 , P-D-01 , PB-D-01 , S-D-01 , SB-D-01 , SE-D-01 , SI-D-01 , SM-D-01 , SR-D-01 , TI-D-01 , TL-D-01 , U-D-01 , V-D-01 , ZN-D-01 , ZR-D-01
15 DUP	S98T002469	0 D	@ICP-D01	LIQUID		
16 SERDIL	S98T002534	0 D	@ICP-D01	LIQUID		
17 SAMPLE	S98T002534	0 D	@ICP-D01	LIQUID	98000401	U-107 (2)
	<b>Analytes Requested:</b>		AG-D-01	, AL-D-01	, AS-D-01	, B-D-01 , BA-D-01 , BE-D-01 , BI-D-01 , CA-D-01 , CD-D-01 , CE-D-01 , CO-D-01 , CR-D-01 , CU-D-01 , FE-D-01 , K-D-01 , LA-D-01 , LI-D-01 , MG-D-01 , MN-D-01 , MO-D-01 , NA-D-01 , ND-D-01 , NI-D-01 , P-D-01 , PB-D-01 , S-D-01 , SB-D-01 , SE-D-01 , SI-D-01 , SM-D-01 , SR-D-01 , TI-D-01 , TL-D-01 , U-D-01 , V-D-01 , ZN-D-01 , ZR-D-01
18 DUP	S98T002534	0 D	@ICP-D01	LIQUID		
19 SPK (1ppm)	S98T002534	0 D	@ICP-D01	LIQUID		
20 ICSA			@ICP-QC	QC		
21 ICSAB			@ICP-QC	QC		
22 CCV			@ICP-QC	QC		
23 CCB			@ICP-QC	QC		

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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**LABCORE Data Entry Template for Worklist# 26277**

S Type	Sample#	R	A	Test	Matrix	Group#	Project
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**Final page for worklist # 26277****Analyst Signature****Date****Analyst Signature****Date**

<i>JK</i>	11.09-98						
5987002458	.025-15			JF	601		
5987002458-D	.025-15				601		
5987002442	.025-15			JF	601		
5987002442-D	.025-15				601		
5987002444	.025-15			JF	601		
5987002444-D	.025-15				601		
5987002444	.025-15			JF	601		
5987002444-D	.025-15				601		
5987002534-L	.025-15-28			JF	3005		
5987002534	.025-15				601		
5987002534-D	.025-15				601		
5987002534-Q	.025-15				601		
5987002534-X	.025-15-19				6010		
5987002534-QX	.025-15-19				6010		

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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S98T00 2534

$$Cr = 6.82 \pm 2 \frac{\mu\text{g}}{\text{ml}}$$

Spike:

$$Cr = \frac{\left(\frac{1274.6}{601}\right) - \left(\frac{681.87}{601}\right)}{1} \times 100 = 98.6\%$$

Post Spike:

$$Na = \frac{\left(\frac{278250}{6010}\right) - \left(\frac{217470}{6010}\right)}{10} \times 100 = 101.1\%$$

$$Al = \frac{\left(\frac{80566}{6010}\right) - \left(\frac{22777}{6010}\right)}{10} \times 100 = 96.15\%$$

$$K = \frac{\left(\frac{61952}{6010}\right) - \left(\frac{3205.0}{6010}\right)}{10} \times 100 = 97.7\%$$

## HNF-1661 REV. 0

Analysis Report

Summary

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981109B	ICP2	11/09/98	13:01	DKS	Q	CONC
2	ICB	981109B	ICP2	11/09/98	13:04	DKS	Q	CONC
3	LLS	981109B	ICP2	11/09/98	13:07	DKS	Q	CONC
4	ICSA	981109B	ICP2	11/09/98	13:10	DKS	Q	CONC
5	ICSAB	981109B	ICP2	11/09/98	13:13	DKS	Q	CONC
6	S98T002458	981109B	ICP2	11/09/98	13:17	DKS	S	CONC
7	S98T002458_D	981109B	ICP2	11/09/98	13:20	DKS	S	CONC
8	S98T002462	981109B	ICP2	11/09/98	13:23	DKS	S	CONC
9	S98T002462_D	981109B	ICP2	11/09/98	13:26	DKS	S	CONC
10	S98T002466	981109B	ICP2	11/09/98	13:30	DKS	S	CONC
11	S98T002466_D	981109B	ICP2	11/09/98	13:33	DKS	S	CONC
12	CCV	981109B	ICP2	11/09/98	13:38	DKS	Q	CONC
13	CCB	981109B	ICP2	11/09/98	13:41	DKS	Q	CONC
14	S98T002469	981109B	ICP2	11/09/98	13:44	DKS	S	CONC
15	S98T002469_D	981109B	ICP2	11/09/98	13:47	DKS	S	CONC
16	S98T002534_L	981109B	ICP2	11/09/98	13:51	DKS	S	CONC
17	S98T002534	981109B	ICP2	11/09/98	13:54	DKS	S	CONC
18	S98T002534_D	981109B	ICP2	11/09/98	13:57	DKS	S	CONC
19	S98T002534_A	981109B	ICP2	11/09/98	14:00	DKS	S	CONC
20	S98T002534_X	981109B	ICP2	11/09/98	14:05	DKS	S	CONC
21	S98T002534_AX	981109B	ICP2	11/09/98	14:08	DKS	S	CONC
22	ICSA	981109B	ICP2	11/09/98	14:24	DKS	Q	CONC
23	ICSAB	981109B	ICP2	11/09/98	14:27	DKS	Q	CONC
24	CCV	981109B	ICP2	11/09/98	14:30	DKS	Q	CONC
25	CCB	981109B	ICP2	11/09/98	14:34	DKS	Q	CONC

JK

11.09.98

Worklist # 26277

6.107

598T002458

598T002462

598T002466

598T002469

598T002534

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1262 TO 1271.

## HNF-1661 REV. 0

Analysis Report

Averages

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#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.9997	4.9285	5.1425	4.9711	4.9037	5.0190
2	ICB	-.00062	-.00530	-.01257	-.00184	.00007	-.00030
3	LLS	.02175	.09939	.19033	.10111	.09604	.01028
4	ICSA	.00306	239.14	.03794	-.00687	.00034	.00009
5	ICSAB	.94014	238.07	.04757	-.00634	.44379	.46444
6	S98T002458	16.650	44941.	-44.285	108.74	.09421	.29714
7	S98T002458_D	17.420	45955.	-46.882	114.56	.08699	.35031
8	S98T002462	16.168	40526.	-55.535	102.35	.00515	.27149
9	S98T002462_D	16.201	40498.	-50.245	105.40	.00571	.27066
10	S98T002466	17.128	41960.	-55.253	112.62	.10363	.27109
11	S98T002466_D	15.441	38538.	-45.693	97.102	.14904	.32286
12	CCV	5.0341	4.9190	5.1442	5.0019	4.9008	5.0270
13	CCB	-.00113	-.00448	-.01110	-.00045	.00001	-.00021
14	S98T002469	17.137	45026.	-161.32	110.12	3.6750	.27101
15	S98T002469_D	16.273	44945.	-151.72	110.12	2.1455	.35055
16	S98T002534_L	13.214	22688.	-60.778	77.667	.13125	-.13159
17	S98T002534	14.568	22260.	-37.106	77.947	.08803	.16287
18	S98T002534_D	14.236	22465.	-38.488	77.118	.04912	.10927
19	S98T002534_A	575.81	23088.	578.04	657.50	560.37	590.51
20	S98T002534_X	20.982	22777.	-26.489	80.471	.71033	-.26251
21	S98T002534_AX	55216.	80566.	60136.	59461.	59242.	58977.
22	ICSA	.00406	241.72	.03127	-.01081	.00021	-.00008
23	ICSAB	.94322	240.16	.00421	-.00716	.45050	.46832
24	CCV	4.9932	4.8964	5.1392	4.9766	4.9136	5.0218
25	CCB	-.00022	-.00216	-.00428	.00093	.00005	.00000

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	4.9819	4.9635	5.0519	5.0352	4.9640	4.9267
2	ICB	-.00628	-.00090	-.00083	-.00027	.00171	-.00144
3	LLS	.20567	.21930	.00899	.20342	.04055	.01917
4	ICSA	.02830	251.05	.00505	.00826	.00180	-.00308
5	ICSAB	-.00645	252.70	.92796	.00902	.45459	.45887
6	S98T002458	-22.446	57.987	.39125	5.2298	.44833	44.410
7	S98T002458_D	9.4589	55.832	.39020	3.8647	.51290	43.655
8	S98T002462	12.821	59.927	-.36601	-4.1796	.07054	173.33
9	S98T002462_D	-9.7767	60.601	-.19360	-1.1185	.87799	173.39
10	S98T002466	-1.1065	78.925	-.57330	-1.8851	.51013	226.48
11	S98T002466_D	5.2204	86.834	-.20660	-.12370	1.2523	246.89
12	CCV	5.0354	5.0159	5.0849	5.0268	4.9976	4.9733
13	CCB	.01575	-.00155	-.00089	-.000570	-.00035	-.00188
14	S98T002469	10.274	67.065	-.13417	5.4069	2.6357	96.176
15	S98T002469_D	-4.8694	66.609	-.26529	.04978	1.8300	90.738
16	S98T002534_L	-30.546	96.383	-1.1733	13.539	8.4489	691.52
17	S98T002534	-6.9685	91.289	-.11603	1.0109	1.6161	681.87
18	S98T002534_D	7.0340	85.756	-.52123	-.90374	.30080	688.42
19	S98T002534_A	582.55	687.37	596.85	590.42	586.21	1274.6
20	S98T002534_X	68.714	87.966	-2.0818	21.421	7.4330	693.87
21	S98T002534_AX	60948.	59844.	59203.	59658.	59017.	60210.
22	ICSA	-.01028	252.37	.00453	-.00279	.00217	-.00346
23	ICSAB	-.00862	252.50	.93175	.00485	.45641	.46012
24	CCV	4.9963	4.9711	5.0529	5.0229	4.9680	4.9372

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#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
25	CCB	.00856	-.00071	-.00115	-.00119	.00075	-.00036

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.6974	.00907	4.8611	4.9972	4.9842	4.9925
2	ICB	-.00073	.00050	-.00049	-.05734	.00026	.00059
3	LLS	.01762	.00075	.09561	.55216	.10068	.02069
4	ICSA	.00301	.02536	90.944	.26379	-.00298	.00256
5	ICSAB	.44668	.02364	90.934	.16305	-.00344	.94033
6	S98T002458	6.3148	1.3210	7.5414	4404.2	.92082	1.0655
7	S98T002458_D	6.6565	.82657	6.4586	4577.6	.52606	.76984
8	S98T002462	5.3847	.62655	5.3792	4164.1	-.12531	.77010
9	S98T002462_D	5.3403	.52555	5.7800	4185.5	-.07036	.65134
10	S98T002466	7.3006	.53579	20.916	4326.3	-.02652	1.4225
11	S98T002466_D	6.8419	1.1166	47.478	4075.0	.21377	.94654
12	CCV	4.6803	.00974	4.8835	5.1360	4.9823	4.9589
13	CCB	-.00081	.00055	-.00106	-.04765	-.00037	.00068
14	S98T002469	8.0522	.98839	23.782	4543.2	.79125	1.4222
15	S98T002469_D	7.9784	.84520	13.224	4427.4	.25294	1.1255
16	S98T002534_L	4.3864	2.6631	2.1617	3537.8	1.3155	2.6637
17	S98T002534	.97100	.93955	5.7530	3083.9	.36430	1.0658
18	S98T002534_D	.85826	.77004	5.1383	3004.2	-.02494	1.2430
19	S98T002534_A	543.64	1.8800	575.40	3494.6	582.36	564.90
20	S98T002534_X	8.1281	5.9280	-.16172	3205.0	5.7080	5.3238
21	S98T002534_AX	55392.	104.86	56694.	61952.	59483.	58841.
22	ICSA	.00312	.02664	91.572	.07316	-.00532	.00306
23	ICSAB	.45263	.02747	91.253	.19140	-.00362	.95898
24	CCV	4.6827	.00988	4.8360	4.9553	4.9744	4.9366
25	CCB	-.00062	.00145	-.00038	.17878	.00013	.00108

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.0425	4.9005	5.0162	5.1060	4.8601	4.9510
2	ICB	-.00113	.00025	.00065	-.01303	-.00216	.00301
3	LLS	.20222	.02010	.10248	.18779	.19389	.03977
4	ICSA	244.05	-.00452	-.01611	185.36	-.00035	-.00488
5	ICSAB	242.66	.43613	-.01600	183.14	-.00041	.90514
6	S98T002458	4.7525	13.478	144.29	232740.	-1.3277	20.773
7	S98T002458_D	5.5521	7.6848	142.56	239440.	-.59757	22.080
8	S98T002462	.81714	6.6018	133.28	230570.	-.16936	23.402
9	S98T002462_D	-1.3739	7.7102	132.70	229970.	-.96221	19.942
10	S98T002466	.34173	52.430	137.30	244160.	-1.5458	22.775
11	S98T002466_D	4.9675	31.349	128.12	223530.	-.19756	19.102
12	CCV	5.0439	4.9375	5.0409	5.0229	4.8459	4.9727
13	CCB	-.00297	.00031	.00192	-.00994	-.00257	.00379
14	S98T002469	7.0943	24.692	144.76	236510.	.62306	25.051
15	S98T002469_D	1.2410	4.4002	144.47	236220.	.15068	27.131
16	S98T002534_L	1.3332	2.3658	93.336	171480.	-2.8050	17.271
17	S98T002534	1.8010	1.6869	90.519	208020.	.12933	15.111
18	S98T002534_D	-2.1569	1.6415	93.594	208810.	-2.3784	16.974
19	S98T002534_A	585.05	569.11	687.49	209650.	564.74	598.27
20	S98T002534_X	25.730	4.1679	77.650	217470.	-7.5967	33.754

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Analysis Report

Averages

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#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
21	S98T002534_AX	60989.	59031.	59088.	278250.	57616.	59328.
22	ICSA	246.43	-.00465	-.01659	187.05	-.00082	-.01681
23	ICSAB	244.63	.43634	-.01569	185.42	-.00098	.90860
24	CCV	4.9936	4.9021	5.0153	5.0065	4.8332	4.9316
25	CCB	.00110	.00057	.00114	-.00102	-.00180	.00102

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	5.0327	4.9892	4.8714	5.0096	4.7182	4.9023
2	ICB	.00998	.00007	-.00215	-.00332	.01437	.00281
3	LLS	.40283	.21305	.17940	.09063	.20103	Q.21189
4	ICSA	.03413	.02880	-.03220	-.00282	.03402	-.00376
5	ICSAB	.04801	.99214	-.03486	-.00426	.06045	-.00198
6	S98T002458	1052.1	29.412	1356.1	-2.5256	66.408	179.44
7	S98T002458_D	1045.7	34.123	1374.6	-1.7457	61.041	185.44
8	S98T002462	1077.9	28.605	1605.7	-7.4445	48.930	187.71
9	S98T002462_D	1061.4	22.250	1599.0	.81459	51.699	196.79
10	S98T002466	1148.1	19.163	1724.8	-6.3349	50.119	403.71
11	S98T002466_D	1325.4	29.369	1584.2	1.0433	50.671	367.14
12	CCV	5.0355	5.0620	4.9135	5.0361	4.7527	4.9617
13	CCB	.01636	-.00766	-.00150	-.00514	.01198	.01710
14	S98T002469	1161.4	34.416	1480.0	1.2784	60.045	184.99
15	S98T002469_D	1160.5	28.332	1477.3	-.07596	60.975	178.23
16	S98T002534_L	1151.8	42.341	2475.3	-9.6941	84.334	196.04
17	S98T002534	1107.1	17.122	2498.9	1.0787	34.222	167.37
18	S98T002534_D	1154.1	8.5652	2510.4	.70749	52.161	167.09
19	S98T002534_A	1750.9	609.97	3106.6	600.55	649.35	764.31
20	S98T002534_X	1199.1	20.099	2410.1	-5.4687	125.82	239.79
21	S98T002534_AX	60993.	59919.	61147.	59719.	57913.	62482.
22	ICSA	.05161	.01974	-.04186	-.00782	.05136	.00106
23	ICSAB	.04802	.98519	-.02914	.00198	.05371	.00216
24	CCV	5.0210	4.9932	4.8900	5.0334	4.7404	4.8994
25	CCB	.01376	.00512	-.00454	-.00565	.03010	.01143

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.8753	4.9864	.23495	5.0299	4.8230	9.6523
2	ICB	.00852	.00008	-.00561	.00019	-.04786	.02972
3	LLS	.20117	.01980	.00549	.02024	.38092	.49262
4	ICSA	-.01082	.00185	.00693	.00137	.00087	-.026815
5	ICSAB	-.00604	.00184	.00853	.00160	-.01173	-.05613
6	S98T002458	10.730	.27020	-4.6339	-.02254	-25.837	40.427
7	S98T002458_D	5.8298	.19661	-2.5759	.12037	-13.782	22.787
8	S98T002462	3.4958	.19689	-4.9844	-.02301	-26.662	18.015
9	S98T002462_D	3.8781	.19665	-4.8971	-.15661	-13.536	20.420
10	S98T002466	3.8264	.29638	-6.3466	.10480	-18.979	19.502
11	S98T002466_D	8.0398	.46931	-6.6689	.22962	-5.8801	45.676
12	CCV	4.8789	4.9807	.24120	5.0346	4.7860	9.6138
13	CCB	.00756	.00016	-.00679	-.00002	-.02359	.02496
14	S98T002469	6.7737	.24617	-1.6128	.39083	-20.014	24.955
15	S98T002469_D	6.2067	.24602	-6.0530	-.02763	-34.843	26.896
16	S98T002534_L	22.565	.61458	-11.130	1.9388	-69.976	100.59

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Analysis Report		Averages		Mon 11-09-98 02:37:08 PM			page 5
#	Sample Name	Sm	Sr	Th	Ti	Tl	U
17	S98T002534	6.5402	.21940	-3.4515	.51179	-16.513	34.683
18	S98T002534_D	6.7327	.21842	-7.1732	.09131	-22.151	48.044
19	S98T002534_A	573.46	580.10	24.432	588.84	536.59	1158.1
20	S98T002534_X	83.013	1.4777	9.5578	1.3535	-23.384	267.97
21	S98T002534_AX	57702.	58678.	2895.9	58878.	58436.	112000.
22	ICSA	-.01009	.00193	.00190	.00113	.00315	-.06679
23	ICSAB	-.01070	.00189	.00223	.00113	.01153	-.07202
24	CCV	4.8736	4.9647	.24210	5.0189	4.8251	9.6211
25	CCB	.01568	.00020	-.00561	.00019	-.01081	.05545

#	Sample Name	V	Y	Zn	Zr
1	ICV	4.9589	.00812	4.7600	4.8074
2	ICB	.00116	.00030	-.00050	.00129
3	LLS	.09929	.00065	.01870	.01930
4	ICSA	.00315	.00794	-.00316	-.00286
5	ICSAB	.45782	.00840	.91946	-.00191
6	S98T002458	2.5407	.59505	3.6704	1.6614
7	S98T002458_D	1.3276	.31998	3.1791	.80090
8	S98T002462	1.0446	.22781	2.5826	.62835
9	S98T002462_D	.83376	.17970	2.8487	.80295
10	S98T002466	1.0361	.18009	6.2534	1.0899
11	S98T002466_D	2.3415	.49863	6.5091	2.9112
12	CCV	4.9830	.00837	4.8031	4.8184
13	CCB	.00186	.00038	-.00044	.00138
14	S98T002469	1.5212	.46034	52.092	1.0813
15	S98T002469_D	1.5321	.27113	51.460	1.2299
16	S98T002534_L	5.4140	1.3701	-.14171	3.3864
17	S98T002534	2.2046	.45621	1.8375	1.4336
18	S98T002534_D	2.1867	.40343	.97836	1.3361
19	S98T002534_A	584.94	1.2974	573.76	570.35
20	S98T002534_X	16.987	5.0666	-.12887	9.8640
21	S98T002534_AX	58494.	100.28	55850.	58489.
22	ICSA	.00253	.00786	-.00431	-.00315
23	ICSAB	.45976	.00802	.91692	-.00236
24	CCV	4.9507	.00813	4.7578	4.8011
25	CCB	.00335	.00091	-.00079	.00186

11-09-98

File #: 980924 B.TXT

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A-0004-1

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# LABCORE Data Entry Template for Worklist# 26278

Analyst: JK Scto Instrument: ICP01 2 JK 9-14-98 Book# 75848Q

Method: LA-505-151/161 Rev/Mod C-2

Worklist Comment: JK 9-14-98  
ICP U-107 (FUSION)

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	ICV		@ICP-QC	QC		
2	ICB		@ICP-QC	QC		
3	LLS		@ICP-QC	QC		
4	ICSA		@ICP-QC	QC		
5	ICSAB		@ICP-QC	QC		
6	PREPBLKTIJA		@ICP-F01	SOLID		
7	SAMPLE	S98T002041	0 F	@ICP-F01	SOLID	98000358 U-107 (2)
<b>Analytes Requested:</b> AG-F-01 , AL-F-01 , AS-F-01 , B-F-01 , BA-F-01 , BE-F-01 , BI-F-01 , CA-F-01 , CD-F-01 , CE-F-01 , CO-F-01 , CR-F-01 , CU-F-01 , FE-F-01 , LA-F-01 , LI-F-01 , MG-F-01 , MN-F-01 , MO-F-01 , NA-F-01 , ND-F-01 , P-F-01 , PB-F-01 , S-F-01 , SB-F-01 , SE-F-01 , SI-F-01 , SM-F-01 , SR-F-01 , TI-F-01 , TL-F-01 , U-F-01 , V-F-01 , ZN-F-01 , ZR-F-01						
8	DUP	S98T002041	0 F	@ICP-F01	SOLID	
9	ICSA		@ICP-QC	QC		
10	ICSAB		@ICP-QC	QC		
11	CCV		@ICP-QC	QC		
12	CCB		@ICP-QC	QC		

## Final page for worklist # 26278

JK Scto 09-14-98  
 Analyst Signature Date  
 Prep. BLKTIJA 1.25-10 , SF 1  
 S98T002041 1.25-10 , SF 41  
 S98T002041-D 1.25-10 41  
 Data Entry Comments:

Analyst Signature Date  
 Validated by:  
Saul H. Pang  
 9/24/98

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



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Analysis Report

Summary

Thu 09-24-98 01:31:57 PM

page 1

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	980924B	ICP2	09/24/98	12:50	DKS	Q	CONC
2	ICB	980924B	ICP2	09/24/98	12:54	DKS	Q	CONC
3	LLS	980924B	ICP2	09/24/98	12:57	DKS	Q	CONC
4	ICSA	980924B	ICP2	09/24/98	13:00	DKS	Q	CONC
5	ICCSAB	980924B	ICP2	09/24/98	13:03	DKS	Q	CONC
6	PREPBLKTJA	980924B	ICP2	09/24/98	13:07	DKS	Q	CONC
7	S98T002041	980924B	ICP2	09/24/98	13:10	DKS	S	CONC
8	S98T002041_D	980924B	ICP2	09/24/98	13:13	DKS	S	CONC
9	ICSA	980924B	ICP2	09/24/98	13:17	DKS	Q	CONC
10	ICCSAB	980924B	ICP2	09/24/98	13:20	DKS	Q	CONC
11	CCV	980924B	ICP2	09/24/98	13:23	DKS	Q	CONC
12	CCB	980924B	ICP2	09/24/98	13:27	DKS	Q	CONC

DK LAD

09-24-98

Work list # 26278

K-107

5987002041

5987002041

$$AL = 15.695 \frac{\mu\text{g}}{\text{mL}} \times \frac{1}{2.0430 \frac{\text{g}}{\text{L}} \times \frac{1\text{L}}{100\text{mL}}} = 7.68 \text{e} + 3 \frac{\mu\text{g}}{\text{g}}$$

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 273 TO 276

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## HNF-1661 REV. 0

Analysis Report Averages Thu 09-24-98 01:31:57 PM page 2

#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.8879	4.8259	5.0515	4.8051	4.8427	4.9794
2	ICB	.00159	.01196	.01319	.00413	.00010	.00013
3	LLS	.02148	.11084	.19772	.09749	.09736	.01068
4	ICSA	.00357	235.67	.04709	-.00499	.00041	.00036
5	ICSAB	.93675	235.07	.04968	-.01067	.44522	.46736
6	PREPBLKTJA	.00125	.01044	.00318	.00320	.00011	.00009
7	S98T002041	.04331	15.695	.19915	.05814	.00818	.00570
8	S98T002041_D	.07572	19.448	.21985	.18857	.01416	.01306
9	ICSA	.00395	236.20	.05882	-.01044	.00031	.00032
10	ICSAB	.94114	235.62	.06137	-.01275	.44840	.47134
11	CCV	4.9777	4.8617	5.0877	4.8312	4.8670	5.0221
12	CCB	.00237	.01255	-.00387	.00367	.00013	.00031

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	4.9036	4.9180	4.9581	4.9378	4.8695	4.8473
2	ICB	.02277	-.00153	.00053	.01103	.00113	.00120
3	LLS	.23080	.21919	.01121	.20593	.03949	.02153
4	ICSA	.04485	252.00	.00676	.02243	.00185	-.00106
5	ICSAB	.01319	250.38	.92440	.01035	.45265	.45998
6	PREPBLKTJA	.03225	-.00197	.00037	.01004	.00048	.00155
7	S98T002041	2.0380	-.16113	.03281	.13123	-.04881	4.0191
8	S98T002041_D	2.2630	.14529	.06820	.54572	.01775	4.5933
9	ICSA	.03881	251.91	.00682	.01526	.00097	-.00107
10	ICSAB	-.00283	252.21	.93563	.00363	.45239	.46323
11	CCV	4.9531	5.0382	5.0291	4.9775	4.9359	4.9333
12	CCB	.01900	-.00030	.00146	.01232	.00100	.00146

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.6567	.00792	4.7726	4.9235	4.8838	4.9007
2	ICB	.00046	.00051	.00183	-.03637	.00181	.00067
3	LLS	.01771	.00055	.09823	.45626	.10187	.02140
4	ICSA	.00406	.00620	90.605	.33378	-.00200	.00319
5	ICSAB	.45234	.01049	89.992	.05960	-.00260	.93655
6	PREPBLKTJA	.00129	.00123	.00312	Q252.06	.00145	.00087
7	S98T002041	.02095	.01142	5.4319	10696.	.02606	.01202
8	S98T002041_D	.05674	.05382	.98636	10192.	.09243	.03963
9	ICSA	.00418	.00943	90.793	.13729	-.00279	.00270
10	ICSAB	.45488	.00957	90.583	.18047	-.00334	.93587
11	CCV	4.6688	.00886	4.8327	4.6879	4.9183	4.8674
12	CCB	.00029	.00035	.00260	.08241	.00209	.00067

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	4.9676	4.8297	4.8790	4.9764	4.7653	4.8296
2	ICB	.00631	.00024	.00032	.00336	.00235	.00094
3	LLS	.20606	.02035	.10150	.19744	.19973	.03637
4	ICSA	241.52	-.00406	-.01345	180.63	.00309	-.00353
5	ICSAB	240.69	.43692	-.01558	181.27	.00198	.89853

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#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
6	PREPBLKTJA	.00830	.00186	.00028	.06976	.00161	Q.35294
7	S98T002041	-.04841	.46332	-.05797	436.77	-.06192	5.0604
8	S98T002041_D	.34293	.48560	-.09797	423.17	-.18289	7.1336
9	ICSA	241.81	-.00405	-.01120	180.47	.00185	-.01711
10	ICSAB	240.96	.43933	-.01543	181.65	.00213	.90383
11	CCV	4.9809	4.9052	4.9420	4.9397	4.7799	4.9030
12	CCB	.00601	.00024	.00273	.00810	.00216	-.00731

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	4.8082	4.8271	4.7778	4.8904	4.7033	4.7649
2	ICB	.01787	.01549	-.00156	.00290	.03070	.00303
3	LLS	.39620	.21928	.20831	.09525	.20892	Q.12938
4	ICSA	.04078	.04914	-.02596	.00053	.09342	.00217
5	ICSAB	.03909	.97648	-.03130	.00764	.08573	.00144
6	PREPBLKTJA	.02587	.01437	.00177	-.00206	.03770	.01814
7	S98T002041	7.0344	-.03523	.94842	-.12970	1.1880	2.3317
8	S98T002041_D	6.8033	.58310	1.2766	.31901	1.4226	2.6771
9	ICSA	.03814	.03555	-.01382	-.00061	.09387	.00295
10	ICSAB	.04137	.98919	-.02339	.00843	.07793	.00180
11	CCV	4.9021	4.9320	4.8301	4.9528	4.7488	4.8471
12	CCB	.01827	.01233	-.00681	.00337	.02827	.00186

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.8022	4.8963	.23514	4.8643	4.6586	9.4728
2	ICB	.00228	.00000	.00664	.00070	-.00320	.00988
3	LLS	.19982	.01987	.01014	.02068	.39424	4.7331
4	ICSA	-.00895	.00178	.01241	.00212	.00708	-.10556
5	ICSAB	-.00850	.00180	.00449	.00141	-.00920	-.10155
6	PREPBLKTJA	.00909	.00017	.00543	.00051	-.01744	-.04662
7	S98T002041	.03185	.00374	.15430	-.01651	-.19990	-2.7719
8	S98T002041_D	.40653	.01057	.29144	.03943	-.37471	-1.1931
9	ICSA	-.01158	.00179	.01818	.00192	.02466	-.12253
10	ICSAB	-.01001	.00178	.01472	.00213	-.00888	-.11807
11	CCV	4.8300	4.9309	.24511	4.9180	4.7105	9.5187
12	CCB	-.00015	.00004	.00356	.00046	.00654	.00736

#	Sample Name	V	Y	Zn	Zr
1	ICV	4.8538	.00749	4.5990	4.8184
2	ICB	.00031	.00015	.00020	-.00019
3	LLS	.09934	.00034	.01964	.01911
4	ICSA	.00446	.00811	-.00356	-.00187
5	ICSAB	.45716	.00787	.90907	-.00166
6	PREPBLKTJA	.00219	.00041	-.00032	.00153
7	S98T002041	.00335	-.00203	.00108	-.00940
8	S98T002041_D	.10286	.02299	.01965	.07013
9	ICSA	.00318	.00773	-.00367	-.00326
10	ICSAB	.45948	.00796	.91274	-.00246
11	CCV	4.9213	.00802	4.6927	4.8728

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#	Sample Name	V	Y	Zn	Zr
12	CCB	.00032	.00007	.00055	.00036

*JK*  
*09-24-98*

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09/21/98 15:02

A-0004-1

File #: 981109G.TXT

Page: 1

## LABCORE Data Entry Template for Worklist# 26279

Analyst: JK Scto Instrument: ICP01A # 1102-98 Book# 75B48BMethod: LA-505-151/161 Rev/Mod C3Ensure dose rate at 30cm is  $\leq 30$  mrem/hr  
prior to performing this analysis.Worklist Comment: # 1102-98  
ICP U-107 (FUSION)

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	ICV		@ICP-QC	QC		
2	ICB		@ICP-QC	QC		
3	LLS		@ICP-QC	QC		
4	ICSA		@ICP-QC	QC		
5	ICSAB		@ICP-QC	QC		
6	PREPBLKTJA		@ICP-F01	SOLID		
7	SERDIL	S98T002529 0 F	@ICP-F01	SOLID		
8	SAMPLE	S98T002529 0 F	@ICP-F01	SOLID	98000401 U-107 (2)	
	Analytes Requested: AG-F-01, AL-F-01, AS-F-01, B-F-01, BA-F-01, BE-F-01, BI-F-01, CA-F-01, CD-F-01, CE-F-01, CO-F-01, CR-F-01, CU-F-01, FE-F-01, LA-F-01, LI-F-01, MG-F-01, MN-F-01, MO-F-01, NA-F-01, ND-F-01, NI-F-01, P-F-01, PB-F-01, S-F-01, SB-F-01, SE-F-01, SI-F-01, SM-F-01, SR-F-01, TI-F-01, TL-F-01, U-F-01, V-F-01, ZN-F-01, ZR-F-01					
9	DUP	S98T002529 0 F	@ICP-F01	SOLID		
10	SPK (1 ppm) Sample X	S98T002529 0 F	@ICP-F01	SOLID		
11	CCV Spiky 4x (10 ppm) # 11-9-98		@ICP-QC	QC		
12	CCB		@ICP-QC	QC		
13	SAMPLE	S98T002539 0 F	@ICP-F01	SOLID	98000401 U-107 (2)	
	Analytes Requested: AG-F-01, AL-F-01, AS-F-01, B-F-01, BA-F-01, BE-F-01, BI-F-01, CA-F-01, CD-F-01, CE-F-01, CO-F-01, CR-F-01, CU-F-01, FE-F-01, LA-F-01, LI-F-01, MG-F-01, MN-F-01, MO-F-01, NA-F-01, ND-F-01, NI-F-01, P-F-01, PB-F-01, S-F-01, SB-F-01, SE-F-01, SI-F-01, SM-F-01,					

Data Entry Comments:

Validated by:

Sally M. Pong

11/10/98

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

HNF-1661 REV. 0

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A-0004-1

# LABCORE Data Entry Template for Worklist# 26279

S Type	Sample#	R A	Test	Matrix	Group#	Project
			SR-F-01 , ZR-F-01	TI-F-01 ,	TL-F-01 ,	U-F-01 , V-F-01 , ZN-F-01 ,
14 DUP	S98T002539	0 F	@ICP-F01	SOLID		
15 SAMPLE	S98T002545	0 F	@ICP-F01	SOLID	98000401	U-107 (2)
	<b>Analyses Requested:</b>		AG-F-01 , BE-F-01 , CR-F-01 , MN-F-01 , PB-F-01 , SR-F-01 , ZR-F-01	AL-F-01 , BI-F-01 , CU-F-01 , MO-F-01 , S-F-01 , TI-F-01	AS-F-01 , CA-F-01 , FE-F-01 , NA-F-01 , SB-F-01 , TL-F-01	E-F-01 , CD-F-01 , LA-F-01 , ND-F-01 , SE-F-01 , U-F-01
						BA-F-01 , CO-F-01 , MG-F-01 , P-F-01 , SM-F-01 , V-F-01 , ZN-F-01
16 DUP	S98T002545	0 F	@ICP-F01	SOLID		
17 ICSA			@ICP-QC	QC		
18 ICSAB			@ICP-QC	QC		
19 CCV			@ICP-QC	QC		
20 CCB			@ICP-QC	QC		

## Final page for worklist # 26279

*JX D* 11-09-98

Analyst Signature	Date
<i>Prep JX D</i>	.15.10 DF 1
<i>5987001527-L</i>	.15.10-28 DF 265
<i>5987001527</i>	.15.10 41
<i>5987001527-D</i>	.15.10 41
<i>5987001527-G</i>	.15.10 41
<i>5987001527-X</i>	.15.10-19 410
<i>5987001527-QK</i>	.15.10-19 410
<i>5987001539</i>	.15.10 DF 41
<i>5987001539-D</i>	.15.10 41
<i>5987001545</i>	.15.10 DF 41
<i>5987001545-D</i>	.15.10 41

Analyst Signature	Date
-------------------	------

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

## HNF-1661 REV. 0

Analysis Report

Summary

Mon 11-09-98 11:33:18 AM

page 1

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981109A	ICP2	11/09/98	10:02	DKS	Q	CONC
2	ICB	981109A	ICP2	11/09/98	10:05	DKS	Q	CONC
3	LLS	981109A	ICP2	11/09/98	10:08	DKS	Q	CONC
4	ICSA	981109A	ICP2	11/09/98	10:11	DKS	Q	CONC
5	ICSAB	981109A	ICP2	11/09/98	10:14	DKS	Q	CONC
6	PREPBLKTJA	981109A	ICP2	11/09/98	10:17	DKS	Q	CONC
7	S98T002529_L	981109A	ICP2	11/09/98	10:21	DKS	S	CONC
8	S98T002529	981109A	ICP2	11/09/98	10:24	DKS	S	CONC
9	S98T002529_D	981109A	ICP2	11/09/98	10:27	DKS	S	CONC
10	S98T002529_A	981109A	ICP2	11/09/98	10:31	DKS	S	CONC
11	S98T002529_X	981109A	ICP2	11/09/98	10:35	DKS	S	CONC
12	S98T002529_AX	981109A	ICP2	11/09/98	10:40	DKS	S	CONC
13	CCV	981109A	ICP2	11/09/98	11:01	DKS	Q	CONC
14	CCB	981109A	ICP2	11/09/98	11:04	DKS	Q	CONC
15	S98T002539	981109A	ICP2	11/09/98	11:07	DKS	S	CONC
16	S98T002539_D	981109A	ICP2	11/09/98	11:10	DKS	S	CONC
17	S98T002545	981109A	ICP2	11/09/98	11:13	DKS	S	CONC
18	S98T002545_D	981109A	ICP2	11/09/98	11:16	DKS	S	CONC
19	ICSA	981109A	ICP2	11/09/98	11:21	DKS	Q	CONC
20	ICSAB	981109A	ICP2	11/09/98	11:23	DKS	Q	CONC
21	CCV	981109A	ICP2	11/09/98	11:26	DKS	Q	CONC
22	CCB	981109A	ICP2	11/09/98	11:30	DKS	Q	CONC

N/A

U-107

11-09-98

5987002529

Work list # 26279

5987002539

5987002545

S98T002529

$$AL = 23.067 \frac{\mu\text{g}}{\text{ml}} \times \frac{1}{2.040 \frac{\text{g}}{\text{L}} \times \frac{1\text{L}}{1000\text{ml}}} = 1.132 + 4 \frac{\mu\text{g}}{\text{g}}$$

SP 11/9/98

Spika:

$$AL = \frac{(62.859)}{41} - \frac{(23.061)}{41} \times 100 = 97.0\%$$

Post Spika:

$$Na = \frac{(4372.9)}{410} - \frac{(302.48)}{410} \times 100 = 99.3\%$$

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 18 79 TO 1283.

## HNF-1661 REV. 0

Analysis Report Averages Mon 11-09-98 11:33:18 AM page 2

#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.9838	4.9188	5.1321	4.9665	4.9166	5.0424
2	ICB	.00040	-.00179	-.00098	.00507	.00007	-.00013
3	LLS	.02305	.10600	.19676	.10204	.09810	.01036
4	ICSA	.00162	244.73	.01343	-.00171	.00017	.00000
5	ICSAB	.94671	243.84	.00962	-.00642	.45816	.47422
6	PREPBLKTJA	.00056	.00639	-.00756	.00091	.00010	-.00017
7	S98T002529_L	.02564	23.706	-1.6914	-.47313	-.01849	-.01798
8	S98T002529	.00902	23.067	-.38773	.07534	.00601	.00015
9	S98T002529_D	.03403	27.073	-.54650	.09463	.00794	-.00709
10	S98T002529_A	38.433	62.854	41.569	39.328	38.251	39.867
11	S98T002529_X	.03965	22.595	-.89926	-.75437	.02425	-.03611
12	S98T002529_AX	3831.1	4014.4	4104.5	4092.5	4104.3	4070.0
13	CCV	4.9856	4.9194	5.1360	4.9655	4.9410	5.0328
14	CCB	.00015	-.00177	.00103	.00323	-.00001	.00008
15	S98T002539	-.00515	19.454	-.41877	.15126	.00239	-.00524
16	S98T002539_D	.04129	20.015	-.05804	.00001	.00500	-.00530
17	S98T002545	.01622	26.402	-.16886	-.00010	.00465	-.01068
18	S98T002545_D	-.01055	25.092	-.11062	.03756	.00431	-.01426
19	ICSA	.00253	242.52	.04937	-.00787	.00030	.00009
20	ICSAB	.94330	241.65	.02845	-.01250	.45483	.47246
21	CCV	5.0084	4.9389	5.1409	4.9812	4.9688	5.0465
22	CCB	-.00036	-.00645	.00507	-.00276	.00004	-.00026

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	4.9999	4.9708	5.0643	5.0261	4.9591	4.9333
2	ICB	.00953	-.00099	-.00037	.00387	.00183	-.00013
3	LLS	.21082	.22771	.01024	.21813	.04238	.02103
4	ICSA	-.01181	254.07	.00432	-.00430	-.00233	-.00377
5	ICSAB	.00380	253.35	.93670	.00203	.45896	.46234
6	PREPBLKTJA	.00653	.01148	-.00019	.00350	.00197	.00037
7	S98T002529_L	-.31540	.10019	-.09261	-.45498	.19970	1.4255
8	S98T002529	.65966	.69158	-.00597	.00057	.09897	1.6947
9	S98T002529_D	-.06739	.84581	-.00057	.31627	.06940	1.8215
10	S98T002529_A	39.350	41.181	41.165	40.221	40.309	41.864
11	S98T002529_X	7.5453	.32202	-.65898	1.7364	.95826	1.6382
12	S98T002529_AX	4156.1	4099.9	4076.4	4132.4	4062.2	4091.0
13	CCV	4.9596	4.9515	5.0578	5.0319	4.9624	4.9308
14	CCB	-.00247	-.00264	-.00054	-.00025	.00160	-.00038
15	S98T002539	.09010	.26562	.00407	-.19391	.07363	1.3857
16	S98T002539_D	.90012	.31850	-.00975	.17078	.04942	1.3366
17	S98T002545	-.20474	.33036	-.03851	.00120	.06405	3.3420
18	S98T002545_D	.62250	.28595	-.05309	-.18406	.00898	3.1276
19	ICSA	-.00336	253.40	.00481	.00235	.00058	-.00391
20	ICSAB	-.01063	253.33	.93533	.00233	.45909	.46201
21	CCV	5.0199	4.9800	5.0551	5.0685	4.9667	4.9487
22	CCB	.00979	-.00299	-.00066	.00004	-.00010	-.00170



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Analysis Report

Averages

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#	Sample Name	Cu	Bu	Fe	K	La	Li
1	ICV	4.7106	.00880	4.8865	4.9487	4.9883	4.9475
2	ICB	.00071	.00049	.00053	.06025	.00085	.00098
3	LLS	.01819	.00094	.09886	.61150	.10383	.02207
4	ICSA	.00329	.02621	92.494	.07578	-.00437	.00227
5	ICSAB	.46424	.02873	92.086	.12168	-.00382	.98790
6	PREPBLKTJA	.00023	.00095	.00200	Q267.08	.00035	.00088
7	S98T002529_L	-.05208	.08379	.13144	10677.	.01752	.06062
8	S98T002529	.02079	.04172	.15476	10383.	.02266	.03648
9	S98T002529_D	.01605	.07492	.29675	10800.	.06872	.05663
10	S98T002529_A	37.253	.12722	39.428	10437.	39.389	38.554
11	S98T002529_X	-.06397	.64265	.05530	10326.	.12420	.60568
12	S98T002529_AX	3846.1	7.1251	3907.1	14707.	4113.6	4092.9
13	CCV	4.7115	.00907	4.8638	4.9925	4.9955	4.9809
14	CCB	-.00004	.00106	-.00068	-.05151	.00012	.00078
15	S98T002539	-.00443	.07178	.13622	11092.	-.00619	.05260
16	S98T002539_D	-.01919	.06337	.26698	10302.	.04314	.06069
17	S98T002545	.03289	.03333	.48697	9987.2	-.00264	.05669
18	S98T002545_D	.00297	.01531	.31999	10384.	-.03213	.04462
19	ICSA	.00287	.02543	92.025	.08477	-.00331	.00266
20	ICSAB	.45902	.02739	91.837	.06261	-.00431	.97398
21	CCV	4.7351	.00968	4.8636	4.9325	5.0223	5.0806
22	CCB	-.00028	.00087	-.00008	.04857	.00009	.00068

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.0748	4.9052	5.0098	5.1036	4.8686	4.9433
2	ICB	.00593	.00046	.00112	-.01339	.00145	.00734
3	LLS	.21669	.02056	.10328	.18811	.19948	.04515
4	ICSA	250.29	-.00476	-.01738	192.18	-.00560	-.00581
5	ICSAB	248.75	.43896	-.01903	191.65	-.00092	.91922
6	PREPBLKTJA	.00598	.00185	-.00049	.08582	.00001	Q.24622
7	S98T002529_L	-.93556	.18208	.09968	323.32	-.59392	3.4184
8	S98T002529	.12747	.12433	.10361	315.93	.01996	2.6882
9	S98T002529_D	.34620	.16511	.13697	284.97	.02608	3.7180
10	S98T002529_A	40.099	39.164	40.698	356.74	38.329	43.068
11	S98T002529_X	1.7319	.38005	.79508	302.48	.24637	3.4830
12	S98T002529_AX	4217.6	4062.7	4054.3	4372.9	4003.4	4085.0
13	CCV	5.0431	4.9035	5.0208	5.0830	4.8811	4.9468
14	CCB	-.00229	.00057	.00145	-.02093	.00004	.00138
15	S98T002539	-.22174	.16795	.05863	402.93	-.04936	4.6638
16	S98T002539_D	.24388	.12999	.09812	398.91	-.15279	2.8343
17	S98T002545	.04514	.25346	.18846	418.36	.08947	2.6124
18	S98T002545_D	-.11182	.24790	.11643	415.76	-.10528	2.0061
19	ICSA	247.59	-.00477	-.01548	188.79	-.00118	-.01066
20	ICSAB	246.04	.43759	-.01776	188.20	-.00259	.91692
21	CCV	5.0390	4.9189	5.0281	5.1471	4.9110	4.9712
22	CCB	-.00361	.00046	.00001	-.01818	-.00173	-.00332

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#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	4.9899	4.9846	4.8583	5.0241	4.7246	4.9022
2	ICB	.01296	.01375	.01001	.00007	.01638	.00648
3	LLS	.40820	.22201	.20342	.10498	.20433	Q.21638
4	ICSA	.03341	.01991	-.04212	-.00025	.05045	-.00454
5	ICSAB	.04282	.99522	-.03047	-.00210	.04813	-.00376
6	PREPBLKTJA	.02268	.00410	.00869	-.00379	.01677	.01293
7	S98T002529_L	37.428	.47688	2.5493	-.10114	1.6740	1.4658
8	S98T002529	37.652	.19368	2.5940	-.01218	.79216	.96281
9	S98T002529_D	8.6590	.41962	3.1289	-.00667	.99169	1.1812
10	S98T002529_A	79.632	40.765	42.596	40.804	39.171	41.322
11	S98T002529_X	44.063	6.0938	.20518	-1.0347	8.1551	4.2130
12	S98T002529_AX	4117.8	4110.9	4003.8	4105.8	3972.8	3988.8
13	CCV	4.9922	4.9949	4.8479	5.0026	4.7349	4.9029
14	CCB	.00879	.01238	.00916	-.00436	.00675	.01148
15	S98T002539	18.738	.29861	1.4913	-.15917	.91749	1.2585
16	S98T002539_D	18.838	-.09168	1.1424	-.09295	1.3383	1.1418
17	S98T002545	11.375	.42715	2.9384	-.10062	1.1658	1.1896
18	S98T002545_D	11.410	-.28728	2.6750	-.14585	.87869	1.0418
19	ICSA	.04047	.02082	-.03296	-.00415	.05576	-.00343
20	ICSAB	.03079	.99326	-.03005	.00826	.05812	-.00102
21	CCV	4.9977	4.9930	4.8588	5.0273	4.7218	4.9157
22	CCB	.00639	.00113	.00680	-.00283	.00372	.00580

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.8832	4.9965	.23217	5.0324	4.7987	9.6564
2	ICB	.00950	.00016	-.00018	.00066	-.00976	.02914
3	LLS	.20748	.02022	.01024	.02070	.39678	.51131
4	ICSA	-.01435	.00200	-.00381	.00088	-.04613	-.06965
5	ICSAB	-.01576	.00202	.00056	.00112	-.02191	-.07097
6	PREPBLKTJA	.00763	.00021	-.00216	.00046	-.01353	-.03220
7	S98T002529_L	1.0604	.01698	-1.1727	-.04901	-9.1686	1.3019
8	S98T002529	.45297	.00863	.04229	.01961	-1.1372	-1.1836
9	S98T002529_D	.85460	.01705	-.02201	.02831	-1.0117	.24853
10	S98T002529_A	38.692	39.332	1.7909	40.199	38.241	75.475
11	S98T002529_X	7.3862	.11764	-.42363	.36082	-8.7119	23.546
12	S98T002529_AX	3993.5	4065.2	200.09	4059.6	4033.7	7760.4
13	CCV	4.8944	4.9957	4.2137	5.0251	4.8072	9.6716
14	CCB	.01192	.00012	-.00507	.00042	-.03158	.03944
15	S98T002539	.72045	.01368	-.22591	.02752	-.31300	-.10672
16	S98T002539_D	.67482	.01195	.04514	.01022	-1.3956	.05101
17	S98T002545	.43595	.01204	-.05253	.03727	-.09943	-.92034
18	S98T002545_D	.20282	.00872	-.16537	.00074	-.90869	-2.0953
19	ICSA	-.01320	.00194	.00192	.00113	-.00104	-.07020
20	ICSAB	-.01367	.00194	.00294	.00136	-.00137	-.07757
21	CCV	4.9106	5.0271	.23889	5.0477	4.8139	9.7223
22	CCB	.00852	.00012	-.00770	-.00003	-.01980	.02885

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#	Sample Name	V	Y	Zn	Zr
1	ICV	4.9549	.00796	4.7459	4.8103
2	ICB	.00166	.00045	-.00072	.00088
3	LLS	.10182	.00080	.01933	.01952
4	ICSA	.00159	.00778	-.00438	-.00340
5	ICSAB	.46210	.00770	.91949	-.00320
6	PREPBLKTJA	.00230	.00064	.00274	.00108
7	S98T002529_L	.21230	.06370	-.01677	.27188
8	S98T002529	.08655	.02620	.03549	.04692
9	S98T002529_D	.21115	.05129	.02267	.12454
10	S98T002529_A	40.039	.10607	39.384	38.348
11	S98T002529_X	1.7938	.40766	-.11831	.74809
12	S98T002529_AX	4024.5	6.8544	3823.0	4028.3
13	CCV	4.9542	.00795	4.7413	4.8114
14	CCB	.00286	.00061	.00004	.00184
15	S98T002539	.17720	.04823	.01248	.12788
16	S98T002539_D	.14081	.03853	.01300	.08289
17	S98T002545	.10028	.02930	-.01529	.04121
18	S98T002545_D	.03220	.01374	.00173	.03869
19	ICSA	.00218	.00794	-.00381	-.00349
20	ICSAB	.46213	.00794	.92276	-.00305
21	CCV	4.9771	.00824	4.7616	4.8275
22	CCB	.00186	.00061	-.00032	.00144

*DK LAD*  
11-09-98

HNF-1661 REV. 0

09/21/98 15:06  
A-0004-1

File #: 9811038.TXT

Page: 1

## LABCORE Data Entry Template for Worklist# 26280

Analyst: JK Seto Instrument: ICP072 # 11-02-98 Book# 77B30Method: LA-505-151/161 Rev/Mod C-3Ensure dose rate at 30 cm is  $\leq 50$  mR/hr  
prior to performing this analysis.Worklist Comment: # 11-02-98  
ICP U-107 (FUSION)

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	ICV		@ICP-QC	QC		
2	ICB		@ICP-QC	QC		
3	LLS		@ICP-QC	QC		
4	ICSA		@ICP-QC	QC		
5	ICSAB		@ICP-QC	QC		
6	PREPBLKTJA		@ICP-F01	SOLID		
7	SAMPLE	S98T002554	0 F	@ICP-F01	SOLID	98000401 U-107 (2)
		<b>Analytes Requested:</b> AG-F-01, AL-F-01, AS-F-01, B-F-01, BA-F-01, BE-F-01, BI-F-01, CA-F-01, CD-F-01, CE-F-01, CO-F-01, CR-F-01, CU-F-01, FE-F-01, LA-F-01, LI-F-01, MG-F-01, MN-F-01, MO-F-01, NA-F-01, ND-F-01, NI-F-01, P-F-01, PB-F-01, S-F-01, SB-F-01, SE-F-01, SI-F-01, SM-F-01, SR-F-01, TI-F-01, TL-F-01, U-F-01, V-F-01, ZN-F-01, ZR-F-01				
8	DUP	S98T002554	0 F	@ICP-F01	SOLID	
9	SAMPLE	S98T002561	0 F	@ICP-F01	SOLID	98000401 U-107 (2)
		<b>Analytes Requested:</b> AG-F-01, AL-F-01, AS-F-01, B-F-01, BA-F-01, BE-F-01, BI-F-01, CA-F-01, CD-F-01, CE-F-01, CO-F-01, CR-F-01, CU-F-01, FE-F-01, LA-F-01, LI-F-01, MG-F-01, MN-F-01, MO-F-01, NA-F-01, ND-F-01, NI-F-01, P-F-01, PB-F-01, S-F-01, SB-F-01, SE-F-01, SI-F-01, SM-F-01, SR-F-01, TI-F-01, TL-F-01, U-F-01, V-F-01, ZN-F-01, ZR-F-01				
10	DUP	S98T002561	0 F	@ICP-F01	SOLID	
11	SAMPLE	S98T002566	0 F	@ICP-F01	SOLID	98000401 U-107 (2)
		<b>Analytes Requested:</b> AG-F-01, AL-F-01, AS-F-01, B-F-01, BA-F-01, BE-F-01, BI-F-01, CA-F-01, CD-F-01, CE-F-01, CO-F-01,				

Data Entry Comments:

updated 12-3-98  
John Wrenell

Validated by:

Sal P. Pag  
12/3/98

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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09/21/98 15:06

A-0004-1

**LBCORE Data Entry Template for Worklist# 26280**

S Type	Sample#	R A	Test	Matrix	Group#	Project			
			CR-F-01	CU-F-01	PE-F-01	LA-F-01	LI-F-01	MG-F-01	
			MN-F-01	MO-F-01	NA-F-01	ND-F-01	NI-F-01	P-F-01	
			PB-F-01	S-F-01	SB-F-01	SE-F-01	SI-F-01	SM-F-01	
			SR-F-01	TI-F-01	TL-F-01	U-F-01	V-F-01	ZN-F-01	
			ZR-F-01						
12 DUP	S98T002566	0 F	⊙ICP-F01	SOLID					
13 ICSA			⊙ICP-QC	QC					
14 ICSAB			⊙ICP-QC	QC					
15 CCV			⊙ICP-QC	QC					
16 CCB			⊙ICP-QC	QC					

**Final page for worklist # 26280**

*DX [Signature]* 12-03-98

Analyst Signature	Date
<i>Prepbill TJA</i>	<i>.25-10 DF 1</i>
<i>5987001554</i>	<i>.25-10 DF 41</i>
<i>5987001554-D</i>	<i>.25-10 41</i>
<i>5987001561</i>	<i>.25-10 DF 41</i>
<i>5987001561-D</i>	<i>.25-10 41</i>
<i>5987001566</i>	<i>.25-10 DF 41</i>
<i>5987001566-D</i>	<i>.25-10 41</i>

Analyst Signature	Date

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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## HNF-1661 REV. 0

Analysis Report

Summary

Thu 12-03-98 01:07:38 PM

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981203B	ICP2	12/03/98	11:02	DKS	Q	CONC
2	ICB	981203B	ICP2	12/03/98	11:05	DKS	Q	CONC
3	LLS	981203B	ICP2	12/03/98	11:08	DKS	Q	CONC
4	ICSA	981203B	ICP2	12/03/98	11:10	DKS	Q	CONC
5	ICSA B	981203B	ICP2	12/03/98	11:13	DKS	Q	CONC
6	PREPBLKTJA	981203B	ICP2	12/03/98	11:17	DKS	Q	CONC
7	S98T002554	981203B	ICP2	12/03/98	11:20	DKS	S	CONC
8	S98T002554_D	981203B	ICP2	12/03/98	11:23	DKS	S	CONC
9	S98T002561	981203B	ICP2	12/03/98	11:26	DKS	S	CONC
10	S98T002561_D	981203B	ICP2	12/03/98	11:29	DKS	S	CONC
11	CCV	981203B	ICP2	12/03/98	12:42	DKS	Q	CONC
12	CCB	981203B	ICP2	12/03/98	12:45	DKS	Q	CONC
13	S98T002566	981203B	ICP2	12/03/98	12:48	DKS	S	CONC
14	S98T002566_D	981203B	ICP2	12/03/98	12:51	DKS	S	CONC
15	ICSA	981203B	ICP2	12/03/98	12:55	DKS	Q	CONC
16	ICSA B	981203B	ICP2	12/03/98	12:57	DKS	Q	CONC
17	CCV	981203B	ICP2	12/03/98	13:01	DKS	Q	CONC
18	CCB	981203B	ICP2	12/03/98	13:04	DKS	Q	CONC

JK

12-03-98

Work list # 26280

k-107

598700 2554

598700 2561

598700 2566

598700 2554

$$\text{AL} = 31.872 \frac{\mu\text{g}}{\text{ml}} \times \frac{1}{2.0480 \frac{\text{g}}{\text{L}} \times \frac{1\text{L}}{1000\text{ml}}} = 1.562 + 4 \frac{\mu\text{g}}{\text{g}}$$

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1286 TO 1289.

HNF-1661 REV. 0

Analysis Report

Averages

Thu 12-03-98 01:07:38 PM

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#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.9381	4.8250	4.9995	4.9835	4.7771	5.0467
2	ICB	.00223	.00616	-.00613	.00142	.00015	.00018
3	LLS	.02352	.11070	.19139	.09845	.09549	.01024
4	ICSA	.00347	238.12	.04605	-.00904	.00039	.00032
5	ICSAB	.94062	237.27	.02396	-.01104	.44970	.46980
6	PREPBLKTJA	.00317	.02201	.00412	-.00284	.00027	.00018
7	S98T002554	.09059	31.872	-.00618	.09690	.01300	.00764
8	S98T002554_D	-.01066	29.977	-.19133	-.01940	.00648	.00392
9	S98T002561	.05879	61.352	.48123	-.01453	.04248	.00573
10	S98T002561_D	.08142	55.037	-.02842	.06274	.03605	.00573
11	CCV	4.8846	4.8167	4.9391	4.9277	4.7316	5.0228
12	CCB	.00183	.01166	-.00163	-.00141	.00014	.00022
13	S98T002566	.07862	10.234	-.13996	.01897	.00688	.00580
14	S98T002566_D	.05089	9.5714	.13031	-.00600	.00699	.00207
15	ICSA	.00439	236.23	.03599	-.00689	.00047	.00023
16	ICSAB	.94578	239.37	.05817	-.00520	.45252	.47445
17	CCV	4.9386	4.8691	5.0115	5.0171	4.8090	5.0870
18	CCB	.00261	.01490	.00547	.00142	.00028	.00013

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	4.9573	5.1482	5.0593	4.9406	4.9475	4.9621
2	ICB	.00060	.00646	.00050	.01043	.00039	.00079
3	LLS	.21665	.23513	.01062	.21117	.04305	.02101
4	ICSA	.01575	252.63	.00586	.01506	.00526	-.00085
5	ICSAB	-.01394	251.08	.93015	.00892	.45548	.45932
6	PREPBLKTJA	.02169	.02054	.00013	.01668	.00185	.00224
7	S98T002554	.19504	.85414	.01265	.56166	.06452	8.3064
8	S98T002554_D	.13618	.64025	-.02737	-.10759	.10348	8.2266
9	S98T002561	.99624	1.4063	.00215	.30172	.12827	23.022
10	S98T002561_D	.74450	2.0805	.07275	.38560	.06375	20.384
11	CCV	4.9226	5.0892	5.0032	4.9312	4.8912	4.9173
12	CCB	.00315	.00682	.00041	.00905	.00050	.00020
13	S98T002566	1.1433	1.1790	.01933	.12005	.06912	1.5576
14	S98T002566_D	.55811	1.4730	.00019	.09501	.11600	1.6549
15	ICSA	.03106	250.75	.00662	.01729	.00388	-.00011
16	ICSAB	.01368	251.61	.93624	.00895	.46214	.46410
17	CCV	4.9594	5.1455	5.0518	5.0032	4.9330	4.9674
18	CCB	.02540	.01025	.00170	.01674	.00113	.00067

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.6537	.00722	4.7648	4.8973	4.9662	4.8772
2	ICB	-.00023	.00144	.00406	.18625	.00077	.00104
3	LLS	.01754	.00148	.09621	Q.69772	.10102	.02109
4	ICSA	.00334	.00692	91.583	.19969	-.00242	.00283
5	ICSAB	.45126	.01007	91.014	.04374	-.00389	.95286
6	PREPBLKTJA	.00130	.00066	.01613	Q254.68	.00214	.00010
7	S98T002554	.02612	.03289	.75691	10540.	.06437	.06470
8	S98T002554_D	.02057	.06900	.62449	10266.	-.04339	.07756
9	S98T002561	.05698	.01551	14.292	10014.	.08261	.03022

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#	Sample Name	Cu	Eu	Fe	K	La	Li
10	S98T002561_D	.00507	.05265	12.632	10543.	.08749	.06032
11	CCV	4.6453	.00667	4.7269	5.0361	4.9479	4.9936
12	CCB	-.00010	.00057	.00688	.10498	.00069	.00041
13	S98T002566	-.01728	-.00555	.70904	9990.8	.03753	.00877
14	S98T002566_D	.08357	.00963	.40244	10563.	.01725	.00446
15	ICSA	.00325	.00643	90.963	.31817	-.00218	.00336
16	ICSAB	.45736	.01081	91.505	.26544	-.00257	.96915
17	CCV	4.7038	.00721	4.7672	4.9987	5.0186	5.0495
18	CCB	.00023	.00047	.00699	.09162	.00243	.00062

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.0759	4.8785	5.0219	4.8238	4.8255	4.9616
2	ICB	.00750	.00034	-.00162	.02143	-.00045	.00020
3	LLS	.21302	.01997	.10148	.19269	.19544	.04959
4	ICSA	244.41	-.00481	-.01389	185.47	.00399	-.00394
5	ICSAB	243.10	.43679	-.01838	185.33	-.00043	.91963
6	PREPBLKTJA	.01899	.00351	-.00086	Q.10357	.00134	Q.96776
7	S98T002554	.69546	.46028	.03971	425.47	.06323	5.6511
8	S98T002554_D	.01833	.46881	.07411	417.57	.08984	12.446
9	S98T002561	.95182	3.9268	.05993	371.30	.18738	12.778
10	S98T002561_D	.97409	3.5779	.11491	372.82	.07154	21.175
11	CCV	5.0788	4.8274	4.9745	4.9490	4.8164	4.8685
12	CCB	.00862	.00008	-.00296	.03596	.00078	.00281
13	S98T002566	.42508	.44518	-.10315	493.65	-.12068	5.5596
14	S98T002566_D	.27078	.32940	.02489	471.73	.24075	4.1117
15	ICSA	242.94	-.00476	-.01702	183.77	.00327	-.00445
16	ICSAB	245.04	.43834	-.01410	188.34	.00334	.90835
17	CCV	5.1133	4.8864	5.0279	4.9852	4.8879	4.9246
18	CCB	.01891	.00001	.00001	.03886	.00132	.00458

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	4.9909	4.9940	4.8569	5.0498	4.8042	5.2344
2	ICB	.00918	.00141	.01512	.00811	.00305	.02116
3	LLS	.40341	.21538	.21976	.10288	.20212	Q.15058
4	ICSA	.04673	.05511	-.02101	.02290	.06806	.00652
5	ICSAB	.04172	1.0027	-.02171	-.00309	.08000	.00108
6	PREPBLKTJA	.01874	.00179	.00093	.01921	.01633	.01482
7	S98T002554	13.776	.18212	2.0925	.28922	.75014	.65386
8	S98T002554_D	13.237	.16353	1.7133	.21180	1.0942	.99666
9	S98T002561	29.986	1.1200	2.3439	.33490	.56598	1.7722
10	S98T002561_D	25.891	.71781	1.7411	.15367	.63070	1.7532
11	CCV	4.9953	4.9775	4.8098	4.9943	4.8000	5.1500
12	CCB	.01020	-.00437	.01446	.01213	.00965	.00084
13	S98T002566	7.6604	-.29210	.26493	.04448	.33908	2.4327
14	S98T002566_D	8.0264	.44602	.14926	.30176	.41528	2.5671
15	ICSA	.05227	.03779	-.02336	.00707	.08589	-.00446
16	ICSAB	.04755	1.0022	-.03083	.01805	.07250	-.00801
17	CCV	4.9971	5.0211	4.8627	5.0497	4.8200	5.2148
18	CCB	.01816	.00832	.01280	.00516	.00996	.00066

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Analysis Report

Averages

Thu 12-03-98 01:07:38 PM

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#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.8117	4.8482	.19320	5.0405	4.7513	9.5051
2	ICB	.01218	.00012	.00317	.00023	.01710	.05257
3	LLS	.20381	.01961	.01427	.01985	.41524	.50818
4	ICSA	-.01029	.00183	.00845	.00210	.01758	.00052
5	ICSAB	-.01283	.00179	.00148	.00044	-.00903	.00916
6	PREPBLKTJA	.00219	.00004	.01427	.00031	-.00437	-.05723
7	S98T002554	.18392	.00912	.46055	.02174	-.31021	-1.3034
8	S98T002554_D	.56199	.01446	-.11507	.01956	-.50003	-.22274
9	S98T002561	.03345	.03259	.36424	.10688	.43056	-1.1483
10	S98T002561_D	.46804	.03609	.14837	.03943	-.58195	-1.10973
11	CCV	4.7925	4.8393	.19242	5.0167	4.7363	9.5169
12	CCB	.00387	.00004	.00215	-.00022	.00314	.01929
13	S98T002566	-.12832	.00022	.26034	.01112	.04470	-3.0020
14	S98T002566_D	-.05555	.00382	.24313	.09767	.26658	-2.9310
15	ICSA	-.00720	.00180	.00848	.00164	-.01278	.01277
16	ICSAB	-.01516	.00186	.00636	.00186	.01413	-.00921
17	CCV	4.8703	4.9032	.19669	5.0868	4.7217	9.6335
18	CCB	.00524	.00004	.01050	-.00019	-.00550	.02405

#	Sample Name	V	Y	Zn	Zr
1	ICV	4.9486	.00802	4.7234	4.8156
2	ICB	.00275	.00099	.00047	.00160
3	LLS	.10082	.00103	.01999	.01955
4	ICSA	.00274	.00791	-.00318	-.00305
5	ICSAB	.46054	.00798	.92126	-.00259
6	PREPBLKTJA	.00059	.00041	.00163	.00024
7	S98T002554	.06680	.02625	.08858	.03136
8	S98T002554_D	.15426	.03865	.07352	.09875
9	S98T002561	.01250	.02297	.18436	.02485
10	S98T002561_D	.12134	.04181	.20541	.09163
11	CCV	4.9112	.00786	4.6606	4.7802
12	CCB	.00103	.00030	.00034	.00108
13	S98T002566	-.03197	-.00515	.06678	-.02955
14	S98T002566_D	.01175	.00445	.01994	-.01595
15	ICSA	.00333	.00806	-.00384	-.00205
16	ICSAB	.46319	.00768	.92330	-.00298
17	CCV	4.9669	.00789	4.7025	4.8433
18	CCB	.00099	.00030	.00054	.00014

DK  
11-03-98

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HNF-1661 REV. 0

file #: 981108.TXT

09/25/98 13:41  
A-0004-1

Page: 1

# LABCORE Data Entry Template for Worklist# 26368

Analyst: DK Sejo Instrument: ICP012 11-02-98 Book# 758488

Method: LA-505-451/161 Rev/Mod C-3

*Ensure data rate of 30 c/s is < 50 mrem/hr prior to performing this analysis.*

Worklist Comment: ICP U-107 (FUSION)

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	ICV		@ICP-QC	QC		
2	ICB		@ICP-QC	QC		
3	LLS		@ICP-QC	QC		
4	ICSA		@ICP-QC	QC		
5	ICSAB		@ICP-QC	QC		
6	PREPBLKTJA		@ICP-F01	SOLID		
7	SAMPLE	S98T002428	0 F	@ICP-F01	SOLID	98000359 U-107 (2)
	Analytes Requested: AG-F-01, AL-F-01, AS-F-01, B-F-01, BA-F-01, BE-F-01, BI-F-01, CA-F-01, CD-F-01, CE-F-01, CO-F-01, CR-F-01, CU-F-01, FE-F-01, LA-F-01, LI-F-01, MG-F-01, MN-F-01, MO-F-01, NA-F-01, ND-F-01, NI-F-01, P-F-01, PB-F-01, S-F-01, SB-F-01, SE-F-01, SI-F-01, SM-F-01, SR-F-01, TI-F-01, TL-F-01, U-F-01, V-F-01, ZN-F-01, ZR-F-01					
8	DUP	S98T002428	0 F	@ICP-F01	SOLID	
9	CCV		@ICP-QC	QC		
10	CCB		@ICP-QC	QC		
11	SAMPLE	S98T002434	0 F	@ICP-F01	SOLID	98000359 U-107 (2)
	Analytes Requested: AG-F-01, AL-F-01, AS-F-01, B-F-01, BA-F-01, BE-F-01, BI-F-01, CA-F-01, CD-F-01, CE-F-01, CO-F-01, CR-F-01, CU-F-01, FE-F-01, LA-F-01, LI-F-01, MG-F-01, MN-F-01, MO-F-01, NA-F-01, ND-F-01, NI-F-01, P-F-01, PB-F-01, S-F-01, SB-F-01, SE-F-01, SI-F-01, SM-F-01, SR-F-01, TI-F-01, TL-F-01, U-F-01, V-F-01, ZN-F-01, ZR-F-01					
12	DUP	S98T002434	0 F	@ICP-F01	SOLID	

Data Entry Comments:

*uploaded 11-10-98  
John Howell*

*Validated by:  
Sam M. Lang  
11/10/98*

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



HNF-1661 REV. 0

Analysis Report

Summary

Tue 11-10-98 01:09:34 PM

page 1

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981110B	ICP2	11/10/98	10:44	DKS	Q	CONC
2	ICB	981110B	ICP2	11/10/98	10:47	DKS	Q	CONC
3	LLS	981110B	ICP2	11/10/98	10:50	DKS	Q	CONC
4	ICSA	981110B	ICP2	11/10/98	10:53	DKS	Q	CONC
5	ICSAB	981110B	ICP2	11/10/98	10:56	DKS	Q	CONC
6	PREPBLKTJA	981110B	ICP2	11/10/98	11:00	DKS	Q	CONC
7	S98T002428	981110B	ICP2	11/10/98	11:03	DKS	S	CONC
8	S98T002428_D	981110B	ICP2	11/10/98	11:06	DKS	S	CONC
9	CCV	981110B	ICP2	11/10/98	11:10	DKS	Q	CONC
10	CCB	981110B	ICP2	11/10/98	11:13	DKS	Q	CONC
11	S98T002434_L	981110B	ICP2	11/10/98	11:16	DKS	S	CONC
12	S98T002434	981110B	ICP2	11/10/98	11:19	DKS	S	CONC
13	S98T002434_D	981110B	ICP2	11/10/98	11:22	DKS	S	CONC
14	S98T002434_A	981110B	ICP2	11/10/98	11:25	DKS	S	CONC
15	S98T002434_X	981110B	ICP2	11/10/98	11:30	DKS	S	CONC
16	S98T002434_AX	981110B	ICP2	11/10/98	11:33	DKS	S	CONC
17	S98T002440	981110B	ICP2	11/10/98	12:50	DKS	S	CONC
18	S98T002440_D	981110B	ICP2	11/10/98	12:53	DKS	S	CONC
19	ICSA	981110B	ICP2	11/10/98	12:56	DKS	Q	CONC
20	ICSAB	981110B	ICP2	11/10/98	12:59	DKS	Q	CONC
21	CCV	981110B	ICP2	11/10/98	13:03	DKS	Q	CONC
22	CCB	981110B	ICP2	11/10/98	13:06	DKS	Q	CONC

*JK*

11-10-98

Worklist # 26368

6407  
 5987002428  
 5987002434  
 5987002440

5987002434

$$\text{AL} = \frac{21.118 \text{ ug}}{\text{ml}} \times \frac{1}{2.0328 \frac{\text{g}}{\text{L}} \times \frac{16}{1000 \text{ ml}}} = 9.15 \text{ e} + 3 \frac{\text{ug}}{\text{g}}$$

Spike:

$$\text{AL} = \frac{(60.820)}{41} - \left( \frac{21.118}{41} \right) \times 100 = 96.8 \%$$

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 292 TO 296.

## HNF-1661 REV. 0

Analysis Report

Averages

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#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.9646	4.9170	5.1075	4.9290	4.9524	5.0363
2	ICB	.00001	.00656	.01496	.00275	.00004	.00013
3	LLS	.02248	.10892	.20589	.09843	.09794	.01044
4	ICSA	.00293	242.33	.04350	-.01165	.00030	.00009
5	ICSAB	.94971	241.47	.03629	-.00790	.45462	.47280
6	PREPBLKTJA	-.00083	.00377	.01161	-.00137	-.00002	.00004
7	S98T002428	.02251	21.254	.16088	.13155	.00757	.00192
8	S98T002428_D	.02328	22.068	.35689	.00035	.01046	.00198
9	CCV	5.0486	4.9376	5.1658	4.9934	4.9396	5.0591
10	CCB	-.00049	-.00278	.00349	.00275	-.00002	.00000
11	S98T002434_L	.19586	21.350	1.7433	.37661	.01113	.00898
12	S98T002434	.04421	21.118	.28802	-.03729	.00612	.00197
13	S98T002434_D	.05918	18.769	.88561	.09378	.00726	.00380
14	S98T002434_A	37.744	60.820	42.342	39.295	38.466	39.930
15	S98T002434_X	-.43315	20.260	1.1925	-1.3097	-.02189	.05439
16	S98T002434_AX	3606.4	4008.1	4110.4	4047.2	4077.1	4042.5
17	S98T002440	.01192	21.713	.42757	-.01879	.00609	.00381
18	S98T002440_D	.00058	24.198	.07322	.05671	.00651	.00195
19	ICSA	.00245	239.21	.05231	-.00457	.00025	.00022
20	ICSAB	.93790	239.72	-.00365	-.00845	.44804	.46532
21	CCV	4.9851	4.9265	5.1059	4.9514	4.9295	5.0271
22	CCB	.00089	.00368	.01252	.00274	.00003	-.00004

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	5.0002	4.9515	5.0294	5.0279	4.9528	4.9072
2	ICB	-.00037	-.00118	.00121	.00198	.00086	.00144
3	LLS	.22127	.21583	.01097	.02623	.04199	.02221
4	ICSA	-.00298	255.60	.00581	.00183	-.00015	-.00140
5	ICSAB	-.00662	256.62	.94050	.00639	.46023	.46693
6	PREPBLKTJA	.01204	.01311	-.00037	-.00702	-.00059	.00094
7	S98T002428	-.52307	.35037	.00123	.15869	.04335	2.1453
8	S98T002428_D	-.68865	.41842	.02224	.13299	.03305	2.3417
9	CCV	5.0034	5.0896	5.0907	5.0252	5.0229	4.9941
10	CCB	-.00613	-.00467	-.00054	-.00218	-.00059	.00073
11	S98T002434_L	-.73330	.92296	.15571	1.4559	.45183	2.4706
12	S98T002434	-.14239	1.0264	.02631	.14428	.04265	1.8455
13	S98T002434_D	.28508	.24121	.05832	.18259	.02753	1.6308
14	S98T002434_A	40.973	41.916	41.164	39.843	40.551	41.978
15	S98T002434_X	1.4808	-2.7162	-.01610	-2.8589	-.44755	1.9742
16	S98T002434_AX	4173.0	4169.9	4072.6	4078.4	4100.0	4104.2
17	S98T002440	-.65258	.05087	.01937	-.12981	.08796	1.6922
18	S98T002440_D	.08469	.20069	.01088	-.00997	.03344	1.8758
19	ICSA	-.00804	255.52	.00547	.00920	.00023	-.00108
20	ICSAB	-.01766	251.63	.91954	-.00031	.45036	.45631
21	CCV	5.0147	4.9795	5.0217	5.0314	4.9562	4.9166
22	CCB	.00239	-.00118	-.00004	.00448	.00147	.00107

## HNF-1661 REV. 0

Analysis Report

Averages

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#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.7374	.00893	4.8401	5.1102	4.9866	5.0549
2	ICB	-.00057	.00122	.00034	.13654	.00001	.00088
3	LLS	.01661	.00171	.09832	.61703	.10119	.02146
4	ICSA	.00321	.02156	92.010	.18002	-.00423	.00287
5	ICSAB	.45762	.02190	92.114	.29296	-.00443	.96716
6	PREPBLKTJA	.00190	.00121	.00711	Q263.33	-.00155	.00059
7	S98T002428	.04224	.07481	1.0587	9963.0	.00028	.04469
8	S98T002428_D	.06392	.09274	1.2319	10544.	.00358	.05686
9	CCV	4.7122	.00981	4.9013	5.0180	4.9760	4.9836
10	CCB	-.00084	.00112	.00019	-.08423	-.00092	.00088
11	S98T002434 L	.31884	.35463	1.5770	10553.	.20078	.26346
12	S98T002434	.04545	.05920	1.3807	10474.	.00054	.03254
13	S98T002434_D	.07295	.04149	1.0908	11758.	.01404	.02853
14	S98T002434_A	37.519	.12759	40.551	10450.	39.368	38.265
15	S98T002434_X	.19258	.47960	1.2845	10930.	-.42182	.40540
16	S98T002434_AX	3834.3	7.3193	3903.8	14796.	4061.2	4025.3
17	S98T002440	.05959	.05432	.96470	11803.	-.00841	.04067
18	S98T002440_D	.04041	.08748	1.2137	9805.2	-.01133	.05683
19	ICSA	.00218	.01658	91.310	.22865	-.00438	.00307
20	ICSAB	.45231	.02603	90.548	.15221	-.00518	.96547
21	CCV	4.7320	.00952	4.8304	5.0540	4.9846	5.0620
22	CCB	-.00051	.00075	.00048	.17237	.00005	.00029

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.0351	4.8850	5.0133	5.1704	4.8796	4.9365
2	ICB	.00017	.00046	.00225	.01173	.00251	-.00149
3	LLS	.20393	.02064	.10325	.19664	.19909	.04436
4	ICSA	247.30	-.00460	-.01667	189.37	-.00055	-.00846
5	ICSAB	246.28	.44066	-.01369	187.78	.00120	.90837
6	PREPBLKTJA	-.00509	.00261	.00028	Q.12027	.00066	Q.23912
7	S98T002428	-.01840	.59946	.05848	428.00	.05253	4.8409
8	S98T002428_D	.12408	.62380	.11752	431.95	.08022	6.2114
9	CCV	5.0502	4.9578	5.0805	5.0918	4.8622	4.9796
10	CCB	-.00570	.00031	.00241	.00761	-.00040	-.00322
11	S98T002434 L	.86829	.66882	-.06228	439.29	.73296	6.2597
12	S98T002434	.00583	.58380	.11071	438.50	-.02844	6.2680
13	S98T002434_D	-.02182	.53649	.11659	429.94	.04949	5.9148
14	S98T002434_A	39.727	39.576	40.881	476.76	38.362	46.739
15	S98T002434_X	-4.4849	.68032	.20406	451.20	-.37893	5.8347
16	S98T002434_AX	4200.6	4073.6	4103.1	4450.4	3946.9	4096.7
17	S98T002440	-.19669	.56916	.09078	427.95	.07407	5.6366
18	S98T002440_D	-.10373	.62481	.09155	409.78	.09706	5.6649
19	ICSA	244.92	-.00438	-.01506	184.07	-.00082	-.01133
20	ICSAB	244.57	.43236	-.01638	187.12	-.00331	.89100
21	CCV	5.0370	4.8862	5.0116	5.1528	4.8777	4.9317
22	CCB	-.00171	.00014	.00192	.02004	.00059	-.00276

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Analysis Report

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#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	5.0287	4.9667	4.8658	5.0533	4.7406	4.8858
2	ICB	.00059	.01031	.01100	-.00860	.01927	.00492
3	LLS	.40166	.22027	.20689	.09540	.20334	Q.17736
4	ICSA	.01773	.03382	-.04460	-.00288	.05843	-.00350
5	ICSAB	.04476	1.0109	-.02585	-.00927	.06120	-.00126
6	PREPBLKTJA	-.00006	.00134	-.00308	-.00650	.01767	.01966
7	S98T002428	4.8729	.55489	.98632	-.23017	.92077	1.4132
8	S98T002428_D	4.4942	.66474	1.2832	-.33213	1.3711	1.6603
9	CCV	5.0369	5.0430	4.9697	5.0995	4.7797	4.9608
10	CCB	-.00239	.00095	.00366	-.00914	.01102	.00380
11	S98T002434_L	2.0607	1.1925	1.2300	-.99461	3.9425	3.6251
12	S98T002434_A	2.5527	.13265	.96470	-.39340	.90789	2.5055
13	S98T002434_D	2.3372	.43373	.94669	-.19042	1.1888	2.5664
14	S98T002434_A	42.759	40.910	40.771	41.200	39.578	42.930
15	S98T002434_X	1.6097	.70409	-4.5277	-4.3730	4.5915	9.5147
16	S98T002434_AX	4136.9	4126.8	4064.4	4151.6	3978.3	4113.9
17	S98T002440	3.4587	.41218	1.1330	-.51259	1.0217	1.9109
18	S98T002440_D	2.0717	.46327	.98575	-.28772	1.1089	2.3545
19	ICSA	.04336	.02458	-.02539	.00757	.06658	.00193
20	ICSAB	.03012	.96711	-.04025	-.00097	.06109	-.00298
21	CCV	5.0307	4.9687	4.9085	5.0452	4.7790	4.8958
22	CCB	.00178	.00118	-.00023	-.00575	.00928	.00094

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.8987	4.9897	.24588	5.0540	4.7932	9.7015
2	ICB	.00812	.00016	-.00218	.00065	-.00486	.03936
3	LLS	.20617	.02005	.00857	.02064	.41774	.50792
4	ICSA	-.01434	.00187	.00414	.00182	.00112	-.08350
5	ICSAB	-.01214	.00179	.00161	.00203	.03080	-.07658
6	PREPBLKTJA	.00677	.00021	-.00398	.00069	.00761	-.05165
7	S98T002428	.57743	.01377	-.12794	.11057	.45048	-.46480
8	S98T002428_D	.71809	.01546	.04972	.04718	-.07181	-.23262
9	CCV	4.8653	4.9887	.23661	5.0783	4.8095	9.6697
10	CCB	.00855	.00016	-.00463	.00020	-.00277	.03152
11	S98T002434_L	2.9938	.05070	.75295	.36922	1.9580	9.0447
12	S98T002434_A	.50942	.01208	.05427	.06568	.18161	-1.1276
13	S98T002434_D	.77052	.01048	.25327	.03006	.50774	-2.0797
14	S98T002434_A	38.589	39.288	2.1050	40.600	38.655	74.947
15	S98T002434_X	3.3855	.08488	-1.4363	.08478	2.5360	12.458
16	S98T002434_AX	3936.4	4021.4	198.20	4072.2	4020.2	7703.6
17	S98T002440	.48388	.01213	.01415	.03805	-.16830	-1.2296
18	S98T002440_D	.77507	.01714	-.14027	.03713	.16759	.24829
19	ICSA	-.00376	.00174	.00547	.00116	-.02703	-.05633
20	ICSAB	-.00988	.00188	-.00042	.00112	.00131	-.05190
21	CCV	4.8920	4.9952	.24306	5.0631	4.7886	9.7279
22	CCB	.00299	.00008	.00142	.00044	.00855	.01965

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Analysis Report

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#	Sample Name	V	Y	Zn	Zr
1	ICV	4.9651	.00794	4.7408	4.8274
2	ICB	.00270	.00068	.00037	.00164
3	LLS	.10253	.00111	.02126	.02043
4	ICSA	.00314	.00826	-.00346	-.00241
5	ICSAB	.46693	.00833	.93252	-.00144
6	PREPBLKTJA	.00235	.00049	.00411	.00155
7	S98T002428	.15721	.04196	.08587	.10916
8	S98T002428_D	.20604	.04829	.08470	.13314
9	CCV	5.0199	.00858	4.8561	4.8519
10	CCB	.00238	.00061	.00022	.00183
11	S98T002434_L	.72790	.20499	.21006	.43288
12	S98T002434	.13649	.02939	.07131	.05876
13	S98T002434_D	.08802	.02337	.05260	.03238
14	S98T002434_A	40.233	.09345	39.651	38.575
15	S98T002434_X	.83441	.21960	.09968	.71885
16	S98T002434_AX	4058.6	7.0393	3894.0	4048.1
17	S98T002440	.13693	.03264	.06406	.08690
18	S98T002440_D	.19860	.04808	.11976	.13430
19	ICSA	.00475	.00864	-.00319	-.00157
20	ICSAB	.45928	.00809	.91889	-.00176
21	CCV	4.9758	.00801	4.7537	4.8270
22	CCB	.00065	.00022	.00055	.00048

JK L&amp;D

11-10-98



file #: 98110C.TXT

HNF-1661 REV. 0

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09/29/98 13:53

A-0004-1

## LABCORE Data Entry Template for Worklist# 26405

Analyst: JK Sato Instrument: ICP01A 11-01-98 Book# 75848BMethod: LA-505-151/161 Rev/Mod C-3Ensure dose rate at 30cm is  $\leq 50$   $\mu$ R/hr  
prior to performing this analysisWorklist Comment: ICP U-107 (FUSION)

S Type	Sample#	R	A	Test	Matrix	Group#	Project
1	ICV			@ICP-QC	QC		
2	ICB			@ICP-QC	QC		
3	LLS			@ICP-QC	QC		
4	ICSA			@ICP-QC	QC		
5	ICSAB			@ICP-QC	QC		
6	PREPBLKTJA			@ICP-F01	SOLID		
7	SERDIL	S98T002572	0	F	@ICP-F01	SOLID	
8	SAMPLE	S98T002572	0	F	@ICP-F01	SOLID	98000401 U-107 (2)
Analytes Requested: AG-F-01, AL-F-01, AS-F-01, B-F-01, BA-F-01, BE-F-01, BI-F-01, CA-F-01, CD-F-01, CE-F-01, CO-F-01, CR-F-01, CU-F-01, FE-F-01, LA-F-01, LI-F-01, MG-F-01, MN-F-01, MO-F-01, NA-F-01, ND-F-01, NI-F-01, P-F-01, PB-F-01, S-F-01, SE-F-01, SE-F-01, SI-F-01, SM-F-01, SR-F-01, TI-F-01, TL-F-01, U-F-01, V-F-01, ZN-F-01, ZR-F-01							
9	DUP	S98T002572	0	F	@ICP-F01	SOLID	
10	SPK (1ppm) S98T002572	S98T002572	0	F	@ICP-F01	SOLID	
11	ICSA S98T002572 (10ppm)				@ICP-QC	QC	
12	ICSAB				@ICP-QC	QC	
13	CCV				@ICP-QC	QC	
14	CCB				@ICP-QC	QC	

Data Entry Comments:

uploaded 11-10-98  
John Wavell

Validated by

Saul M. Pang

11/10/98

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

1297

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A-0004-1

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**LABCORE Data Entry Template for Worklist# 26405**

S Type	Sample#	R A	Test	Matrix	Group#	Project
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**Final page for worklist # 26405**

Analyst Signature	Date	Analyst Signature	Date
<i>JK [Signature]</i>	11-10-98		
Prep 61KJG	.25.10	DF 1	
5487002572-L	.25.10-28	DF 205	
5487002572	.25.10	41	
5487002572-J	.25.10	41	
5487002572-Q	.25.10	41	
5487002572-X	.25.10-19	410	
5487002572-QY	.25.10-19	410	

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

## HNF-1661 REV. 0

Analysis Report

Summary

Tue 11-10-98 02:25:36 PM

page 1

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981110C	ICP2	11/10/98	13:14	DKS	Q	CONC
2	ICB	981110C	ICP2	11/10/98	13:17	DKS	Q	CONC
3	LLS	981110C	ICP2	11/10/98	13:19	DKS	Q	CONC
4	ICSA	981110C	ICP2	11/10/98	13:24	DKS	Q	CONC
5	IC SAB	981110C	ICP2	11/10/98	13:27	DKS	Q	CONC
6	PREPBLKTJA	981110C	ICP2	11/10/98	13:30	DKS	Q	CONC
7	S98T002572_L	981110C	ICP2	11/10/98	13:34	DKS	S	CONC
8	S98T002572	981110C	ICP2	11/10/98	13:37	DKS	S	CONC
9	S98T002572_D	981110C	ICP2	11/10/98	13:40	DKS	S	CONC
10	S98T002572_A	981110C	ICP2	11/10/98	13:43	DKS	S	CONC
11	S98T002572_X	981110C	ICP2	11/10/98	13:48	DKS	S	CONC
12	S98T002572_AX	981110C	ICP2	11/10/98	13:51	DKS	S	CONC
13	ICSA	981110C	ICP2	11/10/98	14:11	DKS	Q	CONC
14	IC SAB	981110C	ICP2	11/10/98	14:14	DKS	Q	CONC
15	CCV	981110C	ICP2	11/10/98	14:18	DKS	Q	CONC
16	CCB	981110C	ICP2	11/10/98	14:22	DKS	Q	CONC

JK

4-107

11-10-98

Worklist #26405

S98T002572

S98T002572

$$AL = 7.1801 \frac{\mu\text{g}}{\text{ml}} \times \frac{1}{1.9964 \frac{\text{F}}{\text{L}} + \frac{1\text{L}}{1000\text{ml}}} = 3.602 + 3 \frac{\mu\text{g}}{\text{g}}$$

Spike:

$$AL = \frac{(46.644)}{41} - \frac{(7.1801)}{41} \times 100 = 96.25\%$$

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1299 TO 1302.

## HNF-1661 REV. 0

Analysis Report

Averages

Tue 11-10-98 02:25:36 PM

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#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.9578	4.8694	5.0613	4.8946	4.8717	4.9670
2	ICB	.00041	-.00504	.00726	.00229	.00001	.00000
3	LLS	.02055	.09989	.21148	.09614	.09735	.01040
4	ICSA	.00345	238.37	.01470	.00082	.00028	.00009
5	ICSAB	.93748	237.50	.03000	-.00654	.44483	.46444
6	PREPBLKTJA	.00032	.00550	.00455	.00183	.00011	.00000
7	S98T002572_L	-.07210	8.0904	1.5536	.00249	.03215	.01808
8	S98T002572	-.00920	7.1801	.28773	-.07432	.03328	-.00163
9	S98T002572_D	.00100	5.8601	-.12902	.01908	.01823	-.00164
10	S98T002572_A	38.207	46.644	41.657	38.846	38.004	39.640
11	S98T002572_X	.40418	10.522	4.8463	-.37306	.11451	.03574
12	S98T002572_AX	3810.4	3976.1	4088.8	4033.6	4069.0	4036.6
13	ICSA	.00389	238.33	.03478	-.00690	.00028	.00022
14	ICSAB	.94156	238.88	.00894	-.00639	.44860	.46708
15	CCV	5.0120	4.9007	5.1089	4.9307	4.8970	5.0051
16	CCB	.00003	-.00040	.01460	.00092	.00002	.00004

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	4.9409	4.9633	4.9875	4.9572	4.9302	4.8969
2	ICB	-.00432	-.00150	.00082	.00772	.00124	.00154
3	LLS	.21027	.21041	.00938	.19856	.04088	.02176
4	ICSA	.00823	253.54	.00615	.01067	.00168	.00029
5	ICSAB	.02313	253.63	.92479	-.00113	.45646	.46192
6	PREPBLKTJA	.00633	.00214	.00021	.00384	.00000	.00163
7	S98T002572_L	.23679	1.1838	.16917	-.24045	.17861	.67498
8	S98T002572	.00713	1.5322	-.02856	-.20767	-.01656	.40126
9	S98T002572_D	-.50516	.82390	-.00555	-.06472	.02296	.34369
10	S98T002572_A	40.201	42.108	40.617	39.435	39.977	40.307
11	S98T002572_X	-4.3050	.80987	.44863	3.6869	.70538	.76933
12	S98T002572_AX	4134.1	4101.2	4031.3	4073.3	4036.3	4059.9
13	ICSA	.00395	254.90	.00517	.00182	.00229	-.00066
14	ICSAB	.00547	254.84	.93192	.01199	.46036	.46325
15	CCV	5.0231	5.0557	5.0538	4.9746	4.9912	4.9539
16	CCB	.00258	.00137	.00048	.00167	.00051	.00094

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.6547	.00932	4.8047	4.9983	4.9156	4.9342
2	ICB	-.00080	.00179	.00049	.18498	.00013	.00088
3	LLS	.01687	.00136	.09642	.59278	.09939	.02136
4	ICSA	.00347	.02067	91.072	.26628	-.00346	.00297
5	ICSAB	.44835	.02192	90.774	.29520	-.00507	.93447
6	PREPBLKTJA	.00096	.00176	.00984	Q237.70	.00038	.00118
7	S98T002572_L	.13305	.43613	1.8210	10229.	-.12037	.28361
8	S98T002572	.01621	.08061	1.9531	10045.	-.02056	.04467
9	S98T002572_D	.04717	.07617	1.3388	10508.	-.02701	.04470
10	S98T002572_A	37.152	.14234	40.741	10178.	38.895	37.907
11	S98T002572_X	.59696	.53372	2.3719	10469.	.89808	.40536
12	S98T002572_AX	3812.7	7.2404	3870.2	14650.	4062.3	4053.3
13	ICSA	.00343	.01780	91.202	.23967	-.00384	.00327

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#	Sample Name	Cu	Eu	Fe	K	La	Li
14	ICSAB	.45119	.02134	91.216	.29406	-.00372	.94378
15	CCV	4.6672	.01051	4.8460	5.0738	4.9310	4.9291
16	CCB	-.00081	.00194	.00078	.20528	.00012	.00118

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	4.9776	4.8607	4.9869	5.0395	4.7956	4.9037
2	ICB	.00080	.00042	.00178	.00519	.00012	-.00276
3	LLS	.19710	.02046	.10149	.19009	.19778	.04173
4	ICSA	243.90	-.00446	-.01365	183.78	.00550	-.01129
5	ICSAB	242.69	.43443	-.01385	182.68	.00018	.89843
6	PREPBLKTJA	.00374	.00185	.00158	.06047	.00053	Q.32595
7	S98T002572_L	-.07892	.23983	.10373	349.33	.40846	3.5763
8	S98T002572	.51645	.12840	-.04596	348.46	-.08567	4.2574
9	S98T002572_D	.11298	.12011	.01924	349.66	-.05879	5.1283
10	S98T002572_A	40.135	38.767	40.567	393.25	37.958	44.507
11	S98T002572_X	1.2099	.34899	.52943	356.55	.97055	4.1886
12	S98T002572_AX	4176.3	4029.2	4035.0	4377.9	3949.8	4055.1
13	ICSA	243.71	-.00445	-.01795	182.93	.00232	-.00496
14	ICSAB	243.83	.43632	-.01432	184.17	.00000	.90081
15	CCV	4.9918	4.9166	5.0323	5.0446	4.8068	4.9508
16	CCB	.00051	.00051	.00067	-.00276	-.00092	-.00323

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	4.9513	4.9507	4.8523	4.9951	4.7085	4.8676
2	ICB	-.00199	.01143	-.00068	-.00938	.02621	.00562
3	LLS	.39948	.21277	.20801	.08649	.20932	Q.17295
4	ICSA	.03789	.04515	-.01794	.00363	.08347	-.00105
5	ICSAB	.03312	1.0051	-.02963	-.00777	.06032	-.00024
6	PREPBLKTJA	.01192	.00096	-.00461	-.00581	.01889	.02301
7	S98T002572_L	144.87	-.02388	-1.6735	-.61858	4.2365	20.091
8	S98T002572	147.61	.24282	-.10719	-.66876	.60616	16.922
9	S98T002572_D	148.91	-.01057	-.26744	-.38637	.35720	12.133
10	S98T002572_A	189.35	40.526	40.366	40.694	39.186	57.434
11	S98T002572_X	146.62	1.4505	-1.4843	-1.0375	5.4196	18.759
12	S98T002572_AX	4178.4	4084.4	3986.3	4088.9	3984.7	3986.3
13	ICSA	.03762	.04153	-.03414	-.00075	.07330	-.00012
14	ICSAB	.03873	1.0013	-.02344	-.01269	.06145	.00311
15	CCV	5.0225	4.9943	4.9161	5.0569	4.7626	4.9175
16	CCB	-.00139	.01195	.00810	-.00963	.01577	.00674

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.8144	4.9225	.23800	5.0014	4.7290	9.5553
2	ICB	.01324	.00016	-.00367	.00042	-.01006	.04698
3	LLS	.20178	.01993	.00673	.02040	.40127	.50194
4	ICSA	-.00830	.00177	.01335	.00186	-.00597	-.08083
5	ICSAB	-.00767	.00177	.00166	.00182	.02432	-.08047
6	PREPBLKTJA	.01311	.00025	.00567	.00071	.00890	-.01282
7	S98T002572_L	3.5711	.06763	-.51558	.40967	-.29974	11.791

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#	Sample Name	Sm	Sr	Th	Ti	Tl	U
8	S98T002572	.69539	.02916	-.07975	.26660	-.23143	-.19597
9	S98T002572_D	.51196	.02236	-.01922	.19352	-.00338	-.73870
10	S98T002572_A	38.229	38.922	1.8199	40.415	37.993	74.777
11	S98T002572_X	4.7296	.15340	1.4724	.37234	-.87850	13.240
12	S98T002572_AX	3953.6	4018.2	197.04	4040.6	4002.8	7692.2
13	ICSA	-.00726	.00176	.00732	.00229	-.01668	-.07616
14	ICCSAB	-.00853	.00177	.01598	.00165	-.01082	-.07656
15	CCV	4.8227	4.9389	.24168	5.0379	4.7866	9.5653
16	CCB	.01569	.00020	-.00354	.00020	.00267	.05704

#	Sample Name	V	Y	Zn	Zr
1	ICV	4.9357	.00824	4.7480	4.7816
2	ICB	.00321	.00084	.00039	.00235
3	LLS	.10134	.00096	.01986	.02027
4	ICSA	.00423	.00818	-.00230	-.00272
5	ICCSAB	.46107	.00818	.92551	-.00163
6	PREPBLKTJA	.00364	.00094	.00043	.00201
7	S98T002572_L	.86825	.20382	.23428	.64971
8	S98T002572	.17065	.04506	.07693	.11794
9	S98T002572_D	.12894	.03244	.08326	.08898
10	S98T002572_A	39.986	.10316	39.413	38.209
11	S98T002572_X	.96608	.28353	.25275	.49826
12	S98T002572_AX	4009.6	6.7550	3808.1	4010.7
13	ICSA	.00454	.00841	-.00338	-.00168
14	ICCSAB	.46327	.00833	.92710	-.00274
15	CCV	4.9841	.00855	4.8196	4.8127
16	CCB	.00354	.00107	.00062	.00233

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File #: 98110Q.TXT

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A-0004-1

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## LABCORE Data Entry Template for Worklist# 26460

Analyst: JX Seb Instrument: ICP01 h #0198 Book# 75848BMethod: LA-505-151/161 Rev/Mod C-3Ensure dose rate at 30cm is  $\leq 30$  nrem/hr  
prior to performing this analysis.

Worklist Comment: ICP U-107 (FUSION)

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	ICV		@ICP-QC	QC		
2	ICB		@ICP-QC	QC		
3	LLS		@ICP-QC	QC		
4	ICSA		@ICP-QC	QC		
5	ICSAB		@ICP-QC	QC		
6	PREPBLKTJA		@ICP-F01	SOLID		
7	SAMPLE	S98T002447	0 F	@ICP-F01	SOLID	98000359 U-107 (2)
	Analytes Requested: AG-F-01, AL-F-01, AS-F-01, B-F-01, BA-F-01, BE-F-01, BI-F-01, CA-F-01, CD-F-01, CE-F-01, CO-F-01, CR-F-01, CU-F-01, FE-F-01, LA-F-01, LI-F-01, MG-F-01, MN-F-01, MO-F-01, NA-F-01, ND-F-01, NI-F-01, P-F-01, PB-F-01, S-F-01, SB-F-01, SE-F-01, SI-F-01, SM-F-01, SR-F-01, TI-F-01, TL-F-01, U-F-01, V-F-01, ZN-F-01, ZR-F-01					
8	DUP	S98T002447	0 F	@ICP-F01	SOLID	
9	SAMPLE	S98T002452	0 F	@ICP-F01	SOLID	98000359 U-107 (2)
	Analytes Requested: AG-F-01, AL-F-01, AS-F-01, B-F-01, BA-F-01, BE-F-01, BI-F-01, CA-F-01, CD-F-01, CE-F-01, CO-F-01, CR-F-01, CU-F-01, FE-F-01, LA-F-01, LI-F-01, MG-F-01, MN-F-01, MO-F-01, NA-F-01, ND-F-01, NI-F-01, P-F-01, PB-F-01, S-F-01, SB-F-01, SE-F-01, SI-F-01, SM-F-01, SR-F-01, TI-F-01, TL-F-01, U-F-01, V-F-01, ZN-F-01, ZR-F-01					
10	DUP	S98T002452	0 F	@ICP-F01	SOLID	
11	CCV		@ICP-QC	QC		
12	CCB		@ICP-QC	QC		

Data Entry Comments:

Validated by:  
Saul H. Yang  
11/10/98

S = Worklist Slot Number, R = Replicate Number, A = Allquot Code.

10/05/98 10:00

A-0004-1

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## LABCORE Data Entry Template for Worklist# 26460

S Type	Sample#	R A	Test	Matrix	Group#	Project
15	SERDIL	S98T002520	0 F	@ICP-F01	SOLID	
14	SAMPLE	S98T002520	0 F	@ICP-F01	SOLID	98000359 U-107 (2)
	Analytes Requested: AG-F-01, AL-F-01, AS-F-01, B-F-01, BA-F-01, BE-F-01, BI-F-01, CA-F-01, CD-F-01, CE-F-01, CO-F-01, CR-F-01, CU-F-01, FE-F-01, LA-F-01, LI-F-01, MG-F-01, MN-F-01, MO-F-01, NA-F-01, ND-F-01, NI-F-01, P-F-01, PB-F-01, S-F-01, SE-F-01, SE-F-01, SI-F-01, SM-F-01, SR-F-01, TI-F-01, TL-F-01, U-F-01, V-F-01, ZN-F-01, ZR-F-01					
15	DUP	S98T002520	0 F	@ICP-F01	SOLID	
16	SPK	S98T002520	0 F	@ICP-F01	SOLID	
17	ICSA			@ICP-QC	QC	
18	ICSAB			@ICP-QC	QC	
19	CCV			@ICP-QC	QC	
20	CCB			@ICP-QC	QC	

Final page for worklist # 26460

Analyst Signature	Date
<i>PrupbkkTJA</i>	.25.10
<i>5987002447</i>	.25.10
<i>5987002447.D</i>	.25.10
<i>5987002452</i>	.25.10
<i>5987002452.D</i>	.25.10
<i>5987002520.L</i>	.25.10.28
<i>5987002520.G</i>	.25.10
<i>5987002520.D</i>	.25.10
<i>5987002520.G</i>	.25.10
<i>5987002520.X</i>	.25.10.19
<i>5987002520.GX</i>	.25.10.19

Analyst Signature	Date
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Data Entry Comments:

*uploaded 11-10-98**JH Warell**26460NOV.CSV*

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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Analysis Report

Summary

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981110A	ICP2	11/10/98	09:04	DKS	Q	CONC
2	ICB	981110A	ICP2	11/10/98	09:07	DKS	Q	CONC
3	LLS	981110A	ICP2	11/10/98	09:10	DKS	Q	CONC
4	ICSA	981110A	ICP2	11/10/98	09:19	DKS	Q	CONC
5	ICSAB	981110A	ICP2	11/10/98	09:22	DKS	Q	CONC
6	PREPBLKTJA	981110A	ICP2	11/10/98	09:27	DKS	Q	CONC
7	S98T002447	981110A	ICP2	11/10/98	09:31	DKS	S	CONC
8	S98T002447_D	981110A	ICP2	11/10/98	09:34	DKS	S	CONC
9	S98T002452	981110A	ICP2	11/10/98	09:37	DKS	S	CONC
10	S98T002452_D	981110A	ICP2	11/10/98	09:40	DKS	S	CONC
11	CCV	981110A	ICP2	11/10/98	09:45	DKS	Q	CONC
12	CCB	981110A	ICP2	11/10/98	09:48	DKS	Q	CONC
13	S98T002520_L	981110A	ICP2	11/10/98	09:52	DKS	S	CONC
14	S98T002520_T	981110A	ICP2	11/10/98	09:55	DKS	S	CONC
15	S98T002520_D	981110A	ICP2	11/10/98	09:58	DKS	S	CONC
16	S98T002520_A	981110A	ICP2	11/10/98	10:01	DKS	S	CONC
17	S98T002520_X	981110A	ICP2	11/10/98	10:07	DKS	S	CONC
18	S98T002520_AX	981110A	ICP2	11/10/98	10:10	DKS	S	CONC
19	ICSA	981110A	ICP2	11/10/98	10:28	DKS	Q	CONC
20	ICSAB	981110A	ICP2	11/10/98	10:31	DKS	Q	CONC
21	CCV	981110A	ICP2	11/10/98	10:34	DKS	Q	CONC
22	CCB	981110A	ICP2	11/10/98	10:38	DKS	Q	CONC

*[Handwritten signature]*

11-10-98

Worklist # 26460

U-107  
 5987002447  
 5987002452  
 5987002520

S 987002520

~~RR = 151.69 ug~~ 8/11/10/98

$$RR = \frac{151.69 \frac{ug}{ml}}{2.0236 \frac{g}{L} \times \frac{1L}{100ml}} = 7.50 \frac{ug}{g}$$

Spike:

$$RR = \left( \frac{191.89}{41} \right) - \left( \frac{151.69}{41} \right) \times 100 = 98.0\%$$

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1305 TO 1309.

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#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	5.0338	4.9524	5.1678	4.9508	4.9612	5.0623
2	ICB	.00065	-.00137	.01268	.00320	.00007	.00000
3	LLS	.02156	.09691	.20328	.09842	.09865	.01031
4	ICSA	.00190	242.23	.02220	-.00617	.00020	.00013
5	ICBAB	.94962	241.02	.02007	-.00469	.45387	.47108
6	PREPBLKTJA	-.00005	-.00190	.00156	.00000	.00001	-.00012
7	S98T002447	.00294	39.561	.02319	.22555	.00999	.00015
8	S98T002447_D	.06923	46.869	.61822	.07538	.00980	.00014
9	S98T002452	.05833	26.617	.58108	.15011	.00839	-.00161
10	S98T002452_D	-.02547	27.782	.31760	.03777	.00160	.00023
11	CCV	5.0643	4.9074	5.1468	4.9247	4.8951	5.0543
12	CCB	-.00073	-.00547	.00051	.00000	.00002	.00004
13	S98T002520_L	-.10139	151.89	.74141	.18919	-.00475	.00020
14	S98T002520	.01673	151.69	.24909	.16940	.00986	.00560
15	S98T002520_D	.11033	55.850	.29807	.03784	.01548	.00374
16	S98T002520_A	38.273	191.89	43.004	39.952	38.791	40.482
17	S98T002520_X	.29881	154.90	3.5901	-.18380	.03346	-.01808
18	S98T002520_AX	3801.3	4115.6	4082.7	4037.3	4056.0	4028.8
19	ICSA	.00492	241.89	.04370	-.00489	.00027	.00013
20	ICBAB	.94587	240.75	.03124	-.00541	.45230	.46840
21	CCV	5.0115	4.9325	5.1575	4.9449	4.9386	5.0347
22	CCB	.00115	.00085	.01201	.00320	.00003	.00000

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	5.0064	5.0286	5.0975	5.0447	5.0161	4.9673
2	ICB	-.00131	-.00230	.00057	.00098	-.00048	.00072
3	LLS	.20986	.21060	.00982	.20015	.04076	.02225
4	ICSA	-.00112	253.17	.00509	.00231	-.00014	-.00209
5	ICBAB	-.00296	256.93	.94023	.00065	.46072	.46738
6	PREPBLKTJA	.00327	.00015	-.00030	-.00124	.00005	.00237
7	S98T002447	.04696	.38741	.03051	.02743	.00250	1.7390
8	S98T002447_D	-.22214	.36047	.00221	.18309	-.00253	1.9095
9	S98T002452	-.38994	.40466	.00499	.19548	.06350	2.6427
10	S98T002452_D	.55739	.11509	.00465	-.41864	.06312	2.9031
11	CCV	5.0424	5.1256	5.1356	4.9888	5.0434	5.0173
12	CCB	.00535	-.00317	.00020	-.00245	.00002	.00119
13	S98T002520_L	-.90465	.18807	-.06059	-.90789	-.17565	5.1460
14	S98T002520	.23834	1.5221	.00180	.02567	-.06706	4.7888
15	S98T002520_D	.36522	.59109	.03019	.43269	.07877	5.1288
16	S98T002520_A	39.751	42.760	41.347	39.848	40.622	45.108
17	S98T002520_X	5.4658	-.54279	.39879	2.1116	-.34558	5.3961
18	S98T002520_AX	4161.0	4138.8	4062.7	4060.8	4071.6	4085.7
19	ICSA	-.00168	254.56	.00634	.00593	.00193	-.00058
20	ICBAB	-.00596	254.29	.93024	-.00299	.46048	.46182
21	CCV	5.0013	5.0206	5.0686	5.0189	4.9857	4.9494
22	CCB	-.00413	-.00147	.00063	.00129	.00208	.00158

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Analysis Report

Averages

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#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.7473	.00905	4.9199	5.2477	4.9969	5.0021
2	ICB	-.00061	.00071	.00143	.14138	.00007	.00039
3	LLS	.01696	.00051	.09626	.58119	.10124	.02136
4	ICSA	.00279	.02475	91.989	.22075	-.00460	.00238
5	ICSAB	.45701	.01897	92.155	.20427	-.00438	.95646
6	PREPBLKTJA	.00139	.00166	.00145	Q260.09	-.00083	.00109
7	S98T002447	.06294	.05805	1.6192	9892.6	.01974	.02847
8	S98T002447_D	.08770	.04196	1.6166	9825.7	.03799	.03256
9	S98T002452	.05307	.03568	1.2388	9897.9	.03362	.02039
10	S98T002452_D	.06132	.03280	1.9403	10510.	-.04383	.02853
11	CCV	4.6758	.01010	4.9138	5.0050	4.9472	4.8596
12	CCB	-.00040	.00174	.00026	.15007	-.00045	.00138
13	S98T002520_L	.33567	.18880	2.0736	10769.	-.19705	.04047
14	S98T002520_	.08310	.04859	1.9736	10373.	-.00842	.02445
15	S98T002520_D	.07563	.05561	1.7348	10321.	.07640	.03253
16	S98T002520_A	37.824	.12808	41.354	10438.	39.763	38.573
17	S98T002520_X	.41061	.52297	1.9866	10867.	.23763	.36475
18	S98T002520_AX	3813.7	7.1037	3894.4	14529.	4048.5	3995.5
19	ICSA	.00320	.02115	91.748	.28129	-.00424	.00287
20	ICSAB	.45665	.02380	91.439	.21064	-.00453	.96607
21	CCV	4.7277	.00993	4.8603	5.3018	4.9771	5.0019
22	CCB	-.00014	.00064	.00110	.20915	-.00069	.00039

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.1038	4.9679	5.0742	5.1761	4.9013	4.9932
2	ICB	-.00081	.00032	.00240	.01521	.00000	.00332
3	LLS	.20712	.02023	.10051	.20669	.20094	.04003
4	ICSA	248.04	-.00500	-.01714	189.53	-.00110	-.01250
5	ICSAB	246.43	.44102	-.01656	186.67	-.00033	.89852
6	PREPBLKTJA	-.00651	.00225	.00045	Q.10888	.00133	Q.16699
7	S98T002447	-.04288	.65553	.18912	380.64	.14573	6.4043
8	S98T002447_D	.30989	.76077	.16274	360.51	.10089	5.6557
9	S98T002452	.13297	.61325	.06430	425.46	.07592	3.3530
10	S98T002452_D	-.29735	.68315	.12317	429.34	.08397	4.1206
11	CCV	5.0268	4.9810	5.0888	5.0082	4.8341	5.0198
12	CCB	-.00593	.00057	.00258	.00381	.00209	-.00379
13	S98T002520_L	-1.4951	.77888	-.16292	365.18	.13569	4.8271
14	S98T002520_	.03442	.73391	.05136	352.23	-.01559	4.6292
15	S98T002520_D	.38218	.66605	.15626	414.74	.20032	3.6823
16	S98T002520_A	40.224	40.042	41.221	393.43	38.855	45.138
17	S98T002520_X	-.43425	.84755	-.25515	364.89	-.03914	3.7660
18	S98T002520_AX	4190.2	4058.0	4069.4	4335.5	3943.4	4070.9
19	ICSA	247.29	-.00465	-.01571	188.64	.00159	-.00998
20	ICSAB	245.92	.43703	-.01608	187.78	.00174	.91184
21	CCV	5.0401	4.9246	5.0344	5.1272	4.8698	4.9620
22	CCB	-.00083	.00020	.00080	.01659	.00094	-.00275

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Analysis Report

Averages

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#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	5.0813	5.0338	4.9251	5.0880	4.7796	4.9524
2	ICB	-.00280	.01159	.00821	-.00729	.01276	.00496
3	LLS	.39228	.21492	.19769	.08282	.18788	Q.17589
4	ICSA	.02917	.02086	-.02775	-.01231	.04739	-.00583
5	ICSAB	.03391	1.0136	-.03138	-.01246	.05433	-.00129
6	PREPBLKTJA	-.00444	.00519	-.00124	-.00917	.01487	.01515
7	S98T002447	2.5145	1.3599	1.4912	-.39204	.56586	3.2520
8	S98T002447_D	2.6981	1.6143	1.3541	-.08673	.97059	1.5023
9	S98T002452	6.9428	-.02316	1.2621	-.24195	.60802	1.6169
10	S98T002452_D	8.3962	.68298	1.3462	-.36997	.41915	1.7467
11	CCV	5.0605	5.0768	4.9571	5.1014	4.8165	4.9699
12	CCB	.00718	.01015	.00580	-.00520	.02586	.00762
13	S98T002520_L	11.184	-.71957	1.0172	-2.8017	3.2746	3.8800
14	S98T002520	11.836	.51840	.58334	-.31834	.54102	2.5790
15	S98T002520_D	13.727	.66059	.82084	-.13120	.86474	2.3379
16	S98T002520_A	52.596	41.082	41.119	41.310	39.885	43.288
17	S98T002520_X	11.469	4.7491	-1.6038	-1.1880	2.3013	4.7893
18	S98T002520_AX	4109.0	4107.8	4029.5	4133.3	3955.1	4019.9
19	ICSA	.05050	.03319	-.03868	-.00862	.04590	-.00210
20	ICSAB	.03978	.99492	-.04736	-.01393	.06303	.00052
21	CCV	5.0383	5.0151	4.9018	5.0689	4.7709	4.9172
22	CCB	-.00120	.00543	.00896	-.00575	.01867	.00255

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.8986	5.0062	.23503	5.0743	4.7978	9.7336
2	ICB	.00614	.00008	-.00145	.00000	.00685	.01980
3	LLS	.19871	.02010	.00434	.02040	.38134	.48125
4	ICSA	-.01707	.00187	.00263	.00113	-.02118	-.07268
5	ICSAB	-.01219	.00182	.00749	.00250	-.02435	-.07466
6	PREPBLKTJA	.01250	.00021	-.00253	.00069	.00380	-.02578
7	S98T002447	.39624	.01209	.01775	.04698	-.11392	-1.0048
8	S98T002447_D	.26883	.01042	.22102	.13029	-.24022	-1.4709
9	S98T002452	.22642	.01044	.38555	.05767	.28212	-1.7407
10	S98T002452_D	.17596	.01047	-.04433	.04690	.07022	-1.9381
11	CCV	4.8209	4.9619	.23264	5.0655	4.8109	9.5661
12	CCB	.01399	.00024	-.00585	.00064	-.01209	.05331
13	S98T002520_L	1.3386	.04271	-.78636	.13514	-1.3413	2.5507
14	S98T002520	.31072	.02758	.11451	.04759	-.36815	-1.7281
15	S98T002520_D	.47297	.01552	.45540	.05789	.09545	-.94089
16	S98T002520_A	38.820	39.751	1.8481	40.865	38.160	75.734
17	S98T002520_X	4.4625	.06756	1.0468	-.18704	-2.5669	13.222
18	S98T002520_AX	3918.8	4009.4	193.02	4051.1	4001.7	7672.6
19	ICSA	-.01275	.00186	.01149	.00162	.02633	-.06508
20	ICSAB	-.01169	.00187	-.00040	.00180	.01985	-.07265
21	CCV	4.8754	4.9862	.24308	5.0573	4.8182	9.6781
22	CCB	.00338	.00008	.00064	.00022	-.01345	.01427

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Analysis Report

Averages

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#	Sample Name	V	Y	Zn	Zr
1	ICV	5.0186	.00832	4.8234	4.8639
2	ICB	.00152	.00054	.00012	.00069
3	LLS	.09999	.00042	.01981	.01955
4	ICSA	.00175	.00786	-.00357	-.00348
5	ICSAB	.46499	.00833	.93429	-.00188
6	PREPBLKTJA	.00334	.00087	.00111	.00202
7	S98T002447	.10066	.02934	.10182	.06124
8	S98T002447_D	.06541	.02311	.10610	.02167
9	S98T002452	.08708	.02001	.12142	.02240
10	S98T002452_D	.07413	.02010	.09308	.04200
11	CCV	5.0288	.00886	4.8938	4.8472
12	CCB	.00390	.00107	.00020	.00281
13	S98T002520_L	.35278	.09530	.42389	.30494
14	S98T002520	.10182	.03286	.34527	.05497
15	S98T002520_D	.11365	.03252	.14230	.04108
16	S98T002520_A	40.565	.10275	39.948	38.981
17	S98T002520_X	1.0400	.28353	.37375	.53204
18	S98T002520_AX	4036.9	6.9561	3868.3	4029.6
19	ICSA	.00368	.00809	-.00336	-.00324
20	ICSAB	.46350	.00825	.92694	-.00184
21	CCV	4.9896	.00811	4.7947	4.8383
22	CCB	.00101	.00038	.00030	.00054

DK 6/10

11-10-98

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10/22/98 09:12

File #: 981120B.TXT

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A-0004-1

## LABCORE Data Entry Template for Worklist# 26696

Analyst: JK 5670 Instrument: ICPORA # 1104-98 Book# 75B48BMethod: LA-505-157/161 Rev/Mod C-3Ensure dose rate of 30cA is  $\leq 50$  mrad/hr  
prior to performing this analysis.Worklist Comment: ICP U-107 (DIRECT)

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	ICV		@ICP-QC	QC		
2	ICB		@ICP-QC	QC		
3	LLS		@ICP-QC	QC		
4	ICSA		@ICP-QC	QC		
5	ICSAB		@ICP-QC	QC		
6	SERDIL	S98T002976 0 D	@ICP-D01	LIQUID		
7	SAMPLE	S98T002976 0 D	@ICP-D01	LIQUID	98000401	U-107 (2)
			<b>Analytes Requested:</b> AG-D-01 , AL-D-01 , AS-D-01 , B-D-01 , BA-D-01 , BE-D-01 , BI-D-01 , CA-D-01 , CD-D-01 , CE-D-01 , CO-D-01 , CR-D-01 , CU-D-01 , FE-D-01 , K-D-01 , LA-D-01 , LI-D-01 , MG-D-01 , MN-D-01 , MO-D-01 , NA-D-01 , ND-D-01 , NI-D-01 , P-D-01 , PB-D-01 , S-D-01 , SB-D-01 , SE-D-01 , SI-D-01 , SM-D-01 , SR-D-01 , TI-D-01 , TL-D-01 , U-D-01 , V-D-01 , ZN-D-01 , ZR-D-01			
8	DUP	S98T002976 0 D	@ICP-D01	LIQUID		
9	SPK (1ppm)	S98T002976 0 D	@ICP-D01	LIQUID		
10	ICSA Spike 4x (10ppm) # 11-62-98		@ICP-QC	QC		
11	ICSAB		@ICP-QC	QC		
12	CCV		@ICP-QC	QC		
13	CCB		@ICP-QC	QC		

Data Entry Comments:

Validated by:

Saul M. Pung  
11/20/98

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

1310

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A-0004-1

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## LABCORE Data Entry Template for Worklist# 26696

S Type	Sample#	R A	Test	Matrix	Group#	Project
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## Final page for worklist # 26696

JK *[Signature]* 11-20-98

Analyst Signature	Date
598700 2976-L	.025-15-28 JF 3005
598700 2976	.025-15 601
598700 2976-D	.025-15 601
598700 2976-G	.025-15 601
598700 2976-X	.025-15-1-9 6010
598700 2976-GX	.025-15-1-9 6010

Analyst Signature	Date
-------------------	------

598700 2976

$$C_2 = 6.85 \times 2 + 2 \frac{\mu\text{g}}{\text{ml}}$$

$$\text{Spike} = \left( \frac{1230.3}{601} \right) - \left( \frac{685.29}{601} \right) \times 100 = 90.7\%$$

Post Spike:

$$\text{Pb} = \left( \frac{85140}{6010} \right) - \left( \frac{23579}{6010} \right) \times 100 = 102.4\%$$

$$\text{Na} = \left( \frac{302130}{6010} \right) - \left( \frac{243530}{6010} \right) \times 100 = 97.5\%$$

$$\text{K} = \left( \frac{66121}{6010} \right) - \left( \frac{3253.2}{6010} \right) \times 100 = 104.6\%$$

Data Entry Comments:

$$\text{S} = \left( \frac{59790}{6010} \right) - \left( \frac{2484.8}{6010} \right) \times 100 = 95.35\%$$

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

## HNF-1661 REV. 0

Analysis Report

Summary

Fri 11-20-98 02:32:35 PM

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981120B	ICP2	11/20/98	13:06	DKS	Q	CONC
2	ICB	981120B	ICP2	11/20/98	13:09	DKS	Q	CONC
3	LLS	981120B	ICP2	11/20/98	13:12	DKS	Q	CONC
4	ICSA	981120B	ICP2	11/20/98	13:15	DKS	Q	CONC
5	ICSAB	981120B	ICP2	11/20/98	13:18	DKS	Q	CONC
6	S98T002976_L	981120B	ICP2	11/20/98	13:21	DKS	S	CONC
7	S98T002976	981120B	ICP2	11/20/98	13:24	DKS	S	CONC
8	S98T002976_D	981120B	ICP2	11/20/98	13:27	DKS	S	CONC
9	S98T002976_A	981120B	ICP2	11/20/98	13:30	DKS	S	CONC
10	S98T002976	981120B	ICP2	11/20/98	13:36	DKS	S	CONC
11	S98T002976_AX	981120B	ICP2	11/20/98	13:39	DKS	S	CONC
12	ICSA	981120B	ICP2	11/20/98	14:20	DKS	Q	CONC
13	ICSAB	981120B	ICP2	11/20/98	14:22	DKS	Q	CONC
14	CCV	981120B	ICP2	11/20/98	14:26	DKS	Q	CONC
15	CCB	981120B	ICP2	11/20/98	14:29	DKS	Q	CONC

JK 2/10

11-20-98

Work/157 # 26696

U-107

5987002976

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1312 TO 1315.



## HNF-1661 REV. 0

Analysis Report Averages Fri 11-20-98 02:32:35 PM page 2

#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.9326	4.9878	5.1381	5.0215	4.9753	5.0986
2	ICB	.00220	.01253	.01630	.00428	.00012	.00041
3	LLS	.02336	.11503	.20180	.10209	.09885	.01065
4	ICSA	.00607	241.63	-.00007	-.01114	.00047	.00041
5	ICSAB	.93032	241.91	.02470	-.00488	.45463	.47497
6	S98T002976_L	23.048	23160.	-30.123	81.661	.37999	.68923
7	S98T002976_	17.335	22769.	-40.218	74.235	.12301	.38849
8	S98T002976_D	16.230	22372.	-35.055	71.942	.05498	.33348
9	S98T002976_A	540.60	22490.	568.04	670.31	560.56	606.86
10	S98T002976_X	42.255	23579.	-27.712	60.123	.71509	2.1980
11	S98T002976_AX	56390.	85140.	63623.	59500.	63922.	63536.
12	ICSA	.00961	244.27	.00909	-.00905	.00033	.00055
13	ICSAB	.93517	242.83	.02194	-.01201	.45661	.47515
14	CCV	4.8789	4.9248	5.0596	5.0196	4.9209	5.0785
15	CCB	.00494	.01432	.00931	.00237	.00012	.00036

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	4.9706	4.8893	5.0070	5.1073	4.8993	4.8820
2	ICB	.03390	.00527	.00004	.00786	.00163	.00006
3	LLS	2.1638	.21708	.01145	.21374	.04140	.01994
4	ICSA	-.00918	247.25	.00729	.01992	.00350	-.00223
5	ICSAB	-.00334	246.57	.92149	.01324	.45014	.45265
6	S98T002976_L	45.884	100.07	1.8611	35.598	9.4455	698.39
7	S98T002976_	11.367	95.554	.74494	5.5648	2.1183	685.29
8	S98T002976_D	19.604	93.028	.08469	.38317	1.7352	665.09
9	S98T002976_A	588.37	684.64	596.96	597.85	590.75	1230.3
10	S98T002976_X	-68.922	83.045	.66753	9.4786	11.268	704.31
11	S98T002976_AX	63604.	62231.	62177.	64137.	57708.	62952.
12	ICSA	.01895	248.40	.00658	.00414	.00349	-.00254
13	ICSAB	.00607	246.77	.92275	.00767	.45167	.45624
14	CCV	4.9700	4.9133	4.9768	5.0536	4.8745	4.8684
15	CCB	-.00426	.00499	.00033	.00653	.00074	-.00048

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.8061	.00586	4.8533	4.8391	5.0787	5.1618
2	ICB	.00023	-.00083	.00163	-.03983	.00138	-.00051
3	LLS	.01706	-.00097	.09730	.51807	.10418	.02093
4	ICSA	.00417	.01999	90.758	.02669	-.00200	.00154
5	ICSAB	.46442	.02490	90.635	.13106	-.00174	1.0007
6	S98T002976_L	1.8254	-1.1071	9.3649	2945.9	4.6567	-.30484
7	S98T002976_	2.0041	.23173	5.6080	3139.0	.54713	.49408
8	S98T002976_D	.89355	-.02365	4.5749	3039.0	.23584	.12372
9	S98T002976_A	563.46	.61775	562.68	3527.6	601.44	597.15
10	S98T002976_X	1.4344	-7.7245	5.9119	3253.2	.24479	-4.9246
11	S98T002976_AX	56269.	86.111	60018.	66121.	64173.	65474.
12	ICSA	.00415	.02033	91.294	.03488	-.00291	.00113
13	ICSAB	.46533	.02480	90.701	.09337	-.00242	1.00031
14	CCV	4.7644	.00687	4.7594	5.1563	5.0518	5.1088
15	CCB	.00028	-.00103	.00158	.03778	.00125	-.00061

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Analysis Report      Averages      Fri 11-20-98 02:32:35 PM      page 3

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.1621	4.8753	4.9770	5.2370	4.9457	4.8510
2	ICB	.01042	-.00026	.00048	.01290	-.00096	-.00083
3	LLS	.22281	.01954	.09794	.22175	.20121	.04191
4	ICSA	247.76	-.00526	-.01538	190.14	.00241	-.00432
5	ICSAB	247.65	.43204	-.01675	191.54	.00171	.89073
6	S98T002976_L	63.819	.58203	94.153	236230.	4.5986	25.227
7	S98T002976	8.9095	1.3359	90.330	226160.	2.1479	15.339
8	S98T002976_D	8.7856	1.0477	87.758	225190.	-.80175	15.200
9	S98T002976_A	613.83	564.96	678.36	217880.	582.24	588.13
10	S98T002976_X	83.854	-1.2100	89.105	243530.	-2.8103	2.1753
11	S98T002976_AX	65982.	62293.	57927.	302130.	62136.	61690.
12	ICSA	250.36	-.00533	-.01506	192.33	.00412	-.00416
13	ICSAB	248.65	.43180	-.01625	191.77	.00368	.87364
14	CCV	5.1243	4.8370	4.9390	5.1056	4.8918	4.8208
15	CCB	.01324	-.00033	-.00017	.01398	-.00124	-.00354

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	4.9826	4.8995	4.8382	5.0028	4.7710	4.8375
2	ICB	.02072	.00085	-.00175	-.00755	.01826	-.00556
3	LLS	.40107	.19787	.19106	.09545	.21080	Q.15977
4	ICSA	.03835	.01903	-.03883	.00082	.06625	-.01334
5	ICSAB	.03248	.95735	-.04223	-.01646	.05403	-.01133
6	S98T002976_L	1246.5	-1.0341	2469.4	1.3302	59.465	229.50
7	S98T002976	1197.6	10.216	2525.3	-.83416	31.781	245.73
8	S98T002976_D	1249.9	6.0094	2447.6	-5.1987	42.730	147.85
9	S98T002976_A	1717.8	592.36	2967.1	610.50	617.80	833.03
10	S98T002976_X	1379.0	-22.273	2484.8	-28.984	109.34	263.78
11	S98T002976_AX	59761.	62603.	59790.	58959.	61561.	60472.
12	ICSA	.05056	.01984	-.03658	-.01693	.07085	-.01137
13	ICSAB	.04192	.96129	-.02733	-.00795	.05572	-.00854
14	CCV	4.9817	4.8956	4.8159	5.0094	4.7659	4.8934
15	CCB	.01578	-.00751	-.00020	-.00165	.01649	-.00332

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	5.0124	5.0818	.21519	5.1100	4.8200	9.8975
2	ICB	-.00786	-.00021	.01023	.00004	.01746	-.02912
3	LLS	.19282	.02001	.01518	.02086	.39351	.44134
4	ICSA	-.02384	.00190	.00910	.00164	.07028	-.06884
5	ICSAB	-.02799	.00193	.01490	.00189	.02021	-.07513
6	S98T002976_L	-20.334	-.38877	37.235	2.2264	7.3680	-71.400
7	S98T002976	.01907	.07542	5.0444	.43750	5.3274	-5.1868
8	S98T002976_D	-4.4167	.02324	-.03827	-.00429	.17969	-4.5442
9	S98T002976_A	583.15	582.64	28.342	603.53	553.96	1135.5
10	S98T002976_X	-71.119	-1.5453	35.533	2.9402	30.309	-270.62
11	S98T002976_AX	63002.	63424.	2577.4	58945.	62048.	114580.
12	ICSA	-.02833	.00199	.00566	.00163	.01613	-.07793
13	ICSAB	-.02624	.00192	.00670	.00163	.04358	-.06878
14	CCV	4.9931	4.9964	.22038	5.0759	4.6794	9.8130
15	CCB	-.00963	-.00025	.00966	.00003	.00929	-.03191

Analysis Report Averages HNF-1661 REV.0  
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#	Sample Name	V	Y	Zn	Zr
1	ICV	4.9613	.00660	4.6502	4.8479
2	ICB	-.00158	-.00077	.00047	-.00198
3	LLS	.09573	-.00065	.01898	.01654
4	ICSA	-.00096	.00661	-.00336	-.00518
5	ICSAB	.45508	.00645	.89708	-.00570
6	S98T002976_L	-3.8555	-1.8536	1.4369	-4.6435
7	S98T002976	.08853	-.13909	.78101	-.43384
8	S98T002976_D	-.21807	-.28066	.80425	-.42438
9	S98T002976_A	584.72	.36517	558.15	576.90
10	S98T002976_X	-19.048	-5.5368	.50484	-17.486
11	S98T002976_AX	57859.	92.597	53811.	58208.
12	ICSA	-.00050	.00661	-.00376	-.00496
13	ICSAB	.45626	.00653	.89951	-.00479
14	CCV	4.9259	.00672	4.6018	4.8235
15	CCB	-.00228	-.00069	-.00017	-.00224

*JK*

11-20-98

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A-0004-1

File #: 981302B.TXT

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## LABCORE Data Entry Template for Worklist# 26919

Analyst: M Scto Instrument: ICP012 11-10-98 Book# 75888 77830 11-01-98  
 Method: LA-505-151/161 Rev/Mod C-3 Ensure dose rate of 30 cpm is  $\leq 50$  mrem/hr  
 prior to performing this analysis  
 Worklist Comment: ICP U-107 (SOLID ACID DIGEST)

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	ICV		@ICP-QC	QC		
2	ICB		@ICP-QC	QC		
3	LLS		@ICP-QC	QC		
4	ICSA		@ICP-QC	QC		
5	IC SAB		@ICP-QC	QC		
6	PREPSTDTJA		@ICP-A01	SOLID		
7	PREPBLKTJA		@ICP-A01	SOLID		
8	SAMPLE	S98T002329 0 A	@ICP-A01	SOLID	98000358	U-107 (2)
	Analytes Requested: AG-A-01, AL-A-01, AS-A-01, B-A-01, BA-A-01, BE-A-01, BI-A-01, CA-A-01, CD-A-01, CE-A-01, CO-A-01, CR-A-01, CU-A-01, FE-A-01, K-A-01, LA-A-01, LI-A-01, MG-A-01, MN-A-01, MO-A-01, NA-A-01, ND-A-01, NI-A-01, P-A-01, PB-A-01, S-A-01, SB-A-01, SE-A-01, SI-A-01, SM-A-01, SR-A-01, TI-A-01, TL-A-01, U-A-01, V-A-01, ZN-A-01, ZR-A-01					
9	DUP	S98T002329 0 A	@ICP-A01	SOLID		
10	SAMPLE	S98T002269 0 A	@ICP-A01	SOLID	98000359	U-107 (2)
	Analytes Requested: AG-A-01, AL-A-01, AS-A-01, B-A-01, BA-A-01, BE-A-01, BI-A-01, CA-A-01, CD-A-01, CE-A-01, CO-A-01, CR-A-01, CU-A-01, FE-A-01, K-A-01, LA-A-01, LI-A-01, MG-A-01, MN-A-01, MO-A-01, NA-A-01, ND-A-01, NI-A-01, P-A-01, PB-A-01, S-A-01, SB-A-01, SE-A-01, SI-A-01, SM-A-01, SR-A-01, TI-A-01, TL-A-01, U-A-01, V-A-01, ZN-A-01, ZR-A-01					
11	DUP	S98T002269 0 A	@ICP-A01	SOLID		
12	CCV		@ICP-QC	QC		

Data Entry Comments:

uploaded 12-2-98  
John Wavell

Validated by:

Saul M. Pang

12/3/98

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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A-0004-I

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## LABCORE Data Entry Template for Worklist# 26919

S Type	Sample#	R A	Test	Matrix	Group#	Project
13	CCB		@ICP-QC	QC		
14	SERDIL	S98T002275 0 A	@ICP-A01	SOLID		
15	SAMPLE	S98T002275 0 A	@ICP-A01	SOLID	98000359 U-107 (2)	
<b>Analytes Requested:</b>						
AG-A-01 , AL-A-01 , AS-A-01 , B-A-01 , BA-A-01 ,						
BE-A-01 , BI-A-01 , CA-A-01 , CD-A-01 , CE-A-01 , CO-A-01 ,						
CR-A-01 , CU-A-01 , FE-A-01 , K-A-01 , LA-A-01 , LI-A-01 ,						
MG-A-01 , MN-A-01 , MO-A-01 , NA-A-01 , ND-A-01 , NI-A-01 ,						
P-A-01 , PB-A-01 , S-A-01 , SB-A-01 , SE-A-01 , SI-A-01 ,						
SM-A-01 , SR-A-01 , TI-A-01 , TL-A-01 , U-A-01 , V-A-01 ,						
ZN-A-01 , ZR-A-01						
16	DUP	S98T002275 0 A	@ICP-A01	SOLID		
17	SPK-PRDIG	S98T002275 0 A	@ICP-A01	SOLID		
18	ICSA	Spk. of (10 ppb) # 1140-98	@ICP-QC	QC		
19	ICSAB		@ICP-QC	QC		
20	CCV		@ICP-QC	QC		
21	CCB		@ICP-QC	QC		

## Final page for worklist # 26919

JK det 12-02-98

Analyst Signature	Date
Prepstk JTG , Direct	JF 1
Prepbk JTG , Direct	1
5987001329 , 3-6	JF 3
5987001329_D , 3-6	3
5987001269 , 3-6	JF 3
5987001269_D , 3-6	3

Analyst Signature	Date
5987001275_1 , 3-6-2-8	JF 15
5987001275 , 3-6	3
5987001275_D , 3-6	3
5987001275_5 , 3-6	3
5987001275_X , 3-6-1-9	30
5987001275_QX , 3-6-1-9	30

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

## HNF-1661 REV. 0

Analysis Report

Summary

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981202B	ICP2	12/02/98	11:21	DKS	Q	CONC
2	ICB	981202B	ICP2	12/02/98	12:38	DKS	Q	CONC
3	LCS	981202B	ICP2	12/02/98	12:41	DKS	Q	CONC
4	ICSA	981202B	ICP2	12/02/98	12:44	DKS	Q	CONC
5	ICSAB	981202B	ICP2	12/02/98	12:47	DKS	Q	CONC
6	PREPSTDITJA	981202B	ICP2	12/02/98	12:50	DKS	Q	CONC
7	PREPBLKTJA	981202B	ICP2	12/02/98	12:53	DKS	Q	CONC
8	S98T002329	981202B	ICP2	12/02/98	12:57	DKS	S	CONC
9	S98T002329_D	981202B	ICP2	12/02/98	13:00	DKS	S	CONC
10	S98T002269	981202B	ICP2	12/02/98	13:03	DKS	S	CONC
11	S98T002269_D	981202B	ICP2	12/02/98	13:06	DKS	S	CONC
12	CCV	981202B	ICP2	12/02/98	13:13	DKS	Q	CONC
13	CCB	981202B	ICP2	12/02/98	13:16	DKS	Q	CONC
14	S98T002275_L	981202B	ICP2	12/02/98	13:22	DKS	S	CONC
15	S98T002275	981202B	ICP2	12/02/98	13:26	DKS	S	CONC
16	S98T002275_D	981202B	ICP2	12/02/98	13:29	DKS	S	CONC
17	S98T002275_S	981202B	ICP2	12/02/98	13:32	DKS	S	CONC
18	S98T002275_X	981202B	ICP2	12/02/98	13:37	DKS	S	CONC
19	S98T002275_AX	981202B	ICP2	12/02/98	13:40	DKS	S	CONC
20	ICSA	981202B	ICP2	12/02/98	14:09	DKS	Q	CONC
21	ICSAB	981202B	ICP2	12/02/98	14:12	DKS	Q	CONC
22	CCV	981202B	ICP2	12/02/98	14:15	DKS	Q	CONC
23	CCB	981202B	ICP2	12/02/98	14:19	DKS	Q	CONC

DK [Signature]

12-02-98  
worklist # 26919

6.107

598T002329

598T002269

598T002275

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 598T002275 ~~VERIFIED~~ THE CALIBRATION/ANALYSIS ON PAGES 1318 TO 1322

$$RL = 54.389 \frac{\mu\text{g}}{\text{mL}} \times \frac{1}{5.07 \frac{\mu\text{g}}{\text{L}} \times \frac{14}{1000\text{mL}}} = 1.07 \text{ at } 4 \frac{\mu\text{g}}{\text{g}}$$

$$\text{Pre-dig Spk: } RL = \frac{59.898 - 54.389}{5} \times 100 = 109.2\%$$

Post Spike:

$$C_2 = \frac{\left(\frac{313.13}{30}\right) - \left(\frac{13.685}{30}\right)}{10} \times 100 = 99.8\%$$

$$P = \frac{\left(\frac{389.39}{30}\right) - \left(\frac{92.265}{30}\right)}{10} \times 100 = 99.04\%$$

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Analysis Report

Averages

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#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.9953	4.8935	5.0689	5.1814	4.8877	5.1049
2	ICB	.00027	.00329	.00756	.00000	.00007	.00004
3	LLS	.02069	.11011	.20890	.10507	.09917	.01050
4	ICSA	.00279	241.11	.04619	-.00697	.00050	.00019
5	ICSAB	.96492	241.78	.03934	-.00937	.45631	.47461
6	PREPSTDITJA	.93267	4.8032	4.7247	5.2919	4.8506	5.1493
7	PREPBLKTJA	-.00035	Q.10746	.00362	Q.51883	.00075	-.00023
8	S98T002329	.07671	69.009	-.00054	.72359	.00858	.00068
9	S98T002329_D	.07910	82.514	.01756	.70176	.00937	.00082
10	S98T002269	.07421	60.508	-.02644	.71321	.00967	.00042
11	S98T002269_D	.07559	55.620	-.09326	.72625	.00834	.00056
12	CCV	5.0589	4.7943	5.0104	5.0595	4.6847	4.9886
13	CCB	.00031	-.00195	.01303	-.00047	.00010	-.00009
14	S98T002275_L	.07680	57.078	-.13261	.70488	.01367	-.00068
15	S98T002275	.07340	54.389	-.05348	.70622	.01294	.00041
16	S98T002275_D	.05974	51.269	-.05912	.69166	.01305	.00083
17	S98T002275_S	1.0745	59.848	5.0560	5.6723	4.8003	5.1145
18	S98T002275_X	.07147	55.961	.28793	.85175	.01802	-.00284
19	S98T002275_AX	215.47	339.70	297.34	294.66	287.10	288.44
20	ICSA	.00580	239.78	.06126	-.01094	.00037	.00014
21	ICSAB	.96621	242.03	.07290	-.01025	.45818	.47633
22	CCV	5.0280	4.8754	5.0887	5.1696	4.8512	5.1117
23	CCB	.00189	.00648	.01168	.00195	.00017	.00000

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	5.0512	5.1924	5.1329	5.0248	5.0314	5.0312
2	ICB	.00487	.00282	.00176	.00000	.00249	.00064
3	LLS	.21403	.22445	.01066	.19647	.04286	.02120
4	ICSA	.00803	258.33	.00695	.00168	.00353	.00066
5	ICSAB	-.01158	258.27	.95179	.00327	.46588	.47379
6	PREPSTDITJA	4.5155	4.9112	4.6519	4.9536	4.6889	4.7680
7	PREPBLKTJA	.01870	Q.13218	.00180	.00870	.00262	.00248
8	S98T002329	.09427	.63567	.00980	.00658	.00679	5.8710
9	S98T002329_D	.09902	.72247	.01247	.00948	.00557	6.2664
10	S98T002269	.09542	.92257	.01315	-.00071	.00945	8.8526
11	S98T002269_D	.20495	.75104	.01150	-.00774	.00828	7.7858
12	CCV	5.0290	5.3557	5.1655	4.8581	5.0759	5.0856
13	CCB	-.00014	.00502	.00145	.00649	.00029	-.00007
14	S98T002275_L	.38126	1.1265	.02216	-.06441	.00807	13.607
15	S98T002275	.17418	1.1377	.01765	.01264	.01145	12.952
16	S98T002275_D	.14992	1.0350	.01771	.00569	.01186	13.115
17	S98T002275_S	5.2253	6.5686	5.0512	4.9407	4.9434	20.566
18	S98T002275_X	.84444	1.2882	.05688	.24715	.11989	13.685
19	S98T002275_AX	298.85	308.80	297.46	288.37	301.57	313.13
20	ICSA	.03157	259.47	.00715	.00707	.00196	.00096
21	ICSAB	-.00292	258.96	.95611	-.00537	.46562	.47200
22	CCV	5.0648	5.2718	5.1715	4.9935	5.0696	5.0710
23	CCB	-.01522	.00253	.00055	.00539	.00026	.00168

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Analysis Report

Averages

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#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.7573	.00588	4.8360	5.0407	5.0357	4.9993
2	ICB	-.00007	-.00049	.00065	-.00301	.00014	-.00040
3	LLS	.01829	-.00050	.09902	Q.75234	.10132	.02054
4	ICSA	.00440	-.00962	92.957	.42097	-.00229	.00262
5	ICSAB	.46061	-.00724	92.807	.32452	-.00334	.95753
6	PREPSTDTJA	4.5374	.00465	4.6580	4.6631	4.9248	4.9052
7	PREPBLKTJA	.00386	-.00049	.02886	.35563	.00070	-.00070
8	S98T002329	.00742	.00286	2.6088	4.5345	.00646	.00209
9	S98T002329_D	.00919	.00098	3.0236	3.9676	.00764	.00179
10	S98T002269	.00690	.00059	2.4158	6.9525	.01962	-.00031
11	S98T002269_D	.00268	.00063	2.0095	6.6089	.01574	.00059
12	CCV	4.5488	.00803	4.8277	4.8441	4.8483	4.6775
13	CCB	-.00073	.00206	-.00025	.22740	.00082	.00150
14	S98T002275_L	-.01482	.00957	3.4024	6.1275	.03006	.00752
15	S98T002275	-.00414	.00265	3.2361	5.2035	.02917	.00149
16	S98T002275_D	-.00428	.00376	3.4736	5.5273	.02965	.00269
17	S98T002275_S	4.5786	.00781	9.3792	10.536	4.9575	4.7085
18	S98T002275_X	-.02851	.08516	3.3879	11.406	.06856	.06031
19	S98T002275_AX	270.64	.38692	286.79	285.16	286.11	273.58
20	ICSA	.00357	-.01317	92.770	.37867	-.00328	.00292
21	ICSAB	.46103	-.00800	93.076	.19309	-.00512	.96711
22	CCV	4.7173	.00698	4.8476	4.9125	5.0058	4.9604
23	CCB	.00073	.00030	.00150	.17360	.00065	.00000

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.1396	4.9545	5.1075	4.9590	4.9186	4.9955
2	ICB	-.00065	-.00009	.00034	.04865	-.00062	.00145
3	LLS	.19793	.02021	.10365	.21558	.20315	.04446
4	ICSA	246.22	-.00431	-.01517	186.19	.00218	-.00775
5	ICSAB	246.31	.44622	-.01537	187.22	-.00145	.92818
6	PREPSTDTJA	4.6293	4.6842	4.7822	6.1431	4.8631	4.7371
7	PREPBLKTJA	.02414	.00057	.00204	Q.73858	.00156	-.00012
8	S98T002329	.12485	.47063	.10290	1082.4	.01485	.07047
9	S98T002329_D	.15542	.53762	.10237	1117.3	.01264	.07496
10	S98T002269	.13010	.80652	.19044	1018.9	.01956	.09668
11	S98T002269_D	.10704	.68478	.18010	1071.9	.02082	.08861
12	CCV	5.0233	4.9834	5.1225	4.6913	4.7132	5.0322
13	CCB	.00250	.00076	-.00029	.00923	-.00075	-.00248
14	S98T002275_L	.19099	1.2529	.18092	1026.1	.02645	.05868
15	S98T002275	.20623	1.1903	.17093	956.64	.02642	.13637
16	S98T002275_D	.19563	1.2972	.15495	861.36	.03706	.13305
17	S98T002275_S	5.0399	6.5667	5.2082	971.39	4.8411	5.2043
18	S98T002275_X	.58277	1.2829	.17730	981.64	.03054	.15333
19	S98T002275_AX	297.63	297.79	300.35	1270.2	278.46	297.61
20	ICSA	245.00	-.00414	-.01172	184.89	.00045	-.01358
21	ICSAB	246.69	.44772	-.01485	188.38	-.00012	.92832
22	CCV	5.1229	4.9795	5.1366	4.9498	4.8892	5.0502
23	CCB	.00578	.00018	.00257	.04758	.00271	-.00062

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Analysis Report

Averages

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#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	5.0775	5.0699	4.9364	5.1418	4.8532	5.2164
2	ICB	.00208	-.00563	.00655	.00586	.01291	-.00336
3	LLS	.38375	.21177	.21246	.10183	.19246	Q.13707
4	ICSA	.04267	.03805	-.02694	.00083	.06917	-.00029
5	ICSAB	.03391	1.0205	-.02111	-.00009	.04465	-.00086
6	PREPSTD TJA	4.6102	4.4690	4.4342	4.5584	4.4914	7.3349
7	PREPBLKTJA	.02615	-.00243	Q.09716	.00722	.03058	Q.88202
8	S98T002329	10.152	.17190	1.8468	.00300	.09815	3.1426
9	S98T002329_D	10.121	.17221	2.2207	.01650	.07940	3.2288
10	S98T002269	10.495	.18791	4.7403	.01278	.12853	.90657
11	S98T002269_D	10.030	.18410	4.2553	-.00876	.07705	.85025
12	CCV	5.0490	5.1584	5.0004	5.1436	4.8169	5.2921
13	CCB	.00569	-.00744	.01195	.00510	.01267	.02883
14	S98T002275_L	92.733	.15503	4.5945	-.00515	.09220	1.3682
15	S98T002275	90.188	.24399	4.2579	.01943	.06738	1.1201
16	S98T002275_D	37.396	.27792	4.2370	-.00188	.07970	1.0534
17	S98T002275_S	58.960	5.2383	9.5112	5.0268	4.8974	7.0595
18	S98T002275_X	92.265	.15837	4.4336	.27887	1.0277	1.6700
19	S98T002275_AX	389.39	303.48	301.43	303.62	286.63	300.82
20	ICSA	.04270	.04216	-.03600	.01504	.08370	.00304
21	ICSAB	.06554	1.0305	-.02834	.00745	.05654	.00336
22	CCV	5.0735	5.1016	4.9739	5.1704	4.8834	5.2462
23	CCB	.01285	-.00034	.00199	.00557	.00584	.00485

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.8904	4.9271	.17993	5.1153	4.8370	9.7309
2	ICB	.00074	-.00004	-.00108	.00000	.02460	-.00598
3	LLS	.19800	.02010	.00181	.02077	.43057	.47512
4	ICSA	-.01056	.00172	.00700	.00216	.00407	-.06465
5	ICSAB	-.01281	.00172	.00150	.00189	.03165	-.05402
6	PREPSTD TJA	4.8213	4.9365	.16516	4.8675	4.4561	9.5944
7	PREPBLKTJA	-.00692	.00012	.00374	.00095	.00686	-.02212
8	S98T002329	.03604	.00972	.00802	.00760	.08424	.47245
9	S98T002329_D	.00858	.01118	.01581	.00620	-.01148	.43857
10	S98T002269	.00100	.00815	.02448	.01199	.06246	.20159
11	S98T002269_D	.01106	.00696	.01400	.00986	.04005	.17348
12	CCV	4.6538	4.7503	.17592	4.9939	4.7372	9.2755
13	CCB	.02207	.00025	-.00423	.00044	.01311	.08236
14	S98T002275_L	10170	.01312	.01045	.01745	-.00485	.75430
15	S98T002275	.02804	.01196	.03051	.02325	.05842	.40740
16	S98T002275_D	.02990	.01222	.02714	.02251	.05497	.46003
17	S98T002275_S	4.8146	4.9294	.22750	5.0136	4.6315	9.8881
18	S98T002275_X	.93471	.02476	-.10124	.02737	.39786	3.6295
19	S98T002275_AX	274.44	284.07	10.744	292.16	290.24	542.35
20	ICSA	-.00694	.00163	.00017	.00213	.00125	-.04962
21	ICSAB	-.01259	.00174	-.00988	.00138	-.01656	-.05305
22	CCV	4.8283	4.9053	.17530	5.0990	4.8498	9.6462
23	CCB	.00279	.00000	-.00037	.00023	.01836	.00744

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Analysis Report

Averages

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#	Sample Name	V	Y	Zn	Zr
1	ICV	5.0390	.00730	4.8043	4.8984
2	ICB	-.00072	-.00015	.00011	-.00055
3	LLS	.10011	.00018	.01968	.01900
4	ICSA	.00237	.00778	-.00330	-.00255
5	IC SAB	.47091	.00778	.95612	-.00225
6	PREPSTDTJA	4.8912	.00579	4.3222	4.6781
7	PREPBLKTJA	-.00108	-.00069	.00786	.00006
8	S98T002329	.01058	.00262	.07666	.01523
9	S98T002329_D	.00445	.00145	.09475	.01179
10	S98T002269	.00430	.00179	.08519	.00937
11	S98T002269_D	.00282	.00157	.06936	.00922
12	CCV	5.0144	.00890	4.9514	4.8100
13	CCB	.00502	.00121	-.00047	.00345
14	S98T002275_L	.03908	.00908	.11749	.03693
15	S98T002275	.01591	.00452	.11156	.02612
16	S98T002275_D	.01580	.00544	.10922	.02729
17	S98T002275_S	5.0481	.01342	4.9761	4.6720
18	S98T002275_X	.21943	.05958	.12070	.15814
19	S98T002275_AX	295.84	.47008	290.58	292.09
20	ICSA	.00429	.00817	-.00318	-.00174
21	IC SAB	.47177	.00770	.95543	-.00175
22	CCV	5.0592	.00781	4.8701	4.8959
23	CCB	.00035	.00000	-.00016	-.00031

*DK AD*

12-02-98

File #: 981202G.TXT

HNF-1661 REV. 0

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# LABCORE Data Entry Template for Worklist# 26920

Analyst: JK 567 Instrument: ICPOT 11/10/98 Book# 77B30

Method: LA-505-151/161 Rev/Mod C3

Ensure dose rate at 30cm is  $\leq 50$  mrem/hr prior to performing this analysis

Worklist Comment: ICP U-107 (SOLID ACID DIGEST)

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	ICV		@ICP-QC	QC		
2	ICB		@ICP-QC	QC		
3	LLS		@ICP-QC	QC		
4	ICSA		@ICP-QC	QC		
5	ICSAB		@ICP-QC	QC		
6	PREPSTDITJA		@ICP-A01	SOLID		
7	PREPBLKTJA		@ICP-A01	SOLID		
8	SAMPLE	S98T002448 0 A	@ICP-A01	SOLID	98000359	U-107 (2)
			<b>Analytes Requested:</b> AG-A-01 , AL-A-01 , AS-A-01 , B-A-01 , BA-A-01 , BE-A-01 , BI-A-01 , CA-A-01 , CD-A-01 , CE-A-01 , CO-A-01 , CR-A-01 , CU-A-01 , FE-A-01 , K-A-01 , LA-A-01 , LI-A-01 , MG-A-01 , MN-A-01 , MO-A-01 , NA-A-01 , ND-A-01 , NI-A-01 , P-A-01 , PB-A-01 , S-A-01 , SB-A-01 , SE-A-01 , SI-A-01 , SM-A-01 , SR-A-01 , TI-A-01 , TL-A-01 , U-A-01 , V-A-01 , ZN-A-01 , ZR-A-01			
9	DUP	S98T002448 0 A	@ICP-A01	SOLID		
10	SAMPLE	S98T002453 0 A	@ICP-A01	SOLID	98000359	U-107 (2)
			<b>Analytes Requested:</b> AG-A-01 , AL-A-01 , AS-A-01 , B-A-01 , BA-A-01 , BE-A-01 , BI-A-01 , CA-A-01 , CD-A-01 , CE-A-01 , CO-A-01 , CR-A-01 , CU-A-01 , FE-A-01 , K-A-01 , LA-A-01 , LI-A-01 , MG-A-01 , MN-A-01 , MO-A-01 , NA-A-01 , ND-A-01 , NI-A-01 , P-A-01 , PB-A-01 , S-A-01 , SB-A-01 , SE-A-01 , SI-A-01 , SM-A-01 , SR-A-01 , TI-A-01 , TL-A-01 , U-A-01 , V-A-01 , ZN-A-01 , ZR-A-01			
11	DUP	S98T002453 0 A	@ICP-A01	SOLID		
12	CCV		@ICP-QC	QC		

Data Entry Comments: uploaded 12-2-98  
John Wavell

Validated by: Saul H. Yang  
12/3/98

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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A-0004-1

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**LABCORE Data Entry Template for Worklist# 26920**

S Type	Sample#	R A	Test	Matrix	Group#	Project
13	CCB		@ICP-QC	QC		
14	SERDIL	S98T002521 0 A	@ICP-A01	SOLID		
15	SAMPLE	S98T002521 0 A	@ICP-A01	SOLID	98000359 U-107 (2)	
<b>Analytes Requested:</b>			AG-A-01 , AL-A-01 , AS-A-01 , B-A-01 , BA-A-01 , BE-A-01 , BI-A-01 , CA-A-01 , CD-A-01 , CE-A-01 , CO-A-01 , CR-A-01 , CU-A-01 , FE-A-01 , K-A-01 , LA-A-01 , LI-A-01 , MG-A-01 , MN-A-01 , MO-A-01 , NA-A-01 , ND-A-01 , NI-A-01 , P-A-01 , PB-A-01 , S-A-01 , SB-A-01 , SE-A-01 , SI-A-01 , SM-A-01 , SR-A-01 , TI-A-01 , TL-A-01 , U-A-01 , V-A-01 , ZN-A-01 , ZR-A-01			
16	DUP	S98T002521 0 A	@ICP-A01	SOLID		
17	SPK-PREDIG	S98T002521 0 A	@ICP-A01	SOLID		
18	<sup>Sample X</sup> ICSA Spike Qx (10 ppq) 11-10-98		@ICP-QC	QC		
19	ICSAB		@ICP-QC	QC		
20	CCV		@ICP-QC	QC		
21	CCB		@ICP-QC	QC		

**Final page for worklist # 26920**

Analyst Signature	Date	Analyst Signature	Date
<i>DK Gold</i>	12-02-98		
Preps/d JJA	Direct, JF 1	5987002521LL	3-6-2-8 JF 15
Prep/d JJA	Direct 1	5987002521	3-6 3
5987002448	3-6 JF 3	5987002531D	3-6 3
5987002448-D	3-6 3	5987002531S	3-6 3
5987002453	3-6 JF 3	5987002531-X	3-6-1-9 30
5987002453-D	3-6 3	5987002531-CX	3-6-1-9 30

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

1324

S98T002521

$$Al = 83.751 \frac{\mu\text{g}}{\text{ml}} \times \frac{1}{5.196 \frac{\text{g}}{\text{L}} \times \frac{1\text{L}}{1000\text{ml}}} = 1.612 + 4 \frac{\mu\text{g}}{\text{g}}$$

Pre dig Spk:

$$Mn = \frac{7.7548 - 2.0277}{5} \times 100 = 114.5\%$$

Post Spike:

$$Al = \frac{\left(\frac{379.60}{30}\right) - \left(\frac{90.119}{30}\right)}{10} \times 100 = 96.5\%$$

$$Cr = \frac{\left(\frac{308.10}{30}\right) - \left(\frac{6.9253}{30}\right)}{10} \times 100 = 100.4\%$$

$$Fe = \frac{\left(\frac{292.86}{30}\right) - \left(\frac{5.4964}{30}\right)}{10} \times 100 = 95.8\%$$

$$Na = \frac{\left(\frac{1494.2}{30}\right) - \left(\frac{1245.9}{30}\right)}{10} \times 100 = 82.8\%$$

$$P = \frac{\left(\frac{322.90}{30}\right) - \left(\frac{28.050}{30}\right)}{10} \times 100 = 98.3\%$$

## HNF-1661 REV. 0

Analysis Report

Summary

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981202A	ICP2	12/02/98	09:41	DKS	Q	CONC
2	ICB	981202A	ICP2	12/02/98	09:45	DKS	Q	CONC
3	LLS	981202A	ICP2	12/02/98	09:48	DKS	Q	CONC
4	ICSA	981202A	ICP2	12/02/98	09:51	DKS	Q	CONC
5	ICSAB	981202A	ICP2	12/02/98	09:54	DKS	Q	CONC
6	PREPSTDTJA	981202A	ICP2	12/02/98	09:57	DKS	Q	CONC
7	PREPBLKTJA	981202A	ICP2	12/02/98	10:00	DKS	Q	CONC
8	S98T002448	981202A	ICP2	12/02/98	10:03	DKS	S	CONC
9	S98T002448_D	981202A	ICP2	12/02/98	10:10	DKS	S	CONC
10	S98T002453	981202A	ICP2	12/02/98	10:13	DKS	S	CONC
11	S98T002453_D	981202A	ICP2	12/02/98	10:16	DKS	S	CONC
12	CCV	981202A	ICP2	12/02/98	10:20	DKS	Q	CONC
13	CCB	981202A	ICP2	12/02/98	10:24	DKS	Q	CONC
14	S98T002521_L	981202A	ICP2	12/02/98	10:27	DKS	S	CONC
15	S98T002521	981202A	ICP2	12/02/98	10:30	DKS	S	CONC
16	S98T002521_D	981202A	ICP2	12/02/98	10:33	DKS	S	CONC
17	S98T002521_S	981202A	ICP2	12/02/98	10:36	DKS	S	CONC
18	S98T002521_X	981202A	ICP2	12/02/98	10:41	DKS	S	CONC
19	S98T002521_AX	981202A	ICP2	12/02/98	10:44	DKS	S	CONC
20	ICSA	981202A	ICP2	12/02/98	11:04	DKS	Q	CONC
21	ICSAB	981202A	ICP2	12/02/98	11:07	DKS	Q	CONC
22	CCV	981202A	ICP2	12/02/98	11:10	DKS	Q	CONC
23	CCB	981202A	ICP2	12/02/98	11:15	DKS	Q	CONC

IX led

12.02.98

Worklist # 26920

6-107

5987002448

5987002453

5987002521

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1326 TO 1330.

## HNF-1661 REV.0

Analysis Report

Averages

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#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.9745	4.8881	5.0491	5.1531	4.8440	5.0942
2	ICB	.00109	.00664	.01021	.00341	.00021	.00004
3	LLS	.02124	.10373	.19595	.10165	.09890	.01041
4	ICSA	.00327	242.26	.02397	-.00699	.00036	.00023
5	ICSAB	.96078	243.03	.05379	-.00736	.46029	.47796
6	PREPSTDTJA	.91025	4.6039	4.5852	5.1968	4.6802	4.9612
7	PREPBLKTJA	.00029	Q.11020	-.00200	Q.53300	.00074	.00004
8	S98T002448	.07352	72.392	-.05441	.74709	.00968	.00084
9	S98T002448_D	.08009	85.763	-.06836	.50671	.00969	.00084
10	S98T002453	.07845	63.254	-.08026	.55829	.01195	.00070
11	S98T002453_D	.07445	57.090	-.10124	.56688	.01112	.00084
12	CCV	5.0335	4.9211	5.1263	5.2052	4.8639	5.1170
13	CCB	.00053	.00091	.00268	.00000	.00003	.00018
14	S98T002521_L	.10046	87.845	.02683	.33916	.01569	.00348
15	S98T002521	.07991	83.751	.00367	.35076	.01293	.00084
16	S98T002521_D	.07710	152.69	-.01346	.20615	.01677	.00151
17	S98T002521_S	1.0961	302.10	5.0828	5.6429	4.8223	5.0917
18	S98T002521_X	.02325	90.119	.17926	.25122	.01138	.00281
19	S98T002521_AX	267.76	379.60	301.99	297.71	299.39	296.70
20	ICSA	.00493	242.69	.04900	-.01042	.00035	.00014
21	ICSAB	.96780	241.48	.05410	-.00884	.45822	.47568
22	CCV	5.0308	4.9141	5.1057	5.1759	4.8956	5.1227
23	CCB	.00259	.00642	.01011	.00098	.00019	.00000

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	5.0280	5.1852	5.1197	5.0115	5.0186	5.0147
2	ICB	.02406	.00450	.00098	.00808	.00237	.00078
3	LLS	.22198	.23017	.01036	.19917	.04379	.02262
4	ICSA	.02107	256.85	.00712	.00790	.00181	-.00157
5	ICSAB	.02895	257.10	.95434	.00755	.46772	.47368
6	PREPSTDTJA	4.4043	4.7147	4.5089	4.7793	4.5337	4.5939
7	PREPBLKTJA	.00182	Q.13065	.00111	.00564	.00326	.00421
8	S98T002448	.18560	.90226	.01072	.03850	.01064	3.4686
9	S98T002448_D	.18698	1.0084	.00803	.02346	.00469	3.4219
10	S98T002453	.17134	.98669	.01066	.00128	.00234	5.9607
11	S98T002453_D	.09839	.86820	.01012	.01027	.01102	4.8578
12	CCV	5.0726	5.2485	5.1646	5.0324	5.0701	5.0641
13	CCB	.01657	-.00036	.00079	-.00603	.00000	.00121
14	S98T002521_L	.42373	1.6926	.02096	.07135	.04151	6.9125
15	S98T002521	.20775	1.4526	.00868	-.01453	.01264	6.5253
16	S98T002521_D	.20949	1.4561	.02171	.03417	.00820	13.730
17	S98T002521_S	5.0762	7.3115	5.0260	5.0225	4.9423	25.431
18	S98T002521_X	1.0774	1.2934	-.01041	-.33203	.01182	6.9253
19	S98T002521_AX	303.23	306.06	299.72	300.01	297.67	308.10
20	ICSA	.00087	256.82	.00753	.00686	.00247	-.00319
21	ICSAB	.02007	258.72	.95833	.01570	.46877	.47369
22	CCV	5.1363	5.2527	5.1768	5.0463	5.0761	5.0671
23	CCB	.00905	.00639	.00192	.01286	.00213	.00094

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Analysis Report

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#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.7308	.00584	4.8439	5.2336	5.0147	5.0362
2	ICB	.00040	.00037	.00038	.19797	.00125	-.00020
3	LLS	.01858	.00017	.09971	Q.65997	.10233	.02105
4	ICSA	.00373	-.00556	92.929	.36372	-.00297	.00222
5	ICSAB	.46605	-.00235	92.982	.26279	-.00382	.97215
6	PREPSTDTJA	4.3805	.00402	4.4823	4.6670	4.7516	4.6962
7	PREPBLKTJA	.00377	-.00148	.04216	.16987	.00074	-.00161
8	S98T002448	.01552	.00161	2.9066	8.2232	.03449	.00059
9	S98T002448_D	.01651	.00178	2.8464	9.4345	.03195	.00059
10	S98T002453	.01061	.00064	3.5612	6.3404	.03667	-.00031
11	S98T002453_D	.01318	-.00083	3.1001	6.4768	.03314	-.00091
12	CCV	4.7524	.00621	4.8586	5.0366	5.0273	5.0205
13	CCB	-.00020	-.00025	.00124	.18778	-.00043	-.00040
14	S98T002521_L	.02021	.00583	5.4602	7.8944	.06192	.00450
15	S98T002521	.01290	.00204	5.1325	4.6212	.03822	.00179
16	S98T002521_D	.00517	.00302	6.2040	5.1567	.05064	.00328
17	S98T002521_S	4.6365	.01157	12.606	9.6050	5.0244	4.8010
18	S98T002521_X	.00019	-.00868	5.4964	1.8449	-.00868	-.00908
19	S98T002521_AX	278.28	.35720	292.86	299.29	298.07	291.40
20	ICSA	.00321	-.00345	92.907	.17842	-.00312	.00191
21	ICSAB	.46035	-.00586	92.948	.36045	-.00204	.94997
22	CCV	4.7614	.00651	4.8518	5.3757	5.0530	4.9819
23	CCB	.00002	.00158	.00170	.35939	.00216	.00100

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.1622	4.9427	5.0851	5.0251	4.8950	4.9742
2	ICB	.00809	.00021	.00103	.02555	.00251	.00182
3	LLS	.20880	.02039	.10452	.20565	.20237	.03441
4	ICSA	248.30	-.00448	-.01637	189.41	.00234	-.00688
5	ICSAB	248.16	.44744	-.00953	189.56	.00080	.92381
6	PREPSTDTJA	4.4659	4.5179	4.6779	5.9295	4.6857	4.5594
7	PREPBLKTJA	.03547	.00036	.00151	Q.73644	.00284	-.00183
8	S98T002448	.20411	1.1837	.22962	986.03	.01599	.07094
9	S98T002448_D	.19569	1.1412	.26418	1072.7	.02070	.07022
10	S98T002453	.21522	1.4509	.18217	1113.9	.01799	.06950
11	S98T002453_D	.18486	1.2477	.17026	1017.2	.02130	.06364
12	CCV	5.1823	4.9941	5.1289	4.9607	4.9010	5.0293
13	CCB	-.00121	.00006	.00223	.03907	.00062	-.00086
14	S98T002521_L	.46067	2.1419	.16793	1190.8	.04704	.11552
15	S98T002521	.25439	2.0277	.11052	1112.5	.03261	.07239
16	S98T002521_D	.26330	1.9217	.12619	1024.5	.07279	.19297
17	S98T002521_S	5.1783	7.7548	5.1610	1017.4	4.9601	5.3328
18	S98T002521_X	.10314	2.1685	.11370	1245.9	-.03471	-.03746
19	S98T002521_AX	306.84	301.52	297.73	1494.2	290.70	299.28
20	ICSA	247.87	-.00464	-.01414	188.31	-.00135	-.00808
21	ICSAB	246.45	.44804	-.01332	185.90	.00009	.94107
22	CCV	5.1642	4.9881	5.1321	4.9372	4.9165	5.0469
23	CCB	.01206	.00057	.00174	.01241	.00326	.00635



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Analysis Report

Averages

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#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	4.9973	5.0243	4.8965	5.0899	4.8154	5.1975
2	ICB	.00208	-.00887	.01420	.00841	-.00121	.00605
3	LLS	.39368	.21107	.21551	.10040	.18726	Q.14270
4	ICSA	.03818	.03413	-.03101	.00448	.06078	.00081
5	ICSAB	.04162	1.0212	-.02988	.00042	.04800	-.00251
6	PREPSTDTJA	4.4460	4.3122	4.3018	4.4557	4.3311	7.0624
7	PREPBLKTJA	.02149	-.00008	Q.10553	-.00344	.00885	Q.66454
8	S98T002448	6.1065	2.0432	3.0829	.15338	.06254	1.4126
9	S98T002448_D	5.4593	2.3398	3.9448	.16615	.10314	1.2060
10	S98T002453	16.944	.20374	2.9292	.00603	.06016	1.0878
11	S98T002453_D	12.414	.17698	2.7293	-.00098	.01047	1.1700
12	CCV	5.0980	5.1075	4.9736	5.1574	4.8676	5.2687
13	CCB	-.00657	-.00643	.01231	.00080	-.00074	.00855
14	S98T002521_L	27.316	.25413	2.0067	.11238	-.04571	1.2675
15	S98T002521	26.649	.22376	1.8650	-.00222	.05369	1.1749
16	S98T002521_D	22.858	.32207	3.7926	-.00540	.13260	2.0515
17	S98T002521_S	33.600	5.3969	6.6786	5.0427	5.0699	6.8758
18	S98T002521_X	28.050	.06888	2.1927	-.04841	-.36067	1.3100
19	S98T002521_AX	322.90	303.62	293.75	301.07	289.96	298.53
20	ICSA	.03806	.00995	-.02791	.00166	.04415	-.00025
21	ICSAB	.03603	1.0184	-.01170	.00610	.07715	.00489
22	CCV	5.0745	5.1102	4.9512	5.1897	4.8409	5.2390
23	CCB	-.00213	-.01190	.00739	.00680	.00491	.00930

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.8691	4.9095	.18914	5.1089	4.7905	9.7106
2	ICB	.00490	.00004	.00872	.00073	.01169	.01737
3	LLS	.20082	.02014	.00213	.02053	.41398	.48901
4	ICSA	-.01298	.00177	.00446	.00190	.02070	-.05583
5	ICSAB	-.01790	.00176	.00152	.00165	.02003	-.05867
6	PREPSTDTJA	4.6597	4.7567	.16970	4.7482	4.3307	9.2423
7	PREPBLKTJA	-.01510	-.00008	.00702	.00144	.00835	-.05548
8	S98T002448	.00900	.00908	.03711	.01349	.05074	.14555
9	S98T002448_D	.01127	.00921	.02597	.02970	.02321	.14895
10	S98T002453	-.00442	.01119	.02416	.01764	-.00156	.18192
11	S98T002453_D	-.00842	.00974	.03149	.01062	-.01213	.10272
12	CCV	4.8821	4.9204	.18299	5.1363	4.8573	9.7113
13	CCB	.00040	-.00004	.00167	-.00046	.01214	.00183
14	S98T002521_L	.05916	.01840	.10465	.03899	.30713	.64718
15	S98T002521	.01928	.01671	.02038	.02888	.00852	.33734
16	S98T002521_D	.01773	.01773	.13519	.10182	.02963	.79494
17	S98T002521_S	4.8798	4.9743	.36692	5.0322	4.7266	10.681
18	S98T002521_X	-.03809	.01580	-.20049	.02731	.83210	.23649
19	S98T002521_AX	288.31	295.59	11.285	295.62	292.90	560.91
20	ICSA	-.01578	.00173	-.00167	.00094	.01821	-.07182
21	ICSAB	-.01122	.00171	.01493	.00196	.01131	-.07139
22	CCV	4.8909	4.9382	.19622	5.1403	4.8675	9.7272
23	CCB	.01662	.00021	.00317	-.00023	.01383	.06578

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#	Sample Name	V	Y	Zn	Zr
1	ICV	5.0180	.00747	4.7935	4.8781
2	ICB	.00068	.00030	.00002	-.00034
3	LLS	.10101	.00026	.01990	.01896
4	ICSA	.00155	.00770	-.00324	-.00364
5	ICSAB	.47080	.00731	.94868	-.00387
6	PREPSTDTJA	4.7084	.00539	4.1558	4.5289
7	PREPBLKTJA	-.00399	-.00107	.00838	-.00111
8	S98T002448	.00198	.00181	.13754	.00357
9	S98T002448_D	.00362	.00205	.14949	.00533
10	S98T002453	.00519	.00156	.13766	.00839
11	S98T002453_D	-.00009	.00066	.12383	.00407
12	CCV	5.0620	.00770	4.8566	4.9082
13	CCB	-.00093	.00000	.00013	-.00044
14	S98T002521_L	.02473	.00795	.20565	.02024
15	S98T002521	.01406	.00361	.17588	.01816
16	S98T002521_D	.01045	.01400	.19096	.05081
17	S98T002521_S	5.0297	.03237	5.0896	4.1837
18	S98T002521_X	.00424	-.00010	.18767	.00477
19	S98T002521_AX	295.42	.44809	282.39	294.25
20	ICSA	.00070	.00716	-.00355	-.00382
21	ICSAB	.47031	.00763	.95221	-.00423
22	CCV	5.0644	.00754	4.8437	4.9217
23	CCB	.00355	.00091	-.00030	.00162

12-02-98

File #: 981112G.TXT

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A-0004-1

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## LABCORE Data Entry Template for Worklist# 26948

Analyst: JK 5670 Instrument: ICP012 11-10-98 Book# 75848BMethod: LA-505-151/161 Rev/Mod C-3Ensure dose reflect 30cm is  $\leq 50$  mrem/hr  
prior to performing this analysis.Worklist Comment: 11-10-98 ICP U-107 (SOLID ACID DIGEST)

S Type	Sample#	R A	Test	Matrix	Group#	Project																																	
1	ICV		@ICP-QC	QC																																			
2	ICB		@ICP-QC	QC																																			
3	LLS		@ICP-QC	QC																																			
4	ICSA		@ICP-QC	QC																																			
5	ICSAB		@ICP-QC	QC																																			
6	PREPSTDITJA		@ICP-A01	SOLID																																			
7	PREPBLKTJA		@ICP-A01	SOLID																																			
8	SERDIL	S98T002530 0 A	@ICP-A01	SOLID																																			
9	SAMPLE	S98T002530 0 A	@ICP-A01	SOLID	98000401	U-107 (2)																																	
	<b>Analytes Requested:</b>		AG-A-01	AL-A-01	AS-A-01	B-A-01	BA-A-01	BE-A-01	BI-A-01	CA-A-01	CD-A-01	CE-A-01	CO-A-01	CR-A-01	CU-A-01	FE-A-01	K-A-01	LA-A-01	LI-A-01	MG-A-01	MN-A-01	MO-A-01	NA-A-01	ND-A-01	NI-A-01	P-A-01	PB-A-01	S-A-01	SB-A-01	SE-A-01	SI-A-01	SM-A-01	SR-A-01	TI-A-01	TL-A-01	U-A-01	V-A-01	ZN-A-01	ZR-A-01
10	DUP	S98T002530 0 A	@ICP-A01	SOLID																																			
11	SPK-PREDIG	S98T002530 0 A	@ICP-A01	SOLID																																			
12	CCV	<sup>500 µl x</sup> <sup>500 µl x</sup> (10 ppm) 11-10-98	@ICP-QC	QC																																			
13	CCB		@ICP-QC	QC																																			
14	SAMPLE	S98T002540 0 A	@ICP-A01	SOLID	98000401	U-107 (2)																																	
	<b>Analytes Requested:</b>		AG-A-01	AL-A-01	AS-A-01	B-A-01	BA-A-01	BE-A-01	BI-A-01	CA-A-01	CD-A-01	CE-A-01	CO-A-01	CR-A-01	CU-A-01	FE-A-01	K-A-01	LA-A-01	LI-A-01																				

Data Entry Comments:

uploaded 11-12-98  
JK Howell

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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## LABCORE Data Entry Template for Worklist# 26948

S Type	Sample#	R A	Test	Matrix	Group#	Project		
			MG-A-01	MN-A-01	MO-A-01	NA-A-01	ND-A-01	NI-A-01
			P-A-01	PB-A-01	S-A-01	SB-A-01	SE-A-01	SI-A-01
			SM-A-01	SR-A-01	TI-A-01	TL-A-01	U-A-01	V-A-01
			ZN-A-01	ZR-A-01				
15 DUP	S98T002540	0 A	@ICP-A01	SOLID				
16 SAMPLE	S98T002546	0 A	@ICP-A01	SOLID	98000401	U-107 (2)		
	<b>Analytes Requested:</b>		AG-A-01	AL-A-01	AS-A-01	B-A-01	BA-A-01	
			BE-A-01	BI-A-01	CA-A-01	CD-A-01	CE-A-01	CO-A-01
			CR-A-01	CU-A-01	FE-A-01	K-A-01	LA-A-01	LI-A-01
			MG-A-01	MN-A-01	MO-A-01	NA-A-01	ND-A-01	NI-A-01
			P-A-01	PB-A-01	S-A-01	SB-A-01	SE-A-01	SI-A-01
			SM-A-01	SR-A-01	TI-A-01	TL-A-01	U-A-01	V-A-01
			ZN-A-01	ZR-A-01				
17 DUP	S98T002546	0 A	@ICP-A01	SOLID				
18 ICSA			@ICP-QC	QC				
19 ICSAB			@ICP-QC	QC				
20 CCV			@ICP-QC	QC				
21 CCB			@ICP-QC	QC				

## Final page for worklist # 26948

Analyst Signature	Date
<i>JK</i>	11-12-98
Prep JTG	Jirsect, DF 1
Prep blk JTG	Jirsect, 1
5987002530_L	3-6-2-8, DF 15
5987002530	3-6, 3
5987002530_D	3-6, 3
5987002530_S	3-6, 3
5987002530_X	3-6-1-9, 30
5987002530_GX	3-6-1-9, 30

Analyst Signature	Date
5987002540	3-6, JF 3
5987002540_D	3-6, 3
5987002546	3-6, DF 3
5987002546_D	3-6, 3

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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Analysis Report

Summary

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981112A	ICP2	11/12/98	09:14	DKS	Q	CONC
2	ICB	981112A	ICP2	11/12/98	09:17	DKS	Q	CONC
3	LLS	981112A	ICP2	11/12/98	09:49	DKS	Q	CONC
4	ICSA	981112A	ICP2	11/12/98	09:53	DKS	Q	CONC
5	IC SAB	981112A	ICP2	11/12/98	09:56	DKS	Q	CONC
6	PREPSTDTJA	981112A	ICP2	11/12/98	09:59	DKS	Q	CONC
7	PREPBLKTJA	981112A	ICP2	11/12/98	10:03	DKS	Q	CONC
8	S98T002530_L	981112A	ICP2	11/12/98	10:07	DKS	S	CONC
9	S98T002530	981112A	ICP2	11/12/98	10:10	DKS	S	CONC
10	S98T002530_D	981112A	ICP2	11/12/98	10:13	DKS	S	CONC
11	S98T002530_S	981112A	ICP2	11/12/98	10:17	DKS	S	CONC
12	S98T002530_X	981112A	ICP2	11/12/98	10:24	DKS	S	CONC
13	S98T002530_AX	981112A	ICP2	11/12/98	10:28	DKS	S	CONC
14	CCV	981112A	ICP2	11/12/98	10:38	DKS	Q	CONC
15	CCB	981112A	ICP2	11/12/98	10:42	DKS	Q	CONC
16	S98T002540	981112A	ICP2	11/12/98	10:45	DKS	S	CONC
17	S98T002540_D	981112A	ICP2	11/12/98	10:48	DKS	S	CONC
18	S98T002546	981112A	ICP2	11/12/98	10:51	DKS	S	CONC
19	S98T002546_D	981112A	ICP2	11/12/98	10:54	DKS	S	CONC
20	ICSA	981112A	ICP2	11/12/98	10:57	DKS	Q	CONC
21	IC SAB	981112A	ICP2	11/12/98	11:00	DKS	Q	CONC
22	CCV	981112A	ICP2	11/12/98	11:03	DKS	Q	CONC
23	CCB	981112A	ICP2	11/12/98	11:07	DKS	Q	CONC

JK *[Signature]*

11-12-98

Worklist # 26748

6-107

5887002530

5887002540

5887002546

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1333 TO 1338.

S98T002530

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$$Al = 63.440 \frac{\mu\text{g}}{\text{ml}} \times \frac{1}{4.774 \frac{\text{g}}{\text{L}} \times \frac{1\text{L}}{1000 \text{ml}}} = 1.33 \text{e} + 4 \frac{\mu\text{g}}{\text{g}}$$

Post Spike:

$$Al = \frac{\left(\frac{355.85}{30}\right) - \left(\frac{65.641}{30}\right)}{10} \times 100 = 96.7\%$$

$$Cr = \frac{\left(\frac{298.67}{30}\right) - \left(\frac{3.8311}{30}\right)}{10} \times 100 = 98.3\%$$

$$Na = \frac{\left(\frac{1231.7}{30}\right) - \left(\frac{945.81}{30}\right)}{10} \times 100 = 95.3\%$$

$$K = \frac{\left(\frac{313.48}{30}\right) - \left(\frac{6.7200}{30}\right)}{10} \times 100 = 102.25\%$$

$$P = \frac{\left(\frac{407.28}{30}\right) - \left(\frac{109.10}{30}\right)}{10} \times 100 = 99.4\%$$

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Analysis Report

Averages

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#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.9646	4.9960	5.1740	5.0640	5.0550	5.0807
2	ICB	.00047	.00223	.00686	.00468	.00010	-.00004
3	LLS	.02238	.10681	.21732	.09821	.09921	.01029
4	ICSA	.00183	244.15	-.00224	-.00984	.00026	.00004
5	ICSAB	.94366	242.29	.00826	-.00809	.45948	.47415
6	PREPSTDTJA	Q.18723	4.9522	4.8789	5.3363	5.0291	5.0420
7	PREPBLKTJA	-.00100	Q.12887	.00392	Q.66849	.00067	-.00013
8	S98T002530_L	.04985	66.253	-.05734	.98650	.00262	.00137
9	S98T002530	.06540	63.440	-.07138	.93586	.00275	.00055
10	S98T002530_D	.05616	57.884	-.09795	.91622	.00378	-.00011
11	S98T002530_S	.62997	55.995	5.0926	5.9121	4.9266	5.1358
12	S98T002530_X	.10046	65.641	-.03032	1.0427	.00131	.00269
13	S98T002530_AX	293.72	355.85	299.07	302.89	300.04	296.84
14	CCV	4.9544	4.9469	5.0919	5.0377	4.9681	5.0323
15	CCB	.00049	.00474	.00213	.00093	-.00004	.00013
16	S98T002540	.07537	50.746	-.13050	.89086	.00382	.00068
17	S98T002540_D	.07721	53.855	-.03947	.47789	.00331	.00081
18	S98T002546	.08089	72.796	-.08218	.73194	.00892	.00120
19	S98T002546_D	.07655	68.355	-.09974	.97558	.00556	.00067
20	ICSA	.00097	243.16	-.00993	-.00828	.00013	.00008
21	ICSAB	.93927	242.14	.03588	-.00981	.45855	.47157
22	CCV	4.9642	4.9677	5.1236	5.0564	5.0161	5.0612
23	CCB	-.00053	.00440	.00012	.00656	.00004	.00013

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	4.9783	4.9028	5.0279	5.1261	4.9614	4.8924
2	ICB	-.02146	.00486	.00097	.00248	.00021	.00044
3	LLS	.19669	.22033	.01115	.21308	.04312	.02173
4	ICSA	-.00228	252.37	.00575	.00050	-.00026	-.00374
5	ICSAB	.01064	251.98	.93522	.00276	.46172	.46290
6	PREPSTDTJA	4.7113	4.9604	4.7824	5.1232	4.7785	4.8206
7	PREPBLKTJA	-.02719	Q.10381	.00096	.00432	.00006	.00293
8	S98T002530_L	-.28640	.44378	.01135	-.03501	-.00771	3.8555
9	S98T002530	-.02558	.43086	.00529	.02803	.00504	3.7322
10	S98T002530_D	-.05446	.46515	.00511	.00977	.00143	4.4751
11	S98T002530_S	4.9414	5.5335	5.0073	5.0818	4.9487	10.083
12	S98T002530_X	-.51693	.56033	.02097	.06556	.00285	3.8311
13	S98T002530_AX	300.30	295.57	294.17	300.42	296.26	298.67
14	CCV	4.9338	4.9335	5.0018	5.0265	4.9378	4.8904
15	CCB	-.00513	.00389	.00144	-.00132	.00023	-.00011
16	S98T002540	-.01302	.38723	.00704	-.00782	.00465	3.7680
17	S98T002540_D	-.10367	.35760	.00561	.00657	.00282	3.3914
18	S98T002546	.10587	.79155	.01542	.01088	.00940	10.740
19	S98T002546_D	.05423	.53317	.01103	.03405	.00652	6.4438
20	ICSA	-.02045	250.94	.00529	.00109	.00107	-.00105
21	ICSAB	-.03283	249.35	.92416	.00869	.45407	.45803
22	CCV	4.9905	4.9250	5.0010	5.0819	4.9513	4.8972
23	CCB	-.03060	.00482	.00080	-.00363	-.00014	.00008

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Analysis Report

Averages

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#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.8635	.00561	4.8967	5.1744	5.0881	5.2739
2	ICB	.00098	-.00161	.00026	.01309	-.00005	-.00122
3	LLS	.01791	-.00055	.09835	.51816	.10296	.02057
4	ICSA	.00306	.02094	92.525	-.08774	-.00448	.00174
5	ICSAB	.46484	.02335	91.962	.05880	-.00462	.98350
6	PREPSTDTJA	4.7507	.00551	4.7379	4.7767	5.1067	5.2011
7	PREPBLKTJA	.00409	-.00324	0.08642	-.20607	-.00101	-.00276
8	S98T002530_L	.00686	-.02164	.27219	8.0934	-.01473	-.00918
9	S98T002530	.00582	-.00230	.25774	9.1206	.00115	.00399
10	S98T002530_D	.00662	-.00081	.43894	7.6800	.00156	.00706
11	S98T002530_S	4.7823	.00541	5.4550	11.516	5.0737	5.1290
12	S98T002530_X	.03517	-.04625	.25125	6.7200	-.02147	-.03066
13	S98T002530_AX	285.08	.41756	283.09	313.48	299.35	303.69
14	CCV	4.7576	.00687	4.8472	5.2228	4.9940	5.1350
15	CCB	.00141	-.00067	-.00020	-.16423	-.00077	-.00051
16	S98T002540	.02236	-.00374	.53686	6.4359	.00063	.01506
17	S98T002540_D	.01105	-.00468	.44060	6.4071	.00175	.01230
18	S98T002546	.01213	-.00200	1.3608	8.0858	.00894	.08177
19	S98T002546_D	.01279	-.00062	.91245	7.7878	.00453	.04857
20	ICSA	.00291	.02312	91.622	.08578	-.00465	.00215
21	ICSAB	.46587	.02819	91.075	.08426	-.00380	.99846
22	CCV	4.8122	.00702	4.8404	5.1800	5.0492	5.2034
23	CCB	.00158	-.00157	.00063	-.10379	-.00061	-.00143

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.1378	4.9123	5.0327	5.3819	5.0084	4.9023
2	ICB	-.00290	-.00036	.00489	.02648	-.00117	-.00056
3	LLS	.21134	.01989	.10173	.21929	.20495	.04402
4	ICSA	251.44	-.00567	-.01414	193.20	-.00062	-.00722
5	ICSAB	248.90	.43832	-.01992	191.09	.00163	.91234
6	PREPSTDTJA	4.8805	4.7646	4.8200	6.4918	5.0432	4.8419
7	PREPBLKTJA	.01181	.00013	.00295	01.0405	-.00110	.00467
8	S98T002530_L	-.05567	.07418	.28069	947.87	.00220	.12728
9	S98T002530	.05405	.07699	.25866	882.96	.01307	.04953
10	S98T002530_D	.03505	.13961	.23822	800.94	.00875	.05969
11	S98T002530_S	5.0308	5.0166	5.1039	772.92	4.9709	5.1111
12	S98T002530_X	-.00220	.06513	.29450	945.81	.03031	.13283
13	S98T002530_AX	308.15	293.74	297.04	1231.7	292.10	293.26
14	CCV	5.0641	4.8804	4.9947	5.1980	4.8953	4.9109
15	CCB	-.00468	-.00010	.00427	.02365	-.00013	-.00158
16	S98T002540	.02557	.14993	.17526	1089.3	.01084	.06478
17	S98T002540_D	.05204	.12798	.18813	1104.5	.00100	.05733
18	S98T002546	.09522	.55828	.23918	1120.4	.03725	.13085
19	S98T002546_D	.07445	.33985	.22918	1062.8	.02492	.08308
20	ICSA	249.63	-.00550	-.01636	191.67	.00117	-.00795
21	ICSAB	248.18	.43390	-.01467	191.63	-.00069	.89583
22	CCV	5.0822	4.8863	5.0063	5.2573	4.9435	4.8891
23	CCB	-.00608	-.00042	.00282	.02612	.00069	.00022



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#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	4.9838	4.9403	4.8381	5.0541	4.7392	4.9014
2	ICB	.00532	-.01204	.00248	-.00217	-.01470	-.00344
3	LLS	.38866	.21125	.20646	.09264	.18075	Q.16781
4	ICSA	.01573	.02116	-.02520	.00391	.02196	-.00953
5	ICSAB	.02992	.98635	-.02742	-.00446	.03691	-.01055
6	PREPSTDITJA	4.6781	4.5770	4.4314	4.6895	4.6068	6.5784
7	PREPBLKTJA	.02740	.00193	Q.07122	-.00822	-.00857	Q.75880
8	S98T002530_L	111.14	.01338	7.2098	-.05207	-.14264	1.1242
9	S98T002530	107.29	.07175	6.9291	.01821	.03165	1.1626
10	S98T002530_D	101.87	.06892	6.2656	-.01729	.04162	1.2705
11	S98T002530_S	119.45	4.9150	10.047	4.8953	4.8448	6.7629
12	S98T002530_X	109.10	.10683	6.9627	-.04886	-.28858	1.0680
13	S98T002530_AX	407.28	296.51	298.72	300.48	289.25	306.30
14	CCV	4.9448	4.9415	4.8221	4.9916	4.7072	4.8916
15	CCB	.00512	-.00653	.00978	-.00577	-.01238	.00006
16	S98T002540	44.143	.07142	3.4916	-.01071	.02075	.90186
17	S98T002540_D	42.028	.05640	3.5530	-.01403	.03390	.80821
18	S98T002546	35.371	.23060	8.4394	-.00059	.04142	1.3646
19	S98T002546_D	21.339	.13088	6.3170	.01604	.05020	1.5184
20	ICSA	.02263	.02367	-.02023	-.00701	.04259	.00336
21	ICSAB	.03988	.98038	-.04023	-.00376	.03800	-.00390
22	CCV	4.9296	4.9591	4.8504	5.0146	4.7168	4.9030
23	CCB	.00315	-.00514	.00355	.00252	-.00812	-.00114

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	5.0041	5.0972	.20514	5.1120	4.8281	9.9627
2	ICB	-.01576	-.00016	.00475	.00002	.01989	-.05937
3	LLS	.19394	.02026	.01288	.02066	.40613	.45717
4	ICSA	-.02390	.00194	.00512	.00089	-.02086	-.01815
5	ICSAB	-.02253	.00187	-.00295	.00177	-.02250	-.02689
6	PREPSTDITJA	5.0271	5.1114	.20744	4.9791	4.6411	9.9742
7	PREPBLKTJA	-.03508	-.00024	.00839	.00072	-.00969	-.12551
8	S98T002530_L	-.24616	-.00186	.00319	.00002	.14423	-.72687
9	S98T002530	-.02579	.00113	.02604	.00414	-.00871	-.02850
10	S98T002530_D	-.00546	.00163	.00710	.00337	-.02022	.05927
11	S98T002530_S	4.9643	5.0613	.22189	4.9466	4.7108	9.8033
12	S98T002530_X	-.45722	-.00370	.04857	.01385	-.23447	-1.5262
13	S98T002530_AX	291.60	296.65	13.183	299.10	290.79	575.44
14	CCV	4.8934	5.0098	.21301	5.0450	4.7693	9.7685
15	CCB	-.00628	-.00008	.00101	.00045	.01199	-.02476
16	S98T002540	-.03912	.00152	.00759	.00407	.02179	-.07743
17	S98T002540_D	-.04717	.00139	.01741	.00140	.02406	-.10895
18	S98T002546	-.03211	.00644	.03114	.00949	.05285	.14243
19	S98T002546_D	-.01024	.00417	.02672	.00613	-.00641	.09954
20	ICSA	-.02102	.00186	-.00160	.00154	.00859	-.00876
21	ICSAB	-.02284	.00192	.00646	.00180	.01926	-.01837
22	CCV	4.9637	5.0606	.21872	5.0903	4.7552	9.8767
23	CCB	-.01641	-.00016	.00426	-.00020	.02232	-.06361

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Analysis Report

Averages

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#	Sample Name	V	Y	Zn	Zr
1	ICV	5.0010	.00658	4.7031	4.8815
2	ICB	-.00372	-.00091	.00083	-.00213
3	LLS	.09828	.00004	.02047	.01813
4	ICSA	-.00140	.00721	-.00344	-.00459
5	ICSAB	.46151	.00729	.92173	-.00345
6	PREPSTDTJA	4.9855	.00571	4.3581	4.7346
7	PREPBLKTJA	-.00762	-.00198	.00487	-.00263
8	S98T002530_L	-.02514	-.01027	.01612	.00505
9	S98T002530	.01518	-.00045	.01906	.02464
10	S98T002530_D	.01714	.00091	.02169	.02872
11	S98T002530_S	5.0697	.00688	4.7762	4.6706
12	S98T002530_X	-.08108	-.02286	.13113	-.03892
13	S98T002530_AX	295.46	.45607	277.59	295.93
14	CCV	4.9632	.00729	4.7255	4.8168
15	CCB	-.00135	-.00030	.00040	-.00066
16	S98T002540	-.00179	-.00161	.02619	.00768
17	S98T002540_D	-.00332	-.00206	.02444	.00607
18	S98T002546	.00267	.00135	.06520	.01391
19	S98T002546_D	.00288	.00113	.04672	.00969
20	ICSA	-.00021	.00729	-.00340	-.00343
21	ICSAB	.45932	.00713	.91639	-.00439
22	CCV	4.9849	.00700	4.7156	4.8552
23	CCB	-.00354	-.00099	.00056	-.00239

DK Jd  
11-12-98

File #: 981119C.TXT

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A-0004-I

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## LABCORE Data Entry Template for Worklist# 27223

Analyst: JK Scto Instrument: ICP01 11-18-98 Book# 75848BMethod: LA-505-151/161 Rev/Mod C3Ensure dose rate of 300cra is  $\leq 50$  nrc/hr.  
prior to performing this analysis.Worklist Comment: ICP U-107 (SOLID ACID DIGEST)

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	ICV		@ICP-QC	QC		
2	ICB		@ICP-QC	QC		
3	LLS		@ICP-QC	QC		
4	ICSA		@ICP-QC	QC		
5	ICSAB		@ICP-QC	QC		
6	PREPSTDITJA		@ICP-A01	SOLID		
7	PREPBKLTJA		@ICP-A01	SOLID		
8	SAMPLE	S98T002337 0 A	@ICP-A01	SOLID	98000358	U-107 (2)
	Analytes Requested: AG-A-01, AL-A-01, AS-A-01, B-A-01, BA-A-01, BE-A-01, BI-A-01, CA-A-01, CD-A-01, CE-A-01, CO-A-01, CR-A-01, CU-A-01, FE-A-01, K-A-01, LA-A-01, LI-A-01, MG-A-01, MN-A-01, MO-A-01, NA-A-01, ND-A-01, NI-A-01, P-A-01, PB-A-01, S-A-01, SB-A-01, SE-A-01, SI-A-01, SM-A-01, SR-A-01, TI-A-01, TL-A-01, U-A-01, V-A-01, ZN-A-01, ZR-A-01					
9	DUP	S98T002337 0 A	@ICP-A01	SOLID		
10	SAMPLE	S98T002338 0 A	@ICP-A01	SOLID	98000358	U-107 (2)
	Analytes Requested: AG-A-01, AL-A-01, AS-A-01, B-A-01, BA-A-01, BE-A-01, BI-A-01, CA-A-01, CD-A-01, CE-A-01, CO-A-01, CR-A-01, CU-A-01, FE-A-01, K-A-01, LA-A-01, LI-A-01, MG-A-01, MN-A-01, MO-A-01, NA-A-01, ND-A-01, NI-A-01, P-A-01, PB-A-01, S-A-01, SB-A-01, SE-A-01, SI-A-01, SM-A-01, SR-A-01, TI-A-01, TL-A-01, U-A-01, V-A-01, ZN-A-01, ZR-A-01					
11	DUP	S98T002338 0 A	@ICP-A01	SOLID		
12	SAMPLE	S98T002344 0 A	@ICP-A01	SOLID	98000358	U-107 (2)

Data Entry Comments:

updated 11-19-98

John Wonnell

Validated by:

Sandra Parry

11/19/98

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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A-0004-1

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**LABCORE Data Entry Template for Worklist# 27223**

S Type	Sample#	R A	Test	Matrix	Group#	Project
	Analytes Requested: AG-A-01 , AL-A-01 , AS-A-01 , B-A-01 , BA-A-01 , BE-A-01 , BI-A-01 , CA-A-01 , CD-A-01 , CE-A-01 , CO-A-01 , CR-A-01 , CU-A-01 , FE-A-01 , K-A-01 , LA-A-01 , LI-A-01 , MG-A-01 , MN-A-01 , MO-A-01 , NA-A-01 , ND-A-01 , NI-A-01 , P-A-01 , PB-A-01 , S-A-01 , SB-A-01 , SE-A-01 , SI-A-01 , SM-A-01 , SR-A-01 , TI-A-01 , TL-A-01 , U-A-01 , V-A-01 , ZN-A-01 , ZR-A-01					
13 DUP	S98T002344	0 A	@ICP-A01	SOLID		
14 ICSA			@ICP-QC	QC		
15 IC SAB			@ICP-QC	QC		
16 CCV			@ICP-QC	QC		
17 CCB			@ICP-QC	QC		

**Final page for worklist # 27223**

*JK [Signature]* 11-19-98

Analyst Signature	Date
Prep 5147JQ	Direct, DF 1
Prep 61KJQ	Direct, 1
5987001337	3.6, DF 3
5987001337-D	3.6, 3
5987001338	3.6, DF 3
5987001338-D	3.6, 3
5987001344	3.6, DF 3
5987001344-D	3.6, 3

Analyst Signature	Date
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Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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Analysis Report

Summary

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981119A	ICP2	11/19/98	09:21	DKS	Q	CONC
2	ICB	981119A	ICP2	11/19/98	09:24	'	Q	CONC
3	LCS	981119A	ICP2	11/19/98	09:27	DKS	Q	CONC
4	ICSA	981119A	ICP2	11/19/98	09:30	DKS	Q	CONC
5	ICSAB	981119A	ICP2	11/19/98	09:33	DKS	Q	CONC
6	PREPSTD TJA	981119A	ICP2	11/19/98	09:36	DKS	Q	CONC
7	PREPBLK TJA	981119A	ICP2	11/19/98	09:39	DKS	Q	CONC
8	S98T002337	981119A	ICP2	11/19/98	09:42	DKS	S	CONC
9	S98T002337_D	981119A	ICP2	11/19/98	09:45	DKS	S	CONC
10	CCV	981119A	ICP2	11/19/98	09:50	DKS	Q	CONC
11	CCB	981119A	ICP2	11/19/98	09:53	DKS	Q	CONC
12	S98T002338	981119A	ICP2	11/19/98	09:57	DKS	S	CONC
13	S98T002338_D	981119A	ICP2	11/19/98	10:00	DKS	S	CONC
14	S98T002344	981119A	ICP2	11/19/98	10:03	DKS	S	CONC
15	S98T002344_D	981119A	ICP2	11/19/98	10:06	DKS	S	CONC
16	ICSA	981119A	ICP2	11/19/98	10:10	DKS	Q	CONC
17	ICSAB	981119A	ICP2	11/19/98	10:13	DKS	Q	CONC
18	CCV	981119A	ICP2	11/19/98	10:16	DKS	Q	CONC
19	CCB	981119A	ICP2	11/19/98	10:19	DKS	Q	CONC

DK [Signature]

11-19-98

Work list # 27223

U-107

5987002337

5987002338

5987002344

5987002337

$$al = 211.40 \frac{\mu\text{g}}{\text{ml}} \times \frac{1}{5.116 \frac{\text{g}}{\text{L}} \times \frac{16}{1000 \text{ ml}}}$$

$$= 4.13e + 4 \frac{\mu\text{g}}{\text{g}}$$

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1341 TO 1344.

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Analysis Report

Averages

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#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.9686	4.8571	4.9844	5.0948	4.8088	5.0409
2	ICB	.00039	.00399	-.00653	.00238	.00000	-.00013
3	LLS	.02168	.10419	.19782	.10524	.09997	.01043
4	ICSA	.00329	243.83	.01928	-.00359	.00038	.00004
5	ICSAB	.95040	242.74	.01320	-.00781	.45884	.47712
6	PREPSTDTJA	Q.23422	4.9713	4.8710	5.3230	4.9756	5.0721
7	PREPBLKTJA	.00055	Q.10590	-.01062	Q.49651	.00067	-.00009
8	S98T002337	.08230	211.40	-.06574	.33798	.05807	.00126
9	S98T002337_D	.08297	111.33	-.12660	.78779	.06092	.00113
10	CCV	5.0155	4.9097	5.0708	5.1533	4.8735	5.1329
11	CCB	.00181	.01089	-.00499	.00190	.00011	.00004
12	S98T002338	.14409	116.09	-.14990	.50452	.15207	.00213
13	S98T002338_D	.14108	124.43	-.14466	.69195	.17846	.00317
14	S98T002344	.08510	23.176	-.07323	.50517	.00869	.00000
15	S98T002344_D	.08441	23.012	-.02810	.35810	.00850	.00000
16	ICSA	.00210	242.77	.01608	-.01066	.00030	.00000
17	ICSAB	.94903	239.63	.00899	-.00710	.44926	.46992
18	CCV	5.0361	4.9317	5.1553	5.0229	4.9418	5.0622
19	CCB	.00155	.00880	-.01033	.00143	.00011	.00008

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	5.0193	5.1920	5.0953	4.9598	4.9629	4.9929
2	ICB	.00760	.00416	.00075	.00400	.00098	.00169
3	LLS	.19219	.22015	.01110	.20135	.04121	.02054
4	ICSA	.01525	254.41	.00576	.00989	.00157	-.00191
5	ICSAB	.00078	256.13	.94641	.01198	.46473	.46973
6	PREPSTDTJA	4.7867	5.1977	4.9049	5.0722	4.8705	4.9485
7	PREPBLKTJA	-.03255	Q.12376	.00090	.01186	.00047	.00358
8	S98T002337	.77048	1.9749	.05052	.09623	.01743	38.498
9	S98T002337_D	.74717	1.7657	.04355	.06949	.01562	39.966
10	CCV	5.0873	5.2404	5.1555	5.0307	5.0265	5.0408
11	CCB	.00207	.00933	.00162	.01259	.00172	.00138
12	S98T002338	1.6912	21.336	.07338	.13525	.02679	46.876
13	S98T002338_D	1.9516	27.079	.08364	.13882	.04202	49.719
14	S98T002344	.11668	.34850	.00729	.01613	.00809	8.9549
15	S98T002344_D	.05181	.38564	.01194	.02116	.00702	10.227
16	ICSA	.00290	258.66	.00588	.00919	-.00085	-.00216
17	ICSAB	-.00210	256.96	.93716	.01305	.46133	.46463
18	CCV	5.0196	5.0913	5.1042	5.0333	5.0057	4.9751
19	CCB	-.03843	.00655	.00075	.00796	.00135	.00075

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.6733	.00779	4.8055	5.0560	4.9834	4.9174
2	ICB	.00083	.00044	.00130	.21334	.00056	.00021
3	LLS	.01729	.00011	.09857	.46833	.10298	.02064
4	ICSA	.00315	.01572	92.927	.09828	-.00299	.00222
5	ICSAB	.46071	.01514	92.869	.23770	-.00286	.98271
6	PREPSTDTJA	4.6520	.00747	4.8000	5.0124	5.0442	5.0040
7	PREPBLKTJA	.00382	-.00004	.02986	-.03399	.00115	-.00074

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#	Sample Name	Cu	Eu	Fe	K	La	Li
8	S98T002337	.03694	.00751	28.486	5.8420	.07236	.00624
9	S98T002337_D	.02076	.00448	28.362	6.1568	.07032	.00369
10	CCV	4.7400	.00797	4.8421	5.1322	5.0505	4.9753
11	CCB	.00149	.00099	.00134	.23258	.00220	.00031
12	S98T002338	.02913	.02976	68.167	7.1169	.65953	.01025
13	S98T002338_D	.06059	.03790	80.198	8.9537	.78594	.01337
14	S98T002344	.00141	.00186	2.7492	3.2571	.00753	.00157
15	S98T002344_D	-.00373	.00231	2.7814	3.0384	.01073	.00157
16	ICSA	.00317	.00812	93.076	.23843	-.00301	.00360
17	ICSAB	.45068	.01005	92.155	.23405	-.00336	.95621
18	CCV	4.7228	.00820	4.8951	5.1859	4.9824	4.9659
19	CCB	.00058	.00092	.00095	.22751	.00137	.00031

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.1687	4.9215	5.0382	4.9219	4.8566	4.9508
2	ICB	.00424	.00008	.00064	.00400	.00375	.00161
3	LLS	.21106	.02038	.10186	.21311	.20280	.04124
4	ICSA	251.25	-.00526	-.01289	192.40	.00310	-.00242
5	ICSAB	249.37	.44309	-.01375	191.19	.00280	.92576
6	PREPSTD TJA	4.9021	4.8735	4.9089	6.1018	4.9422	4.9469
7	PREPBLKTJA	.02578	.00066	.00079	Q.73782	.00183	.00127
8	S98T002337	1.0800	5.5339	.18213	892.30	.11774	.41831
9	S98T002337_D	1.1112	5.8842	.19325	967.14	.12038	.37200
10	CCV	5.1745	4.9737	5.0835	4.9221	4.9123	5.0208
11	CCB	.01423	.00046	.00162	.00289	.00504	.00310
12	S98T002338	4.2529	36.821	.22311	924.34	.37357	.68833
13	S98T002338_D	5.0523	43.435	.27912	941.86	.44415	.74845
14	S98T002344	.14146	.62286	.05519	1200.8	.01613	.06625
15	S98T002344_D	.13271	.60864	.08859	1153.0	.02026	.05276
16	ICSA	249.93	-.00466	-.01546	187.68	-.00050	-.00537
17	ICSAB	246.45	.44067	-.01406	185.97	.00165	.92511
18	CCV	5.0611	4.9501	5.0524	5.1112	4.8675	5.0256
19	CCB	.00812	.00025	.00161	.00436	.00356	-.00160

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	4.9740	5.0511	4.8671	5.0790	4.8572	5.1402
2	ICB	.00717	.01056	.00663	-.00103	.00452	.00675
3	LLS	.38631	.21535	.20787	.09790	.20589	Q.17135
4	ICSA	.02911	.02811	-.03633	.00268	.05109	-.00329
5	ICSAB	.03234	1.0049	-.03474	.00046	.06051	.00037
6	PREPSTD TJA	4.7298	4.7335	4.5808	4.7681	4.7355	7.0987
7	PREPBLKTJA	.02607	.01053	.03915	.00207	.01905	Q1.1866
8	S98T002337	77.524	1.4408	2.7681	.00926	.19450	3.8391
9	S98T002337_D	86.078	1.4747	2.8771	.01208	.08866	3.4758
10	CCV	5.0482	5.0864	4.9233	5.1161	4.9165	5.2269
11	CCB	.00756	.02136	.00387	.00216	.01968	.02392
12	S98T002338	76.146	3.4611	3.2395	.04419	.09387	5.8011
13	S98T002338_D	75.679	4.0510	3.4419	.06056	.07387	6.6943
14	S98T002344	21.564	.19586	1.2455	.01540	.08313	1.0029
15	S98T002344_D	24.077	.18754	1.2317	.00192	.11391	1.0219

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#	Sample Name	P	Pb	S	Sb	Se	Si
16	ICSA	.04065	.03947	-.04282	.01480	.06137	.01063
17	ICSAB	.04017	1.0045	-.03777	-.00134	.06759	.00829
18	CCV	4.9714	5.0564	4.9223	5.0857	4.8200	4.9360
19	CCB	.00118	.01185	.00870	.00423	.01122	.01107

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.8433	4.8692	.21142	5.0420	4.7211	9.5700
2	ICB	.00458	.00004	.00322	.00046	-.00807	.01937
3	LLS	.19917	.02027	.00841	.02018	.41349	.48471
4	ICSA	-.01656	.00186	.00663	.00160	-.01869	-.00953
5	ICSAB	-.01583	.00185	.00740	.00252	-.00231	-.01097
6	PREPSTDITJA	4.9402	5.0467	.20392	4.9705	4.6554	9.7330
7	PREPBLKTJA	-.00413	.00012	.00812	.00345	-.00568	-.00486
8	S98T002337	.05889	.05498	.16712	.05104	-.02552	2.1505
9	S98T002337_D	.04771	.05382	.17386	.04693	.02192	2.1728
10	CCV	4.9062	4.9278	.22051	5.1211	4.7929	9.7024
11	CCB	.00733	.00008	.01156	.00095	-.00846	.03675
12	S98T002338	.17379	.22179	.68620	.20281	-.02928	4.5490
13	S98T002338_D	.20745	.26371	.74766	.20873	-.00266	5.5868
14	S98T002344	.00830	.00647	.02723	.00751	-.04030	.28797
15	S98T002344_D	.02186	.00647	.03628	.00754	-.02788	.33462
16	ICSA	-.00303	.00184	.01020	.00117	-.00272	-.00440
17	ICSAB	-.00127	.00177	.01257	.00187	-.04306	.00017
18	CCV	4.8833	4.9962	.21694	5.0482	4.7786	9.6600
19	CCB	.00560	.00008	.00556	.00070	-.01609	.02879

#	Sample Name	V	Y	Zn	Zr
1	ICV	4.9692	.00839	4.7535	4.8311
2	ICB	.00030	.00030	.00006	.00097
3	LLS	.09919	.00018	.02059	.01931
4	ICSA	.00079	.00752	-.00384	-.00315
5	ICSAB	.46518	.00768	.92938	-.00272
6	PREPSTDITJA	5.0263	.00722	4.5290	4.7437
7	PREPBLKTJA	-.00090	-.00015	.00556	.00188
8	S98T002337	.02925	.01789	.32503	.12981
9	S98T002337_D	.02606	.01718	.32641	.05651
10	CCV	5.0296	.00833	4.7934	4.8911
11	CCB	.00165	.00061	.00053	.00127
12	S98T002338	.03206	.04226	1.9562	.14720
13	S98T002338_D	.03822	.05076	2.2845	.15122
14	S98T002344	.00820	.00246	.04906	.02554
15	S98T002344_D	.01071	.00291	.05042	.04440
16	ICSA	.00371	.00830	-.00357	-.00100
17	ICSAB	.46404	.00862	.93449	-.00122
18	CCV	5.0000	.00804	4.8201	4.8330
19	CCB	.00150	.00037	.00055	.00110

*JK*  
11-19-98



File #: 981201B.TXT

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A-0004-1

## LABCORE Data Entry Template for Worklist# 27232

Analyst: JK Selo Instrument: ICP012 12.01.98 Book# 77830  
 Method: LA-505-151/161 Rev/Mod C-3 Ensure dose rate at 30cm  
 Worklist Comment: 12.01.98 is  $\leq 50$  mrem/hr prior to  
 ICP U-107 (SOLID ACID DIGEST) performing this analysis

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	ICV		@ICP-QC	QC		
2	ICB		@ICP-QC	QC		
3	LLS		@ICP-QC	QC		
4	ICSA		@ICP-QC	QC		
5	ICSAB		@ICP-QC	QC		
6	PREPSTD1JA		@ICP-A01	SOLID		
7	PREPELKTJA		@ICP-A01	SOLID		
8	SAMPLE	S98T002429 0 A	@ICP-A01	SOLID	98000359	U-107 (2)
			Analytes Requested: AG-A-01, AL-A-01, AS-A-01, B-A-01, BA-A-01, BE-A-01, BI-A-01, CA-A-01, CD-A-01, CE-A-01, CO-A-01, CR-A-01, CU-A-01, FE-A-01, K-A-01, LA-A-01, LI-A-01, MG-A-01, MN-A-01, MO-A-01, NA-A-01, ND-A-01, NI-A-01, P-A-01, PB-A-01, S-A-01, SB-A-01, SE-A-01, SI-A-01, SM-A-01, SR-A-01, TI-A-01, TL-A-01, U-A-01, V-A-01, ZN-A-01, ZR-A-01			
9	DUP	S98T002429 0 A	@ICP-A01	SOLID		
10	CCV		@ICP-QC	QC		
11	CCB		@ICP-QC	QC		
12	SERDIL	S98T002435 0 A	@ICP-A01	SOLID		
13	SAMPLE	S98T002435 0 A	@ICP-A01	SOLID	98000359	U-107 (2)
			Analytes Requested: AG-A-01, AL-A-01, AS-A-01, B-A-01, BA-A-01, BE-A-01, BI-A-01, CA-A-01, CD-A-01, CE-A-01, CO-A-01, CR-A-01, CU-A-01, FE-A-01, K-A-01, LA-A-01, LI-A-01, MG-A-01, MN-A-01, MO-A-01, NA-A-01, ND-A-01, NI-A-01, P-A-01, PB-A-01, S-A-01, SB-A-01, SE-A-01, SI-A-01,			

Data Entry Comments:

updated 12-1-98  
John Woell

Validated by:

Sam H. Pang  
12/2/98

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

11/19/98 08:09

A-0004-1

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**LABCORE Data Entry Template for Worklist# 27232**

S Type	Sample#	R A	Test	Matrix	Group#	Project
						SM-A-01 , SR-A-01 , TI-A-01 , TL-A-01 , U-A-01 , V-A-01 , ZN-A-01 , ZR-A-01
-4 DUP	S98T002435	0 A	@ICP-A01	SOLID		
-5 SPK-PREDIG	S98T002435	0 A	@ICP-A01	SOLID		
-6 ICSA			@ICP-QC	QC		
-7 ICSAB			@ICP-QC	QC		
-8 CCV			@ICP-QC	QC		
-9 CCB			@ICP-QC	QC		

**Final page for worklist # 27232**

Analyst Signature	Date
<i>JK Jato</i>	12-01-98
Preps 16 YJA	Direct 1 DF 1
Preps 61 K7JR	Direct 1 1
598700 2427	3-6 1 DF 3
598700 2427-D	3-6 3
598700 2435-L	3-6-2-8 1 DF 15
598700 2435	3-6 3
598700 2435-D	3-6 3
598700 2435-S	3-6 3
598700 2435-X	3-6-1-9 30
598700 2435-QX	3-6-1-9 30

Analyst Signature	Date
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Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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Analysis Report

Summary

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981201B	ICP2	12/01/98	13:06	DKS	Q	CONC
2	ICB	981201B	ICP2	12/01/98	13:10	DKS	Q	CONC
3	LLS	981201B	ICP2	12/01/98	13:12	DKS	Q	CONC
4	ICSA	981201B	ICP2	12/01/98	13:15	DKS	Q	CONC
5	ICSAB	981201B	ICP2	12/01/98	13:18	DKS	Q	CONC
6	PREPSTDTJA	981201B	ICP2	12/01/98	13:22	DKS	Q	CONC
7	PREPBLKTJA	981201B	ICP2	12/01/98	13:26	DKS	Q	CONC
8	S98T002429	981201B	ICP2	12/01/98	13:29	DKS	S	CONC
9	S98T002429_D	981201B	ICP2	12/01/98	13:32	DKS	S	CONC
10	CCV	981201B	ICP2	12/01/98	13:36	DKS	Q	CONC
11	CCB	981201B	ICP2	12/01/98	13:40	DKS	Q	CONC
12	S98T002435_L	981201B	ICP2	12/01/98	13:43	DKS	S	CONC
13	S98T002435	981201B	ICP2	12/01/98	13:47	DKS	S	CONC
14	S98T002435_D	981201B	ICP2	12/01/98	13:50	DKS	S	CONC
15	S98T002435_S	981201B	ICP2	12/01/98	13:53	DKS	S	CONC
16	S98T002435_X	981201B	ICP2	12/01/98	13:58	DKS	S	CONC
17	S98T002435_AX	981201B	ICP2	12/01/98	14:01	DKS	S	CONC
18	ICSA	981201B	ICP2	12/01/98	14:27	DKS	Q	CONC
19	ICSAB	981201B	ICP2	12/01/98	14:30	DKS	Q	CONC
20	CCV	981201B	ICP2	12/01/98	14:33	DKS	Q	CONC
21	CCB	981201B	ICP2	12/01/98	14:36	DKS	Q	CONC

DK [Signature]

4-107

12-01-98

5987002429

Worklist # 27132

5987002435

S98T002435

$$C_2 = 4.6699 \frac{\mu\text{g}}{\text{ml}} \times \frac{1}{\frac{5.248 \text{ g}}{L} + \frac{1L}{100 \text{ ml}}} = 8.90 \text{ e} + 2 \frac{\mu\text{g}}{\text{g}}$$

$$\text{Pre-dig Spk: } C_2 = \frac{9.0253 - 4.6699}{5} \times 100 = 87.1\%$$

Post Spike: SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1347 TO 1349.2

$$C_1 = \frac{\left(\frac{347.51}{30}\right) - \left(\frac{58.351}{30}\right)}{10} \times 100 = 96.4\%$$

$$C_2 = \frac{\left(\frac{1486.2}{30}\right) - \left(\frac{1220.9}{30}\right)}{10} \times 100 = 88.4\%$$

$$P = \frac{\left(\frac{300.73}{30}\right) - \left(\frac{8.2938}{30}\right)}{10} \times 100 = 97.5\%$$

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Analysis Report

Averages

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#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.9202	4.9006	5.0062	5.1541	4.8631	5.1182
2	ICB	-.00093	.00180	.00236	.00238	-.00001	.00022
3	LLS	.02053	.10946	.20229	.09761	.09803	.01053
4	ICSA	.00129	243.90	.05629	-.01115	.00020	.00027
5	ICSAB	.93754	241.75	.04522	-.00941	.45383	.47143
6	PREPSTDITJA	.89696	4.6800	4.7040	5.0337	4.7497	5.0385
7	PREPBLKTJA	-.00066	Q.12146	-.01096	Q.55817	.00043	.00000
8	S98T002429	.06787	56.489	-.11082	.73454	.01097	.00055
9	S98T002429_D	.07491	58.734	-.05207	.89363	.00992	.00096
10	CCV	5.0058	4.9131	5.1055	5.1788	4.8785	5.1707
11	CCB	-.00092	.00890	-.00834	.00047	-.00017	.00009
12	S98T002435_L	.07654	57.436	-.09381	.58259	.01181	.00276
13	S98T002435	.07613	55.204	-.06274	.56675	.01116	.00055
14	S98T002435_D	.08155	58.521	-.07225	.70859	.01045	.00068
15	S98T002435_S	1.0436	55.403	5.0371	5.6364	4.7895	5.0163
16	S98T002435_X	.01514	58.351	-.16694	.57537	.00791	.00686
17	S98T002435_AX	256.98	347.51	298.71	298.31	298.72	297.00
18	ICSA	.00492	240.60	.04996	-.00381	.00014	.00027
19	ICSAB	.94778	242.69	.05155	-.01227	.46133	.47691
20	CCV	4.9275	4.8816	5.0084	5.1163	4.8528	5.0965
21	CCB	-.00212	.00105	.00083	.00190	-.00018	.00027

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	4.9996	5.0864	5.0569	5.0244	4.9642	4.9569
2	ICB	.01672	.00092	-.00144	-.00670	.00087	.00002
3	LLS	.21570	.22511	.00948	.19957	.04065	.02091
4	ICSA	.01251	252.60	.00473	-.00593	-.00079	-.00182
5	ICSAB	.01089	252.32	.92549	-.00265	.45994	.45973
6	PREPSTDITJA	4.4572	4.7004	4.5091	4.8419	4.5528	4.5703
7	PREPBLKTJA	.00130	Q.16843	-.00054	-.00512	.00058	.00165
8	S98T002429	.23772	1.0414	.00244	-.00775	.00148	5.3777
9	S98T002429_D	.18059	.89092	.00577	-.00691	.00489	5.2108
10	CCV	5.0915	5.2397	5.1580	5.0482	5.0602	5.0620
11	CCB	.04161	-.00051	-.00041	-.00931	-.00101	-.00017
12	S98T002435_L	.33429	1.0092	.00137	-.08489	-.01533	4.8642
13	S98T002435	.24061	.97815	.00221	-.02382	-.00120	4.6699
14	S98T002435_D	.20041	.83918	.00575	.01504	.00489	4.1604
15	S98T002435_S	5.0181	5.7998	4.8806	4.9095	4.8222	9.0253
16	S98T002435_X	.76964	.96249	-.05025	-.25009	-.03471	4.9184
17	S98T002435_AX	300.25	299.56	294.56	299.09	296.17	301.29
18	ICSA	.00585	252.27	.00540	-.00065	.00009	-.00279
19	ICSAB	-.00113	251.39	.93164	-.00240	.45751	.46304
20	CCV	5.0292	5.1246	5.0584	5.0069	4.9734	4.9636
21	CCB	.01022	-.00504	-.00191	-.01734	-.00230	-.00098

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#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.7654	.00615	4.7794	4.8493	5.0520	5.1011
2	ICB	.00052	-.00109	.00025	-.06436	-.00101	-.00081
3	LLS	.01782	-.00061	.09632	.57145	.10049	.02052
4	ICSA	.00353	.01672	92.367	.01926	-.00531	.00164
5	ICSAB	.45924	.01615	91.626	.05931	-.00525	.98984
6	PREPSTDTJA	4.4918	.00494	4.5501	4.4973	4.8179	4.9614
7	PREPBLKTJA	.00327	-.00238	.01937	-.10630	-.00151	-.00235
8	S98T002429	.01269	.00028	3.4531	5.9370	.03194	.00060
9	S98T002429_D	.00822	-.00169	2.9931	5.6283	.02964	-.00092
10	CCV	4.7549	.00703	4.8559	4.8723	5.0619	4.9902
11	CCB	-.00014	-.00019	-.00070	-.00811	-.00149	-.00010
12	S98T002435_L	.00475	-.00280	3.8477	6.4647	.02288	.00308
13	S98T002435	.00986	-.00095	3.7057	5.7585	.03351	.00030
14	S98T002435_D	.02240	-.00145	3.1616	6.8728	.03351	-.00061
15	S98T002435_S	4.6521	.00499	8.3140	9.9354	4.9351	4.8567
16	S98T002435_X	.03095	-.02106	3.8884	5.7997	-.01844	-.02154
17	S98T002435_AX	280.52	.40205	287.49	297.11	298.29	295.16
18	ICSA	.00276	.01255	91.477	-.05038	-.00534	.00195
19	ICSAB	.46595	.01966	91.648	.08467	-.00467	.99087
20	CCV	4.7300	.00683	4.7675	5.0059	5.0250	5.0381
21	CCB	-.00046	-.00110	-.00125	-.06746	-.00297	-.00081

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.1605	4.8858	5.0455	4.9999	4.9082	4.9268
2	ICB	-.00291	-.00025	.00500	.06274	-.00180	-.00011
3	LLS	.20460	.01971	.10371	.21674	.19828	.03868
4	ICSA	249.13	-.00490	-.01563	191.37	.00068	-.00240
5	ICSAB	246.77	.43724	-.01164	189.99	-.00255	.90797
6	PREPSTDTJA	4.6111	4.5323	4.6747	5.7359	4.7443	4.4890
7	PREPBLKTJA	.01448	-.00027	.00246	Q.80440	-.00132	-.00034
8	S98T002429	.19522	1.3456	.17202	1008.9	.01482	.08902
9	S98T002429_D	.19060	1.1821	.15638	1047.1	.01152	.07403
10	CCV	5.1757	4.9822	5.1375	4.9103	4.8990	5.0130
11	CCB	-.00432	.00012	.00519	-.00679	-.00176	-.00083
12	S98T002435_L	.21907	1.4348	.17860	1192.1	-.04493	.18241
13	S98T002435	.17405	1.3770	.16597	1131.2	.00653	.08006
14	S98T002435_D	.19809	1.2463	.17902	1135.1	.01703	.09511
15	S98T002435_S	5.0460	6.0801	5.1650	1115.5	4.7856	4.8299
16	S98T002435_X	.00828	1.4434	.18589	1220.9	-.06055	.20088
17	S98T002435_AX	305.73	296.14	296.89	1486.2	289.04	294.52
18	ICSA	246.04	-.00499	-.01479	186.92	-.00206	-.00701
19	ICSAB	247.58	.43880	-.01651	190.42	-.00267	.91940
20	CCV	5.1351	4.8845	5.0483	4.9482	4.8582	4.9270
21	CCB	-.01341	-.00022	.00233	.02496	-.00526	.00418

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#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	5.0164	4.9825	4.8571	5.0713	4.8743	5.1371
2	ICB	-.00353	.00293	.00877	-.00873	.01318	-.00092
3	LLS	.38967	.20491	.21264	.10054	.21080	Q.13679
4	ICSA	.02699	.02491	-.01807	.00567	.06261	-.00743
5	ICSAB	.02490	.99128	-.01252	-.00003	.06872	-.00488
6	PREPSTD TJA	4.5150	4.3883	4.3055	4.4702	4.4359	4.7305
7	PREPBLKTJA	.04395	.00477	Q.06724	-.00528	.02191	Q1.5546
8	S98T002429	13.112	.19320	3.2081	-.02498	.11607	2.0958
9	S98T002429_D	12.753	.17765	2.9433	.00387	.12813	2.0025
10	CCV	5.0776	5.0954	4.9613	5.1656	4.9261	5.2107
11	CCB	.01277	.00469	.01021	.00212	.02392	.00488
12	S98T002435_L	8.3977	.12505	3.3499	.00927	.25218	1.4492
13	S98T002435	8.0490	.19066	3.1439	-.01040	.10173	1.2038
14	S98T002435_D	4.4375	.19161	3.1793	-.01111	.14929	1.8446
15	S98T002435_S	10.290	5.0032	7.5918	5.0125	4.8509	7.2541
16	S98T002435_X	8.2938	.07369	3.2355	-.04090	.20816	1.4912
17	S98T002435_AX	300.73	298.48	292.97	299.59	290.80	298.90
18	ICSA	.03540	.02251	-.02435	-.00759	.07558	-.00153
19	ICSAB	.02497	.98861	-.03067	.01598	.07695	-.00397
20	CCV	5.0058	4.9908	4.8773	5.0809	4.8577	5.1166
21	CCB	.00432	-.00710	.00305	-.00628	.01504	.00014

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.9342	4.9305	.21050	5.1145	4.7864	9.7781
2	ICB	-.01056	-.00012	-.00117	-.00092	.00654	-.04351
3	LLS	.18899	.01988	.01031	.01973	.40669	.45141
4	ICSA	-.02549	.00176	-.00340	-.00001	.04167	-.07498
5	ICSAB	-.02235	.00173	.00000	.00046	.02504	-.07195
6	PREPSTD TJA	4.7660	4.8280	.19682	4.8037	4.3602	9.3448
7	PREPBLKTJA	-.02876	-.00025	.00132	.00024	.01809	-.10173
8	S98T002429	-.00997	.01055	.01311	.01314	-.01801	.12207
9	S98T002429_D	-.02343	.00938	.02856	.01115	-.03680	.02765
10	CCV	4.9260	4.9362	.21573	5.1658	4.8321	9.7553
11	CCB	-.00133	.00000	.00044	-.00046	.00361	-.00210
12	S98T002435_L	.00074	.00912	.03690	-.00331	-.03682	-.02848
13	S98T002435	-.02279	.01029	.02488	.01251	.02152	.06435
14	S98T002435_D	-.01716	.00912	.03791	.01119	-.01542	.04780
15	S98T002435_S	4.8009	4.9087	.23697	5.0396	4.6276	9.4707
16	S98T002435_X	-.20589	.00525	-.09772	-.00730	-.66357	-.59603
17	S98T002435_AX	290.62	294.97	13.179	297.88	290.35	568.66
18	ICSA	-.02075	.00168	-.00096	.00069	.01807	-.07594
19	ICSAB	-.02418	.00180	.00630	.00026	-.00275	-.08656
20	CCV	4.8979	4.9024	.22425	5.1110	4.7749	9.7067
21	CCB	-.01006	-.00021	-.00673	-.00117	-.00061	-.04737

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Analysis Report

Averages

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#	Sample Name	V	Y	Zn	Zr
1	ICV	4.9957	.00712	4.7042	4.8774
2	ICB	-.00315	-.00060	.00083	-.00113
3	LLS	.09777	-.00027	.01970	.01737
4	ICSA	.00004	.00692	-.00264	-.00406
5	ICSAB	.46172	.00708	.92476	-.00374
6	PREPSTDTJA	4.7711	.00551	4.1563	4.5647
7	PREPBLKTJA	-.00684	-.00183	Q.01115	-.00125
8	S98T002429	.00142	.00112	.11982	.00908
9	S98T002429_D	-.00209	.00045	.10124	.00521
10	CCV	5.0687	.00776	4.8197	4.9264
11	CCB	-.00036	.00000	.00056	-.00034
12	S98T002435_L	-.00922	.00001	.14637	.00179
13	S98T002435	-.00177	.00044	.13137	.00447
14	S98T002435_D	-.00491	-.00002	.11984	.00256
15	S98T002435_S	4.9731	.00726	4.7780	4.8225
16	S98T002435_X	-.06986	-.00915	.13784	-.02072
17	S98T002435_AX	294.85	.45659	278.40	295.20
18	ICSA	.00130	.00732	-.00351	-.00355
19	ICSAB	.46387	.00685	.92633	-.00514
20	CCV	4.9872	.00723	4.7205	4.8607
21	CCB	-.00295	-.00084	-.00004	-.00070

*JK*  
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1349.2

11/19/98 08:14

A-0004-1

File #: 981201G.TXT

HNF-1661 REV. 0

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## LABCORE Data Entry Template for Worklist# 27233

Analyst: JK SGT Instrument: ICP01 2.11.98 Book# 77B30

Method: LA-505-151/161 Rev/Mod \_\_\_\_\_

Ensure dose rate at 30cm  
is  $\leq$  50 mrem/hr prior to  
performing this analysis

Worklist Comment: ICP U-107 (SOLID ACID DIGEST)

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	ICV		@ICP-QC	QC		
2	ICB		@ICP-QC	QC		
3	LLS		@ICP-QC	QC		
4	ICSA		@ICP-QC	QC		
5	ICSAB		@ICP-QC	QC		
6	PREPSTDTJA		@ICP-A01	SOLID		
7	PREPBKLTJA		@ICP-A01	SOLID		
8	SAMPLE	S98T002441 0 A	@ICP-A01	SOLID	98000359	U-107 (2)
			Analytes Requested: AG-A-01 , AL-A-01 , AS-A-01 , B-A-01 , BA-A-01 , BE-A-01 , BI-A-01 , CA-A-01 , CD-A-01 , CE-A-01 , CO-A-01 , CR-A-01 , CU-A-01 , FE-A-01 , K-A-01 , LA-A-01 , LI-A-01 , MG-A-01 , MN-A-01 , MO-A-01 , NA-A-01 , ND-A-01 , NI-A-01 , P-A-01 , PB-A-01 , S-A-01 , SB-A-01 , SE-A-01 , SI-A-01 , SM-A-01 , SR-A-01 , TI-A-01 , TL-A-01 , U-A-01 , V-A-01 , ZN-A-01 , ZR-A-01			
9	DUP	S98T002441 0 A	@ICP-A01	SOLID		
10	CCV		@ICP-QC	QC		
11	CCB		@ICP-QC	QC		
12	SERDIL	S98T002573 0 A	@ICP-A01	SOLID		
13	SAMPLE	S98T002573 0 A	@ICP-A01	SOLID	98000401	U-107 (2)
			Analytes Requested: AG-A-01 , AL-A-01 , AS-A-01 , B-A-01 , BA-A-01 , BE-A-01 , BI-A-01 , CA-A-01 , CD-A-01 , CE-A-01 , CO-A-01 , CR-A-01 , CU-A-01 , FE-A-01 , K-A-01 , LA-A-01 , LI-A-01 , MG-A-01 , MN-A-01 , MO-A-01 , NA-A-01 , ND-A-01 , NI-A-01 , P-A-01 , PB-A-01 , S-A-01 , SB-A-01 , SE-A-01 , SI-A-01 ,			

Data Entry Comments:

uploaded 12-1-98  
John Worell

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

1349.3



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A-0004-1

## LABCORE Data Entry Template for Worklist# 27233

S Type	Sample#	R	A	Test	Matrix	Group#	Project
				SM-A-01 , SR-A-01 , TI-A-01 , TL-A-01 , U-A-01 , V-A-01 , ZN-A-01 , ZR-A-01			
14 DUP	S98T002573	0	A	⊙ICP-A01	SOLID		
15 SPK-PREDIG	S98T002573	0	A	⊙ICP-A01	SOLID		
16 ICSA				⊙ICP-QC	QC		
17 ICSAB				⊙ICP-QC	QC		
18 CCV				⊙ICP-QC	QC		
19 CCB				⊙ICP-QC	QC		

Final page for worklist # 27233

*DK* *12-01-98*

Analyst Signature	Date
Prep d/TJc , Direct	DF 1
Prep d/KJG , Direct	1
S987002441 , 3-6	DF 3
S987002441-D , 3-6	3
S987002573-L , 2-8-2-8	DF 25
S987002573 , 2-8	5
S987002573-D , 2-8	5
S987002573-5 , 2-8	5
S987002573-X , 2-8-1-9	50
S987002573-QY , 2-8-1-9	50

Analyst Signature	Date

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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## HNF-1661 REV. 0

Analysis Report

Summary

Tue 12-01-98 12:56:13 PM

page 1

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981201A	ICP2	12/01/98	10:18	DKS	Q	CONC
2	ICB	981201A	ICP2	12/01/98	10:22	DKS	Q	CONC
3	LLS	981201A	ICP2	12/01/98	10:25	DKS	Q	CONC
4	ICSA	981201A	ICP2	12/01/98	10:28	DKS	Q	CONC
5	ICSAB	981201A	ICP2	12/01/98	10:30	DKS	Q	CONC
6	PREPSTDTJA	981201A	ICP2	12/01/98	10:34	DKS	Q	CONC
7	PREPBLKTJA	981201A	ICP2	12/01/98	10:38	DKS	Q	CONC
8	S98T002441	981201A	ICP2	12/01/98	10:43	DKS	S	CONC
9	S98T002441_D	981201A	ICP2	12/01/98	10:46	DKS	S	CONC
10	CCV	981201A	ICP2	12/01/98	10:50	DKS	Q	CONC
11	CCB	981201A	ICP2	12/01/98	10:53	DKS	Q	CONC
12	S98T002573_L	981201A	ICP2	12/01/98	10:57	DKS	S	CONC
13	S98T002573	981201A	ICP2	12/01/98	11:01	DKS	S	CONC
14	S98T002573_D	981201A	ICP2	12/01/98	11:04	DKS	S	CONC
15	S98T002573_S	981201A	ICP2	12/01/98	11:07	DKS	S	CONC
16	S98T002573_X	981201A	ICP2	12/01/98	11:13	DKS	S	CONC
17	S98T002573_AX	981201A	ICP2	12/01/98	11:16	DKS	S	CONC
18	ICSA	981201A	ICP2	12/01/98	12:43	DKS	Q	CONC
19	ICSAB	981201A	ICP2	12/01/98	12:46	DKS	Q	CONC
20	CCV	981201A	ICP2	12/01/98	12:49	DKS	Q	CONC
21	CCB	981201A	ICP2	12/01/98	12:53	DKS	Q	CONC

K det

U. 107

12-01-98

5987002441

Worklist # 17233

5987002573

S98T002573

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1351 TO 1356.

$$Cr = 0.49153 \times \frac{1}{\frac{49}{100} \times \frac{5.318}{L} \times \frac{1L}{1000}} = 97.5\%$$

$$Pre-dig Spk = \frac{5.2250 - 0.49153}{5} \times 100 = 94.7\%$$

Post Spike:

$$Al = \frac{\left(\frac{495.12}{50}\right) - \left(\frac{7.8215}{50}\right)}{10} \times 100 = 97.5\%$$

$$Na = \frac{\left(\frac{1508.2}{50}\right) - \left(\frac{1013.5}{50}\right)}{10} \times 100 = 98.9\%$$

$$P = \frac{\left(\frac{904.50}{50}\right) - \left(\frac{413.88}{50}\right)}{10} \times 100 = 98.1\%$$

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## Analysis Report

## Averages

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#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.9383	4.8632	5.0078	5.1043	4.8149	5.0823
2	ICB	-.00116	.00531	.00076	.00287	.00000	.00103
3	LLS	.02001	.10036	.18345	.09858	.09716	.01021
4	ICSA	.00099	243.79	.05140	-.00615	.00017	.00009
5	ICSAB	.94220	242.99	.04011	-.00437	.45725	.47481
6	PREPSTDTJA	Q.08405	4.8072	4.8068	5.2746	4.8070	4.8260
7	PREPBLKTJA	-.00023	Q.12711	-.00395	Q.63184	.00075	.00000
8	S98T002441	.07733	56.489	-.08218	.85253	.01342	.00027
9	S98T002441_D	.07776	47.812	-.10031	.52797	.01079	.00028
10	CCV	5.0031	4.9002	5.0421	5.1286	4.8341	5.1040
11	CCB	-.00131	.00337	-.00660	-.00047	-.00003	.00000
12	S98T002573_L	.05161	7.6540	.01162	.16798	.00586	.00002
13	S98T002573	.06330	7.3928	.02933	.15125	.00608	-.00022
14	S98T002573_D	.05996	1.7646	.12672	.56205	.00113	.00001
15	S98T002573_S	.65401	9.0426	5.1915	5.7557	4.8176	5.0140
16	S98T002573_X	.09133	7.8215	.35881	.07245	.00158	-.00025
17	S98T002573_AX	456.68	495.12	501.10	502.97	500.56	496.05
18	ICSA	.00299	244.42	.05923	-.00938	.00012	.00032
19	ICSAB	.93440	243.38	.01914	-.00989	.45851	.47650
20	CCV	4.9252	4.8896	4.9991	5.1312	4.8589	5.1160
21	CCB	-.00091	.00517	-.00390	-.00047	-.00006	.00009

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	4.9803	5.1391	5.0818	4.9926	4.9869	4.9826
2	ICB	.01863	.00141	-.00075	-.00197	.00102	.00066
3	LLS	.20070	.22741	.00944	.19165	.03901	.02004
4	ICSA	.02427	255.29	.00469	.00086	.00073	-.00306
5	ICSAB	.04399	253.70	.93587	-.00589	.45777	.46089
6	PREPSTDTJA	4.5854	4.9661	4.6902	4.8994	4.6931	4.7125
7	PREPBLKTJA	.01669	.08298	-.00071	.00018	-.00283	.00194
8	S98T002441	.28244	.98739	.00207	-.03168	.00297	5.2716
9	S98T002441_D	.25155	.87086	.00228	-.03957	.00225	4.3859
10	CCV	5.0518	5.2361	5.1344	5.0048	5.0433	5.0446
11	CCB	.02087	.00059	-.00041	-.00831	-.00025	-.00009
12	S98T002573_L	.47013	.54623	-.00518	-.15855	-.01938	.49386
13	S98T002573	.05980	.59010	-.00943	-.03844	-.00594	.49153
14	S98T002573_D	.10163	.22326	-.00426	-.03845	-.00134	.09879
15	S98T002573_S	5.0912	5.5791	5.0148	4.9876	4.9079	5.2250
16	S98T002573_X	.35869	.45583	-.03592	-.18414	-.05740	.44899
17	S98T002573_AX	503.09	502.32	494.81	500.89	498.64	498.81
18	ICSA	-.00585	249.61	.00415	-.00515	-.00004	-.00245
19	ICSAB	.01788	249.45	.92529	-.00185	.45383	.45757
20	CCV	4.9962	5.1078	5.0444	5.0350	4.9606	4.9636
21	CCB	.01400	.00197	-.00088	-.00333	-.00101	-.00045

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Analysis Report

Averages

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#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.7066	.00676	4.7996	4.8198	5.0027	4.9457
2	ICB	.00005	.00075	.00091	.18807	-.00078	.00061
3	LLS	.01680	.00037	.09652	.57944	.09916	.02082
4	ICSA	.00320	.00984	92.954	-.05749	-.00485	.00205
5	IC SAB	.46299	.01459	92.320	.02367	-.00531	.99189
6	PREPSTDTJA	4.5528	.00598	4.7046	4.6998	4.8695	4.9165
7	PREPBLKTJA	.00506	-.00211	.02745	-.02369	-.00096	-.00174
8	S98T002441	.01698	-.00119	4.3406	6.4367	.03871	-.00092
9	S98T002441_D	.00678	.00177	3.5918	5.3104	.03014	.00030
10	CCV	4.7145	.00736	4.8354	4.9855	5.0081	5.0206
11	CCB	.00059	.00000	-.00021	.05126	-.00126	.00010
12	S98T002573_L	.02100	-.00621	1.6629	-2.4620	-.01261	.00002
13	S98T002573	.02699	-.00407	1.6100	-.38436	-.00690	.00000
14	S98T002573_D	.01001	-.00440	.12327	-.20017	-.00727	-.00461
15	S98T002573_S	4.7239	.00442	5.7657	4.8929	4.9313	4.8932
16	S98T002573_X	-.00696	.00351	1.6917	-4.0916	-.03286	.00514
17	S98T002573_AX	472.94	.67563	478.32	494.60	499.32	501.36
18	ICSA	.00351	.02063	91.997	.09983	-.00565	.00113
19	IC SAB	.46704	.02314	91.604	.07943	-.00484	1.0178
20	CCV	4.7592	.00693	4.7679	4.8886	5.0545	5.1241
21	CCB	-.00014	-.00007	-.00023	-.03018	-.00113	.00051

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.1381	4.9037	5.0482	4.9404	4.8688	4.9420
2	ICB	-.00110	.00039	.00370	.03599	-.00209	.00606
3	LLS	.20017	.02023	.10005	.19430	.19361	.04560
4	ICSA	250.13	-.00494	-.01477	190.74	-.00358	.00022
5	IC SAB	248.52	.44055	-.01565	191.17	-.00628	.91599
6	PREPSTDTJA	4.7810	4.6722	4.7932	6.0400	4.7889	4.6498
7	PREPBLKTJA	.01988	.00015	.00046	9.99587	-.00341	.00228
8	S98T002441	.23092	1.6946	.16295	1154.6	.02033	.09045
9	S98T002441_D	1.1790	1.3873	.14387	1175.7	.01221	.09082
10	CCV	5.1553	4.9673	5.1072	4.9649	4.8645	4.9992
11	CCB	-.00627	.00012	.00285	.04099	-.00212	.00501
12	S98T002573_L	.18888	.05247	.01246	.106.9	-.05676	.10155
13	S98T002573	.20221	.05051	.00665	985.35	-.01291	.04236
14	S98T002573_D	-.00140	.00819	.00498	938.26	-.01134	.02805
15	S98T002573_S	5.2778	4.8087	5.0146	937.08	4.7931	4.9179
16	S98T002573_X	3.2913	.05701	-.04990	1013.5	-.24321	.12507
17	S98T002573_AX	516.09	495.12	498.88	1508.2	486.75	493.84
18	ICSA	250.08	-.00541	-.01713	193.63	-.00119	-.00135
19	IC SAB	248.55	.43458	-.01784	194.00	-.00261	.91181
20	CCV	5.1244	4.8843	5.0350	5.0367	4.9139	4.9409
21	CCB	-.00186	.00012	.00335	.03528	-.00365	.00251

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Analysis Report

Averages

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#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	4.9586	5.0041	4.8779	5.0606	4.8216	5.1380
2	ICB	.00512	-.00466	.01619	.00300	.01333	.00690
3	LLS	.40081	.20961	.20659	.09357	.20749	Q.14353
4	ICSA	.03306	.01873	-.02389	.01923	.06369	-.00430
5	ICSAB	.02449	.98070	-.02704	-.00404	.04165	-.00581
6	PREPSTDITJA	4.6070	4.5808	4.4697	4.6257	4.5434	5.2661
7	PREPBLKTJA	.02715	-.00398	Q.07226	.00123	.01933	Q1.5306
8	S98T002441	5.8568	.23422	3.0486	-.00543	.07537	1.2264
9	S98T002441_D	5.8668	.18867	2.5937	.00834	.11239	1.0044
10	CCV	5.0601	5.0799	4.9668	5.1090	4.8359	5.2026
11	CCB	.00656	.00207	.01044	-.00108	.00762	.00578
12	S98T002573_L	415.44	-.13219	.28898	-.05849	.13947	1.8402
13	S98T002573	406.73	.02540	.21186	-.01361	-.02730	1.6135
14	S98T002573_D	397.39	.16063	.12382	-.02792	-.09121	1.3766
15	S98T002573_S	394.68	4.9779	5.0262	5.0620	4.6233	5.6547
16	S98T002573_X	413.88	-.71874	.51815	.21274	.88279	2.1473
17	S98T002573_AX	904.50	501.30	490.94	502.53	485.76	495.18
18	ICSA	.03526	.00741	-.03326	-.00541	.06096	-.01193
19	ICSAB	.04044	.96563	-.03077	.01732	.05214	-.00990
20	CCV	4.9549	4.9699	4.8515	5.0735	4.8117	5.1169
21	CCB	.00965	-.00658	.01233	-.00082	.01994	.00194

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.8597	4.8949	.20494	5.0873	4.7490	9.6556
2	ICB	.00534	.00004	.00021	-.00046	.01114	.02121
3	LLS	.19904	.01988	-.00019	.01969	.39587	.48489
4	ICSA	-.02176	.00175	.00111	.00023	-.03633	-.05698
5	ICSAB	-.02492	.00172	-.00466	.00043	.03405	-.06110
6	PREPSTDITJA	4.7964	4.8855	.18564	4.8719	4.5117	9.3714
7	PREPBLKTJA	-.02380	-.00016	.00468	.00002	-.00288	-.08495
8	S98T002441	-.02250	.01251	.02015	.01941	-.02641	.09589
9	S98T002441_D	.00651	.01068	.00332	.01798	-.05170	.13958
10	CCV	4.8437	4.8983	.20354	5.1171	4.7568	9.6572
11	CCB	-.00026	.00000	-.00241	-.00023	-.00755	-.00222
12	S98T002573_L	-.08746	.00110	.03303	.06956	-.18466	-.41804
13	S98T002573	-.05019	.00282	-.00175	.08321	-.02984	-.13965
14	S98T002573_D	-.04066	.00000	.01914	.00238	-.02001	-.12319
15	S98T002573_S	4.7646	4.9313	.22899	5.0845	4.7083	9.3342
16	S98T002573_X	-.08678	.00000	-.13427	.01100	.15739	-.16894
17	S98T002573_AX	485.86	494.90	21.254	499.77	490.10	954.26
18	ICSA	-.03175	.00186	-.00522	.00020	.02479	-.07024
19	ICSAB	-.02794	.00187	-.00078	.00000	.04027	-.06717
20	CCV	4.9222	4.9425	.20981	5.1274	4.7215	9.7745
21	CCB	.00077	.00000	-.00431	-.00047	-.01840	-.00031

HNF-1661 REV. 0

Analysis Report

Averages

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#	Sample Name	V	Y	Zn	Zr
1	ICV	4.9917	.00757	4.7502	4.8615
2	ICB	.00103	.00038	.00092	.00122
3	LLS	.09954	.00057	.01978	.01971
4	ICSA	.00048	.00739	-.00335	-.00351
5	ICSAB	.46414	.00715	.92999	-.00345
6	PREPSTDTJA	4.8835	.00620	4.3475	4.6508
7	PREPBLKTJA	-.00508	-.00137	.00470	-.00088
8	S98T002441	-.00466	.00113	.14553	.00475
9	S98T002441_D	.00196	.00182	.12392	.00884
10	CCV	5.0365	.00804	4.8254	4.8835
11	CCB	-.00089	.00000	.00037	.00018
12	S98T002573_L	-.02670	-.00374	.03715	-.01787
13	S98T002573	-.00465	-.00268	.03558	.00021
14	S98T002573_D	-.00435	-.00269	.00766	.01615
15	S98T002573_S	5.0232	.00504	4.7914	4.5545
16	S98T002573_X	.00931	.00399	.03243	.02624
17	S98T002573_AX	495.66	.76214	470.41	495.24
18	ICSA	-.00166	.00653	-.00359	-.00512
19	ICSAB	.46097	.00668	.91525	-.00491
20	CCV	4.9961	.00720	4.7095	4.8740
21	CCB	.00036	.00000	.00029	.00095

*JK*

12-01-98

File #: 981203Q.TXT

11/19/98 08:20  
A-0004-1

HNF-1661 REV. 0

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## LABCORE Data Entry Template for Worklist# 27234

Analyst: JK 5/4 Instrument: ICP01-2 11-02-98 Book# 77B30Method: LA-505-151/161 Rev/Mod C-3Ensure dose rate at 30cm  
is  $\leq$  50 mrem/hr prior to  
performing this analysisWorklist Comment: 11-3-98  
ICP U-107 (SOLID ACID DIGEST)

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	ICV		@ICP-QC	QC		
2	ICB		@ICP-QC	QC		
3	LLS		@ICP-QC	QC		
4	ICSA		@ICP-QC	QC		
5	ICSAB		@ICP-QC	QC		
6	PREPSTDTJA		@ICP-A01	SOLID		
7	PREPBLKTJA		@ICP-A01	SOLID		
8	SAMPLE	S98T002555	0 A	@ICP-A01	SOLID	98000401 U-107 (2)
		Analytes Requested: AG-A-01, AL-A-01, AS-A-01, B-A-01, BA-A-01, BE-A-01, BI-A-01, CA-A-01, CD-A-01, CE-A-01, CO-A-01, CR-A-01, CU-A-01, FE-A-01, K-A-01, LA-A-01, LI-A-01, MG-A-01, MN-A-01, MO-A-01, NA-A-01, ND-A-01, NI-A-01, P-A-01, PB-A-01, S-A-01, SE-A-01, SI-A-01, SM-A-01, SR-A-01, TI-A-01, TL-A-01, U-A-01, V-A-01, ZN-A-01, ZR-A-01				
9	DUP	S98T002555	0 A	@ICP-A01	SOLID	
10	SAMPLE	S98T002562	0 A	@ICP-A01	SOLID	98000401 U-107 (2)
		Analytes Requested: AG-A-01, AL-A-01, AS-A-01, B-A-01, BA-A-01, BE-A-01, BI-A-01, CA-A-01, CD-A-01, CE-A-01, CO-A-01, CR-A-01, CU-A-01, FE-A-01, K-A-01, LA-A-01, LI-A-01, MG-A-01, MN-A-01, MO-A-01, NA-A-01, ND-A-01, NI-A-01, P-A-01, PB-A-01, S-A-01, SE-A-01, SI-A-01, SM-A-01, SR-A-01, TI-A-01, TL-A-01, U-A-01, V-A-01, ZN-A-01, ZR-A-01				
11	DUP	S98T002562	0 A	@ICP-A01	SOLID	
		CCV CCB <u>11-3-98</u>				
12	SAMPLE	S98T002567	0 A	@ICP-A01	SOLID	98000401 U-107 (2)

Data Entry Comments:

Validated by:  
Sam H. Pang  
12/3/98

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

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11/19/98 08:20  
A-0004-1

HNF-1661 REV. 0

Page: 2

**LACORE Data Entry Template for Worklist# 27234**

S Type	Sample#	R	A	Test	Matrix	Group#	Project
	Analytes Requested: AG-A-01 , AL-A-01 , AS-A-01 , B-A-01 , BA-A-01 ,						
	BE-A-01 , BI-A-01 , CA-A-01 , CD-A-01 , CE-A-01 , CO-A-01 ,						
	CR-A-01 , CU-A-01 , FE-A-01 , K-A-01 , LA-A-01 , LI-A-01 ,						
	MG-A-01 , MN-A-01 , MO-A-01 , NA-A-01 , ND-A-01 , NI-A-01 ,						
	P-A-01 , PB-A-01 , S-A-01 , SB-A-01 , SE-A-01 , SI-A-01 ,						
	SM-A-01 , SR-A-01 , TI-A-01 , TL-A-01 , U-A-01 , V-A-01 ,						
	ZN-A-01 , ZR-A-01						
13 DUP	S98T002567	0	A	⊙ICP-A01	SOLID		
14 ICSA				⊙ICP-QC	QC		
15 ICSAB				⊙ICP-QC	QC		
16 CCV				⊙ICP-QC	QC		
17 CCB				⊙ICP-QC	QC		

**Final page for worklist # 27234**

*JK* *QAB* 11-03-98

Analyst Signature	Date
<i>Preps JJA</i> Direct	DF 1
<i>Preps JJA</i> Direct	1
5487062555	3-6, DF 3
5487062555	3-6 3
5487002562	3-6, DF 3
5487002562-D	3-6 3
5487002567	3-6, DF 3
5487002567-D	3-6 3

Analyst Signature	Date
-------------------	------

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

1357



## HNF-1661 REV. 0

Analysis Report

Summary

Thu 12-03-98 10:54:52 AM

page 1

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981203A	ICP2	12/03/98	09:53	DKS	Q	CONC
2	ICB	981203A	ICP2	12/03/98	09:57	DKS	Q	CONC
3	LLS	981203A	ICP2	12/03/98	09:59	DKS	Q	CONC
4	ICSA	981203A	ICP2	12/03/98	10:02	DKS	Q	CONC
5	ICSAB	981203A	ICP2	12/03/98	10:05	DKS	Q	CONC
6	PREPSTDJJA	981203A	ICP2	12/03/98	10:08	DKS	Q	CONC
7	PREPBLKTJA	981203A	ICP2	12/03/98	10:12	DKS	Q	CONC
8	S98T002555	981203A	ICP2	12/03/98	10:15	DKS	S	CONC
9	S98T002555_D	981203A	ICP2	12/03/98	10:18	DKS	S	CONC
10	S98T002562	981203A	ICP2	12/03/98	10:21	DKS	S	CONC
11	S98T002562_D	981203A	ICP2	12/03/98	10:24	DKS	S	CONC
12	CCV	981203A	ICP2	12/03/98	10:28	DKS	Q	CONC
13	CCB	981203A	ICP2	12/03/98	10:31	DKS	Q	CONC
14	S98T002567	981203A	ICP2	12/03/98	10:34	DKS	S	CONC
15	S98T002567_D	981203A	ICP2	12/03/98	10:37	DKS	S	CONC
16	ICSA	981203A	ICP2	12/03/98	10:41	DKS	Q	CONC
17	ICSAB	981203A	ICP2	12/03/98	10:44	DKS	Q	CONC
18	CCV	981203A	ICP2	12/03/98	10:48	DKS	Q	CONC
19	CCB	981203A	ICP2	12/03/98	10:51	DKS	Q	CONC

JK LdB

11-03-98

Worklist # 27234

U-107

598T002555

598T002562

598T002567

598T002555

$$\text{AL} = 76.660 \frac{\mu\text{g}}{\text{ml}} \times \frac{1}{5.0 \frac{\text{g}}{\text{L}} \times \frac{1\text{L}}{100\text{ml}}} = 1.532 + 4 \frac{\mu\text{g}}{\text{g}}$$

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1358 TO 1361.

## HNF-1661 REV. 0

Analysis Report      Averages      Thu 12-03-98 10:54:52 AM      page 2

#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	4.9453	4.8469	5.0029	4.9716	4.7745	5.0586
2	ICB	.00040	.00788	.00075	.00000	.00007	.00009
3	LLS	.02154	.10546	.19885	.09513	.09710	.01042
4	ICSA	.00369	238.49	.07326	.00317	.00042	.00027
5	ICSAB	.94189	238.22	.03699	-.00155	.45135	.47076
6	PREPSTDTJA	.93196	4.7248	4.6684	4.9656	4.7778	5.1010
7	PREPBLKTJA	.00106	Q.13129	.00305	Q.59894	.00083	.00000
8	S98T002555	.07624	76.660	-.06923	.67076	.01158	.00095
9	S98T002555_D	.07489	81.808	-.11525	.50748	.01074	.00095
10	S98T002562	.08906	130.71	-.04651	.79976	.06382	.00169
11	S98T002562_D	.08553	125.95	-.11799	.48091	.06793	.00155
12	CCV	4.9641	4.8603	5.0651	5.0170	4.8042	5.0879
13	CCB	.00039	.00282	.00315	.00047	.00010	.00018
14	S98T002567	.08520	21.038	-.03486	.49157	.00560	.00041
15	S98T002567_D	.08853	23.005	-.02740	.39366	.00600	.00040
16	ICSA	.00259	239.09	.05952	-.01001	.00029	.00018
17	ICSAB	.94616	240.67	.02917	-.01134	.45680	.47380
18	CCV	4.9328	4.8203	5.0204	4.9645	4.7614	5.0489
19	CCB	.00014	.00710	.00567	.00189	.00011	.00013

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	4.9582	5.1534	5.0816	4.9571	4.9556	4.9687
2	ICB	-.00849	.00381	-.00003	.00304	.00189	.00031
3	LLS	.20269	.22574	.01060	.20547	.04204	.02149
4	ICSA	.02234	249.99	.00648	.01923	.00237	-.00110
5	ICSAB	.01502	249.99	.93156	.01354	.45938	.46126
6	PREPSTDTJA	4.4805	4.9427	4.6059	4.8830	4.6048	4.6865
7	PREPBLKTJA	-.00206	Q.14994	.00012	.01029	.00247	.00455
8	S98T002555	.21375	.92028	.02353	.01872	.01318	20.373
9	S98T002555_D	.19951	.83444	.01760	.00160	.00788	19.576
10	S98T002562	1.0721	2.0191	.05527	.10484	.02541	45.013
11	S98T002562_D	1.0380	2.0740	.05499	.07764	.01788	45.810
12	CCV	5.0175	5.1795	5.1064	4.9788	4.9786	4.9879
13	CCB	.00327	.00309	-.00009	-.00029	.00126	.00040
14	S98T002567	.03194	.63609	.00511	.02128	.00980	3.8654
15	S98T002567_D	.16335	.54355	.00555	.03825	.00263	3.5712
16	ICSA	.02093	252.55	.00538	.00704	.00150	-.00185
17	ICSAB	.00663	251.00	.93469	.00959	.46163	.46393
18	CCV	4.9742	5.1587	5.0660	4.9379	4.9514	4.9631
19	CCB	-.00658	.00354	.00025	-.00028	.00101	-.00005

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.6600	.00724	4.7835	4.9570	4.9676	4.8958
2	ICB	-.00001	.00081	.00249	.13066	.00049	.00073
3	LLS	.01808	.00036	.09681	.48681	.10074	.02078
4	ICSA	.00304	.01063	91.367	.26433	-.00203	.00252
5	ICSAB	.45427	.01307	91.112	.24615	-.00235	.95454
6	PREPSTDTJA	4.4795	.00552	4.5746	4.7862	4.8636	4.8454
7	PREPBLKTJA	.00441	-.00138	.03388	.09713	.00070	-.00146

## HNF-1661 REV. 0

Analysis Report Averages Thu 12-03-98 10:54:52 AM page 3

#	Sample Name	Cu	Eu	Fe	K	La	Li
8	S98T002555	-.01494	.00246	2.0512	7.8586	.01859	.07847
9	S98T002555_D	-.01247	.00104	1.9140	8.1015	.01611	.07343
10	S98T002562	-.00508	.00491	27.573	7.2196	.08305	.04022
11	S98T002562_D	-.00457	.00241	28.838	6.9893	.08442	.03928
12	CCV	4.6860	.00717	4.8004	5.0641	4.9954	4.9128
13	CCB	.00037	.00081	.00351	.19340	-.00016	.00073
14	S98T002567	.01101	.00194	1.2997	3.3483	.01282	.00692
15	S98T002567_D	.00696	.00033	1.3365	2.6070	.01466	.00661
16	ICSA	.00218	.00640	91.501	.10837	-.00401	.00294
17	ICSAB	.46011	.01375	91.554	.20985	-.00350	.98386
18	CCV	4.6464	.00757	4.7520	4.9476	4.9517	4.9041
19	CCB	.00003	.00102	.00467	.03087	.00000	.00073

#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.1245	4.8917	5.0268	4.8892	4.8384	4.9400
2	ICB	.00960	.00007	-.00196	.03125	-.00075	.00150
3	LLS	.20963	.01970	.09832	.20107	.19934	.04596
4	ICSA	245.74	-.00512	-.01388	187.14	.00233	-.00400
5	ICSAB	244.42	.43674	-.01988	186.79	.00256	.90048
6	PREPSTD TJA	4.5975	4.6058	4.6544	5.9079	4.7867	4.6701
7	PREPBLKTJA	.02239	-.00010	-.00086	Q.84184	.00303	.00519
8	S98T002555	.14082	.91841	.22936	1012.5	.04261	.22192
9	S98T002555_D	.10649	.88305	.23924	1059.3	.04170	.23855
10	S98T002562	1.1395	7.6397	.21430	956.43	.14616	.46968
11	S98T002562_D	1.1607	7.8699	.21386	947.36	.13502	.45309
12	CCV	5.1320	4.9222	5.0549	4.8797	4.8596	4.9588
13	CCB	.00297	.00023	-.00014	.02290	-.00032	.00187
14	S98T002567	.10783	.59559	.06205	1146.4	.01186	.05077
15	S98T002567_D	.13019	.60965	.06898	1171.5	.00712	.05576
16	ICSA	245.62	-.00476	-.01570	186.01	.00169	-.00906
17	ICSAB	246.45	.43796	-.01509	190.29	.00372	.91534
18	CCV	5.0651	4.8724	5.0113	4.8504	4.8170	4.9250
19	CCB	.00451	.00014	-.00246	.02579	.00153	.00706

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	5.0340	5.0262	4.8829	5.0601	4.8554	5.2225
2	ICB	.00979	.00036	.01447	.00837	.00567	.00410
3	LLS	.39645	.21338	.21228	.11009	.18087	Q.13580
4	ICSA	.04178	.02764	-.02623	.03041	.05753	-.00572
5	ICSAB	.04407	1.0035	-.03665	.00433	.05360	-.00853
6	PREPSTD TJA	4.5010	4.4102	4.3220	4.4566	4.5038	7.0923
7	PREPBLKTJA	.02094	.01953	Q.07334	.00423	.01118	Q1.7410
8	S98T002555	31.186	.23881	4.6148	.02405	.09609	1.0324
9	S98T002555_D	31.271	.25249	4.5885	.03771	.04210	1.0181
10	S98T002562	57.970	1.6553	3.7522	.06966	.10578	2.7358
11	S98T002562_D	60.212	1.6623	3.9552	.02520	.09490	2.7011
12	CCV	5.0485	5.0612	4.8616	5.0907	4.8382	5.2583
13	CCB	.00734	.00518	.00887	.00487	.01039	.01100
14	S98T002567	18.533	.09472	.75944	.01721	.06397	4.7211
15	S98T002567_D	16.974	.08516	.84368	.04048	.00955	5.1155

## HNF-1661 REV. 0

## Analysis Report

## Averages

Thu 12-03-98 10:54:52 AM

page 4

#	Sample Name	P	Pb	S	Sb	Se	Si
16	ICSA	.04608	.03026	-.02161	.00434	.05199	.05256
17	ICSAB	.04541	1.0068	-.02067	.01110	.05712	.02992
18	CCV	5.0126	5.0272	4.8497	5.0559	4.8068	5.2561
19	CCB	.01062	.01028	.01698	.00921	.00964	.03370

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.8080	4.8523	.19160	5.0565	4.7447	9.5406
2	ICB	.00536	.00008	-.00181	-.00024	.01930	.03261
3	LLS	.19331	.01983	.00641	.02075	.39882	.48249
4	ICSA	-.01320	.00178	.00852	.00163	.01430	.01326
5	ICSAB	-.01546	.00187	.00140	.00207	.01463	.00313
6	PREPSTDTJA	4.7683	4.8686	-.18003	4.7663	4.4680	9.4104
7	PREPBLKTJA	-.01936	-.00004	.00665	.00119	-.00079	-.06169
8	S98T002555	-.00224	.01049	.04124	.00821	.03214	.59919
9	S98T002555_D	-.01081	.00984	.02580	.00748	.01749	.52604
10	S98T002562	.04429	.05674	-.17728	.05743	.04914	2.3385
11	S98T002562_D	.02268	.05925	-.18924	.05114	.01752	2.3880
12	CCV	4.8463	4.8814	-.19888	5.0824	4.7738	9.5822
13	CCB	.00391	.00008	-.00313	-.00049	.00316	.03686
14	S98T002567	.00790	.00406	.02277	.00280	.04721	.15482
15	S98T002567_D	.00059	.00394	.02402	.00143	-.01746	.11017
16	ICSA	-.00983	.00178	-.00546	.00112	.02145	.00602
17	ICSAB	-.01831	.00188	.00347	.00184	.01039	.00281
18	CCV	4.8026	4.8438	-.19047	5.0535	4.7721	9.4990
19	CCB	.00905	.00008	-.00014	-.00046	-.00828	.02781

#	Sample Name	V	Y	Zn	Zr
1	ICV	4.9517	.00809	4.7406	4.8201
2	ICB	.00155	.00069	.00010	.00105
3	LLS	.09838	.00057	.01957	.01922
4	ICSA	.00114	.00775	-.00320	-.00365
5	ICSAB	.45976	.00752	.91898	-.00257
6	PREPSTDTJA	4.7858	.00595	4.2195	4.5320
7	PREPBLKTJA	-.00366	-.00107	0.01079	.00020
8	S98T002555	.00983	.00656	.08749	.03224
9	S98T002555_D	.00734	.00565	.07974	.02871
10	S98T002562	.02440	.02110	.41749	.13062
11	S98T002562_D	.01759	.01967	.41017	.12778
12	CCV	4.9803	.00807	4.7514	4.8486
13	CCB	.00154	.00068	.00008	.00146
14	S98T002567	.00463	.00181	.07418	.00944
15	S98T002567_D	.00148	.00089	.06547	.00749
16	ICSA	.00290	.00806	-.00341	-.00138
17	ICSAB	.46185	.00752	.92022	-.00340
18	CCV	4.9433	.00818	4.7261	4.8073
19	CCB	.00156	.00061	-.00010	.00156

12-03-98

File #: 9812310.TXT

HNF-1661 REV. 0

Page: 1

## LABCORE Data Entry Template for Worklist# 27698

Analyst: JK Sato Instrument: ICP01 3 12-30-98 Book# 77B30Method: LA-505-151/161 Rev/Mod C-3Ensure dose rate at 30cm  
is  $\leq 50$  mrem/hr prior to  
performing this analysisWorklist Comment: 11-30-98 ICP U-107 (DIRECT) Field Blank and LiBr STD.

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	ICV		@ICP-QC	QC		
2	ICB		@ICP-QC	QC		
3	LLS		@ICP-QC	QC		
4	ICSA		@ICP-QC	QC		
5	ICSAB		@ICP-QC	QC		
6	SAMPLE	S98T002114 0 D	@ICP-D01	LIQUID	98000401 U-107 (2)	
	Analytes Requested: AG-D-01 , AL-D-01 , AS-D-01 , B-D-01 , BA-D-01 , BE-D-01 , BI-D-01 , CA-D-01 , CD-D-01 , CE-D-01 , CO-D-01 , CR-D-01 , CU-D-01 , FE-D-01 , K-D-01 , LA-D-01 , LI-D-01 , MG-D-01 , MN-D-01 , MO-D-01 , NA-D-01 , ND-D-01 , NI-D-01 , P-D-01 , PB-D-01 , S-D-01 , SB-D-01 , SE-D-01 , SI-D-01 , SM-D-01 , SR-D-01 , TI-D-01 , TL-D-01 , U-D-01 , V-D-01 , ZN-D-01 , ZR-D-01					
7	DUP	S98T002114 0 D	@ICP-D01	LIQUID		
8	SAMPLE	S98T002116 0 D	@ICP-D01	LIQUID	98000401 U-107 (2)	
	Analytes Requested: AG-D-01 , AL-D-01 , AS-D-01 , B-D-01 , BA-D-01 , BE-D-01 , BI-D-01 , CA-D-01 , CD-D-01 , CE-D-01 , CO-D-01 , CR-D-01 , CU-D-01 , FE-D-01 , K-D-01 , LA-D-01 , LI-D-01 , MG-D-01 , MN-D-01 , MO-D-01 , NA-D-01 , ND-D-01 , NI-D-01 , P-D-01 , PB-D-01 , S-D-01 , SB-D-01 , SE-D-01 , SI-D-01 , SM-D-01 , SR-D-01 , TI-D-01 , TL-D-01 , U-D-01 , V-D-01 , ZN-D-01 , ZR-D-01					
9	DUP	S98T002116 0 D	@ICP-D01	LIQUID		
10	ICSA		@ICP-QC	QC		
11	ICSAB		@ICP-QC	QC		
12	CCV		@ICP-QC	QC		

Data Entry Comments:

Uploaded 12-31-98

John Wauell

Val. dated by:

Saul M. Pang

01/06/99

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

1362

HNF-1661 REV. 0

12/29/98 08:34  
A-0004-1

# LABCORE Data Entry Template for Worklist# 27698

S Type	Sample#	R	A	Test	Matrix	Group#	Project
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13	CCB			@ICP-QC	QC		
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## Final page for worklist # 27698

*DK Lsd*

12-31-98

Analyst Signature	Date
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Analyst Signature	Date
-------------------	------

<i>S48T002114</i>	<i>Direct</i>	<i>DF 1</i>
<i>S48T002114-b</i>	<i>Direct</i>	<i>1</i>
<i>S48T002116</i>	<i>1-9</i>	<i>DF 10</i>
<i>S48T002116-b</i>	<i>1-9</i>	<i>10</i>

Data Entry Comments:

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S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

## HNF-1661 REV. 0

Analysis Report

Summary

Thu 12-31-98 10:09:23 AM

page 1

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV	981231A	ICP2	12/31/98	09:26	DKS	Q	CONC
2	ICB	981231A	ICP2	12/31/98	09:29	DKS	Q	CONC
3	LLS	981231A	ICP2	12/31/98	09:32	DKS	Q	CONC
4	ICSA	981231A	ICP2	12/31/98	09:35	DKS	Q	CONC
5	ICSAB	981231A	ICP2	12/31/98	09:38	DKS	Q	CONC
6	S98T002114	981231A	ICP2	12/31/98	09:41	DKS	S	CONC
7	S98T002114_D	981231A	ICP2	12/31/98	09:44	DKS	S	CONC
8	S98T002116	981231A	ICP2	12/31/98	09:48	DKS	S	CONC
9	S98T002116_D	981231A	ICP2	12/31/98	09:52	DKS	S	CONC
10	ICSA	981231A	ICP2	12/31/98	09:56	DKS	Q	CONC
11	ICSAB	981231A	ICP2	12/31/98	09:59	DKS	Q	CONC
12	CCV	981231A	ICP2	12/31/98	10:03	DKS	Q	CONC
13	CCB	981231A	ICP2	12/31/98	10:06	DKS	Q	CONC

*DK delo*  
 12-31-98  
 Work list # 27698

*U-107*  
*598T002114*  
*598T002116*

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1364 TO 1367.

## HNF-1661 REV. 0

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#	Sample Name	Ag	Al	As	B	Ba	Be
1	ICV	5.0306	4.9522	5.1253	5.1982	4.8917	5.1912
2	ICB	-.00212	.00000	-.00483	.00340	-.00003	.00009
3	LLS	.02088	.09985	.19427	.10376	.09820	.01039
4	ICSA	.00183	244.11	.02009	-.00855	.00025	.00009
5	IC SAB	.95611	244.52	.02929	-.00516	.45862	.47780
6	S98T002114	-.00199	.02630	-.00340	-.00047	.00036	-.00013
7	S98T002114_D	-.00159	.05191	.00642	.00098	.00036	-.00009
8	S98T002116	.00153	.66539	-.02216	.03406	.06366	.00046
9	S98T002116_D	-.00642	.63428	-.08518	.01949	.06469	-.00044
10	ICSA	-.00037	244.56	.04957	-.00842	.00026	.00009
11	IC SAB	.95895	243.98	.05203	-.00512	.45699	.47835
12	CCV	5.0369	4.9209	5.0888	5.2172	4.8659	5.1716
13	CCB	-.00092	-.00328	.00536	-.00097	.00000	-.00009

#	Sample Name	Bi	Ca	Cd	Ce	Co	Cr
1	ICV	5.0961	5.2368	5.2019	5.0905	5.0798	5.0831
2	ICB	.00104	-.00117	-.00048	-.00840	.00064	.00099
3	LLS	.18452	.22069	.00965	.19750	.04273	.02281
4	ICSA	-.01517	257.57	.00536	.00053	.00011	-.00178
5	IC SAB	-.04302	257.42	.94873	-.00015	.46224	.47020
6	S98T002114	-.01216	.44627	-.00087	-.00629	-.00089	.00150
7	S98T002114_D	-.00803	.44884	-.00045	-.00594	-.00024	.00041
8	S98T002116	.02378	8.3464	-.00240	.03130	.01557	.02196
9	S98T002116_D	-.03273	8.4930	-.00422	-.03959	-.00646	-.00004
10	ICSA	.00734	260.68	.00559	.00580	.00115	-.00114
11	IC SAB	-.00766	258.90	.95299	.00331	.46599	.47339
12	CCV	5.0971	5.2763	5.1962	5.0629	5.0770	5.0880
13	CCB	-.02735	.00147	.00001	-.00502	.00026	-.00025

#	Sample Name	Cu	Eu	Fe	K	La	Li
1	ICV	4.7941	.00632	4.9052	4.9314	5.0954	5.0305
2	ICB	.00074	.00028	-.00012	-.06743	-.00131	.00010
3	LLS	.01757	.00080	.09796	.42869	.10123	.02172
4	ICSA	.00336	.00110	93.655	-.03723	-.00428	.00322
5	IC SAB	.46283	.00438	93.328	-.06401	-.00478	.98470
6	S98T002114	.00182	.00183	-.00030	-.02974	-.00073	.00083
7	S98T002114_D	.00139	.00190	-.00083	-.03397	-.00006	.00093
8	S98T002116	.01472	.01560	.00411	-.11622	-.00285	1895.1
9	S98T002116_D	.00804	.01464	.00048	.99969	-.00416	1909.5
10	ICSA	.00253	-.00206	93.998	.02927	-.00457	.00301
11	IC SAB	.46304	.00165	93.422	-.08142	-.00436	.96576
12	CCV	4.7585	.00758	4.8709	5.0027	5.0674	4.9511
13	CCB	.00051	.00071	-.00019	-.04531	-.00101	.00031



## HNF-1661 REV. 0

Analysis Report

Averages

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#	Sample Name	Mg	Mn	Mo	Na	Nd	Ni
1	ICV	5.2507	5.0113	5.1502	5.0017	4.9783	5.0590
2	ICB	-.00966	.00012	.00016	.00361	.00238	-.00253
3	LLS	.20377	.02075	.10164	.19961	.20178	.04007
4	ICSA	251.69	-.00476	-.01382	191.00	.00267	-.01008
5	ICSA B	251.07	.44835	-.01452	191.14	-.00045	.92339
6	S98T002114	.09506	.00019	.00018	1.5920	.00178	-.00181
7	S98T002114_D	.09763	.00016	-.00117	1.5248	.00221	.00071
8	S98T002116	.04894	.00217	.03738	19.582	.05363	-.03376
9	S98T002116_D	.01978	.00250	.04934	19.813	.02096	-.01908
10	ICSA	251.15	-.00455	-.01807	191.28	.00025	-.01176
11	ICSA B	250.33	.44863	-.01725	190.02	-.00035	.93697
12	CCV	5.1805	5.0180	5.1547	4.9451	4.9409	5.0701
13	CCB	-.00514	.00031	-.00169	.00000	.00039	-.00193

#	Sample Name	P	Pb	S	Sb	Se	Si
1	ICV	5.1705	5.1103	5.0086	5.1822	5.0015	5.2522
2	ICB	.00963	-.00013	.01330	.01211	.01705	.00500
3	LLS	.40595	.20931	.20576	.10697	.22083	.11978
4	ICSA	.04116	.03230	-.01655	.01572	.10242	-.00005
5	ICSA B	.03925	1.0103	-.01768	.01542	.08400	.00129
6	S98T002114	.00394	.00774	.02668	.00167	.02141	2.7649
7	S98T002114_D	.00335	.00637	.02238	.00777	.02131	2.6987
8	S98T002116	.14288	.12881	1.7674	.07982	.33108	46.556
9	S98T002116_D	.13649	.02349	1.8039	.11572	.35367	47.419
10	ICSA	.03866	.02763	-.02309	.01408	.09803	.00172
11	ICSA B	.05268	1.0174	-.02262	.01935	.07153	.00374
12	CCV	5.1264	5.1186	5.0003	5.1598	4.9316	5.2423
13	CCB	.01403	.00151	.01388	.00388	.02330	.00542

#	Sample Name	Sm	Sr	Th	Ti	Tl	U
1	ICV	4.9413	4.9788	.17330	5.1665	4.8546	9.8094
2	ICB	-.00176	.00004	-.00656	.00113	-.02092	.00206
3	LLS	.20114	.02011	-.00076	.02118	.38364	.49598
4	ICSA	-.01385	.00184	-.00709	.00206	-.02994	-.03298
5	ICSA B	-.01362	.00184	-.00323	.00113	-.04591	-.01771
6	S98T002114	.00964	.00055	-.00881	.00042	-.03272	.04178
7	S98T002114_D	.01219	.00059	-.00753	.00043	-.00552	.04431
8	S98T002116	.02218	.01426	-.02473	.01152	-.27233	.06185
9	S98T002116_D	.01582	.01426	-.05871	.00676	-.44474	.02189
10	ICSA	-.00830	.00182	-.00928	.00112	-.02078	-.02528
11	ICSA B	-.01156	.00188	-.00543	.00206	-.00142	-.01955
12	CCV	4.9124	4.9524	.17667	5.1423	4.8313	9.7460
13	CCB	.00291	.00004	-.00632	.00020	-.01615	.01691

## HNF-1661 REV. 0

Analysis Report

Averages

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#	Sample Name	V	Y	Zn	Zr
1	ICV	5.0793	.00750	4.8378	4.9478
2	ICB	.00019	-.00015	.00058	.00048
3	LLS	.10155	.00057	.02015	.02012
4	ICSA	.00206	.00761	-.00354	-.00147
5	ICSAB	.46977	.00768	.94417	-.00219
6	S98T002114	.00211	.00045	.00039	.00190
7	S98T002114_D	.00210	.00060	.00002	.00246
8	S98T002116	.01789	.00154	-1.2168	.01141
9	S98T002116_D	.01803	.00077	-1.2282	.01401
10	ICSA	.00377	.00792	-.00323	-.00073
11	ICSAB	.47123	.00768	.94763	-.00140
12	CCV	5.0724	.00784	4.8445	4.9297
13	CCB	.00162	.00014	.00028	.00110

*JK*  
12-31-98

# LABCORE Completed Worklist Report for Worklist# 27509

Analyst: krm

Instrument: CARB2

Book#: \_\_\_\_\_

Method: LA-342-100 Rev/Mod \_\_\_\_\_

Worklist Comment: U107, @TICTOC1, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 BLNK	0	@TICTOC1 TIC-02	SOLID	1	5.60E+0	5.600	ug/g
1 BLNK	0	@TICTOC1 TOC-02	SOLID	1	8.00E-1	0.800	ug/g
2 STD	0	@TICTOC1 TIC-02	SOLID	6.02E+02	5.96E+2	99.003	% Recovery
2 STD	0	@TICTOC1 TOC-02	SOLID	3.00E+03	2.79E+3	93.000	% Recovery
3 SAMPLE	S98T002039 0	@TICTOC1 TIC-02	SOLID	N/A	1.95E+03	5.000	ug/g
3 SAMPLE	S98T002039 0	@TICTOC1 TOC-02	SOLID	N/A	1.59E+03	40.000	ug/g
4 DUP	S98T002039 0	@TICTOC1 TIC-02	SOLID	1.95E+3	2.14E+3	9.291	RPD
4 DUP	S98T002039 0	@TICTOC1 TOC-02	SOLID	1.59E+3	8.76E+2	57.908	RPD
5 SPK	S98T002039 0	@TICTOC1 TIC-02	SOLID	1.00E+02	0.00E+00	0.000	% Recovery
5 SPK	S98T002039 0	@TICTOC1 TOC-02	SOLID	1.00E+02	1.09E+02	109.000	% Recovery
6 SAMPLE	S98T002528 0	@TICTOC1 TIC-02	SOLID	N/A	3.39E+03	5.000	ug/g
6 SAMPLE	S98T002528 0	@TICTOC1 TOC-02	SOLID	N/A	2.34E+03	40.000	ug/g
7 DUP	S98T002528 0	@TICTOC1 TIC-02	SOLID	3.39E+3	4.01E+3	16.757	RPD
7 DUP	S98T002528 0	@TICTOC1 TOC-02	SOLID	2.34E+3	2.74E+3	15.748	RPD
8 SPK	S98T002528 0	@TICTOC1 TIC-02	SOLID	1.00E+02	2.29E+02	229.000	% Recovery
8 SPK	S98T002528 0	@TICTOC1 TOC-02	SOLID	1.00E+02	1.73E+02	173.000	% Recovery

Final page for worklist# 27509

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*C.J. Oprien* 12/21/98  
Analyst Signature Date

*[Signature]* 12/31/98  
Reviewer Signature Date

Sample S98T002039 will  
Be rerun Due to Dup  
Failure. n/c

# LABCORE Data Entry Template for Worklist# 27509

Analyst: KRM Instrument: CARB2 \_\_\_\_\_ Book# 25N170  
26N12F

Method: LA-342-100 Rev/Mod F-1

Worklist Comment: U107, @TICTOC1, idm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	BLNK		@TICTOC1	SOLID		
2	STD		@TICTOC1	SOLID		
3	SAMPLE	S98T002039 0	@TICTOC1	SOLID	98000358	U-107 (2)
		Analytes Requested: TIC-02 , TOC-02				
4	DUP	S98T002039 0	@TICTOC1	SOLID		
5	SPK	S98T002039 0	@TICTOC1	SOLID		
6	SAMPLE	S98T002528 0	@TICTOC1	SOLID	98000401	U-107 (2)
		Analytes Requested: TIC-02 , TOC-02				
7	DUP	S98T002528 0	@TICTOC1	SOLID		
8	SPK	S98T002528 0	@TICTOC1	SOLID		

### Final page for worklist # 27509

[Signature]  
Analyst Signature      Date 12-15-98

[Signature]  
Analyst Signature      Date 12/21/98

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT

TICTOC REV 2.0

<<< BLANK ANALYSIS >>>

Sample: BASE

Date: 12/15/98

Time: 22:39:33

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # = BASE  
 Blank Value = N/A

Analyst : KR MONTEITH  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

== Reading	==== Analysis	Time	==== Coulometer	==== % Difference ==
1	0.08		0.00	0.00
2	0.51		0.30	100.00
3	1.01		1.00	70.00
4	1.51		1.20	16.67
5	2.00		1.90	36.84
6	2.50		2.40	20.83
7	3.00		2.90	17.24
8	3.50		3.50	17.14
9	4.00		4.10	14.63
10	4.50		4.60	10.87
11	5.00		5.00	8.00
12	5.50		5.30	5.66
13	6.00		5.90	10.17
14	6.50		6.20	4.84
15	7.00		6.70	7.46
16	7.50		7.20	6.94
17	8.00		7.50	4.00
18	8.50		8.10	7.41
19	9.00		8.50	4.71
20	9.50		9.40	9.57
21	10.00		9.40	0.00
22	10.50		9.80	4.08

BLANK VALUE = 9.8 micrograms carbon

BLANK FACTOR = 9.8 / 10.49805 =

+9.3E-01 ug/min Carbon

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 Completely VERIFIED THE CALIBRATION ANALYSIS ON PAGES 1370 TO 1387.

Sample Run By:



12-15-98

KR MONTEITH

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
 TICTOC REV 2.0  
 <<< BLANK ANALYSIS >>>

Sample: BASE

Date: 12/15/98

Time: 23:21:56

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # = BASE  
 Blank Value = N/A

Analyst : KR MONTEITH  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	0.60	100.00
3	1.01	1.10	45.45
4	1.51	4.20	73.81
5	2.00	7.00	40.00
6	2.50	9.70	27.84
7	3.00	11.50	15.65
8	3.50	12.80	10.16
9	4.00	13.30	3.76
10	4.50	14.50	8.28
11	5.00	15.00	3.33
12	5.50	15.90	5.66
13	6.00	16.30	2.45
14	6.50	17.30	5.78
15	7.00	17.70	2.26
16	7.50	18.20	2.75
17	8.00	18.80	3.19
18	8.50	19.30	2.59
19	9.00	19.80	2.53
20	9.50	20.70	4.35
21	10.00	21.10	1.90
22	10.50	21.50	1.86

BLANK VALUE = 21.5 micrograms carbon  
 BLANK FACTOR = 21.5 / 10.49817 = +2.05E+00 ug/min Carbon

<<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!>>>>

Sample Run By:

\_\_\_\_\_  
 KR MONTEITH

00000

HNF-1661 REV. 0

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: STD

Date: 12/15/98

Time: 23:33:55

Sample Size = 1000 uL

Analyst : KR MONTEITH

Dil Factor = 1

Min Readings = 22

Blank ID # =

Max Readings = 22

Blank Value = .93 ug/minute C

% Difference = 10

== Reading	==== Analysis Time	==== Coulometer	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	0.50	100.00
3	1.01	1.10	54.55
4	1.51	37.00	97.03
5	2.00	172.20	78.51
6	2.50	334.80	48.57
7	3.00	461.80	27.50
8	3.50	536.10	13.86
9	4.00	572.00	6.28
10	4.50	588.30	2.77
11	5.00	594.70	1.08
12	5.50	597.60	0.49
13	6.00	599.10	0.25
14	6.50	600.20	0.18
15	7.00	600.70	0.08
16	7.50	601.90	0.20
17	8.00	602.30	0.07
18	8.50	603.20	0.15
19	9.00	603.70	0.08
20	9.50	604.50	0.13
21	10.00	605.10	0.10
22	10.50	605.50	0.07

USER INPUT BLANK VALUE

BLANK VALUE = 9.763297 micrograms carbon

BLANK FACTOR = 9.763297 / 10.49817 = +9.3E-01 ug/min Carbon

SAMPLE RESULTS:

( 605.5 - 9.763297 ) (1)/(1000) = +5.957E-01 g/L Carbon  
 ( 605.5 - 9.763297 ) (1)/(1000) (12) = +4.964E-02 Molar Carbon

Sample Run By:

KR MONTEITH

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: STD

Date: 12/15/98

Time: 23:45:28

Sample Size = 200 uL

Dil Factor = 1

Blank ID # =

Blank Value = 2.05 ug/minute C

Analyst : KR MONTEITH

Min Readings = 22

Max Readings = 22

% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.50	1.00	100.00
3	1.01	1.70	41.18
4	1.50	58.90	97.11
5	2.00	231.20	74.52
6	2.50	404.60	42.86
7	3.00	501.60	19.34
8	3.50	542.80	7.59
9	4.00	558.80	2.86
10	4.50	565.50	1.18
11	5.00	568.10	0.46
12	5.50	570.60	0.44
13	6.00	571.90	0.23
14	6.50	572.80	0.16
15	7.00	574.30	0.26
16	7.50	574.90	0.10
17	8.00	576.20	0.23
18	8.50	576.60	0.07
19	9.00	577.60	0.17
20	9.50	578.50	0.16
21	10.00	579.30	0.14
22	10.50	579.90	0.10

## USER INPUT BLANK VALUE

BLANK VALUE = 21.52125 micrograms carbon

BLANK FACTOR = 21.52125 / 10.49817 = +2.0E+00 ug/min Carbon

## SAMPLE RESULTS:

( 579.9 - 21.52275 ) (1)/(200) = +2.792E+00 g/L Carbon  
 ( 579.9 - 21.52275 ) (1)/(200) (12) = +2.327E-01 Molar Carbon

&lt;&lt;&lt;&lt; WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!!!&gt;&gt;&gt;&gt;

Sample Run By:

KR MONTEITH

00000



TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: BLK

Date: 12/15/98

Time: 23:57:14

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # =  
 Blank Value = .93 ug/minute C

Analyst : KR MONTEITH  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.54	0.60	100.00
3	1.04	1.60	62.50
4	1.54	4.40	63.64
5	2.04	6.10	27.87
6	2.54	7.40	17.57
7	3.04	7.90	6.33
8	3.54	8.50	7.06
9	4.04	9.00	5.56
10	4.54	9.30	3.23
11	5.04	10.00	7.00
12	5.54	10.70	6.54
13	6.04	11.10	3.60
14	6.54	11.50	3.48
15	7.04	12.20	5.74
16	7.54	12.80	4.69
17	8.04	13.00	1.54
18	8.54	13.50	3.70
19	9.03	14.00	3.57
20	9.53	14.50	3.45
21	10.03	15.00	3.33
22	10.53	15.40	2.60

## USER INPUT BLANK VALUE

BLANK VALUE = 9.763297 micrograms carbon

BLANK FACTOR = 9.763297 / 10.49817 = +9.3E-01 ug/min Carbon

## SAMPLE RESULTS:

( 15.4 - 9.796447 ) (1)/(1) = +5.60E+00 g/L Carbon  
 ( 15.4 - 9.796447 ) (1)/(1)(12) = +4.67E-01 Molar Carbon

Sample Run By:

KR MONTEITH

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: BLK

Date: 12/16/98

Time: 00:08:38

Sample Size = 1 uL

Analyst : KR MONTEITH

Dil Factor = 1

Min Readings = 22

Blank ID # =

Max Readings = 22

Blank Value = 2.05 ug/minute C

% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	0.80	100.00
3	1.01	1.10	27.27
4	1.51	3.60	69.44
5	2.00	6.10	40.98
6	%-1437.50	9.00	32.22
7	%-1437.00	10.70	15.89
8	%-1436.50	12.30	13.01
9	%-1436.00	13.70	10.22
10	%-1435.50	14.10	2.84
11	%-1435.00	15.10	6.62
12	%-1434.50	15.80	4.43
13	%-1434.00	16.10	1.86
14	%-1433.50	16.60	3.01
15	%-1433.00	17.20	3.49
16	%-1432.50	17.80	3.37
17	%-1432.00	18.10	1.66
18	%-1431.50	18.70	3.21
19	%-1431.00	19.30	3.11
20	%-1430.50	19.60	1.53
21	%-1430.00	20.00	2.00
22	%-1429.50	20.70	3.38

USER INPUT BLANK VALUE

BLANK VALUE = 21.52125 micrograms carbon

BLANK FACTOR = 21.52125 / 10.49817 = +2.0E+00 ug/min Carbon

SAMPLE RESULTS:

( 20.7 --2930.477 ) (1)/(1) = +2.95E+03 g/L Carbon  
 ( 20.7 --2930.477 ) (1)/(1) (12) = +2.46E+02 Molar Carbon  
 <<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!!!>>>>

Sample Run By:

KR MONTEITH

00000



TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T2528

Date: 12/16/98

Time: 01:35:53

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # =  
 Blank Value = .93 ug/minute C

Analyst : KR MONTEITH  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	1.70	100.00
3	1.01	3.10	45.16
4	1.50	21.50	85.58
5	2.04	196.10	89.04
6	2.54	510.30	61.57
7	3.04	784.00	34.91
8	3.54	955.60	17.96
9	4.04	1049.70	8.96
10	4.54	1100.50	4.62
11	5.04	1129.80	2.59
12	5.54	1144.20	1.26
13	6.04	1151.70	0.65
14	6.54	1156.40	0.41
15	7.04	1159.90	0.30
16	7.53	1162.30	0.21
17	8.03	1164.10	0.15
18	8.53	1165.80	0.15
19	9.03	1167.80	0.17
20	9.53	1169.00	0.10
21	10.03	1170.10	0.09
22	10.53	1171.50	0.12

## USER INPUT BLANK VALUE

BLANK VALUE = 9.763297 micrograms carbon

BLANK FACTOR = 9.763297 / 10.49817 = +9.3E-01 ug/min Carbon

## SAMPLE RESULTS:

( 1171.5 - 9.795694 ) (1) / (1) = +1.1617E+03 g/L Carbon  
 ( 1171.5 - 9.795694 ) (1) / (1) (12) = +9.6809E+01 Molar Carbon

Sample Run By:

KR MONTEITH

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
 TIC/TOC REV 2.0

Sample: S98T2528

Date: 12/16/98

Time: 01:48:05

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # =  
 Blank Value = 2.05 ug/minute C

Analyst : KR MONTEITH  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	1.10	100.00
3	1.01	4.90	77.55
4	1.50	87.20	94.38
5	2.00	282.50	69.13
6	2.50	526.40	46.33
7	3.00	668.00	21.20
8	3.50	732.90	8.86
9	4.00	767.10	4.46
10	4.50	785.20	2.31
11	5.00	794.80	1.21
12	5.50	800.90	0.76
13	6.00	805.40	0.56
14	6.50	809.10	0.46
15	7.00	812.30	0.39
16	7.50	814.80	0.31
17	8.00	816.80	0.24
18	8.50	818.50	0.21
19	9.00	820.50	0.24
20	9.50	821.80	0.16
21	10.00	823.20	0.17
22	10.50	824.50	0.16

## USER INPUT BLANK VALUE

BLANK VALUE = 21.52125 micrograms carbon

BLANK FACTOR = 21.52125 / 10.49817 = +2.0E+00 ug/min Carbon

## SAMPLE RESULTS:

( 824.5 - 21.525 ) (1)/(1) = +8.030E+02 g/L Carbon

( 824.5 - 21.525 ) (1)/(1) (12) = +6.691E+01 Molar Carbon

&lt;&lt;&lt;&lt; WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!!!&gt;&gt;&gt;&gt;

Sample Run By:

KR MONTEITH

00000

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T2528DUP

Date: 12/16/98

Time: 02:04:50

Sample Size = 1 uL

Analyst : KR MONTEITH

Dil Factor = 1

Min Readings = 22

Blank ID # =

Max Readings = 22

Blank Value = .93 ug/minute C

% Difference = 10

== Reading	==== Analysis Time	==== Coulometer	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	1.20	100.00
3	1.01	2.40	50.00
4	1.50	54.80	95.62
5	2.00	343.60	84.05
6	2.50	717.70	52.12
7	3.00	974.90	26.38
8	3.50	1127.30	13.52
9	4.00	1205.50	6.49
10	4.50	1248.80	3.47
11	5.00	1274.80	2.04
12	5.50	1288.90	1.09
13	6.00	1297.90	0.69
14	6.50	1302.90	0.38
15	7.00	1307.60	0.36
16	7.50	1310.90	0.25
17	8.00	1312.90	0.15
18	8.50	1315.40	0.19
19	9.00	1316.90	0.11
20	9.50	1318.60	0.13
21	10.00	1320.30	0.13
22	10.50	1321.70	0.11

## USER INPUT BLANK VALUE

BLANK VALUE = 9.763297 micrograms carbon

BLANK FACTOR = 9.763297 / 10.49817 = +9.3E-01 ug/min Carbon

## SAMPLE RESULTS:

( 1321.7 - 9.764078 ) (1)/(1) = +1.3119E+03 g/L Carbon

( 1321.7 - 9.764078 ) (1)/(1)(12) = +1.0933E+02 Molar Carbon

Sample Run By:

KR MONTEITH

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T2528DUP

Date: 12/16/98

Time: 02:16:18

Sample Size = 1 uL  
Dil Factor = 1  
Blank ID # =  
Blank Value = 2.05 ug/minute C

Analyst : KR MONTEITH  
Min Readings = 22  
Max Readings = 22  
% Difference = 10

== Reading	==== Analysis Time	==== Coulometer	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	1.20	100.00
3	1.01	2.80	57.14
4	1.50	61.10	95.42
5	2.00	235.10	74.01
6	2.50	496.00	52.60
7	3.00	698.60	29.00
8	3.50	792.20	11.82
9	4.00	839.50	5.63
10	4.50	867.20	3.19
11	5.00	882.40	1.72
12	5.50	891.20	0.99
13	6.00	896.60	0.60
14	6.50	901.00	0.49
15	7.00	904.20	0.35
16	7.50	907.00	0.31
17	8.00	909.60	0.29
18	8.50	911.30	0.19
19	9.00	913.70	0.26
20	9.50	915.10	0.15
21	10.00	916.90	0.20
22	10.50	918.00	0.12

## USER INPUT BLANK VALUE

BLANK VALUE = 21.52125 micrograms carbon

BLANK FACTOR = 21.52125 / 10.49817 = +2.0E+00 ug/min Carbon

## SAMPLE RESULTS:

( 918 - 21.52123 ) (1)/(1) = +8.965E+02 g/L Carbon  
 ( 918 - 21.52123 ) (1)/(1) (12) = +7.471E+01 Molar Carbon  
 <<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!!!>>>>

Sample Run By:

KR MONTEITH

00000





TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
 TICTOC REV 2.0

Sample: S98T2528SPK

Date: 12/16/98

Time: 02:40:07

Sample Size = 1 uL

Analyst : KR MONTEITH

Dil Factor = 1

Min Readings = 22

Blank ID # =

Max Readings = 22

Blank Value = 2.05 ug/minute C

% Difference = 10

== Reading	==== Analysis Time	==== Coulometer	==== % Difference
1	0.08	0.00	0.00
2	0.51	1.50	100.00
3	1.01	4.00	62.50
4	1.51	83.90	95.23
5	2.00	301.70	72.19
6	2.51	647.30	53.39
7	3.00	1024.30	36.81
8	3.50	1236.30	17.15
9	4.00	1328.90	6.97
10	4.50	1379.00	3.63
11	5.00	1408.60	2.10
12	5.50	1425.00	1.15
13	6.00	1435.10	0.70
14	6.50	1441.90	0.47
15	7.00	1447.20	0.37
16	7.50	1451.70	0.31
17	8.00	1454.90	0.22
18	8.50	1458.20	0.23
19	9.00	1461.20	0.21
20	9.50	1463.80	0.18
21	10.00	1465.50	0.12
22	10.50	1468.00	0.17

## USER INPUT BLANK VALUE

BLANK VALUE = 21.52125 micrograms carbon

BLANK FACTOR = 21.52125 / 10.49817 = +2.0E+00 ug/min Carbon

## SAMPLE RESULTS:

( 1468 - 21.52297 ) (1)/(1) = +1.4465E+03 g/L Carbon

( 1468 - 21.52297 ) (1)/(1) (12) = +1.2054E+02 Molar Carbon

&lt;&lt;&lt;&lt; WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!&gt;&gt;&gt;&gt;

Sample Run By:

KR MONTEITH

00000

HNF-1661  
rev 0

WORKBOOK PAGE: BLANK1

TIC/TOC : LA-342-100 (F-1)

SOLIDS

		TIC	TOC
Type	Sample Size in g (SS)	0.1815	0.1815
BLNK	Dilution Factor (DF)	1	1
Work List	ug of Carbon in Sample (C1)	15.4	20.7
27509	ug of Carbon from Baseline (C2)	9.8	21.5
Test Code			
@TICTOC1			
Matrix			
SOLID			
Batch Number			
98006117			
Rerun	ug of Carbon =  C1-C2		
0			
Sample Prep			
N/A			
Sample #			
BLNK			
Instrument Code			
CARB2			
Prepared By			
CJO			
Chemist			
MJL			
Analyst			
KRM			
Date Complete			
12/21/98			
Analysis Date			
12/15/98			
Analysis Time	Method Detection Limit in ug/g	TIC	TOC
10:40 PM		5	40
Sample Point	ug of Carbon	5.60E+00	8.00E-01
U-107			

Data Entered By:	CJO	Date:	12/21/98
Signature of Chemist:	<i>N/A</i>	Date:	

BLANK.WB1 REV 1.0

342100ML

1383

HNF-1661  
rev 0

WORKBOOK PAGE: STD2

TIC/TOC : LA-342-100 (F-1)

LIQUIDS

		TIC	TOC
Type	Sample Size in mL (SS)	1.0000	0.2000
STD	Dilution Factor (DF)	1	1
Work List 27509	Final Coulometer Reading in µg (C1)	605.5	579.9
	µg of Carbon from Baseline (C2)	9.8	21.5
Test Code	Standard Book Number	25N12D	26N12F
@TIC/TOC1	Standard Value (µg/ml)	602	3000

Matrix	
LIQUID	
Batch Number	
98006117	
Rerun	
0	
Sample Prep	
N/A	
Sample #	
STD	
Instrument Code	
CARB2	
Prepared By	
CJO	
Chemist	
MJL	
Analyst	
KRM	
Date Complete	
12/21/98	
Analysis Date	
12/15/98	
Analysis Time	
10:40 PM	
Sample Point	
U-107	

QC Actual in µg/mL = Standard Value (µg/mL)

QC Found in µg/mL = (C1 - C2) \* DF / SS

QC Found in µg/mL for TIC = 5 if C1 < C2

QC Found in µg/mL for TOC = 40 if C1 < C2

% Recovery = QC Found / QC Actual \* 100

	TIC	TOC
Method Detection Limit in µg/mL	5	40
QC Actual in µg/mL	6.02E+02	3.00E+03
QC Found in µg/mL	5.96E+02	2.79E+03
Percent Standard Recovery	99.0	93.1

Data Entered By:	CJO	Date:	12/21/98
Signature of Chemist:	<i>NA</i>	Date:	

STANDARD.WB1 REV 1.0

342100ML

1384

HNF-1661  
rev φ

WORKBOOK PAGE: SAM6

TIC/TOC : LA-342-100 (F-1)

SOLIDS

		TIC	TOC
Type	Sample Size in g (SS)	0.3425	0.3425
SAMPLE	Dilution Factor (DF)	1	1
Work List	µg of Carbon in Sample (C1)	1171.5	824.5
27509	µg of Carbon from Baseline (C2)	9.8	21.5
Test Code			
@TICTOC1			
Matrix			
SOLID			
Batch Number			
98006117			
Rerun			
0			
Sample Prep			
N/A			
Sample #			
S98T002528			
Instrument Code			
CARB2			
Prepared By			
CJO			
Chemist			
MJL			
Analyst			
KRM			
Date Complete			
12/21/98			
Analysis Date			
12/15/98			
Analysis Time	Method Detection Limit in ug/g	TIC	TOC
10:40 PM		5	40
Sample Point	µg of Carbon/g	3.39E+03	2.34E+03
U-107			

µg of Carbon/g = (C1-C2) \* DF / SS  
 µg of Carbon/g for TIC = 5 if C1 < C2  
 µg of Carbon/g for TOC = 40 if C1 < C2

Data Entered By:	CJO	Date:	12/21/98
Signature of Chemist:	<i>NA</i>	Date:	

HNF-1661  
rev 0

WORKBOOK PAGE: DUP7

TIC/TOC : LA-342-100 (F-1)

SOLIDS

		TIC	TOC
Type	Sample Size in g (SS)	0.3269	0.3269
DUP	Dilution Factor (DF)	1	1
Work List	µg of Carbon in Sample (C1)	1321.7	918
27509	µg of Carbon from Baseline (C2)	9.8	21.5
Test Code	Known µg of C from Original Sample	3.39E+3	2.34E+3
@TICTOC1			
Matrix			
SOLID			
Batch Number			
98006117			
Rerun			
0			
Sample Prep			
N/A			
Sample #			
S98T002528			
Instrument Code			
CARB2			
Prepared By			
CJO			
Chemist			
MJL			
Analyst			
KRM			
Date Complete			
12/21/98			
Analysis Date			
12/15/98			
Analysis Time	Method Detection Limit in ug/g	5	40
10:40 PM			
Sample Point	µg of Carbon/g	4.01E+03	2.74E+03
U-107			

µg of Carbon/g = (C1-C2) \* DF / SS  
 µg of Carbon/g for TIC = 5 if C1 < C2  
 µg of Carbon/g for TOC = 40 if C1 < C2

Data Entered By:	CJO	Date:	12/21/98
Signature of Chemist:	<i>NA</i>	Date:	

HNF-1661  
NWO

WORKBOOK PAGE: SPIKE8

TIC/TOC : LA-342-100 (F-1)

SOLIDS

Type	Sample Vial Data	TIC	TOC
SPK	Sample Size in g (SS)	0.3425	0.3425
Work List	Final Coulometer Reading in µg (C1)	1171.5	824.5
27509	Spiked Vial Data		
Test Code	Sample Size in g (SPK SS)	0.3960	0.3960
@TIC/TOC1	Amount of Spike Std. in mL (SPK VOL)	0.500	0.100
Matrix	Final Coulometer Reading in µg (C2)	2042.9	1468
SOLID	Spike Book Number	25N12D	26N12F
Batch Number	Spike Standard Value in µg/mL (SPK CONC)	602	3000
98006117	µg C in baseline (BL)	9.8	21.5
Rerun			
0			
Sample Prep			
N/A			
Sample #	Percent Spike Recovery = ((C2-BL) - (C1-BL)) * (SPK SS) / SS / ((SPK CONC) * (SPK VOL)) * 100		
S98T002528			
Instrument Code	QC Actual in µg/mL = Spike Value (µg/mL)		
CARB2	QC Found in µg/mL = (Percent Spike Recovery) * (QC Actual) / 100		
Prepared By			
CJO			
Chemist			
MJL			
Analyst			
KRM			
Date Complete			
12/21/98			
Analysis Date			
12/15/98			
Analysis Time		TIC	TOC
10:40 PM	QC Actual in µg/mL	6.02E+02	3.00E+03
Sample Point	QC Found in µg/mL	1.38E+03	5.18E+03
U-107	Percent Spike Recovery	229.2	172.7

Data Entered By:	CJO	Date:	12/21/98
Signature of Chemist:	<i>MJA</i>	Date:	

SPIKE.WB1 REV 1.3

342100ML

1387

# LABCORE Completed Worklist Report for Worklist# 27510

Analyst: krm Instrument: CARB2 Book#: \_\_\_\_\_

Method: LA-342-100 Rev/Mod \_\_\_\_\_

Worklist Comment: U107, @TICTOC1, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 BLNK	0	@TICTOC1 TIC-02	SOLID	1	5.60E+0	5.600	ug/g
1 BLNK	0	@TICTOC1 TOC-02	SOLID	1	1.70E+0	1.700	ug/g
2 STD	0	@TICTOC1 TIC-02	SOLID	6.02E+02	5.93E+2	98.505 %	Recovery
2 STD	0	@TICTOC1 TOC-02	SOLID	3.00E+03	2.83E+3	94.333 %	Recovery
3 SAMPLE	S98T002565 0	@TICTOC1 TIC-02	SOLID	N/A	5.27E+02	5.000	ug/g
3 SAMPLE	S98T002565 0	@TICTOC1 TOC-02	SOLID	N/A	1.17E+03	40.000	ug/g
4 DUP	S98T002565 0	@TICTOC1 TIC-02	SOLID	5.27E+2	5.28E+2	0.190	RPD
4 DUP	S98T002565 0	@TICTOC1 TOC-02	SOLID	1.17E+3	1.15E+3	1.724	RPD
5 SAMPLE	S98T002570 0	@TICTOC1 TIC-02	SOLID	N/A	7.24E+02	5.000	ug/g
5 SAMPLE	S98T002570 0	@TICTOC1 TOC-02	SOLID	N/A	4.01E+02	40.000	ug/g
6 DUP	S98T002570 0	@TICTOC1 TIC-02	SOLID	7.24E+2	5.19E+2	32.985	RPD
6 DUP	S98T002570 0	@TICTOC1 TOC-02	SOLID	4.01E+2	3.17E+2	23.398	RPD
7 SPK	S98T002570 0	@TICTOC1 TIC-02	SOLID	1.00E+02	8.29E+01	82.900 %	Recovery
7 SPK	S98T002570 0	@TICTOC1 TOC-02	SOLID	1.00E+02	8.31E+01	83.100 %	Recovery

## Final page for worklist# 27510

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Analyst Signature *[Signature]* Date *12-14-98*

Reviewer Signature *[Signature]* Date *12/15/98*

*598T002570  
ML 12/15/98  
Sample will be Rerun  
Due to Dup Failure. WJK*

# LABCORE Data Entry Template for Worklist# 27510


Analyst: KRM Instrument: CARB2 Book# 25N120  
26N12F

Method: LA-342-100 Rev/Mod F1

Worklist Comment: U107, @TICTOC1, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1 BLNK			@TICTOC1	SOLID		
2 STD			@TICTOC1	SOLID		
3 SAMPLE	S98T002565 0		@TICTOC1	SOLID	98000401	U-107 (2)
	Analytes Requested: TIC-02 , TOC-02					
4 DUP	S98T002565 0		@TICTOC1	SOLID		
5 SAMPLE	S98T002570 0		@TICTOC1	SOLID	98000401	U-107 (2)
	Analytes Requested: TIC-02 , TOC-02					
6 DUP	S98T002570 0		@TICTOC1	SOLID		
7 SPK	S98T002570 0		@TICTOC1	SOLID		

### Final page for worklist # 27510

 12-13-98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
 TIC/TOC REV 2.0  
 <<< BLANK ANALYSIS >>>

Sample: BASE2

Date: 12/13/98

Time: 06:48:15

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # = BASE2  
 Blank Value = N/A

Analyst : KR MONTEITH  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

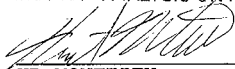
== Reading ==	==== Analysis Time =====	Coulometer =====	% Difference ==
1	0.08	0.00	0.00
2	0.51	0.50	100.00
3	1.01	1.10	54.55
4	1.51	1.70	35.29
5	2.00	2.30	26.09
6	2.50	3.10	25.81
7	3.00	3.40	8.82
8	3.50	4.00	15.00
9	4.00	4.50	11.11
10	4.50	5.00	10.00
11	5.00	5.50	9.09
12	5.50	6.10	9.84
13	6.00	6.60	7.58
14	6.50	6.90	4.35
15	7.00	7.40	6.76
16	7.50	7.90	6.33
17	8.00	8.40	5.95
18	8.50	9.00	6.67
19	9.00	9.40	4.26
20	9.50	9.80	4.08
21	10.00	10.40	5.77
22	10.50	10.90	4.59

BLANK VALUE = 10.9 micrograms carbon

BLANK FACTOR = 10.9 / 10.49902 =

+1.04E+00 ug/min Carbon

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1390 TO 1403

Sample Run By: 

KR MONTEITH

12-13-98

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT

TICTOC REV 2.0

<<< BLANK ANALYSIS >>>

Sample: BASE2

Date: 12/13/98

Time: 07:26:25

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # = BASE2  
 Blank Value = N/A

Analyst : KR MONTEITH  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

Reading	Analysis Time	Coulometer	% Difference
1	0.08	0.00	0.00
2	0.51	0.50	100.00
3	1.01	3.10	83.87
4	1.50	8.80	64.77
5	2.00	12.80	31.25
6	2.50	15.80	18.99
7	3.00	17.50	9.71
8	3.50	18.80	6.91
9	4.00	19.90	5.53
10	4.50	20.70	3.86
11	5.00	21.80	5.05
12	5.50	22.70	3.96
13	6.00	23.60	3.81
14	6.50	24.20	2.48
15	7.00	24.80	2.42
16	7.50	25.40	2.36
17	8.00	26.10	2.68
18	8.50	26.70	2.25
19	9.00	27.40	2.55
20	9.50	27.80	1.44
21	10.00	28.40	2.11
22	10.50	29.00	2.07

BLANK VALUE = 29 micrograms carbon

BLANK FACTOR = 29 / 10.49796 = +2.76E+00 ug/min Carbon

<<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!>>>>

Sample Run By:

KR MONTEITH

00000

TIC

~~DOC~~ - TOTAL ORGANIC CARBON ANALYSIS REPORT  
 TIC/DOC REV 2.0

Sample: STD2

Date: 12/13/98

Time: 07:40:35

Sample Size = 1000 uL

Analyst : KR MONTEITH

Dil Factor = 1

Min Readings = 22

Blank ID # =

Max Readings = 22

Blank Value = 1.04 ug/minute C

% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	0.60	100.00
3	1.01	4.30	86.05
4	1.51	97.80	95.60
5	2.01	275.80	64.54
6	2.50	426.80	35.38
7	3.00	519.60	17.86
8	3.50	564.90	8.02
9	4.00	584.30	3.32
10	4.50	591.80	1.27
11	5.00	595.10	0.55
12	5.50	596.90	0.30
13	6.00	597.90	0.17
14	6.50	598.80	0.15
15	7.04	599.60	0.13
16	7.53	600.50	0.15
17	8.03	601.00	0.08
18	8.53	601.70	0.12
19	9.03	602.30	0.10
20	9.53	602.90	0.10
21	10.03	603.60	0.12
22	10.53	604.20	0.10

## USER INPUT BLANK VALUE

BLANK VALUE = 10.91787 micrograms carbon

BLANK FACTOR = 10.91787 / 10.49796 = +1.0E+00 ug/min Carbon

## SAMPLE RESULTS:

( 604.2 - 10.95326 ) (1)/(1000) = +5.932E-01 g/L Carbon  
 ( 604.2 - 10.95326 ) (1)/(1000) (12) = +4.944E-02 Molar Carbon

Sample Run By:

KR MONTEITH

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: STD2

Date: 12/13/98

Time: 07:53:11

Sample Size = 200 uL  
Dil Factor = 1  
Blank ID # =  
Blank Value = 2.76 ug/minute C

Analyst : KR MONTEITH  
Min Readings = 22  
Max Readings = 22  
% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	0.60	100.00
3	1.01	6.80	91.18
4	1.50	127.40	94.66
5	2.00	338.40	62.35
6	2.50	488.90	30.78
7	3.00	550.00	11.11
8	3.50	570.50	3.59
9	4.00	578.30	1.35
10	4.50	581.90	0.62
11	5.00	583.70	0.31
12	5.50	585.30	0.27
13	6.00	586.60	0.22
14	6.50	587.90	0.22
15	7.00	589.10	0.20
16	7.50	590.20	0.19
17	8.00	591.10	0.15
18	8.50	592.10	0.17
19	9.00	593.00	0.15
20	9.50	594.00	0.17
21	10.00	594.70	0.12
22	10.50	595.60	0.15

## USER INPUT BLANK VALUE

BLANK VALUE = 28.97436 micrograms carbon

BLANK FACTOR = 28.97436 / 10.49796 = +2.8E+00 ug/min Carbon

## SAMPLE RESULTS:

( 595.6 - 28.97453 ) (1)/(200) = +2.833E+00 g/L Carbon  
( 595.6 - 28.97453 ) (1)/(200) (12) = +2.361E-01 Molar Carbon

&lt;&lt;&lt;&lt; WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!!!&gt;&gt;&gt;&gt;

Sample Run By:

KR MONTEITH

00000

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: BLK2

Date: 12/13/98

Time: 08:06:34

Sample Size = 1 uL  
Dil Factor = 1  
Blank ID # =  
Blank Value = 1.04 ug/minute C

Analyst : KR MONTEITH  
Min Readings = 22  
Max Readings = 22  
% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	1.30	100.00
3	1.01	4.10	68.29
4	1.50	5.50	25.45
5	2.00	6.60	16.67
6	2.50	7.30	9.59
7	3.00	8.10	9.88
8	3.50	8.60	5.81
9	4.00	9.30	7.53
10	4.50	9.80	5.10
11	5.00	10.40	5.77
12	5.50	11.00	5.45
13	6.00	11.50	4.35
14	6.50	12.10	4.96
15	7.00	12.70	4.72
16	7.50	13.20	3.79
17	8.00	13.70	3.65
18	8.50	14.10	2.84
19	9.00	14.70	4.08
20	9.50	15.40	4.55
21	10.00	15.80	2.53
22	10.50	16.50	4.24

USER INPUT BLANK VALUE

BLANK VALUE = 10.91787 micrograms carbon

BLANK FACTOR = 10.91787 / 10.49796 = +1.0E+00 ug/min Carbon

SAMPLE RESULTS:

( 16.5 - 10.9179 ) (1)/(1) = +5.58E+00 g/L Carbon  
( 16.5 - 10.9179 ) (1)/(1) (12) = +4.65E-01 Molar Carbon

Sample Run By:

KR MONTEITH

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: BLK2

Date: 12/13/98

Time: 08:18:38

Sample Size = 1 uL  
Dil Factor = 1  
Blank ID # =  
Blank Value = 2.76 ug/minute C

Analyst : KR MONTEITH  
Min Readings = 22  
Max Readings = 22  
% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	0.50	100.00
3	1.00	3.90	87.18
4	1.50	8.00	51.25
5	2.00	11.20	28.57
6	2.50	13.20	15.15
7	3.00	14.50	8.97
8	3.50	15.40	5.84
9	4.00	16.20	4.94
10	4.50	17.00	4.71
11	5.00	17.80	4.49
12	5.50	19.00	6.32
13	6.00	20.70	8.21
14	6.50	21.70	4.61
15	7.00	22.70	4.41
16	7.50	23.10	1.73
17	8.00	23.70	2.53
18	8.50	24.40	2.87
19	9.00	25.10	2.79
20	9.50	26.00	3.46
21	10.00	26.70	2.62
22	10.50	27.30	2.20

## USER INPUT BLANK VALUE

BLANK VALUE = 28.97436 micrograms carbon

BLANK FACTOR = 28.97436 / 10.49796 = +2.8E+00 ug/min Carbon

## SAMPLE RESULTS:

( 27.3 - 28.97495 ) (1)/(1) = &lt; 5.00 E-3 g/L Carbon

( 27.3 - 28.97495 ) (1)/(1) (12) = &lt; 4.17 E-4 Molar Carbon

&lt;&lt;&lt;&lt; WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!!!&gt;&gt;&gt;&gt;

Sample Run By:

KR MONTEITH

00000

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T2565-2

Date: 12/13/98

Time: 08:32:41

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # =  
 Blank Value = 1.04 ug/minute C

Analyst : KR MONTEITH  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	1.40	100.00
3	1.00	3.20	56.25
4	1.50	14.50	77.93
5	2.00	39.30	63.10
6	2.50	65.20	39.72
7	3.00	84.40	22.75
8	3.50	97.20	13.17
9	4.00	104.30	6.81
10	4.50	108.70	4.05
11	5.00	111.10	2.16
12	5.50	112.80	1.51
13	6.00	114.20	1.23
14	6.50	115.20	0.87
15	7.00	116.20	0.86
16	7.50	117.20	0.85
17	8.00	118.00	0.68
18	8.50	118.80	0.67
19	9.00	119.50	0.59
20	9.50	120.20	0.58
21	10.00	121.00	0.66
22	10.50	121.70	0.58

## USER INPUT BLANK VALUE

BLANK VALUE = 10.91787 micrograms carbon

BLANK FACTOR = 10.91787 / 10.49796 = +1.0E+00 ug/min Carbon

## SAMPLE RESULTS:

( 121.7 - 10.91892 ) (1)/(1) = +1.108E+02 g/L Carbon  
 ( 121.7 - 10.91892 ) (1)/(1) (12) = +9.232E+00 Molar Carbon

Sample Run By:

KR MONTEITH

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T2565-2

Date: 12/13/98

Time: 08:44:12

Sample Size = 1 uL  
Dil Factor = 1  
Blank ID # =  
Blank Value = 2.76 ug/minute C

Analyst : KR MONTEITH  
Min Readings = 22  
Max Readings = 22  
% Difference = 10

== Reading	==== Analysis Time	==== Coulometer	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	0.90	100.00
3	1.01	5.00	82.00
4	1.50	60.30	91.71
5	2.00	134.00	55.00
6	2.50	191.00	29.84
7	3.00	218.70	12.67
8	3.50	232.40	5.90
9	4.00	240.90	3.53
10	4.50	246.90	2.43
11	5.00	251.80	1.95
12	5.50	255.70	1.53
13	6.00	259.20	1.35
14	6.50	262.30	1.18
15	7.00	264.80	0.94
16	7.50	266.80	0.75
17	8.00	268.80	0.74
18	8.50	270.40	0.59
19	9.00	272.00	0.59
20	9.50	273.20	0.44
21	10.00	274.40	0.44
22	10.50	275.50	0.40

## USER INPUT BLANK VALUE

BLANK VALUE = 28.97436 micrograms carbon

BLANK FACTOR = 28.97436 / 10.49796 = +2.8E+00 ug/min Carbon

## SAMPLE RESULTS:

( 275.5 - 28.97444 ) (1)/(1) = +2.465E+02 g/L Carbon  
( 275.5 - 28.97444 ) (1)/(1) (12) = +2.054E+01 Molar Carbon

&lt;&lt;&lt;&lt; WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!&gt;&gt;&gt;&gt;

Sample Run By:

KR MONTEITH

00000



TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T2565DUP-2

Date: 12/13/98

Time: 09:11:07

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # =  
 Blank Value = 1.04 ug/minute C

Analyst : KR MONTEITH  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	0.50	100.00
3	1.01	1.60	68.75
4	1.50	14.60	89.04
5	2.00	52.50	72.19
6	2.50	94.90	44.68
7	3.00	129.10	26.49
8	3.50	153.30	15.79
9	4.00	167.70	8.59
10	4.50	175.40	4.39
11	5.00	180.10	2.61
12	5.50	182.80	1.48
13	6.00	184.60	0.98
14	6.50	186.10	0.81
15	7.00	187.20	0.59
16	7.50	188.20	0.53
17	8.00	189.30	0.58
18	8.50	190.00	0.37
19	9.00	190.90	0.47
20	9.50	191.50	0.31
21	10.00	192.30	0.42
22	10.50	193.00	0.36

## USER INPUT BLANK VALUE

BLANK VALUE = 10.91787 micrograms carbon

BLANK FACTOR = 10.91787 / 10.49796 = +1.0E+00 ug/min Carbon

## SAMPLE RESULTS:

( 193 - 10.91898 ) (1)/(1) =

+1.821E+02 g/L Carbon

( 193 - 10.91898 ) (1)/(1) (12) =

+1.517E+01 Molar Carbon

Sample Run By:

KR MONTEITH

00000



WORKBOOK PAGE: BLANK1

TIC/TOC : LA-342-100 (F-1)

SOLIDS

		TIC	TOC
Type	Sample Size in g (SS)	0.0000	0.0000
	BLNK Dilution Factor (DF)	1	1
Work List	ug of Carbon in Sample (C1)	16.5	27.3
	27510 ug of Carbon from Baseline (C2)	10.9	29
Test Code	ug of Carbon =  C1-C2		
@TICTOC1			
Matrix			
SOLID			
Batch Number			
98006118			
Rerun			
0			
Sample Prep			
N/A			
Sample #			
BLK			
Instrument Code			
CARB2			
Prepared By			
JRO			
Chemist			
MJL			
Analyst			
KRM			
Date Complete			
12/14/98			
Analysis Date			
12/13/98			
Analysis Time	Method Detection Limit in ug/g	TIC	TOC
		5	40
	07:40 AM		
Sample Point	ug of Carbon	5.60E+00	1.70E+00
	U107		

Data Entered By:	JRO	Date:	12/14/98
Signature of Chemist:	<i>N/A</i>	Date:	

BLANK.WB1 REV 1.0

342100ML

1400

WORKBOOK PAGE: STD2

TIC/TOC : LA-342-100 (F-1)

LIQUIDS

		TIC	TOC
Type	Sample Size in mL (SS)	1.0000	0.2000
STD	Dilution Factor (DF)	1	1
Work List	Final Coulometer Reading in µg (C1)	604.2	595.6
27510	µg of Carbon from Baseline (C2)	10.9	29
Test Code	Standard Book Number	25N12D	26N12F
@TIC/TOC1	Standard Value (µg/ml)	602	3000

Matrix	
LIQUID	
Batch Number	
98006118	
Rerun	
0	
Sample Prep	
N/A	
Sample #	
Instrument Code	
CARB2	
Prepared By	
JRO	
Chemist	
MJL	
Analyst	
KRM	
Date Complete	
12/14/98	
Analysis Date	
12/13/98	

QC Actual in µg/mL = Standard Value (µg/mL)

QC Found in µg/mL = (C1 - C2) \* DF / SS

QC Found in µg/mL for TIC = 5 if C1 < C2

QC Found in µg/mL for TOC = 40 if C1 < C2

% Recovery = QC Found / QC Actual \* 100

		TIC	TOC
Analysis Time	Method Detection Limit in µg/mL	5	40
07:40 AM	QC Actual in µg/mL	6.02E+02	3.00E+03
Sample Point	QC Found in µg/mL	5.93E+02	2.83E+03
U107	Percent Standard Recovery	98.6	94.4

Data Entered By:	JRO	Date:	12/14/98
Signature of Chemist:	<i>WA</i>	Date:	

WORKBOOK PAGE: SAM3

TIC/TOC : LA-342-100 (F-1)

SOLIDS

		TIC	TOC
Type	Sample Size in g (SS)	0.2104	0.2104
SAMPLE	Dilution Factor (DF)	1	1
Work List	µg of Carbon in Sample (C1)	121.7	275.5
27510	µg of Carbon from Baseline (C2)	10.9	29
Test Code			
@TICTOC1			

Matrix
SOLID
Batch Number
98006118
Rerun
0
Sample Prep
N/A
Sample #
S98T002565
Instrument Code
CARB2
Prepared By
JRO
Chemist
MJL
Analyst
KRM
Date Complete
12/14/98
Analysis Date
12/13/98
Analysis Time
07:40 AM
Sample Point
U107

µg of Carbon/g = (C1-C2) \* DF / SS  
 µg of Carbon/g for TIC = 5 if C1 < C2  
 µg of Carbon/g for TOC = 40 if C1 < C2

	TIC	TOC
Method Detection Limit in ug/g	5	40
µg of Carbon/g	5.27E+02	1.17E+03

Data Entered By:	JRO	Date:	12/14/98
Signature of Chemist:	<i>MA</i>	Date:	

WORKBOOK PAGE: DUP4

TIC/TOC : LA-342-100 (F-1)

SOLIDS

		TIC	TOC
Type	Sample Size in g (SS)	0.3447	0.3447
DUP	Dilution Factor (DF)	1	1
Work List	µg of Carbon in Sample (C1)	193	424.6
27510	µg of Carbon from Baseline (C2)	10.9	29
Test Code	Known µg of C from Original Sample	5.27E+2	1.17E+3
@TICTOC1			
Matrix			
SOLID			
Batch Number			
98006118			
Rerun	µg of Carbon/g = (C1-C2) * DF / SS		
0	µg of Carbon/g for TIC = 5 if C1 < C2		
Sample Prep	µg of Carbon/g for TOC = 40 if C1 < C2		
N/A			
Sample #			
S98T002565			
Instrument Code			
CARB2			
Prepared By			
JRO			
Chemist			
MJL			
Analyst			
KRM			
Date Complete			
12/14/98			
Analysis Date			
12/13/98			
Analysis Time	Method Detection Limit in ug/g	TIC	TOC
07:40 AM		5	40
Sample Point	µg of Carbon/g	5.28E+02	1.15E+03
U107			

Data Entered By:	JRO	Date:	12/14/98
Signature of Chemist:	<i>MJL</i>	Date:	

# LABCORE Completed Worklist Report for Worklist# 27537

Analyst: krm Instrument: CARB1 Book#: \_\_\_\_\_

Method: LA-342-100 Rev/Mod \_\_\_\_\_

Worklist Comment: U107, @TIC/TOC1; tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 BLNK	0	@TIC/TOC1 TIC-02	LIQUID	1	3.50E+0	3.500	ug/mL
1 BLNK	0	@TIC/TOC1 TOC-02	LIQUID	1	0.00E+0	0.000	ug/mL
2 STD	0	@TIC/TOC1 TIC-02	LIQUID	6.02E+02	5.87E+2	97.508	% Recovery
2 STD	0	@TIC/TOC1 TOC-02	LIQUID	3.00E+03	2.89E+3	96.333	% Recovery
3 SAMPLE	S98T003340 0	@TIC/TOC1 TIC-02	LIQUID	N/A	6.52E+03	5.000	ug/mL
3 SAMPLE	S98T003340 0	@TIC/TOC1 TOC-02	LIQUID	N/A	4.39E+03	40.000	ug/mL
4 DUP	S98T003340 0	@TIC/TOC1 TIC-02	LIQUID	6.52E+3	6.45E+3	1.079	RPD
4 DUP	S98T003340 0	@TIC/TOC1 TOC-02	LIQUID	4.39E+3	4.32E+3	1.607	RPD
5 SPK	S98T003340 0	@TIC/TOC1 TIC-02	LIQUID	1.00E+02	8.58E+01	85.800	% Recovery
5 SPK	S98T003340 0	@TIC/TOC1 TOC-02	LIQUID	1.00E+02	8.21E+01	82.100	% Recovery
6 SAMPLE	S98T003356 0	@TIC/TOC1 TIC-02	LIQUID	N/A	3.00E+03	5.000	ug/mL
6 SAMPLE	S98T003356 0	@TIC/TOC1 TOC-02	LIQUID	N/A	5.92E+03	40.000	ug/mL
7 DUP	S98T003356 0	@TIC/TOC1 TIC-02	LIQUID	3.00E+3	3.33E+3	10.427	RPD
7 DUP	S98T003356 0	@TIC/TOC1 TOC-02	LIQUID	5.92E+3	6.50E+3	9.340	RPD
8 SPK	S98T003356 0	@TIC/TOC1 TIC-02	LIQUID	1.00E+02	1.06E+02	106.000	% Recovery
8 SPK	S98T003356 0	@TIC/TOC1 TOC-02	LIQUID	1.00E+02	1.06E+02	106.000	% Recovery

Final page for worklist# 27537

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

 12-14-98  
Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

 12/15/98  
Reviewer Signature \_\_\_\_\_ Date \_\_\_\_\_

# LBCORE Data Entry Template for Worklist# 27537

Analyst: KRM Instrument: CARB2 \_\_\_\_\_ Book# 25N140  
26N12F

Method: LA-342-100 Rev/Mod F-1

Worklist Comment: U107, @TICTOC1, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1 BLNK			@TICTOC1	LIQUID		
2 STD			@TICTOC1	LIQUID		
3 SAMPLE	S98T003340 0		@TICTOC1	LIQUID	98000401	U-107 (2)
	Analytes Requested: TIC-02 , TOC-02					
4 DUP	S98T003340 0		@TICTOC1	LIQUID		
5 SPK	S98T003340 0		@TICTOC1	LIQUID		
6 SAMPLE	S98T003356 0		@TICTOC1	LIQUID	98000401	U-107 (2)
	Analytes Requested: TIC-02 , TOC-02					
7 DUP	S98T003356 0		@TICTOC1	LIQUID		
8 SPK	S98T003356 0		@TICTOC1	LIQUID		

**Final page for worklist # 27537**

  
Analyst Signature \_\_\_\_\_ Date 12-13-98

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
 TICTOC REV 2.0  
 <<< BLANK ANALYSIS >>>

Sample: BASE1

Date: 03/02/01

Time: 12:31:27

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # = BASE1  
 Blank Value = N/A

Analyst : KR MONTEITH  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.51	0.40	0.00
2	1.01	0.90	55.56
3	1.51	1.40	35.71
4	2.00	1.90	26.32
5	2.50	2.60	26.92
6	3.00	3.20	18.75
7	3.50	3.70	13.51
8	4.00	4.30	13.95
9	4.50	4.80	10.42
10	5.00	5.30	9.43
11	5.50	5.70	7.02
12	6.00	6.20	8.06
13	6.50	6.70	7.46
14	7.00	7.20	6.94
15	7.50	7.60	5.26
16	8.00	8.10	6.17
17	8.50	8.60	5.81
18	9.00	9.00	4.44
19	9.50	9.50	5.26
20	10.00	10.00	5.00
21	10.50	10.40	3.85
22	11.00	10.90	4.59

BLANK VALUE = 10.9 micrograms carbon

BLANK FACTOR = 10.9 / 10.99799 =

+9.91E-01 ug/min Carbon

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1406 TO 1431.

Sample Run By:



17-13-99

KR MONTEITH

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
 TIC/TOC REV 2.0  
 <<< BLANK ANALYSIS >>>

Sample: BASE1

Date: 03/02/01

Time: 12:44:53

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # = BASE1  
 Blank Value = N/A

Analyst : KR MONTEITH  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

== Reading ==	==== Analysis Time ====	Coulometer	==== % Difference ==
1	0.51	0.40	0.00
2	1.01	0.90	55.56
3	1.50	1.60	43.75
4	2.00	4.70	65.96
5	2.50	9.10	48.35
6	3.00	12.00	24.17
7	3.50	13.90	13.67
8	4.00	14.80	6.08
9	4.50	15.70	5.73
10	5.00	16.40	4.27
11	5.50	17.20	4.65
12	6.00	17.70	2.82
13	6.50	18.60	4.84
14	7.00	19.00	2.11
15	7.50	19.50	2.56
16	8.00	20.20	3.47
17	8.50	20.60	1.94
18	9.00	21.10	2.37
19	9.50	21.70	2.76
20	10.00	22.10	1.81
21	10.50	22.50	1.78
22	11.00	23.00	2.17

BLANK VALUE = 23 micrograms carbon

BLANK FACTOR = 23 / 10.9978 = +2.09E+00 ug/min Carbon

&lt;&lt;&lt;&lt; WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!&gt;&gt;&gt;&gt;

Sample Run By:

KR MONTEITH00000

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: STD1

Date: 03/02/01

Time: 13:08:02

Sample Size = 1000 uL

Analyst : KR MONTEITH

Dil Factor = 1

Min Readings = 22

Blank ID # =

Max Readings = 22

Blank Value = .991 ug/minute C

% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.51	1.00	0.00
2	1.01	1.90	47.37
3	1.50	18.90	89.95
4	2.00	82.70	77.15
5	2.50	190.70	56.63
6	3.00	322.20	40.81
7	3.50	436.50	26.19
8	4.00	517.30	15.62
9	4.50	559.10	7.48
10	5.00	577.20	3.14
11	5.50	585.50	1.42
12	6.00	588.90	0.58
13	6.50	590.90	0.34
14	7.00	591.80	0.15
15	7.50	592.80	0.17
16	8.00	593.50	0.12
17	8.50	594.40	0.15
18	9.00	595.00	0.10
19	9.50	595.70	0.12
20	10.00	596.30	0.10
21	10.50	596.90	0.10
22	11.00	597.40	0.08

## USER INPUT BLANK VALUE

BLANK VALUE = 10.89882 micrograms carbon

BLANK FACTOR = 10.89882 / 10.9978 = +9.9E-01 ug/min Carbon

## SAMPLE RESULTS:

( 597.4 - 10.899 ) (1)/(1000) = +5.865E-01 g/L Carbon  
 ( 597.4 - 10.899 ) (1)/(1000) (12) = +4.888E-02 Molar Carbon

Sample Run By:

KR MONTEITH

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: STD1                      Date: 03/02/01                      Time: 13:20:46

Sample Size = 200 uL	Analyst :	KR MONTEITH
Dil Factor = 1	Min Readings = 22	
Blank ID # =	Max Readings = 22	
Blank Value = 2.09 ug/minute C	% Difference = 10	

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.50	0.40	0.00
2	1.00	1.40	71.43
3	1.50	28.90	95.16
4	2.00	163.80	82.36
5	2.50	348.20	52.96
6	3.00	475.30	26.74
7	3.50	537.30	11.54
8	4.00	566.50	5.15
9	4.50	578.90	2.14
10	5.00	585.00	1.04
11	5.50	588.30	0.56
12	6.00	590.50	0.37
13	6.50	592.20	0.29
14	7.00	593.70	0.25
15	7.50	594.80	0.18
16	8.00	595.90	0.18
17	8.50	597.00	0.18
18	9.00	597.90	0.15
19	9.50	598.80	0.15
20	10.00	599.70	0.15
21	10.50	600.40	0.12
22	11.00	601.00	0.10

USER INPUT BLANK VALUE

BLANK VALUE = 22.98541 micrograms carbon  
BLANK FACTOR = 22.98541 / 10.9978 = +2.1E+00 ug/min Carbon

SAMPLE RESULTS:

( 601 - 22.98553 ) (1)/(200) = +2.890E+00 g/L Carbon  
( 601 - 22.98553 ) (1)/(200) (12) = +2.408E-01 Molar Carbon  
<<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!!!>>>>

Sample Run By:

\_\_\_\_\_  
KR MONTEITH

00000

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: BLK1

Date: 03/02/01

Time: 13:35:32

Sample Size = 1 uL

Analyst : KR MONTEITH

Dil Factor = 1

Min Readings = 22

Blank ID # =

Max Readings = 22

Blank Value = .991 ug/minute C

% Difference = 10

== Reading	==== Analysis Time	==== Coulometer	==== % Difference
1	0.51	1.60	0.00
2	1.01	2.90	44.83
3	1.51	4.30	32.56
4	2.00	5.20	17.31
5	2.50	6.10	14.75
6	3.00	6.80	10.29
7	3.50	7.30	6.85
8	4.00	7.80	6.41
9	4.50	8.40	7.14
10	5.00	8.80	4.55
11	5.50	9.40	6.38
12	6.00	10.00	6.00
13	6.50	10.40	3.85
14	7.00	10.70	2.80
15	7.50	11.30	5.31
16	8.00	11.70	3.42
17	8.50	12.10	3.31
18	9.00	12.60	3.97
19	9.50	13.00	3.08
20	10.00	13.50	3.70
21	10.50	13.90	2.88
22	11.00	14.40	3.47

USER INPUT BLANK VALUE

BLANK VALUE = 10.89882 micrograms carbon

BLANK FACTOR = 10.89882 / 10.9978 = +9.9E-01 ug/min Carbon

SAMPLE RESULTS:

( 14.4 - 10.89804 ) (1)/(1) = +3.50E+00 g/L Carbon  
 ( 14.4 - 10.89804 ) (1)/(1) (12) = +2.92E-01 Molar Carbon

Sample Run By:

KR MONTEITH

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: BLK1

Date: 03/02/01

Time: 13:47:39

Sample Size = 1 uL  
Dil Factor = 1  
Blank ID # =  
Blank Value = 2.09 ug/minute C

Analyst : KR MONTEITH  
Min Readings = 22  
Max Readings = 22  
% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.51	0.50	0.00
2	1.00	1.20	58.33
3	1.50	1.80	33.33
4	2.04	4.80	62.50
5	2.54	8.50	43.53
6	3.04	11.50	26.09
7	3.54	13.50	14.81
8	4.04	15.00	10.00
9	4.54	15.70	4.46
10	5.04	16.40	4.27
11	5.54	17.10	4.09
12	6.04	17.70	3.39
13	6.54	18.40	3.80
14	7.03	18.80	2.13
15	7.53	19.30	2.59
16	8.03	20.00	3.50
17	8.53	20.40	1.96
18	9.03	21.00	2.86
19	9.53	21.50	2.33
20	10.03	22.00	2.27
21	10.53	22.40	1.79
22	11.03	23.00	2.61

USER INPUT BLANK VALUE

BLANK VALUE = 22.98541 micrograms carbon

BLANK FACTOR = 22.98541 / 10.9978 = +2.1E+00 ug/min Carbon

SAMPLE RESULTS:

( 23 - 23.05659 ) (1) / (1) = < 5.00 E-3 g/L Carbon  
 ( 23 - 23.05659 ) (1) / (1) (12) = < 4.17 E-4 Molar Carbon  
 <<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!!!>>>>

Sample Run By:

KR MONTEITH

00000

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T3340-1

Date: 03/02/01

Time: 14:00:44

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # =  
 Blank Value = .991 ug/minute C

Analyst : KR MONTEITH  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.51	0.50	0.00
2	1.01	0.90	44.44
3	1.51	2.10	57.14
4	2.00	29.30	92.83
5	2.50	156.20	81.24
6	3.00	335.10	53.39
7	3.50	481.60	30.42
8	4.00	573.30	16.00
9	4.50	620.10	7.55
10	5.00	639.80	3.08
11	5.50	648.70	1.37
12	6.00	653.30	0.70
13	6.50	655.90	0.40
14	7.00	657.70	0.27
15	7.50	659.20	0.23
16	8.00	660.30	0.17
17	8.50	661.40	0.17
18	9.00	662.50	0.17
19	9.50	663.40	0.14
20	10.00	664.40	0.15
21	10.50	665.40	0.15
22	11.00	666.30	0.14

## USER INPUT BLANK VALUE

BLANK VALUE = 10.89882 micrograms carbon

BLANK FACTOR = 10.89882 / 10.9978 = +9.9E-01 ug/min Carbon

## SAMPLE RESULTS:

( 666.3 - 10.89906 ) (1)/(1) = +6.554E+02 g/L Carbon  
 ( 666.3 - 10.89906 ) (1)/(1) (12) = +5.462E+01 Molar Carbon

Sample Run By:

KR MONTEITH00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T3340-1

Date: 03/02/01

Time: 14:12:29

Sample Size = 1 uL  
Dil Factor = 1  
Blank ID # =  
Blank Value = 2.09 ug/minute C

Analyst : KR MONTEITH  
Min Readings = 22  
Max Readings = 22  
% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.51	0.30	0.00
2	1.01	1.10	72.73
3	1.50	1.60	31.25
4	2.00	2.10	23.81
5	2.50	5.90	64.41
6	3.00	32.00	81.56
7	3.50	105.80	69.75
8	4.00	212.50	50.21
9	4.50	304.40	30.19
10	5.00	363.60	16.28
11	5.50	400.80	9.28
12	6.00	422.50	5.14
13	6.50	434.90	2.85
14	7.00	443.10	1.85
15	7.50	448.20	1.14
16	8.00	451.90	0.82
17	8.50	454.40	0.55
18	9.00	456.60	0.48
19	9.50	458.50	0.41
20	10.00	459.80	0.28
21	10.50	461.10	0.28
22	11.00	461.90	0.17

USER INPUT BLANK VALUE

BLANK VALUE = 22.98541 micrograms carbon

BLANK FACTOR = 22.98541 / 10.9978 = +2.1E+00 ug/min Carbon

SAMPLE RESULTS:

( 461.9 - 22.98553 ) (1)/(1) = +4.389E+02 g/L Carbon  
 ( 461.9 - 22.98553 ) (1)/(1) (12) = +3.658E+01 Molar Carbon  
 <<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!!!>>>>

Sample Run By:

KR MONTEITH

00000





TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T3340DUP-1      Date: 03/02/01      Time: 14:37:23

Sample Size = 1 uL	Analyst :	KR MONTEITH
Dil Factor = 1	Min Readings = 22	
Blank ID # =	Max Readings = 22	
Blank Value = 2.09 ug/minute C	% Difference = 10	

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.51	1.10	0.00
2	1.01	2.30	52.17
3	1.51	3.70	37.84
4	2.00	37.70	90.19
5	2.50	155.40	75.74
6	3.00	295.60	47.43
7	3.50	374.40	21.05
8	4.00	411.30	8.97
9	4.50	426.20	3.50
10	5.00	434.20	1.84
11	5.50	438.70	1.03
12	6.00	441.80	0.70
13	6.50	444.60	0.63
14	7.00	446.70	0.47
15	7.50	448.20	0.33
16	8.00	449.40	0.27
17	8.50	450.70	0.29
18	9.00	451.50	0.18
19	9.50	452.50	0.22
20	10.00	453.30	0.18
21	10.50	454.30	0.22
22	11.00	455.10	0.18

USER INPUT BLANK VALUE

BLANK VALUE = 22.98541 micrograms carbon  
BLANK FACTOR = 22.98541 / 10.9978 = +2.1E+00 ug/min Carbon

SAMPLE RESULTS:

( 455.1 - 22.98745 ) (1)/(1) = +4.321E+02 g/L Carbon  
( 455.1 - 22.98745 ) (1)/(1) (12) = +3.601E+01 Molar Carbon  
<<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!!!>>>>

Sample Run By:

\_\_\_\_\_  
KR MONTEITH

00000

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T3340SPK-1      Date: 03/02/01      Time: 14:54:29

Sample Size = 1 uL	Analyst :	KR MONTEITH
Dil Factor = 1	Min Readings =	22
Blank ID # =	Max Readings =	22
Blank Value = .991 ug/minute C	% Difference =	10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.51	1.20	0.00
2	1.01	1.80	33.33
3	1.51	2.70	33.33
4	2.00	13.10	79.39
5	2.50	97.00	86.49
6	3.00	298.70	67.53
7	3.50	536.10	44.28
8	4.00	714.20	24.94
9	4.50	815.40	12.41
10	5.00	869.90	6.27
11	5.50	894.70	2.77
12	6.00	904.90	1.13
13	6.50	909.90	0.55
14	7.00	912.60	0.30
15	7.50	914.30	0.19
16	8.00	915.80	0.16
17	8.50	916.90	0.12
18	9.00	917.90	0.11
19	9.50	919.00	0.12
20	10.00	919.80	0.09
21	10.50	920.80	0.11
22	11.00	921.70	0.10

## USER INPUT BLANK VALUE

BLANK VALUE = 10.89882 micrograms carbon

BLANK FACTOR = 10.89882 / 10.9978 = +9.9E-01 ug/min Carbon

## SAMPLE RESULTS:

( 921.7 - 10.89888 ) (1)/(1) =	+9.108E+02	g/L Carbon
( 921.7 - 10.89888 ) (1)/(1) (12) =	+7.590E+01	Molar Carbon

Sample Run By:

KR MONTEITH

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T3340SPK-1      Date: 03/02/01      Time: 15:07:00

Sample Size = 1 uL      Analyst :      KR MONTEITH  
Dil Factor = 1      Min Readings = 22  
Blank ID # =      Max Readings = 22  
Blank Value = 2.09 ug/minute C      % Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.51	0.60	0.00
2	1.01	1.40	57.14
3	1.50	4.50	68.89
4	2.00	68.70	93.45
5	2.50	277.40	75.23
6	3.00	508.40	45.44
7	3.50	614.10	17.21
8	4.00	659.50	6.88
9	4.50	680.20	3.04
10	5.00	688.30	1.18
11	5.50	692.90	0.66
12	6.00	695.80	0.42
13	6.50	698.10	0.33
14	7.00	699.70	0.23
15	7.50	701.00	0.19
16	8.00	702.30	0.19
17	8.50	703.70	0.20
18	9.00	704.80	0.16
19	9.50	705.80	0.14
20	10.00	706.80	0.14
21	10.50	707.60	0.11
22	11.00	708.30	0.10

USER INPUT BLANK VALUE

BLANK VALUE = 22.98541 micrograms carbon

BLANK FACTOR = 22.98541 / 10.9978 = +2.1E+00 ug/min Carbon

SAMPLE RESULTS:

( 708.3 - 22.98553 ) (1)/(1) = +6.853E+02 g/L Carbon  
( 708.3 - 22.98553 ) (1)/(1) (12) = +5.711E+01 Molar Carbon

<<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!!!>>>>

Sample Run By:

KR MONTEITH

00000

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T3356-1

Date: 03/02/01

Time: 15:19:49

Sample Size = 1 uL

Analyst : KR MONTEITH

Dil Factor = 1

Min Readings = 22

Blank ID # =

Max Readings = 22

Blank Value = .991 ug/minute C

% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.51	0.80	0.00
2	1.01	1.70	52.94
3	1.50	2.30	26.09
4	2.00	5.80	60.34
5	2.50	25.30	77.08
6	3.00	74.80	66.18
7	3.50	157.00	52.36
8	4.00	226.40	30.65
9	4.50	266.50	15.05
10	5.00	286.10	6.85
11	5.50	295.20	3.08
12	6.00	299.10	1.30
13	6.50	301.60	0.83
14	7.00	303.40	0.59
15	7.50	304.70	0.43
16	8.00	306.10	0.46
17	8.50	307.00	0.29
18	9.00	307.90	0.29
19	9.50	308.70	0.26
20	10.00	309.60	0.29
21	10.50	310.50	0.29
22	11.00	311.10	0.19

## USER INPUT BLANK VALUE

BLANK VALUE = 10.89882 micrograms carbon

BLANK FACTOR = 10.89882 / 10.9978 = +9.9E-01 ug/min Carbon

## SAMPLE RESULTS:

( 311.1 - 10.899 ) (1)/(1) = +3.002E+02 g/L Carbon  
 ( 311.1 - 10.899 ) (1)/(1) (12) = +2.502E+01 Molar Carbon

Sample Run By:

KR MONTEITH

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T3356-1

Date: 03/02/01

Time: 15:32:08

Sample Size = 1 uL  
Dil Factor = 1  
Blank ID # =  
Blank Value = 2.09 ug/minute C

Analyst : KR MONTEITH  
Min Readings = 22  
Max Readings = 22  
% Difference = 10

== Reading	==== Analysis Time	==== Coulometer	==== % Difference
1	0.51	0.70	0.00
2	1.01	1.30	46.15
3	1.51	2.10	38.10
4	2.00	6.40	67.19
5	2.50	53.30	87.99
6	3.00	182.40	70.78
7	3.50	342.10	46.68
8	4.00	449.60	23.91
9	4.50	513.30	12.41
10	5.00	552.80	7.15
11	5.50	574.60	3.79
12	6.00	586.10	1.96
13	6.50	593.30	1.21
14	7.00	598.00	0.79
15	7.50	601.90	0.65
16	8.00	604.80	0.48
17	8.50	607.20	0.40
18	9.00	609.10	0.31
19	9.50	611.00	0.31
20	10.03	612.20	0.20
21	10.53	613.50	0.21
22	11.03	614.70	0.20

## USER INPUT BLANK VALUE

BLANK VALUE = 22.98541 micrograms carbon

BLANK FACTOR = 22.98541 / 10.9978 = +2.1E+00 ug/min Carbon

## SAMPLE RESULTS:

( 614.7 - 23.0562 ) (1)/(1) = +5.916E+02 g/L Carbon  
 ( 614.7 - 23.0562 ) (1)/(1) (12) = +4.930E+01 Molar Carbon  
 <<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!>>>>

Sample Run By:

KR MONTEITH

00000

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T3356DUP-1      Date: 03/02/01      Time: 15:44:54

Sample Size = 1 uL	Analyst :	KR MONTEITH
Dil Factor = 1	Min Readings =	22
Blank ID # =	Max Readings =	22
Blank Value = .991 ug/minute C	% Difference =	10

== Reading ==	==== Analysis Time =====	Coulometer =====	==== % Difference ==
1	0.51	1.10	0.00
2	1.01	1.90	42.11
3	1.50	2.70	29.63
4	2.00	3.70	27.03
5	2.50	5.30	30.19
6	3.00	12.50	57.60
7	3.50	42.70	70.73
8	4.00	101.00	57.72
9	4.50	170.50	40.76
10	5.00	231.70	26.41
11	5.50	275.00	15.75
12	6.00	304.00	9.54
13	6.50	319.70	4.91
14	7.00	327.90	2.50
15	7.50	332.50	1.38
16	8.00	335.70	0.95
17	8.50	337.70	0.59
18	9.00	339.50	0.53
19	9.50	340.60	0.32
20	10.00	341.80	0.35
21	10.50	342.80	0.29
22	11.00	343.60	0.23

## USER INPUT BLANK VALUE

BLANK VALUE = 10.89882 micrograms carbon

BLANK FACTOR = 10.89882 / 10.9978 = +9.9E-01 ug/min Carbon

## SAMPLE RESULTS:

( 343.6 - 10.89888 ) (1)/(1)	=	+3.327E+02	g/L Carbon
( 343.6 - 10.89888 ) (1)/(1) (12)	=	+2.773E+01	Molar Carbon

Sample Run By:

KR MONTEITH00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T3356DUP-1      Date: 03/02/01      Time: 16:02:07

Sample Size = 1 uL	Analyst :	KR MONTEITH
Dil Factor = 1	Min Readings = 22	
Blank ID # =	Max Readings = 22	
Blank Value = 2.09 ug/minute C	% Difference = 10	

== Reading	==== Analysis Time	==== Coulometer	==== % Difference ==
1	0.51	0.80	0.00
2	1.01	1.50	46.67
3	1.51	2.40	37.50
4	2.00	3.60	33.33
5	2.50	21.60	83.33
6	3.00	99.30	78.25
7	3.50	260.60	61.90
8	4.00	416.00	37.36
9	4.50	512.30	18.80
10	5.00	570.60	10.22
11	5.50	608.90	6.29
12	6.00	632.10	3.67
13	6.50	644.30	1.89
14	7.00	652.30	1.23
15	7.50	657.90	0.85
16	8.00	661.70	0.57
17	8.50	664.50	0.42
18	9.00	666.90	0.36
19	9.50	668.60	0.25
20	10.00	670.10	0.22
21	10.50	671.70	0.24
22	11.00	672.90	0.18

USER INPUT BLANK VALUE

BLANK VALUE = 22.98541 micrograms carbon  
BLANK FACTOR = 22.98541 / 10.9978 = +2.1E+00 ug/min Carbon

SAMPLE RESULTS:

( 672.9 - 22.98592 ) (1)/(1) = +6.499E+02 g/L Carbon  
( 672.9 - 22.98592 ) (1)/(1)(12) = +5.416E+01 Molar Carbon  
<<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!>>>>

Sample Run By:

\_\_\_\_\_  
KR MONTEITH

00000



TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T3356SPK-1 Date: 03/02/01 Time: 16:17:20

Sample Size = 1 uL	Analyst :	KR MONTEITH
Dil Factor = 1	Min Readings = 22	
Blank ID # =	Max Readings = 22	
Blank Value = .991 ug/minute C	% Difference = 10	

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.51	0.60	0.00
2	1.01	1.30	53.85
3	1.50	2.00	35.00
4	2.00	2.60	23.08
5	2.50	3.90	33.33
6	3.00	15.50	74.84
7	3.50	61.50	74.80
8	4.00	152.30	59.62
9	4.50	272.30	44.07
10	5.00	387.50	29.73
11	5.50	475.30	18.47
12	6.00	537.30	11.54
13	6.50	577.20	6.91
14	7.00	599.90	3.78
15	7.50	611.90	1.96
16	8.00	618.30	1.04
17	8.50	621.70	0.55
18	9.00	624.30	0.42
19	9.50	626.20	0.30
20	10.00	627.70	0.24
21	10.50	628.90	0.19
22	11.00	630.00	0.17

## USER INPUT BLANK VALUE

BLANK VALUE = 10.89882 micrograms carbon

BLANK FACTOR = 10.89882 / 10.9978 = +9.9E-01 ug/min Carbon

## SAMPLE RESULTS:

( 630 - 10.89888 ) (1)/(1) =	+6.191E+02	g/L Carbon
( 630 - 10.89888 ) (1)/(1) (12) =	+5.159E+01	Molar Carbon

Sample Run By:

KR MONTEITH

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T3356SPK-1      Date: 03/02/01      Time: 16:29:56

Sample Size = 1 uL      Analyst :      KR MONTEITH  
Dil Factor = 1      Min Readings = 22  
Blank ID # =      Max Readings = 22  
Blank Value = 2.09 ug/minute C      % Difference = 10

== Reading	==== Analysis Time	==== Coulometer	==== % Difference ==
1	0.51	1.20	0.00
2	1.01	2.30	47.83
3	1.51	10.00	77.00
4	2.00	151.00	93.38
5	2.50	484.30	68.82
6	3.00	731.70	33.81
7	3.50	833.10	12.17
8	4.00	879.10	5.23
9	4.50	901.10	2.44
10	5.00	910.00	0.98
11	5.50	915.30	0.58
12	6.00	918.90	0.39
13	6.50	921.40	0.27
14	7.00	923.60	0.24
15	7.50	925.40	0.19
16	8.00	926.70	0.14
17	8.50	928.00	0.14
18	9.00	929.30	0.14
19	9.50	930.60	0.14
20	10.00	932.00	0.15
21	10.50	932.70	0.08
22	11.00	933.70	0.11

USER INPUT BLANK VALUE

BLANK VALUE = 22.98541 micrograms carbon

BLANK FACTOR = 22.98541 / 10.9978 = +2.1E+00 ug/min Carbon

SAMPLE RESULTS:

( 933.7 - 22.98579 ) (1)/(1) = +9.107E+02 g/L Carbon  
 ( 933.7 - 22.98579 ) (1)/(1) (12) = +7.589E+01 Molar Carbon  
 <<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!!!>>>>

Sample Run By:

KR MONTEITH

00000

TIC/TOC : LA-342-100 (F-1)

LIQUIDS

		TIC	TOC
Type	Sample Size in mL (SS)	0.0000	0.0000
BLNK	Dilution Factor (DF)	1	1
Work List	µg of Carbon in Sample (C1)	14.4	23
27537	µg of Carbon from Baseline (C2)	10.9	23

Test Code
@TICTOC1
Matrix
LIQUID
Batch Number
98006164
Rerun
0
Sample Prep
N/A
Sample #
BLK
Instrument Code
CARB1
Prepared By
JRO
Chemist
MJL
Analyst
KRM
Date Complete
12/14/98
Analysis Date
12/13/98
Analysis Time
12:44 PM
Sample Point
U107

µg of Carbon = |C1-C2|

	TIC	TOC
Analysis Time	5	40
Sample Point	3.50E+00	0.00E+00

Data Entered By:	JRO	Date:	12/14/98
Signature of Chemist:	<i>MJL</i>	Date:	

TIC/TOC : LA-342-100 (F-1)

LIQUIDS

		TIC	TOC
Type	Sample Size in mL (SS)	1.0000	0.2000
STD	Dilution Factor (DF)	1	1
Work List	Final Coulometer Reading in µg (C1)	597.4	601
27537	µg of Carbon from Baseline (C2)	10.9	23
Test Code	Standard Book Number	25N12D	26N12F
@TIC/TOC1	Standard Value (µg/ml)	602	3000

Matrix	<p>LIQUID</p> <p>Batch Number 98006164</p> <p>Rerun: 0</p> <p>QC Actual in µg/mL = Standard Value (µg/mL)</p> <p>Sample Prep N/A</p> <p>QC Found in µg/mL = (C1 - C2) * DF / SS</p> <p>QC Found in µg/mL for TIC = 5 if C1 &lt; C2</p> <p>Sample #</p> <p>QC Found in µg/mL for TOC = 40 if C1 &lt; C2</p> <p>Instrument Code CARB1</p> <p>% Recovery = QC Found / QC Actual * 100</p> <p>Prepared By JRO</p> <p>Chemist MJL</p> <p>Analyst KRM</p> <p>Date Complete 12/14/98</p> <p>Analysis Date 12/13/98</p>
LIQUID	
Batch Number	
98006164	
Rerun:	
0	
Sample Prep	
N/A	
Sample #	
Instrument Code	
CARB1	
Prepared By	
JRO	
Chemist	
MJL	
Analyst	
KRM	
Date Complete	
12/14/98	
Analysis Date	
12/13/98	

		TIC	TOC
Analysis Time	Method Detection Limit in µg/mL	5	40
12:44 PM	QC Actual in µg/mL	6.02E+02	3.00E+03
Sample Point	QC Found in µg/mL	5.87E+02	2.89E+03
U107	Percent Standard Recovery	97.4	96.3

Data Entered By:	JRO	Date:	12/14/98
Signature of Chemist:	<i>MJL</i>	Date:	

TIC/TOC : LA-342-100 (F-1)


LIQUIDS

		TIC	TOC
Type	Sample Size in mL (SS)	0.1000	0.1000
SAMPLE	Dilution Factor (DF)	1	1
Work List	µg of Carbon in Sample (C1)	666.3	461.9
27537	µg of Carbon from Baseline (C2)	10.9	23
Test Code			
@TICTOC1			

Matrix	
LIQUID	
Batch Number	
98006164	
Rerun	
0	
Sample Prep	
N/A	
Sample #	
S98T003340	
Instrument Code	
CARB1	
Prepared By	
JRO	
Chemist	
MJL	
Analyst	
KRM	
Date Complete	
12/14/98	
Analysis Date	
12/13/98	
Analysis Time	
12:44 PM	
Sample Point	
U107	

µg of Carbon/mL = (C1-C2) \* DF / SS  
 µg of Carbon/mL for TIC = 5 if C1 < C2  
 µg of Carbon/mL for TOC = 40 if C1 < C2

		TIC	TOC
Analysis Time	Method Detection Limit in µg/mL	5	40
Sample Point	µg of Carbon/mL	6.55E+03	4.39E+03

Data Entered By:	JRO	Date:	12/14/98
Signature of Chemist:		Date:	

WORKBOOK PAGE: DUP4

TIC/TOC : LA-342-100 (F-1)

LIQUIDS

		TIC	TOC
Type	Sample Size in mL (SS)	0.1000	0.1000
DUP	Dilution Factor (DF)	1	1
Work List	µg of Carbon in Sample (C1)	656.2	455.1
27537	µg of Carbon from Baseline (C2)	10.9	23
Test Code	Known µg of C from Original Sample	6.52E+3	4.39E+3
@TICTOC1			

Matrix
LIQUID
Batch Number
98006164
Rerun
0
Sample Prep
N/A
Sample #
S98T003340
Instrument Code
CARB1
Prepared By
JRO
Chemist
MJL
Analyst
KRM
Date Complete
12/14/98
Analysis Date
12/13/98
Analysis Time
12:44 PM
Sample Point
U107

µg of Carbon/mL = (C1-C2) \* DF / SS  
 µg of Carbon/mL for TIC = 5 if C1 < C2  
 µg of Carbon/mL for TOC = 40 if C1 < C2

	TIC	TOC
Method Detection Limit in µg/mL	5	40
µg of Carbon/mL	6.45E+03	4.32E+03

Data Entered By:	JRO	Date:	12/14/98
Signature of Chemist:	<i>NA</i>	Date:	

WORKBOOK PAGE: SPIKE5

TIC/TOC : LA-342-100 (F-1) LIQUIDS

Type	Sample Vial Data	TIC	TOC
SPK	Sample Volume in mL (SS)	0.1000	0.1000
Work List	Final Coulometer Reading in µg (C1)	666.3	461.9
27537	Spiked Vial Data		
Test Code	Sample Volume in mL (SPK SS)	0.1000	0.1000
@TICTOC1	Amount of Spike Std. in mL (SPK VOL)	0.500	0.100
Matrix	Final Coulometer Reading in µg (C2)	921.7	708.3
LIQUID	Spike Book Number	25N12D	26N12F
Batch Number	Spike Standard Value in µg/ml (SPK CONC)	602	3000
98006164	µg C in baseline (BL)	10.9	23

Rerun	
0	
Sample Prep	
N/A	
Sample #	
S98T003340	
Instrument Code	
CARB1	
Prepared By	
JRO	
Chemist	
MJL	
Analyst	
KRM	
Date Complete	
12/14/98	
Analysis Date	
12/13/98	
Analysis Time	
12:44 PM	
Sample Point	
U107	

Percent Spike Recovery = ((C2-BL) - (C1-BL) \* (SPK SS) / SS) / ((SPK CONC) \* (SPK VOL)) \* 100

QC Actual in µg/mL = Spike Value (µg/mL)

QC Found in µg/mL = (Percent Spike Recovery)\*(QC Actual) / 100

	TIC	TOC
QC Actual in µg/mL	6.02E+02	3.00E+03
QC Found in µg/mL	5.11E+02	2.46E+03
Percent Spike Recovery	84.9	82.1

Data Entered By:	JRO	Date:	12/14/98
Signature of Chemist:	<i>NA</i>	Date:	

SPIKE WB1 REV 1.3

342100ML

1428

WORKBOOK PAGE: SAM6

TIC/TOC : LA-342-100 (F-1)

LIQUIDS

		TIC	TOC
Type	Sample Size in mL (SS)	0.1000	0.1000
SAMPLE	Dilution Factor (DF)	1	1
Work List	µg of Carbon in Sample (C1)	311.1	614.7
27537	µg of Carbon from Baseline (C2)	10.9	23
Test Code			
@TICTOC1			
Matrix			
LIQUID			
Batch Number			
98006164			
Run	µg of Carbon/mL = (C1-C2) * DF / SS		
0	µg of Carbon/mL for TIC = 5 if C1 < C2		
Sample Prep	µg of Carbon/mL for TOC = 40 if C1 < C2		
N/A			
Sample #			
S98T003356			
Instrument Code			
CARB1			
Prepared By			
JRO			
Chemist			
MJL			
Analyst			
KRM			
Date Complete			
12/14/98			
Analysis Date			
12/13/98			
Analysis Time	Method Detection Limit in µg/mL	TIC	TOC
12:44 PM		5	40
Sample Point	µg of Carbon/mL	3.00E+03	5.92E+03
U107			

Data Entered By:	JRO	Date:	12/14/98
Signature of Chemist:	<i>NA</i>	Date:	



WORKBOOK PAGE: DUP7

**TIC/TOC : LA-342-100 (F-1)**

**LIQUIDS**

			TIC	TOC
Type	Sample Size in mL	(SS)	0.1000	0.1000
DUP	Dilution Factor	(DF)	1	1
Work List	µg of Carbon in Sample	(C1)	343.6	672.9
27537	µg of Carbon from Baseline	(C2)	10.9	23
Test Code	Known µg of C from Original Sample		3.00E+3	5.92E+3
@TICTOC1				

Matrix	
LIQUID	
Batch Number	
98006164	
Rerun	
0	
Sample Prep	
N/A	
Sample #	
S98T003356	
Instrument Code	
CARB1	
Prepared By	
JRO	
Chemist	
MJL	
Analyst	
KRM	
Date Complete	
12/14/98	
Analysis Date	
12/13/98	
Analysis Time	
12:44 PM	
Sample Point	
U107	

µg of Carbon/mL = (C1-C2) \* DF / SS  
 µg of Carbon/mL for TIC = 5 if C1 < C2  
 µg of Carbon/mL for TOC = 40 if C1 < C2

		TIC	TOC
Analysis Time	Method Detection Limit in µg/mL	5	40
Sample Point	µg of Carbon/mL	3.33E+03	6.50E+03

Data Entered By:	JRO	Date:	12/14/98
Signature of Chemist:	<i>NA</i>	Date:	

WORKBOOK PAGE: SPIKE8

TIC/TOC : LA-342-100 (F-1) LIQUIDS

Type	Sample Vial Data	TIC	TOC
SPK	Sample Volume in mL (SS)	0.1000	0.1000
Work List	Final Coulometer Reading in µg (C1)	311.1	614.7
27537	Spiked Vial Data		
Test Code	Sample Volume in mL (SPK SS)	0.1000	0.1000
@TICTOC1	Amount of Spike Std. in mL (SPK VOL)	0.500	0.100
Matrix	Final Coulometer Reading in µg (C2)	630	933.7
LIQUID	Spike Book Number	25N12D	26N12F
Batch Number	Spike Standard Value in µg/ml (SPK CONC)	602	3000
98006164	µg C in baseline (BL)	10.9	23

Rerun  
0

Sample Prep  
N/A

Sample #  
S98T003356

Percent Spike Recovery = ((C2-BL) - (C1-BL) \* (SPK SS) / SS) / ((SPK CONC) \* (SPK VOL)) \* 100

Instrument Code  
CARB1

QC Actual in µg/mL = Spike Value (µg/mL)  
QC Found in µg/mL = (Percent Spike Recovery)\*(QC Actual) / 100

Prepared By  
JRO

Chemist  
MJL

Analyst  
KRM

Date Complete  
12/14/98

Analysis Date  
12/13/98

Analysis Time  
12:44 PM

	TIC	TOC
QC Actual in µg/mL	6.02E+02	3.00E+03
QC Found in µg/mL	6.38E+02	3.19E+03
Percent Spike Recovery	105.9	106.3

Sample Point  
U107

Data Entered By: JRO	Date: 12/14/98
Signature of Chemist: <i>MA</i>	Date:

# LABCORE Completed Worklist Report for Worklist# 27538

Analyst: rdm

Instrument: CARB2

Book#: \_\_\_\_\_

Method: LA-342-100 Rev/Mod \_\_\_\_\_

Worklist Comment: U107, @TICTOC1, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 BLNK	0	@TICTOC1 TIC-02	SOLID	1	2.00E+0	2.000	ug/g
1 BLNK	0	@TICTOC1 TOC-02	SOLID	1	2.03E+1	20.300	ug/g
2 STD	0	@TICTOC1 TIC-02	SOLID	6.02E+02	5.30E+2	88.040	% Recovery
2 STD	0	@TICTOC1 TOC-02	SOLID	3.00E+03	2.67E+3	89.000	% Recovery
3 SAMPLE	S98T003335 0	@TICTOC1 TIC-02	SOLID	N/A	5.77E+03	5.000	ug/g
3 SAMPLE	S98T003335 0	@TICTOC1 TOC-02	SOLID	N/A	5.24E+03	40.000	ug/g
4 DUP	S98T003335 0	@TICTOC1 TIC-02	SOLID	5.77E+3	5.45E+3	5.704	RPD
4 DUP	S98T003335 0	@TICTOC1 TOC-02	SOLID	5.24E+3	4.67E+3	11.504	RPD

## Final page for worklist# 27538

Analyst Signature

Date

12-15-98

Analyst Signature

Date

12/18/98

Reviewer Signature

Date

Standard Failed for TIC  
Sample will be ReRun. nyc

Reanalyzed for TIC on worklist # 27664.  
1/15/99

HNF-1661 REV. 0

Page: 1

12/18/98 13:18  
A-0004-1**LABCORE Data Entry Template for Worklist# 27538**

Analyst: RDM Instrument: CARB2 Book# 25N12P  
 Method: LA-342-100 Rev/Mod FL  
 Worklist Comment: U107, @TICTOC1, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	BLNK		@TICTOC1	SOLID		
2	STD		@TICTOC1	SOLID		
3	SAMPLE	S98T003335 0	@TICTOC1	SOLID	98000401	U-107 (2)
Analytes Requested: TIC-02 , TOC-02						
4	DUP	S98T003335 0	@TICTOC1	SOLID		

**Final page for worklist # 27538**

RDM 12/14/98  
 Analyst Signature Date

\_\_\_\_\_  
 Analyst Signature Date

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

## HNF-1661 REV. 0

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
 TICTOC REV 2.0  
 <<< BLANK ANALYSIS >>>

Sample: BASE

Date: 12/14/98

Time: 08:49:01

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # = BASE  
 Blank Value = N/A

Analyst : RD MEYERS  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

Reading	Analysis Time	Coulometer	% Difference
1	0.51	0.30	0.00
2	1.01	1.10	72.73
3	1.51	2.00	45.00
4	2.00	2.60	23.08
5	2.50	3.30	21.21
6	3.00	4.10	19.51
7	3.50	4.80	14.58
8	4.00	5.50	12.73
9	4.50	6.10	9.84
10	5.00	6.70	8.96
11	5.50	7.70	12.99
12	6.00	8.20	6.10
13	6.50	8.70	5.75
14	7.00	9.30	6.45
15	7.50	10.00	7.00
16	8.00	10.60	5.66
17	8.50	11.30	6.19
18	9.00	12.00	5.83
19	9.50	12.60	4.76
20	10.00	13.00	3.08
21	10.50	13.60	4.41
22	11.00	14.30	4.90

BLANK VALUE = 14.3 micrograms carbon

BLANK FACTOR = 14.3 / 10.99982 =

+1.30E+00

ug/min Carbon

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1434 TO 1445.

Sample Run By:

RD MEYERS

00002

HNF-1661 REV. 0

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
 TICTOC REV 2.0  
 <<< BLANK ANALYSIS >>>

Sample: BASE

Date: 12/14/98

Time: 09:05:13

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # = BASE  
 Blank Value = N/A

Analyst : RD MEYERS  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.51	0.60	0.00
2	1.01	2.10	71.43
3	1.51	6.10	65.57
4	2.00	10.70	42.99
5	2.50	14.20	24.65
6	3.00	16.80	15.48
7	3.50	18.60	9.68
8	4.00	19.90	6.53
9	4.50	21.10	5.69
10	5.00	22.20	4.95
11	5.50	23.30	4.72
12	6.00	24.10	3.32
13	6.50	25.00	3.60
14	7.00	25.80	3.10
15	7.50	26.70	3.37
16	8.00	27.60	3.26
17	8.50	28.30	2.47
18	9.00	28.90	2.08
19	9.50	29.50	2.03
20	10.00	30.10	1.99
21	10.50	31.00	2.90
22	11.00	31.50	1.59

BLANK VALUE = 31.5 micrograms carbon

BLANK FACTOR = 31.5 / 10.99701 = +2.86E+00 ug/min Carbon

&lt;&lt;&lt; WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!&gt;&gt;&gt;

Sample Run By:

RD MEYERS

00002

## HNF-1661 REV. 0

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: 25N12-D

Date: 12/14/98

Time: 09:29:29

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # =  
 Blank Value = 1.3 ug/minute C

Analyst : RD MEYERS  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.51	0.80	0.00
2	1.01	42.40	98.11
3	1.51	174.70	75.73
4	2:00	316.20	44.75
5	2.50	419.90	24.70
6	3.00	481.80	12.85
7	3.50	514.60	6.37
8	4.00	527.30	2.41
9	4.50	533.10	1.09
10	5.00	535.10	0.37
11	5.50	536.40	0.24
12	6.00	537.40	0.19
13	6.50	538.40	0.19
14	7.00	539.20	0.15
15	7.50	540.00	0.15
16	8.00	540.60	0.11
17	8.50	541.30	0.13
18	9.00	542.10	0.15
19	9.50	542.80	0.13
20	10.00	543.60	0.15
21	10.50	544.00	0.07
22	11.00	544.70	0.13

## USER INPUT BLANK VALUE

BLANK VALUE = 14.29611 micrograms carbon

BLANK FACTOR = 14.29611 / 10.99701 = +1.3E+00 ug/min Carbon

## SAMPLE RESULTS:

( 544.7 - 14.29738 ) (1) / (1) = +5.304E+02 g/L Carbon  
 ( 544.7 - 14.29738 ) (1) / (1) (12) = +4.420E+01 Molar Carbon

Sample Run By:

RD MEYERS

00002

HNF-1661 REV. 0

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: 26N12-F

Date: 12/14/98

Time: 09:48:50

Sample Size = 1 uL  
Dil Factor = 1  
Blank ID # =  
Blank Value = 2.86 ug/minute C

Analyst : RD MEYERS  
Min Readings = 22  
Max Readings = 22  
% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.51	0.60	0.00
2	1.01	12.70	95.28
3	1.50	102.10	87.56
4	2.00	279.30	63.44
5	2.50	440.30	36.57
6	3.00	514.60	14.44
7	3.50	538.40	4.42
8	4.00	546.90	1.55
9	4.50	550.40	0.64
10	5.00	552.80	0.43
11	5.50	554.50	0.31
12	6.00	555.60	0.20
13	6.50	557.30	0.31
14	7.00	558.30	0.18
15	7.50	559.50	0.21
16	8.00	560.40	0.16
17	8.50	561.30	0.16
18	9.00	562.20	0.16
19	9.50	563.10	0.16
20	10.00	564.10	0.18
21	10.50	564.90	0.14
22	11.00	565.90	0.18

## USER INPUT BLANK VALUE

BLANK VALUE = 31.45144 micrograms carbon

BLANK FACTOR = 31.45144 / 10.99701 = +2.9E+00 ug/min Carbon

## SAMPLE RESULTS:

( 565.9 - 31.45389 ) (1)/(1) = +5.344E+02 g/L Carbon  
 ( 565.9 - 31.45389 ) (1)/(1) (12) = +4.454E+01 Molar Carbon  
 <<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!>>>>

Sample Run By:

RD MEYERS

00002

1437



HNF-1661 REV. 0

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: BLK

Date: 12/14/98

Time: 10:02:02

Sample Size = 1 uL

Analyst : RD MEYERS

Dil Factor = 1

Min Readings = 22

Blank ID # =

Max Readings = 22

Blank Value = 1.3 ug/minute C

% Difference = 10

== Reading	==== Analysis Time	==== Coulometer	==== % Difference ==
1	0.51	0.60	0.00
2	1.01	2.10	71.43
3	1.50	4.40	52.27
4	2.00	5.70	22.81
5	2.50	6.70	14.93
6	3.00	7.30	8.22
7	3.50	8.20	10.98
8	4.00	8.70	5.75
9	4.50	9.20	5.43
10	5.00	9.80	6.12
11	5.50	10.50	6.67
12	6.00	10.90	3.67
13	6.50	11.40	4.39
14	7.00	12.20	6.56
15	7.50	12.70	3.94
16	8.00	13.20	3.79
17	8.50	13.80	4.35
18	9.00	14.30	3.50
19	9.50	14.70	2.72
20	10.00	15.20	3.29
21	10.50	15.70	3.18
22	11.00	16.30	3.68

## USER INPUT BLANK VALUE

BLANK VALUE = 14.29611 micrograms carbon

BLANK FACTOR = 14.29611 / 10.99701 = +1.3E+00 ug/min Carbon

## SAMPLE RESULTS:

( 16.3 - 14.29738 ) (1)/(1) =

+2.00E+00 g/L Carbon

( 16.3 - 14.29738 ) (1)/(1)(12) =

+1.67E-01 Molar Carbon

Sample Run By:

RD MEYERS

00002

1438

HNF-1661 REV. 0

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: BLK

Date: 12/14/98

Time: 10:14:32

Sample Size = 1 uL

Analyst : RD MEYERS

Dil Factor = 1

Min Readings = 22

Blank ID # =

Max Readings = 22

Blank Value = 2.86 ug/minute C

% Difference = 10

== Reading ==	==== Analysis Time'====	Coulometer	==== % Difference ==
1	0.51	0.20	0.00
2	1.01	2.40	91.67
3	1.51	11.10	78.38
4	2.00	22.20	50.00
5	2.50	30.00	26.00
6	3.00	34.30	12.54
7	3.50	37.00	7.30
8	4.00	38.50	3.90
9	4.50	40.10	3.99
10	5.00	41.60	3.61
11	5.50	42.60	2.35
12	6.00	43.50	2.07
13	6.50	44.50	2.25
14	7.00	45.60	2.41
15	7.50	46.60	2.15
16	8.00	47.60	2.10
17	8.50	48.20	1.24
18	9.00	49.00	1.63
19	9.50	49.90	1.80
20	10.00	50.40	0.99
21	10.50	51.00	1.18
22	11.00	51.80	1.54

## USER INPUT BLANK VALUE

BLANK VALUE = 31.45144 micrograms carbon

BLANK FACTOR = 31.45144 / 10.99701 = +2.9E+00 ug/min Carbon

## SAMPLE RESULTS:

( 51.8 - 31.45144 ) (1)/(1) = +2.03E+01 g/L Carbon  
 ( 51.8 - 31.45144 ) (1)/(1)(12) = +1.70E+00 Molar Carbon

&lt;&lt;&lt;&lt; WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!&gt;&gt;&gt;&gt;

Sample Run By:

RD MEYERS

00002

1439

HNF-1661 REV. 0

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: 3335

Date: 12/14/98

Time: 10:53:44

Sample Size = 1 uL

Analyst: RD MEYERS

Dil Factor = 1

Min Readings = 22

Blank ID # =

Max Readings = 22

Blank Value = 2.86 ug/minute C

% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.51	1.40	0.00
2	1.00	30.00	95.33
3	1.50	155.00	80.65
4	2.00	302.00	48.68
5	2.50	425.00	28.94
6	3.00	490.10	13.28
7	3.50	519.60	5.68
8	4.00	532.80	2.48
9	4.50	541.10	1.53
10	5.00	546.00	0.90
11	5.50	549.70	0.67
12	6.00	552.50	0.51
13	6.50	555.10	0.47
14	7.00	556.80	0.31
15	7.50	558.90	0.38
16	8.00	560.30	0.25
17	8.50	561.90	0.28
18	9.00	563.10	0.21
19	9.50	564.30	0.21
20	10.00	565.80	0.27
21	10.50	566.80	0.18
22	11.00	568.10	0.23

## USER INPUT BLANK VALUE

BLANK VALUE = 31.45144 micrograms carbon

BLANK FACTOR = 31.45144 / 10.99701 = +2.9E+00 ug/min Carbon

## SAMPLE RESULTS:

( 568.1 - 31.449 ) (1)/(1) = +5.367E+02 g/L Carbon  
 ( 568.1 - 31.449 ) (1)/(1) (12) = +4.472E+01 Molar Carbon  
 <<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!>>>>

Sample Run By:

RD MEYERS

00002

1440

HNF-1661 REV. 0

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: 3335DUP

Date: 12/14/98

Time: 11:47:16

Sample Size = 1 uL

Analyst : RD MEYERS

Dil Factor = 1

Min Readings = 22

Blank ID # =

Max Readings = 22

Blank Value = 2.86 ug/minute C

% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.51	0.90	0.00
2	1.00	57.00	98.42
3	1.50	169.80	66.43
4	2.00	298.30	43.08
5	2.50	390.70	23.65
6	3.00	432.80	9.73
7	3.50	450.60	3.95
8	4.00	459.80	2.00
9	4.50	465.70	1.27
10	5.00	469.20	0.75
11	5.50	472.00	0.59
12	6.00	474.80	0.59
13	6.50	476.80	0.42
14	7.00	478.70	0.40
15	7.50	480.50	0.37
16	8.00	482.10	0.33
17	8.50	483.70	0.33
18	9.00	485.20	0.31
19	9.50	486.60	0.29
20	10.00	488.10	0.31
21	10.50	489.30	0.25
22	11.00	490.80	0.31

## USER INPUT BLANK VALUE

BLANK VALUE = 31.45144 micrograms carbon

BLANK FACTOR = 31.45144 / 10.99701 = +2.9E+00 ug/min Carbon

## SAMPLE RESULTS:

( 490.8 - 31.45127 ) (1)/(1) = +4.593E+02 g/L Carbon  
 ( 490.8 - 31.45127 ) (1)/(1) (12) = +3.828E+01 Molar Carbon  
 <<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!>>>>

Sample Run By:

RD MEYERS

00002

1441

WORKBOOK PAGE: BLANK1

TIC/TOC : LA-342-100 (F-1)

SOLIDS

		TIC	TOC
Type	Sample Size in g (SS)	0.0000	0.0000
	Dilution Factor (DF)	1	1
Work List	µg of Carbon in Sample (C1)	16.3	51.8
27538	µg of Carbon from Baseline (C2)	14.3	31.5
Test Code			
@TICTOC1			
Matrix			
SOLID			
Batch Number			
98006165			
Rerun	µg of Carbon =  C1-C2		
0			
Sample Prep			
N/A			
Sample #			
BLK			
Instrument Code			
CARB2			
Prepared By			
JRO			
Chemist			
MJL			
Analyst			
RDM			
Date Complete			
12/15/98			
Analysis Date			
12/14/98			
Analysis Time	Method Detection Limit in µg/g	TIC	TOC
11:50 AM		5	40
Sample Point	µg of Carbon	2.00E+00	2.03E+01
U107			

Data Entered By:	JRO	Date:	12/15/98
Signature of Chemist:	<i>MJL</i>	Date:	

BLANK.WB1 REV 1.0

342100ML

1442

WORKBOOK PAGE: STD2

TIC/TOC : LA-342-100 (F-1)

LIQUIDS

		TIC	TOC
Type	Sample Size in mL (SS)	1.0000	0.2000
STD	Dilution Factor (DF)	1	1
Work List	Final Coulometer Reading in µg (C1)	544.7	565.9
27538	µg of Carbon from Baseline (C2)	14.3	31.6
Test Code	Standard Book Number	25N12D	26N12F
@TICTOC1	Standard Value (µg/ml)	602	3000
Matrix			
LIQUID			
Batch Number			
98006165			
Rerun			
0	QC Actual in µg/mL = Standard Value (µg/mL)		
Sample Prep	QC Found in µg/mL = (C1 - C2) * DF / SS		
N/A	QC Found in µg/mL for TIC = 5 if C1 < C2		
Sample #	QC Found in µg/mL for TOC = 40 if C1 < C2		
Instrument Code	% Recovery = QC Found / QC Actual * 100		
CARB2			
Prepared By			
JRO			
Chemist			
MJL			
Analyst			
RDM			
Date Complete			
12/15/98			
Analysis Date			
12/14/98			
Analysis Time	Method Detection Limit in µg/mL	TIC	TOC
11:50 AM	QC Actual in µg/mL	5	40
Sample Point	QC Found in µg/mL	6.02E+02	3.00E+03
U107	Percent Standard Recovery	5.30E+02	2.67E+03
		88.1	89.1

Data Entered By:	JRO	Date:	12/15/98
Signature of Chemist:	<i>[Signature]</i>	Date:	

STANDARD.WB1 REV 1.0


342100ML

WORKBOOK PAGE: SAM3

TIC/TOC : LA-342-100 (F-1)

**SOLIDS**

		TIC	TOC
Type	Sample Size in g (SS)	0.1025	0.1025
SAMPLE	Dilution Factor (DF)	1	1
Work List	µg of Carbon in Sample (C1)	605.8	568.1
27538	µg of Carbon from Baseline (C2)	14.3	31.5
Test Code			
@TICTOC1			
Matrix			
SOLID			
Batch Number			
98006165			
Rerun	µg of Carbon/g = (C1-C2) * DF / SS		
0	µg of Carbon/g for TIC = 5 if C1 < C2		
Sample Prep	µg of Carbon/g for TOC = 40 if C1 < C2		
N/A			
Sample #			
S98T003335			
Instrument Code			
CARB2			
Prepared By			
JRO			
Chemist			
MJL			
Analyst			
RDM			
Date Complete			
12/15/98			
Analysis Date			
12/14/98			
Analysis Time	Method Detection Limit in ug/g	TIC	TOC
11:50 AM		5	40
Sample Point	µg of Carbon/g	5.77E+03	5.24E+03
U107			


Data Entered By:	JRO	Date:	12/15/98
Signature of Chemist:		Date:	

WORKBOOK PAGE: DUP4

TIC/TOC : LA-342-100 (F-1)

**SOLIDS**

		TIC	TOC
Type	Sample Size in g (SS)	0.0984	0.0984
DUP	Dilution Factor (DF)	1	1
Work List	µg of Carbon in Sample (C1)	550.6	490.8
27538	µg of Carbon from Baseline (C2)	14.3	31.5
Test Code	Known µg of C from Original Sample	5.77E+3	5.24E+3
@TICTOC1			
Matrix			
SOLID			
Batch Number			
98006165			
Rerun	µg of Carbon/g = (C1-C2) * DF / SS		
0	µg of Carbon/g for TIC = 5 if C1 < C2		
Sample Prep	µg of Carbon/g for TOC = 40 if C1 < C2		
N/A			
Sample #			
S98T003335			
Instrument Code			
CARB2			
Prepared By			
JRO			
Chemist			
MJL			
Analyst			
RDM			
Date Complete			
12/15/98			
Analysis Date			
12/14/98			
Analysis Time	Method Detection Limit in ug/g	TIC	TOC
11:50 AM		5	40
Sample Point	µg of Carbon/g	5.45E+03	4.67E+03
U107			

Data Entered By:	JRO	Date:	12/15/98
Signature of Chemist:		Date:	



# LABCORE Completed Worklist Report for Worklist# 27581

Analyst: krm Instrument: CARB2 Book#: \_\_\_\_\_

Method: LA-342-100 Rev/Mod \_\_\_\_\_

Worklist Comment: U107 RERUN SOLID JRO

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0	@TICTOC1 TIC-02	SOLID	6.02E+02	5.68E+2	94.352 % Recovery	
1 STD	0	@TICTOC1 TOC-02	SOLID	3.00E+03	2.77E+3	92.333 % Recovery	
2 BLNK	0	@TICTOC1 TIC-02	SOLID	1	5.00E+0	5.000 ug/g	
2 BLNK	0	@TICTOC1 TOC-02	SOLID	1	5.80E+0	5.800 ug/g	
3 SAMPLE	S98T002570 0	@TICTOC1 TIC-02	SOLID	N/A	5.46E+02	5.000 ug/g	
3 SAMPLE	S98T002570 0	@TICTOC1 TOC-02	SOLID	N/A	3.16E+02	40.000 ug/g	
4 DUP	S98T002570 0	@TICTOC1 TIC-02	SOLID	5.46E+2	5.42E+2	0.735 RPD	
4 DUP	S98T002570 0	@TICTOC1 TOC-02	SOLID	3.16E+2	2.39E+2	27.748 RPD	
5 SPK	S98T002570 0	@TICTOC1 TIC-02	SOLID	1.00E+02	8.65E+01	86.500 % Recovery	
5 SPK	S98T002570 0	@TICTOC1 TOC-02	SOLID	1.00E+02	8.05E+01	80.500 % Recovery	

Final page for worklist# 27581

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*John M. Smith* 12-22-98  
Analyst Signature Date

*[Signature]* 12/31/98  
Reviewer Signature Date

HNF-1661  
rev 0

# LABCORE Data Entry Template for Worklist# 27581

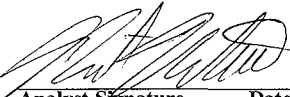
Analyst: KRM Instrument: CARB2 \_\_\_\_\_ Book# \_\_\_\_\_

Method: LA-342-100 Rev/Mod F-1

Worklist Comment: U107 RERUN SOLID JRO

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	STD				@TICTOC1	SOLID		
2	BLNK				@TICTOC1	SOLID		
3	SAMPLE	S98T002570 0			@TICTOC1	SOLID	98000401	U-107 (2)
Analytes Requested: TIC-02 , TOC-02								
4	DUP	S98T002570 0			@TICTOC1	SOLID		
5	SPK	S98T002570 0			@TICTOC1	SOLID		

### Final page for worklist # 27581

  
 Analyst Signature \_\_\_\_\_ Date 12-16-98

\_\_\_\_\_  
 Analyst Signature \_\_\_\_\_ Date

Data Entry Comments:

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
 TIC/TOC REV 2.0  
 <<< BLANK ANALYSIS >>>

Sample: BASE2

Date: 12/17/98

Time: 01:01:55

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # = BASE2  
 Blank Value = N/A


Analyst : KR MONTEITH  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	0.40	100.00
3	1.01	0.70	42.86
4	1.51	1.20	41.67
5	2.00	1.80	33.33
6	2.50	2.50	28.00
7	3.04	3.00	16.67
8	3.54	3.50	14.29
9	4.04	4.00	12.50
10	4.54	4.30	6.98
11	5.04	4.90	12.24
12	5.54	5.30	7.55
13	6.04	5.80	8.62
14	6.53	6.20	6.45
15	7.03	6.60	6.06
16	7.53	7.20	8.33
17	8.03	7.40	2.70
18	8.53	7.80	5.13
19	9.03	8.20	4.88
20	9.53	8.60	4.65
21	10.03	9.20	6.52
22	10.53	9.60	4.17

BLANK VALUE = 9.6 micrograms carbon  
 BLANK FACTOR = 9.6 / 10.532 =

+9.1E-01 ug/min Carbon

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1448 TO 1465

Sample Run By: 

KR MONTEITH

00000

HNF-1661 REV.0

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT

TICTOC REV 2.0

<<< BLANK ANALYSIS >>>

Sample: BASE2

Date: 12/17/98

Time: 01:14:53

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # = BASE2  
 Blank Value = N/A

Analyst : KR MONTEITH  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	0.60	100.00
3	1.00	1.40	57.14
4	1.50	4.90	71.43
5	2.00	8.90	44.94
6	2.50	11.50	22.61
7	3.00	13.60	15.44
8	3.50	14.90	8.72
9	4.00	15.70	5.10
10	4.50	16.70	5.99
11	5.00	17.30	3.47
12	5.50	18.10	4.42
13	6.00	18.60	2.69
14	6.50	19.30	3.63
15	7.00	20.20	4.46
16	7.50	20.90	3.35
17	8.00	21.70	3.69
18	8.50	22.20	2.25
19	9.00	22.90	3.06
20	9.50	23.20	1.29
21	10.00	23.80	2.52
22	10.50	24.20	1.65

BLANK VALUE = 24.2 micrograms carbon

BLANK FACTOR = 24.2 / 10.49817 = +2.31E+00 ug/min Carbon

<<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!!!>>>>

Sample Run By:

KR MONTEITH

00000

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: STD

Date: 12/17/98

Time: 01:27:34

Sample Size = 1000 uL  
Dil Factor = 1  
Blank ID # =  
Blank Value = .91 ug/minute C

Analyst : KR MONTEITH  
Min Readings = 22  
Max Readings = 22  
% Difference = 10

Reading	Analysis Time	Coulometer	% Difference
1	0.08	0.00	0.00
2	0.51	2.20	100.00
3	1.01	4.80	54.17
4	1.51	78.70	93.90
5	2.00	229.30	65.68
6	2.50	366.70	37.47
7	3.00	464.40	21.04
8	3.50	520.20	10.73
9	4.00	549.10	5.26
10	4.50	561.20	2.16
11	5.00	566.60	0.95
12	5.50	568.80	0.39
13	6.00	570.30	0.26
14	6.50	571.40	0.19
15	7.00	572.30	0.16
16	7.50	573.20	0.16
17	8.00	573.80	0.10
18	8.50	574.70	0.16
19	9.00	575.40	0.12
20	9.50	576.10	0.12
21	10.00	576.80	0.12
22	10.50	577.40	0.10

USER INPUT BLANK VALUE

BLANK VALUE = 9.553334 micrograms carbon

BLANK FACTOR = 9.553334 / 10.49817 = +9.1E-01 ug/min Carbon

SAMPLE RESULTS:

( 577.4 - 9.55409 ) (1)/(1000) = +5.678E-01 g/L Carbon  
( 577.4 - 9.55409 ) (1)/(1000) (12) = +4.732E-02 Molar Carbon

Sample Run By:

KR MONTEITH

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: STD

Date: 12/17/98

Time: 01:39:06

Sample Size = 200 uL  
Dil Factor = 1  
Blank ID # =  
Blank Value = 2.31 ug/minute C

Analyst : KR MONTEITH  
Min Readings = 22  
Max Readings = 22  
% Difference = 10

== Reading	==== Analysis Time	==== Coulometer	==== % Difference ==
1	0.08	0.00	0.00
2	0.50	0.80	100.00
3	1.00	1.70	52.94
4	1.50	39.00	95.64
5	2.00	228.20	82.91
6	2.50	409.70	44.30
7	3.00	500.30	18.11
8	3.50	542.00	7.69
9	4.00	558.70	2.99
10	4.50	565.50	1.20
11	5.00	568.40	0.51
12	5.50	570.20	0.32
13	6.00	571.40	0.21
14	6.50	572.40	0.17
15	7.00	573.40	0.17
16	7.50	574.40	0.17
17	8.00	575.20	0.14
18	8.50	575.80	0.10
19	9.00	576.50	0.12
20	9.50	577.20	0.12
21	10.00	577.80	0.10
22	10.50	578.60	0.14

## USER INPUT BLANK VALUE

BLANK VALUE = 24.25077 micrograms carbon

BLANK FACTOR = 24.25077 / 10.49817 = +2.3E+00 ug/min Carbon

## SAMPLE RESULTS:

( 578.6 - 24.25038 ) (1)/(200) = +2.772E+00 g/L Carbon  
 ( 578.6 - 24.25038 ) (1)/(200) (12) = +2.310E-01 Molar Carbon  
 <<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!!!>>>>

Sample Run By:

KR MONTEITH

00000

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: BLK

Date: 12/17/98

Time: 01:52:55

Sample Size = 1 uL  
Dil Factor = 1  
Blank ID # =  
Blank Value = .91 ug/minute C

Analyst : KR MONTEITH  
Min Readings = 22  
Max Readings = 22  
% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	0.80	100.00
3	1.01	2.50	68.00
4	1.51	4.70	46.81
5	2.00	5.90	20.34
6	2.50	6.90	14.49
7	3.00	7.70	10.39
8	3.50	8.00	3.75
9	4.00	8.50	5.88
10	4.50	9.00	5.56
11	5.00	9.50	5.26
12	5.50	9.90	4.04
13	6.00	10.50	5.71
14	6.50	11.00	4.55
15	7.00	11.40	3.51
16	7.50	11.80	3.39
17	8.00	12.30	4.07
18	8.50	12.70	3.15
19	9.00	13.30	4.51
20	9.50	13.70	2.92
21	10.00	14.10	2.84
22	10.50	14.60	3.42

## USER INPUT BLANK VALUE

BLANK VALUE = 9.553334 micrograms carbon

BLANK FACTOR = 9.553334 / 10.49817 = +9.1E-01 ug/min Carbon

## SAMPLE RESULTS:

( 14.6 - 9.553334 ) (1)/(1) = +5.05E+00 g/L Carbon  
( 14.6 - 9.553334 ) (1)/(1) (12) = +4.21E-01 Molar Carbon

Sample Run By:

KR MONTEITH

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: BLK

Date: 12/17/98

Time: 02:17:34

Sample Size = 1 uL  
Dil Factor = 1  
Blank ID # =  
Blank Value = 2.31 ug/minute C

Analyst : KR MONTEITH  
Min Readings = 22  
Max Readings = 22  
% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.50	0.40	100.00
3	1.00	0.80	50.00
4	1.50	2.40	66.67
5	2.00	5.20	53.85
6	2.50	7.50	30.67
7	3.00	9.50	21.05
8	3.50	10.60	10.38
9	4.00	11.60	8.62
10	4.50	12.40	6.45
11	5.00	13.00	4.62
12	5.50	13.60	4.41
13	6.00	14.30	4.90
14	6.50	14.70	2.72
15	7.00	15.30	3.92
16	7.50	15.80	3.16
17	8.00	16.20	2.47
18	8.50	16.80	3.57
19	9.00	17.40	3.45
20	9.50	17.70	1.69
21	10.00	18.20	2.75
22	10.50	18.60	2.15

## USER INPUT BLANK VALUE

BLANK VALUE = 24.25077 micrograms carbon

BLANK FACTOR = 24.25077 / 10.49817 = +2.3E+00 ug/min Carbon

## SAMPLE RESULTS:

( 18.6 - 24.2504 ) (1)/(1) = &lt; 5.00 E-3 g/L Carbon

( 18.6 - 24.2504 ) (1)/(1) (12) = &lt; 4.17 E-4 Molar Carbon

&lt;&lt;&lt;&lt; WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!!!&gt;&gt;&gt;&gt;

Sample Run By:

KR MONTEITH

00000



TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T2570

Date: 12/17/98

Time: 02:32:50

Sample Size = 1 uL

Analyst : KR MONTEITH

Dil Factor = 1

Min Readings = 22

Blank ID # =

Max Readings = 22

Blank Value = .91 ug/minute C

% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	0.40	100.00
3	1.01	1.00	60.00
4	1.50	9.20	89.13
5	2.00	34.70	73.49
6	2.50	64.70	46.37
7	3.00	92.10	29.75
8	3.50	112.70	18.28
9	4.00	124.90	9.77
10	4.50	131.80	5.24
11	5.00	135.30	2.59
12	5.50	137.40	1.53
13	6.00	138.50	0.79
14	6.50	139.40	0.65
15	7.00	140.40	0.71
16	7.50	141.00	0.43
17	8.00	141.70	0.49
18	8.50	142.60	0.63
19	9.00	143.20	0.42
20	9.50	143.90	0.49
21	10.03	144.60	0.48
22	10.53	145.10	0.34

## USER INPUT BLANK VALUE

BLANK VALUE = 9.553334 micrograms carbon

BLANK FACTOR = 9.553334 / 10.49817 = +9.1E-01 ug/min Carbon

## SAMPLE RESULTS:

( 145.1 - 9.584868 ) (1)/(1) =

+1.355E+02 g/L Carbon

( 145.1 - 9.584868 ) (1)/(1) (12) =

+1.129E+01 Molar Carbon

Sample Run By:

KR MONTEITH

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
 TIC/TOC REV 2.0

Sample: S98T2570

Date: 12/17/98

Time: 02:44:08

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # =  
 Blank Value = 2.31 ug/minute C

Analyst : KR MONTEITH  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	0.80	100.00
3	1.01	1.70	52.94
4	1.50	14.70	88.44
5	2.00	41.90	64.92
6	2.50	61.80	32.20
7	3.00	74.50	17.05
8	3.50	81.80	8.92
9	4.00	85.60	4.44
10	4.50	88.50	3.28
11	5.00	90.50	2.21
12	5.50	92.10	1.74
13	6.00	93.50	1.50
14	6.50	95.00	1.58
15	7.00	96.10	1.14
16	7.50	97.30	1.23
17	8.00	98.40	1.12
18	8.50	99.20	0.81
19	9.00	100.30	1.10
20	9.50	100.80	0.50
21	10.00	101.70	0.88
22	10.50	102.50	0.78

## USER INPUT BLANK VALUE

BLANK VALUE = 24.25077 micrograms carbon

BLANK FACTOR = 24.25077 / 10.49817 = +2.3E+00 ug/min Carbon

## SAMPLE RESULTS:

( 102.5 - 24.25271 ) (1)/(1) = +7.825E+01 g/L Carbon  
 ( 102.5 - 24.25271 ) (1)/(1) (12) = +6.521E+00 Molar Carbon  
 <<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!!!>>>>

Sample Run By:

KR MONTEITH

00000

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T2570DUP

Date: 12/17/98

Time: 03:01:45

Sample Size = 1 uL

Analyst : KR MONTEITH

Dil Factor = 1

Min Readings = 22

Blank ID # =

Max Readings = 22

Blank Value = .91 ug/minute C

% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	0.70	100.00
3	1.01	1.60	56.25
4	1.51	9.00	82.22
5	2.00	40.80	77.94
6	2.50	86.50	52.83
7	3.00	132.50	34.72
8	3.50	169.80	21.97
9	4.00	194.70	12.79
10	4.50	209.70	7.15
11	5.00	217.40	3.54
12	5.50	221.30	1.76
13	6.00	223.60	1.03
14	6.50	225.10	0.67
15	7.00	226.50	0.62
16	7.50	227.40	0.40
17	8.00	228.20	0.35
18	8.50	229.00	0.35
19	9.00	230.00	0.43
20	9.50	230.70	0.30
21	10.00	231.60	0.39
22	10.50	232.10	0.22

## USER INPUT BLANK VALUE

BLANK VALUE = 9.553334 micrograms carbon

BLANK FACTOR = 9.553334 / 10.49817 = +9.1E-01 ug/min Carbon

## SAMPLE RESULTS:

( 232.1 - 9.553334 ) (1)/(1) = +2.225E+02 g/L Carbon  
 ( 232.1 - 9.553334 ) (1)/(1) (12) = +1.855E+01 Molar Carbon

Sample Run By:

KR MONTEITH

00000



TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: S98T2570SPK

Date: 12/17/98

Time: 03:38:32

Sample Size = 1 uL

Analyst : KR MONTEITH

Dil Factor = 1

Min Readings = 22

Blank ID # =

Max Readings = 22

Blank Value = .91 ug/minute C

% Difference = 10

== Reading	==== Analysis Time	==== Coulometer	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	1.80	100.00
3	1.01	2.90	37.93
4	1.50	11.80	75.42
5	2.00	72.90	83.81
6	2.50	171.40	57.47
7	3.00	272.50	37.10
8	3.50	355.50	23.35
9	4.00	409.60	13.21
10	4.50	442.60	7.46
11	5.00	459.00	3.57
12	5.50	466.30	1.57
13	6.00	470.00	0.79
14	6.50	471.90	0.40
15	7.00	473.50	0.34
16	7.50	474.40	0.19
17	8.00	475.50	0.23
18	8.50	476.50	0.21
19	9.00	477.40	0.19
20	9.50	478.40	0.21
21	10.00	479.30	0.19
22	10.50	480.30	0.21

## USER INPUT BLANK VALUE

BLANK VALUE = 9.553334 micrograms carbon

BLANK FACTOR = 9.553334 / 10.49817 = +9.1E-01 ug/min Carbon

## SAMPLE RESULTS:

( 480.3 - 9.555 ) (1)/(1) = +4.707E+02 g/L Carbon  
 ( 480.3 - 9.555 ) (1)/(1) (12) = +3.923E+01 Molar Carbon

Sample Run By:

KR MONTEITH0000



WORKBOOK PAGE: BLANK2

TIC/TOC : LA-342-100 (F-1)

SOLIDS

		TIC	TOC
Type	Sample Size in g (SS)	0.0000	0.0000
BLNK	Dilution Factor (DF)	1	1
<b>Work List</b>	<b>µg of Carbon in Sample (C1)</b>	<b>14.6</b>	<b>18.4</b>
27581	µg of Carbon from Baseline (C2)	9.6	24.2
<b>Test Code</b>	µg of Carbon =  C1-C2		
@TICTOC1			
<b>Matrix</b>			
SOLID			
<b>Batch Number</b>			
98006210			
<b>Rerun</b>			
0			
<b>Sample Prep</b>			
N/A			
<b>Sample #</b>			
BLANK			
<b>Instrument Code</b>			
CARB2			
<b>Prepared By</b>			
JMV			
<b>Chemist</b>			
MJL			
<b>Analyst</b>			
KRM			
<b>Date Complete</b>			
12/21/98			
<b>Analysis Date</b>			
12/16/98			
<b>Analysis Time</b>	Method Detection Limit in ug/g	TIC	TOC
03:51 AM		5	40
<b>Sample Point</b>	µg of Carbon	5.00E+00	5.80E+00
U-107			

Data Entered By:	JMV	Date:	12/21/98
Signature of Chemist:	<i>NA</i>	Date:	

BLANK.WB1 REV 1.0

342100ML

1460

TIC/TOC : LA-342-100 (F-1)

LIQUIDS

		TIC	TOC
Type	Sample Size in mL (SS)	1.0000	0.2000
STD	Dilution Factor (DF)	1	1
Work List	Final Coulometer Reading in µg (C1)	577.4	578.6
27581	µg of Carbon from Baseline (C2)	9.6	24.2
Test Code	Standard Book Number	25N12D	26N12F
@TICTOC1	Standard Value (µg/ml)	602	3000

Matrix	
LIQUID	
Batch Number	
98006210	
Rerun	
0	
Sample Prep	
N/A	
Sample #	
STD	
Instrument Code	
CARB2	
Prepared By	
JMV	
Chemist	
MJL	
Analyst	
KRM	
Date Complete	
12/21/98	
Analysis Date	
12/16/98	
Analysis Time	
03:51 AM	
Sample Point	
U-107	

QC Actual in µg/mL = Standard Value (µg/mL)

QC Found in µg/mL = (C1 - C2) \* DF / SS

QC Found in µg/mL for TIC = 5 if C1 < C2

QC Found in µg/mL for TOC = 40 if C1 < C2

% Recovery = QC Found / QC Actual \* 100

	TIC	TOC
Method Detection Limit in µg/mL	5	40
QC Actual in µg/mL	6.02E+02	3.00E+03
QC Found in µg/mL	5.68E+02	2.77E+03
Percent Standard Recovery	94.3	92.4

Data Entered By:	JMV	Date:	12/21/98
Signature of Chemist:	<i>N/A</i>	Date:	



WORKBOOK PAGE: SAM3

TIC/TOC : LA-342-100 (F-1)

SOLIDS

		TIC	TOC
Type	Sample Size in g (SS)	0.2481	0.2481
SAMPLE	Dilution Factor (DF)	1	1
Work List	µg of Carbon in Sample (C1)	145.1	102.5
27581	µg of Carbon from Baseline (C2)	9.6	24.2
Test Code			
@TICTOC1			
Matrix			
SOLID			
Batch Number			
98006210			
Rerun			
0			
Sample Prep			
N/A			
Sample #			
S98T002570			
Instrument Code			
CARB2			
Prepared By			
JMV			
Chemist			
MJL			
Analyst			
KRM			
Date Complete			
12/21/98			
Analysis Date			
12/16/98			
Analysis Time	Method Detection Limit in ug/g		
03:51 AM			
Sample Point	µg of Carbon/g		
U-107		5.46E+02	3.16E+02

µg of Carbon/g = (C1-C2) \* DF / SS  
 µg of Carbon/g for TIC = 5 if C1 < C2  
 µg of Carbon/g for TOC = 40 if C1 < C2

Data Entered By:	JMV	Date:	12/21/98
Signature of Chemist:	<i>NA</i>	Date:	

WORKBOOK PAGE: DUP4

TIC/TOC : LA-342-100 (F-1)

**SOLIDS**

		TIC	TOC
Type	Sample Size in g (SS)	0.4108	0.4108
DUP	Dilution Factor (DF)	1	1
Work List	µg of Carbon in Sample (C1)	232.1	122.2
27581	µg of Carbon from Baseline (C2)	9.6	24.2
Test Code	Known µg of C from Original Sample	5.46E+2	3.16E+2
@TICTOC1			
Matrix			
SOLID			
Batch Number			
98006210			
Rerun	µg of Carbon/g = (C1-C2) * DF / SS		
0	µg of Carbon/g for TIC = 5 if C1 < C2		
Sample Prep	µg of Carbon/g for TOC = 40 if C1 < C2		
N/A			
Sample #			
S98T002570			
Instrument Code			
CARB2			
Prepared By			
JMV			
Chemist			
MJL			
Analyst			
KRM			
Date Complete			
12/21/98			
Analysis Date			
12/16/98			
Analysis Time	Method Detection Limit in ug/g	TIC	TOC
03:51 AM		5	40
Sample Point	µg of Carbon/g	5.42E+02	2.39E+02
U-107			

Data Entered By:	JMV	Date:	12/21/98
Signature of Chemist:	<i>NA</i>	Date:	

WORKBOOK PAGE: SPIKES

TIC/TOC : LA-342-100 (F-1) SOLIDS

Type	Sample Vial Data	TIC	TOC
SPK	Sample Size in g (SS)	0.2481	0.2481
Work List	Final Coulometer Reading in µg (C1)	145.1	102.5
27581	Spiked Vial Data		
Test Code	Sample Size in g (SPK SS)	0.3850	0.3850
@TICTOC1	Amount of Spike Std. in mL (SPK VOL)	0.500	0.100
Matrix	Final Coulometer Reading in µg (C2)	480.3	387.3
SOLID	Spike Book Number	25N12D	26N12F
Batch Number	Spike Standard Value in µg/mL (SPK CONC)	602	3000
98006210	µg C in baseline (BL)	9.6	24.2

Rerun  
0

Sample Prep  
N/A

Sample #  
S98T002570

Percent Spike Recovery = ((C2-BL) - (C1-BL) \* (SPK SS) / SS) / ((SPK CONC) \* (SPK VOL)) \* 100

Instrument Code  
CARB2

QC Actual in µg/mL = Spike Value (µg/mL)  
QC Found in µg/mL = (Percent Spike Recovery) \* (QC Actual) / 100

Prepared By  
JMV

Chemist  
MJL

Analyst  
KRM

Date Complete  
12/21/98

Analysis Date  
12/16/98

Analysis Time  
03:51 AM

	TIC	TOC
QC Actual in µg/mL	6.02E+02	3.00E+03
QC Found in µg/mL	5.21E+02	2.42E+03
Percent Spike Recovery	86.5	80.5

Sample Point  
U-107

Data Entered By:	JMV	Date:	12/21/98
Signature of Chemist:	<i>MJA</i>	Date:	

# LABCORE Completed Worklist Report for Worklist# 27582

Analyst: krm Instrument: CARB2 Book#: \_\_\_\_\_

Method: LA-342-100 Rev/Mod \_\_\_\_\_

Worklist Comment: U107 RERUN LIQUID JRO

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0	@TICTOCL TIC-02	LIQUID	6.02E+02	5.64E+2	93.688 % Recovery	
1 STD	0	@TICTOCL TOC-02	LIQUID	3.00E+03	2.74E+3	91.333 % Recovery	
2 BLNK	0	@TICTOCL TIC-02	LIQUID	1	4.90E+0	4.900 ug/mL	
2 BLNK	0	@TICTOCL TOC-02	LIQUID	1	1.45E+1	14.500 ug/mL	
3 SAMPLE	S98T003326 0	@TICTOCL TIC-02	LIQUID	N/A	5.59E+03	5.000 ug/mL	
3 SAMPLE	S98T003326 0	@TICTOCL TOC-02	LIQUID	N/A	4.11E+03	40.000 ug/mL	
4 DUP	S98T003326 0	@TICTOCL TIC-02	LIQUID	5.59E+3	6.27E+3	11.467 RPD	
4 DUP	S98T003326 0	@TICTOCL TOC-02	LIQUID	4.11E+3	4.09E+3	0.488 RPD	
5 SPK	S98T003326 0	@TICTOCL TIC-02	LIQUID	1.00E+02	1.31E+02	131.000 % Recovery	
5 SPK	S98T003326 0	@TICTOCL TOC-02	LIQUID	1.00E+02	9.49E+01	94.900 % Recovery	
6 SAMPLE	S98T003331 0	@TICTOCL TIC-02	LIQUID	N/A	6.31E+03	5.000 ug/mL	
6 SAMPLE	S98T003331 0	@TICTOCL TOC-02	LIQUID	N/A	4.49E+03	40.000 ug/mL	
7 DUP	S98T003331 0	@TICTOCL TIC-02	LIQUID	6.31E+3	6.17E+3	2.244 RPD	
7 DUP	S98T003331 0	@TICTOCL TOC-02	LIQUID	4.49E+3	4.34E+3	3.398 RPD	
8 SPK	S98T003331 0	@TICTOCL TIC-02	LIQUID	1.00E+02	9.50E+01	95.000 % Recovery	
8 SPK	S98T003331 0	@TICTOCL TOC-02	LIQUID	1.00E+02	8.70E+01	87.000 % Recovery	

Final page for worklist# 27582

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*Mary Tracy* 12-28-98  
Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*[Signature]* 12/31/98  
Reviewer Signature \_\_\_\_\_ Date \_\_\_\_\_

# LABCORE Data Entry Template for Worklist# 27582

Analyst: KRM Instrument: CARB2 Book# 25N12D  
26N12F

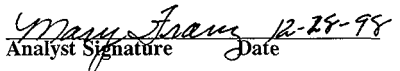
Method: LA-342-100 Rev/Mod F-1

Worklist Comment: U107 RERUN LIQUID JRO

S Type	Sample#	R A	Test	Matrix	Group#	Project
1 STD			@TICTOC1	LIQUID		
2 SAMPLE	S98T003326 0		@TICTOC1	LIQUID	98000358	U-107 (2)
	Analytes Requested: TIC-02 , TOC-02					
3 DUP	S98T003326 0		@TICTOC1	LIQUID		
4 SPK	S98T003326 0		@TICTOC1	LIQUID		
5 SAMPLE	S98T003331 0		@TICTOC1	LIQUID	98000359	U-107 (2)
	Analytes Requested: TIC-02 , TOC-02					
6 DUP	S98T003331 0		@TICTOC1	LIQUID		
7 SPK	S98T003331 0		@TICTOC1	LIQUID		

### Final page for worklist # 27582

  
Analyst Signature 12-17-98  
Date

  
Analyst Signature 12-28-98  
Date

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: BASE

Date: 12/17/98

Time: 22:54:30

Sample Size = 1 uL  
Dil Factor = 1  
Blank ID # =  
Blank Value = 0 ug/minute C

Analyst : KR MONTEITH  
Min Readings = 22  
Max Readings = 22  
% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	0.40	100.00
3	1.01	0.90	55.56
4	1.50	1.60	43.75
5	2.00	2.10	23.81
6	2.50	2.60	19.23
7	3.00	3.00	13.33
8	3.50	3.50	14.29
9	4.00	3.90	10.26
10	4.50	4.30	9.30
11	5.00	4.70	8.51
12	5.50	5.10	7.84
13	6.00	5.60	8.93
14	6.50	6.00	6.67
15	7.00	6.50	7.69
16	7.50	6.80	4.41
17	8.00	7.40	8.11
18	8.50	7.70	3.90
19	9.00	8.20	6.10
20	9.50	8.70	5.75
21	10.00	9.00	3.33
22	10.50	9.50	5.26

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 1462 TO 1492.

USER INPUT BLANK VALUE

BLANK VALUE = 0 micrograms carbon

BLANK FACTOR = 0 / 0 =

+0.0E+00 ug/min Carbon


SAMPLE RESULTS:

( 9.5 - 0 ) (1)/(1) =

+9.5E+00 g/L Carbon

( 9.5 - 0 ) (1)/(1) (12) =

+7.9E-01 Molar Carbon

Sample Run By: 

KR MONTEITH

00000

TOC- TOTAL ORGANIC CARBON ANALYSIS REPORT  
 TIC/TOC REV 2.0  
 <<< BLANK ANALYSIS >>>

Sample: BASE

Date: 12/17/98

Time: 23:06:33

Sample Size = 1 uL  
 Dil Factor = 1  
 Blank ID # = BASE  
 Blank Value = N/A

Analyst : KR MONTEITH  
 Min Readings = 22  
 Max Readings = 22  
 % Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	0.50	100.00
3	1.01	1.70	70.59
4	1.50	7.70	77.92
5	2.00	14.70	47.62
6	2.50	18.90	22.22
7	3.00	21.20	10.85
8	3.50	23.10	8.23
9	4.00	24.60	6.10
10	4.50	26.10	5.75
11	5.00	27.20	4.04
12	5.50	28.20	3.55
13	6.00	29.40	4.08
14	6.50	30.00	2.00
15	7.00	30.70	2.28
16	7.50	31.50	2.54
17	8.00	32.40	2.78
18	8.50	33.00	1.82
19	9.00	33.80	2.37
20	9.50	34.40	1.74
21	10.00	35.00	1.71
22	10.50	35.50	1.41

BLANK VALUE = 35.5 micrograms carbon

BLANK FACTOR = 35.5 / 10.49817 = +3.38E+00 ug/min Carbon

<<<< WARNING - BLANK VALUE EXCEEDS 1.5 ug/min Carbon!!!!>>>>

Sample Run By:

KR MONTEITH

00000

HNF-1661 REV. 0

TIC- TOTAL INORGANIC CARBON ANALYSIS REPORT  
TICTOC REV 2.0

Sample: STD

Date: 12/17/98

Time: 23:22:25

Sample Size = 1000 uL  
Dil Factor = 1  
Blank ID # =  
Blank Value = .95 ug/minute C

Analyst : KR MONTEITH  
Min Readings = 22  
Max Readings = 22  
% Difference = 10

== Reading ==	==== Analysis Time ==	==== Coulometer ==	==== % Difference ==
1	0.08	0.00	0.00
2	0.51	0.50	100.00
3	1.01	1.60	68.75
4	1.50	53.60	97.01
5	2.00	190.30	71.83
6	2.50	331.90	42.66
7	3.00	440.80	24.71
8	3.50	507.70	13.18
9	4.00	541.50	6.24
10	4.50	556.30	2.66
11	5.00	562.40	1.08
12	5.50	565.30	0.51
13	6.00	566.90	0.28
14	6.50	568.00	0.19
15	7.00	568.80	0.14
16	7.50	569.60	0.14
17	8.00	570.20	0.11
18	8.50	571.00	0.14
19	9.00	571.60	0.10
20	9.50	572.30	0.12
21	10.00	572.80	0.09
22	10.50	573.50	0.12

USER INPUT BLANK VALUE

BLANK VALUE = 9.97326 micrograms carbon

BLANK FACTOR = 9.97326 / 10.49817 = +9.5E-01 ug/min Carbon

SAMPLE RESULTS:

( 573.5 - 9.97326 ) (1)/(1000) = +5.635E-01 g/L Carbon  
( 573.5 - 9.97326 ) (1)/(1000) (12) = +4.696E-02 Molar Carbon

Sample Run By:

KR MONTEITH

00000



This document was too large to scan as a single document; therefore, it has been divided into smaller sections.

Section 3 of 7

Document Information

Document #	HNF-1661	Revision	0
Title	TANK 241U107 CORES 242 & 242R & 245 ANALYTICAL RESULTS FOR THE FINAL REPORT		
Date	02/01/99		
Originator	STEEN FH	Originator Co.	WMH
Recipient		Recipient Co.	
References	EDT-626133		
Keywords	PUSH MODE, CHARACTERIZATION, U FARM		
Projects	TWRS		
Other Information			

DOUBLE KNOWN ADDITION SELECTED  
AT 12:03, 09-14-98

SAMPLE VOL= 25.000 AT 12:09, 09-14-98  
ENTERED

EMF= 158.5 mV AT 12:16, 09-14-98

EMF= 159.2 mV AT 12:17, 09-14-98

EMF= 159.8 mV AT 12:17, 09-14-98

EMF= 159.9 mV AT 12:17, 09-14-98  
ENTERED

STD CONC= 1000 AT 12:17, 09-14-98  
ENTERED

STD VOL= .25000 AT 12:17, 09-14-98  
ENTERED

EMF= 64.8 mV AT 12:21, 09-14-98

EMF= 64.5 mV AT 12:21, 09-14-98

EMF= 64.5 mV AT 12:22, 09-14-98  
ENTERED

STD VOL= 2.5000 AT 12:22, 09-14-98  
ENTERED

EMF= 6.5 mV AT 12:25, 09-14-98

EMF= 6.3 mV AT 12:26, 09-14-98

EMF= 6.3 mV AT 12:26, 09-14-98  
ENTERED

1:NH3 SLOPE=-58.7 mV/DEC  
AT 12:26, 09-14-98

1:NH3 CONC= .241

598T002036  
1ML

DOUBLE KNOWN ADDITION SELECTED  
AT 12:26, 09-14-98

SAMPLE VOL= 25.000 AT 13:46, 09-14-98  
ENTERED

EMF= 160.6 mV AT 13:49, 09-14-98

EMF= 159.7 mV AT 13:49, 09-14-98

EMF= 159.4 mV AT 13:50, 09-14-98

EMF= 159.3 mV AT 13:50, 09-14-98  
ENTERED

STD CONCEN= 1000 AT 13:50, 09-14-98  
ENTERED

STD VOL= .25000 AT 13:50, 09-14-98  
ENTERED

EMF= 53.3 mV AT 13:54, 09-14-98

EMF= 52.9 mV AT 13:54, 09-14-98

EMF= 52.9 mV AT 13:54, 09-14-98  
ENTERED

STD VOL= 2.5000 AT 13:55, 09-14-98  
ENTERED

EMF=-5.3 mV AT 13:57, 09-14-98

EMF=-5.6 mV AT 13:58, 09-14-98

EMF=-5.6 mV AT 13:58, 09-14-98  
ENTERED

1:NH3 SLOPE=-58.8 mV/DEC  
AT 13:58, 09-14-98

1:NH3 CONCEN= .156

598T002036 D4P  
LML

DOUBLE KNOWN ADDITION SELECTED  
AT 14:06. 09-14-98

SAMPLE VOL= 25.000 AT 14:06. 09-14-98  
ENTERED

EMF= 62.0 mV AT 14:07. 09-14-98

EMF= 61.7 mV AT 14:07. 09-14-98

EMF= 61.7 mV AT 14:07. 09-14-98  
ENTERED

STD CONC= 1000 AT 14:08. 09-14-98  
ENTERED

STD VOL= .25000 AT 14:08. 09-14-98  
ENTERED

EMF= 41.6 mV AT 14:10. 09-14-98

EMF= 41.4 mV AT 14:10. 09-14-98

EMF= 41.4 mV AT 14:10. 09-14-98  
ENTERED

STD VOL= 2.5000 AT 14:11. 09-14-98  
ENTERED

EMF=-3.4 mV AT 14:13. 09-14-98

EMF=-3.7 mV AT 14:13. 09-14-98

EMF=-3.7 mV AT 14:13. 09-14-98  
ENTERED

1:NH3 SLOPE=-58.1 mV/DEC  
AT 14:13. 09-14-98

1:NH3 CONC= 7.94

*548T002036 SPX*

*1ML*

*.500ML SPX*

DOUBLE KNOWN ADDITION SELECTED  
AT 14:20, 09-14-98

SAMPLE VOL= 25.000 AT 14:21, 09-14-98  
ENTERED

EMF= 97.9 mV AT 14:22, 09-14-98

EMF= 98.3 mV AT 14:23, 09-14-98

EMF= 98.3 mV AT 14:23, 09-14-98  
ENTERED

STD CONC= 1000 AT 14:23, 09-14-98  
ENTERED

STD VOL= .25000 AT 14:23, 09-14-98  
ENTERED

EMF= 53.7 mV AT 14:25, 09-14-98

EMF= 53.4 mV AT 14:26, 09-14-98

EMF= 53.4 mV AT 14:26, 09-14-98  
ENTERED

STD VOL= 2.5000 AT 14:26, 09-14-98  
ENTERED

EMF=-0.7 mV AT 14:28, 09-14-98

EMF=-0.9 mV AT 14:29, 09-14-98

EMF=-0.9 mV AT 14:29, 09-14-98  
ENTERED

1:NH3 SLOPE=-58.5 mV/DEC  
AT 14:29, 09-14-98

1:NH3 CONC= 2.04

598T002046  
1ML

AMPLE KNOWN ADDITION SELECTED  
T 14:29, 09-14-98

AMPLE VOL= 25.000 AT 14:35, 09-14-98  
ITERED

IF= 100.7 mV AT 14:36, 09-14-98

IF= 100.6 mV AT 14:36, 09-14-98

IF= 100.6 mV AT 14:36, 09-14-98  
ITERED

TD CONCEN= 1000 AT 14:37, 09-14-98  
ITERED

TD VOL= .25000 AT 14:37, 09-14-98  
ITERED

IF= 56.3 mV AT 14:40, 09-14-98

IF= 56.1 mV AT 14:40, 09-14-98

IF= 56.0 mV AT 14:40, 09-14-98  
ITERED

TD VOL= 2.5000 AT 14:41, 09-14-98  
ITERED

IF= 2.4 mV AT 14:43, 09-14-98

IF= 2.2 mV AT 14:44, 09-14-98

IF= 1.9 mV AT 14:44, 09-14-98

IF= 1.9 mV AT 14:44, 09-14-98  
ITERED

NH3 SLOPE=-58.3 mV/DEC  
AT 14:44, 09-14-98

*598T 002046 D41*

*1mL*

NH3 CONCEN= 2.05

DOUBLE KNOWN ADDITION SELECTED

~~AT 14:45 09-14-98~~

SAMPLE VOL= 25.000 AT 14:51. 09-14-98  
ENTERED

EMF= 52.0 mV AT 14:54. 09-14-98

EMF= 51.7 mV AT 14:55. 09-14-98

EMF= 51.7 mV AT 14:55. 09-14-98  
ENTERED

STD CONC= 1000 AT 14:55. 09-14-98  
ENTERED

STD VOL= .25000 AT 14:55. 09-14-98  
ENTERED

EMF= 39.3 mV AT 14:57. 09-14-98

EMF= 39.0 mV AT 14:58. 09-14-98

EMF= 39.0 mV AT 14:58. 09-14-98  
ENTERED

STD VOL= 2.5000 AT 14:58. 09-14-98  
ENTERED

EMF= 0.6 mV AT 15:01. 09-14-98

EMF= 0.2 mV AT 15:02. 09-14-98

EMF= 0.2 mV AT 15:02. 09-14-98  
ENTERED

NH3 SLOPE=-59.4 mV/DEC  
~~AT 15:02, 09-14-98~~

NH3 CONC= 15.3

*Ending Std*

HWF 1661  
MVO

WORKBOOK PAGE: STD1

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			STD
Type	Instrument Data (ug/mL)	ID	15.900
STD	Blank Result from the Instrument (ug/mL)	BR	0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
25161	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code	LCS Standard Book Number	LCS	50N19B
NH3-01	LCS Standard Concentration (ug/mL)	STD VAL	3.85E+02
Matrix			
Batch Number			
98003677			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (ug/mL)	NH3 CONC	3.97E+02
Sample #			
	Detection Limit (ug/mL)		5.00E+00
Instrument Code			
NH301	Detection Limit = 0.200ug * (FVOL/VSAM)		
Prepared By			
JRO	NH3 Concentration (ug/mL) = (ID-BR)*(FVOL /VSAM)		
Chemist			
MJL	QC ACTUAL = STD VAL		
Analyst	QC FOUND = (ID-BR) * (FVOL/VSAM)		
RWK			
Date Complete			
09/15/98			
Analysis Date	QC ACTUAL (ug)		3.85E+02
09/14/98	QC FOUND (ug)		3.97E+02
Analysis Time			
07:31 AM			
Sample Point			
U107			

Analyst:	RWK	Date:	09/15/98
Signature of Chemist:	<i>MVA</i>	MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML



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WORKBOOK PAGE: BLANK2

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

BLNK

Type	Instrument Data (µg/mL)	ID	0.000
BLNK	Blank Result from the Instrument (µg/mL)	BR	0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
25161	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98003677			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	< 5.00E+00
Sample #			
	Detection Limit (µg/mL)		5.00E+00
Instrument Code			
NH301	Detection Limit = 0.200µg * (FVOL/VSAM)		
Prepared By			
JRO	NH3 Concentration (µg/mL) = (BR) * (FVOL / VSAM) * DDF		
Chemist			
MJL			
Analyst			
RWK			
Date Complete			
09/15/98			
Analysis Date			
09/14/98			
Analysis Time			
07:31 AM			
Sample Point	NH3 Concentration (µg/mL)		< 5.00E+00
U107			

Analyst:	RWK	Date:	09/15/98
Signature of Chemist:	<i>MJL</i>	Date:	

SAMPLE.WB1 REV 1.0

631001ML

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HNF-1661  
 RWK

WORKBOOK PAGE: SAM3

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			SAMPLE
Type	Instrument Data (µg/mL)	ID	0.189
SAMPLE	Blank Result from the Instrument (µg/mL)	BR	0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
25161	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98003677			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	< 5.00E+00
Sample #			
S98T002032	Detection Limit (µg/mL)		5.00E+00
Instrument Code			
NH301	Detection Limit = 0.200µg * (FVOL/VSAM) * DF		
Prepared By			
JRO	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF		
Chemist			
MJL			
Analyst			
RWK			
Date Complete			
09/15/98			
Analysis Date			
09/14/98			
Analysis Time			
07:31 AM			
Sample Point	NH3 Concentration (µg/mL)		< 5.00E+00
U107			

Analyst:	RWK	Date:	09/15/98
Signature of Chemist:	<i>NA</i>	MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML

HNF-1661  
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WORKBOOK PAGE: DUP4

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

DUP

Type	Instrument Data (µg/mL)	ID	0.217
DUP	Blank Result from the Instrument (µg/mL)	BR	0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
25161	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98003677			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	5.18E+00
Sample #			
S98T002032	Detection Limit (µg/mL)	5.00E+00	
Instrument Code			
NH301	Detection Limit = 0.200µg * (FVOL/VSAM) * DF		
Prepared By			
JRO	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF		
Chemist			
MJL			
Analyst			
RWK			
Date Complete			
09/15/98			
Analysis Date			
09/14/98			
Analysis Time			
07:31 AM			
Sample Point	NH3 Concentration (µg/mL)		5.18E+00
U107			

Analyst:	RWK	Date:	09/15/98
Signature of Chemist:	<i>MJL</i>	MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML

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WORKBOOK PAGE: SPIKE5

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		SPK
Type	Instrument Data (ug/mL)	ID 7.890
SPK	Blank Result from the Instrument (ug/mL)	BR 0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
25161	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code	Spike Book Number	SPK 50N19B
NH3-01	Spike Value (ug/mL)	SPK VAL 3.85E+02
Matrix	Vol of Spike Standard Used (mL)	VOL SPK 0.500
LIQUID		
Batch Number		
98003677		
Rerun	Sample Instrument Data (ug/mL)	SAM ID 0.189
0	Sample Volume of Sample (mL)	SAM VSAM 1.000
Sample Prep	Sample Final Volume (mL)	SAM FVOL 25.0
N/A		
Sample #		
S98T002032		
Instrument Code		
NH301		
Prepared By		
JRO		
Chemist		
MJL	QC ACTUAL = SPK VAL * VOL SPK	
Analyst	QC FOUND = (((ID-BR) * FVOL) - (SAM ID - BR) * SAM FVOL * (VSAM / SAM VSAM))	
RWK		
Date Complete		
09/15/98		
Analysis Date	QC ACTUAL (ug)	1.93E+02
09/14/98	QC FOUND (ug)	1.93E+02
Analysis Time		
07:31 AM		
Sample Point		
U107		

Analyst:	RWK	Date: 09/15/98
Signature of Chemist:	<i>NA</i>	MJL Date:

SAMPLE.WB1 REV 1.0

631001ML

HNF-1661  
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WORKBOOK PAGE: SAM6

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			SAMPLE
Type	Instrument Data (µg/mL)	ID	0.241
SAMPLE	Blank Result from the Instrument (µg/mL)	BR	0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
25161	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98003677			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	5.78E+00
Sample #			
S98T002036	Detection Limit (µg/mL)	5.00E+00	
Instrument Code			
NH301	Detection Limit = 0.200µg * (FVOL/VSAM) * DF		
Prepared By			
JRO	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF		
Chemist			
MJL			
Analyst			
RWK			
Date Complete			
09/15/98			
Analysis Date			
09/14/98			
Analysis Time			
07:31 AM			
Sample Point	NH3 Concentration (µg/mL)		5.78E+00
U107			

Analyst:	RWK	Date:	09/15/98
Signature of Chemist:	<i>NA</i>	MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML

HNF-1661  
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WORKBOOK PAGE: DUP7

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

Type	Instrument Data (µg/mL)	ID	DUP
DUP	Blank Result from the Instrument (µg/mL)	BR	0.156
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	0.010
25161	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	1.000
25161			25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98003677			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	< 5.00E+00
Sample #			
S98T002036	Detection Limit (µg/mL)		5.00E+00
Instrument Code			
NH301	Detection Limit = 0.200µg * (FVOL/VSAM) * DF		
Prepared By			
JRO	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF		
Chemist			
MJL			
Analyst			
RWK			
Date Complete			
09/15/98			
Analysis Date			
09/14/98			
Analysis Time			
07:31 AM			
Sample Point	NH3 Concentration (µg/mL)		< 5.00E+00
U107			

Analyst: \_\_\_\_\_ RWK Date: 09/15/98  
 Signature of Chemist: *NA* \_\_\_\_\_ MJL Date: \_\_\_\_\_

SAMPLE.WB1 REV 1.0

631001ML

HNF-1661  
rev 0

WORKBOOK PAGE: SPIKE8

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		SPK
Type	Instrument Data (µg/mL)	ID 7.940
SPK	Blank Result from the Instrument (µg/mL)	BR 0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
25161	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code	Spike Book Number	SPK 50N19B
NH3-01	Spike Value (µg/mL)	SPK VAL 3.85E+02
Matrix	Vol of Spike Standard Used (mL)	VOL SPK 0.500
LIQUID		
Batch Number		
98003677		
Rerun	Sample Instrument Data (µg/mL)	SAM ID 0.241
0	Sample Volume of Sample (mL)	SAM VSAM 1.000
Sample Prep	Sample Final Volume (mL)	SAM FVOL 25.0
N/A		
Sample #		
S98T002036		
Instrument Code		
NH301		
Prepared By		
JRO		
Chemist		
MJL	QC ACTUAL = SPK VAL * VOL SPK	
Analyst	QC FOUND = (((ID-BR) * FVOL) - (SAM ID - BR) * SAM FVOL * (VSAM / SAM VSAM))	
RWK		
Date Complete		
09/15/98		
Analysis Date	QC ACTUAL (µg)	1.93E+02
09/14/98	QC FOUND (µg)	1.92E+02
Analysis Time		
07:31 AM		
Sample Point		
U107		

Analyst:	RWK	Date: 09/15/98
Signature of Chemist:		MJL Date:

SAMPLE.WB1 REV 1.0

631001ML

HNF-1661  
*rw*

WORKBOOK PAGE: SAM9

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			SAMPLE
Type	Instrument Data (µg/mL)	ID	2.040
SAMPLE	Blank Result from the Instrument (µg/mL)	BR	0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
25161	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98003677			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	5.08E+01
Sample #			
S98T002046	Detection Limit (µg/mL)		5.00E+00
Instrument Code			
NH301	Detection Limit = 0.200µg * (FVOL/VSAM) * DF		
Prepared By			
JRO	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF		
Chemist			
MJL			
Analyst			
RWK			
Date Complete			
09/15/98			
Analysis Date			
09/14/98			
Analysis Time			
07:31 AM			
Sample Point	NH3 Concentration (µg/mL)		5.08E+01
U107			

Analyst:	RWK	Date:	09/15/98
Signature of Chemist:	<i>NA</i>	MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML



HN F-1661  
RWK

WORKBOOK PAGE: DUP10

**AMMONIA (NH3) : LA-631-001 (C-0)**

**LIQUIDS/SOLIDS**

**DUP**

Type	Instrument Data (µg/mL)	ID	2.050
DUP	Blank Result from the Instrument (µg/mL)	BR	0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
25161	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98003677			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	5.10E+01
Sample #			
S98T002046	Detection Limit (µg/mL)		5.00E+00
Instrument Code			
NH301	Detection Limit = 0.200µg * (FVOL/VSAM) * DF		
Prepared By			
JRO	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF		
Chemist			
MJL			
Analyst			
RWK			
Date Complete			
09/15/98			
Analysis Date			
09/14/98			
Analysis Time			
07:31 AM			
Sample Point	NH3 Concentration (µg/mL)		5.10E+01
U107			

Analyst:	RWK	Date:	09/15/98
Signature of Chemist:	<i>MJL</i>	MJL	Date:

SAMPLE.WB1 REV 1.0


631001ML

HUF-166/  
rev 0

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		STD
Type	Instrument Data (µg/mL)	ID 15.300
STD	Blank Result from the Instrument (µg/mL)	BR 0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
25161	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code	LCS Standard Book Number	LCS 50N19B
NH3-01	LCS Standard Concentration (µg/mL)	STD VAL 3.85E+02
Matrix		
Batch Number		
98003677		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 3.82E+02
Sample #		
	Detection Limit (µg/mL)	5.00E+00
Instrument Code		
NH301	Detection Limit = 0.200µg * (FVOL/VSAM)	
Prepared By		
JRO	NH3 Concentration (µg/mL) = (ID-BR)*(FVOL /VSAM)	
Chemist		
MJL	QC ACTUAL = STD VAL	
Analyst	QC FOUND = (ID-BR) * (FVOL/VSAM)	
RWK		
Date Complete		
09/15/98		
Analysis Date	QC ACTUAL (µg)	3.85E+02
09/14/98	QC FOUND (µg)	3.82E+02
Analysis Time		
07:31 AM		
Sample Point		
U107		

Analyst:	RWK	Date: 09/15/98
Signature of Chemist:		MJL Date:

SAMPLE.WB1 REV 1.0

631001ML



# LABCORE Data Entry Template for Worklist# 25934

Analyst: NK Instrument: NH301 Book # 50719-18  
Method: LA-631-001 Rev/Mod C-D  
Worklist Comment: U107, NH3-01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			NH3-01	LIQUID			N/A	ug/mL
		2 BLNK			NH3-01	LIQUID			N/A	ug/mL
98000359	U-107 (2)	3 SAMPLE	S98T002235	0	NH3-01	LIQUID	N/A			ug/mL
98000359	U-107 (2)	4 DUP	S98T002235	0	NH3-01	LIQUID			N/A	ug/mL
98000359	U-107 (2)	5 SPK	S98T002235	0	NH3-01	LIQUID			N/A	ug/mL
98000359	U-107 (2)	6 SAMPLE	S98T002239	0	NH3-01	LIQUID	N/A			ug/mL
98000359	U-107 (2)	7 DUP	S98T002239	0	NH3-01	LIQUID			N/A	ug/mL
98000359	U-107 (2)	8 SAMPLE	S98T002243	0	NH3-01	LIQUID	N/A			ug/mL
98000359	U-107 (2)	9 DUP	S98T002243	0	NH3-01	LIQUID			N/A	ug/mL
		10 STD			NH3-01	LIQUID			N/A	ug/mL

## Final page for worklist # 25934

NK 9/14/98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

DOUBLE KNOWN ADDITION SELECTED  
AT 07:33, 09-14-98

SAMPLE VOL= 25.000 AT 07:35, 09-14-98  
ENTERED

EMF= 39.4 mV AT 07:37, 09-14-98

EMF= 39.1 mV AT 07:37, 09-14-98

EMF= 39.1 mV AT 07:37, 09-14-98  
ENTERED

STD CONC= 1000 AT 07:37, 09-14-98  
ENTERED

STD VOL= .25000 AT 07:38, 09-14-98  
ENTERED

EMF= 27.2 mV AT 07:39, 09-14-98

EMF= 27.0 mV AT 07:39, 09-14-98

EMF= 26.8 mV AT 07:40, 09-14-98

EMF= 26.8 mV AT 07:40, 09-14-98  
ENTERED

STD VOL= 2.5000 AT 07:41, 09-14-98  
ENTERED

EMF=-11.3 mV AT 07:42, 09-14-98

EMF=-11.5 mV AT 07:43, 09-14-98

EMF=-11.5 mV AT 07:43, 09-14-98  
ENTERED

1:NH3 SLOPE=-59.4 mV/DEC  
AT 07:43, 09-14-98

1:NH3 CONC= 15.9

*std*

DOUBLE KNOWN ADDITION SELECTED  
AT 07:14, 09-14-98

SAMPLE VOL= 25.000 AT 07:14, 09-14-98  
ENTERED

EMF= 238.5 mV AT 07:19, 09-14-98

EMF= 231.9 mV AT 07:23, 09-14-98

EMF= 229.1 mV AT 07:26, 09-14-98

EMF= 229.0 mV AT 07:26, 09-14-98  
ENTERED

STD CONC= 1000 AT 07:26, 09-14-98  
ENTERED

STD VOL= .25000 AT 07:26, 09-14-98  
ENTERED

EMF= 52.3 mV AT 07:28, 09-14-98

EMF= 52.0 mV AT 07:29, 09-14-98

EMF= 52.0 mV AT 07:29, 09-14-98  
ENTERED

STD VOL= 2.5000 AT 07:29, 09-14-98  
ENTERED

EMF=-6.5 mV AT 07:30, 09-14-98

EMF=-6.8 mV AT 07:31, 09-14-98

EMF=-6.8 mV AT 07:31, 09-14-98  
ENTERED

1:NH3 SLOPE=-52.8 mV/DEC  
AT 07:31, 09-14-98

1:NH3 CONC= .00968

BLK

DOUBLE KNOWN ADDITION SELECTED  
AT 07:47, 09-14-98

SAMPLE VOL= 25.000 AT 07:53, 09-14-98  
ENTERED

EMF= 90.4 mV AT 07:55, 09-14-98

EMF= 90.1 mV AT 07:55, 09-14-98

EMF= 90.1 mV AT 07:55, 09-14-98  
ENTERED

STD CONCEN= 1000 AT 07:55, 09-14-98  
ENTERED

STD VOL= .25000 AT 07:56, 09-14-98  
ENTERED

EMF= 46.7 mV AT 07:58, 09-14-98

EMF= 46.6 mV AT 07:58, 09-14-98

EMF= 46.5 mV AT 07:58, 09-14-98  
ENTERED

STD VOL= 2.5000 AT 07:59, 09-14-98  
ENTERED

EMF=-7.3 mV AT 08:01, 09-14-98

EMF=-7.5 mV AT 08:01, 09-14-98

EMF=-7.5 mV AT 08:01, 09-14-98  
ENTERED

1:NH3 SLOPE=-58.5 mV/DEC  
AT 08:01, 09-14-98

1:NH3 CONCEN= 2.16

598T002235  
1ML

DOUBLE KNOWN ADDITION SELECTED  
AT 08:03, 09-14-98

SAMPLE VOL= 25.000 AT 08:06, 09-14-98  
ENTERED

EMF= 90.8 mV AT 08:07, 09-14-98

EMF= 90.7 mV AT 08:08, 09-14-98

EMF= 90.6 mV AT 08:08, 09-14-98  
ENTERED

STD CONC= 1000 AT 08:08, 09-14-98  
ENTERED

STD VOL= .25000 AT 08:08, 09-14-98  
ENTERED

EMF= 48.1 mV AT 08:10, 09-14-98

EMF= 48.0 mV AT 08:10, 09-14-98

EMF= 47.9 mV AT 08:11, 09-14-

EMF= 47.9 mV AT 08:11, 09-14-98  
ENTERED

STD VOL= 2.500 AT 08:12, 09-14-98  
ENTERED

EMF=-5.5 mV AT 08:13, 09-14-98

EMF=-5.7 mV AT 08:14, 09-14-98

EMF=-5.7 mV AT 08:14, 09-14-98  
ENTERED

1:NH3 SLOPE=-58.2 mV/DEC  
AT 08:14, 09-14-98

1:NH3 CONC= 2.23

*598T002235 DUP  
1mL*



DOUBLE KNOWN ADDITION SELECTED  
AT 09:33, 09-14-98

SAMPLE VOL= 25.000 AT 09:33, 09-14-98  
ENTERED

EMF= 48.5 mV AT 09:34, 09-14-98

EMF= 48.1 mV AT 09:34, 09-14-98

EMF= 48.1 mV AT 09:35, 09-14-98

EMF= 48.0 mV AT 09:35, 09-14-98  
ENTERED

STD CONC= 1000 AT 09:35, 09-14-98  
ENTERED

STD VOL= .25000 AT 09:35, 09-14-98  
ENTERED

EMF= 31.1 mV AT 09:37, 09-14-98

EMF= 31.0 mV AT 09:37, 09-14-98

EMF= 31.0 mV AT 09:37, 09-14-98  
ENTERED

STD VOL= 2.5000 AT 09:38, 09-14-98  
ENTERED

EMF=-11.9 mV AT 09:39, 09-14-98

EMF=-12.0 mV AT 09:39, 09-14-98

EMF=-12.1 mV AT 09:39, 09-14-98  
ENTERED

1:NH3 SLOPE=-59.1 mV/DEC  
AT 09:39, 09-14-98

1:NH3 CONC= 10.4

*598T002235 SPK  
1 mL  
.500 mL SPK*

DOUBLE KNOWN ADDITION SELECTED  
AT 09:48, 09-14-98

SAMPLE VOL= 25.000 AT 09:48, 09-14-98  
ENTERED

EMF= 94.3 mV AT 09:51, 09-14-98

EMF= 94.1 mV AT 09:51, 09-14-98

EMF= 94.1 mV AT 09:51, 09-14-98  
ENTERED

STD CONC= 1000 AT 09:51, 09-14-98  
ENTERED

STD VOL= .25000 AT 09:51, 09-14-98  
ENTERED

EMF= 48.6 mV AT 09:54, 09-14-98

EMF= 48.4 mV AT 09:55, 09-14-98

EMF= 48.3 mV AT 09:55, 09-14-98  
ENTERED

STD VOL= 2.5000 AT 09:56, 09-14-98  
ENTERED

EMF=-5.7 mV AT 09:58, 09-14-98

EMF=-6.2 mV AT 09:58, 09-14-98

EMF=-6.2 mV AT 09:58, 09-14-98  
ENTERED

1:NH3 SLOPE=-58.6 mV/DEC  
AT 09:59, 09-14-98

1:NH3 CONC= 1.96

S48T002239  
1ML

DOUBLE KNOWN ADDITION SELECTED  
AT 09:59, 09-14-98

SAMPLE VOL= 25.000 AT 10:03, 09-14-98  
ENTERED

EMF= 96.3 mV AT 10:05, 09-14-98

EMF= 96.0 mV AT 10:06, 09-14-98

EMF= 96.0 mV AT 10:06, 09-14-98  
ENTERED

STD CONC= 1000 AT 10:06, 09-14-98  
ENTERED

STD VOL= .25000 AT 10:06, 09-14-98  
ENTERED

EMF= 50.9 mV AT 10:09, 09-14-98

EMF= 50.6 mV AT 10:09, 09-14-98

EMF= 50.6 mV AT 10:09, 09-14-98  
ENTERED

STD VOL= 2.5000 AT 10:10, 09-14-98  
ENTERED

EMF=-3.7 mV AT 10:12, 09-14-98

EMF=-4.1 mV AT 10:13, 09-14-98

EMF=-4.1 mV AT 10:13, 09-14-98  
ENTERED

1:NH3 SLOPE=-58.9 mV/DEC  
AT 10:13, 09-14-98

1:NH3 CONC= 2.02

598T002239 DUP  
1ML

DOUBLE KNOWN ADDITION SELECTED  
AT 10:14. 09-14-98

SAMPLE VOL= 25.000 AT 10:21. 09-14-98  
ENTERED

EMF= 112.4 mV AT 10:21. 09-14-98

EMF= 112.2 mV AT 10:22. 09-14-98

EMF= 112.2 mV AT 10:22. 09-14-98  
ENTERED

STD CONC= 1000 AT 10:22. 09-14-98  
ENTERED

STD VOL= .25000 AT 10:22. 09-14-98  
ENTERED

EMF= 54.3 mV AT 10:25. 09-14-98

EMF= 54.1 mV AT 10:25. 09-14-98

EMF= 54.1 mV AT 10:25. 09-14-98  
ENTERED

STD VOL= 2.5000 AT 10:26. 09-14-98  
ENTERED

EMF=-1.6 mV AT 10:27. 09-14-98

EMF=-2.0 mV AT 10:27. 09-14-98

EMF=-2.0 mV AT 10:28. 09-14-98  
ENTERED

548T002243

1ml

1:NH3 SLOPE=-58.5 mV/DEC  
AT 10:28. 09-14-98

1:NH3 CONC= 1.12

DOUBLE KNOWN ADDITION SELECTED  
AT 10:28, 09-14-98

SAMPLE VOL= 25.000 AT 10:36, 09-14-98  
ENTERED

EMF= 113.8 mV AT 10:36, 09-14-98

EMF= 113.8 mV AT 10:37, 09-14-98  
ENTERED

STD CONC= 1000 AT 10:37, 09-14-98  
ENTERED

STD VOL= .25000 AT 10:37, 09-14-98  
ENTERED

EMF= 55.9 mV AT 10:39, 09-14-98

EMF= 55.7 mV AT 10:39, 09-14-98

EMF= 55.7 mV AT 10:39, 09-14-98  
ENTERED

STD VOL= 2.5000 AT 10:40, 09-14-98  
ENTERED

EMF= 0 mV AT 10:41, 09-14-98

EMF=-0.5 mV AT 10:42, 09-14-98

EMF=-0.5 mV AT 10:42, 09-14-98  
ENTERED

1:NH3 SLOPE=-58.6 mV/DEC  
AT 10:42, 09-14-98

1:NH3 CONC= 1.12

598T002243 Dup.  
1ML

DOUBLE KNOWN ADDITION SELECTED

~~AT 14:45 09-14-98~~

SAMPLE VOL= 25.000 AT 14:51, 09-14-98  
ENTERED

EMF= 52.0 mV AT 14:54, 09-14-98

EMF= 51.7 mV AT 14:55, 09-14-98

EMF= 51.7 mV AT 14:55, 09-14-98  
ENTERED

STD CONC= 1000 AT 14:55, 09-14-98  
ENTERED

STD VOL= .25000 AT 14:55, 09-14-98  
ENTERED

EMF= 39.3 mV AT 14:57, 09-14-98

EMF= 39.0 mV AT 14:58, 09-14-98

EMF= 39.0 mV AT 14:58, 09-14-98  
ENTERED

STD VOL= 2.5000 AT 14:58, 09-14-98  
ENTERED

EMF= 0.6 mV AT 15:01, 09-14-98

EMF= 0.2 mV AT 15:02, 09-14-98

EMF= 0.2 mV AT 15:02, 09-14-98  
ENTERED

1:NH3 SLOPE=-59.4 mV/DEC  
~~AT 15:02, 09-14-98~~

1:NH3 CONC= 15.3

*Ending Std*

WORKBOOK PAGE: STD1

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			STD
Type	Instrument Data (ug/mL)	ID	15.900
STD	Blank Result from the Instrument (ug/mL)	BR	0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
25934	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code	LCS Standard Book Number	LCS	50N19B
NH3-01	LCS Standard Concentration (ug/mL)	STD VAL	3.85E+02
Matrix			
Batch Number			
98004494			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (ug/mL)	NH3 CONC	3.97E+02
Sample #			
	Detection Limit (ug/mL)		5.00E+00
Instrument Code			
NH301	Detection Limit = 0.200ug * (FVOL/VSAM)		
Prepared By			
JRO	NH3 Concentration (ug/mL) = (ID-BR)*(FVOL /VSAM)		
Chemist			
MJL	QC ACTUAL = STD VAL		
Analyst	QC FOUND = (ID-BR) * (FVOL/VSAM)		
RWK			
Date Complete			
09/15/98			
Analysis Date	QC ACTUAL (ug)		3.85E+02
09/14/98	QC FOUND (ug)		3.97E+02
Analysis Time			
03:02 PM			
Sample Point			
U107			

Analyst:		RWK Date:	09/15/98
Signature of Chemist:	<i>NA</i>	MJL Date:	

SAMPLE.WB1 REV 1.0

631001ML

WORKBOOK PAGE: BLANK2

**AMMONIA (NH3) : LA-631-001 (C-0)**

**LIQUIDS/SOLIDS**

			BLNK
Type	Instrument Data (µg/mL)	ID	0.000
BLNK	Blank Result from the Instrument (µg/mL)	BR	0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
25934	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98004494			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	< 5.00E+00
Sample #	Detection Limit (µg/mL)		5.00E+00
Instrument Code			
NH301	Detection Limit = 0.200µg * (FVOL/VSAM)		
Prepared By			
JRO	NH3 Concentration (µg/mL) = (BR) * (FVOL / VSAM) * DDF		
Chemist			
MJL			
Analyst			
RWK			
Date Complete			
09/15/98			
Analysis Date			
09/14/98			
Analysis Time			
03:02 PM			
Sample Point	NH3 Concentration (µg/mL)		< 5.00E+00
U107			

Analyst:	RWK	Date:	09/15/98
Signature of Chemist:		MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML



AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		SAMPLE
Type	Instrument Data (µg/mL)	ID 2.160
SAMPLE	Blank Result from the Instrument (µg/mL)	BR 0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
25934	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code		
NH3-01		
Matrix		
LIQUID	Dilution Factor	DF 1.000
Batch Number		
98004494		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 5.38E+01
Sample #		
S98T002235	Detection Limit (µg/mL)	5.00E+00
Instrument Code		
NH301	Detection Limit = $0.200\mu\text{g} * (\text{FVOL}/\text{VSAM}) * \text{DF}$	
Prepared By		
JRO	NH3 Concentration (µg/mL) = $(\text{ID}-\text{BR}) * (\text{FVOL} / \text{VSAM}) * \text{DF}$	
Chemist		
MJL		
Analyst		
RWK		
Date Complete		
09/16/98		
Analysis Date		
09/14/98		
Analysis Time		
03:02 PM		
Sample Point	NH3 Concentration (µg/mL)	5.38E+01
U107		

Analyst:	RWK	Date:	09/15/98
Signature of Chemist:	<i>NA</i>	MJL	Date:

WORKBOOK PAGE: DUP4

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			DUP
Type	Instrument Data (µg/mL)	ID	2.230
DUP	Blank Result from the Instrument (µg/mL)	BR	0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
25934	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98004494			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	5.55E+01
Sample #			
S98T002235	Detection Limit (µg/mL)	5.00E+00	
Instrument Code			
NH301	Detection Limit = 0.200µg * (FVOL/VSAM) * DF		
Prepared By			
JRO	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)* DF		
Chemist			
MJL			
Analyst			
RWK			
Date Complete			
09/15/98			
Analysis Date			
09/14/98			
Analysis Time			
03:02 PM			
Sample Point	NH3 Concentration (µg/mL)		5.55E+01
U107			

Analyst:	RWK	Date:	09/15/98
Signature of Chemist:	<i>NA</i>	MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			SPK
Type	Instrument Data (µg/mL)	ID	10.400
SPK	Blank Result from the Instrument (µg/mL)	BR	0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
25934	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code	Spike Book Number	SPK	50N19B
NH3-01	Spike Value (µg/mL)	SPK VAL	3.85E+02
Matrix	Vol of Spike Standard Used (mL)	VOL SPK	0.500
LIQUID			
Batch Number			
98004494			
Rerun	Sample Instrument Data (µg/mL)	SAM ID	2.16
0	Sample Volume of Sample (mL)	SAM VSAM	1.000
Sample Prep	Sample Final Volume (mL)	SAM FVOL	25.0
N/A			
Sample #			
S98T002235			
Instrument Code			
NH301			
Prepared By			
JRO			
Chemist			
MJL	QC ACTUAL = SPK VAL * VOL SPK		
Analyst	QC FOUND = (((ID-BR) * FVOL) - (SAM ID - BR) * SAM FVOL * (VSAM / SAM VSAM))		
RWK			
Date Complete			
09/16/98			
Analysis Date	QC ACTUAL (µg)		1.93E+02
09/14/98	QC FOUND (µg)		2.06E+02
Analysis Time			
03:02 PM			
Sample Point			
U107			

Analyst:	RWK	Date:	09/15/98
Signature of Chemist:	<i>MJL</i>	MJL	Date:

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			SAMPLE
Type	Instrument Data (µg/mL)	ID	1.960
SAMPLE	Blank Result from the Instrument (µg/mL)	BR	0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
25934	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98004494			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	4.88E+01
Sample #			
S98T002239	Detection Limit (µg/mL)	5.00E+00	
Instrument Code			
NH301	Detection Limit = 0.200µg * (FVOL/VSAM) * DF		
Prepared By			
JRO	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF		
Chemist			
MJL			
Analyst			
RWK			
Date Complete			
09/15/98			
Analysis Date			
09/14/98			
Analysis Time			
03:02 PM			
Sample Point	NH3 Concentration (µg/mL)	4.88E+01	
U107			


Analyst:	RWK	Date:	09/15/98
Signature of Chemist:	<i>MJL</i>	MJL	Date:

WORKBOOK PAGE: DUP7

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			DUP
Type	Instrument Data (ug/mL)	ID	2.020
DUP	Blank Result from the Instrument (ug/mL)	BR	0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
25934	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98004494			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (ug/mL)	NH3 CONC	5.03E+01
Sample #			
S98T002239	Detection Limit (ug/mL)	5.00E+00	
Instrument Code			
NH301	Detection Limit = 0.200ug * (FVOL/VSAM) * DF		
Prepared By			
JRO	NH3 Concentration (ug/mL) = (ID-BR) * (FVOL / VSAM)*DF		
Chemist			
MJL			
Analyst			
RWK			
Date Complete			
09/15/98			
Analysis Date			
09/14/98			
Analysis Time			
03:02 PM			
Sample Point	NH3 Concentration (ug/mL)		5.03E+01
U107			

Analyst:	RWK	Date:	09/15/98
Signature of Chemist:		MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			SAMPLE
Type	Instrument Data (µg/mL)		ID 1.120
SAMPLE	Blank Result from the Instrument (µg/mL)		BR 0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)		VSAM 1.000
25934	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)		FVOL 25.0
Test Code	NH3-01		
Matrix	LIQUID		
	Dilution Factor	DF	1.000
Batch Number	98004494		
Rerun	0		
Sample Prep	N/A		
	NH3 Concentration (µg/mL)	NH3 CONC	2.78E+01
Sample #	S98T002243		
	Detection Limit (µg/mL)		5.00E+00
Instrument Code	NH301		
	Detection Limit = 0.200µg * (FVOL/VSAM) * DF		
Prepared By	JRO		
	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF		
Chemist	MJL		
Analyst	RWK		
Date Complete	09/15/98		
Analysis Date	09/14/98		
Analysis Time	03:02 PM		
Sample Point	NH3 Concentration (µg/mL)		2.78E+01
	U107		

Analyst:	RWK	Date:	09/15/98
Signature of Chemist:		MJL	Date:

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		DUP
Type	Instrument Data (µg/mL)	ID 1.120
DUP	Blank Result from the Instrument (µg/mL)	BR 0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
25934	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code		
NH3-01		
Matrix		
LIQUID	Dilution Factor	DF 1.000
Batch Number		
98004494		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 2.78E+01
Sample #		
S98T002243	Detection Limit (µg/mL)	5.00E+00
Instrument Code		
NH301	Detection Limit = 0.200µg * (FVOL/VSAM) * DF	
Prepared By		
JRO	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF	
Chemist		
MJL		
Analyst		
RWK		
Date Complete		
09/15/98		
Analysis Date		
09/14/98		
Analysis Time		
03:02 PM		
Sample Point	NH3 Concentration (µg/mL)	2.78E+01
U107		

Analyst:	RWK	Date:	09/15/98
Signature of Chemist:	<i>N/A</i>	MJL	Date:

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		STD
Type	Instrument Data (µg/mL)	ID 15.300
STD	Blank Result from the Instrument (µg/mL)	BR 0.010
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
25934	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code	LCS Standard Book Number	LCS 50N19B
NH3-01	LCS Standard Concentration (µg/mL)	STD VAL 3.85E+02
Matrix		
Batch Number		
98004494		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 3.82E+02
Sample #		
	Detection Limit (µg/mL)	5.00E+00
Instrument Code		
NH301	Detection Limit = 0.200µg * (FVOL/VSAM)	
Prepared By		
JRO	NH3 Concentration (µg/mL) = (ID-BR)*(FVOL /VSAM)	
Chemist		
MJL	QC ACTUAL = STD VAL	
Analyst	QC FOUND = (ID-BR) * (FVOL/VSAM)	
RWK		
Date Complete		
09/15/98		
Analysis Date	QC ACTUAL (µg)	3.85E+02
09/14/98	QC FOUND (µg)	3.82E+02
Analysis Time		
03:02 PM		
Sample Point		
U107		

Analyst:	RWK	Date:	09/15/98
Signature of Chemist:	<i>RWK</i>	MJL	Date:



# LABCORE Completed Worklist Report for Worklist# 25935

Analyst: rwk                      Instrument: NH301                      Book#: \_\_\_\_\_  
Method: LA-631-001    Rev/Mod \_\_\_\_\_  
Worklist Comment: U107, NH3-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0	NH3-01	LIQUID	3.85E+02	3.85E+2	100.260 % Recovery	
2 BLNK	0	NH3-01	LIQUID	1	<5.00E+0		ug/mL
3 SAMPLE	S98T002247 0	NH3-01	LIQUID	N/A	5.65E+00	5.000	ug/mL
4 DUP	S98T002247 0	NH3-01	LIQUID	5.65E+0	1.23E+1	74.095 RPD	
5 SPK	S98T002247 0	NH3-01	LIQUID	1.93E+02	2.14E+02	110.881 % Recovery	
6 SAMPLE	S98T002251 0	NH3-01	LIQUID	N/A	4.54E+01	5.000	ug/mL
7 DUP	S98T002251 0	NH3-01	LIQUID	4.54E+1	4.89E+1	7.423 RPD	
8 SPK	S98T002251 0	NH3-01	LIQUID	1.93E+02	2.15E+02	111.399 % Recovery	
9 STD	0	NH3-01	LIQUID	3.85E+02	4.18E+2	108.571 % Recovery	

Final page for worklist# 25935

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_  
Analyst Signature *JAK SP* Date 9/17/98  
Reviewer Signature *ML* Date 9/17/98

HNF-1661 REV. 0  
**LABCORE Data Entry Template for Worklist# 25935**

**Analyst:** DLK **Instrument:** NH301 **Book #** 50019-B

**Method:** LA-631-001 Rev/Mod C-D

**Worklist Comment:** U107, NH3-01, tdm

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				NH3-01	LIQUID			N/A	ug/mL
		2	BLNK				NH3-01	LIQUID			N/A	ug/mL
98000359	U-107 (2)	3	SAMPLE	S98T002247	0		NH3-01	LIQUID	N/A			ug/mL
98000359	U-107 (2)	4	DUP	S98T002247	0		NH3-01	LIQUID			N/A	ug/mL
98000359	U-107 (2)	5	SPK	S98T002247	0		NH3-01	LIQUID			N/A	ug/mL
98000359	U-107 (2)	6	SAMPLE	S98T002251	0		NH3-01	LIQUID	N/A			ug/mL
98000359	U-107 (2)	7	DUP	S98T002251	0		NH3-01	LIQUID			N/A	ug/mL
98000359	U-107 (2)	8	SPK	S98T002251	0		NH3-01	LIQUID			N/A	ug/mL
		9	STD				NH3-01	LIQUID			N/A	ug/mL

**Final page for worklist # 25935**

DLK 9/15/98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

HNF-1661 REV. 0

DOUBLE KNOWN ADDITION SELECTED  
AT 07:03. 09-15-98

SAMPLE VOL= 25.000 AT 07:04. 09-15-98  
ENTERED

EMF= 32.9 mV AT 07:04. 09-15-98

EMF= 32.8 mV AT 07:04. 09-15-98  
ENTERED

STD CONC= 1000 AT 07:05. 09-15-98  
ENTERED

STD VOL= .25000 AT 07:05. 09-15-98  
ENTERED

EMF= 20.7 mV AT 07:06. 09-15-98

EMF= 20.5 mV AT 07:07. 09-15-98

EMF= 20.5 mV AT 07:07. 09-15-98  
ENTERED

STD VOL= 2.5000 AT 07:07. 09-15-98  
ENTERED

EMF=-17.1 mV AT 07:09. 09-15-98

EMF=-17.3 mV AT 07:09. 09-15-98

EMF=-17.3 mV AT 07:09. 09-15-98  
ENTERED

1:NH3 SLOPE=-58.1 mV/DEC  
AT 07:09. 09-15-98

1:NH3 CONC= 15.5

*std*

DOUBLE KNOWN ADDITION SELECTED  
AT 06:30, 09-15-98

SAMPLE VOL= 25.000 AT 06:34, 09-15-98  
ENTERED

EMF= 166.4 mV AT 06:47, 09-15-98

EMF= 165.9 mV AT 06:47, 09-15-98

EMF= 165.9 mV AT 06:47, 09-15-98  
ENTERED

STD CONC= 1000 AT 06:47, 09-15-98  
ENTERED

STD VOL= .25000 AT 06:47, 09-15-98  
ENTERED

EMF= 41.6 mV AT 06:49, 09-15-98

EMF= 41.4 mV AT 06:50, 09-15-98

EMF= 41.5 mV AT 06:50, 09-15-98  
ENTERED

STD VOL= 2.5000 AT 06:50, 09-15-98  
ENTERED

EMF=-16.5 mV AT 06:51, 09-15-98

EMF=-16.6 mV AT 06:53, 09-15-98  
ENTERED

1:NH3 SLOPE=-58.2 mV/DEC  
AT 06:53, 09-15-98

1:NH3 CONC= .0729

*BLK*

DOUBLE KNOWN ADDITION SELECTED  
AT 07:12. 09-15-98

SAMPLE VOL= 25.000 AT 07:21. 09-15-98  
ENTERED

EMF= 134.8 mV AT 07:21. 09-15-98

EMF= 135.2 mV AT 07:22. 09-15-98

EMF= 136.2 mV AT 07:22. 09-15-98

EMF= 136.3 mV AT 07:23. 09-15-98  
ENTERED

STD CONC= 1000 AT 07:23. 09-15-98  
ENTERED

STD VOL= .25000 AT 07:23. 09-15-98  
ENTERED

EMF= 47.9 mV AT 07:25. 09-15-98

EMF= 47.7 mV AT 07:25. 09-15-98

EMF= 47.6 mV AT 07:25. 09-15-98  
ENTERED

STD VOL= 2.5000 AT 07:26. 09-15-98  
ENTERED

EMF=-9.4 mV AT 07:27. 09-15-98

EMF=-9.6 mV AT 07:28. 09-15-98

EMF=-9.6 mV AT 07:28. 09-15-98  
ENTERED

1:NH3 SLOPE=-57.8 mV/DEC  
AT 07:28. 09-15-98

1:NH3 CONC= .299

598T 2247

dmL

HNF-1661 REV.0

DOUBLE KNOWN ADDITION SELECTED  
AT 07:28, 09-15-98

SAMPLE VOL= 25.000 AT 07:35, 09-15-98  
ENTERED

EMF= 119.4 mV AT 07:39, 09-15-98

EMF= 120.4 mV AT 07:40, 09-15-98

EMF= 120.5 mV AT 07:40, 09-15-98  
ENTERED

STD CONC= 1000 AT 07:40, 09-15-98  
ENTERED

STD VOL= .25000 AT 07:40, 09-15-98  
ENTERED

EMF= 49.3 mV AT 07:44, 09-15-98

EMF= 49.1 mV AT 07:44, 09-15-98

EMF= 48.8 mV AT 07:44, 09-15-98

EMF= 48.7 mV AT 07:44, 09-15-98  
ENTERED

STD VOL= 2.5000 AT 07:45, 09-15-98  
ENTERED

EMF=-6.4 mV AT 07:48, 09-15-98

EMF=-6.7 mV AT 07:48, 09-15-98

EMF=-6.7 mV AT 07:48, 09-15-98  
ENTERED

1:NH3 SLOPE=-56.6 mV/DEC  
AT 07:48, 09-15-98

1:NH3 CONC= .564

2247 DUP  
1ml

DOUBLE KNOWN ADDITION SELECTED  
AT 07:56. 09-15-98

SAMPLE VOL= 25.000 AT 07:56. 09-15-98  
ENTERED

EMF= 58.4 mV AT 07:56. 09-15-98

EMF= 58.4 mV AT 07:57. 09-15-98

EMF= 58.4 mV AT 07:57. 09-15-98  
ENTERED

STD CONC= .1000 AT 07:58. 09-15-98  
ENTERED

STD VOL= .25000 AT 07:58. 09-15-98  
ENTERED

EMF= 39.6 mV AT 08:00. 09-15-98

EMF= 39.2 mV AT 08:00. 09-15-98

EMF= 39.3 mV AT 08:00. 09-15-98  
ENTERED

STD VOL= 2.5000 AT 08:00. 09-15-98  
ENTERED

EMF=-5.0 mV AT 08:02. 09-15-98

EMF=-5.3 mV AT 08:03. 09-15-98

EMF=-5.4 mV AT 08:03. 09-15-98  
ENTERED

1:NH3 SLOPE=-58.9 mV/DEC  
AT 08:03. 09-15-98

1:NH3 CONC= 8.84

*2247 5PK  
1ML  
500ml 5PK*

DOUBLE KNOWN ADDITION SELECTED  
AT 08:14. 09-15-98

SAMPLE VOL= 25.000 AT 08:14. 09-15-98  
ENTERED

EMF= 99.7 mV AT 08:15. 09-15-98

EMF= 99.6 mV AT 08:15. 09-15-98  
ENTERED

STD CONC= 1000 AT 08:15. 09-15-98  
ENTERED

STD VOL= .25000 AT 08:15. 09-15-98  
ENTERED

EMF= 53.4 mV AT 08:16. 09-15-98

EMF= 53.2 mV AT 08:17. 09-15-98

EMF= 53.2 mV AT 08:17. 09-15-98  
ENTERED

STD VOL= 2.5000 AT 08:17. 09-15-98  
ENTERED

EMF=-1.1 mV AT 08:19. 09-15-98

EMF=-1.2 mV AT 08:19. 09-15-98

EMF=-1.3 mV AT 08:19. 09-15-98  
ENTERED

1:NH3 SLOPE=-58.4 mV/DEC  
AT 08:19. 09-15-98

1:NH3 CONC= 1.89

*598T 2251  
1mL*



DOUBLE KNOWN ADDITION SELECTED  
AT 08:22, 09-15-98

SAMPLE VOL= 25.000 AT 09:55, 09-15-98  
ENTERED

EMF= 84.4 mV AT 09:55, 09-15-98

EMF= 84.3 mV AT 09:55, 09-15-98  
ENTERED

STD CONC= 1000 AT 09:56, 09-15-98  
ENTERED

STD VOL= .25000 AT 09:56, 09-15-98  
ENTERED

EMF= 42.8 mV AT 09:58, 09-15-98

EMF= 42.6 mV AT 09:58, 09-15-98

EMF= 42.6 mV AT 09:58, 09-15-98  
ENTERED

STD VOL= 2.5000 AT 09:59, 09-15-98  
ENTERED

EMF=-11.1 mV AT 10:00, 09-15-98

EMF=-11.3 mV AT 10:01, 09-15-98

EMF=-11.4 mV AT 10:01, 09-15-98  
ENTERED

1:NH3 SLOPE=-59.0 mV/DEC  
AT 10:01, 09-15-98

1:NH3 CONC= 2.41

*2251 DYP  
1ML*

DOUBLE KNOWN ADDITION SELECTED  
AT 10:02, 09-15-98

SAMPLE VOL= 25.000 AT 10:07, 09-15-98  
ENTERED

EMF= 90.3 mV AT 10:07, 09-15-98

EMF= 90.3 mV AT 10:07, 09-15-98  
ENTERED

STD CONC= 1000 AT 10:08, 09-15-98  
ENTERED

STD VOL= .25000 AT 10:08, 09-15-98  
ENTERED

EMF= 47.5 mV AT 10:09, 09-15-98

EMF= 45.7 mV AT 10:09, 09-15-98

EMF= 45.6 mV AT 10:09, 09-15-98  
ENTERED

STD VOL= 2.5000 AT 10:10, 09-15-98  
ENTERED

EMF=-8.2 mV AT 10:11, 09-15-98

EMF=-8.4 mV AT 10:12, 09-15-98

EMF=-8.4 mV AT 10:12, 09-15-98  
ENTERED

1:NHS SLOPE=-58.2 mV/DEC  
AT 10:12, 09-15-98

1:NHS CONC= 2.00

2251 TRIP  
1012

DOUBLE KNOWN ADDITION SELECTED  
AT 10:16, 09-15-98

SAMPLE VOL= 25.000 AT 10:23, 09-15-98  
ENTERED

EMF= 35.3 mV AT 10:23, 09-15-98

EMF= 55.4 mV AT 10:24, 09-15-98  
ENTERED

STD CONC= 1000 AT 10:24, 09-15-98  
ENTERED

STD VOL= .25000 AT 10:24, 09-15-98  
ENTERED

EMF= 38.5 mV AT 10:26, 09-15-98

EMF= 38.5 mV AT 10:26, 09-15-98

EMF= 38.4 mV AT 10:26, 09-15-98  
ENTERED

STD VOL= 2.5000 AT 10:27, 09-15-98  
ENTERED

EMF=-4.7 mV AT 10:28, 09-15-98

EMF=-4.9 mV AT 10:29, 09-15-98

EMF=-4.8 mV AT 10:29, 09-15-98  
ENTERED

*2251 SPK  
1ALH  
.500mL SPK*

1:NH3 SLOPE=-59.3 mV/DEC  
AT 10:29, 09-15-98

1:NH3 CONC= 10.5

DOUBLE KNOWN ADDITION SELECTED  
AT 15:23, 09-15-98

SAMPLE VOL= 25.000 AT 15:23, 09-15-98  
ENTERED

EMF= 44.8 mV AT 15:24, 09-15-98

EMF= 44.5 mV AT 15:24, 09-15-98

EMF= 44.5 mV AT 15:24, 09-15-98  
ENTERED

STD CONC= 1000 AT 15:24, 09-15-98  
ENTERED

STD VOL= .25000 AT 15:24, 09-15-98  
ENTERED

EMF= 32.5 mV AT 15:25, 09-15-98

EMF= 32.3 mV AT 15:26, 09-15-98

EMF= 32.4 mV AT 15:26, 09-15-98  
ENTERED

*Ending Std*

STD VOL= 2.5000 AT 15:26, 09-15-98  
ENTERED

EMF=-6.0 mV AT 15:28, 09-15-98

EMF=-6.2 mV AT 15:28, 09-15-98

EMF=-6.2 mV AT 15:28, 09-15-98  
ENTERED

1:NH3 SLOPE=-60.8 mV/DEC  
AT 15:28, 09-15-98

1:NH3 CONC= 16.8

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		STD
Type	Instrument Data (µg/mL)	ID 15.500
STD	Blank Result from the Instrument (µg/mL)	BR 0.073
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
25935	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code	LCS Standard Book Number	LCS 50N19B
NH3-01	LCS Standard Concentration (µg/mL)	STD VAL 3.85E+02
Matrix		
Batch Number		
98004495		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 3.86E+02
Sample #		
STD	Detection Limit (µg/mL)	5.00E+00
Instrument Code		
U01	Detection Limit = 0.200µg * (FVOL/VSAM)	
Prepared By		
JDS	NH3 Concentration (µg/mL) = (ID-BR)*(FVOL /VSAM)	
Chemist		
MJL	QC ACTUAL = STD VAL	
Analyst	QC FOUND = (ID-BR) * (FVOL/VSAM)	
RWK		
Date Complete		
09/17/98		
Analysis Date	QC ACTUAL (µg)	3.85E+02
09/15/98	QC FOUND (µg)	3.86E+02
Analysis Time		
03:30 PM		
Sample Point		
U107		

Analyst:	RWK	Date:	09/17/98
Signature of Chemist:	<i>N/A</i>	MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		BLNK
Type	Instrument Data (µg/mL)	ID 0.000
BLNK	Blank Result from the Instrument (µg/mL)	BR 0.073
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
25935	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code		
NH3-01		
Matrix		
LIQUID	Dilution Factor	DF 1.000
Batch Number		
98004495		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC < 5.00E+00
Sample #		
BLK	Detection Limit (µg/mL)	5.00E+00
Instrument Code		
U01	Detection Limit = 0.200µg * (FVOL/VSAM)	
Prepared By		
JDS	NH3 Concentration (µg/mL) = (BR) * (FVOL / VSAM) * DDF	
Chemist		
MJL		
Analyst		
RWK		
Date Complete		
09/17/98		
Analysis Date		
09/15/98		
Analysis Time		
03:30 PM		
Sample Point	NH3 Concentration (µg/mL)	< 5.00E+00
U107		

Analyst:	RWK	Date:	09/17/98
Signature of Chemist:	<i>NA</i>	MJL	Date:

WORKBOOK PAGE: SAM3

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			SAMPLE
Type	Instrument Data (µg/mL)		ID 0.299
SAMPLE	Blank Result from the Instrument (µg/mL)		BR 0.073
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)		VSAM 1.000
25935	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)		FVOL 25.0
Test Code	NH3-01		
Matrix	LIQUID		
	Dilution Factor	DF	1.000
Batch Number	98004495		
Rerun	0		
Sample Prep	N/A		
	NH3 Concentration (µg/mL)	NH3 CONC	5.65E+00
Sample #	S98T002247		
	Detection Limit (µg/mL)		5.00E+00
Instrument Code	U01		
	Detection Limit = 0.200µg * (FVOL/VSAM) * DF		
Prepared By	JDS		
	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF		
Chemist	MJL		
Analyst	RWK		
Date Complete	09/17/98		
Analysis Date	09/15/98		
Analysis Time	03:30 PM		
Sample Point	NH3 Concentration (µg/mL)		5.65E+00
	U107		

Analyst:	RWK	Date:	09/17/98
Signature of Chemist:	<i>RWK</i>	MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML

WORKBOOK PAGE: DUP4

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			DUP
Type	Instrument Data (µg/mL)	ID	0.564
DUP	Blank Result from the Instrument (µg/mL)	BR	0.073
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
25935	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98004495			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	1.23E+01
Sample #			
S98T002247	Detection Limit (µg/mL)	5.00E+00	
Instrument Code			
U01	Detection Limit = 0.200µg * (FVOL/VSAM) * DF		
Prepared By			
JDS	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF		
Chemist			
MJL			
Analyst			
RWK			
Date Complete			
09/17/98			
Analysis Date			
09/15/98			
Analysis Time			
03:30 PM			
Sample Point	NH3 Concentration (µg/mL)		1.23E+01
U107			

Analyst:	RWK	Date:	09/17/98
Signature of Chemist:	<i>NA</i>	MJL	Date:



WORKBOOK PAGE: SPIKE5

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

Type	Instrument Data (µg/mL)	ID	SPK
SPK	Blank Result from the Instrument (µg/mL)	BR	8.840
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	0.073
25935	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	1.000
Test Code	Spike Book Number	SPK	25.0
NH3-01	Spike Value (µg/mL)	SPK VAL	50N19B
Matrix	Vol of Spike Standard Used (mL)	VOL SPK	3.85E+02
LIQUID			0.500
Batch Number			
98004495			
Rerun	Sample Instrument Data (µg/mL)	SAM ID	0.299
0	Sample Volume of Sample (mL)	SAM VSAM	1.000
Sample Prep	Sample Final Volume (mL)	SAM FVOL	25.0
N/A			
Sample #			
S98T002247			
Instrument Code			
U01			
Prepared By			
JDS			
Chemist			
MJL	QC ACTUAL = SPK VAL * VOL SPK		
Analyst	QC FOUND = ((ID-BR) * FVOL) - (SAM ID - BR) * SAM FVOL * (VSAM / SAM VSAM))		
RWK			
Date Complete			
09/17/98			
Analysis Date	QC ACTUAL (µg)		1.93E+02
09/15/98	QC FOUND (µg)		2.14E+02
Analysis Time			
03:30 PM			
Sample Point			
U107			

Analyst:	RWK	Date:	09/17/98
Signature of Chemist:	<i>MJL</i>	Date:	

SAMPLE.WB1 REV 1.0

631001ML

WORKBOOK PAGE: SAM6

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			SAMPLE
Type	Instrument Data (µg/mL)	ID	1.890
SAMPLE	Blank Result from the Instrument (µg/mL)	BR	0.073
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
25935	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98004495			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	4.54E+01
Sample #			
S98T002251	Detection Limit (µg/mL)	5.00E+00	
Instrument Code			
U01	Detection Limit = 0.200µg * (FVOL/VSAM) * DF		
Prepared By			
JDS	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF		
Chemist			
MJL			
Analyst			
RWK			
Date Complete			
09/17/98			
Analysis Date			
09/15/98			
Analysis Time			
03:30 PM			
Sample Point	NH3 Concentration (µg/mL)		4.54E+01
U107			

Analyst:	RWK	Date:	09/17/98
Signature of Chemist:	<i>MJL</i>	Date:	

SAMPLE.WB1 REV 1.0

631001ML

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		DUP
Type	Instrument Data (µg/mL)	ID 2.030
DUP	Blank Result from the Instrument (µg/mL)	BR 0.073
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
25935	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code		
NH3-01		
Matrix		
LIQUID	Dilution Factor	DF 1.000
Batch Number		
98004495		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 4.89E+01
Sample #		
S98T002251	Detection Limit (µg/mL)	5.00E+00
Instrument Code		
U01	Detection Limit = 0.200µg * (FVOL/VSAM) * DF	
Prepared By		
JDS	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF	
Chemist		
MJL		
Analyst		
RWK		
Date Complete		
09/17/98		
Analysis Date		
09/15/98		
Analysis Time		
03:30 PM		
Sample Point	NH3 Concentration (µg/mL)	4.89E+01
U107		

Analyst:	RWK	Date:	09/17/98
Signature of Chemist:	<i>NA</i>	MJL	Date:

WORKBOOK PAGE: SPIKE8

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		SPK
Type	Instrument Data (µg/mL)	ID 10.500
SPK	Blank Result from the Instrument (µg/mL)	BR 0.073
Wort List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
25935	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code	Spike Book Number	SPK 50N19B
NH3-01	Spike Value (µg/mL)	SPK VAL 3.85E+02
Matrix	Vol of Spike Standard Used (mL)	VOL SPK 0.500
<b>LIQUID</b>		
Batch Number	98004495	
Rerun	Sample Instrument Data (µg/mL)	SAM ID 1.89
0	Sample Volume of Sample (mL)	SAM VSAM 1.000
Sample Prep	Sample Final Volume (mL)	SAM FVOL 25.0
N/A		
Sample #	S98T002251	
Instrument Code	U01	
Prepared By	JDS	
Chemist	MJE	
Analyst	QC ACTUAL = SPK VAL * VOL SPK	
RWK	QC FOUND = (((ID-BR) * FVOL) - (SAM ID - BR) * SAM FVOL * (VSAM / SAM VSAM))	
Date Complete	09/17/98	
Analysis Date	QC ACTUAL (µg)	1.93E+02
09/15/98	QC FOUND (µg)	2.15E+02
Analysis Time	03:30 PM	
Sample Point	U107	

Analyst:	RWK Date: 09/17/98
Signature of Chemist: <i>NA</i>	MJL Date:

WORKBOOK PAGE: ST\_END9

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			STD
Type	Instrument Data (ug/mL)	ID	16.800
STD	Blank Result from the Instrument (ug/mL)	BR	0.073
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
25935	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code	LCS Standard Book Number	LCS	50N19B
NH3-01	LCS Standard Concentration (ug/mL)	STD VAL	3.85E+02
Matrix			
Batch Number			
98004495			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (ug/mL)	NH3 CONC	4.18E+02
Sample #			
	Detection Limit (ug/mL)		5.00E+00
Instrument Code			
U01	Detection Limit = 0.200ug * (FVOL/VSAM)		
Prepared By			
JDS	NH3 Concentration (ug/mL) = (ID-BR)*(FVOL /VSAM)		
Chemist			
MJL	QC ACTUAL = STD VAL		
Analyst	QC FOUND = (ID-BR) * (FVOL/VSAM)		
RWK			
Date Complete			
09/17/98			
Analysis Date	QC ACTUAL (ug)		3.85E+02
09/15/98	QC FOUND (ug)		4.18E+02
Analysis Time			
03:30 PM			
Sample Point			
U107			

Analyst:	RWK	Date:	09/17/98
Signature of Chemist:	<i>NA</i>	MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML

# LABCORE Completed Worklist Report for Worklist# 26133

Analyst: rwk                      Instrument: NH301                      Book#: \_\_\_\_\_  
Method: LA-631-001    Rev/Mod \_\_\_\_\_  
Worklist Comment: U107, NH3-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0	NH3-01	LIQUID	3.85E+02	3.86E+2	100.260 % Recovery	
2 BLNK	0	NH3-01	LIQUID	1	<5.00E+0		ug/mL
3 SAMPLE	S98T002465 0	NH3-01	LIQUID	N/A	2.02E+02	5.000	ug/mL
4 DUP	S98T002465 0	NH3-01	LIQUID	2.02E+2	1.94E+2	4.040	RPD
5 SAMPLE	S98T002524 0	NH3-01	LIQUID	N/A	1.34E+02	5.000	ug/mL
6 DUP	S98T002524 0	NH3-01	LIQUID	1.34E+2	1.17E+2	13.546	RPD
7 SPK	S98T002524 0	NH3-01	LIQUID	1.93E+02	2.01E+02	104.145 % Recovery	
8 STD	0	NH3-01	LIQUID	3.85E+02	4.18E+2	108.571 % Recovery	

## Final page for worklist# 26133

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_  
*[Signature]* *9/17/98*  
Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_  
*[Signature]* *9/17/98*  
Reviewer Signature \_\_\_\_\_ Date \_\_\_\_\_  
*[Signature]* *9/17/98*

# LABCORE Data Entry Template for Worklist# 26133

Analyst: PK Instrument: NH301 \_\_\_\_\_ Book # 50119-B  
 Method: LA-631-001 Rev/Mod C-D  
 Worklist Comment: U107, NH3-01, tdm

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				NH3-01	LIQUID	_____	_____	N/A	ug/mL
		2 BLNK				NH3-01	LIQUID	_____	_____	N/A	ug/mL
98000401	U-107 (2)	3 SAMPLE	S98T002465	0		NH3-01	LIQUID	N/A	_____	_____	ug/mL
98000401	U-107 (2)	4 DUP	S98T002465	0		NH3-01	LIQUID	_____	_____	N/A	ug/mL
98000401	U-107 (2)	5 SAMPLE	S98T002524	0		NH3-01	LIQUID	N/A	_____	_____	ug/mL
98000401	U-107 (2)	6 DUP	S98T002524	0		NH3-01	LIQUID	_____	_____	N/A	ug/mL
98000401	U-107 (2)	7 SPK	S98T002524	0		NH3-01	LIQUID	_____	_____	N/A	ug/mL
		8 STD				NH3-01	LIQUID	_____	_____	N/A	ug/mL

**Final page for worklist # 26133**

Rob Kim 9/15/98  
 Analyst Signature Date

\_\_\_\_\_  
 Analyst Signature Date

Data Entry Comments:

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Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

DOUBLE KNOWN ADDITION SELECTED  
AT 07:03. 09-15-98

SAMPLE VOL= 25.000 AT 07:04. 09-15-98  
ENTERED

EMF= 32.9 mV AT 07:04. 09-15-98

EMF= 32.8 mV AT 07:04. 09-15-98  
ENTERED

STD CONC= 1000 AT 07:05. 09-15-98  
ENTERED

STD VOL= .25000 AT 07:05. 09-15-98  
ENTERED

EMF= 20.7 mV AT 07:06. 09-15-98

EMF= 20.5 mV AT 07:07. 09-15-98

EMF= 20.5 mV AT 07:07. 09-15-98  
ENTERED

STD VOL= 2.5000 AT 07:07. 09-15-98  
ENTERED

EMF=-17.1 mV AT 07:09. 09-15-98

EMF=-17.3 mV AT 07:09. 09-15-98

EMF=-17.3 mV AT 07:09. 09-15-98  
ENTERED

I: NH3 SLOPE=-58.1 mV/DEC  
AT 07:09. 09-15-98

I: NH3 CONC= 15.5

*std*



DOUBLE KNOWN ADDITION SELECTED  
AT 06:30, 09-15-98

SAMPLE VOL= 25.000 AT 06:34, 09-15-98  
ENTERED

EMF= 166.4 mV AT 06:47, 09-15-98

EMF= 165.9 mV AT 06:47, 09-15-98

EMF= 165.9 mV AT 06:47, 09-15-98  
ENTERED

STD CONC= 1000 AT 06:47, 09-15-98  
ENTERED

STD VOL= .25000 AT 06:47, 09-15-98  
ENTERED

EMF= 41.6 mV AT 06:49, 09-15-98

EMF= 41.4 mV AT 06:50, 09-15-98

EMF= 41.5 mV AT 06:50, 09-15-98  
ENTERED

STD VOL= 2.5000 AT 06:50, 09-15-98  
ENTERED

MF=-16.5 mV AT 06:51, 09-15-98

MF=-16.6 mV AT 06:53, 09-15-98  
ENTERED

:NH3 SLOPE=-58.2 mV/DEC  
AT 06:53, 09-15-98

:NH3 CONC= .0729

PLK

HNF-1661 REV. 0

DOUBLE KNOWN ADDITION SELECTED  
AT 10:45. 09-15-98

SAMPLE VOL= 25.000 AT 10:45. 09-15-98  
ENTERED

EMF= 63.6 mV AT 10:45. 09-15-98

EMF= 63.7 mV AT 10:46. 09-15-98  
ENTERED

STD CONC= 1000 AT 10:46. 09-15-98  
ENTERED

STD VOL= .25000 AT 10:46. 09-15-98  
ENTERED

EMF= 43.7 mV AT 10:47. 09-15-98

EMF= 43.6 mV AT 10:48. 09-15-98  
ENTERED

STD VOL= 2.5000 AT 10:48. 09-15-98  
ENTERED

EMF=-1.6 mV AT 10:49. 09-15-98

EMF=-1.6 mV AT 10:50. 09-15-98

EMF=-1.6 mV AT 10:50. 09-15-98  
ENTERED

1:NH3 SLOPE=-58.5 mV/DEC  
AT 10:50. 09-15-98

1:NH3 CONC= 8.14

*S98T 2465*

*1 mL*

DOUBLE KNOWN ADDITION SELECTED  
AT 10:50, 09-15-98

SAMPLE VOL= 25.000 AT 11:00, 09-15-98  
ENTERED

EMF= 66.8 mV AT 11:00, 09-15-98

EMF= 66.8 mV AT 11:01, 09-15-98  
ENTERED

STD CONC= 1000 AT 11:01, 09-15-98  
ENTERED

STD VOL= .25000 AT 11:01, 09-15-98  
ENTERED

EMF= 46.5 mV AT 11:02, 09-15-98

EMF= 46.3 mV AT 11:03, 09-15-98

EMF= 46.3 mV AT 11:03, 09-15-98  
ENTERED

STD VOL= 2.5000 AT 11:03, 09-15-98  
ENTERED

EMF= 1.2 mV AT 11:05, 09-15-98

EMF= 1.0 mV AT 11:07, 09-15-98

EMF= 1.1 mV AT 11:07, 09-15-98  
ENTERED

1:NH3 SLOPE=-58.0 mV/DEC  
AT 11:07, 09-15-98

1:NH3 CONC= 7.82

2465  
D4P  
1ML

SAMPLE VOL= 25.000 AT 14:03, 09-15-98  
ENTERED

EMF= 89.0 mV AT 14:03, 09-15-98

EMF= 89.1 mV AT 14:04, 09-15-98

EMF= 89.1 mV AT 14:04, 09-15-98  
ENTERED

STD CONC= 1000 AT 14:04, 09-15-98  
ENTERED

STD VOL= .25000 AT 14:04, 09-15-98  
ENTERED

EMF= 62.1 mV AT 14:06, 09-15-98

EMF= 61.8 mV AT 14:06, 09-15-98

EMF= 61.8 mV AT 14:06, 09-15-98  
ENTERED

STD VOL= 2.5000 AT 14:07, 09-15-98  
ENTERED

EMF= 11.5 mV AT 14:09, 09-15-98

EMF= 11.2 mV AT 14:09, 09-15-98

EMF= 11.2 mV AT 14:09, 09-15-98  
ENTERED

1:NH3 SLOPE=-60.7 mV/DEC  
AT 14:09, 09-15-98

1:NH3 CONC= 5.43

59872524  
1mL

DOUBLE KNOWN ADDITION SELECTED  
AT 14:45, 09-15-98

SAMPLE VOL= 25.000 AT 14:49, 09-15-98  
ENTERED

EMF= 71.9 mV AT 14:49, 09-15-98

EMF= 72.0 mV AT 14:49, 09-15-98  
ENTERED

STD CONC= 1000 AT 14:50, 09-15-98  
ENTERED

STD VOL= .25000 AT 14:50, 09-15-98  
ENTERED

EMF= 42.6 mV AT 14:51, 09-15-98

EMF= 42.6 mV AT 14:52, 09-15-98  
ENTERED

STD VOL= 2.5000 AT 14:52, 09-15-98  
ENTERED

EMF=-8.5 mV AT 14:54, 09-15-98

EMF=-8.6 mV AT 14:54, 09-15-98

EMF=-8.6 mV AT 14:54, 09-15-98  
ENTERED

1:NH3 SLOPE=-60.2 mV/DEC  
AT 14:54, 09-15-98

1:NH3 CONC= 4.74

*2524 DUP  
1ML*

DOUBLE KNOWN ADDITION SELECTED  
AT 14:56. 09-15-98

SAMPLE VOL= 25.000 AT 15:10. 09-15-98  
ENTERED

EMF= 56.5 mV AT 15:11. 09-15-98

EMF= 56.2 mV AT 15:11. 09-15-98

EMF= 56.2 mV AT 15:11. 09-15-98  
ENTERED

STD CONC= 1000 AT 15:11. 09-15-98  
ENTERED

STD VOL= .25000 AT 15:11. 09-15-98  
ENTERED

EMF= 39.4 mV AT 15:13. 09-15-98

EMF= 39.2 mV AT 15:13. 09-15-98

EMF= 39.0 mV AT 15:14. 09-15-98

EMF= 39.0 mV AT 15:14. 09-15-98  
ENTERED

STD VOL= 2.5000 AT 15:14. 09-15-98  
ENTERED

EMF=-5.0 mV AT 15:16. 09-15-98

EMF=-5.2 mV AT 15:16. 09-15-98

EMF=-5.3 mV AT 15:17. 09-15-98  
ENTERED

1:NH3 SLOPE=-61.2 mV/DEC  
AT 15:17. 09-15-98

1:NH3 CONC= 10.8

2524 SPK  
.500ML  
.500ML SPK

DOUBLE KNOWN ADDITION SELECTED  
AT 15:23, 09-15-98

SAMPLE VOL= 25.000 AT 15:23, 09-15-98  
ENTERED

EMF= 44.8 mV AT 15:24, 09-15-98

EMF= 44.5 mV AT 15:24, 09-15-98

EMF= 44.5 mV AT 15:24, 09-15-98  
ENTERED

STD CONC= 1000 AT 15:24, 09-15-98  
ENTERED

STD VOL= .25000 AT 15:24, 09-15-98  
ENTERED

EMF= 32.5 mV AT 15:25, 09-15-98

EMF= 32.3 mV AT 15:26, 09-15-98

EMF= 32.4 mV AT 15:26, 09-15-98  
ENTERED

*Ending Std*

STD VOL= 2.5000 AT 15:26, 09-15-98  
ENTERED

EMF=-6.0 mV AT 15:28, 09-15-98

EMF=-6.2 mV AT 15:28, 09-15-98

EMF=-6.2 mV AT 15:28, 09-15-98  
ENTERED

∴NH3 SLOPE=-60.8 mV/DEC  
AT 15:28, 09-15-98

∴NH3 CONC= 16.8

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

Type	Instrument Data (ug/mL)	ID	STD
STD	Blank Result from the Instrument (ug/mL)	BR	15.500
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	0.073
26133	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	1.000
Test Code	LCS Standard Book Number	LCS	25.0
NH3-01	LCS Standard Concentration (ug/mL)	STD VAL	50N19B
Matrix			3.85E+02
Batch Number			
98004687			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (ug/mL)	NH3 CONC	3.86E+02
Sample #			
STD	Detection Limit (ug/mL)		5.00E+00
Instrument Code			
NH301	Detection Limit = 0.200ug * (FVOL/VSAM)		
Prepared By			
JDS	NH3 Concentration (ug/mL) = (ID-BR)*(FVOL /VSAM)		
Chemist			
MJL	QC ACTUAL = STD VAL		
Analyst	QC FOUND = (ID-BR) * (FVOL/VSAM)		
RWK			
Date Complete			
09/17/98			
Analysis Date	QC ACTUAL (ug)		3.85E+02
09/15/98	QC FOUND (ug)		3.86E+02
Analysis Time			
03:30 PM			
Sample Point			

Analyst:		RWK Date:	09/17/98
Signature of Chemist:	<i>N/A</i>	MJL Date:	



WORKBOOK PAGE: BLANK2

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		BLNK
Type	Instrument Data (µg/mL)	ID 0.000
BLNK	Blank Result from the Instrument (µg/mL)	BR 0.073
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
26133	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code		
NH3-01		
Matrix		
LIQUID	Dilution Factor	DF 1.000
Batch Number		
98004687		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC < 5.00E+00
Sample #		
BLK	Detection Limit (µg/mL)	5.00E+00
Instrument Code		
NH301	Detection Limit = 0.200µg * (FVOL/VSAM)	
Prepared By		
JDS	NH3 Concentration (µg/mL) = (BR) * (FVOL / VSAM) * DDF	
Chemist		
MJL		
Analyst		
RWK		
Date Complete		
09/17/98		
Analysis Date		
09/15/98		
Analysis Time		
03:30 PM		
Sample Point	NH3 Concentration (µg/mL)	< 5.00E+00

Analyst:	RWK	Date:	09/17/98
Signature of Chemist:	<i>MJL</i>	Date:	

SAMPLE.WB1 REV 1.0

631001ML

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			SAMPLE
Type	Instrument Data (ug/mL)	ID	8.140
SAMPLE	Blank Result from the Instrument (ug/mL)	BR	0.073
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
26133	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98004687			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (ug/mL)	NH3 CONC	2.02E+02
Sample #			
S98T002465	Detection Limit (ug/mL)		5.00E+00
Instrument Code			
NH301	Detection Limit = 0.200ug * (FVOL/VSAM) * DF		
Prepared By			
JDS	NH3 Concentration (ug/mL) = (ID-BR) * (FVOL / VSAM)*DF		
Chemist			
MJL			
Analyst			
RWK			
Date Complete			
09/17/98			
Analysis Date			
09/15/98			
Analysis Time			
03:30 PM			
Sample Point	NH3 Concentration (ug/mL)		2.02E+02


Analyst:	RWK	Date:	09/17/98
Signature of Chemist:	<i>N/A</i>	MJL	Date:

WORKBOOK PAGE: DUP4

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		DUP
Type	Instrument Data (µg/mL)	ID 7.820
DUP	Blank Result from the Instrument (µg/mL)	BR 0.073
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
26133	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code		
NH3-01		
Matrix		
LIQUID	Dilution Factor	DF 1.000
Batch Number		
98004687		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 1.94E+02
Sample #		
S98T002465	Detection Limit (µg/mL)	5.00E+00
Instrument Code		
NH301	Detection Limit = 0.200µg * (FVOL/VSAM) * DF	
Prepared By		
JDS	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF	
Chemist		
MJL		
Analyst		
RWK		
Date Complete		
09/17/98		
Analysis Date		
09/15/98		
Analysis Time		
03:30 PM		
Sample Point	NH3 Concentration (µg/mL)	1.94E+02

Analyst:	RWK	Date: 09/17/98
Signature of Chemist:		MJL Date:

SAMPLE.WB1 REV 1.0

631001ML

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		SAMPLE
Type	Instrument Data (µg/mL)	ID 5.430
SAMPLE	Blank Result from the Instrument (µg/mL)	BR 0.073
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
26133	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code		
NH3-01		
Matrix		
LIQUID	Dilution Factor	DF 1.000
Batch Number		
98004687		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 1.34E+02
Sample #		
S98T002524	Detection Limit (µg/mL)	5.00E+00
Instrument Code		
NH301	Detection Limit = 0.200µg * (FVOL/VSAM) * DF	
Prepared By		
JDS	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)* DF	
Chemist		
MJL		
Analyst		
RWK		
Date Complete		
09/17/98		
Analysis Date		
09/15/98		
Analysis Time		
03:30 PM		
Sample Point	NH3 Concentration (µg/mL)	1.34E+02

Analyst:	RWK	Date:	09/17/98
Signature of Chemist:	<i>N/A</i>	MJL	Date:

WORKBOOK PAGE: DUP6

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		DUP
Type	Instrument Data (µg/mL)	ID 4.740
DUP	Blank Result from the Instrument (µg/mL)	BR 0.073
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
26133	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code		
NH3-01		
Matrix		
LIQUID	Dilution Factor	DF 1.000
Batch Number		
98004687		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 1.17E+02
Sample #		
S98T002524	Detection Limit (µg/mL)	5.00E+00
Instrument Code		
NH301	Detection Limit = 0.200µg * (FVOL/VSAM) * DF	
Prepared By		
JDS	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF	
Chemist		
MJL		
Analyst		
RWK		
Date Complete		
09/17/98		
Analysis Date		
09/15/98		
Analysis Time		
03:30 PM		
Sample Point	NH3 Concentration (µg/mL)	1.17E+02

Analyst:	RWK	Date:	09/17/98
Signature of Chemist:	<i>N/A</i>	MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML

WORKBOOK PAGE: SPIKE7

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		SPK
Type	Instrument Data (µg/mL)	ID 10.800
SPK	Blank Result from the Instrument (µg/mL)	BR 0.073
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 0.500
26133	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code	Spike Book Number	SPK 50N19B
NH3-01	Spike Value (µg/mL)	SPK VAL 3.85E+02
Matrix	Vol of Spike Standard Used (mL)	VOL SPK 0.500
LIQUID		
Batch Number		
98004687		
Rerun	Sample Instrument Data (µg/mL)	SAM ID 5.43
0	Sample Volume of Sample (mL)	SAM VSAM 1.000
Sample Prep	Sample Final Volume (mL)	SAM FVOL 25.0
N/A		
Sample #		
S98T002524		
Instrument Code		
NH301		
Prepared By		
JDS		
Chemist		
MJL	QC ACTUAL = SPK VAL * VOL SPK	
Analyst	QC FOUND = (((ID-BR) * FVOL) - (SAM ID - BR) * SAM FVOL * (VSAM / SAM VSAM))	
RWK		
Date Complete		
09/17/98		
Analysis Date	QC ACTUAL (µg)	1.93E+02
09/15/98	QC FOUND (µg)	2.01E+02
Analysis Time		
03:30 PM		
Sample Point		

Analyst:	RWK	Date:	09/17/98
Signature of Chemist:	<i>MJL</i>	Date:	MJL

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		STD
Type	Instrument Data (µg/mL)	ID 16.800
STD	Blank Result from the Instrument (µg/mL)	BR 0.073
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
26133	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code	LCS Standard Book Number	LCS 50N19B
NH3-01	LCS Standard Concentration (µg/mL)	STD VAL 3.85E+02
Matrix		
Batch Number		
98004687		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 4.18E+02
Sample #		
STD	Detection Limit (µg/mL)	5.00E+00
Instrument Code		
NH301	Detection Limit = 0.200µg * (FVOL/VSAM)	
Prepared By		
JDS	NH3 Concentration (µg/mL) = (ID-BR)*(FVOL /VSAM)	
Chemist		
MJL	QC ACTUAL = STD VAL	
Analyst	QC FOUND = (ID-BR) * (FVOL/VSAM)	
RWK		
Date Complete		
09/17/98		
Analysis Date	QC ACTUAL (µg)	3.85E+02
09/15/98	QC FOUND (µg)	4.18E+02
Analysis Time		
03:30 PM		
Sample Point		

Analyst:	RWK	Date:	09/17/98
Signature of Chemist:	<i>NA</i>	MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML

# LABCORE Completed Worklist Report for Worklist# 26134

Analyst: pjm Instrument: NH301 Book#: \_\_\_\_\_

Method: LA-631-001 Rev/Mod \_\_\_\_\_

Worklist Comment: U107, NH3-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0	NH3-01	LIQUID	3.85E+02	3.92E+2	101.818 % Recovery	
2 BLNK	0	NH3-01	LIQUID	1	<1.00E+1		ug/mL
3 SAMPLE	S98T002533 0	NH3-01	LIQUID	N/A	1.22E+02	10.000	ug/mL
4 DUP	S98T002533 0	NH3-01	LIQUID	1.22E+2	1.21E+2	0.823	RPD
5 SPK	S98T002533 0	NH3-01	LIQUID	9.63E+01	8.58E+01	89.097 % Recovery	
6 STD	0	NH3-01	LIQUID	3.85E+02	3.88E+2	100.779 % Recovery	

## Final page for worklist# 26134

\_\_\_\_\_  
Analyst Signature Date

 9-15-98  
\_\_\_\_\_  
Analyst Signature Date

 9/17/98  
\_\_\_\_\_  
Reviewer Signature Date



HNF-1661 REV. 0

worklistprt Version 2.1 05/15/95

09/11/98 08:21

Page: 1

**LABCORE Data Entry Template for Worklist# 26134**Analyst: RLW Instrument: NH301 \_\_\_\_\_ Bool: # 50219BMethod: LA-631-001 Rev/Mod C-D

Worklist Comment: U107, NH3-01, tdm

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				NH3-01	LIQUID	_____	_____	N/A	ug/mL
		2	BLNK				NH3-01	LIQUID	_____	_____	N/A	ug/mL
98000401	U-107 (2)	3	SAMPLE	S98T002533	0		NH3-01	LIQUID	N/A	_____	_____	ug/mL
98000401	U-107 (2)	4	DUP	S98T002533	0		NH3-01	LIQUID	_____	_____	N/A	ug/mL
98000401	U-107 (2)	5	SPK	S98T002533	0		NH3-01	LIQUID	_____	_____	N/A	ug/mL
		6	STD				NH3-01	LIQUID	_____	_____	N/A	ug/mL

**Final page for worklist # 26134**

RL McCown 9/13/98  
 Analyst Signature Date

\_\_\_\_\_  
 Analyst Signature Date

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WORKBOOK PAGE: ST\_END6

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		STD
Type	Instrument Data (µg/mL)	ID 7.880
STD	Blank Result from the Instrument (µg/mL)	BR 0.115
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 0.500
26134	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code	LCS Standard Book Number	LCS 50N19B
NH3-01	LCS Standard Concentration (µg/mL)	STD VAL 3.85E+02
Matrix		
Batch Number		
98004689		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 3.88E+02
Sample #		
	Detection Limit (µg/mL)	1.00E+01
Instrument Code		
NH301	Detection Limit = 0.200µg * (FVOL/VSAM)	
Prepared By		
JRO	NH3 Concentration (µg/mL) = (ID-BR)*(FVOL /VSAM)	
Chemist		
MJL	QC ACTUAL = STD VAL	
Analyst	QC FOUND = (ID-BR) * (FVOL/VSAM)	
PJM		
Date Complete		
09/15/98		
Analysis Date	QC ACTUAL (µg)	3.85E+02
09/13/98	QC FOUND (µg)	3.88E+02
Analysis Time		
11:45 PM		
Sample Point		
U107		

Analyst:	PJM	Date:	09/15/98
Signature of Chemist:	<i>MJL</i>	MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML

HNF-1661 REV.0

STD  
1.0mL

RJ McCown  
9/13/98

DOUBLE KNOWN ADDITION SELECTED  
AT 18:58, 09-13-98

SAMPLE VOL= 25.000 AT 18:58, 09-13-98  
ENTERED

MF= 31.8 mV AT 19:01, 09-13-98

MF= 31.8 mV AT 19:01, 09-13-98  
ENTERED

TD CONC= 1000 AT 19:02, 09-13-98  
ENTERED

TD VOL= 1.25000 AT 19:02, 09-13-98  
ENTERED

MF= 19.5 mV AT 19:04, 09-13-98

MF= 19.4 mV AT 19:04, 09-13-98  
ENTERED

TD VOL= 2.5000 AT 19:05, 09-13-98  
ENTERED

MF=-18.9 mV AT 19:08, 09-13-98

MF=-19.0 mV AT 19:08, 09-13-98  
ENTERED

:NH3 SLOPE=-59.3 mV/DEC  
AT 19:08, 09-13-98

:NH3 CONC= 15.8

HNF-1661 REV. 0

*Blank*  
*.500 ml Blm*

DOUBLE KNOWN ADDITION SELECTED  
AT 19:09, 09-13-98

SAMPLE VOL= 25.000 AT 19:15, 09-13-98  
ENTERED

MF= 156.6 mV AT 19:29, 09-13-98

MF= 159.3 mV AT 19:31, 09-13-98

MF= 159.4 mV AT 19:31, 09-13-98  
ENTERED

TD CONC= 1000 AT 19:32, 09-13-98  
ENTERED

TD VOL= .25000 AT 19:32, 09-13-98  
ENTERED

MF= 44.1 mV AT 19:36, 09-13-98

MF= 43.9 mV AT 19:36, 09-13-98  
ENTERED

TD VOL= 2.5000 AT 19:37, 09-13-98  
ENTERED

MF=-15.2 mV AT 19:40, 09-13-98

MF=-15.4 mV AT 19:40, 09-13-98  
ENTERED

NH3 SLOPE=-59.5 mV/DEC  
AT 19:40, 09-13-98

NH3 CONC= .115

HNF-1661 REV. 0

5987002533  
.500mc Rsm

DOUBLE KNOWN ADDITION SELECTED  
AT 19:49, 09-13-98

SAMPLE VOL= 25.000 AT 19:49, 09-13-98  
ENTERED

MF= 79.5 mV AT 19:51, 09-13-98

MF= 79.4 mV AT 19:51, 09-13-98  
ENTERED

TD CONC= 1000 AT 19:52, 09-13-98  
ENTERED

TD VOL= .25000 AT 19:52, 09-13-98  
ENTERED

MF= 38.4 mV AT 19:55, 09-13-98

MF= 38.4 mV AT 19:55, 09-13-98  
ENTERED

TD VOL= 2.5000 AT 19:55, 09-13-98  
ENTERED

MF=-15.7 mV AT 19:58, 09-13-98

MF=-16.0 mV AT 19:58, 09-13-98  
ENTERED

:NH3 SLOPE=-59.7 mV/DEC  
AT 19:58, 09-13-98

:NH3 CONC= 2.56

HNF-1661 REV. 0

2533 DUP  
.500ml Refu

DOUBLE KNOWN ADDITION SELECTED

BT 21:46, 09-13-98

SAMPLE VOL= 25.000 AT 21:48, 09-13-98

ENTERED

MF= 85.0 mV AT 21:55, 09-13-98

MF= 84.9 mV AT 21:55, 09-13-98

ENTERED

TD CONC= 1000 AT 21:55, 09-13-98

ENTERED

TD VOL= .25000 AT 21:55, 09-13-98

ENTERED

MF= 44.9 mV AT 21:59, 09-13-98

MF= 44.3 mV AT 21:59, 09-13-98

ENTERED

TD VOL= 2.5000 AT 21:59, 09-13-98

ENTERED

MF=-9.2 mV AT 22:02, 09-13-98

MF=-9.3 mV AT 22:02, 09-13-98

ENTERED

:NH3 SLOPE=-58.7 mV/DEC

AT 22:02, 09-13-98

:NH3 CONC= 2.53

2533 spk  
.500mL 4.250mL STD

HNF-1661 REV. 0

DOUBLE KNOWN ADDITION SELECTED  
AT 22:09, 09-13-98

SAMPLE VOL= 25.000 AT 22:09, 09-13-98  
ENTERED

MF= 64.4 mV AT 22:11, 09-13-98

MF= 64.0 mV AT 22:11, 09-13-98  
ENTERED

STD CONCEN= 1000 AT 22:12, 09-13-98  
ENTERED

TD VOL= .25000 AT 22:12, 09-13-98  
ENTERED

MF= 38.6 mV AT 22:14, 09-13-98

MF= 38.6 mV AT 22:14, 09-13-98  
ENTERED

TD VOL= 2.5000 AT 22:15, 09-13-98  
ENTERED

MF=-10.4 mV AT 22:18, 09-13-98

MF=-10.7 mV AT 22:18, 09-13-98  
ENTERED

:NH3 SLOPE=-60.1 mV/DEC  
AT 22:18, 09-13-98

:NH3 CONCEN= 5.99

HNF-1661 REV. 0

STD

500ML B/McCown

SAMPLE KNOWN ADDITION SELECTED 5/13/98  
AT 23:03, 09-13-98SAMPLE VOL= 25.000 AT 23:04, 09-13-98  
FILTERED

MF= 57.4 mV AT 23:08, 09-13-98

MF= 57.1 mV AT 23:08, 09-13-98  
FILTEREDSTD CONC= 1000 AT 23:08, 09-13-98  
FILTEREDSTD VOL= .25000 AT 23:08, 09-13-98  
FILTERED

MF= 36.3 mV AT 23:11, 09-13-98

MF= 36.0 mV AT 23:11, 09-13-98  
FILTEREDSTD VOL= 2.5000 AT 23:12, 09-13-98  
FILTERED

MF=-10.6 mV AT 23:15, 09-13-98

MF=-10.7 mV AT 23:15, 09-13-98  
FILTEREDNH3 SLOPE=-60.0 mV/DEC  
AT 23:15, 09-13-98

NH3 CONC= 7.88



AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		STD
Type	Instrument Data (µg/mL)	ID 15.800
STD	Blank Result from the Instrument (µg/mL)	BR 0.115
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
26134	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code	LCS Standard Book Number	LCS 50N19B
NH3-01	LCS Standard Concentration (µg/mL)	STD VAL 3.85E+02
Matrix		
Batch Number		
98004689		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 3.92E+02
Sample #		
	Detection Limit (µg/mL)	5.00E+00
Instrument Code		
NH301	Detection Limit = 0.200µg * (FVOL/VSAM)	
Prepared By		
JRO	NH3 Concentration (µg/mL) = (ID-BR)*(FVOL /VSAM)	
Chemist		
MJL	QC ACTUAL = STD VAL	
Analyst	QC FOUND = (ID-BR) * (FVOL/VSAM)	
PJM		
Date Complete		
09/15/98		
Analysis Date	QC ACTUAL (µg)	3.85E+02
09/13/98	QC FOUND (µg)	3.92E+02
Analysis Time		
11:45 PM		
Sample Point		
U107		


Analyst:	PJM	Date:	09/15/98
Signature of Chemist:	<i>NA</i>	MJL	Date:

WORKBOOK PAGE: BLANK2

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			BLNK
Type	Instrument Data (µg/mL)	ID	0.000
BLNK	Blank Result from the Instrument (µg/mL)	BR	0.115
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	0.500
26134	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98004689			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	< 1.00E+01
Sample #			
	Detection Limit (µg/mL)		1.00E+01
Instrument Code			
NH301	Detection Limit = 0.200µg * (FVOL/VSAM)		
Prepared By			
JRO	NH3 Concentration (µg/mL) = (BR) * (FVOL / VSAM) * DDF		
Chemist			
MJL			
Analyst			
PJM			
Date Complete			
09/15/98			
Analysis Date			
09/13/98			
Analysis Time			
11:45 PM			
Sample Point	NH3 Concentration (µg/mL)		< 1.00E+01
U107			

Analyst:	PJM	Date:	09/15/98
Signature of Chemist:		MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML

WORKBOOK PAGE: SAM3

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		SAMPLE
Type	Instrument Data (µg/mL)	ID 2.560
SAMPLE	Blank Result from the Instrument (µg/mL)	BR 0.115
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 0.500
26134	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code		
NH3-01		
Matrix		
LIQUID	Dilution Factor	DF 1.000
Batch Number		
98004689		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 1.22E+02
Sample #		
S98T002533	Detection Limit (µg/mL)	1.00E+01
Instrument Code		
NH301	Detection Limit = 0.200µg * (FVOL/VSAM) * DF	
Prepared By		
JRO	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF	
Chemist		
MJL		
Analyst		
PJM		
Date Complete		
09/15/98		
Analysis Date		
09/13/98		
Analysis Time		
11:45 PM		
Sample Point	NH3 Concentration (µg/mL)	1.22E+02
U107		

Analyst: Signature of Chemist:  Date: 09/15/98  
 Signature of Chemist: MJL Date:

SAMPLE.WB1 REV 1.0

631001ML

**AMMONIA (NH3) : LA-631-001 (C-0)**

**LIQUIDS/SOLIDS**

		DUP
Type	Instrument Data (µg/mL)	ID 2.530
DUP	Blank Result from the Instrument (µg/mL)	BR 0.115
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 0.500
26134	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code		
NH3-01		
Matrix		
LIQUID	Dilution Factor	DF 1.000
Batch Number		
98004689		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 1.21E+02
Sample #		
S98T002533	Detection Limit (µg/mL)	1.00E+01
Instrument Code		
NH301	Detection Limit = 0.200µg * (FVOL/VSAM) * DF	
Prepared By		
JRO	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF	
Chemist		
MJL		
Analyst		
PJM		
Date Complete		
09/15/98		
Analysis Date		
09/13/98		
Analysis Time		
11:45 PM		
Sample Point	NH3 Concentration (µg/mL)	1.21E+02
U107		

Analyst:	PJM	Date:	09/15/98
Signature of Chemist:		MJL	Date:

WORKBOOK PAGE: SPIKE5

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		SPK
Type	Instrument Data (µg/mL)	ID 5.990
SPK	Blank Result from the Instrument (µg/mL)	BR 0.115
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 0.500
26134	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code	Spike Book Number	SPK 50N19B
NH3-01	Spike Value (µg/mL)	SPK VAL 3.85E+02
Matrix	Vol of Spike Standard Used (mL)	VOL SPK 0.250
LIQUID		
Batch Number		
98004689		
Rerun	Sample Instrument Data (µg/mL)	SAM ID 2.56
0	Sample Volume of Sample (mL)	SAM VSAM 0.500
Sample Prep	Sample Final Volume (mL)	SAM FVOL 25.0
N/A		
Sample #		
S98T002533		
Instrument Code		
NH301		
Prepared By		
JRO		
Chemist		
MJL	QC ACTUAL = SPK VAL * VOL SPK	
Analyst	QC FOUND = (((ID-BR) * FVOL) - (SAM ID - BR) * SAM FVOL * (VSAM / SAM VSAM))	
PJM		
Date Complete		
09/16/98		
Analysis Date	QC ACTUAL (µg)	9.63E+01
09/13/98	QC FOUND (µg)	8.58E+01
Analysis Time		
11:45 PM		
Sample Point		
U107		

Analyst:	PJM	Date:	09/15/98
Signature of Chemist:	<i>MJL</i>	Date:	

SAMPLE.WB1 REV 1.0

631001ML

# LABCORE Completed Worklist Report for Worklist# 26188

Analyst: rwk Instrument: NH301 Book#: \_\_\_\_\_

Method: LA-631-001 Rev/Mod \_\_\_\_\_

Worklist Comment: U107, NH3-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0	NH3-01	LIQUID	3.85E+02	4.13E+2	107.273 % Recovery	
2 BLNK	0	NH3-01	LIQUID	1	<1.00E+1	ug/mL	
3 SAMPLE	S98T002457 0	NH3-01	LIQUID	N/A	2.98E+2	5.000	ug/mL
4 DUP	S98T002457 0	NH3-01	LIQUID	2.98E+2	2.26E+2	27.481 RPD	
5 TRIPL	S98T002457 0	NH3-01	LIQUID	2.98E+2	2.34E+2	24.060 RPD	
6 SPK	S98T002457 0	NH3-01	LIQUID	1.93E+02	2.74E+02	141.969 % Recovery	
7 SAMPLE	S98T002461 0	NH3-01	LIQUID	N/A	4.03E+02	10.000	ug/mL
8 DUP	S98T002461 0	NH3-01	LIQUID	4.03E+2	3.86E+2	4.309 RPD	
9 STD	0	NH3-01	LIQUID	3.85E+02	4.03E+2	104.675 % Recovery	

Final page for worklist# 26188

Analyst Signature


Date

Analyst Signature

Date

  
Reviewer Signature Date

 9/22/98

#598T002457 rerun on WL# 26422  
 11/5/99

# LABCORE Data Entry Template for Worklist# 26188

Analyst: KK Instrument: NH301 Book # 50714-B  
Method: LA-631-001 Rev/Mod CD  
Worklist Comment: U107, NH3-01, tdm

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				NH3-01	LIQUID			N/A	ug/mL
		2	BLNK				NH3-01	LIQUID			N/A	ug/mL
98000401	U-107 (2)	3	SAMPLE	S98T002457	0		NH3-01	LIQUID	N/A			ug/mL
98000401	U-107 (2)	4	DUP	S98T002457	0		NH3-01	LIQUID			N/A	ug/mL
98000401	U-107 (2)	5	SPK	S98T002457	0		NH3-01	LIQUID			N/A	ug/mL
98000401	U-107 (2)	6	SAMPLE	S98T002461	0		NH3-01	LIQUID	N/A			ug/mL
98000401	U-107 (2)	7	DUP	S98T002461	0		NH3-01	LIQUID			N/A	ug/mL
		8	STD				NH3-01	LIQUID			N/A	ug/mL

Final page for worklist # 26188

Rob King 9/16/98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

HNF-1661 REV. 0

DOUBLE KNOWN ADDITION SELECTED  
AT 10:24, 09-16-98

SAMPLE VOL= 25.000 AT 10:30, 09-16-98  
ENTERED

EMF= 145.7 mV AT 10:34, 09-16-98

EMF= 145.8 mV AT 10:34, 09-16-98  
ENTERED

STD CONC= 1000 AT 10:35, 09-16-98  
ENTERED

STD VOL= .25000 AT 10:35, 09-16-98  
ENTERED

EMF= 43.4 mV AT 10:36, 09-16-98

EMF= 43.2 mV AT 10:37, 09-16-98

EMF= 43.2 mV AT 10:37, 09-16-98  
ENTERED

STD VOL= 2.5000 AT 10:38, 09-16-98  
ENTERED

EMF=-14.9 mV AT 10:38, 09-16-98

EMF=-14.9 mV AT 10:39, 09-16-98  
ENTERED

1:NH3 SLOPE=-58.5 mV/DEC  
AT 10:39, 09-16-98

1:NH3 CONC= .177

*BLK*



DOUBLE KNOWN ADDITION SELECTED  
AT 11:05. 09-16-98

SAMPLE VOL= 25.000 AT 11:10. 09-16-98  
ENTERED

EMF= 34.5 mV AT 11:11. 09-16-98

EMF= 34.3 mV AT 11:11. 09-16-98

EMF= 34.4 mV AT 11:12. 09-16-98  
ENTERED

STD CONC= 1000 AT 11:13. 09-16-98  
ENTERED

STD VOL= 125000 AT 11:13. 09-16-98  
ENTERED

EMF= 23.6 mV AT 11:15. 09-16-98

EMF= 23.3 mV AT 11:16. 09-16-98

EMF= 23.3 mV AT 11:16. 09-16-98  
ENTERED

STD VOL= 2.5000 AT 11:16. 09-16-98  
ENTERED

EMF=-11.7 mV AT 11:20. 09-16-98

EMF=-12.1 mV AT 11:20. 09-16-98

EMF=-12.1 mV AT 11:20. 09-16-98  
ENTERED

1:NH3 SLOPE=-55.8 mV/DEC  
AT 11:20. 09-16-98

1:NH3 CONC= 16.7

*Sfd*

DOUBLE KNOWN ADDITION SELECTED  
AT 15:12. 09-16-98

SAMPLE VOL= 25.000 AT 15:19. 09-16-98  
ENTERED

EMF= 57.8 mV AT 15:19. 09-16-98

EMF= 57.7 mV AT 15:19. 09-16-98  
ENTERED

STD CONC= 1000 AT 15:20. 09-16-98  
ENTERED

STD VOL= .25000 AT 15:20. 09-16-98  
ENTERED

EMF= 37.6 mV AT 15:22. 09-16-98

EMF= 37.3 mV AT 15:22. 09-16-98

EMF= 37.3 mV AT 15:22. 09-16-98  
ENTERED

STD VOL= 2.5000 AT 15:22. 09-16-98  
ENTERED

EMF=-8.3 mV AT 15:24. 09-16-98

EMF=-8.5 mV AT 15:25. 09-16-98

EMF=-8.8 mV AT 15:25. 09-16-98

EMF=-8.8 mV AT 15:26. 09-16-98  
ENTERED

1:NH3 SLOPE=-59.8 mV/DEC  
AT 15:26. 09-16-98

1:NH3 CONC= 8.23

598T2461

1500 mL

HNF-1661 REV. 0

DOUBLE KNOWN ADDITION SELECTED  
AT 15:46. 09-16-98

SAMPLE VOL= 25.000 AT 15:46. 09-16-98  
ENTERED

EMF= 59.3 mV AT 15:46. 09-16-98

EMF= 59.2 mV AT 15:49. 09-16-98

EMF= 59.4 mV AT 15:49. 09-16-98

EMF= 59.6 mV AT 15:49. 09-16-98

EMF= 59.6 mV AT 15:49. 09-16-98  
ENTERED

STD CONC= 1000 AT 15:50. 09-16-98  
ENTERED

STD VOL= .25000 AT 15:50. 09-16-98  
ENTERED

EMF= 38.8 mV AT 15:51. 09-16-98

EMF= 38.7 mV AT 15:52. 09-16-98

EMF= 38.7 mV AT 15:52. 09-16-98  
ENTERED

STD VOL= 2.5000 AT 15:52. 09-16-98  
ENTERED

EMF=-7.3 mV AT 15:54. 09-16-98

EMF=-7.5 mV AT 15:54. 09-16-98

EMF=-7.6 mV AT 15:54. 09-16-98  
ENTERED

1:NH3 SLOPE=-59.5 mV/DEC  
AT 15:54. 09-16-98

1:NH3 CONC= 7.89

2461 DUP  
1,500mL

DOUBLE KNOWN ADDITION SELECTED  
AT 15:55, 09-16-98

SAMPLE VOL= 25.000 AT 15:59, 09-16-98  
ENTERED

EMF= 41.9 mV AT 16:00, 09-16-98

EMF= 41.7 mV AT 16:00, 09-16-98

EMF= 41.7 mV AT 16:00, 09-16-98  
ENTERED

STD CONC= 1000 AT 16:01, 09-16-98  
ENTERED

STD VOL= .25000 AT 16:01, 09-16-98  
ENTERED

EMF= 29.8 mV AT 16:02, 09-16-98

EMF= 29.6 mV AT 16:03, 09-16-98

EMF= 29.6 mV AT 16:03, 09-16-98  
ENTERED

STD VOL= 2.5000 AT 16:03, 09-16-98  
ENTERED

EMF=-8.3 mV AT 16:04, 09-16-98

EMF=-8.5 mV AT 16:06, 09-16-98

EMF=-8.5 mV AT 16:06, 09-16-98  
ENTERED

1:NH3 SLOPE=-59.5 mV/DEC  
AT 16:06, 09-16-98

*Ending Std*

1:NH3 CONC= 16.3

WORKBOOK PAGE: STD1

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			STD
Type	Instrument Data (µg/mL)	ID	16.700
STD	Blank Result from the Instrument (µg/mL)	BR	0.177
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
26188	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code	LCS Standard Book Number	LCS	50N19B
NH3-01	LCS Standard Concentration (µg/mL)	STD VAL	3.85E+02
Matrix			
Batch Number			
98004759			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	4.13E+02
Sample #			
STD	Detection Limit (µg/mL)		5.00E+00
Instrument Code			
NH301	Detection Limit = 0.200µg * (FVOL/VSAM)		
Prepared By			
JDS	NH3 Concentration (µg/mL) = (ID-BR)*(FVOL /VSAM)		
Chemist			
MJL	QC ACTUAL = STD VAL		
Analyst	QC FOUND = (ID-BR) * (FVOL/VSAM)		
RWK			
Date Complete			
09/22/98			
Analysis Date	QC ACTUAL (µg)		3.85E+02
09/16/98	QC FOUND (µg)		4.13E+02
Analysis Time			
04:10 PM			
Sample Point			
U107			

Analyst:		RWK	Date:	09/22/98
Signature of Chemist:	<i>NA</i>	MJL	Date:	

SAMPLE.WB1 REV 1.0


631001ML

WORKBOOK PAGE: BLANK2

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			BLNK
Type	Instrument Data (µg/mL)	ID	0.000
BLNK	Blank Result from the Instrument (µg/mL)	BR	0.177
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	0.500
26188	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98004759			
Retrun			
0			
Sample Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	< 1.00E+01
Sample #			
	Detection Limit (µg/mL)		1.00E+01
Instrument Code			
NH301	Detection Limit = 0.200µg * (FVOL/VSAM)		
Prepared By			
JDS	NH3 Concentration (µg/mL) = (BR) * (FVOL / VSAM) * DDF		
Chemist			
MJL			
Analyst			
RWK			
Date Complete			
09/22/98			
Analysis Date			
09/16/98			
Analysis Time			
04:10 PM			
Sample Point	NH3 Concentration (µg/mL)		< 1.00E+01
U107			

Analyst:	RWK	Date:	09/22/98
Signature of Chemist:		MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML

WORKBOOK PAGE: SAM7

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

			SAMPLE
Type	Instrument Data (µg/mL)	ID	8.230
SAMPLE	Blank Result from the Instrument (µg/mL)	BR	0.177
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	0.500
26188	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98004759			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	4.03E+02
Sample #			
S98T002461	Detection Limit (µg/mL)	1.00E+01	
Instrument Code			
NH301	Detection Limit = 0.200µg * (FVOL/VSAM) * DF		
Prepared By			
JDS	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF		
Chemist			
MJL			
Analyst			
RWK			
Date Complete			
09/22/98			
Analysis Date			
09/16/98			
Analysis Time			
04:10 PM			
Sample Point	NH3 Concentration (µg/mL)		4.03E+02
U107			

Analyst:	RWK	Date:	09/22/98
Signature of Chemist:	<i>NA</i>	MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		DUP
Type	Instrument Data (µg/mL)	ID 7.890
DUP	Blank Result from the Instrument (µg/mL)	BR 0.177
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 0.500
26188	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code		
NH3-01		
Matrix		
LIQUID	Dilution Factor	DF 1.000
Batch Number		
98004759		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 3.86E+02
Sample #		
S98T002461	Detection Limit (µg/mL)	1.00E+01
Instrument Code		
NH301	Detection Limit = 0.200µg * (FVOL/VSAM) * DF	
Prepared By		
JDS	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF	
Chemist		
MJL		
Analyst		
RWK		
Date Complete		
09/22/98		
Analysis Date		
09/16/98		
Analysis Time		
04:10 PM		
Sample Point	NH3 Concentration (µg/mL)	3.86E+02
U107		

Analyst:	RWK	Date:	09/22/98
Signature of Chemist:	<i>NA</i>	MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML



WORKBOOK PAGE: ST\_END9

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		STD
Type	Instrument Data (µg/mL)	ID 16.300
STD	Blank Result from the Instrument (µg/mL)	BR 0.177
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
26188	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code	LCS Standard Book Number	LCS 50N19B
NH3-01	LCS Standard Concentration (µg/mL)	STD VAL 3.85E+02
Matrix		
Batch Number		
98004759		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 4.03E+02
Sample #		
	Detection Limit (µg/mL)	5.00E+00
Instrument Code		
NH301	Detection Limit = 0.200µg * (FVOL/VSAM)	
Prepared By		
JDS	NH3 Concentration (µg/mL) = (ID-BR)*(FVOL /VSAM)	
Chemist		
MJL	QC ACTUAL = STD VAL	
Analyst	QC FOUND = (ID-BR) * (FVOL/VSAM)	
RWK		
Date Complete		
09/22/98		
Analysis Date	QC ACTUAL (µg)	3.85E+02
09/16/98	QC FOUND (µg)	4.03E+02
Analysis Time		
04:10 PM		
Sample Point		
U107		

Analyst:	RWK	Date:	09/22/98
Signature of Chemist:	<i>MJL</i>	MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML

HNF-1661 REV. 0

# LABCORE Completed Worklist Report for Worklist# 26422

Analyst: rwk Instrument: NH301 Book#: \_\_\_\_\_

Method: LA-631-001 Rev/Mod \_\_\_\_\_

Worklist Comment: U107 NH3 Rerun-1, Run smple at 0.250ml S.S., pjw

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 STD	0	NH3-01	LIQUID	4.25E+02	4.17E+2	98.118 % Recovery	
2 BLNK	0	NH3-01	LIQUID	1	<5.00E+0	ug/mL	
3 SAMPLE	S98T002457 0	NH3-01	LIQUID	N/A	2.70E+02	5.000 % Recovery	ug/mL
4 DUP	S98T002457 0	NH3-01	LIQUID	2.70E+2	2.72E+2	0.738 RPD	
5 SPK	S98T002457 0	NH3-01	LIQUID	2.13E+02	1.89E+02	88.732 % Recovery	
6 STD	0	NH3-01	LIQUID	4.25E+02	4.07E+2	95.765 % Recovery	

**Final page for worklist# 26422**

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*Mary Frey* 11-19-98  
Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*[Signature]* 11/22/98  
Reviewer Signature \_\_\_\_\_ Date \_\_\_\_\_

# LABCORE Data Entry Template for Worklist# 26422

Analyst: RK Instrument: NH301 Book# 50119-D

Method: LA-631-001 Rev/Mod 00

*@30cm  
Ensure dose rate is  
≤ 50 mrem/hr prior to  
performing this analysis.*

Worklist Comment: U107 NH3 Rerun-1, Run smple at 0.250ml S.S., pjm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1 STD			NH3-01	LIQUID		
2 BLNK			NH3-01	LIQUID		
3 SAMPLE	S98T002457 0		NH3-01	LIQUID	98000401	U-107 (2)
	Analytes Requested: NH3-01					
4 DUP	S98T002457 0		NH3-01	LIQUID		
5 SPK	S98T002457 0		NH3-01	LIQUID		
6 STD			NH3-01	LIQUID		

## Final page for worklist # 26422

*Rob King* 10/24/98  
Analyst Signature Date

*Mary Shary* 11-19-98  
Analyst Signature Date

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

EMF=-18.5 mV AT 22:00. 10-24-98

EMF=-18.8 mV AT 22:01. 10-24-98

EMF=-18.8 mV AT 22:01. 10-24-98

ENTERED

1:NH3 SLOPE=-57.9 mV/DEC

AT 22:01. 10-24-98

1:NH3 CONC= 16.8

DOUBLE KNOWN ADDITION SELECTED

AT 22:16. 10-24-98

SAMPLE VOL= 25.000 AT 22:16. 10-24-98

ENTERED

EMF= 46.7 mV AT 22:19. 10-24-98

EMF= 46.4 mV AT 22:19. 10-24-98

ENTERED

STD CONC= 1000 AT 22:19. 10-24-98

ENTERED

STD VOL= .25000 AT 22:19. 10-24-98

ENTERED

EMF= 31.1 mV AT 22:21. 10-24-98

EMF= 30.8 mV AT 22:22. 10-24-98

EMF= 30.5 mV AT 22:22. 10-24-98

ENTERED

STD VOL= 2.5000 AT 22:22. 10-24-98

ENTERED

EMF=-10.3 mV AT 22:24. 10-24-98

EMF=-10.6 mV AT 22:25. 10-24-98

EMF=-10.7 mV AT 22:25. 10-24-98

ENTERED

1:NH3 SLOPE=-57.1 mV/DEC

AT 22:25. 10-24-98

1:NH3 CONC= 10.9

DOUBLE KNOWN ADDITION SELECTED  
AT 22:25, 10-24-98

SAMPLE VOL= 25.000 AT 22:36, 10-24-98  
ENTERED

EMF= 49.9 mV AT 22:38, 10-24-98

~~EMF= 49.6 mV AT 22:39, 10-24-98~~

EMF= 49.4 mV AT 22:39, 10-24-98  
ENTERED

STD CONC= 1000 AT 22:39, 10-24-98  
ENTERED

STD VOL= .25000 AT 22:39, 10-24-98  
ENTERED

EMF= 33.5 mV AT 22:42, 10-24-98

EMF= 33.3 mV AT 22:42, 10-24-98

EMF= 33.2 mV AT 22:42, 10-24-98  
ENTERED

STD VOL= 2.5000 AT 22:42, 10-24-98  
ENTERED

EMF=-8.7 mV AT 22:45, 10-24-98

EMF=-8.9 mV AT 22:45, 10-24-98

EMF=-9.0 mV AT 22:45, 10-24-98  
ENTERED

1:NH3 SLOPE=-58.7 mV/DEC  
AT 22:46, 10-24-98

1:NH3 CONC= 11.0

DOUBLE KNOWN ADDITION SELECTED  
AT 22:58. 10-24-98

SAMPLE VOL= 25.000 AT 22:59. 10-24-98  
ENTERED

EMF= 60.6 mV AT 23:01. 10-24-98

EMF= 60.4 mV AT 23:01. 10-24-98  
ENTERED

STD CONC= 1000 AT 23:02. 10-24-98  
ENTERED

STD VOL= .25000 AT 23:02. 10-24-98  
ENTERED

EMF= 42.0 mV AT 23:04. 10-24-98

EMF= 41.7 mV AT 23:05. 10-24-98

EMF= 41.7 mV AT 23:05. 10-24-98  
ENTERED

STD VOL= 2.5000 AT 23:05. 10-24-98  
ENTERED

EMF=-1.5 mV AT 23:08. 10-24-98

EMF=-1.8 mV AT 23:08. 10-24-98

EMF=-1.9 mV AT 23:08. 10-24-98.....  
ENTERED

1:NH3 SLOPE=-57.4 mV/DEC  
AT 23:08. 10-24-98

1:NH3 CONC= 8.77

DOUBLE KNOWN ADDITION SELECTED  
AT 23:30, 10-24-98

SAMPLE VOL= 25.000 AT 23:32, 10-24-98  
ENTERED

EMF= 41.8 mV AT 23:34, 10-24-98

EMF= 41.7 mV AT 23:34, 10-24-98  
ENTERED

STD CONC= 1000 AT 23:35, 10-24-98  
ENTERED

STD VOL= .25000 AT 23:35, 10-24-98  
ENTERED

EMF= 30.4 mV AT 23:37, 10-24-98

EMF= 30.1 mV AT 23:37, 10-24-98

EMF= 30.1 mV AT 23:37, 10-24-98  
ENTERED

STD VOL= 2.5000 AT 23:37, 10-24-98  
ENTERED

EMF=-6.1 mV AT 23:39, 10-24-98

EMF=-6.4 mV AT 23:40, 10-24-98

EMF=-6.5 mV AT 23:40, 10-24-98  
ENTERED

1: NH3 SLOPE=-57.2 mV/DEC  
AT 23:40, 10-24-98

1: NH3 CONC= 16.4

DOUBLE KNOWN ADDITION SELECTED  
AT 21:31. 10-24-98

SAMPLE VOL= 25.000 AT 21:31. 10-24-98  
ENTERED

EMF= 132.1 mV AT 21:32. 10-24-98

EMF= 154.6 mV AT 21:40. 10-24-98

EMF= 155.4 mV AT 21:40. 10-24-98

EMF= 155.5 mV AT 21:41. 10-24-98  
ENTERED

STD CONC= 1000 AT 21:41. 10-24-98  
ENTERED

STD VOL= .25000 AT 21:41. 10-24-98  
ENTERED

EMF= 41.2 mV AT 21:44. 10-24-98

EMF= 41.0 mV AT 21:44. 10-24-98

EMF= 41.0 mV AT 21:44. 10-24-98  
ENTERED

STD VOL= 2.5000 AT 21:44. 10-24-98  
ENTERED

EMF=-17.6 mV AT 21:47. 10-24-98

EMF=-17.7 mV AT 21:47. 10-24-98  
ENTERED

1:NH3 SLOPE=-58.9 mV/DEC  
AT 21:47. 10-24-98

:NH3 CONC= .114

*BLK*



DOUBLE KNOWN ADDITION SELECTED  
AT 21:51, 10-24-98

SAMPLE VOL= 25.000 AT 21:51, 10-24-98  
ENTERED

EMF= 29.7 mV AT 21:54, 10-24-98

EMF= 29.5 mV AT 21:55, 10-24-98

EMF= 29.4 mV AT 21:55, 10-24-98  
ENTERED

STD CONC= 1000 AT 21:55, 10-24-98  
ENTERED

STD VOL= .25000 AT 21:55, 10-24-98  
ENTERED

*std*

EMF= 18.2 mV AT 21:57, 10-24-98

EMF= 17.9 mV AT 21:57, 10-24-98

EMF= 17.9 mV AT 21:58, 10-24-98  
ENTERED

STD VOL= 2.5000 AT 21:58, 10-24-98  
ENTERED

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		STD
Type	Instrument Data (µg/mL)	ID 16.800
STD	Blank Result from the Instrument (µg/mL)	BR 0.114
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
26422	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code	LCS Standard Book Number	LCS 50n19d
NH3-01	LCS Standard Concentration (µg/mL)	STD VAL 4.25E+02
Matrix		
LIQUID		
Batch Number		
98005035		
Refun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 4.17E+02
Sample #		
STD	Detection Limit (µg/mL)	5.00E+00
Instrument Code		
NH301	Detection Limit = 0.200µg * (FVOL/VSAM)	
Prepared By		
MF	NH3 Concentration (µg/mL) = (ID-BR)*(FVOL /VSAM)	
Chemist		
MJL	QC ACTUAL = STD VAL	
Analyst	QC FOUND = (ID-BR) * (FVOL/VSAM)	
rwk		
Date Complete		
11/19/98		
Analysis Date	QC ACTUAL (µg)	4.25E+02
10/24/98	QC FOUND (µg)	4.17E+02
Analysis Time		
10:40 PM		
Sample Point		
U107		

Analyst:	rwk	Date: 11/19/98
Signature of Chemist:	<i>MA</i>	MJL Date:

WORKBOOK PAGE: BLANK2

**AMMONIA (NH3) ; LA-631-001 (C-0)**

**LIQUIDS/SOLIDS**

**BLNK**

Type	Instrument Data (µg/mL)	ID	0.000
BLNK	Blank Result from the Instrument (µg/mL)	BR	0.114
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM	1.000
26422	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL	25.0
Test Code			
NH3-01			
Matrix			
LIQUID	Dilution Factor	DF	1.000
Batch Number			
98005035			
Rerun			
0			
Sample Prep			
N/A	NH3 Concentration (µg/mL)	NH3 CONC	< 5.00E+00
Sample #			
BLNK	Detection Limit (µg/mL)		5.00E+00
Instrument Code			
NH301	Detection Limit = 0.200µg * (FVOL/VSAM)		
Prepared By			
MF	NH3 Concentration (µg/mL) = (BR) * (FVOL / VSAM) * DDF		
Chemist			
MJL			
Analyst			
rwk			
Date Complete			
11/19/98			
Analysis Date			
10/24/98			
Analysis Time			
10:40 PM			
Sample Point	NH3 Concentration (µg/mL)		< 5.00E+00
U107			

Analyst:		rwk	Date: 11/19/98
Signature of Chemist:	<i>MJL</i>	MJL	Date:

SAMPLE.WB1 REV 1.0

631001ML

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		SAMPLE
Type	Instrument Data (µg/mL)	ID 10.900
SAMPLE	Blank Result from the Instrument (µg/mL)	BR 0.114
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
26422	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code		
NH3-01		
Matrix		
LIQUID	Dilution Factor	DF 1.000
Batch Number		
98005035		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 2.70E+02
Sample #		
S98T002457	Detection Limit (µg/mL)	5.00E+00
Instrument Code		
NH301	Detection Limit = 0.200µg * (FVOL/VSAM) * DF	
Prepared By		
MF	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF	
Chemist		
MJL		
Analyst		
rwk		
Date Complete		
11/19/98		
Analysis Date		
10/24/98		
Analysis Time		
10:40 PM		
Sample Point	NH3 Concentration (µg/mL)	2.70E+02
U107		

Analyst:		rwk Date: 11/19/98
Signature of Chemist:		MJL Date:

WORKBOOK PAGE: DUP4

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		DUP
Type	Instrument Data (µg/mL)	ID 11.000
DUP	Blank Result from the Instrument (µg/mL)	BR 0.114
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
26422	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code		
NH3-01		
Matrix		
LIQUID	Dilution Factor	DF 1.000
Batch Number		
98005035		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 2.72E+02
Sample #		
S98T002457	Detection Limit (µg/mL)	5.00E+00
Instrument Code		
NH301	Detection Limit = 0.200µg * (FVOL/VSAM) * DF	
Prepared By		
MF	NH3 Concentration (µg/mL) = (ID-BR) * (FVOL / VSAM)*DF	
Chemist		
MJL		
Analyst		
rwk		
Date Complete		
11/19/98		
Analysis Date		
10/24/98		
Analysis Time		
10:40 PM		
Sample Point	NH3 Concentration (µg/mL)	2.72E+02
U107		

Analyst:		rwk Date: 11/19/98
Signature of Chemist:	<i>NA</i>	MJL Date:

SAMPLE.WB1 REV 1.0

631001ML

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS


		SPK
Type	Instrument Data (µg/mL)	ID 8.770
SPK	Blank Result from the Instrument (µg/mL)	BR 0.114
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 0.100
26422	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code	Spike Book Number	SPK 50n19d
NH3-01	Spike Value (µg/mL)	SPK VAL 4.25E+02
Matrix	Vol of Spike Standard Used (mL)	VOL SPK 0.500
LIQUID		
Batch Number		
98005035		
Rerun	Sample Instrument Data (µg/mL)	SAM ID 10.9
0	Sample Volume of Sample (mL)	SAM VSAM 1.000
Sample Prep	Sample Final Volume (mL)	SAM FVOL 25.0
N/A		
Sample #		
S98T002457		
Instrument Code		
NH301		
Prepared By		
MF		
Chemist		
MJL	QC ACTUAL = SPK VAL * VOL SPK	
Analyst	QC FOUND = (((ID-BR) * FVOL) - (SAM ID - BR) * SAM FVOL * (VSAM / SAM VSAM))	
rwk		
Date Complete		
11/19/98		
Analysis Date	QC ACTUAL (µg)	2.13E+02
10/24/98	QC FOUND (µg)	1.89E+02
Analysis Time		
10:40 PM		
Sample Point		
U107		

Analyst:	rwk	Date: 11/19/98
Signature of Chemist:	<i>N/A</i>	MJL Date:

AMMONIA (NH3) : LA-631-001 (C-0)

LIQUIDS/SOLIDS

		STD
Type	Instrument Data (µg/mL)	ID 16.400
STD	Blank Result from the Instrument (µg/mL)	BR 0.114
Work List	Vol of Sample for Dilution (mL) or Vol of Sample Direct (mL)	VSAM 1.000
26422	Final Vol of Dilution (mL) or Vol of Sample Direct (mL)	FVOL 25.0
Test Code	LCS Standard Book Number	LCS 50n19d
NH3-01	LCS Standard Concentration (µg/mL)	STD VAL 4.25E+02
Matrix		
LIQUID		
Batch Number		
98005035		
Rerun		
0		
Sample Prep		
N/A	NH3 Concentration (µg/mL)	NH3 CONC 4.07E+02
Sample #		
STD	Detection Limit (µg/mL)	5.00E+00
Instrument Code		
NH301	Detection Limit = 0.200µg * (FVOL/VSAM)	
Prepared By		
MF	NH3 Concentration (µg/mL) = (ID-BR)*(FVOL /VSAM)	
Chemist		
MJL	QC ACTUAL = STD VAL	
Analyst	QC FOUND = (ID-BR) * (FVOL/VSAM)	
rwk		
Date Complete		
11/19/98		
Analysis Date	QC ACTUAL (µg)	4.25E+02
10/24/98	QC FOUND (µg)	4.07E+02
Analysis Time		
10:40 PM		
Sample Point		
U107		

Analyst:		rwk Date: 11/19/98
Signature of Chemist:		MJL Date:

# LABCORE Completed Worklist Report for Worklist# 27515

Analyst: krm Instrument: SP02 Book#: 49N19E

Method: LA-265-101 Rev/Mod \_\_\_\_\_

Worklist Comment: U107, CRVI-01, tdm

Seq	Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCV		0		CRVI-01	SOLID	5.06	5.09	100.593 % Recovery	
2	CCB		0		CRVI-01	SOLID	1	<2.58e+2	Ratio	
3	BLNK-PRRP		0		CRVI-01	SOLID	1	<51.6	ug/g	
4	SAMPLE	S98T002043	0	W	CRVI-01	SOLID	N/A	1.99e+2	1.00e-002	ug/g
5	DUP	S98T002043	0	W	CRVI-01	SOLID	1.99e+2	2.13e+2	6.796 RPD	
6	SPK	S98T002043	0	W	CRVI-01	SOLID	100	116.1	116.100 % Recovery	

Final page for worklist# 27515

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

  
Reviewer Signature

12/17/98  
Date



12/10/98 08:32  
A-0004-1

Page: 1


**LABCORE Data Entry Template for Worklist# 27515**Analyst: KRM Instrument: SP01 \_\_\_\_\_ Book# 49N19 RMethod: LA-265-101 Rev/Mod C-O

Worklist Comment: U107, CRVI-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCV		CRVI-01	SOLID		
2	CCB		CRVI-01	SOLID		
3	BLNK-PREP		CRVI-01	SOLID		
4	SAMPLE	S98T002043 0 W	CRVI-01	SOLID	98000358	U-107 (2)
		Analytes Requested: CRVI-01				
5	DUP	S98T002043 0 W	CRVI-01	SOLID		
6	SPK	S98T002043 0 W	CRVI-01	SOLID		

**Final page for worklist # 27515**

  
 Analyst Signature \_\_\_\_\_ Date 12-12-98

  
 Analyst Signature \_\_\_\_\_ Date 12/10/98

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WORKBOOK PAGE: STD1

Cr+6 : LA-265-101 (C-0) LIQUID/SOLID SAMPLE		CCV
Type	Sample Absorbance at 540 nm (abs)	0.382
CCV	Sample Volume in mL (Vsamp)	1.00
Work List	Method Factor (10 + Vsamp) (MF)	11
27515	Dilution Factor (DF)	1
Test Code	Digest Dilution Factor (DDF)	1
CRVI-01	Standard Value	5.06E+00
Matrix	Low Calibration Point (LOW)	0.022
SOLID	High Calibration Point"	0.831
Batch Number	Y-Intercept (a)	0.00276
	Slope (b)	0.8198
Rerun	Cr +6 µg/mL =	5.09E+00
0		
Sample Prep	Cr +6 µg/mL = [(MF*DF) / (b*VSAMP)] * (abs - a) (DDF)	
N/A	If the result is a < value ( abs < LOW) :	
Sample #	Cr +6 µg/mL = [(MF*DF) / (b*VSAMP)] * (LOW - a) (DDF)	
STD		
Instrument Code	RPD = ( Cr +6 µg/mL SAM - Cr +6 µg/mL DUP  *100) /	
SP02	(AVERAGE OF THE SAM + DUP)	
Prepared By		
CJO	Less Than Value = abs < Low Calibration Point	
Chemist		
PPB		
Analyst		
KRM		
Date Complete		
12/16/98		
Analysis Date	v RESULT v	CCV
12/12/98		
Analysis Time	Cr +6 µg/mL =	5.09E+00
12:00 AM		
Sample Point		
U-107		

Analyst:	KRM	Date:	12/16/98
Signature of Chemist:	PPB	Date:	

WORKBOOK PAGE: BLANK2

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

BLANK

Type	Sample Absorbance at 540 nm (abs)	0.000
CCB	Sample Volume in mL (Vsamp)	1.00
Work List	Method Factor (10 + Vsamp) (MF)	11
27515	Dilution Factor (DF)	1
Test Code	Digest g/L (DGL)	1
	Low Calibration abs point (LOW)	0.022
Matrix	High Calibration abs point	0.831
SOLID	Y-Intercept (a)	0.00276
Batch Number	Slope (b)	0.8198
	Cr +6 µg/g =	<258.161

Rerun	0	Cr +6 µg/g = [(MF*DF) / (b*VSAMP)] * (abs - a) (1000 / DGL)
Sample Prep	N/A	If the result is a < value ( abs < LOW) :
Sample #	BLANK	Cr +6 µg/g = < [(MF*DF) / (b*VSAMP)] * (LOW - a) (1000 / DGL)
Instrument Code	SP02	RPD =  Cr +6 µg/g SAM - Cr +6 µg/g DUP  * 100 / (AVERAGE OF THE SAM + DUP)
Prepared By	CJO	Less Than Value = Sample Absorbance < Low Calibration Point
Chemist	PPB	
Analyst	KRM	
Date Complete	12/16/98	The Sample Absorbance is < Detection Limit (the Low Calibration Poi
Analysis Date	12/12/98	v RESULT v
Analysis Time	12:00 AM	Cr +6 µg/g =
Sample Point	U-107	BLANK
		<258.161

Analyst:	KRM	Date:	12/16/98
Signature of Chemist:	PPB	Date:	

WORKBOOK PAGE: BLANK3

**Cr+6 : LA-265-101 (C-0)**

**LIQUID/SOLID SAMPLE**

**BLANK**

Type	Sample Absorbance at 540 nm (abs)	0.001
BLNK-PREP	Sample Volume in mL (Vsamp)	1.00
Work List	Method Factor (10 + Vsamp) (MF)	11
27515	Dilution Factor (DF)	1
Test Code	Digest g/L (DGL)	5
CRVI-1	Low Calibration abs point (LOW)	0.022
Matrix	High Calibration abs point	0.831
SOLID	Y-Intercept (a)	0.00276
Batch Number	Slope (b)	0.8198
98006123	Cr +6 µg/g =	<51.632

Rerun	0
Sample Prep	N/A
Sample #	PREP BLANK
Instrument Code	SP02
Prepared By	CJO
Chemist	PPB
Analyst	KRM
Date Complete	12/16/98
Analysis Date	12/12/98
Analysis Time	12:00 AM
Sample Point	U-107

Cr +6 µg/g = [(MF\*DF) / (b\*VSAMP)] \* (abs - a) (1000 / DGL)

If the result is a < value ( abs < LOW) :

Cr +6 µg/g = < [(MF\*DF) / (b\*VSAMP)] \* (LOW - a) (1000 / DGL)

RPD = |Cr +6 µg/g SAM - Cr +6 µg/g DUP| \* 100 /  
(AVERAGE OF THE SAM + DUP)

Less Than Value = Sample Absorbance < Low Calibration Point

The Sample Absorbance is < Detection Limit (the Low Calibration Poi

v RESULT v	BLANK
Cr +6 µg/g =	<51.632

Analyst:	KRM	Date:	12/16/98
Signature of Chemist:	PPB	Date:	

SAMPLE.WB1 REV 1.

265101

WORKBOOK PAGE: SAM4

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

		SAMPLE	DUPLICATE
Type	Sample Absorbance at 540 nm (abs)	0.077	0.083
SAMPLE	Sample Volume in mL (Vsamp)	1.00	1.00
Work List	Method Factor (10 + Vsamp) (MF)	11	11
27515	Dilution Factor (DF)	1	1
Test Code	Digest g/L (DGL)	5	5.056
	Low Calibration abs point (LOW)	0.022	0.022
Matrix	High Calibration abs point	0.831	0.831
SOLID	Y-Intercept (a)	0.00276	0.00276
Batch Number	Slope (b)	0.8198	0.8198
98006123	Cr +6 µg/g =	1.99E+02	2.13E+02
Rerun			
0	Cr +6 µg/g = [(MF*DF) / (b*VSAMP)] * (abs - a) (1000 / DGL)		
Sample Prep	If the result is a < value ( abs < LOW) :		
H2ODIG01	Cr +6 µg/g = < [(MF*DF) / (b*VSAMP)] * (LOW - a) (1000 / DGL)		
Sample #			
S98T002043	RPD =  Cr +6 µg/g SAM - Cr +6 µg/g DUP  / AVERAGE OF THE SAM + DUP * 100		
Instrument Code	Less Than Value = Sample Absorbance < Low Calibration Point		
SP02			
Prepared By			
CJO			
Chemist			
PPB			
Analyst			
KRM			
Date Complete			
12/16/98			
Analysis Date	v RESULT v	SAMPLE	DUPLICATE
12/12/98			
Analysis Time	Cr +6 µg/g =	1.99E+02	2.13E+02
Sample Point			
U-107	Recovery % Difference =	6.66%	

Analyst:	KRM	Date:	12/16/98
Signature of Chemist:	PPB	Date:	

WORKBOOK PAGE: SPIKE5

**Cr+6 : LA-265-101 (C-0)      HEXAVALENT CHROMIUM - SPIKE**

		SPIKE
Type	SAMPLE ABSORBANCE at 540 nm (SAM abs)	0.077
SPK	SAMPLE + SPIKE ABSORBANCE at 540 n (S+S abs)	0.472
Work List	SAMPLE VOLUME (Sample) in mL (Vsam)	1.000
27515	SAMPLE VOLUME (Spiked Sample) in mL (S+S Vsam)	1.000
Test Code	VOLUME of SPIKE in mL (VSPK)	1.000
CRVI-02	Total Vol Sample Vial (10 + Vsam) (MF)	11
Matrix	Total Vol Sam+Spk Vial (10+Vsam+VSPK) (SSMF)	12
SOLID	Sample Dilution Factor (DF)	1
Batch Number	Digest g/L (DGL)	1
98006123	SPIKE DILUTION FACTOR (SDF)	1
Rerun	SPIKE STANDARD CONCENTRATION (µg/mL)	5.06
0		
Sample Prep	LOW CALIBRATION POINT	0.022
H2ODIG01	HIGH CALIBRATION POINT	0.831
Sample #	Y-INTERCEPT (b)	0.00276
S98T002043	SLOPE (m)	0.8198
Instrument Code		
SP02	ug Cr +6 in SAMP VIAL = [(SAM abs - b)/m](MF) (MSV)	
Prepared By	ug Cr +6 in S+S VIAL = [(S+S abs - b) / m](SSMF) (MSSV)	
CJO	% Spike Rec. = [(MSSV - MSV) / (SPIKE VALUE * VSPK / SDF)]*100	
Chemist		
PPB		
Analyst		
KRM		
Date Complete		
12/16/98		
Analysis Date		
12/12/98		
Analysis Time	RESULT	
	QC ACTUAL =	5.06E+00
Sample Point	QC FOUND =	5.87E+00
U-107	% SPIKE RECOVERY =	116.1%

Analyst:	KRM	Date: 12/16/98
Signature of Chemist:	PPB	Date:

# LABCORE Completed Worklist Report for Worklist# 27520

Analyst: krm

Instrument: SP02

Book#: 49N19E

Method: LA-265-101 Rev/Mod \_\_\_\_\_

Worklist Comment: U107, CRVI-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 CCV	0	CRVI-01	SOLID	5.06	5.09	100.593	% Recovery
2 CCB	0	CRVI-01	SOLID	1	<2.58e+2		Ratio
3 BLNK-FRRP	0	CRVI-01	SOLID	1	<53.8		ug/g
4 SAMPLE	S98T002531 0 W	CRVI-01	SOLID	N/A	3.45e+2	1.00e-002	ug/g
5 DUP	S98T002531 0 W	CRVI-01	SOLID	3.45e2	3.55e+2	2.857	RFD
6 SPK	S98T002531 0 W	CRVI-01	SOLID	100	97.6	97.600	% Recovery

Final page for worklist# 27520

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

  
Reviewer Signature \_\_\_\_\_ Date 12/17/98

# LABCORE Data Entry Template for Worklist# 27520

Analyst: KRM Instrument: SP01 \_\_\_\_\_ Book# 419 NISE


Method: LA-265-101 Rev/Mod C-D

Worklist Comment: U107, CRVI-01, tdm

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	CCV				CRVI-01	SOLID		
2	CCB				CRVI-01	SOLID		
3	BLNK-PREP				CRVI-01	SOLID		
4	SAMPLE	S98T002531	0	W	CRVI-01	SOLID	98000401	U-107 (2)
		Analytes Requested: CRVI-01						
5	DUP	S98T002531	0	W	CRVI-01	SOLID		
6	SPK	S98T002531	0	W	CRVI-01	SOLID		

**Final page for worklist # 27520**

  
Analyst Signature \_\_\_\_\_ Date 12-12-98

  
Analyst Signature \_\_\_\_\_ Date 12/16/98

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



WORKBOOK PAGE: STD1

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

		CCV
Type	Sample Absorbance at 540 nm (abs)	0.382
CCV	Sample Volume in mL (Vsamp)	1.00
Work List	Method Factor (10 + Vsamp) (MF)	11
27520	Dilution Factor (DF)	1
Test Code	Digest Dilution Factor (DDF)	1
CRVI-01	Standard Value	5.06E+00
Matrix	Low Calibration Point (LOW)	0.022
SOLID	High Calibration Point"	0.831
Batch Number	Y-Intercept (a)	0.00276
	Slope (b)	0.8198
Rerun	Cr +6 µg/mL =	5.09E+00
0		
Sample Prep	Cr +6 µg/mL = [(MF*DF) / (b*VSAMP)] * (abs - a) (DDF)	
N/A	If the result is a < value ( abs < LOW) :	
Sample #	Cr +6 µg/mL = < [(MF*DF) / (b*VSAMP)] * (LOW - a) (DDF)	
STD		
Instrument Code	RPD = ( Cr +6 µg/mL SAM - Cr +6 µg/mL DUP  *100) /	
SP02	(AVERAGE OF THE SAM + DUP)	
Prepared By		
CJO	Less Than Value = abs < Low Calibration Point	
Chemist		
PPB		
Analyst		
KRM		
Date Complete		
12/16/98		
Analysis Date	v RESULT v	CCV
12/12/98		
Analysis Time	Cr +6 µg/mL =	5.09E+00
12:00 AM		
Sample Point		
U-107		

Analyst:	KRM	Date:	12/16/98
Signature of Chemist:	PPB	Date:	

WORKBOOK PAGE: BLANK2

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

		BLANK
Type	Sample Absorbance at 540 nm (abs)	0.000
CCB	Sample Volume in mL (Vsamp)	1.00
WorkList	Method Factor (10 + Vsamp) (MF)	11
27520	Dilution Factor (DF)	1
Test Code	Digest g/L (DGL)	1
CRVI-01	Low Calibration abs point (LOW)	0.022
Matrix	High Calibration abs point	0.831
SOLID	Y-Intercept (a)	0.00276
Batch Number	Slope (b)	0.8198
	Cr +6 µg/g =	<258.161

Rerun	0
Sample Prep	N/A
Sample #	BLANK
Instrument Code	SP02
Prepared By	CJO
Chemist	PPB
Analyst	KRM
Date Complete	12/16/98
Analysis Date	12/12/98
Analysis Time	12:00 AM
Sample Point	U-107

Cr +6 µg/g = [(MF\*DF) / (b\*VSAMP)] \* (abs - a) (1000 / DGL)

If the result is a < value ( abs < LOW) :

Cr +6 µg/g = < [(MF\*DF) / (b\*VSAMP)] \* (LOW - a) (1000 / DGL)

RPD = |Cr +6 µg/g SAM - Cr +6 µg/g DUP| \* 100 /  
(AVERAGE OF THE SAM + DUP)

Less Than Value = Sample Absorbance < Low Calibration Point

The Sample Absorbance is < Detection Limit (the Low Calibration Poi

v RESULT v	BLANK
Cr +6 µg/g =	<258.161

Analyst:	KRM	Date:	12/16/98
Signature of Chemist:	PPB	Date:	

SAMPLE.WB1 REV 1.

265101

WORKBOOK PAGE: BLANK3

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

BLANK	
Type	Sample Absorbance at 540 nm (abs) 0.001
BLNK-PREP	Sample Volume in mL (Vsamp) 1.00
Work List	Method Factor (10 + Vsamp) (MF) 11
27520	Dilution Factor (DF) 1
Test Code	Digest g/L (DGL) 4.797
CRVI-01	Low Calibration abs point (LOW) 0.022
Matrix	High Calibration abs point 0.831
SOLID	Y-Intercept (a) 0.00276
Batch Number	Slope (b) 0.8198
98006124	Cr +6 µg/g = <53.817

Rerun	0
Sample Prep	N/A
Sample #	PREP BLNK
Instrument Code	SP02
Prepared By	CJO
Chemist	PPB
Analyst	KRM
Date Complete	12/16/98
Analysis Date	12/12/98
Analysis Time	12:00 AM
Sample Point	U-107

Cr +6 µg/g = [(MF\*DF) / (b\*VSAMP)] \* (abs - a) (1000 / DGL)

If the result is a < value ( abs < LOW) :

Cr +6 µg/g = < [(MF\*DF) / (b\*VSAMP)] \* (LOW - a) (1000 / DGL)

RPD = |Cr +6 µg/g SAM - Cr +6 µg/g DUP| \* 100 /  
(AVERAGE OF THE SAM + DUP)

Less Than Value = Sample Absorbance < Low Calibration Point

The Sample Absorbance is < Detection Limit (the Low Calibration Poi

v RESULT v	BLANK
Cr +6 µg/g =	<53.817

Analyst:	KRM	Date:	12/16/98
Signature of Chemist:	PPB	Date:	



HNF-1661 REV. 0

WORKBOOK PAGE: SPIKE5

Cr+6 : LA-265-101 (C-0) HEXAVALENT CHROMIUM - SPIKE		SPIKE
Type	SAMPLE ABSORBANCE at 540 nm (SAM abs)	0.126
SPK	SAMPLE + SPIKE ABSORBANCE at 540 n (S+S abs)	0.453
Work List	SAMPLE VOLUME (Sample) in mL (Vsam)	1.000
27520	SAMPLE VOLUME (Spiked Sample) in mL (S+S Vsam)	1.000
Test Code	VOLUME of SPIKE in mL (VSPK)	1.000
CRVI-01	Total Vol Sample Vial (10 + Vsam) (MF)	11
Matrix	Total Vol Sam+Spk Vial (10+Vsam+VSPK) (SSMF)	12
SOLID	Sample Dilution Factor (DF)	1
Batch Number	Digest g/L (DGL)	1
98006124	SPIKE DILUTION FACTOR (SDF)	1
Rerun	SPIKE STANDARD CONCENTRATION (µg/mL)	5.06
0		
Sample Prep	LOW CALIBRATION POINT	0.022
H2ODIG01	HIGH CALIBRATION POINT	0.831
Sample #	Y-INTERCEPT (b)	0.00276
S98T002531	SLOPE (m)	0.8198
Instrument Code		
SP02	ug Cr +6 in SAMP VIAL = [(SAM abs - b)/m](MF) (MSV)	
Prepared By	ug Cr +6 in S+S VIAL = [(S+S abs - b) / m](SSMF) (MSSV)	
CJO	% Spike Rec. = [(MSSV - MSV) / (SPIKE VALUE * VSPK / SDF)]*100	
Chemist		
PPB		
Analyst		
KRM		
Date Complete		
12/16/98		
Analysis Date		
12/12/98		
Analysis Time	RESULT	
	QC ACTUAL =	5.06E+00
Sample Point	QC FOUND =	4.94E+00
U-107	% SPIKE RECOVERY =	97.6%

Analyst:	KRM	Date:	12/16/98
Signature of Chemist:	PPB	Date:	

# LABCORE Completed Worklist Report for Worklist# 27521

Analyst: jis Instrument: SP02 Book#: 49N19E

Method: LA-265-101 Rev/Mod C-0

Worklist Comment: U107, CRVI-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1. CCV	0	CRVI-01	SOLID	5.06	5.10	100.791 % Recovery	
2. CCB	0	CRVI-01	SOLID	1	<258.16	Ratio	
3. BLNK-PREP	0	CRVI-01	SOLID	1	<51.61	ug/g	
4. SAMPLE	S98T002568 0 W	CRVI-01	SOLID	<u>N/A</u>	2.55e+2	1.00e-002	ug/g
5. DUP	S98T002568 0 W	CRVI-01	SOLID	2.55e+2	2.57e+2	0.781 RPD	

## Final page for worklist# 27521

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*C. J. O'Brien* 12/21/98  
Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*D. Anichello* 12/28/98  
Reviewer Signature \_\_\_\_\_ Date \_\_\_\_\_

# LABCORE Data Entry Template for Worklist# 27521

Analyst: JIS Instrument: SP01 SP02 Book# 49N19-E

Method: LA-265-101 Rev/Mod C-0

Worklist Comment: U107, CRVI-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCV		CRVI-01	SOLID		
2	CCB		CRVI-01	SOLID		
3	BLNK-PREP		CRVI-01	SOLID		
4	SAMPLE	S98T002568 0 W	CRVI-01	SOLID	98000401	U-107 (2)
Analytes Requested: CRVI-01						
5	DUP	S98T002568 0 W	CRVI-01	SOLID		

**Final page for worklist # 27521**

JIS  
Analyst Signature

12-16-98  
Date

[Signature]  
Analyst Signature

12/18/98  
Date

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WORKBOOK PAGE: STD1

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

		CCV
Type	Sample Absorbance at 540 nm (abs)	0.383
CCV	Sample Volume in mL (Vsamp)	1.00
Work List	Method Factor (10 + Vsamp) (MF)	11
27521	Dilution Factor (DF)	1
Test Code	Digest Dilution Factor (DDF)	1
CRVI-01	Standard Value	5.06E+00
Matrix	Low Calibration Point (LOW)	0.022
SOLID	High Calibration Point"	0.831
Batch Number	Y-Intercept (a)	0.00276
	Slope (b)	0.8198
Rerun	Cr +6 µg/mL =	5.10E+00
0		
Sample Prep	Cr +6 µg/mL = [(MF*DF) / (b*VSAMP)] * (abs - a) (DDF)	
N/A	If the result is a < value ( abs < LOW) :	
Sample #	Cr +6 µg/mL = < [(MF*DF) / (b*VSAMP)] * (LOW - a) (DDF)	
STD		
Instrument Code	RPD = ( Cr +6 µg/mL SAM - Cr +6 µg/mL DUP  *100) /	
SP02	(AVERAGE OF THE SAM + DUP)	
Prepared By		
CJO	Less Than Value = abs < Low Calibration Point	
Chemist		
PPB		
Analyst		
JIS		
Date Complete		
12/21/98		
Analysis Date	v RESULT v	CCV
12/16/98		
Analysis Time	Cr +6 µg/mL =	5.10E+00
02:30 PM		
Sample Point		
U-107		

Analyst:	JIS	Date:	12/21/98
Signature of Chemist:	<i>NA</i>	PPB	Date:



WORKBOOK PAGE: BLANK2

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

		BLANK
Type	Sample Absorbance at 540 nm (abs)	0.000
CCB	Sample Volume in mL (Vsamp)	1.00
Work List	Method Factor (10 + Vsamp) (MF)	11
27521	Dilution Factor (DF)	1
Test Code	Digest g/L (DGL)	1
CRVI-01	Low Calibration abs point (LOW)	0.022
Matrix	High Calibration abs point	0.831
SOLID	Y-Intercept (a)	0.00276
Batch Number	Slope (b)	0.8198
	Cr +6 µg/g =	<258.161

Rerun	0
Sample Prep	N/A
Sample #	BLNK
Instrument Code	SP02
Prepared By	CJO
Chemist	PPB
Analyst	JIS
Date Complete	12/21/98
Analysis Date	12/16/98
Analysis Time	02:30 PM
Sample Point	U-107

Cr +6 µg/g = [(MF\*DF) / (b\*VSAMP)] \* (abs - a) (1000 / DGL)

If the result is a < value ( abs < LOW) :

Cr +6 µg/g = < [(MF\*DF) / (b\*VSAMP)] \* (LOW - a) (1000 / DGL)

RPD = |Cr +6 µg/g SAM - Cr +6 µg/g DUP| \* 100 /

(AVERAGE OF THE SAM + DUP)

Less Than Value = Sample Absorbance < Low Calibration Point

The Sample Absorbance is < Detection Limit (the Low Calibration Poi

v RESULT v		BLANK
Cr +6 µg/g =		<258.161

Analyst:	JIS	Date:	12/21/98
Signature of Chemist:	<i>NA</i>	PPB	Date:

SAMPLE.WB1 REV 1.

265101

WORKBOOK PAGE: BLANK3

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

		BLANK
Type	Sample Absorbance at 540 nm (abs)	0.000
BLNK-PREP	Sample Volume in mL (Vsamp)	1.00
Work List	Method Factor (10 + Vsamp) (MF)	11
27521	Dilution Factor (DF)	1
Test Code	Digest g/L (DGL)	5.002
CRVI-01	Low Calibration abs point (LOW)	0.022
Matrix	High Calibration abs point	0.831
SOLID	Y-Intercept (a)	0.00276
Batch Number	Slope (b)	0.8198
98006125	Cr +6 µg/g =	<51.611

Rerun	0
Sample Prep	N/A
Sample #	BLNK-PREP
Instrument Code	SP02
Prepared By	CJO
Chemist	PPB
Analyst	JIS
Date Complete	12/21/98
Analysis Date	12/16/98
Analysis Time	02:30 PM
Sample Point	U-107

Cr +6 µg/g = [(MF\*DF) / (b\*VSAMP)] \* (abs - a) (1000 / DGL)

If the result is a < value ( abs < LOW ) :

Cr +6 µg/g = < [(MF\*DF) / (b\*VSAMP)] \* (LOW - a) (1000 / DGL)

RPD = |Cr +6 µg/g SAM - Cr +6 µg/g DUP| \* 100 /  
(AVERAGE OF THE SAM + DUP)

Less Than Value = Sample Absorbance < Low Calibration Point

The Sample Absorbance is < Detection Limit (the Low Calibration Poi

v RESULT v	BLANK
Cr +6 µg/g =	<51.611

Analyst:	JIS	Date:	12/21/98
Signature of Chemist:	<i>NA</i>	PPB	Date:

WORKBOOK PAGE: SAM4

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

		SAMPLE	DUPLICATE
Type	Sample Absorbance at 540 nm (abs)	0.098	0.098
SAMPLE	Sample Volume in mL (Vsamp)	1.00	1.00
Work List	Method Factor (10 + Vsamp) (MF)	11	11
27521	Dilution Factor (DF)	1	1
Test Code	Digest g/L (DGL)	5.002	4.977
CRVI-01	Low Calibration abs point (LOW)	0.022	0.022
Matrix	High Calibration abs point	0.831	0.831
SOLID	Y-Intercept (a)	0.00276	0.00276
Batch Number	Slope (b)	0.8198	0.8198
98006125	Cr +6 µg/g =	2.55E+02	2.57E+02

Rerun	0	Cr +6 µg/g = [(MF*DF) / (b*VSAMP)] * (abs - a) (1000 / DGL)	
Sample Prep	H2ODIG01	If the result is a < value ( abs < LOW ) :	
Sample #	S98T002568	Cr +6 µg/g = < [(MF*DF) / (b*VSAMP)] * (LOW - a) (1000 / DGL)	
Instrument Code	SP02	RPD =  Cr +6 µg/g SAM - Cr +6 µg/g DUP  / AVERAGE OF THE SAM + DUP * 100	
Prepared By	CJO	Less Than Value = Sample Absorbance < Low Calibration Point	
Chemist	PPB		
Analyst	JIS		
Date Complete	12/21/98		
Analysis Date	12/16/98	<b>v RESULT v</b>	
Analysis Time	02:30 PM	SAMPLE	DUPLICATE
Sample Point	U-107	2.55E+02	2.57E+02
	Recovery % Difference =	0.50%	

Analyst:	JIS	Date:	12/21/98
Signature of Chemist:	<i>NA</i>	PPB	Date:

SAMPLE.WB1 REV 1.

265101

707

# LBCORE Completed Worklist Report for Worklist# 27523

Analyst: jis Instrument: SP02 Book#: 49N19E

Method: LA-265-101 Rev/Mod C-0

Worklist Comment: U107, CRVI-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 CCV	0	CRVI-01	SOLID	5.06	5.10	100.791 % Recovery	
2 CCB	0	CRVI-01	SOLID	1	<258.16	Ratio	
3 BLNK-PREP	0	CRVI-01	SOLID	1	<50.83	ug/g	
4 SAMPLE	S98T002574 0 W	CRVI-01	SOLID	N/A <	50.83	1.00e-002 ug/g	
5 DUP	S98T002574 0 W	CRVI-01	SOLID	<50.83	<51.62	RPD	

Final page for worklist# 27523

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

C.J. Quinn 12/21/98  
Analyst Signature Date

B. Michelot 12/28/98  
Reviewer Signature Date

12/10/98 10:24  
A-0004-1

Page: 1

## LABCORE Data Entry Template for Worklist# 27523

Analyst: JIS Instrument: SP01 SP02 Book# 49N19-EMethod: LA-265-101 Rev/Mod C-0

Worklist Comment: U107, CRVI-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCV		CRVI-01	SOLID		
2	CCB		CRVI-01	SOLID		
3	BLNK-PREP		CRVI-01	SOLID		
4	SAMPLE	S98T002574 0 W	CRVI-01	SOLID	98000401	U-107 (2)
Analytes Requested: CRVI-01						
5	DUP	S98T002574 0 W	CRVI-01	SOLID		

## Final page for worklist # 27523

Analyst Signature

Date

Analyst Signature

Date

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WORKBOOK PAGE: STD1

**Cr+6 : LA-265-101 (C-0)**

**LIQUID/SOLID SAMPLE**

		CCV
Type	Sample Absorbance at 540 nm (abs)	0.383
CCV	Sample Volume in mL (Vsamp)	1.00
Work List	Method Factor (10 + Vsamp) (MF)	11
27523	Dilution Factor (DF)	1
Test Code	Digest Dilution Factor (DDF)	1
CRVI-01	Standard Value	5.06E+00
Matrix	Low Calibration Point (LOW)	0.022
SOLID	High Calibration Point"	0.831
Batch Number	Y-Intercept (a)	0.00276
	Slope (b)	0.8198
Rerun	Cr +6 µg/mL =	5.10E+00
0		
Sample Prep	Cr +6 µg/mL = [(MF*DF) / (b*VSAMP)] * (abs - a) (DDF)	
N/A	If the result is a < value ( abs < LOW) :	
Sample #	Cr +6 µg/mL = < [(MF*DF) / (b*VSAMP)] * (LOW - a) (DDF)	
STD		
Instrument Code	RPD = ( Cr +6 µg/mL SAM - Cr +6 µg/mL DUP  *100) /	
SP02	(AVERAGE OF THE SAM + DUP)	
Prepared By		
CJO	Less Than Value = abs < Low Calibration Point	
Chemist		
PPB		
Analyst		
JIS		
Date Complete		
12/18/98		
Analysis Date	v RESULT v	CCV
12/16/98	Cr +6 µg/mL =	5.10E+00
Analysis Time		
02:30 PM		
Sample Point		
U-107		

Analyst:	JIS	Date:	12/18/98
Signature of Chemist:	<i>NA</i>	PPB	Date:

WORKBOOK PAGE: BLANK2

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

		BLANK
Type	Sample Absorbance at 540 nm (abs)	0.000
CCB	Sample Volume in mL (Vsamp)	1.00
Work List	Method Factor (10 + Vsamp) (MF)	11
27523	Dilution Factor (DF)	1
Test Code	Digest g/L (DGL)	1
CRVI-01	Low Calibration abs point (LOW)	0.022
Matrix	High Calibration abs point	0.831
SOLID	Y-Intercept (a)	0.00276
Batch Number	Slope (b)	0.8198
	Cr +6 µg/g =	<258.161

Rerun	0
Sample Prep	N/A
Sample #	BLNK
Instrument Code	SP02
Prepared By	CJO
Chemist	PPB
Analyst	JIS
Date Complete	12/18/98
Analysis Date	12/16/98
Analysis Time	02:30 PM
Sample Point	U-107

Cr +6 µg/g = [(MF\*DF) / (b\*VSAMP)] \* (abs - a) (1000 / DGL)

If the result is a < value ( abs < LOW ) :

Cr +6 µg/g = < [(MF\*DF) / (b\*VSAMP)] \* (LOW - a) (1000 / DGL)

RPD = |Cr +6 µg/g SAM - Cr +6 µg/g DUP| \* 100 /  
(AVERAGE OF THE SAM + DUP)

Less Than Value = Sample Absorbance < Low Calibration Point

The Sample Absorbance is < Detection Limit (the Low Calibration Poi

v RESULT v		BLANK
Cr +6 µg/g	=	<258.161

Analyst:	JIS	Date:	12/18/98
Signature of Chemist:	<i>NA</i>	PPB	Date:

SAMPLE.WB1 REV 1.

265101

WORKBOOK PAGE: BLANK3

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

		BLANK
Type	Sample Absorbance at 540 nm (abs)	0.000
BLNK-PREP	Sample Volume in mL (Vsamp)	1.00
Work List	Method Factor (10 + Vsamp) (MF)	11
27523	Dilution Factor (DF)	1
Test Code	Digest g/L (DGL)	5.079
CRVI-01	Low Calibration abs point (LOW)	0.022
Matrix	High Calibration abs point	0.831
SOLID	Y-Intercept (a)	0.00276
Batch Number	Slope (b)	0.8198
98006126	Cr +6 µg/g =	<50.829

Rerun	0
Sample Prep	N/A
Sample #	BLNK-PREP
Instrument Code	SP02
Prepared By	CJO
Chemist	PPB
Analyst	JIS
Date Complete	12/18/98
Analysis Date	12/16/98
Analysis Time	02:30 PM
Sample Point	U-107

Cr +6 µg/g = [(MF\*DF) / (b\*VSAMP)] \* (abs - a) (1000 / DGL)

If the result is a < value ( abs < LOW) :

Cr +6 µg/g = < [(MF\*DF) / (b\*VSAMP)] \* (LOW - a) (1000 / DGL)

RPD = |Cr +6 µg/g SAM - Cr +6 µg/g DUP| \* 100 /  
(AVERAGE OF THE SAM + DUP)

Less Than Value = Sample Absorbance < Low Calibration Point

The Sample Absorbance is < Detection Limit (the Low Calibration Poi

v RESULT v	BLANK
Cr +6 µg/g =	<50.829

Analyst:	JIS	Date:	12/18/98
Signature of Chemist:	<i>NA</i>	PPB	Date:

SAMPLE.WB1 REV 1.

265101



WORKBOOK PAGE: SAM4

**Cr+6 : LA-265-101 (C-0)**

**LIQUID/SOLID SAMPLE**

		SAMPLE	DUPLICATE
Type	Sample Absorbance at 540 nm (abs)	0.009	0.007
SAMPLE	Sample Volume in mL (Vsamp)	1.00	1.00
Work List	Method Factor (10 + Vsamp) (MF)	11	11
27523	Dilution Factor (DF)	1	1
Test Code	Digest g/L (DGL)	5.079	5.001
CRVI-01	Low Calibration abs point (LOW)	0.022	0.022
Matrix	High Calibration abs point	0.831	0.831
SOLID	Y-Intercept (a)	0.00276	0.00276
Batch Number	Slope (b)	0.8198	0.8198
98006126	Cr +6 µg/g =	<50.829	<51.622


Rerun	0
Sample Prep	H2ODIG01
Sample #	S98T002574
Instrument Code	SP02
Prepared By	CJO
Chemist	PPB
Analyst	JIS
Date Complete	12/18/98
Analysis Date	12/16/98
Analysis Time	02:30 PM
Sample Point	U-107

Cr +6 µg/g = [(MF\*DF) / (b\*VSAMP)] \* (abs - a) (1000 / DGL)  
 If the result is a < value ( abs < LOW) :  
 Cr +6 µg/g = < [(MF\*DF) / (b\*VSAMP)] \* (LOW - a) (1000 / DGL)  
 RPD = |Cr +6 µg/g SAM - Cr +6 µg/g DUP| / AVERAGE OF THE SAM + DUP \* 100  
 Less Than Value = Sample Absorbance < Low Calibration Point

**Both Absorbances are < Detection Limit (the Low Calibration Point)**

v RESULT v	SAMPLE	DUPLICATE
Cr +6 µg/g =	<50.829	<51.622

**Recovery % Difference = N/A**

Analyst:	JIS	Date:	12/18/98
Signature of Chemist:		Date:	

SAMPLE.WB1 REV 1.

265101

# LABCORE Completed Worklist Report for Worklist# 27541

Analyst: jis Instrument: SP02 Book#: 49N19E

Method: LA-265-101 Rev/Mod \_\_\_\_\_

Worklist Comment: U107, CRVI-01, cjo

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCV 0	CRVI-01	LIQUID	5.06	5.06	100.000 % Recovery	
2	CCB 0	CRVI-01	LIQUID	1	<0.258	Ratio	
3	SAMPLE S98T003326 0	CRVI-01	LIQUID	N/A	5.72e+2	1.00e-002 ug/mL	
4	DUP S98T003326 0	CRVI-01	LIQUID	5.72e+2	5.72e+2	0.000 RPD	
5	SPK S98T003326 0	CRVI-01	LIQUID	100	99.3	99.300 % Recovery	
6	SAMPLE S98T003331 0	CRVI-01	LIQUID	N/A	5.42e+2	1.00e-002 ug/mL	
7	DUP S98T003331 0	CRVI-01	LIQUID	5.42e+2	5.47e+2	0.918 RPD	
8	SPK S98T003331 0	CRVI-01	LIQUID	100	100.2	100.200 % Recovery	

Final page for worklist# 27541

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

 Reviewer Signature  
12/17/98 Date

12/10/98 14:01  
A-0004-1

Page: 1

**LABCORE Data Entry Template for Worklist# 27541**Analyst: JIS Instrument: SP01 SP02 Book# 49N19-EMethod: LA-265-101 Rev/Mod C-0

Worklist Comment: U107, CRVI-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCV		CRVI-01	LIQUID		
2	CCB		CRVI-01	LIQUID		
<del>3</del>	<del>BLNK PREP</del>		<del>CRVI-01</del>	<del>LIQUID</del>		
4	SAMPLE	S98T003326 0	CRVI-01	LIQUID	98000358	U-107 (2)
		Analytes Requested: CRVI-01				
5	DUP	S98T003326 0	CRVI-01	LIQUID		
6	SPK	S98T003326 0	CRVI-01	LIQUID		
7	SAMPLE	S98T003331 0	CRVI-01	LIQUID	98000359	U-107 (2)
		Analytes Requested: CRVI-01				
8	DUP	S98T003331 0	CRVI-01	LIQUID		
9	SPK	S98T003331 0	CRVI-01	LIQUID		

**Final page for worklist # 27541**

Analyst Signature

Date

Analyst Signature

Date

Data Entry Comments:

Batch # 6169

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WORKBOOK PAGE: STD1

Cr+6 : LA-265-101 (C-0) LIQUID/SOLID SAMPLE		CCV
Type	Sample Absorbance at 540 nm (abs)	0.380
CCV	Sample Volume in mL (Vsamp)	1.00
Work List	Method Factor (10 + Vsamp) (MF)	11
27541	Dilution Factor (DF)	1
Test Code	Digest Dilution Factor (DDF)	1
CRVI-01	Standard Value	5.06E+00
Matrix	Low Calibration Point (LOW)	0.022
LIQUID	High Calibration Point"	0.831
Batch Number	Y-Intercept (a)	0.00276
6169	Slope (b)	0.8198
Rerun	Cr +6 µg/mL =	5.06E+00
0		
Sample Prep	Cr +6 µg/mL = [(MF*DF) / (b*VSAMP)] * (abs - a) (DDF)	
N/A	If the result is a < value ( abs < LOW) :	
Sample #	Cr +6 µg/mL = [(MF*DF) / (b*VSAMP)] * (LOW - a) (DDF)	
STD		
Instrument Code	RPD = ( Cr +6 µg/mL SAM - Cr +6 µg/mL DUP  *100) /	
SP02	(AVERAGE OF THE SAM + DUP)	
Prepared By		
CJO	Less Than Value = abs < Low Calibration Point	
Chemist		
PPB		
Analyst		
JIS		
Date Complete		
12/16/98		
Analysis Date	v RESULT v	CCV
12/11/98		
Analysis Time	Cr +6 µg/mL =	5.06E+00
03:00 PM		
Sample Point		
U-107		

Analyst:	JIS	Date:	12/16/98
Signature of Chemist:	PPB	Date:	

WORKBOOK PAGE: BLANK2

**Cr+6 : LA-265-101 (C-0) LIQUID/SOLID SAMPLE BLANK**

Type	Sample Absorbance at 540 nm (abs)	0.000
CCB	Sample Volume in mL (Vsamp)	1.00
Work List	Method Factor (10 + Vsamp) (MF)	11
27541	Dilution Factor (DF)	1
Test Code	Digest Dilution Factor (DDF)	1
CRVI-01	Low Calibration Point (LOW)	0.022
Matrix	High Calibration Point	0.831
LIQUID	Y-Intercept (a)	0.00276
Batch Number	Slope (b)	0.8198
6169	Cr +6 µg/mL =	<0.258

0	Cr +6 µg/mL = [(MF*DF) / (b*VSAMP)] * (abs - a) (DDF)
Sample Prep	If the result is a < value ( abs < LOW ) :
N/A	Cr +6 µg/mL = < [(MF*DF) / (b*VSAMP)] * (LOW - a) (DDF)
Sample #	RPD = ( Cr +6 µg/mL SAM - Cr +6 µg/mL DUP  * 100 /
BLANK	(AVERAGE OF THE SAM + DUP)
Instrument Code	
SP02	Less Than Value = abs < Low Calibration Point
Prepared By	
CJO	
Chemist	
PPB	
Analyst	
JIS	
Date Complete	The Sample Absorbance is < Detection Limit (the Low Calibration Poi
12/16/98	
Analysis Date	v RESULT v
12/11/98	
Analysis Time	Cr +6 µg/mL =
03:00 PM	
Sample Point	
U-107	

Analyst:	JIS	Date:	12/16/98
Signature of Chemist:	PPB	Date:	

WORKBOOK PAGE: SAM3

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

		SAMPLE	DUPLICATE
Type	Sample Absorbance at 540 nm (abs)	0.116	0.116
SAMPLE	Sample Volume in mL (Vsamp)	0.25	0.25
Work List	Method Factor (10 + Vsamp) (MF)	10.25	10.25
27541	Dilution Factor (DF)	101	101
Test Code	Digest Dilution Factor (DDF)	1	1
CRVI-01	Low Calibration Point (LOW)	0.022	0.022
Matrix	High Calibration Point	0.831	0.831
LIQUID	Y-Intercept (a)	0.00276	0.00276
Batch Number	Slope (b)	0.8198	0.8198
98006169	Cr +6 µg/mL =	5.72E+02	5.72E+02

Rerun	0	Cr +6 µg/mL = [(MF*DF) / (b*VSAMP)] * (abs - a) (DDF)	
Sample Prep	N/A	If the result is a < value ( abs < LOW) :	
		Cr +6 µg/mL = < [(MF*DF) / (b*VSAMP)] * (LOW - a) (DDF)	
Sample #	S98T003326	RPD = ( Cr +6 µg/mL SAM - Cr +6 µg/mL DUP) / AVERAGE OF THE SAM + DUP)*	
Instrument Code	SP02	Less Than Value = abs < Low Calibration Point	
Prepared By	CJO		
Chemist	PPB		
Analyst	JIS		
Date Complete	12/16/98		
Analysis Date	12/11/98	<b>v RESULT v</b>	
Analysis Time	03:00 PM	Cr +6 µg/mL =	SAMPLE 5.72E+02 DUPLICATE 5.72E+02
Sample Point	U-107	Recovery % Difference =	0.00%

Analyst:	JIS	Date:	12/16/98
Signature of Chemist:	PPB	Date:	

SAMPLE.WB1 REV 1.

265101

WORKBOOK PAGE: SPIKE4

Cr+6 : LA-265-101 (C-0) HEXAVALENT CHROMIUM - SPIKE

		SPIKE
Type	SAMPLE ABSORBANCE at 540 nm (SAM abs)	0.116
SPK	SAMPLE + SPIKE ABSORBANCE at 540 n (S+S abs)	0.472
Work List	SAMPLE VOLUME (Sample) in mL (Vsam)	0.250
27541	SAMPLE VOLUME (Spiked Sample) in mL (S+S Vsam)	0.250
Test Code	VOLUME of SPIKE in mL (VSPK)	1.000
CRVI-01	Total Vol Sample Vial (10 + Vsam) (MF)	10.25
Matrix	Total Vol Sam+Spk Vial (10+Vsam+VSPK) (SSMF)	11.25
LIQUID	Sample Dilution Factor (DF)	101
Batch Number	Digest Dilution Factor (DDF)	1
98006169	SPIKE DILUTION FACTOR (SDF)	1
Rerun	SPIKE STANDARD CONCENTRATION (µg/mL)	5.06
0		
Sample Prep	LOW CALIBRATION POINT	0.022
N/A	HIGH CALIBRATION POINT	0.831
Sample #	Y-INTERCEPT (b)	0.00276
S98T003326	SLOPE (m)	0.8198
Instrument Code		
SP02	ug Cr +6 in SAMP VIAL = [(SAM abs - b)/m](MF) (MSV)	
Prepared By	ug Cr +6 in S+S VIAL = [(S+S abs - b) / m](SSMF) (MSSV)	
CJO	% Spike Rec. = [(MSSV - MSV) / (SPIKE VALUE * VSPK / SDF)]*100	
Chemist		
PPB		
Analyst		
JIS		
Date Complete		
12/16/98		
Analysis Date		
12/11/98		
Analysis Time	RESULT	
03:00 PM	QC ACTUAL =	5.06E+00
Sample Point	QC FOUND =	5.02E+00
U-107	% SPIKE RECOVERY =	99.3%

Analyst:	JIS	Date:	12/16/98
Signature of Chemist:	PPB	Date:	

WORKBOOK PAGE: SAM5

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

		SAMPLE	DUPLICATE
Type	Sample Absorbance at 540 nm (abs)	0.110	0.111
SAMPLE	Sample Volume in mL (Vsamp)	0.25	0.25
Work List	Method Factor (10 + Vsamp) (MF)	10.25	10.25
27541	Dilution Factor (DF)	101	101
Test Code	Digest Dilution Factor (DDF)	1	1
CRVI-01	Low Calibration Point (LOW)	0.022	0.022
Matrix	High Calibration Point	0.831	0.831
LIQUID	Y-Intercept (a)	0.00276	0.00276
Batch Number	Slope (b)	0.8198	0.8198
98006169	Cr +6 µg/mL =	5.42E+02	5.47E+02

Rerun	0	Cr +6 µg/mL = [(MF*DF) / (b*VSAMP)] * (abs - a) (DDF)	
Sample Prep	N/A	If the result is a < value ( abs < LOW) :	
Sample #	S98T003331	Cr +6 µg/mL = < [(MF*DF) / (b*VSAMP)] * (LOW - a) (DDF)	
Instrument Code	SP02	RPD = ( Cr +6 µg/mL SAM - Cr +6 µg/mL DUP  / AVERAGE OF THE SAM + DUP)*	
Prepared By	CJO	Less Than Value = abs < Low Calibration Point	
Chemist	PPB		
Analyst	JIS		
Date Complete	12/16/98		

	v RESULT v	SAMPLE	DUPLICATE
Analysis Date	12/11/98		
Analysis Time	03:00 PM	5.42E+02	5.47E+02
Sample Point	U-107	Recovery % Difference = 0.93%	

Analyst:	JIS	Date:	12/16/98
Signature of Chemist:	PPB	Date:	

SAMPLE.WB1 REV 1.

265101



WORKBOOK PAGE: SPIKE6

Cr+6 : LA-265-101 (C-0) HEXAVALENT CHROMIUM - SPIKE

		SPIKE
Type	SAMPLE ABSORBANCE at 540 nm (SAM abs)	0.11
SPK	SAMPLE + SPIKE ABSORBANCE at 540 n (S+S abs)	0.47
Work List	SAMPLE VOLUME (Sample) in mL (Vsam)	0.250
27541	SAMPLE VOLUME (Spiked Sample) in mL (S+S Vsam)	0.250
Test Code	VOLUME of SPIKE in mL (VSPK)	1.000
CRVI-01	Total Vol Sample Vial (10 + Vsam) (MF)	10.25
Matrix	Total Vol Sam+Spk Vial (10+Vsam+VSPK) (SSMF)	11.25
LIQUID	Sample Dilution Factor (DF)	101
Batch Number	Digest Dilution Factor (DDF)	1
98006169	SPIKE DILUTION FACTOR (SDF)	1
Rerun	SPIKE STANDARD CONCENTRATION (µg/mL)	5.06
0		
Sample Prep	LOW CALIBRATION POINT	0.022
N/A	HIGH CALIBRATION POINT	0.831
Sample #	Y-INTERCEPT (b)	0.00276
S98T003331	SLOPE (m)	0.8198
Instrument Code		
SP02	ug Cr +6 in SAMP VIAL = [(SAM abs - b)/m](MF) (MSV)	
Prepared By	ug Cr +6 in S+S VIAL = [(S+S abs - b) / m](SSMF) (MSSV)	
CJO	% Spike Rec. = [(MSSV - MSV) / (SPIKE VALUE * VSPK / SDF)]*100	
Chemist		
PPB		
Analyst		
JIS		
Date Complete		
12/16/98		
Analysis Date		
12/11/98		
Analysis Time	RESULT	
03:00 PM	QC ACTUAL =	5.06E+00
Sample Point	QC FOUND =	5.07E+00
U-107	% SPIKE RECOVERY =	100.2%

Analyst:	JIS	Date:	12/16/98
Signature of Chemist:	PPB	Date:	

# LABCORE Completed Worklist Report for Worklist# 27542

Analyst: jis Instrument: SP02 Book#: 49N19E

Method: LA-265-101 Rev/Mod \_\_\_\_\_

Worklist Comment: U107, CRVI-01, cjo

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCV	0	CRVI-01	LIQUID	5.06	5.28	104.348 % Recovery
2	CCB	0	CRVI-01	LIQUID	1	<0.258	Ratio
3	SAMPLE	S98T003340 0	CRVI-01	LIQUID	N/A	5.36	1.00e-002 ug/mL
4	DUP	S98T003340 0	CRVI-01	LIQUID	5.36	5.41	0.929 RPD
5	SPK	S98T003340 0	CRVI-01	LIQUID	100	100.8	100.800 % Recovery
6	SAMPLE	S98T003356 0	CRVI-01	LIQUID	N/A	7.75e-1	1.00e-002 ug/mL
7	DUP	S98T003356 0	CRVI-01	LIQUID	7.75e-1	7.75e-1	0.000 RPD
8	SPK	S98T003356 0	CRVI-01	LIQUID	100	100.8	100.800 % Recovery

Final page for worklist# 27542

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_ Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

 12/17/98  
Reviewer Signature Date

## LABCORE Data Entry Template for Worklist# 27542

Analyst: V/S Instrument: SP01 SP02 Book# 49119-EMethod: LA-265-101 Rev/Mod C-0

Worklist Comment: U107, CRVI-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCV		CRVI-01	LIQUID		
2	CCB		CRVI-01	LIQUID		
<del>3</del>	<del>BLNK DREF</del>		<del>CRVI-01</del>	<del>LIQUID</del>		
4	SAMPLE S98T003340 0		CRVI-01	LIQUID	98000401	U-107 (2)
	Analytes Requested:		CRVI-01			
5	DUP S98T003340 0		CRVI-01	LIQUID		
6	SPK S98T003340 0		CRVI-01	LIQUID		
7	SAMPLE S98T003356 0		CRVI-01	LIQUID	98000401	U-107 (2)
	Analytes Requested:		CRVI-01			
8	DUP S98T003356 0		CRVI-01	LIQUID		
9	SPK S98T003356 0		CRVI-01	LIQUID		

Final page for worklist # 27542

M. Soliman  
Analyst Signature12-11-98  
DateC.J. Oliver  
Analyst Signature12/16/98  
Date

Data Entry Comments:

Batch 6170

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WORKBOOK PAGE: STD1

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

		CCV
Type	Sample Absorbance at 540 nm (abs)	0.396
CCV	Sample Volume in mL (Vsamp)	1.00
Work List	Method Factor (10 + Vsamp) (MF)	11
27542	Dilution Factor (DF)	1
Test Code	Digest Dilution Factor (DDF)	1
CRVI-01	Standard Value	5.06E+00
Matrix	Low Calibration Point (LOW)	0.022
LIQUID	High Calibration Point"	0.831
Batch Number	Y-Intercept (a)	0.00276
6170	Slope (b)	0.8198
Rerun	Cr +6 µg/mL =	5.28E+00
0		
Sample Prep	Cr +6 µg/mL = [(MF*DF) / (b*VSAMP)] * (abs - a) (DDF)	
N/A	If the result is a < value ( abs < LOW) :	
Sample #	Cr +6 µg/mL = < [(MF*DF) / (b*VSAMP)] * (LOW - a) (DDF)	
STD		
Instrument Code	RPD = ( Cr +6 µg/mL SAM - Cr +6 µg/mL DUP  *100) /	
SP02	(AVERAGE OF THE SAM + DUP)	
Prepared By		
CJO	Less Than Value = abs < Low Calibration Point	
Chemist		
PPB		
Analyst		
JIS		
Date Complete		
12/16/98		
Analysis Date	v RESULT v	CCV
12/11/98		
Analysis Time	Cr +6 µg/mL =	5.28E+00
01:00 PM		
Sample Point		
U-107		

Analyst:	JIS	Date:	12/16/98
Signature of Chemist:	PPB	Date:	

WORKBOOK PAGE: BLANK2

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

BLANK

Type	Sample Absorbance at 540 nm (abs)	0.000
CCB	Sample Volume in mL (Vsamp)	1.00
Work List	Method Factor (10 + Vsamp) (MF)	11
27542	Dilution Factor (DF)	1
Test Code	Digest Dilution Factor (DDF)	1
CRVI-01	Low Calibration Point (LOW)	0.022
Matrix	High Calibration Point	0.831
LIQUID	Y-Intercept (a)	0.00276
Batch Number	Slope (b)	0.8198
6170	Cr +6 µg/mL =	<0.258

Rerun	0	Cr +6 µg/mL = $[(MF*DF) / (b*VSAMP)] * (abs - a) (DDF)$
Sample Prep	N/A	If the result is a < value ( abs < LOW ) :
Sample #	BLANK	Cr +6 µg/mL = $< [(MF*DF) / (b*VSAMP)] * (LOW - a) (DDF)$
Instrument Code	SP02	RPD = $( Cr +6 µg/mL SAM - Cr +6 µg/mL DUP  * 100 / (AVERAGE OF THE SAM + DUP)$
Prepared By	CJO	Less Than Value = abs < Low Calibration Point
Chemist	PPB	
Analyst	JIS	
Date Complete	12/16/98	The Sample Absorbance is < Detection Limit (the Low Calibration Poi
Analysis Date	12/11/98	v RESULT v
Analysis Time	01:00 PM	Cr +6 µg/mL =
Sample Point	U-107	BLANK
		<0.258

Analyst:	JIS	Date:	12/16/98
Signature of Chemist:	PPB	Date:	

WORKBOOK PAGE: SAM3

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

		SAMPLE	DUPLICATE
Type	Sample Absorbance at 540 nm (abs)	0.110	0.111
SAMPLE	Sample Volume in mL (Vsamp)	0.25	0.25
Work List	Method Factor (10 + Vsamp) (MF)	10.25	10.25
27542	Dilution Factor (DF)	1	1
Test Code	Digest Dilution Factor (DDF)	1	1
CRVI-01	Low Calibration Point (LOW)	0.022	0.022
Matrix	High Calibration Point	0.831	0.831
LIQUID	Y-Intercept (a)	0.00276	0.00276
Batch Number	Slope (b)	0.8198	0.8198
98006170	Cr +6 µg/mL =	5.36E+00	5.41E+00

Rerun	0	Cr +6 µg/mL = [(MF*DF) / (b*VSAMP)] * (abs - a) (DDF)	
Sample Prep	N/A	If the result is a < value ( abs < LOW) :	
Sample #	S98T003340	Cr +6 µg/mL = < [(MF*DF) / (b*VSAMP)] * (LOW - a) (DDF)	
Instrument Code	SP02	RPD = ((Cr +6 µg/mL SAM - Cr +6 µg/mL DUP) / AVERAGE OF THE SAM + DUP)*	
Prepared By	CJO	Less Than Value = abs < Low Calibration Point	
Chemist	PPB		
Analyst	JIS		
Date Complete	12/16/98		

	v RESULT v	SAMPLE	DUPLICATE
Analysis Date	12/11/98		
Analysis Time	01:00 PM	5.36E+00	5.41E+00
Sample Point	U-107		
	Recovery % Difference =	0.93%	

Analyst:	JIS	Date:	12/16/98
Signature of Chemist:	PPB	Date:	

Cr+6 : LA-265-101 (C-0) HEXAVALENT CHROMIUM - SPIKE

		SPIKE
Type	SAMPLE ABSORBANCE at 540 nm (SAM abs)	0.11
SPK	SAMPLE + SPIKE ABSORBANCE at 540 n (S+S abs)	0.472
Work List	SAMPLE VOLUME (Sample) in mL (Vsam)	0.250
27542	SAMPLE VOLUME (Spiked Sample) in mL (S+S Vsam)	0.250
Test Code	VOLUME of SPIKE in mL (VSPK)	1.000
CRVI-01	Total Vol Sample Vial (10 + Vsam) (MF)	10.25
Matrix	Total Vol Sam+Spk Vial (10+Vsam+VSPK) (SSMF)	11.25
LIQUID	Sample Dilution Factor (DF)	1
Batch Number	Digest Dilution Factor (DDF)	1
98006170	SPIKE DILUTION FACTOR (SDF)	1
Rerun	SPIKE STANDARD CONCENTRATION (µg/mL)	5.06
0		
Sample Prep	LOW CALIBRATION POINT	0.022
N/A	HIGH CALIBRATION POINT	0.831
Sample #	Y-INTERCEPT (b)	0.00276
S98T003340	SLOPE (m)	0.8198
Instrument Code		
SP02	ug Cr +6 in SAMP VIAL = [(SAM abs - b)/m](MF) (MSV)	
Prepared By	ug Cr +6 in S+S VIAL = [(S+S abs - b) / m](SSMF) (MSSV)	
CJO	% Spike Rec. = [(MSSV - MSV) / (SPIKE VALUE * VSPK / SDF)]*100	
Chemist		
PPB		
Analyst		
JIS		
Date Complete		
12/16/98		
Analysis Date		
12/11/98		
Analysis Time	RESULT	
01:00 PM	QC ACTUAL =	5.06E+00
Sample Point	QC FOUND =	5.10E+00
U-107	% SPIKE RECOVERY =	100.8%

Analyst:	JIS	Date:	12/16/98
Signature of Chemist:	PPB	Date:	

WORKBOOK PAGE: SAM5

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

		SAMPLE	DUPLICATE
Type	Sample Absorbance at 540 nm (abs)	0.033	0.033
SAMPLE	Sample Volume in mL (Vsamp)	0.50	0.50
Work List	Method Factor (10 + Vsamp) (MF)	10.5	10.5
27542	Dilution Factor (DF)	1	1
Test Code	Digest Dilution Factor (DDF)	1	1
CRVI-01	Low Calibration Point (LOW)	0.022	0.022
Matrix	High Calibration Point	0.831	0.831
LIQUID	Y-Intercept (a)	0.00276	0.00276
Batch Number	Slope (b)	0.8198	0.8198
98006170	Cr +6 µg/mL =	7.75E-01	7.75E-01

Rerun	Cr +6 µg/mL = [(MF*DF) / (b*VSAMP)] * (abs - a) (DDF)		
0	If the result is a < value ( abs < LOW) :		
Sample Prep	Cr +6 µg/mL = < [(MF*DF) / (b*VSAMP)] * (LOW - a) (DDF)		
N/A			
Sample #	RPD = ( Cr +6 µg/mL SAM - Cr +6 µg/mL DUP  / AVERAGE OF THE SAM + DUP)*		
S98T003356	Less Than Value = abs < Low Calibration Point		
Instrument Code			
SP02			
Prepared By			
CJO			
Chemist			
PPB			
Analyst			
JIS			
Date Complete			
12/16/98			
Analysis Date	v RESULT v	SAMPLE	DUPLICATE
12/11/98			
Analysis Time	Cr +6 µg/mL =	7.75E-01	7.75E-01
01:00 PM			
Sample Point			
U-107	Recovery % Difference =	0.00%	

Analyst:	JIS	Date:	12/16/98
Signature of Chemist:	PPB	Date:	



WORKBOOK PAGE: SPIKE6

Cr+6 : LA-265-101 (C-0) HEXAVALENT CHROMIUM - SPIKE

		SPIKE
Type	SAMPLE ABSORBANCE at 540 nm (SAM abs)	0.033
SPK	SAMPLE + SPIKE ABSORBANCE at 540 n (S+S abs)	0.394
Work List	SAMPLE VOLUME (Sample) in mL (Vsam)	0.500
27542	SAMPLE VOLUME (Spiked Sample) in mL (S+S Vsam)	0.500
Test Code	VOLUME of SPIKE in mL (VSPK)	1.000
CRVI-01	Total Vol Sample Vial (10 + Vsam) (MF)	10.5
Matrix	Total Vol Sam+Spk Vial (10+Vsam+VSPK) (SSMF)	11.5
LIQUID	Sample Dilution Factor (DF)	1
Batch Number	Digest Dilution Factor (DDF)	1
98006170	SPIKE DILUTION FACTOR (SDF)	1
Rerun	SPIKE STANDARD CONCENTRATION (µg/mL)	5.06
0		
Sample Prep	LOW CALIBRATION POINT	0.022
N/A	HIGH CALIBRATION POINT	0.831
Sample #	Y-INTERCEPT (b)	0.00276
S98T003356	SLOPE (m)	0.8198
Instrument Code		
SP02	ug Cr +6 in SAMP VIAL = [(SAM abs - b)/m](MF) (MSV)	
Prepared By	ug Cr +6 in S+S VIAL = [(S+S abs - b) / m](SSMF) (MSSV)	
CJO	% Spike Rec. = [(MSSV - MSV) / (SPIKE VALUE * VSPK / SDF)]*100	
Chemist		
PPB		
Analyst		
JIS		
Date Complete		
12/16/98		
Analysis Date		
12/11/98		
Analysis Time	RESULT	
01:00 PM	QC ACTUAL =	5.06E+00
Sample Point	QC FOUND =	5.10E+00
U-107	% SPIKE RECOVERY =	100.8%

Analyst:	JIS	Date:	12/16/98
Signature of Chemist:	PPB	Date:	

# LABCORE Completed Worklist Report for Worklist# 27690

Analyst: slh Instrument: SP02 Book#: 49N19E

Method: LA-265-101 Rev/Mod \_\_\_\_\_

Worklist Comment: U107 FOR CRVI-01 RTS

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCV	0	CRVI-01	SOLID	5.06	5.14	101.581	% Recovery
2	CCB	0	CRVI-01	SOLID	1	<258.16		Ratio
3	BLNK-PREP	0	CRVI-01	SOLID	1	<20.434		ug/g
4	SAMPLE	S98T003338 0 W	CRVI-01	SOLID	N/A	5.23e1	1.00e-002	ug/g
5	DUP	S98T003338 0 W	CRVI-01	SOLID	5.23e+1	5.15e+1	1.541	RPD

**Final page for worklist# 27690**

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*Sl. Quisenberry* 1/4/99  
Analyst Signature Date

*Michelle* 1/4/99  
Reviewer Signature Date

# LABCORE Data Entry Template for Worklist# 27690

Analyst: SLH Instrument: SP02 \_\_\_\_\_ Book# 49N19-E

Method: LA-265-101 Rev/Mod C-0

Worklist Comment: U107 FOR CRVI-01 RTS

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCV		CRVI-01	SOLID		
2	CCB		CRVI-01	SOLID		
3	BLNK-PREP		CRVI-01	SOLID		
4	SAMPLE	S98T003338 0 W	CRVI-01	SOLID	98000401	U-107 (2)
Analytes Requested: CRVI-01						
5	DUP	S98T003338 0 W	CRVI-01	SOLID		

## Final page for worklist # 27690

Andrew Wood Boatright  
 Analyst Signature \_\_\_\_\_  
 Date 12-30-98

C. Quinn  
 Analyst Signature \_\_\_\_\_  
 Date 1/4/98

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

WORKBOOK PAGE: STD1

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

	CCV
Type	Sample Absorbance at 540 nm (abs) 0.386
CCV	Sample Volume in mL (Vsamp) 1.00
Work List	Method Factor (10 + Vsamp) (MF) 11
27690	Dilution Factor (DF) 1
Test Code	Digest Dilution Factor (DDF) 1
CRVI-01	Standard Value 5.06E+00
Matrix	Low Calibration Point (LOW) 0.022
SOLID	High Calibration Point" 0.831
Batch Number	Y-Intercept (a) 0.00276
	Slope (b) 0.8198
Rerun	Cr +6 µg/mL = 5.14E+00

0
Sample Prep
N/A
Sample #
CCV
Instrument Code
SP02
Prepared By
CJO
Chemist
PPB
Analyst
SLH
Date Complete
01/04/99
Analysis Date
12/30/98
Analysis Time
05:30 PM
Sample Point
U-107

Cr +6 µg/mL = [(MF\*DF) / (b\*VSAMP)] \* (abs - a) (DDF)  
 If the result is a < value ( abs < LOW) :  
 Cr +6 µg/mL = < [(MF\*DF) / (b\*VSAMP)] \* (LOW - a) (DDF)

RPD = (|Cr +6 µg/mL SAM - Cr +6 µg/mL DUP| \*100) /  
 (AVERAGE OF THE SAM + DUP)

Less Than Value = abs < Low Calibration Point

v RESULT v	CCV
Cr +6 µg/mL =	5.14E+00

Analyst:	SLH	Date:	01/04/99
Signature of Chemist:	<i>NA</i>	PPB	Date:

WORKBOOK PAGE: BLANK2

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

BLANK

Type	Sample Absorbance at 540 nm (abs)	0.000
CCB	Sample Volume in mL (Vsamp)	1.00
Worklist	Method Factor (10 + Vsamp) (MF)	11
27690	Dilution Factor (DF)	1
Test Code	Digest g/L (DGL)	1
CRVI-01	Low Calibration abs point (LOW)	0.022
Matrix	High Calibration abs point	0.831
SOLID	Y-Intercept (a)	0.00276
Batch Number	Slope (b)	0.8198
	Cr +6 µg/g =	<258.161

Rerun	0
Sample Prep	N/A
Sample #	
CCB	
Instrument Code	SP02
Prepared By	
CJO	
Chemist	PPB
Analyst	SLH
Date Complete	01/04/99
Analysis Date	12/30/98
Analysis Time	05:30 PM
Sample Point	U-107

Cr +6 µg/g =  $[(MF \cdot DF) / (b \cdot VSAMP)] \cdot (abs - a) (1000 / DGL)$

If the result is a < value ( abs < LOW) :

Cr +6 µg/g =  $< [(MF \cdot DF) / (b \cdot VSAMP)] \cdot (LOW - a) (1000 / DGL)$

RPD =  $|Cr +6 \mu\text{g/g SAM} - Cr +6 \mu\text{g/g DUP}| \cdot 100 /$   
(AVERAGE OF THE SAM + DUP)

Less Than Value = Sample Absorbance < Low Calibration Point

The Sample Absorbance is < Detection Limit (the Low Calibration Poi

v RESULT v	BLANK
Cr +6 µg/g =	<258.161

Analyst:	SLH	Date:	01/04/99
Signature of Chemist:	<i>NA</i>	PPB	Date:

SAMPLE.WB1 REV 1.

265101

729 , 4

WORKBOOK PAGE: BLANK3

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

BLANK

Type	Sample Absorbance at 540 nm (abs)	0.001
BLNK-PREP	Sample Volume in mL (Vsamp)	3.00
Work List	Method Factor (10 + Vsamp) (MF)	13
27690	Dilution Factor (DF)	1
Test Code	Digest g/L (DGL)	4.977
CRVI-01	Low Calibration abs point (LOW)	0.022
Matrix	High Calibration abs point	0.831
SOLID	Y-Intercept (a)	0.00276
Batch Number	Slope (b)	0.8198
98006328	Cr +6 µg/g =	<20.434

Rerun	0
Sample Prep	N/A
Sample #	BLNK-PREP
Instrument Code	SP02
Prepared By	CJO
Chemist	PPB
Analyst	SHL
Date Complete	01/04/99
Analysis Date	12/30/98
Analysis Time	05:30 PM
Sample Point	U-107

Cr +6 µg/g = [(MF\*DF) / (b\*VSAMP)] \* (abs - a) (1000 / DGL)

If the result is a < value ( abs < LOW) :

Cr +6 µg/g = < [(MF\*DF) / (b\*VSAMP)] \* (LOW - a) (1000 / DGL)

RPD = |Cr +6 µg/g SAM - Cr +6 µg/g DUP| \* 100 / (AVERAGE OF THE SAM + DUP)

Less Than Value = Sample Absorbance < Low Calibration Point

The Sample Absorbance is < Detection Limit (the Low Calibration Poi

v RESULT v	BLANK
Cr +6 µg/g =	<20.434

Analyst:	SHL	Date:	01/04/99
Signature of Chemist:	<i>NA</i>	PPB	Date:

SAMPLE.WB1 REV 1.

265101

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WORKBOOK PAGE: SAM4

Cr+6 : LA-265-101 (C-0)

LIQUID/SOLID SAMPLE

		SAMPLE	DUPLICATE
Type	Sample Absorbance at 540 nm (abs)	0.052	0.053
SAMPLE	Sample Volume in mL (Vsamp)	3.00	3.00
Work List	Method Factor (10 + Vsamp) (MF)	13	13
27690	Dilution Factor (DF)	1	1
Test Code	Digest g/L (DGL)	4.977	5.16
CRVI-01	Low Calibration abs point (LOW)	0.022	0.022
Matrix	High Calibration abs point	0.831	0.831
SOLID	Y-Intercept (a)	0.00276	0.00276
Batch Number	Slope (b)	0.8198	0.8198
98006328	Cr +6 µg/g =	5.23E+01	5.15E+01

Rerun	0
Sample Prep	H2ODIG01
Sample #	S98T003338
Instrument Code	SP02
Prepared By	CJO
Chemist	PPB
Analyst	SHL
Date Complete	01/04/99
Analysis Date	12/30/98
Analysis Time	05:30 PM
Sample Point	U-107

Cr +6 µg/g = [(MF\*DF) / (b\*VSAMP)] \* (abs - a) (1000 / DGL)

If the result is a < value ( abs < LOW) :

Cr +6 µg/g = < [(MF\*DF) / (b\*VSAMP)] \* (LOW - a) (1000 / DGL)

RPD = |Cr +6 µg/g SAM - Cr +6 µg/g DUP| / AVERAGE OF THE SAM + DUP \* 100

Less Than Value = Sample Absorbance < Low Calibration Point

v RESULT v		SAMPLE	DUPLICATE
Cr +6 µg/g	=	5.23E+01	5.15E+01
Recovery % Difference =		1.60%	

Analyst:	SHL	Date:	01/04/99
Signature of Chemist:	PPB	Date:	

SAMPLE.WB1 REV 1.

265101

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# LABCORE Completed Worklist Report for Worklist# 25157

Analyst: adp

Instrument: IC40S1

Book# 149N/20D

Method: AA-533-105-Rev/Mod E-D

Worklist Comment: U107, @IC-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 CCB	0	•IC-QC F	QC	1	<1.20e-2		ug/mL
1 CCB	0	•IC-QC CL	QC	1	<1.70e-2		ug/mL
1 CCB	0	•IC-QC NO2	QC	1	1.38e-01	0.138	ug/mL
1 CCB	0	•IC-QC BR	QC	1	<1.25e-1		ug/mL
1 CCB	0	•IC-QC NO3	QC	1	1.65e-01	0.165	ug/mL
1 CCB	0	•IC-QC PO4	QC	1	<1.20e-1		ug/mL
1 CCB	0	•IC-QC SO4	QC	1	<1.38e-1		ug/mL
1 CCB	0	•IC-QC OXALATE2	QC	1	<1.05e-1		ug/mL
2 ICV	0	•IC-QC F	QC	5.90e1	6.23e+01	105.593 % Recovery	
2 ICV	0	•IC-QC CL	QC	8.00e1	7.98e+01	99.750 % Recovery	
2 ICV	0	•IC-QC NO2	QC	5.30e2	5.20e+02	98.113 % Recovery	
2 ICV	0	•IC-QC BR	QC	5.86e2	5.86e+02	100.000 % Recovery	
2 ICV	0	•IC-QC NO3	QC	5.92e2	6.00e+02	101.351 % Recovery	
2 ICV	0	•IC-QC PO4	QC	5.46e2	5.25e+02	96.154 % Recovery	
2 ICV	0	•IC-QC SO4	QC	6.38e2	6.34e+02	99.373 % Recovery	
2 ICV	0	•IC-QC OXALATE2	QC	5.31e2	5.16e+02	97.175 % Recovery	
3 CCV	0	•IC-QC F	QC	6.40e1	6.78e+01	105.938 % Recovery	
3 CCV	0	•IC-QC CL	QC	9.00e1	8.88e+01	98.667 % Recovery	
3 CCV	0	•IC-QC NO2	QC	5.43e2	5.19e+02	95.580 % Recovery	
3 CCV	0	•IC-QC BR	QC	6.30e2	6.23e+02	98.889 % Recovery	
3 CCV	0	•IC-QC NO3	QC	6.99e2	7.17e+02	102.722 % Recovery	
3 CCV	0	•IC-QC PO4	QC	6.32e2	6.19e+02	97.943 % Recovery	
3 CCV	0	•IC-QC SO4	QC	6.99e2	6.91e+02	98.856 % Recovery	
3 CCV	0	•IC-QC OXALATE2	QC	5.26e2	5.19e+02	98.669 % Recovery	
4 SAMPLE	S98T002032	•IC-01 F-02	LIQUID	N/A	< 6.181e+01	61.810	ug/mL
4 SAMPLE	S98T002032	•IC-01 CL-02	LIQUID	N/A	7.752e+03	87.570	ug/mL
4 SAMPLE	S98T002032	•IC-01 NO2-02	LIQUID	N/A	9.550e+04	556.300	ug/mL
4 SAMPLE	S98T002032	•IC-01 BR-02	LIQUID	N/A	< 6.439e+02	643.900	ug/mL
4 SAMPLE	S98T002032	•IC-01 NO3-02	LIQUID	N/A	2.366e+05	716.000	ug/mL
4 SAMPLE	S98T002032	•IC-01 PO4-02	LIQUID	N/A	3.183e+03	618.100	ug/mL
4 SAMPLE	S98T002032	•IC-01 SO4-02	LIQUID	N/A	5.109e+03	710.800	ug/mL
4 SAMPLE	S98T002032	•IC-01 OXALATE2	LIQUID	N/A	5.754e+02	540.900	ug/mL
5 DUP	S98T002032	•IC-01 F-02	LIQUID	<6.181e1	<6.181e1		RPD
5 DUP	S98T002032	•IC-01 CL-02	LIQUID	7.75e+03	7.75e+03	0.515	RPD
5 DUP	S98T002032	•IC-01 NO2-02	LIQUID	9.55e+04	9.63e+04	0.834	RPD
5 DUP	S98T002032	•IC-01 BR-02	LIQUID	<6.44e2	<6.44e2		RPD
5 DUP	S98T002032	•IC-01 NO3-02	LIQUID	2.37e+05	2.37e+05	0.000	RPD
5 DUP	S98T002032	•IC-01 PO4-02	LIQUID	3.18e+03	2.92e+03	8.525	RPD
5 DUP	S98T002032	•IC-01 SO4-02	LIQUID	5.11e+03	5.13e+03	0.391	RPD
5 DUP	S98T002032	•IC-01 OXALATE2	LIQUID	5.75e+02	6.61e+02	13.916	RPD
6 SPK	S98T002032	•IC-01 F-02	LIQUID	6.40e1	3.84e+01	60.000 % Recovery	

Units shown for QC (BLK/BKG) may not reflect the actual units.



# LABCORE Completed Worklist Report for Worklist# 25157

Seq Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
6 SPK	S98T002032	0		IC-01	CL-02	LIQUID	9.00e1	7.96e+01	88.444 % Recovery
6 SPK	S98T002032	0		IC-01	NO2-02	LIQUID	5.43e2	5.35e+02	98.527 % Recovery
6 SPK	S98T002032	0		IC-01	BR-02	LIQUID	6.30e2	5.41e+02	85.873 % Recovery
6 SPK	S98T002032	0		IC-01	NO3-02	LIQUID	6.98e2	6.70e+02	95.989 % Recovery
6 SPK	S98T002032	0		IC-01	PO4-02	LIQUID	6.32e2	5.21e+02	82.437 % Recovery
6 SPK	S98T002032	0		IC-01	SO4-02	LIQUID	6.99e2	6.37e+02	91.130 % Recovery
6 SPK	S98T002032	0		IC-01	OxALATE2	LIQUID	5.26e2	4.93e+02	93.726 % Recovery

**Final page for worklist# 25157**

Analyst Signature

Date

Analyst Signature

Date

*Jann M. Leye* 8/24/98  
Reviewer Signature Date

# LABCORE Data Entry Template for Worklist# 25157

Analyst: ADP Instrument: IC Book# 149N20-1

Method: LA-533-105 Rev/Mod E-0

Worklist Comment: U107, @IC-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC-QC	QC		
2	ICV		@IC-QC	QC		
3	CCV		@IC-QC	QC		
4	SAMPLE	S98T002032 0	@IC-01	LIQUID	98000358	U-107 (2)
		Analytes Requested:	BR-02	CL-02	F-02	NO2-02 , NO3-02 ,
			OXALATE2, PO4-02	SO4-02		
5	DUP	S98T002032 0	@IC-01	LIQUID		
6	SPK	S98T002032 0	@IC-01	LIQUID		

### Final page for worklist # 25157

Anthony Parente 8-22-98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

Validated 8/24/98 GML

Data Entry Comments: uploaded 8-24-98  
John Weill  
25157AUG.CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Data Reprocessed On 08/22/1998 04:26:27

=====  
 Sample Name: 149N20-D Date: 08/22/1998 04:22:24  
 Data File : C:\DX\DATA\98082101.D43  
 Method : C:\DX\METHOD\KIT.MET  
 ACI Address: System: 1 Inject#: 43 Detector: CDM-1  
 Analyst : *Anthony Puynter* Column: AG4A/AS4A anion column  
 =====

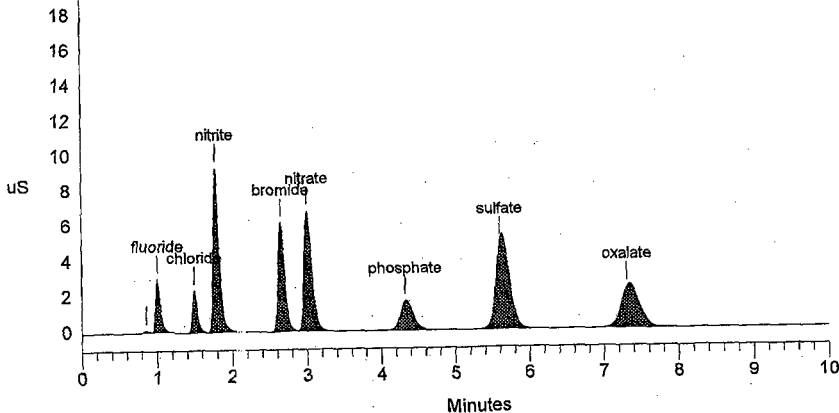
=====  
 Calibration Volume Dilution Points Rate Start Stop Area Reject  
 -----  
 External 1 101 3000 5Hz 0.00 10.00 30  
 =====

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	91	343	2	
2	1.01	fluoride	62.275	2967	12457	2	0.67
3	1.49	chloride	79.848	2355	10643	1	-0.44
4	1.78	nitrite	519.705	9328	48753	1	-1.66
5	2.65	bromide	585.821	6163	36502	1	1.28
6	3.00	nitrate	600.387	6794	49056	1	0.00
7	4.32	phosphate	525.475	1663	20726	1	1.25
8	5.60	sulfate	633.991	4995	66890	1	0.00
9	7.31	oxalate	516.285	2353	41731	1	0.74

Totals 3523.788 36709 287098

File: 98082101.D43 Sample: 149N20-D



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 733 TO 738.

*SS* .100-10

```

=====
Sample Name: BLANK                      Date: 08/22/1998 04:11:28
Data File  : C:\DX\DATA\98082101.D42
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 42    Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====
    
```

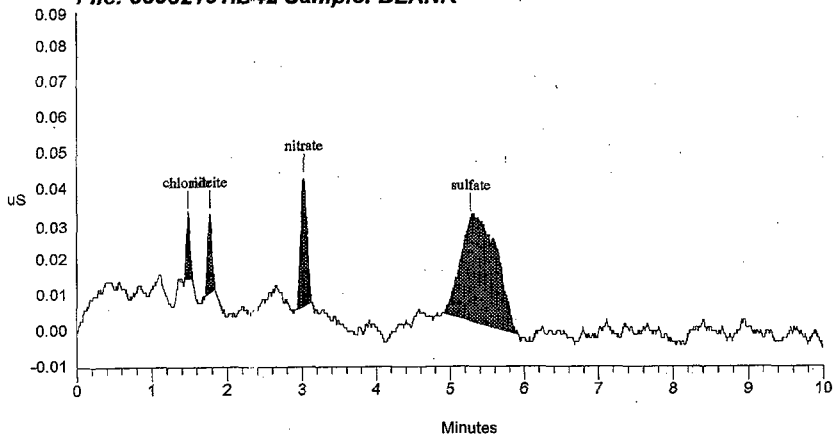
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           1    3000 5Hz   0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.48	chloride	0.003	18	59	1	-1.33
2	1.77	nitrite	0.138	22	87	1	-2.03
3	3.03	nitrate	0.165	36	219	1	-3.92
4	5.28	sulfate	-0.002	29	1020	1	-5.71
Totals			0.304	105	1385		

File: 98082101.D42 Sample: BLANK



SS 1

Data Reprocessed On 08/22/1998 04:37:40

```

=====
Sample Name: 148N20-D                               Date: 08/22/1998 04:33:03
Data File  : C:\DX\DATA\98082101.D44
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 44                Detector: CDM-1
Analyst    :                                       Column: AG4A/AS4A anion column
=====
    
```

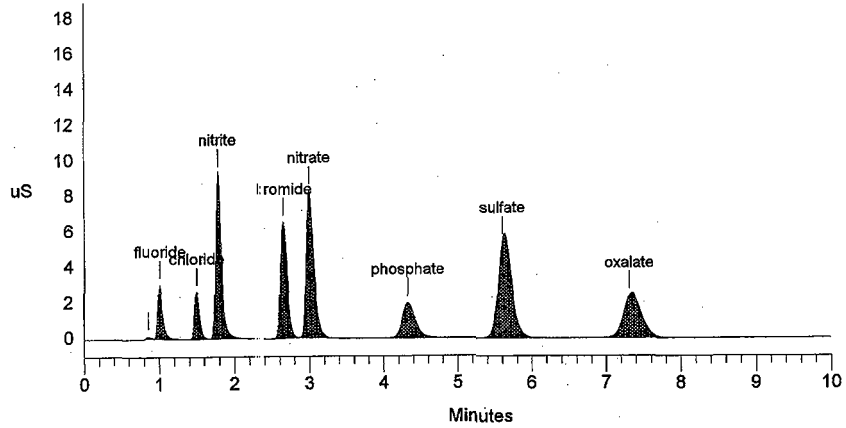
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
External           1           101   3000  5Hz  0.00 10.00      30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	108	464	2	
2	1.01	fluoride	67.763	3000	13579	2	-0.67
3	1.49	chloride	88.838	2628	11859	1	-0.44
4	1.78	nitrite	519.381	9305	48721	1	-1.66
5	2.65	bromide	623.374	6537	38931	1	1.28
6	2.99	nitrate	717.465	8287	58964	1	0.11
7	4.32	phosphate	619.128	1970	24549	1	1.25
8	5.60	sulfate	691.485	5488	72974	1	0.00
9	7.31	oxalate	519.140	2356	41965	1	0.74
Totals			3846.575	39680	312006		

File: 98082101.D44 Sample: 148N20-D



SS .100-10

Data Reprocessed On 08/24/1998 08:16:21

```

=====
Sample Name: S98T002032 SAM                               Date: 08/22/1998 04:44:15
Data File  : F:\DATA\98082101.D45
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 45                      Detector: CDM-1
Analyst    :                                               Column: AG4A/AS4A anion column
=====

```

```

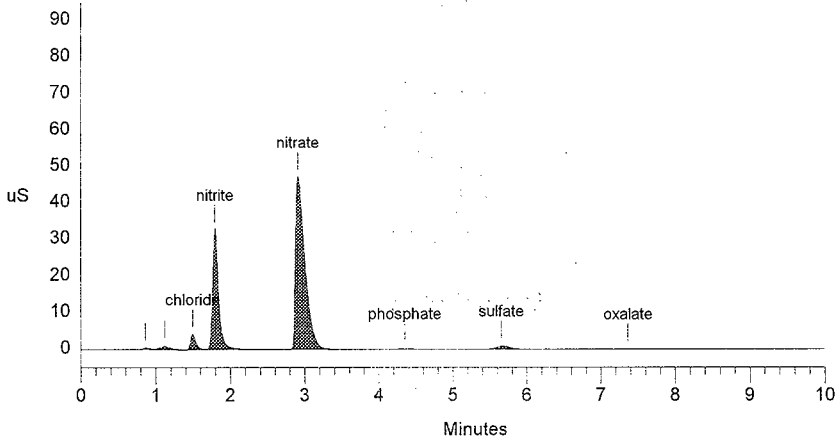
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           5151  3000 5Hz   0.00 10.00           30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.86		0.000	439	2465	2	
2	1.12		0.000	994	8734	2	
3	1.49	chloride	7752.391	4123	20527	1	-0.44
4	1.79	nitrite	95497.510	32684	180648	1	-0.92
5	2.91	nitrate	236618.145	47174	416654	1	-0.11
6	4.35	phosphate	3182.672	169	2115	1	1.88
7	5.65	sulfate	5108.664	861	11301	1	0.95
8	7.36	oxalate	575.394	32	540	1	1.47
Totals			348734.775	86476	642985		

File: 98082101.D45 Sample: S98T002032 SAM



Data Reprocessed On 08/24/1998 08:18:33

```

=====
Sample Name: S98T002032 DUP                               Date: 08/22/1998 04:55:37
Data File  : F:\DATA\98082101.D46
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 46                      Detector:CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

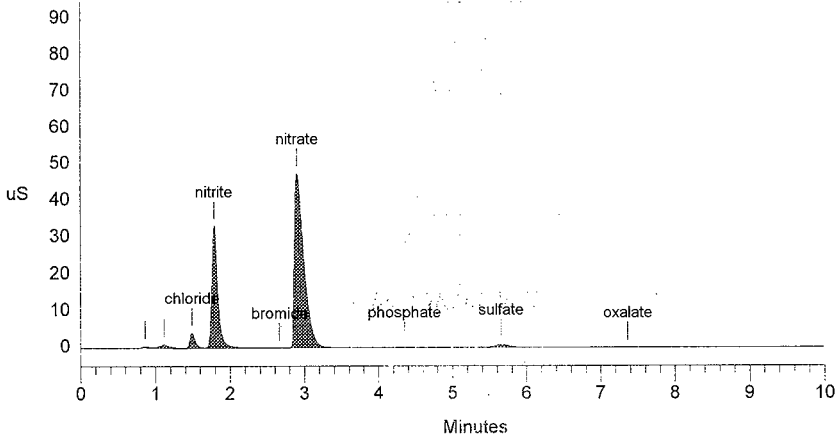
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           5151  3000 5Hz   0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.86		0.000	442	2420	2	
2	1.11		0.000	996	8514	2	
3	1.49	chloride	7788.360	4168	20625	1	-0.89
4	1.79	nitrite	96304.585	32939	182206	1	-1.29
5	2.66	bromide	610.348	14	56	1	1.79
6	2.90	nitrate	237373.074	47451	418115	1	0.00
7	4.35	phosphate	2918.118	170	1909	1	1.88
8	5.65	sulfate	5133.602	899	11352	1	0.95
9	7.36	oxalate	661.353	36	677	1	1.47
Totals			350789.440	87115	645874		

File: 98082101.D46 Sample: S98T002032 DUP



Data Reprocessed On 08/24/1998 08:20:07

```

=====
Sample Name: S98T002032 SPK                               Date: 08/22/1998 05:07:21
Data File  : F:\DATA\98082101.D47
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 47                      Detector:CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

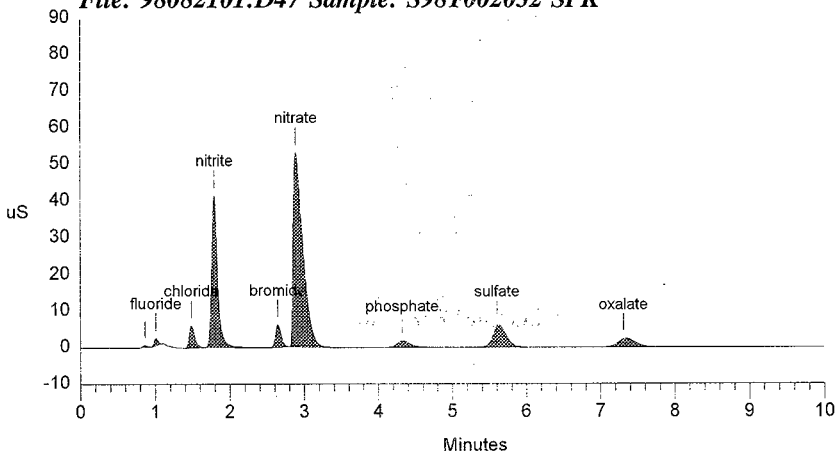
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           5151  3000 5Hz  0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.86		0.000	431	1778	1	
2	1.01	fluoride	1941.676	2020	7525	1	0.67
3	1.48	chloride	11773.927	6172	31662	1	-1.33
4	1.79	nitrite	122497.842	41508	232970	1	-0.92
5	2.64	bromide	27323.560	6133	33272	1	1.02
6	2.89	nitrate	270448.248	53065	483103	1	-0.12
7	4.32	phosphate	29506.608	1796	22891	1	1.25
8	5.60	sulfate	37266.415	5839	77136	1	0.00
9	7.31	oxalate	25452.687	2288	40319	1	0.74
Totals			526210.964	119253	930655		

File: 98082101.D47 Sample: S98T002032 SPK





# LABCORE Completed Worklist Report for Worklist# 25158

Analyst: adp

Instrument: IC40S1

Book# 149K20C

Method: 14-533-105 Rev/Mod E-0

Worklist Comment: U107, @IC-01, tdm

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	@IC-QC F	QC	1	<1.20e-2		ug/mL
1	CCB	0	@IC-QC CL	QC	1	7.60e-02	0.076	ug/mL
1	CCB	0	@IC-QC NO2	QC	1	<1.08e-1		ug/mL
1	CCB	0	@IC-QC BR	QC	1	<1.25e-1		ug/mL
1	CCB	0	@IC-QC NO3	QC	1	<1.39e-1		ug/mL
1	CCB	0	@IC-QC PO4	QC	1	<1.20e-1		ug/mL
1	CCB	0	@IC-QC SO4	QC	1	<1.38e-1		ug/mL
1	CCB	0	@IC-QC OXALATE2	QC	1	1.29e-01	0.129	ug/mL
2	ICV	0	@IC-QC F	QC	5.90e1	6.04e+01	102.373 %	Recovery
2	ICV	0	@IC-QC CL	QC	8.00e1	8.17e+01	102.125 %	Recovery
2	ICV	0	@IC-QC NO2	QC	5.42e2	5.59e+02	103.137 %	Recovery
2	ICV	0	@IC-QC BR	QC	5.86e2	5.96e+02	101.706 %	Recovery
2	ICV	0	@IC-QC NO3	QC	5.92e2	6.05e+02	102.196 %	Recovery
2	ICV	0	@IC-QC PO4	QC	5.47e2	5.29e+02	96.709 %	Recovery
2	ICV	0	@IC-QC SO4	QC	6.38e2	6.34e+02	99.373 %	Recovery
2	ICV	0	@IC-QC OXALATE2	QC	5.29e2	5.25e+02	99.244 %	Recovery
3	CCV	0	@IC-QC F	QC	6.40e1	6.24e+01	97.500 %	Recovery
3	CCV	0	@IC-QC CL	QC	9.00e1	9.00e+01	100.000 %	Recovery
3	CCV	0	@IC-QC NO2	QC	5.43e2	5.40e+02	99.448 %	Recovery
3	CCV	0	@IC-QC BR	QC	6.30e2	6.35e+02	100.794 %	Recovery
3	CCV	0	@IC-QC NO3	QC	6.98e2	7.34e+02	105.158 %	Recovery
3	CCV	0	@IC-QC PO4	QC	6.32e2	6.39e+02	101.108 %	Recovery
3	CCV	0	@IC-QC SO4	QC	6.99e2	6.87e+02	98.283 %	Recovery
3	CCV	0	@IC-QC OXALATE2	QC	5.30e2	5.36e+02	101.132 %	Recovery
4	SAMPLE	S98T002036	@IC-01 F-02	LIQUID	N/A	< 1.224e+02	122.400	ug/mL
4	SAMPLE	S98T002036	@IC-01 CL-02	LIQUID	N/A	7.671e+03	173.400	ug/mL
4	SAMPLE	S98T002036	@IC-01 NO2-02	LIQUID	N/A	9.915e+04	1102.000	ug/mL
4	SAMPLE	S98T002036	@IC-01 BR-02	LIQUID	N/A	< 1.275e+03	1275.000	ug/mL
4	SAMPLE	S98T002036	@IC-01 NO3-02	LIQUID	N/A	2.342e+05	1418.000	ug/mL
4	SAMPLE	S98T002036	@IC-01 PO4-02	LIQUID	N/A	4.081e+03	1224.000	ug/mL
4	SAMPLE	S98T002036	@IC-01 SO4-02	LIQUID	N/A	4.897e+03	1408.000	ug/mL
4	SAMPLE	S98T002036	@IC-01 OXALATE2	LIQUID	N/A	< 1.071e+03	1071.000	ug/mL
5	DUP	S98T002036	@IC-01 F-02	LIQUID	<1.22e2	<1.22e2		RPD
5	DUP	S98T002036	@IC-01 CL-02	LIQUID	7.67e+03	7.88e+03	2.701	RPD
5	DUP	S98T002036	@IC-01 NO2-02	LIQUID	9.92e+04	1.02e+05	2.783	RPD
5	DUP	S98T002036	@IC-01 BR-02	LIQUID	<1.28e3	<1.28e3		RPD
5	DUP	S98T002036	@IC-01 NO3-02	LIQUID	2.34e+05	2.34e+05	0.000	RPD
5	DUP	S98T002036	@IC-01 PO4-02	LIQUID	4.08e+03	3.79e+03	7.370	RPD
5	DUP	S98T002036	@IC-01 SO4-02	LIQUID	4.90e+03	5.47e+03	10.993	RPD
5	DUP	S98T002036	@IC-01 OXALATE2	LIQUID	<1.07e3	<1.07e3		RPD
6	SFK	S98T002036	@IC-01 F-02	LIQUID	5.90e1	7.74e+01	131.186 %	Recovery

Units shown for QC (BLK/BKG) may not reflect the actual units.

# LABCORE Completed Worklist Report for Worklist# 25158

Seq Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
6	SPK	S98T002036	0	⊖IC-01	CL-02	LIQUID	8.00e1	7.94e+01	99.250 % Recovery
6	SPK	S98T002036	0	⊖IC-01	NO2-02	LIQUID	5.42e2	5.57e+02	102.768 % Recovery
6	SPK	S98T002036	0	⊖IC-01	BR-02	LIQUID	5.86e2	5.67e+02	96.758 % Recovery
6	SPK	S98T002036	0	⊖IC-01	NO3-02	LIQUID	5.92e2	5.53e+02	93.412 % Recovery
6	SPK	S98T002036	0	⊖IC-01	PO4-02	LIQUID	5.47e2	4.99e+02	91.225 % Recovery
6	SPK	S98T002036	0	⊖IC-01	SO4-02	LIQUID	6.38e2	6.22e+02	97.492 % Recovery
6	SPK	S98T002036	0	⊖IC-01	OXALATE2	LIQUID	5.29e2	5.29e+02	100.000 % Recovery
7	SAMPLE	S98T002046	0	⊖IC-01	F-02	LIQUID	N/A	< 1.224e+02	122.400 ug/mL
7	SAMPLE	S98T002046	0	⊖IC-01	CL-02	LIQUID	N/A	7.570e+03	173.400 ug/mL
7	SAMPLE	S98T002046	0	⊖IC-01	NO2-02	LIQUID	N/A	9.776e+04	1102.000 ug/mL
7	SAMPLE	S98T002046	0	⊖IC-01	BR-02	LIQUID	N/A	< 1.275e+03	1275.000 ug/mL
7	SAMPLE	S98T002046	0	⊖IC-01	NO3-02	LIQUID	N/A	2.325e+05	1418.000 ug/mL
7	SAMPLE	S98T002046	0	⊖IC-01	PO4-02	LIQUID	N/A	3.577e+03	1224.000 ug/mL
7	SAMPLE	S98T002046	0	⊖IC-01	SO4-02	LIQUID	N/A	5.018e+03	1408.000 ug/mL
7	SAMPLE	S98T002046	0	⊖IC-01	OXALATE2	LIQUID	N/A	< 1.071e+03	1071.000 ug/mL
8	DUP	S98T002046	0	⊖IC-01	F-02	LIQUID	<1.22e2	<1.22e2	RPD
8	DUP	S98T002046	0	⊖IC-01	CL-02	LIQUID	7.57e+03	7.61e+03	0.527 RPD
8	DUP	S98T002046	0	⊖IC-01	NO2-02	LIQUID	9.78e+04	9.82e+04	0.408 RPD
8	DUP	S98T002046	0	⊖IC-01	BR-02	LIQUID	<1.28e3	<1.28e3	RPD
8	DUP	S98T002046	0	⊖IC-01	NO3-02	LIQUID	2.32e+05	2.31e+05	0.432 RPD
8	DUP	S98T002046	0	⊖IC-01	PO4-02	LIQUID	3.58e+03	3.70e+03	3.297 RPD
8	DUP	S98T002046	0	⊖IC-01	SO4-02	LIQUID	5.02e+03	4.61e+03	8.515 RPD
8	DUP	S98T002046	0	⊖IC-01	OXALATE2	LIQUID	<1.07e3	<1.07e3	RPD

Final page for worklist# 25158

Analyst Signature

Date

Analyst Signature

Date

*Jane M. Lyle* 8/10/98  
Reviewer Signature Date

**LABCORE Data Entry Template for Worklist# 25158**

Analyst: ADD Instrument: IC \_\_\_\_\_ Book# 129N20-C

Method: LA-533-105 Rev/Mod E-0

Worklist Comment: U107, @IC-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC-QC	QC		
2	ICV		@IC-QC	QC		
3	CCV		@IC-QC	QC		
4	SAMPLE S98T002036 0		@IC-01	LIQUID	98000358	U-107 (2)
	<b>Analytes Requested:</b>		BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02			
5	DUP S98T002036 0		@IC-01	LIQUID		
6	SPK S98T002036 0		@IC-01	LIQUID		
7	SAMPLE S98T002046 0		@IC-01	LIQUID	98000358	U-107 (2)
	<b>Analytes Requested:</b>		BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02			
8	DUP S98T002046 0		@IC-01	LIQUID		

**Final page for worklist # 25158**

*Anthony Perreault* 8-10-98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

*Validated 8/10/98 JM Luy*

Data Entry Comments: upgraded 8-10-98  
John Wauell  
25158AUG.CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

=====  
 Sample Name: 149N20-C 20-C Date: 08/10/1998 07:13:15  
 Data File : C:\DX\DATA\98080711.D02  
 Method : C:\DX\METHOD\KIT.MET  
 ACI Address: System: 1 Inject#: 2 Detector: CDM-1  
 Analyst : *Anthony Purita* Column: AG4A/AS4A anion column  
 =====  
*8-10-98*

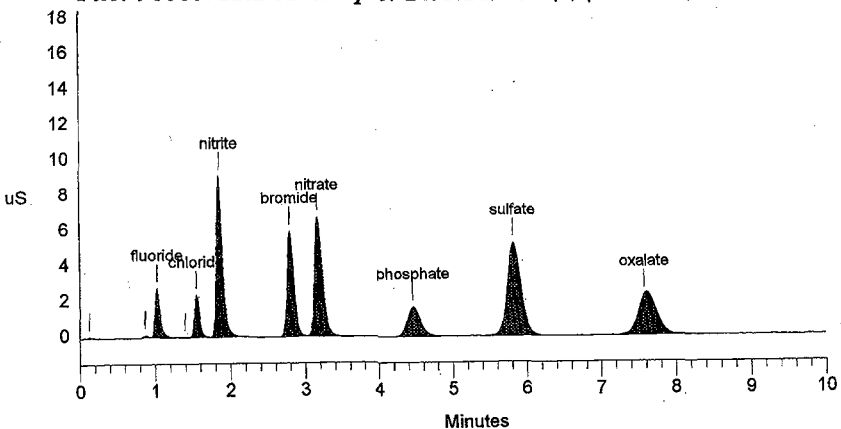
-----  
 Calibration Volume Dilution Points Rate Start Stop Area Reject  
 -----  
 External 1 101 3000 5Hz 0.00 10.00 30  
 -----

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.13		0.000	67	364	1	
2	0.87		0.000	95	405	2	
3	1.03	fluoride	60.376	2741	12527	2	1.65
4	1.39		0.000	14	45	1	
5	1.55	chloride	81.705	2367	11055	1	0.87
6	1.85	nitrite	558.996	9082	49877	1	0.72
7	2.17	bromide	595.678	5972	36960	1	0.84
8	3.17	nitrate	604.936	6725	49440	1	0.53
9	4.45	phosphate	529.476	1661	21096	1	-2.98
10	5.81	sulfate	634.356	5282	67666	1	-3.59
11	7.57	oxalate	524.538	2333	41436	1	-4.01

Totals 3590.061 36339 290871

File: 98080711.D02 Sample: <sup>APR</sup>149N20-C 149N20-C



*SS 100-10*

SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 742 TO 749.

```

=====
Sample Name: BLANK                               Date: 08/10/1998 06:54:50
Data File  : C:\DX\DATA\98080711.D01
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 1             Detector: CDM-1
Analyst    :                                   Column: AG4A/AS4A anion column
=====
    
```

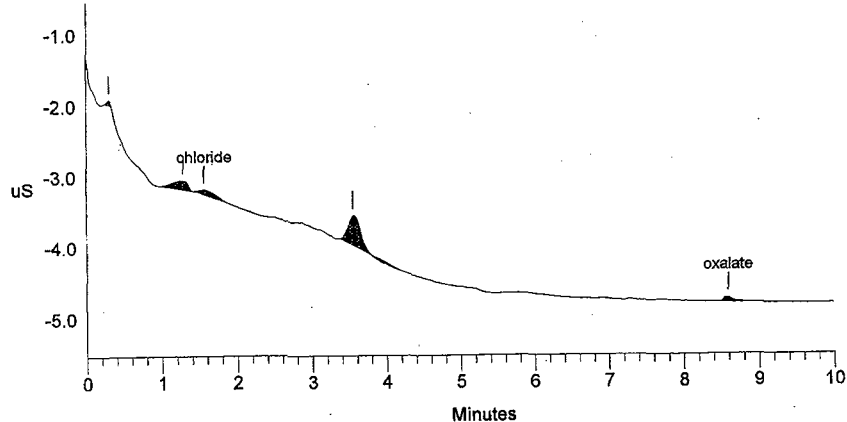
```

-----
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           1 3000 5Hz  0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.31		0.000	68	214	1	
2	1.29		0.000	125	1784	1	
3	1.56	chloride	0.076	61	1023	1	1.74
4	3.55		0.000	419	4387	1	
5	8.59	oxalate	0.129	68	810	1	8.83
Totals			0.205	740	8219		

File: 98080711.D01 Sample: BLANK



SS1

```

=====
Sample Name: 148N20-C                               Date: 08/10/1998 07:24:36
Data File : C:\DX\DATA\98080711.D03
Method    : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 3                 Detector: CDM-1
Analyst   :                                         Column: AG4A/AS4A anion column
=====
    
```

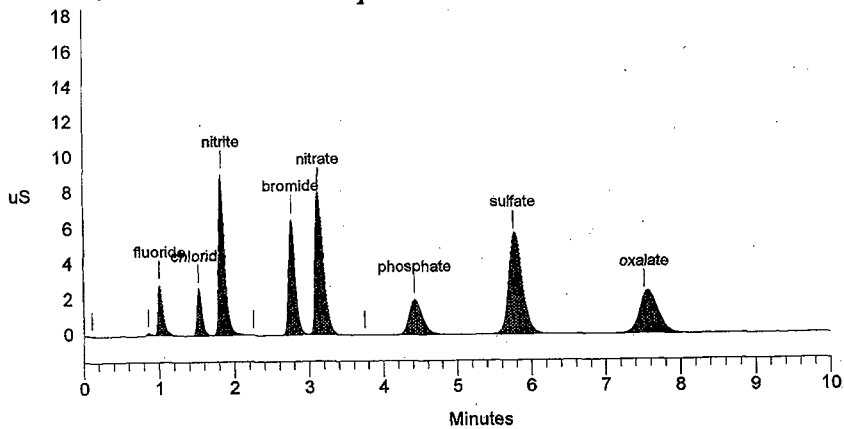
```

-----
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           101    3000 5Hz   0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.11		0.000	42	134	1	
2	0.85		0.000	109	463	2	
3	1.01	fluoride	62.403	2839	12958	2	0.33
4	1.53	chloride	89.968	2644	12186	1	-0.43
5	1.83	nitrite	540.155	9087	48167	1	-0.36
6	2.25		0.000	25	93	1	
7	2.77	bromide	635.402	6538	39508	1	-0.12
8	3.13	nitrate	734.320	8056	60393	1	-0.74
9	3.75		0.000	19	61	1	
10	4.43	phosphate	638.569	1991	25603	1	-3.56
11	5.76	sulfate	686.660	5645	73266	1	-4.48
12	7.52	oxalate	535.734	2235	42329	1	-4.69
Totals			3923.209	39230	315163		

File: 98080711.D03 Sample: 148N20-C



SS 100-10  
744

```

=====
Sample Name: S98T002036 SAM                               Date: 08/10/1998 09:15:06
Data File  : C:\DX\DATA\98080711.D04
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 4                       Detector: CDM-1
Analyst    :                                               Column: AG4A/AS4A anion column
=====
    
```

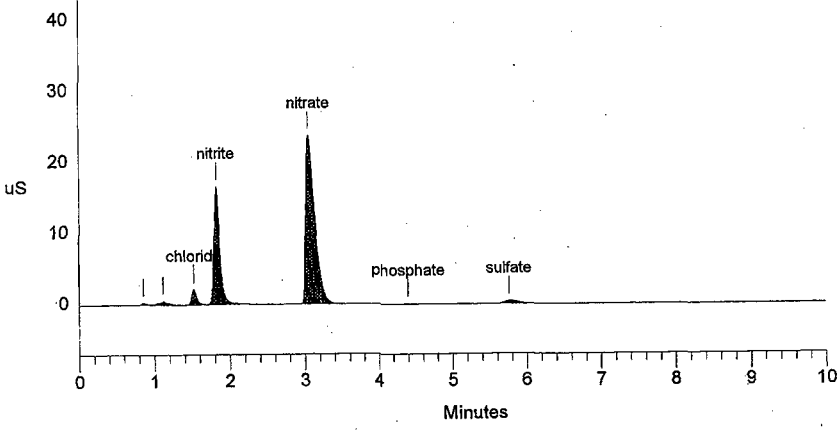
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1         10201   3000 5Hz   0.00 10.00         30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	237	1242	2	
2	1.11		0.000	502	4285	2	
3	1.52	chloride	7670.546	2180	10268	1	-0.87
4	1.82	nitrite	99145.332	16630	88341	1	-1.09
5	3.05	nitrate	234181.904	23770	198557	1	-3.07
6	4.40	phosphate	4080.925	89	1205	1	-4.14
7	5.76	sulfate	4897.249	427	5884	1	-4.48
Totals			349975.956	43835	309782		

File: 98080711.D04 Sample: S98T002036 SAM



SS .100-10 - .100-10

```

=====
Sample Name: S98T002036 DUP                               Date: 08/10/1998 09:31:04
Data File  : C:\DX\DATA\98080711.D05
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 5                       Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
  
```

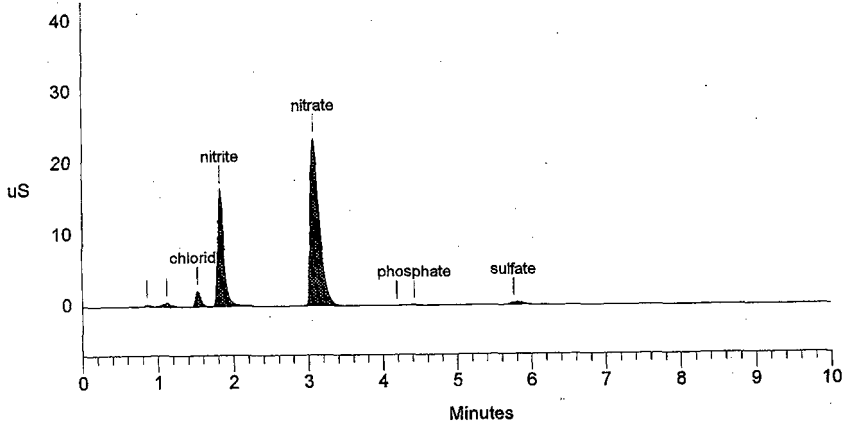
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          10201    3000  5Hz   0.00 10.00          30
  
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.86		0.000	222	1175	2	
2	1.12		0.000	509	4240	2	
3	1.53	chloride	7882.633	2180	10555	1	-0.43
4	1.83	nitrite	101568.940	16394	90530	1	-0.72
5	3.07	nitrate	234328.147	23600	198686	1	-2.43
6	4.19		0.000	19	54	1	
7	4.43	phosphate	3794.152	85	1091	1	-3.56
8	5.76	sulfate	5468.663	408	6473	1	-4.48
Totals			353042.535	43418	312805		

File: 98080711.D05 Sample: S98T002036 DUP



SS .100-10 - .100-10



```

=====
Sample Name: S98T002036 SPK                               Date: 08/10/1998 09:43:09
Data File  : C:\DX\DATA\98080711.D06
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 6                       Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

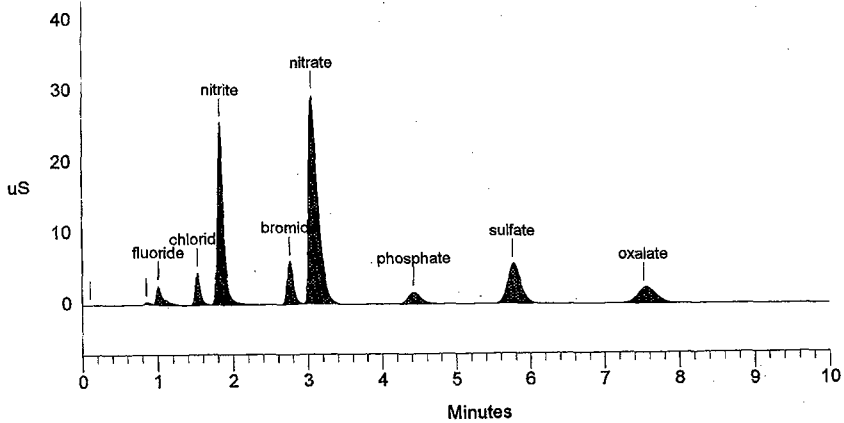
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          10201    3000 5Hz   0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.11		0.000	38	121	1	
2	0.85		0.000	290	1371	2	
3	1.01	fluoride	7816.602	2603	16153	2	0.33
4	1.53	chloride	15693.616	4513	21222	1	-0.43
5	1.83	nitrite	155445.290	25560	139383	1	-0.36
6	2.76	bromide	57297.457	6044	35143	1	-0.36
7	3.05	nitrate	290078.566	29345	248729	1	-3.07
8	4.43	phosphate	54501.713	1712	21514	1	-3.56
9	5.76	sulfate	67724.054	5571	71538	1	-4.48
10	7.52	oxalate	53435.311	2243	41797	1	-4.69
Totals			701992.610	77918	596971		

File: 98080711.D06 Sample: S98T002036 SPK



SS .106-10 - .100-10

SPK#  
149N20-C

```

=====
Sample Name: S98T002046 SAM           Date: 08/10/1998 09:54:25
Data File  : C:\DX\DATA\98080711.D07
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 7   Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====
    
```

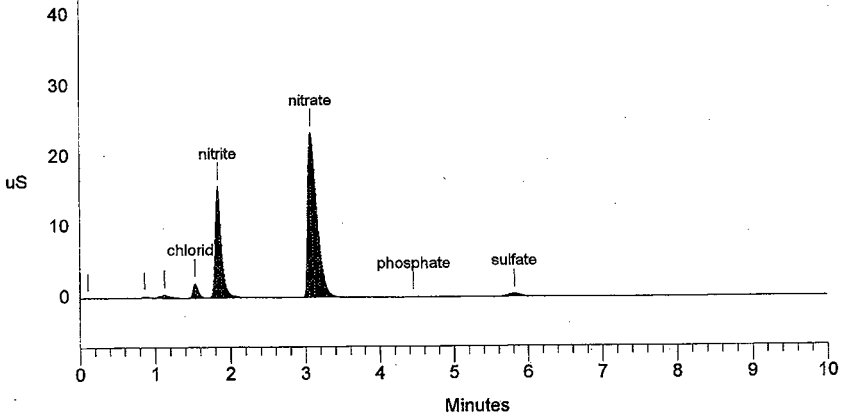
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1          10201   3000 5Hz   0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.11		0.000	36	112	1	
2	0.86		0.000	212	1189	2	
3	1.13		0.000	489	4190	2	
4	1.53	chloride	7569.900	2044	10132	1	-0.43
5	1.83	nitrite	97764.926	15766	87094	1	-0.36
6	3.07	nitrate	232524.839	23379	197085	1	-2.43
7	4.45	phosphate	3577.032	85	1005	1	-2.98
8	5.81	sulfate	5018.417	445	6009	1	-3.59
Totals			346455.115	42457	306815		

File: 98080711.D07 Sample: S98T002046 SAM



SS .100-10 - .100-10

```

=====
Sample Name: S98T002046 DUP                               Date: 08/10/1998 10:06:19
Data File  : C:\DX\DATA\98080711.D08
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 8                      Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

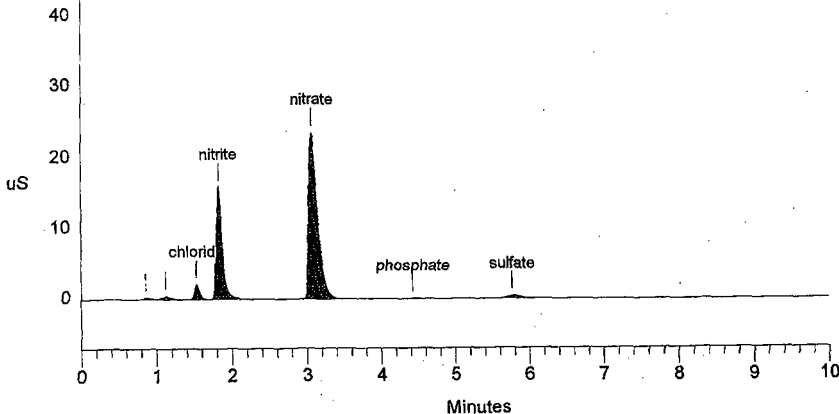
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1      10201    3000 5Hz   0.00 10.00      30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	216	1206	2	
2	1.12		0.000	495	4149	2	
3	1.53	chloride	7609.421	2111	10186	1	-0.43
4	1.83	nitrite	98218.372	15803	87503	1	-0.72
5	3.07	nitrate	230679.637	23541	195448	1	-2.65
6	4.43	phosphate	3702.074	86	1054	1	-3.56
7	5.76	sulfate	4605.271	383	5584	1	-4.48
Totals			344814.776	42635	305129		

File: 98080711.D08 Sample: S98T002046 DUP



SS, 100-10-100-10

# LABCORE Completed Worklist Report for Worklist# 25498

Analyst: adp

Instrument: IC45S2

Book#: 131N20B

Method: LA-533-Y105

Rev/Mod F-0

Worklist Comment: U107 (2), @IC4G-01 skm

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	@IC4G-QC F*4	QC	1	<1.10e-2		ug/mL
1	CCB	0	@IC4G-QC ACETATE2	QC	1	<2.00e-2		ug/mL
1	CCB	0	@IC4G-QC FORMATE2	QC	1	<2.10e-2		ug/mL
1	CCB	0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2		ug/mL
2	ICV	0	@IC4G-QC F*4	QC	5.80e1	6.19e+01	106.724 %	Recovery
2	ICV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.21e+02	103.419 %	Recovery
2	ICV	0	@IC4G-QC FORMATE2	QC	1.27e2	1.21e+02	95.276 %	Recovery
2	ICV	0	@IC4G-QC GLYCOLT1	QC	1.01e2	9.92e+01	98.218 %	Recovery
3	SAMPLE	S98T002031	@IC4G-01 F*4-01	LIQUID	N/A	6.819e+01	65.750	ug/mL
4	DUP	S98T002031	@IC4G-01 F*4-01	LIQUID	6.82e+01	6.84e+01	0.293	RPD
4	DUP	S98T002031	@IC4G-01 ACETATE2	LIQUID	1.13e+03	1.18e+03	4.329	RPD
4	DUP	S98T002031	@IC4G-01 FORMATE2	LIQUID	4.66e+03	4.71e+03	1.067	RPD
4	DUP	S98T002031	@IC4G-01 GLYCOLT1	LIQUID	4.15e+03	4.08e+03	1.701	RPD
5	SPK	S98T002031	@IC4G-01 F*4-01	LIQUID	5.80e1	5.19e+01	89.483 %	Recovery
5	SPK	S98T002031	@IC4G-01 ACETATE2	LIQUID	1.17e2	8.28e+01	70.769 %	Recovery
5	SPK	S98T002031	@IC4G-01 FORMATE2	LIQUID	1.27e2	1.22e+00	0.961 %	Recovery
5	SPK	S98T002031	@IC4G-01 GLYCOLT1	LIQUID	1.01e2	5.21e+01	0.516 %	Recovery
6	SAMPLE	S98T002035	@IC4G-01 F*4-01	LIQUID	N/A	< 6.575e+01	65.750	ug/mL
6	SAMPLE	S98T002035	@IC4G-01 FORMATE2	LIQUID	N/A	2.909e+03	131.500	ug/mL
6	SAMPLE	S98T002035	@IC4G-01 GLYCOLT1	LIQUID	N/A	2.483e+03	118.800	ug/mL
7	DUP	S98T002035	@IC4G-01 F*4-01	LIQUID	<6.58e1	7.22e+01		RPD
7	DUP	S98T002035	@IC4G-01 ACETATE2	LIQUID	7.30e+02	7.64e+02	4.552	RPD
7	DUP	S98T002035	@IC4G-01 FORMATE2	LIQUID	2.91e+03	2.94e+03	1.026	RPD
7	DUP	S98T002035	@IC4G-01 GLYCOLT1	LIQUID	2.49e+03	2.55e+03	2.783	RPD
8	SPK	S98T002035	@IC4G-01 F*4-01	LIQUID	5.80e1	5.48e+01	94.483 %	Recovery
8	SPK	S98T002035	@IC4G-01 ACETATE2	LIQUID	1.17e2	1.13e+02	96.581 %	Recovery
8	SPK	S98T002035	@IC4G-01 FORMATE2	LIQUID	1.27e2	1.27e+02	100.000 %	Recovery
8	SPK	S98T002035	@IC4G-01 GLYCOLT1	LIQUID	1.01e2	1.00e+02	99.010 %	Recovery
9	SAMPLE	S98T002045	@IC4G-01 F*4-01	LIQUID	N/A	< 6.575e+01	65.750	ug/mL
9	SAMPLE	S98T002045	@IC4G-01 FORMATE2	LIQUID	N/A	2.464e+03	131.500	ug/mL
9	SAMPLE	S98T002045	@IC4G-01 GLYCOLT1	LIQUID	N/A	2.171e+03	118.800	ug/mL
10	DUP	S98T002045	@IC4G-01 F*4-01	LIQUID	<6.58e1	<6.58e1		RPD
10	DUP	S98T002045	@IC4G-01 ACETATE2	LIQUID	6.25e+02	6.57e+02	4.992	RPD
10	DUP	S98T002045	@IC4G-01 FORMATE2	LIQUID	2.46e+03	2.45e+03	0.407	RPD
10	DUP	S98T002045	@IC4G-01 GLYCOLT1	LIQUID	2.17e+03	2.15e+03	0.926	RPD
11	CCV	0	@IC4G-QC F*4	QC	5.90e1	5.57e+01	94.407 %	Recovery
11	CCV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.05e+02	89.744 %	Recovery
11	CCV	0	@IC4G-QC FORMATE2	QC	1.32e2	1.23e+02	93.182 %	Recovery
11	CCV	0	@IC4G-QC GLYCOLT1	QC	1.16e2	1.08e+02	93.103 %	Recovery

# LABCORE Completed Worklist Report for Worklist# 25498

---

Seq	Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
-----	------	---------	---	---	------	--------	--------	-------	-------------	------

---

**Final page for worklist# 25498**

---

Analyst Signature      Date

---

Analyst Signature      Date

*James M. Lyle*      9/14/98  
Reviewer Signature      Date

08/11/98 09:56  
A-0004-1

# LABCORE Data Entry Template for Worklist# 25498

Analyst: ADP Instrument: IC Book# 131P20B

Method: LA-533,1105 Rev/Mbd F-0

Worklist Comment: U107 (2), @DIC4G-01 skm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC4G-QC	QC		
2	ICV		@IC4G-QC	QC		
3	SAMPLE	S98T002031 0	@IC4G-01	LIQUID	98000358	U-107 (2)
Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCOLT1						
4	DUP	S98T002031 0	@IC4G-01	LIQUID		
5	SPK	S98T002031 0	@IC4G-01	LIQUID		
6	SAMPLE	S98T002035 0	@IC4G-01	LIQUID	98000358	U-107 (2)
Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCOLT1						
7	DUP	S98T002035 0	@IC4G-01	LIQUID		
8	SPK	S98T002035 0	@IC4G-01	LIQUID		
9	SAMPLE	S98T002045 0	@IC4G-01	LIQUID	98000358	U-107 (2)
Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCOLT1						
10	DUP	S98T002045 0	@IC4G-01	LIQUID		
11	CCV		@IC4G-QC	QC		

### Final page for worklist # 25498

*Anthony Parrento* 9-9-98  
Analyst Signature Date

Analyst Signature Date

All samples put out for re-run of ~~acetate~~ acetate due to GCV failure. Also S98T002031 will be re-run due to poor spike for acetate, formate & glycolate.

Data Entry Comments:

Rest Validated  
updated 9-11-98  
JL Howell

*JM Luge*  
9/11/98

25498SEP.CSV

752

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

598T002035 and 598T002045 reanalyzed for Acetate on worklist # 26836. 598T002031 reanalyzed

=====  
 Sample Name: ICV 131N20-B Date: 09/09/1998 09:00:29  
 Data File : C:\DX\DATA\98090911.D13  
 Method : C:\DX\METHOD\GLYCOLIC.MET  
 ACI Address: 1 System: 2 Inject#: 13 Detector: CDM-1  
 Analyst : Ed Colvin Column: AG4A-SC,AS4A-SC, SRS  
 =====

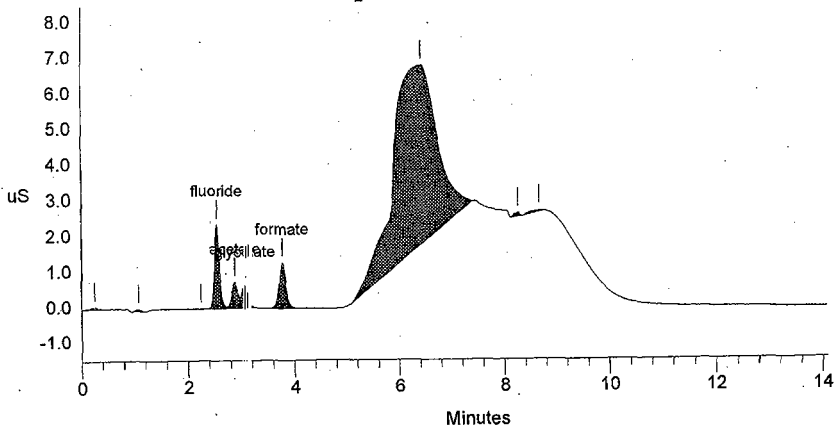
*Anthony Furuta* 9-9-98

=====  
 Calibration Volume Dilution Points Rate Start Stop Area Reject  
 External 1 101 4227 5Hz 0.00 14.09 0  
 =====

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.26		0.000	76	838	1	
2	1.07		0.000	51	421	1	
3	2.24		0.000	10	54	1	
4	2.54	fluoride	61.887	2360	15282	2	0.00
5	2.87	acetate	121.185	730	5886	2	0.00
6	3.06	glycolate	99.185	637	5107	2	0.00
7	3.77	formate	121.084	1288	11074	1	0.00
8	6.42		0.000	5055	303835	1	
9	8.26		0.000	109	759	1	
10	8.66		0.000	49	988	1	
Totals			403.341	10363	344244		

File: 98090911.D13 Sample: ICV 131N20-B



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 753 TO 763.

*SS.100-10*

```

=====
Sample Name: CCB BLANK                               Date: 09/09/1998 08:43:39
Data File  : C:\DX\DATA\98090911.D12
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 12                Detector: CDM-1
Analyst    : Ed Colvin                               Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

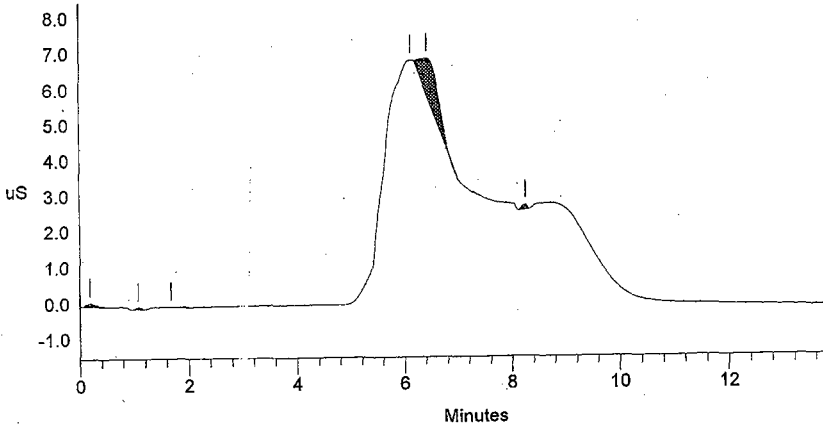
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          1    4136 5Hz   0.00 13.78          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.19		0.000	92	1180	1	
2	1.07		0.000	49	380	1	
3	1.68		0.000	5	73	1	
4	6.13		0.000	19	54	1	
5	6.43		0.000	1037	26555	1	
6	8.27		0.000	133	882	1	
Totals			0.000	1334	29124		

File: 98090911.D12 Sample: CCB BLANK



391



Data Reprocessed On 09/11/1998 09:01:29

```

=====
Sample Name: S98T002031          Date: 09/09/1998 09:58:34
Data File  : E:\DATA\98090911.D16
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 16      Detector: CDM-1
Analyst    : Ed Colvin           Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

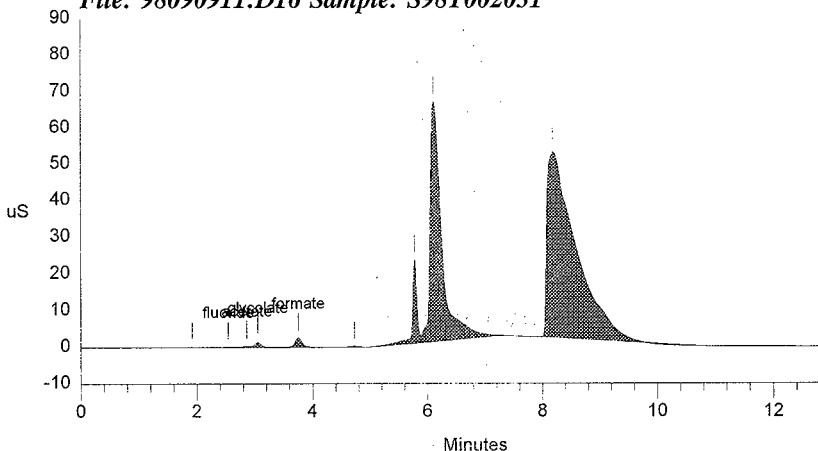
```

-----
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
-----
External           1           2121   3864  5Hz   0.00  12.88           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.91		0.000	11	237	1	
2	2.54	fluoride	68.195	30	144	1	0.00
3	2.86	acetate	1131.403	373	2557	2	0.00
4	3.05	glycolate	4147.038	1341	10622	2	0.00
5	3.75	formate	4664.688	2566	21135	1	0.00
6	4.73		0.000	318	2970	1	
7	5.77		0.000	22672	126062	2	
8	6.11		0.000	65772	940722	2	
9	8.18		0.000	50634	1767217	1	
Totals			10011.324	143716	2871665		

File: 98090911.D16 Sample: S98T002031



```

=====
Sample Name: S98T002031 DUP                               Date: 09/09/1998 10:15:29
Data File  : E:\DATA\98090911.D17
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 17                      Detector: CDM-1
Analyst    : Ed Colvin      Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

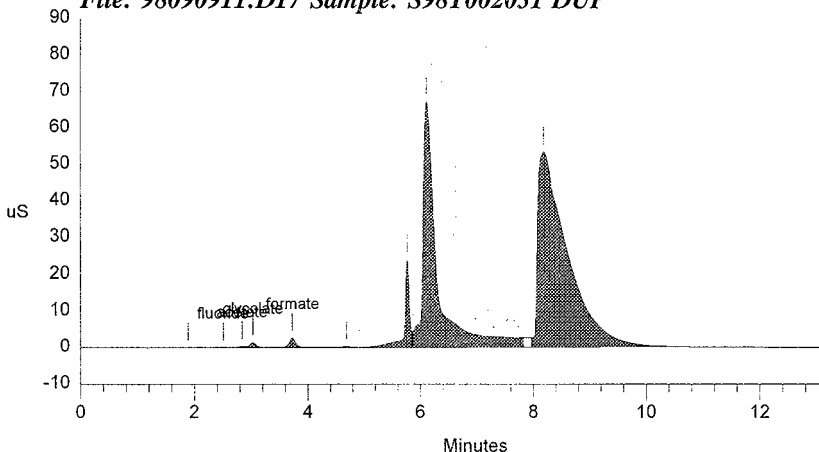
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           2121   3944 5Hz   0.00 13.14           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.89		0.000	14	465	1	
2	2.51	fluoride	68.410	25	147	1	0.00
3	2.84	acetate	1181.471	378	2676	2	0.00
4	3.03	glycolate	4084.897	1363	10453	2	0.00
5	3.73	formate	4709.231	2618	21348	1	0.00
6	4.68		0.000	329	3085	1	
7	5.76		0.000	23914	149661	2	
8	6.11		0.000	67320	1219837	2	
9	8.18		0.000	53332	1948424	2	
Totals			10044.010	149294	3356097		

**File: 98090911.D17 Sample: S98T002031 DUP**



```

=====
Sample Name: S98T002031 SPK                               Date: 09/09/1998 10:31:20
Data File  : C:\DX\DATA\98090911.D18
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 18                      Detector: CDM-1
Analyst    : Ed Colvin                                     Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

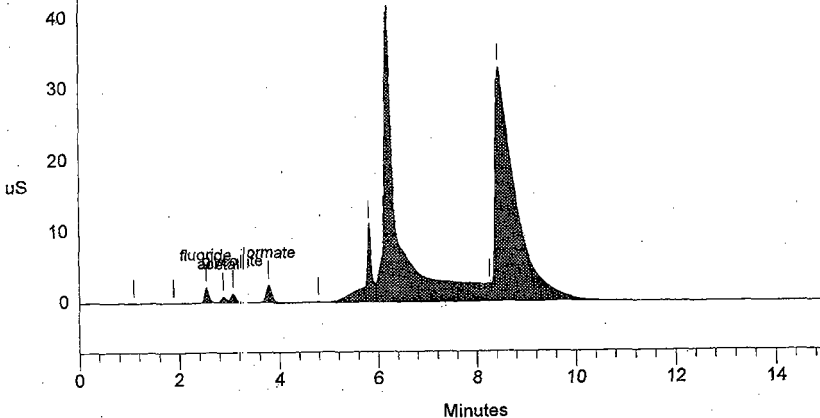
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           2121   4500 5Hz   0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.10		0.000	38	292	1	
2	1.89		0.000	7	130	1	
3	2.54	fluoride	1117.530	2144	13014	2	0.00
4	2.88	acetate	2803.634	874	6488	2	0.00
5	3.07	glycolate	4157.565	1314	10651	2	0.00
6	3.79	formate	4689.349	2536	21253	1	0.00
7	4.79		0.000	139	1325	2	
8	5.82		0.000	11014	113541	2	
9	6.18		0.000	41943	804797	3	
10	8.26		0.000	2526	24603	4	
11	8.44		0.000	33098	939069	2	
Totals			12768.078	95633	1935162		

File: 98090911.D18 Sample: S98T002031 SPK



SS 100-10 - 500-10  
 SPK# 131N20-B  
 757

Data Reprocessed On 09/11/1998 09:04:43

```

=====
Sample Name: S98T002035 SAM                               Date: 09/09/1998 14:13:51
Data File  : E:\DATA\98090911.D22
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 22                      Detector: CDM-1
Analyst    : Ed Colvin      Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

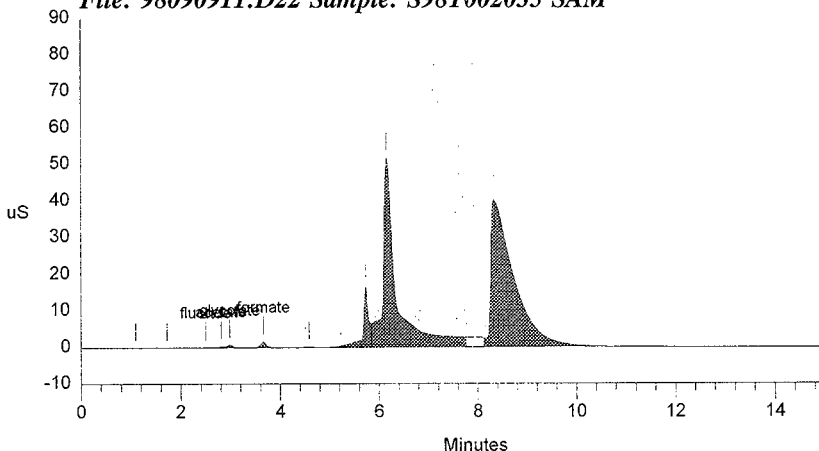
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          2121    4500 5Hz   0.00 15.00          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.10		0.000	34	250	1	
2	1.73		0.000	10	219	1	
3	2.50	fluoride	57.144	8	11	1	0.00
4	2.81	acetate	729.689	241	1598	2	0.00
5	2.98	glycolate	2482.577	793	6158	2	0.00
6	3.66	formate	2908.687	1565	12793	1	0.00
7	4.59		0.000	201	1892	1	
8	5.73		0.000	16487	135611	2	
9	6.15		0.000	51496	1017105	2	
10	8.32		0.000	40238	1300069	2	
Totals			6178.097	111072	2475706		

File: 98090911.D22 Sample: S98T002035 SAM



Data Reprocessed On 09/11/1998 09:05:25

```

=====
Sample Name: S98T002035 DUP                      Date: 09/09/1998 14:29:45
Data File  : E:\DATA\98090911.D23
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 23             Detector: CDM-1
Analyst    : Ed Colvin                          Column: AG4A-SC,AS4A-SC, SRS
=====

```

```

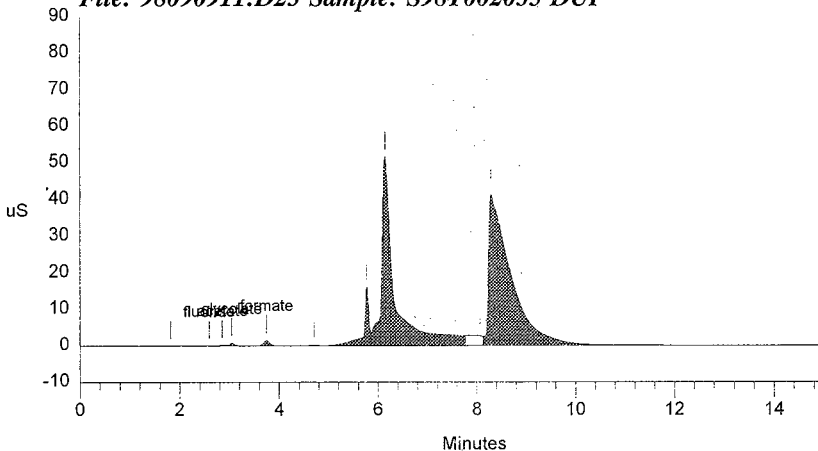
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          2121    4500 5Hz   0.00 15.00          0
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.82		0.000	15	657	1	
2	2.59	fluoride	72.217	24	193	1	0.00
3	2.85	acetate	764.270	233	1681	2	0.00
4	3.04	glycolate	2547.013	786	6328	2	0.00
5	3.75	formate	2938.862	1532	12935	1	0.00
6	4.71		0.000	194	1862	1	
7	5.77		0.000	15964	119564	2	
8	6.14		0.000	51575	978270	2	
9	8.29		0.000	41143	1297977	2	
Totals			6322.362	111468	2419467		

File: 98090911.D23 Sample: S98T002035 DUP



Data Reprocessed On 09/11/1998 09:06:42

```

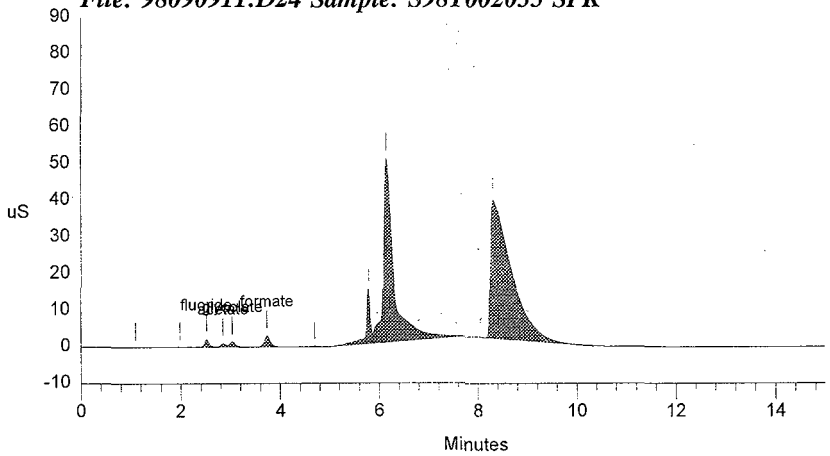
=====
Sample Name: S98T002035 SPK                               Date: 09/09/1998 14:45:48
Data File  : E:\DATA\98090911.D24
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 24                      Detector: CDM-1
Analyst    : Ed Colvin      Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	2121	4500	5Hz	0.00	15.00		0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.10		0.000	27	203	1	
2	1.98		0.000	19	671	1	
3	2.51	fluoride	1106.749	2107	12880	2	0.00
4	2.85	acetate	3010.478	917	6968	2	0.00
5	3.03	glycolate	4512.056	1516	11620	2	0.00
6	3.73	formate	5475.447	3018	25041	1	0.00
7	4.70		0.000	194	1880	1	
8	5.78		0.000	14955	93171	2	
9	6.15		0.000	50100	762045	2	
10	8.30		0.000	38073	1101522	1	
Totals			14104.730	110925	2016002		

File: 98090911.D24 Sample: S98T002035 SPK



Data Reprocessed On 09/11/1998 09:07:56

```

=====
Sample Name: S98T002045 SAM                      Date: 09/09/1998 13:12:39
Data File  : E:\DATA\98090911.D19
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 19             Detector: CDM-1
Analyst    : Ed Colvin                          Column: AG4A-SC,AS4A-SC, SRS
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----

```

```

External      1      2121    4500 5Hz   0.00 15.00      0

```

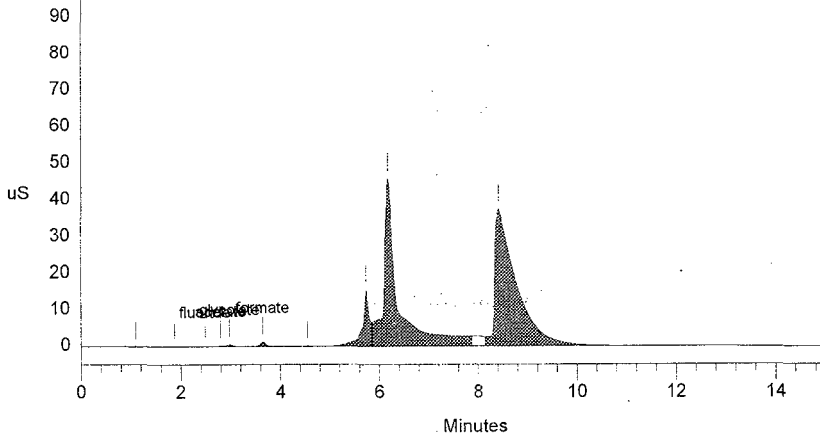
```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.10		0.000	29	215	1	
2	1.87		0.000	23	967	1	
3	2.49	fluoride	61.125	16	59	1	0.00
4	2.79	acetate	624.771	201	1346	2	0.00
5	2.97	glycolate	2170.871	671	5337	2	0.00
6	3.65	formate	2463.613	1309	10704	1	0.00
7	4.55		0.000	174	1597	1	
8	5.73		0.000	15395	158233	2	
9	6.17		0.000	45924	964509	2	
10	8.41		0.000	37548	1139498	2	
Totals			5320.380	101290	2282465		

File: 98090911.D19 Sample: S98T002045 SAM



Data Reprocessed On 09/11/1998 09:08:30

```

=====
Sample Name: S98T002045 DUP                               Date: 09/09/1998 13:29:21
Data File   : E:\DATA\98090911.D20
Method      : C:\DX\METHOD\GLYCOLIC.MET
ACI Address : 1 System: 2 Inject#: 20                    Detector: CDM-1
Analyst     : Ed Colvin                                   Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

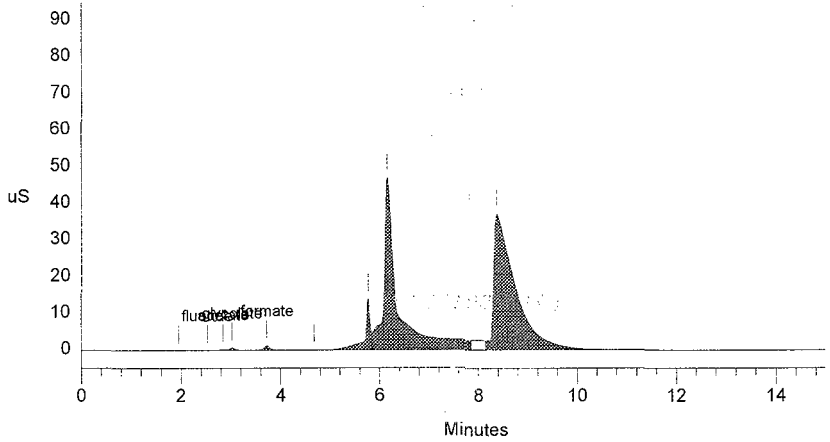
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           2121   4500 5Hz   0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.96		0.000	11	473	1	
2	2.53	fluoride	63.339	15	86	1	0.00
3	2.85	acetate	656.707	201	1423	2	0.00
4	3.03	glycolate	2147.406	658	5276	2	0.00
5	3.73	formate	2445.118	1280	10617	1	0.00
6	4.68		0.000	166	1576	1	
7	5.77		0.000	13841	108903	2	
8	6.15		0.000	46990	940695	2	
9	8.37		0.000	36931	1143007	2	
Totals			5312.569	100092	2212056		

File: 98090911.D20 Sample: S98T002045 DUP





Data Reprocessed On 09/14/1998 08:52:59

```

=====
Sample Name: CCV 130N20-C                               Date: 09/09/1998 09:16:16
Data File  : E:\DATA\98090911.D14
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 14                    Detector: CDM-1
Analyst    : Ed Colvin                                  Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

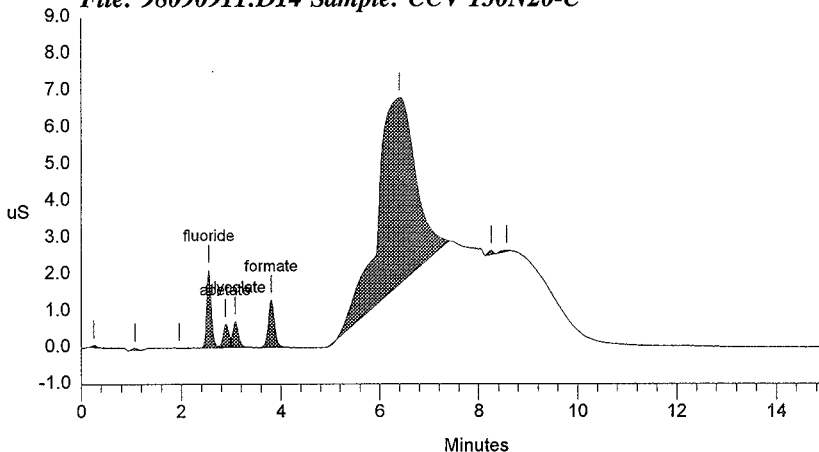
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           101 4500 5Hz  0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.26		0.000	66	438	1	
2	1.07		0.000	46	353	1	
3	1.96		0.000	7	108	1	
4	2.55	fluoride	55.731	2125	13671	2	0.00
5	2.89	acetate	105.321	638	5108	2	0.00
6	3.09	glycolate	108.451	705	5617	2	0.00
7	3.81	formate	123.382	1292	11301	1	0.00
8	6.40		0.000	5081	277980	1	
9	8.27		0.000	109	767	1	
10	8.57		0.000	30	502	1	
Totals			392.885	10098	315845		

File: 98090911.D14 Sample: CCV 130N20-C



# LABCORE Completed Worklist Report for Worklist# 25762

Analyst: adp

Instrument: IC40S1

Book# 149N201

Method: AA-533705 Rev/Mod E-0

Worklist Comment: U107, @IC-01, tdm

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	•IC-QC	F	QC	1	<1.20e-2	ug/mL
1	CCB	0	•IC-QC	CL	QC	1	<1.70e-2	ug/mL
1	CCB	0	•IC-QC	NO2	QC	1	<1.08e-1	ug/mL
1	CCB	0	•IC-QC	BR	QC	1	<1.25e-1	ug/mL
1	CCB	0	•IC-QC	NO3	QC	1	<1.39e-1	ug/mL
1	CCB	0	•IC-QC	P04	QC	1	<1.20e-1	ug/mL
1	CCB	0	•IC-QC	SO4	QC	1	<1.38e-1	ug/mL
1	CCB	0	•IC-QC	OXALATE2	QC	1	<1.05e-1	ug/mL
2	ICV	0	•IC-QC	F	QC	5.90e1	6.38e+01	108.136 % Recovery
2	ICV	0	•IC-QC	CL	QC	8.00e1	8.13e+01	101.625 % Recovery
2	ICV	0	•IC-QC	NO2	QC	5.24e2	5.14e+02	98.092 % Recovery
2	ICV	0	•IC-QC	BR	QC	5.86e2	5.83e+02	99.488 % Recovery
2	ICV	0	•IC-QC	NO3	QC	5.92e2	5.86e+02	98.986 % Recovery
2	ICV	0	•IC-QC	P04	QC	5.47e2	5.21e+02	95.247 % Recovery
2	ICV	0	•IC-QC	SO4	QC	6.38e2	6.32e+02	99.060 % Recovery
2	ICV	0	•IC-QC	OXALATE2	QC	5.26e2	5.13e+02	97.529 % Recovery
3	CCV	0	•IC-QC	F	QC	6.40e1	6.59e+01	102.969 % Recovery
3	CCV	0	•IC-QC	CL	QC	9.00e1	9.11e+01	101.222 % Recovery
3	CCV	0	•IC-QC	NO2	QC	5.43e2	5.34e+02	98.343 % Recovery
3	CCV	0	•IC-QC	BR	QC	6.30e2	6.42e+02	101.905 % Recovery
3	CCV	0	•IC-QC	NO3	QC	6.98e2	7.17e+02	102.722 % Recovery
3	CCV	0	•IC-QC	P04	QC	6.32e2	6.17e+02	97.627 % Recovery
3	CCV	0	•IC-QC	SO4	QC	6.99e2	6.95e+02	99.428 % Recovery
3	CCV	0	•IC-QC	OXALATE2	QC	5.26e2	5.16e+02	98.099 % Recovery
4	SAMPLE	S98T002236	0	•IC-01	F-02	LIQUID	N/A	< 6.181e+01
4	SAMPLE	S98T002236	0	•IC-01	CL-02	LIQUID	N/A	8.079e+03
4	SAMPLE	S98T002236	0	•IC-01	NO2-02	LIQUID	N/A	9.822e+04
4	SAMPLE	S98T002236	0	•IC-01	BR-02	LIQUID	N/A	< 6.439e+02
4	SAMPLE	S98T002236	0	•IC-01	NO3-02	LIQUID	N/A	2.464e+05
4	SAMPLE	S98T002236	0	•IC-01	P04-02	LIQUID	N/A	3.209e+03
4	SAMPLE	S98T002236	0	•IC-01	SO4-02	LIQUID	N/A	5.317e+03
4	SAMPLE	S98T002236	0	•IC-01	OXALATE2	LIQUID	N/A	5.775e+02
5	DUP	S98T002236	0	•IC-01	F-02	LIQUID	<6.18e1	<6.18e1
5	DUP	S98T002236	0	•IC-01	CL-02	LIQUID	8.08e+03	8.40e+03
5	DUP	S98T002236	0	•IC-01	NO2-02	LIQUID	9.82e+04	1.01e+05
5	DUP	S98T002236	0	•IC-01	BR-02	LIQUID	<6.44e2	<6.44e2
5	DUP	S98T002236	0	•IC-01	NO3-02	LIQUID	2.46e+05	2.46e+05
5	DUP	S98T002236	0	•IC-01	P04-02	LIQUID	3.21e+03	3.12e+03
5	DUP	S98T002236	0	•IC-01	SO4-02	LIQUID	5.32e+03	5.39e+03
5	DUP	S98T002236	0	•IC-01	OXALATE2	LIQUID	5.78e+02	6.62e+02
6	SPK	S98T002236	0	•IC-02	F-02	LIQUID	5.90e1	6.31e+01

Units shown for QC (BLK/BKG) may not reflect the actual units.

# LABCORE Completed Worklist Report for Worklist# 25762

Seq Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
6 SPK	S98T002236	0		@IC-01 CL-02	LIQUID	8.00e1	7.61e+01	95.125 %	Recovery
6 SPK	S98T002236	0		@IC-01 NO2-02	LIQUID	5.24e2	5.44e+02	103.817 %	Recovery
6 SPK	S98T002236	0		@IC-01 BR-02	LIQUID	5.86e2	5.41e+02	92.321 %	Recovery
6 SPK	S98T002236	0		@IC-01 NO3-02	LIQUID	5.92e2	5.73e+02	96.791 %	Recovery
6 SPK	S98T002236	0		@IC-01 PO4-02	LIQUID	5.47e2	5.00e+02	91.408 %	Recovery
6 SPK	S98T002236	0		@IC-01 SO4-02	LIQUID	6.38e2	6.23e+02	97.649 %	Recovery
6 SPK	S98T002236	0		@IC-01 OXALATE2	LIQUID	5.26e2	4.91e+02	93.346 %	Recovery
7 SAMPLE	S98T002240	0		@IC-01 F-02	LIQUID	N/A	< 6.181e+01	61.810	ug/mL
7 SAMPLE	S98T002240	0		@IC-01 CL-02	LIQUID	N/A	7.713e+03	87.570	ug/mL
7 SAMPLE	S98T002240	0		@IC-01 NO2-02	LIQUID	N/A	9.574e+04	556.300	ug/mL
7 SAMPLE	S98T002240	0		@IC-01 BR-02	LIQUID	N/A	< 6.439e+02	643.900	ug/mL
7 SAMPLE	S98T002240	0		@IC-01 NO3-02	LIQUID	N/A	2.350e+05	716.000	ug/mL
7 SAMPLE	S98T002240	0		@IC-01 PO4-02	LIQUID	N/A	3.070e+03	618.100	ug/mL
7 SAMPLE	S98T002240	0		@IC-01 SO4-02	LIQUID	N/A	5.084e+03	710.800	ug/mL
7 SAMPLE	S98T002240	0		@IC-01 OXALATE2	LIQUID	N/A	5.553e+02	540.900	ug/mL
8 DUP	S98T002240	0		@IC-01 F-02	LIQUID	<6.18e1	<6.18e1		RPD
8 DUP	S98T002240	0		@IC-01 CL-02	LIQUID	7.71e+03	8.00e+03	3.692	RPD
8 DUP	S98T002240	0		@IC-01 NO2-02	LIQUID	9.57e+04	9.88e+04	3.188	RPD
8 DUP	S98T002240	0		@IC-01 BR-02	LIQUID	<6.44e2	<6.44e2		RPD
8 DUP	S98T002240	0		@IC-01 NO3-02	LIQUID	2.35e+05	2.38e+05	1.268	RPD
8 DUP	S98T002240	0		@IC-01 PO4-02	LIQUID	3.07e+03	3.02e+03	1.642	RPD
8 DUP	S98T002240	0		@IC-01 SO4-02	LIQUID	5.08e+03	5.57e+03	9.202	RPD
8 DUP	S98T002240	0		@IC-01 OXALATE2	LIQUID	5.55e+02	5.68e+02	2.315	RPD

Final page for worklist# 25762

Analyst Signature

Date

Analyst Signature

Date

*Janet M. Luy*  
Reviewer Signature Date 8/24/98

# LABCORE Data Entry Template for Worklist# 25762

Analyst: AOP Instrument: IC Book# 149N20D

Method: LA-533-105 Rev/Mod EO

Worklist Comment: U107, @IC-01, tdm

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	CCB				@IC-QC	QC		
2	ICV				@IC-QC	QC		
3	CCV				@IC-QC	QC		
4	SAMPLE	S98T002236 0			@IC-01	LIQUID	98000359	U-107 (2)
		<b>Analytes Requested:</b>			BR-02	CL-02	F-02	NO2-02
					OXALATE2,	PO4-02	SO4-02	NO3-02
5	DUP	S98T002236 0			@IC-01	LIQUID		
6	SPK	S98T002236 0			@IC-01	LIQUID		
7	SAMPLE	S98T002240 0			@IC-01	LIQUID	98000359	U-107 (2)
		<b>Analytes Requested:</b>			BR-02	CL-02	F-02	NO2-02
					OXALATE2,	PO4-02	SO4-02	NO3-02
8	DUP	S98T002240 0			@IC-01	LIQUID		

**Final page for worklist # 25762**

*Anthony Perumal*  
Analyst Signature Date 8-21-98

Analyst Signature Date

*Validated 8/24/98 JM Lyle*

Data Entry Comments:  
uploaded 8-24-98  
JL Howell  
25762AUG.CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Sample Name: 149N20-D Date: 08/21/1998 23:09:21  
 Data File : C:\DX\DATA\98082101.D22  
 Method : C:\DX\METHOD\KIT.MBT  
 ACI Address: 1 System: 1 Inject#: 22 Detector: CDM-1  
 Analyst : *Anthony J. Smith* Column: AG4A/AS4A anion column

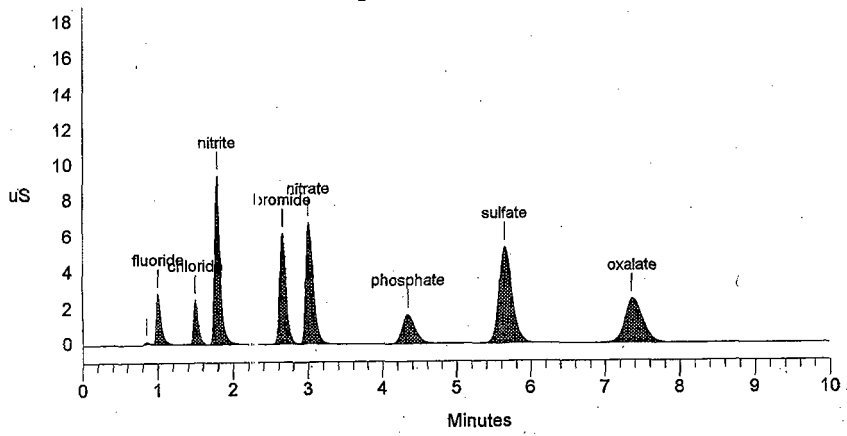
*8-21-98*

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	119	498	2	
2	1.01	fluoride	63.825	<i>108.18</i> 2814	12773	2	0.67
3	1.50	chloride	81.308	<i>101.64</i> 2489	10840	1	0.00
4	1.79	nitrite	513.550	<i>98.00</i> 9437	48158	1	-1.29
5	2.66	bromide	582.963	<i>99.48</i> 6185	36317	1	1.79
6	3.01	nitrate	585.772	<i>98.95</i> 6789	47821	1	-0.11
7	4.35	phosphate	520.764	<i>95.20</i> 1664	20534	1	1.88
8	5.65	sulfate	631.981	<i>99.06</i> 5411	66677	1	0.95
9	7.36	oxalate	513.261	<i>97.58</i> 2470	41483	1	1.47
Totals			3493.423	37378	285102		

File: 98082101.D22 Sample: 149N20-D



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 767 TO 774.  
*SS 100-10*

HNF-1661 REV. 0

```

=====
Sample Name: BLANK                               Date: 08/21/1998 22:57:26
Data File  : C:\DX\DATA\98082101.D21
Method     : C:\DX\METHOD\KIT.MET
ACTI Address: 1 System: 1 Inject#: 21           Detector: CDM-1
Analyst    :                                   Column: AG4A/AS4A anion column
=====

```

```

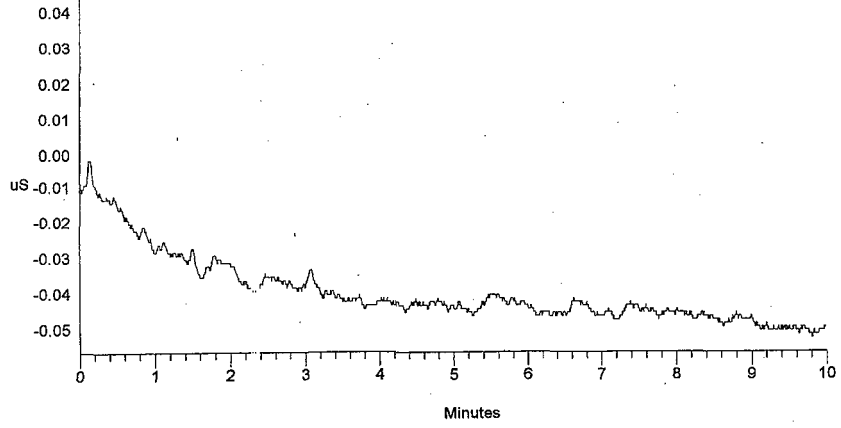
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1    3000 5Hz   0.00 10.00           30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: 98082101.D21 Sample: BLANK



SSI

Data R@processed On 08/21/1998 23:29:22

```

=====
Sample Name: 148N20-D                      Date: 08/21/1998 23:22:00
Data File  : C:\DX\DATA\98082101.D23
Method     : C:\DX\METH\OD\KIT.MET
ACI Address: 1 System: 1 Inject#: 23       Detector: CDM-1
Analyst    :                               Column: AG4A/AS4A anion column
=====
    
```

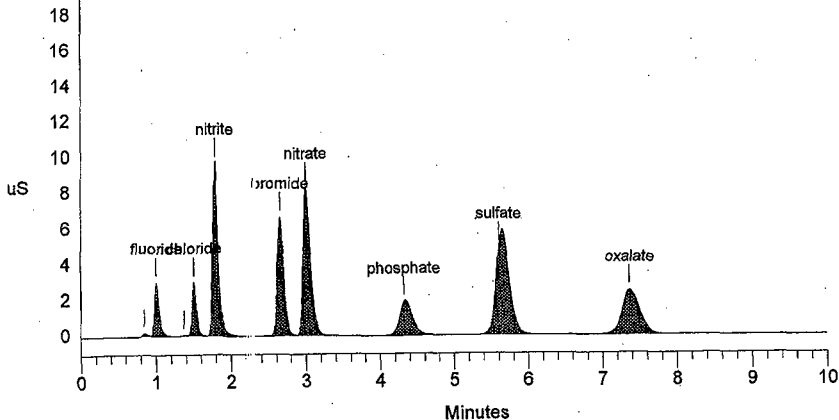
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          101    3000  5Hz   0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	130	560	2	
2	1.01	fluoride	65.915	3012	13201	2	0.67
3	1.37		0.000	31	125	1	
4	1.51	chloride	91.124	2998	12169	1	0.44
5	1.79	nitrite	533.569	9687	50091	1	-1.29
6	2.65	bromide	642.491	6657	40169	1	1.53
7	2.99	nitrate	717.411	8317	58959	1	0.11
8	4.32	phosphate	616.803	1917	24454	1	1.25
9	5.60	sulfate	694.946	4939	73340	1	0.00
10	7.36	oxalate	516.307	2515	41732	1	1.47
Totals			3878.566	40202	314802		

File: 98082101.D23 Sample: 148N20-D



SS. 100-10

Data Reprocessed On 08/24/1998 13:29:15

```

=====
Sample Name: S98T002236 SAM           Date: 08/22/1998 00:04:15
Data File  : F:\DATA\98082101.D25
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 25   Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====
    
```

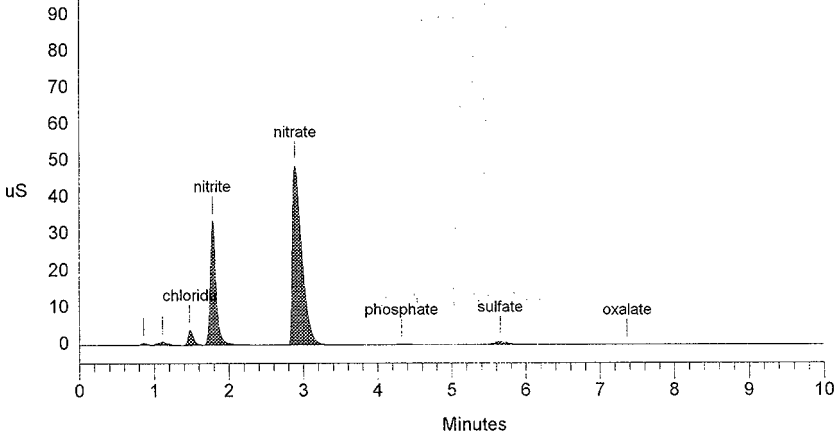
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           5151  3000  5Hz   0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	462	2650	2	
2	1.11		0.000	1054	9333	2	
3	1.47	chloride	8078.671	4206	21417	1	-1.78
4	1.78	nitrite	98217.493	33635	185901	1	-1.66
5	2.89	nitrate	246418.627	48713	435695	1	-0.12
6	4.32	phosphate	3208.892	166	2135	1	1.25
7	5.65	sulfate	5316.549	914	11720	1	0.95
8	7.36	oxalate	577.469	33	543	1	1.47
Totals			361817.699	89182	669394		

File: 98082101.D25 Sample: S98T002236 SAM





Data Reprocessed On 08/24/1998 13:30:42

```

=====
Sample Name: S98T002236 DUP                      Date: 08/22/1998 00:19:29
Data File  : F:\DATA\98082101.D26
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 26             Detector: CDM-1
Analyst    :                                     Column: AG4A/AS4A anion column
=====

```

```

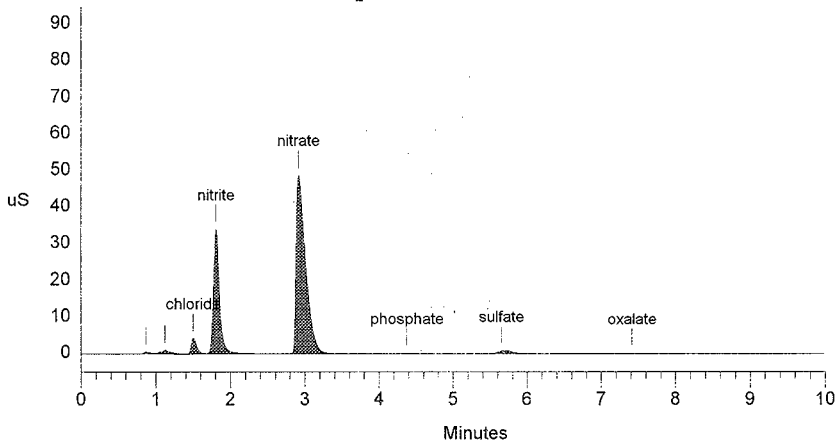
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           5151   3000 5Hz   0.00 10.00           30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.87		0.000	459	2638	2	
2	1.12		0.000	1049	9316	2	
3	1.50	chloride	8398.339	4322	22291	1	0.00
4	1.81	nitrite	101052.056	33996	191379	1	-0.18
5	2.91	nitrate	246008.578	48830	434895	1	0.11
6	4.37	phosphate	3117.376	171	2064	1	2.50
7	5.65	sulfate	5388.367	791	11864	1	0.95
8	7.41	oxalate	661.982	39	678	1	2.21
Totals			364626.698	89658	675126		

File: 98082101.D26 Sample: S98T002236 DUP



Data Reprocessed On 08/24/1998 13:36:06

```

=====
Sample Name: S98T002236 SPK                               Date: 08/22/1998 00:42:44
Data File  : F:\DATA\98082101.D28
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 28                      Detector:CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

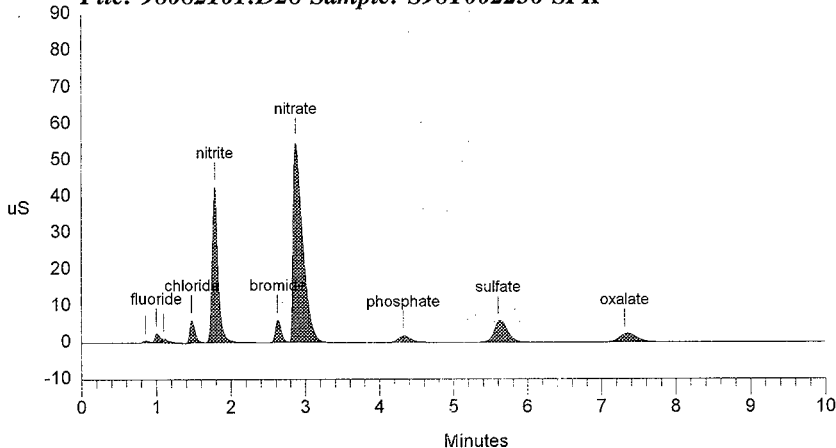
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           5151  3000  5Hz   0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	488	2260	2	
2	1.00	fluoride	3187.335	2541	12502	2	0.00
3	1.10		0.000	1237	7710	2	
4	1.47	chloride	11923.752	6237	32084	1	-1.78
5	1.79	nitrite	125693.237	42626	239189	1	-1.29
6	2.63	bromide	27315.483	6096	33262	1	0.51
7	2.87	nitrate	275363.867	54769	492933	1	0.12
8	4.32	phosphate	28466.883	1784	22059	1	1.25
9	5.60	sulfate	36799.653	5773	76164	1	0.00
10	7.31	oxalate	25395.218	2235	40227	1	0.74
Totals			534145.428	123786	958388		

File: 98082101.D28 Sample: S98T002236 SPK



Data Reprocessed On 08/24/1998 13:37:32

```

=====
Sample Name: S98T002240 SAM                               Date: 08/22/1998 01:09:16
Data File  : F:\DATA\98082101.D30
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 30                      Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

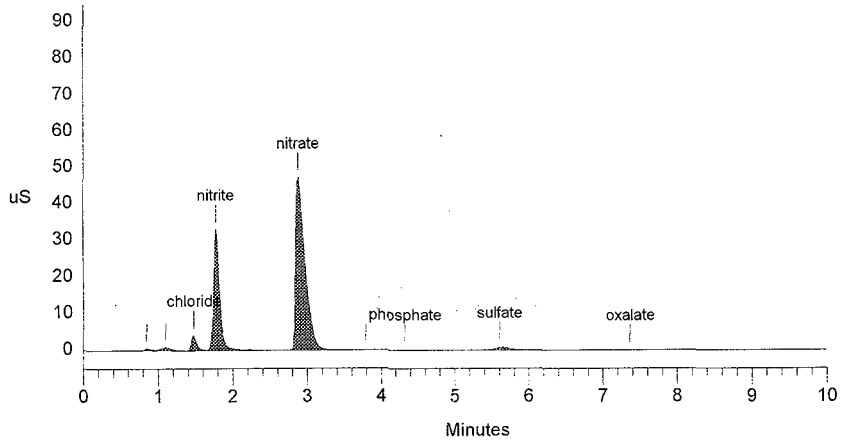
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           5151  3000 5Hz  0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	430	2349	2	
2	1.10		0.000	994	8629	2	
3	1.47	chloride	7713.108	4125	20420	1	-1.78
4	1.77	nitrite	95742.433	32996	181121	1	-2.03
5	2.87	nitrate	235047.552	47288	413618	1	0.12
6	3.79		0.000	11	64	1	
7	4.32	phosphate	3070.457	165	2028	1	1.25
8	5.60	sulfate	5084.271	738	11252	1	0.00
9	7.36	oxalate	555.271	35	508	1	1.47
Totals			347213.093	86782	639990		

File: 98082101.D30 Sample: S98T002240 SAM



```

=====
Sample Name: S98T002240 DUP                               Date: 08/22/1998 01:19:56
Data File  : F:\DATA\98082101.D31
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 31                      Detector: CDM-1
Analyst    :                                               Column: AG4A/AS4A anion column
=====
    
```

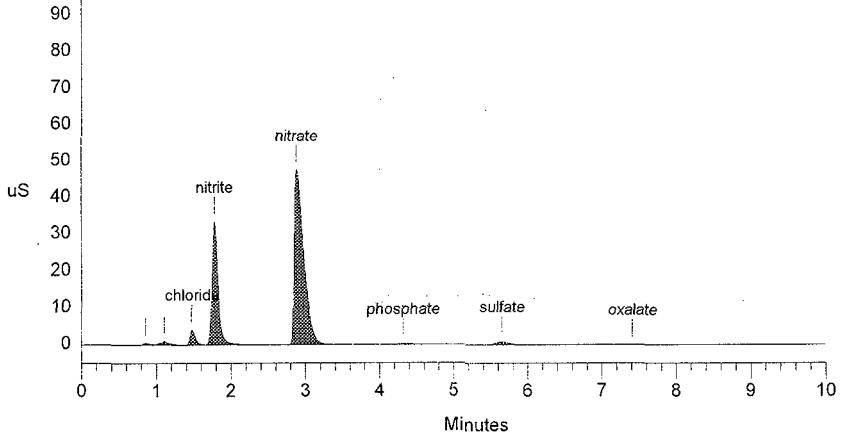
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           5151   3000 5Hz   0.00 10.00           30
-----
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	449	2535	2	
2	1.11		0.000	1013	8798	2	
3	1.47	chloride	7997.363	4153	21195	1	-1.78
4	1.78	nitrite	98816.771	33470	187059	1	-1.66
5	2.88	nitrate	237784.435	47592	418912	1	0.00
6	4.32	phosphate	3023.408	166	1991	1	1.25
7	5.65	sulfate	5572.109	922	12234	1	0.95
8	7.41	oxalate	567.722	31	528	1	2.21
Totals			353761.808	87796	653252		

File: 98082101.D31 Sample: S98T002240 DUP



# LABCORE Completed Worklist Report for Worklist# 25763

Analyst: adp

Instrument: IC40S1

Book# 149N20D

Method: 1A-33-105 Rev/Mod E-0

Worklist Comment: U107, @IC-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB 0	@IC-QC F	QC	1	<1.20e-2		ug/mL
1	CCB 0	@IC-QC CL	QC	1	<1.70e-2		ug/mL
1	CCB 0	@IC-QC NO2	QC	1	<1.08e-1		ug/mL
1	CCB 0	@IC-QC BR	QC	1	<1.25e-1		ug/mL
1	CCB 0	@IC-QC NO3	QC	1	<1.39e-1		ug/mL
1	CCB 0	@IC-QC P04	QC	1	<1.20e-1		ug/mL
1	CCB 0	@IC-QC SO4	QC	1	<1.38e-1		ug/mL
1	CCB 0	@IC-QC OXALATE2	QC	1	<1.05e-1		ug/mL
2	ICV 0	@IC-QC F	QC	5.90e1	5.76e+01	97.627 %	Recovery
2	ICV 0	@IC-QC CL	QC	8.00e1	7.85e+01	98.125 %	Recovery
2	ICV 0	@IC-QC NO2	QC	5.24e2	5.11e+02	97.519 %	Recovery
2	ICV 0	@IC-QC BR	QC	5.86e2	5.75e+02	98.123 %	Recovery
2	ICV 0	@IC-QC NO3	QC	5.92e2	5.83e+02	98.480 %	Recovery
2	ICV 0	@IC-QC P04	QC	5.47e2	5.04e+02	92.139 %	Recovery
2	ICV 0	@IC-QC SO4	QC	6.38e2	6.16e+02	96.552 %	Recovery
2	ICV 0	@IC-QC OXALATE2	QC	5.26e2	4.97e+02	94.487 %	Recovery
3	CCV 0	@IC-QC F	QC	6.40e1	6.77e+01	105.781 %	Recovery
3	CCV 0	@IC-QC CL	QC	9.00e1	9.22e+01	102.444 %	Recovery
3	CCV 0	@IC-QC NO2	QC	5.43e2	5.41e+02	99.632 %	Recovery
3	CCV 0	@IC-QC BR	QC	6.30e2	6.43e+02	102.063 %	Recovery
3	CCV 0	@IC-QC NO3	QC	6.98e2	7.48e+02	107.163 %	Recovery
3	CCV 0	@IC-QC P04	QC	6.32e2	6.18e+02	97.785 %	Recovery
3	CCV 0	@IC-QC SO4	QC	6.99e2	7.07e+02	101.144 %	Recovery
3	CCV 0	@IC-QC OXALATE2	QC	5.26e2	5.27e+02	100.190 %	Recovery
4	SAMPLE S98T002244 0	@IC-01 F-02	LIQUID	N/A	< 6.181e+01	61.810	ug/mL
4	SAMPLE S98T002244 0	@IC-01 CL-02	LIQUID	N/A	8.367e+03	87.570	ug/mL
4	SAMPLE S98T002244 0	@IC-01 NO2-02	LIQUID	N/A	1.030e+05	556.300	ug/mL
4	SAMPLE S98T002244 0	@IC-01 BR-02	LIQUID	N/A	< 6.439e+02	643.900	ug/mL
4	SAMPLE S98T002244 0	@IC-01 NO3-02	LIQUID	N/A	2.529e+05	716.000	ug/mL
4	SAMPLE S98T002244 0	@IC-01 P04-02	LIQUID	N/A	3.302e+03	618.100	ug/mL
4	SAMPLE S98T002244 0	@IC-01 SO4-02	LIQUID	N/A	5.787e+03	710.800	ug/mL
4	SAMPLE S98T002244 0	@IC-01 OXALATE2	LIQUID	N/A	6.115e+02	540.900	ug/mL
5	DUP S98T002244 0	@IC-01 F-02	LIQUID	<6.18e1	<6.18e1		RPD
5	DUP S98T002244 0	@IC-01 CL-02	LIQUID	8.37e+03	8.40e+03	0.358	RPD
5	DUP S98T002244 0	@IC-01 NO2-02	LIQUID	1.03e+05	1.05e+05	1.923	RPD
5	DUP S98T002244 0	@IC-01 BR-02	LIQUID	<6.44e2	<6.44e2		RPD
5	DUP S98T002244 0	@IC-01 NO3-02	LIQUID	2.53e+05	2.48e+05	1.996	RPD
5	DUP S98T002244 0	@IC-01 P04-02	LIQUID	3.30e+03	3.44e+03	4.154	RPD
5	DUP S98T002244 0	@IC-01 SO4-02	LIQUID	5.79e+03	6.24e+03	7.481	RPD
5	DUP S98T002244 0	@IC-01 OXALATE2	LIQUID	6.12e+02	6.72e+02	9.346	RPD
6	SAMPLE S98T002244 0	@IC-02 F-02	LIQUID	N/A	< 6.181e+01	61.810	ug/mL

Units shown for QC (BLK/BKG) may not reflect the actual units.

# LABCORE Completed Worklist Report for Worklist# 25763

Seq Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
6 SAMPLE	S98T002248	0		⊖IC-01 CL-02	LIQUID	N/A	1.012e+04	87.570	ug/mL
6 SAMPLE	S98T002248	0		⊖IC-01 NO2-02	LIQUID	N/A	1.208e+05	556.300	ug/mL
6 SAMPLE	S98T002248	0		⊖IC-01 BR-02	LIQUID	N/A	6.439e+02	643.900	ug/mL
6 SAMPLE	S98T002248	0		⊖IC-01 NO3-02	LIQUID	N/A	2.347e+05	716.000	ug/mL
6 SAMPLE	S98T002248	0		⊖IC-01 PO4-02	LIQUID	N/A	2.846e+03	618.100	ug/mL
6 SAMPLE	S98T002248	0		⊖IC-01 SO4-02	LIQUID	N/A	4.984e+03	710.800	ug/mL
6 SAMPLE	S98T002248	0		⊖IC-01 OXALATE2	LIQUID	N/A	5.409e+02	540.900	ug/mL
7 DUP	S98T002248	0		⊖IC-01 F-02	LIQUID	<6.18e1	<6.18e1		RPD
7 DUP	S98T002248	0		⊖IC-01 CL-02	LIQUID	1.01e+04	9.89e+03	2.101	RPD
7 DUP	S98T002248	0		⊖IC-01 NO2-02	LIQUID	1.21e+05	1.20e+05	0.830	RPD
7 DUP	S98T002248	0		⊖IC-01 BR-02	LIQUID	<6.44e2	<6.44e2		RPD
7 DUP	S98T002248	0		⊖IC-01 NO3-02	LIQUID	2.35e+05	2.36e+05	0.425	RPD
7 DUP	S98T002248	0		⊖IC-01 PO4-02	LIQUID	2.85e+03	3.00e+03	5.128	RPD
7 DUP	S98T002248	0		⊖IC-01 SO4-02	LIQUID	4.98e+03	4.57e+03	8.586	RPD
7 DUP	S98T002248	0		⊖IC-01 OXALATE2	LIQUID	<5.41e2	<5.41e2		RPD
8 SPK	S98T002248	0		⊖IC-01 F-02	LIQUID	5.90e1	5.47e+01	92.712	% Recovery
8 SPK	S98T002248	0		⊖IC-01 CL-02	LIQUID	8.00e1	1.27e+02	158.750	% Recovery
8 SPK	S98T002248	0		⊖IC-01 NO2-02	LIQUID	5.24e2	1.19e+03	227.099	% Recovery
8 SPK	S98T002248	0		⊖IC-01 BR-02	LIQUID	5.86e2	5.30e+02	90.444	% Recovery
8 SPK	S98T002248	0		⊖IC-01 NO3-02	LIQUID	5.92e2	2.05e+03	346.284	% Recovery
8 SPK	S98T002248	0		⊖IC-01 PO4-02	LIQUID	5.47e2	5.55e+02	101.463	% Recovery
8 SPK	S98T002248	0		⊖IC-01 SO4-02	LIQUID	6.38e2	7.09e+02	111.129	% Recovery
8 SPK	S98T002248	0		⊖IC-01 OXALATE2	LIQUID	5.26e2	5.08e+02	96.578	% Recovery

Final page for worklist# 25763

Analyst Signature

Date

Analyst Signature

Date

*James M. Lyle*  
Reviewer Signature Date 8/25/98

08/20/98 14:00  
A-0004-1

HNF-1661 REV. 0

Page: 1

# LABCORE Data Entry Template for Worklist# 25763

Analyst: ASP Instrument: IC \_\_\_\_\_ Book# 149N20-D

Method: LA-533-105 Rev/Mod E-0

Worklist Comment: U107, @IC-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Product
1	CCB		@IC-QC	QC		
2	ICV		@IC-QC	QC		
3	CCV		@IC-QC	QC		
4	SAMPLE	S98T002244 0	@IC-01	LIQUID	98000359	U-107 (2)
		<b>Analytes Requested:</b>	BR-02	CL-02	F-02	NO2-02
			OXALATE2	PO4-02	SO4-02	NO3-02
5	DUP	S98T002244 0	@IC-01	LIQUID		
6	SAMPLE	S98T002248 0	@IC-01	LIQUID	98000359	U-107 (2)
		<b>Analytes Requested:</b>	BR-02	CL-02	F-02	NO2-02
			OXALATE2	PO4-02	SO4-02	NO3-02
7	DUP	S98T002248 0	@IC-01	LIQUID		
8	SPK	S98T002248 0	@IC-01	LIQUID		

### Final page for worklist # 25763

Anthony Perreter 8-22-98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

Validated 8/25/98 JM Luy

Data Entry Comments: uploaded 8-24-98  
J. Howell  
25763AUG.CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

HNF-1661 REV. 0

Data Reprocessed On 08/22/1998 02:35:17

```

=====
Sample Name: 149N20-D                               Date: 08/12/1998 02:31:19
Data File : C:\DX\DATA\98082101.D33
Method    : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 33                Detector: CDM-1
Analyst   : Antony Parvath Column: AG4A/AS4A anion column
=====

```

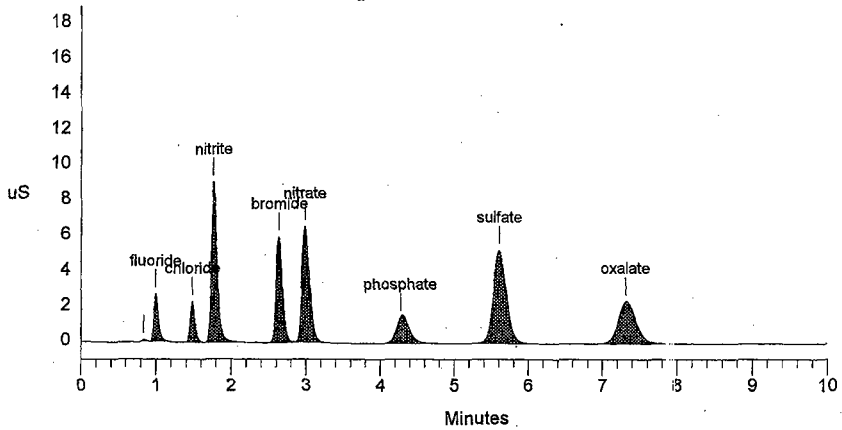
*9-22-98*

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.83		0.000	90	350	2	
2	0.99	fluoride	57.577	<i>97.59</i>	2685	11497	2 -0.67
3	1.48	chloride	78.478	<i>98.18</i>	2333	10458	1 -1.33
4	1.76	nitrite	511.033	<i>97.53</i>	9032	47915	1 -2.76
5	2.63	bromide	575.400	<i>98.19</i>	5993	35829	1 0.77
6	2.98	nitrate	582.702	<i>98.43</i>	6568	47562	1 0.00
7	4.27	phosphate	503.750	<i>92.09</i>	1474	19842	1 0.00
8	5.60	sulfate	615.683	<i>96.50</i>	5265	64956	1 0.00
9	7.31	oxalate	497.164	<i>94.58</i>	2394	40162	1 0.74
Totals			3421.788		35833	278572	

File: 98082101.D33 Sample: 149N20-D



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 778 TO 785.

*SS 100-10*



HNF-1661 REV. 0

```

=====
Sample Name: BLANK                               Date: 08/22/1998 01:31:24
Data File  : C:\DX\DATA\98082101.D32
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 32           Detector: CDM-1
Analyst    :                               Column: AG4A/AS4A anion column
=====

```

```

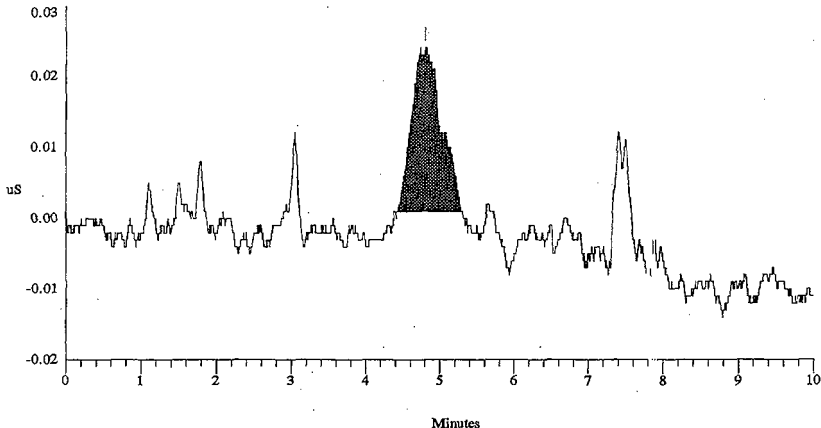
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1 3000 5Hz 0.00 10.00           30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	4.80		0.000	23	630		1
Totals			0.000	23	630		

File: 98082101.D32 Sample: BLANK



SS 1

HNF-1661 REV. 0

Data Reprocessed On 08/22/1998 03:09:29

```

=====
Sample Name: 148N20-D                               Date: 08/22/1998 03:06:01
Data File  : C:\DX\DATA\98082101.D36
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 36                Detector: CDM-1
Analyst    :                                         Column: AG4A/AS4A anion column
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          101    3000 5Hz   0.00 10.00          30
=====

```

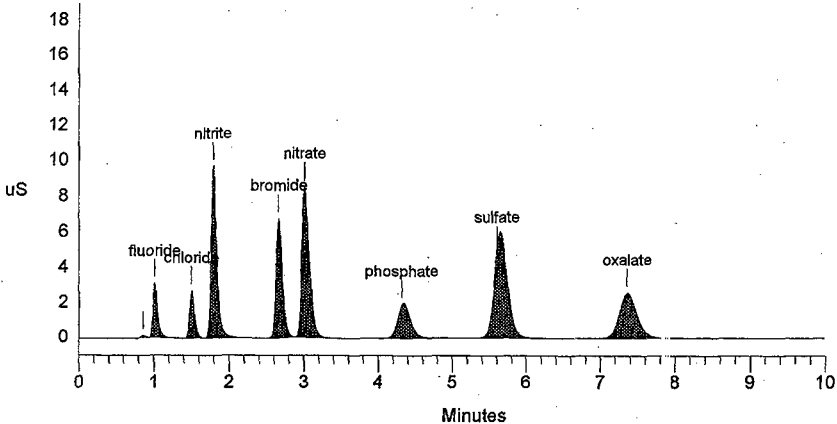
```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	106	445	2	
2	1.01	fluoride	67.720	3077	13570	2	1.33
3	1.50	chloride	92.245	2722	12321	1	0.00
4	1.79	nitrite	540.637	9653	50774	1	-1.29
5	2.66	bromide	642.750	6762	40186	1	1.79
6	3.01	nitrate	747.696	8513	61528	1	-0.11
7	4.32	phosphate	618.493	1920	24523	1	1.25
8	5.60	sulfate	706.964	4980	74615	1	0.00
9	7.36	oxalate	527.206	2578	42627	1	1.47
Totals			3943.711	40311	320589		

File: 98082101.D36 Sample: 148N20-D



Data Reprocessed On 08/24/1998 14:48:47

```

=====
Sample Name: S98T002244 SAM                               Date: 08/22/1998 03:17:01
Data File  : F:\DATA\98082101.D37
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 37                      Detector:CDM-1
Analyst    :                                               Column: AG4A/AS4A anion column
=====
    
```

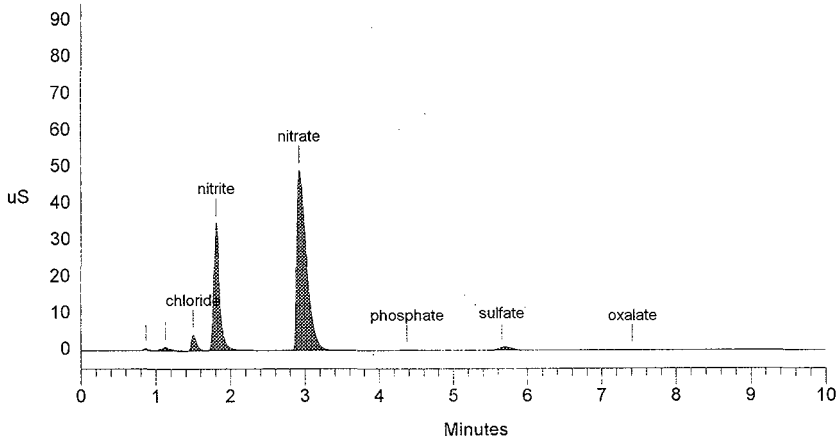
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           5151  3000 5Hz   0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.87		0.000	460	2566	2	
2	1.13		0.000	1077	9475	2	
3	1.50	chloride	8366.781	4388	22205	1	0.00
4	1.81	nitrite	103001.456	34838	195149	1	-0.18
5	2.92	nitrate	252857.551	49255	448296	1	0.00
6	4.37	phosphate	3302.326	187	2208	1	2.50
7	5.65	sulfate	5787.193	841	12668	1	0.95
8	7.41	oxalate	611.488	38	597	1	2.21
Totals			373926.796	91084	693164		

File: 98082101.D37 Sample: S98T002244 SAM



Data Reprocessed On 08/24/1998 14:50:11

```

=====
Sample Name: S98T002244 DUP                               Date: 08/22/1998 03:27:42
Data File  : F:\DATA\98082101.D38
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 38                      Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

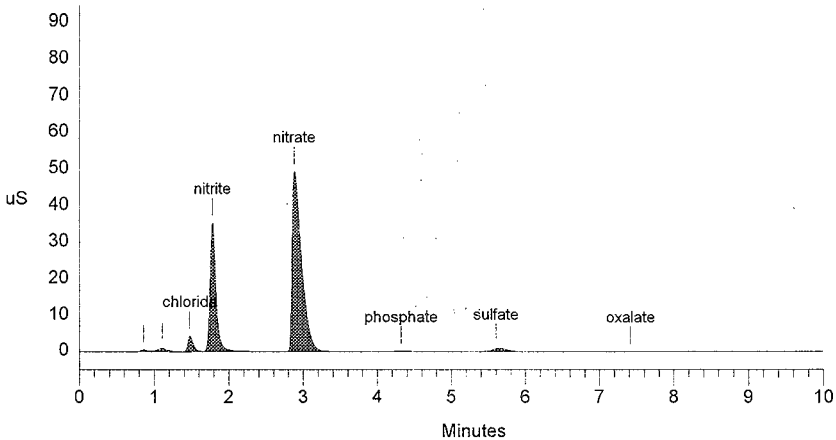
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           5151  3000  5Hz  0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	482	2665	2	
2	1.11		0.000	1085	9253	2	
3	1.47	chloride	8396.586	4391	22286	1	-1.78
4	1.78	nitrite	104629.898	35269	198300	1	-1.66
5	2.88	nitrate	248208.149	49352	439190	1	0.00
6	4.32	phosphate	3439.570	189	2315	1	1.25
7	5.60	sulfate	6244.212	855	13588	1	0.00
8	7.41	oxalate	671.540	36	693	1	2.21
Totals			371589.955	91658	688290		

**File: 98082101.D38 Sample: S98T002244 DUP**



Data Reprocessed On 08/24/1998 14:51:31

```

=====
Sample Name: S98T002248 SAM                               Date: 08/22/1998 03:38:39
Data File  : F:\DATA\98082101.D39
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 39                      Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

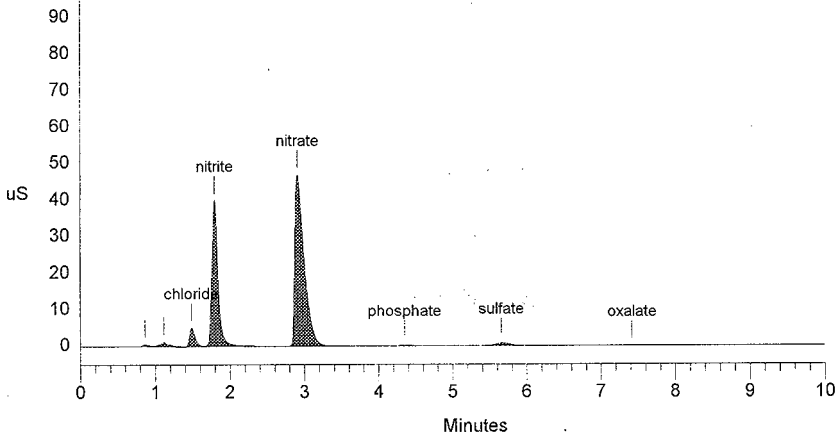
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           5151   3000 5Hz   0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.86		0.000	474	2705	2	
2	1.11		0.000	1245	10590	2	
3	1.48	chloride	10113.598	5141	27020	1	-1.33
4	1.79	nitrite	120838.197	39789	229742	1	-0.92
5	2.91	nitrate	234671.860	46909	412893	1	-0.11
6	4.35	phosphate	2846.375	152	1853	1	1.88
7	5.65	sulfate	4984.210	809	11051	1	0.95
8	7.41	oxalate	474.024	24	379	1	2.21
Totals			373928.264	94543	696233		

File: 98082101.D39 Sample: S98T002248 SAM



Data Reprocessed On 08/24/1998 14:52:53

```

=====
Sample Name: S98T002248 DUP                               Date: 08/22/1998 03:49:45
Data File  : F:\DATA\98082101.D40
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 40                     Detector:CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

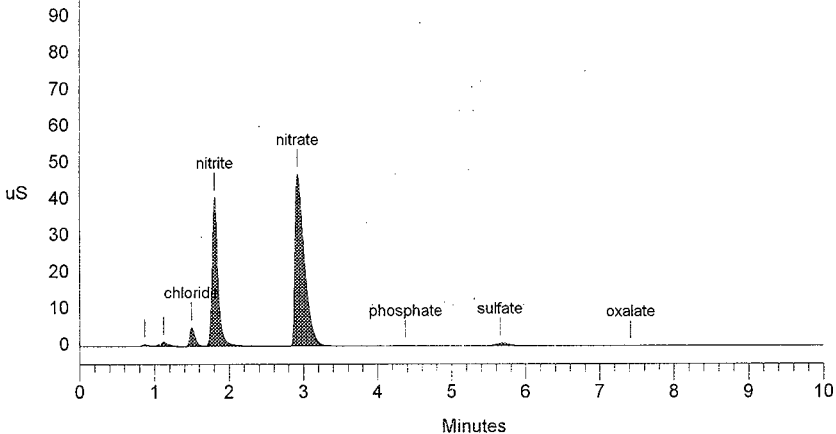
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           5151  3000  5Hz   0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.87		0.000	502	2890	2	
2	1.12		0.000	1259	10841	2	
3	1.49	chloride	9892.749	5198	26408	1	-0.44
4	1.81	nitrite	119658.047	40688	227448	1	-0.18
5	2.92	nitrate	235955.202	47177	415372	1	0.00
6	4.37	phosphate	3000.397	159	1973	1	2.50
7	5.65	sulfate	4565.868	741	10209	1	0.95
8	7.41	oxalate	480.942	24	390	1	2.21
Totals			373553.205	95748	695531		

File: 98082101.D40 Sample: S98T002248 DUP



Data Reprocessed On 08/24/1998 14:54:18

```

=====
Sample Name: S98T002248 SPK                               Date: 08/22/1998 04:00:32
Data File  : F:\DATA\98082101.D41
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 41                      Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

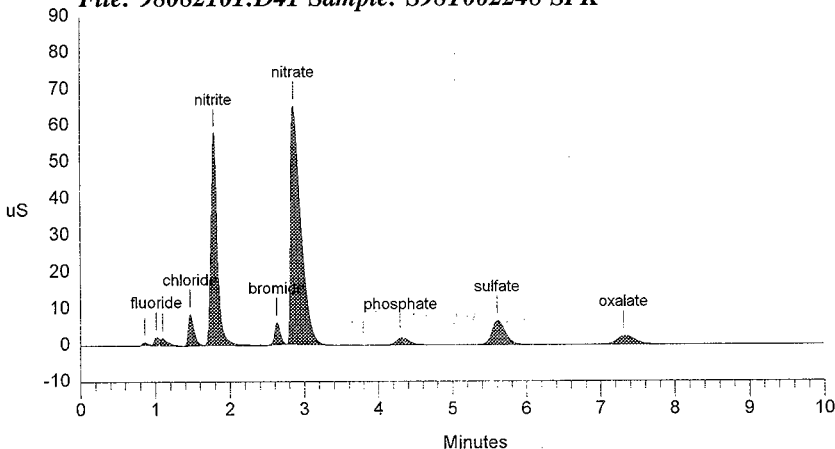
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          5151    3000 5Hz  0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	671	3146	2	
2	1.01	fluoride	2761.871	2301	10799	2	1.33
3	1.10		0.000	1988	12699	2	
4	1.47	chloride	16518.511	8589	45295	1	-2.22
5	1.79	nitrite	180973.619	57727	347703	1	-1.29
6	2.63	bromide	26790.479	6054	32599	1	0.51
7	2.85	nitrate	338214.770	65080	622900	1	0.12
8	3.79		0.000	34	270	1	
9	4.29	phosphate	30872.228	1850	23985	1	0.63
10	5.60	sulfate	40811.289	6529	84533	1	0.00
11	7.31	oxalate	25660.346	2361	40653	1	0.74
Totals			662603.112	153184	1224582		

File: 98082101.D41 Sample: S98T002248 SPK



# LABCORE Completed Worklist Report for Worklist# 25764

Analyst: adp Instrument: IC40S1 Book# 149N20D

Method: 14-533-105 Rev/Mod E-0

Worklist Comment: U107, @IC-01, tdm

Seq Type	Sample#	RA	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	••IC-QC	F	QC	1	<1.20e-2	ug/mL
1	CCB	0	••IC-QC	CL	QC	1	<1.70e-2	ug/mL
1	CCB	0	••IC-QC	NO2	QC	1	<1.08e-1	ug/mL
1	CCB	0	••IC-QC	BR	QC	1	<1.25e-1	ug/mL
1	CCB	0	••IC-QC	NO3	QC	1	<1.39e-1	ug/mL
1	CCB	0	••IC-QC	PO4	QC	1	<1.20e-1	ug/mL
1	CCB	0	••IC-QC	SO4	QC	1	<1.38e-1	ug/mL
1	CCB	0	••IC-QC	OXALATE2	QC	1	<1.05e-1	ug/mL
2	ICV	0	••IC-QC	F	QC	5.90e1	6.66e+01	112.881 % Recovery
2	ICV	0	••IC-QC	CL	QC	8.00e1	7.83e+01	97.875 % Recovery
2	ICV	0	••IC-QC	NO2	QC	5.24e2	5.07e+02	96.756 % Recovery
2	ICV	0	••IC-QC	BR	QC	5.86e2	5.76e+02	98.294 % Recovery
2	ICV	0	••IC-QC	NO3	QC	5.92e2	5.83e+02	98.480 % Recovery
2	ICV	0	••IC-QC	PO4	QC	5.47e2	5.22e+02	95.430 % Recovery
2	ICV	0	••IC-QC	SO4	QC	6.38e2	6.21e+02	97.335 % Recovery
2	ICV	0	••IC-QC	OXALATE2	QC	5.26e2	5.03e+02	95.627 % Recovery
3	CCV	0	••IC-QC	F	QC	6.40e1	6.83e+01	106.719 % Recovery
3	CCV	0	••IC-QC	CL	QC	9.00e1	8.99e+01	99.889 % Recovery
3	CCV	0	••IC-QC	NO2	QC	5.43e2	5.16e+02	95.028 % Recovery
3	CCV	0	••IC-QC	BR	QC	6.30e2	6.21e+02	98.571 % Recovery
3	CCV	0	••IC-QC	NO3	QC	6.98e2	7.14e+02	102.292 % Recovery
3	CCV	0	••IC-QC	PO4	QC	6.32e2	6.04e+02	95.570 % Recovery
3	CCV	0	••IC-QC	SO4	QC	6.99e2	6.83e+02	97.711 % Recovery
3	CCV	0	••IC-QC	OXALATE2	QC	5.26e2	5.15e+02	97.909 % Recovery
4	SAMPLE	S98T002252	••IC-01	F-02	LIQUID	N/A	< 6.181e+01	61.810 ug/mL
4	SAMPLE	S98T002252	••IC-01	CL-02	LIQUID	N/A	1.112e+04	87.570 ug/mL
4	SAMPLE	S98T002252	••IC-01	NO2-02	LIQUID	N/A	1.287e+05	556.300 ug/mL
4	SAMPLE	S98T002252	••IC-01	BR-02	LIQUID	N/A	< 6.439e+02	643.900 ug/mL
4	SAMPLE	S98T002252	••IC-01	NO3-02	LIQUID	N/A	1.886e+05	716.000 ug/mL
4	SAMPLE	S98T002252	••IC-01	PO4-02	LIQUID	N/A	2.838e+03	618.100 ug/mL
4	SAMPLE	S98T002252	••IC-01	SO4-02	LIQUID	N/A	4.123e+03	710.800 ug/mL
4	SAMPLE	S98T002252	••IC-01	OXALATE2	LIQUID	N/A	< 5.409e+02	540.900 ug/mL
5	DUP	S98T002252	••IC-01	F-02	LIQUID	<6.18e1	<6.18e1	RPD
5	DUP	S98T002252	••IC-01	CL-02	LIQUID	1.11e+04	1.09e+04	1.818 RPD
5	DUP	S98T002252	••IC-01	NO2-02	LIQUID	1.29e+05	1.30e+05	0.772 RPD
5	DUP	S98T002252	••IC-01	BR-02	LIQUID	<6.44e2	<6.44e2	RPD
5	DUP	S98T002252	••IC-01	NO3-02	LIQUID	1.89e+05	1.89e+05	0.000 RPD
5	DUP	S98T002252	••IC-01	PO4-02	LIQUID	2.84e+03	2.78e+03	2.135 RPD
5	DUP	S98T002252	••IC-01	SO4-02	LIQUID	4.12e+03	4.02e+03	2.457 RPD
5	DUP	S98T002252	••IC-01	OXALATE2	LIQUID	<5.41e2	<5.41e2	RPD
6	SPK	S98T002252	••IC-01	F-02	LIQUID	5.90e1	5.66e+01	95.932 % Recovery

Units shown for QC (BLK/BKG) may not reflect the actual units.



HNF-1661 REV. 0

# LABCORE Completed Worklist Report for Worklist# 25764

Seq Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
6 SPK	S98T002252	0	@IC-01	CL-02	LIQUID	8.00e1	6.92e+01	86.500 %	Recovery
6 SPK	S98T002252	0	@IC-01	NO2-02	LIQUID	5.24e2	5.41e+02	103.244 %	Recovery
6 SPK	S98T002252	0	@IC-02	BR-02	LIQUID	5.86e2	5.51e+02	94.027 %	Recovery
6 SPK	S98T002252	0	@IC-01	NO3-02	LIQUID	5.92e2	6.33e+02	106.926 %	Recovery
6 SPK	S98T002252	0	@IC-01	PO4-02	LIQUID	5.47e2	4.93e+02	90.128 %	Recovery
6 SPK	S98T002252	0	@IC-01	SO4-02	LIQUID	6.38e2	6.26e+02	98.119 %	Recovery
6 SPK	S98T002252	0	@IC-01	OXALATE2	LIQUID	5.26e2	5.03e+02	95.627 %	Recovery

**Final page for worklist# 25764**

Analyst Signature

Date

Analyst Signature

Date

*James M. Lutz* 8/24/98  
Reviewer Signature Date

HNF-1661 REV. 0

08/20/98 14:01  
A-0004-1

Page: 1

# LABCORE Data Entry Template for Worklist# 25764

Analyst: ADD Instrument: IC 4051 Book# <sup>ADP</sup> 127-129149N201

Method: LA-533-105 Rev/Mod E-0 8-21-98

Worklist Comment: U107, @IC-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC-QC	QC		
2	ICV		@IC-QC	QC		
3	CCV		@IC-QC	QC		
4	SAMPLE	S98T002252 0	@IC-01	LIQUID	98000359	U-1C7 (2)
		Analytes Requested: BR-02 , CL-02 , F-02 , NO2-C2 , NO3-02 , OXALATE2, PO4-02 , SO4-02				
5	DUP	S98T002252 0	@IC-01	LIQUID		
6	SPK	S98T002252 0	@IC-01	LIQUID		

### Final page for worklist # 25764

Arthur Parvuta 8-21-98  
Analyst Signature Date

Analyst Signature Date

Validated 8/24/98 JM Luy

Data Entry Comments: uploaded 8-24-98  
John Worell  
25764AUG.CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

## HNF-1661 REV. 0

Sample Name: 149N20-D Date: 08/21/1998 19:53:19  
 Data File : C:\DX\DATA\98082101.D15  
 Method : C:\DX\METHOD\KIT.MET  
 ACI Address: 1 System: 1 Inject#: 15 Detector: CDM-1  
 Analyst : *Autly Parvath* Column: AG4A/AS4A anion column

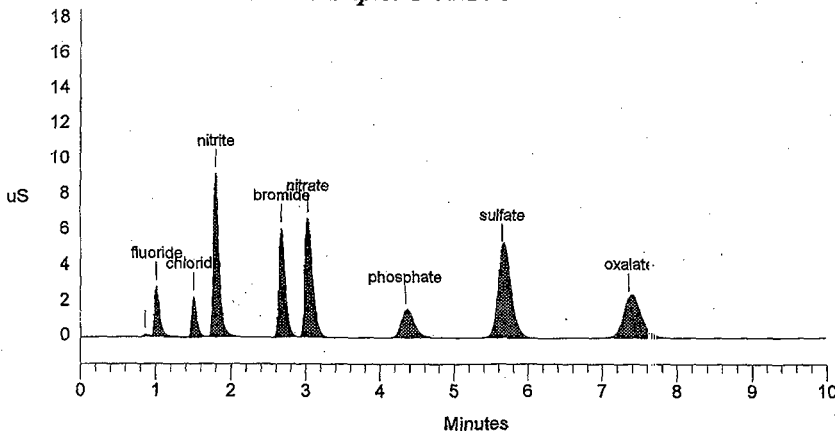
8-21-98

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.86		0.000	102	458	2	
2	1.01	fluoride	66.641/12.95	2825	13349	2	1.33
3	1.51	chloride	78.30697.95	2300	10435	1	0.44
4	1.80	nitrite	507.06356.77	9178	47532	1	-0.55
5	2.68	bromide	576.04098.30	6097	35870	1	2.55
6	3.03	nitrate	582.56198.41	6635	47550	1	-3.92
7	4.35	phosphate	521.87995.41	1574	20580	1	1.88
8	5.65	sulfate	621.06997.35	5030	65525	1	0.95
9	7.36	oxalate	503.37295.69	2261	40672	1	1.47
Totals			3456.932	36002	281970		

File: 98082101.D15 Sample: 149N20-D



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 789 TO 794.

SS.100-10

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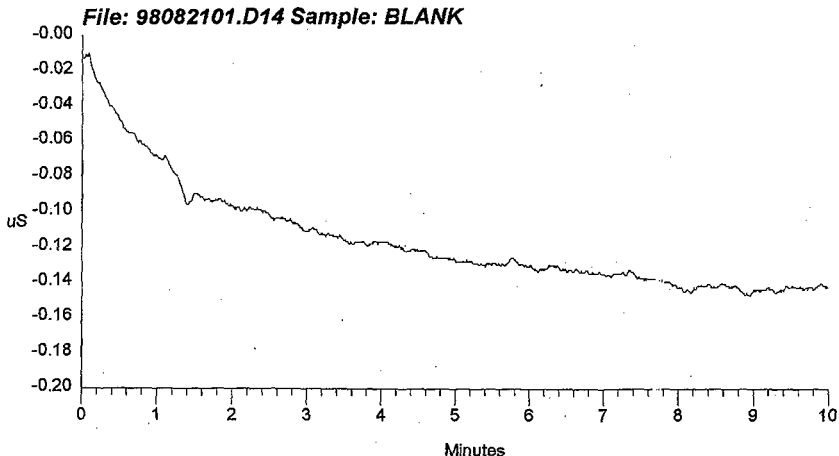
=====
Sample Name: BLANK                               Date: 08/21/1998 19:31:38
Data File  : C:\DX\DATA\98082101.D14
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 14           Detector: CDM-1
Analyst    :                               Column: AG4A/AS4A anion column
=====

```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	3000	5Hz	0.00	10.00		30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		



SS1

HNF-1661 REV.0

Data Reprocessed On 08/21/1998 20:26:39

```

=====
Sample Name: 148N20-D          Date: 08/21/1998 20:19:39
Data File  : C:\DX\DATA\98082101.D16
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 16          Detector: CDM-1
Analyst    :                      Column: AG4A/AS4A anion ccolumn
=====

```

```

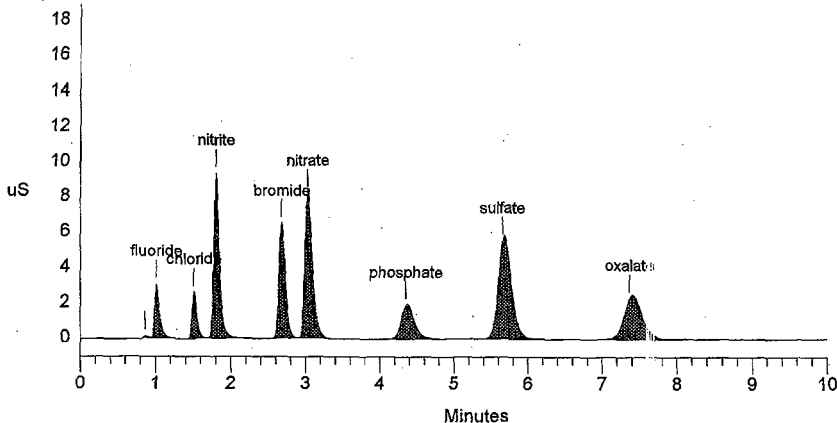
=====
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           101    3000  5Hz   0.00 10.00      30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.86		0.000	105	455	2	
2	1.01	fluoride	68.275	3023	13684	2	1.33
3	1.51	chloride	89.872	2614	11999	1	0.44
4	1.80	nitrite	515.604	9340	48356	1	-0.55
5	2.67	bromide	621.188	6473	38789	1	2.30
6	3.02	nitrate	713.646	8183	58640	1	0.00
7	4.35	phosphate	604.223	1874	23940	1	1.88
8	5.65	sulfate	683.173	5558	72093	1	0.95
9	7.36	oxalate	514.502	2278	41584	1	1.47
Totals			3810.485	39449	309540		

File: 98082101.D16 Sample: 148N20-D



55.100-10

```

Sample Name: S98T002252 SAM                               Date: 08/21/1998 21:00:11
Data File  : F:\DATA\98082101.D18
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 18                     Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
    
```

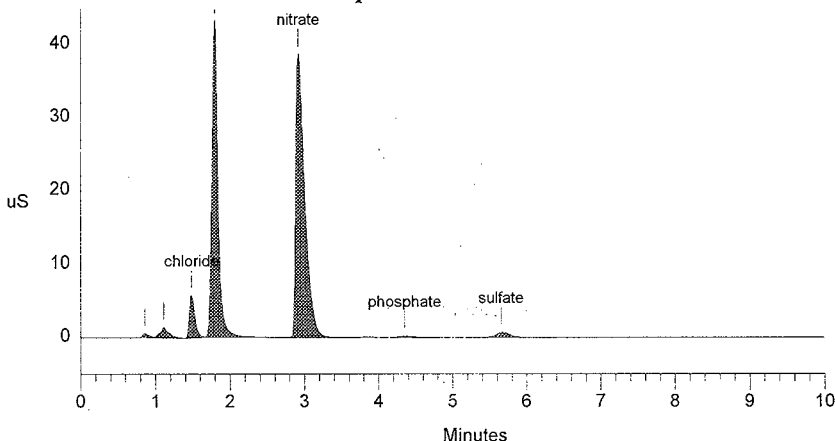
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Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           5151  3000  5Hz  0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	502	2918	2	
2	1.11		0.000	1413	11870	2	
3	1.48	chloride	11115.205	5786	29813	1	-1.33
4	1.79	nitrite	128661.754	43259	244971	1	-0.92
5	2.91	nitrate	188617.529	38709	325694	1	0.11
6	4.35	phosphate	2837.760	154	1847	1	1.88
7	5.65	sulfate	4123.179	691	9319	1	0.95
Totals			335355.427	90515	626431		

*File: 98082101.D18 Sample: S98T002252 SAM*



Data Reprocessed On 08/24/1998 13:55:55

```

=====
Sample Name: S98T002252 DUP                               Date: 08/21/1998 21:12:16
Data File  : F:\DATA\98082101.D19
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 19                      Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

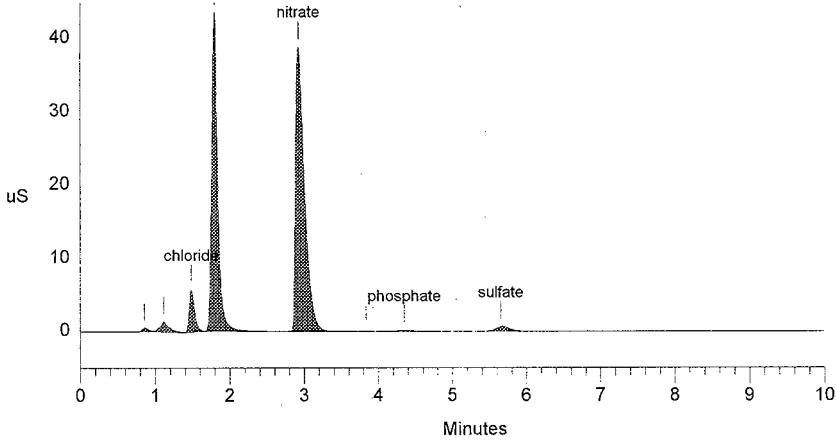
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          5151    3000  5Hz   0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	497	2760	2	
2	1.11		0.000	1430	11568	2	
3	1.48	chloride	10872.300	5784	29133	1	-1.33
4	1.79	nitrite	130189.062	43585	247948	1	-0.92
5	2.92	nitrate	188968.228	38913	326345	1	0.00
6	3.83		0.000	18	138	1	
7	4.35	phosphate	2778.612	152	1801	1	1.88
8	5.65	sulfate	4015.907	686	9103	1	0.95
Totals			336824.109	91065	628796		

File: 98082101.D19 Sample: S98T002252 DUP



Data Reprocessed On 08/24/1998 13:57:27

```

=====
Sample Name: S98T002252 SPK                               Date: 08/21/1998 21:25:07
Data File  : F:\DATA\98082101.D20
Method     : C:\DX\METHOD\KIT.MET
ACI Address: 1 System: 1 Inject#: 20                     Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

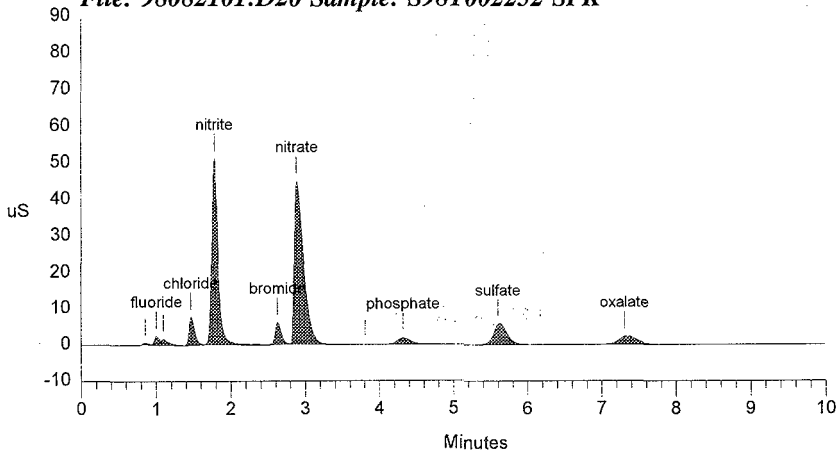
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           5151   3000 5Hz   0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.85		0.000	573	2866	2	
2	1.01	fluoride	2856.292	2432	11176	2	0.67
3	1.10		0.000	1617	10503	2	
4	1.47	chloride	14608.200	7809	39737	1	-2.22
5	1.79	nitrite	156002.317	51181	298466	1	-1.29
6	2.63	bromide	27829.239	6079	33911	1	0.51
7	2.89	nitrate	220596.163	44762	385878	1	-0.12
8	3.81		0.000	19	131	1	
9	4.32	phosphate	27735.937	1772	21474	1	1.25
10	5.60	sulfate	35732.152	5666	73943	1	0.00
11	7.31	oxalate	25390.678	2268	40219	1	0.74
Totals			510750.978	124178	918305		

File: 98082101.D20 Sample: S98T002252 SPK





# LABCORE Completed Worklist Report for Worklist# 25768

Analyst: adp

Instrument: IC45S2

Book#: 131N20B

Method: LA-533-X105

Rev/Mod F-0

Worklist Comment: U107, @IC4G-01, tdm

Seq Type	Sample#	RA	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	@IC4G-QC F*4	QC	1	<1.10e-2		ug/mL
1	CCB	0	@IC4G-QC ACETATE2	QC	1	<2.00e-2		ug/mL
1	CCB	0	@IC4G-QC FORMATE2	QC	1	<2.10e-2		ug/mL
1	CCB	0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2		ug/mL
2	ICV	0	@IC4G-QC F*4	QC	5.80e1	5.68e+01	97.931 %	Recovery
2	ICV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.15e+02	98.291 %	Recovery
2	ICV	0	@IC4G-QC FORMATE2	QC	1.27e2	1.18e+02	92.913 %	Recovery
2	ICV	0	@IC4G-QC GLYCOLT1	QC	1.01e2	9.41e+01	93.168 %	Recovery
3	CCV	0	@IC4G-QC F*4	QC	5.90e1	6.06e+01	102.712 %	Recovery
3	CCV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.26e+02	107.692 %	Recovery
3	CCV	0	@IC4G-QC FORMATE2	QC	1.32e2	1.43e+02	108.333 %	Recovery
3	CCV	0	@IC4G-QC GLYCOLT1	QC	1.16e2	1.28e+02	110.345 %	Recovery
4	SAMPLE	S98T002236	@IC4G-01 F*4-01	LIQUID	<u>N/A</u>	2.374e+01	18.790	ug/mL
4	SAMPLE	S98T002236	@IC4G-01 ACETATE2	LIQUID	<u>N/A</u>	7.844e+02	35.150	ug/mL
4	SAMPLE	S98T002236	@IC4G-01 FORMATE2	LIQUID	<u>N/A</u>	3.090e+03	37.570	ug/mL
5	DUP	S98T002236	@IC4G-01 F*4-01	LIQUID	2.37e+01	2.27e+01	4.310	RPD
5	DUP	S98T002236	@IC4G-01 ACETATE2	LIQUID	7.84e+02	7.86e+02	0.255	RPD
5	DUP	S98T002236	@IC4G-01 FORMATE2	LIQUID	3.09e+03	3.02e+03	2.291	RPD
5	DUP	S98T002236	@IC4G-01 GLYCOLT1	LIQUID	2.60e+03	2.47e+03	5.128	RPD
6	SPK	S98T002236	@IC4G-01 F*4-01	LIQUID	5.80e1	4.35e+01	75.000 %	Recovery
6	SPK	S98T002236	@IC4G-01 ACETATE2	LIQUID	1.17e2	1.24e+02	105.983 %	Recovery
6	SPK	S98T002236	@IC4G-01 FORMATE2	LIQUID	1.27e2	1.30e+02	102.362 %	Recovery
6	SPK	S98T002236	@IC4G-01 GLYCOLT1	LIQUID	1.01e2	9.35e+01	92.574 %	Recovery
7	SAMPLE	S98T002240	@IC4G-01 F*4-01	LIQUID	<u>N/A</u>	2.179e+01	18.790	ug/mL
7	SAMPLE	S98T002240	@IC4G-01 ACETATE2	LIQUID	<u>N/A</u>	8.182e+02	35.150	ug/mL
7	SAMPLE	S98T002240	@IC4G-01 FORMATE2	LIQUID	<u>N/A</u>	3.098e+03	37.570	ug/mL
8	DUP	S98T002240	@IC4G-01 F*4-01	LIQUID	2.18e+01	2.14e+01	1.852	RPD
8	DUP	S98T002240	@IC4G-01 ACETATE2	LIQUID	8.18e+02	8.33e+02	1.817	RPD
8	DUP	S98T002240	@IC4G-01 FORMATE2	LIQUID	3.10e+03	3.12e+03	0.643	RPD
8	DUP	S98T002240	@IC4G-01 GLYCOLT1	LIQUID	2.61e+03	2.62e+03	0.382	RPD

Final page for worklist# 25768

Analyst Signature

Date

Analyst Signature

Date

*Jean M. Lee* 9/24/98  
 Reviewer Signature Date

08/20/98 14:05  
A-0004-1

HNF-1661 REV. 0

Page: 1

## LABCORE Data Entry Template for Worklist# 25768

Analyst: ADP Instrument: IC \_\_\_\_\_ Book# 131A20-BMethod: LA-533-1105 Rev/Mod FO

Worklist Comment: U107, @IC4G-01, tdm.

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC4G-QC	QC		
2	ICV		@IC4G-QC	QC		
3	CCV		@IC4G-QC	QC		
4	SAMPLE	S98T002236 0	@IC4G-01	LIQUID	98000359	U-1C7 (2)
		Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCCLT1				
5	DUP	S98T002236 0	@IC4G-01	LIQUID		
6	SPK	S98T002236 0	@IC4G-01	LIQUID		
7	SAMPLE	S98T002240 0	@IC4G-01	LIQUID	98000359	U-1C7 (2)
		Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCCLT1				
8	DUP	S98T002240 0	@IC4G-01	LIQUID		

Final page for worklist # 25768

*Anthony Punter* 9-20-98  
 Analyst Signature Date

Analyst Signature Date

*glycolate rejected for CCV failure. Revalidated*

*9/24/98*

*glycolate reanalyzed on worklist #26338.*

*1/15/99*

Data Entry Comments:

*uploaded 9-23-98*

*John Howell*

*25768SEP.CSV*

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

## HNF-1661 REV. 0

Sample Name: 131N20-B Date: 09/20/1998 00:11:38  
 Data File : C:\DX\DATA\98091911.D05  
 Method : C:\DX\METHOD\GLYCOLIC.MET.  
 ACI Address: 1 System: 2 Inject#: 5 Detector: CDM-1  
 Analyst : Ed. Colvin Column: AG4A-SC, AS4A-SC, SRS

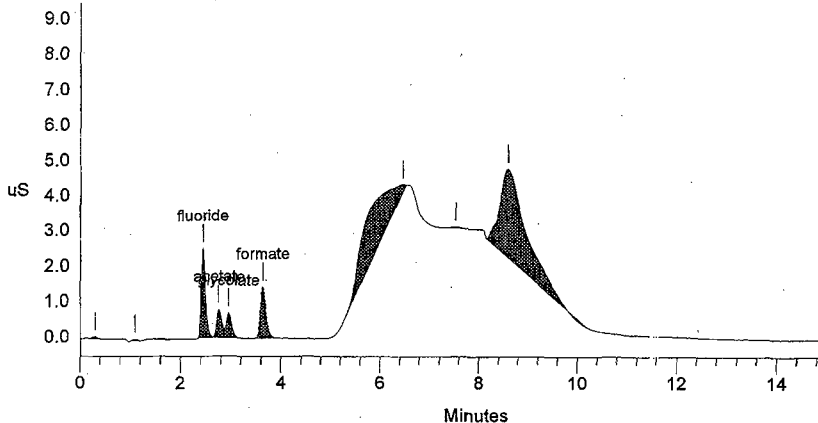
*Anthony Parvator 9-20-98*

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	4500	5Hz	0.00	15.00		0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.30		0.000	52	417	1	
2	1.10		0.000	45	322	1	
3	2.45	fluoride	56.789	97.91	2490	14605	2 0.00
4	2.76	acetate	114.581	97.93	776	5587	2 0.00
5	2.95	glycolate	94.071	93.14	676	5052	2 0.00
6	3.63	formate	117.574	92.58	1435	11223	1 0.00
7	6.47		0.000	175	62384	1	
8	7.53		0.000	29	266	1	
9	8.60		0.000	2519	94643	1	
Totals			383.015	8198	194500		

**File: 98091911.D05 Sample: 131N20-B**



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 797 TO 804.

*SS.100-10*

HNF-1661 REV. 0

```

=====
Sample Name: BLANK                      Date: 09/19/1998 22:43:49
Data File  : C:\DX\DATA\98091911.D01
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 1      Detector: CDM-1
Analyst    : Ed Colvin                   Column: AG4A-SC,AS4A-SC, SRS
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----

```

```

External          1          1    4500    5Hz    0.00  15.00    0

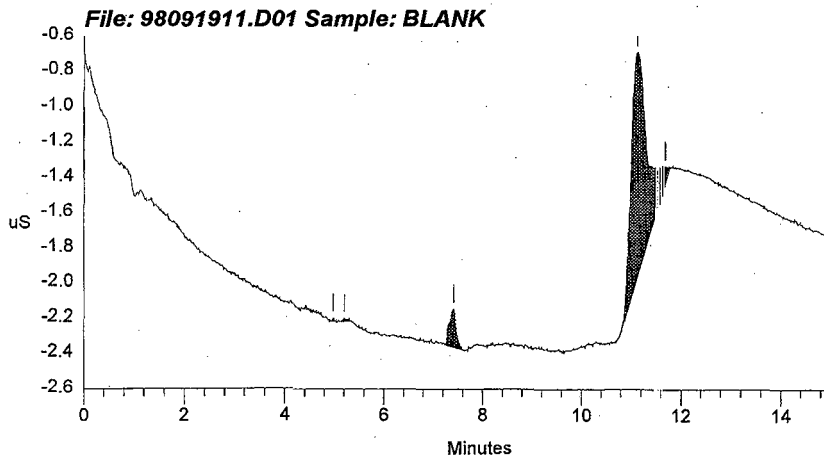
```

```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	4.97		0.000	14	30	1	
2	5.20		0.000	15	89	1	
3	7.41		0.000	213	2042	1	
4	11.13		0.000	1271	27179	3	
5	11.68		0.000	4	25	4	
Totals			0.000	1517	29365		



## HNF-1661 REV. 0

```

=====
Sample Name: 130N20-C                      Date: 09/20/1998 00:30:34
Data File  : C:\DX\DATA\98091911.D06
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 6        Detector: CDM-1
Analyst    : Ed Colvin                     Column: AG4A-SC,AS4A-SC, SRS
=====

```

```

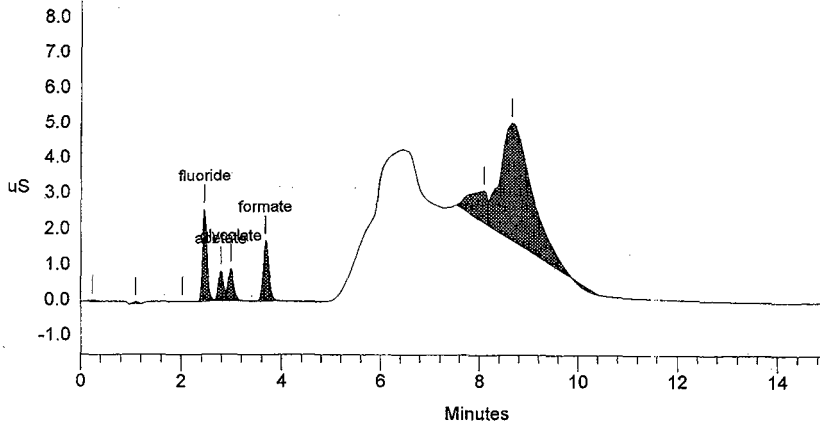
=====
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
-----
External           1           101  4500  5Hz  0.00  15.00  0
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	46	476	1	
2	1.10		0.000	45	313	1	
3	2.03		0.000	4	50	1	
4	2.46	fluoride	60.637	2575	15648	2	0.00
5	2.78	acetate	126.092	834	6154	2	0.00
6	2.98	glycolate	127.626	902	6983	2	0.00
7	3.67	formate	142.508	1710	13761	1	0.00
8	8.08		0.000	873	20423	2	
9	8.65		0.000	3312	148768	2	
Totals			456.862	10301	212575		

## File: 98091911.D06 Sample: 130N20-C



SS.100-10

Data Reprocessed On 09/23/1998 07:51:08

```

=====
Sample Name: S98T002236 SAM                               Date: 09/20/1998 02:18:38
Data File  : E:\DATA\98091911.D08
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 8                       Detector: CDM-1
Analyst    : Bd Colvin      Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

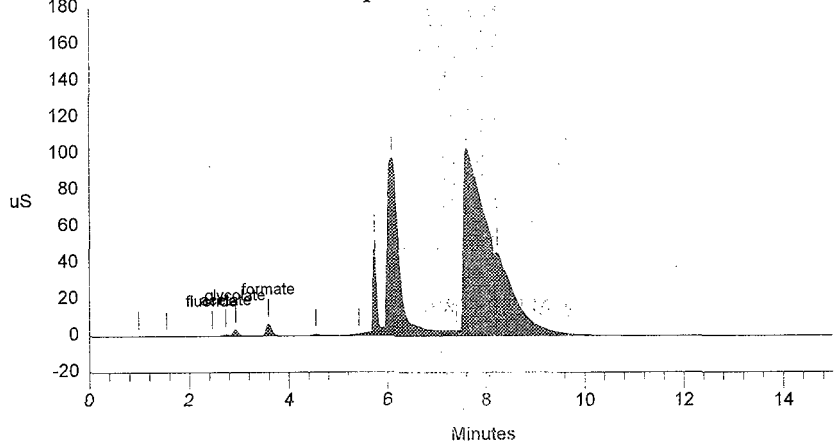
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           606   4500 5Hz   0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.98		0.000	75	542	1	
2	1.54		0.000	32	1299	1	
3	2.45	fluoride	23.742	68	451	1	0.00
4	2.73	acetate	784.433	916	6382	2	0.00
5	2.93	glycolate	2601.896	3466	26027	2	0.00
6	3.59	formate	3089.791	6535	53081	1	0.00
7	4.55		0.000	916	8297	1	
8	5.42		0.000	1016	10106	2	
9	5.73		0.000	52242	279878	2	
10	6.09		0.000	97508	1704604	3	
11	7.41		0.000	2996	38443	4	
12	7.61		0.000	102861	2947880	2	
13	8.23		0.000	45328	1321939	2	
Totals			6499.862	313959	6398928		

File: 98091911.D08 Sample: S98T002236 SAM



Data Reprocessed On 09/23/1998 07:55:15

```

=====
Sample Name: S98T002236 DUP           Date: 09/20/1998 02:48:30
Data File  : E:\DATA\98091911.D09
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 9   Detector: CDM-1
Analyst    : Ed Colvin                Column: AG4A-SC, AS4A-SC, SRS
=====
    
```

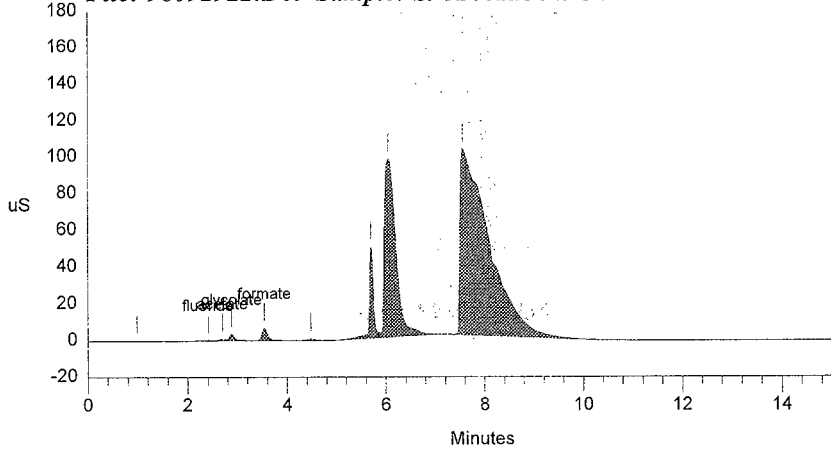
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          606    4500 5Hz  0.00 15.00          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.98		0.000	92	665	1	
2	2.41	fluoride	22.726	68	406	1	0.00
3	2.69	acetate	786.291	910	6397	2	0.00
4	2.88	glycolate	2467.870	3368	24535	2	0.00
5	3.54	formate	3015.676	6552	51731	1	0.00
6	4.48		0.000	886	8078	1	
7	5.70		0.000	49447	276584	2	
8	6.05		0.000	96748	1570174	2	
9	7.56		0.000	101105	4123298	1	
Totals			6292.563	259176	6061868		

File: 98091911.D09 Sample: S98T002236 DUP







Data Reprocessed On 09/23/1998 07:55:55

```

=====
Sample Name: S98T002240 SAM                      Date: 09/20/1998 03:25:38
Data File  : E:\DATA\98091911.D11
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 11             Detector: CDM-1
Analyst    : Ed Colvin                          Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

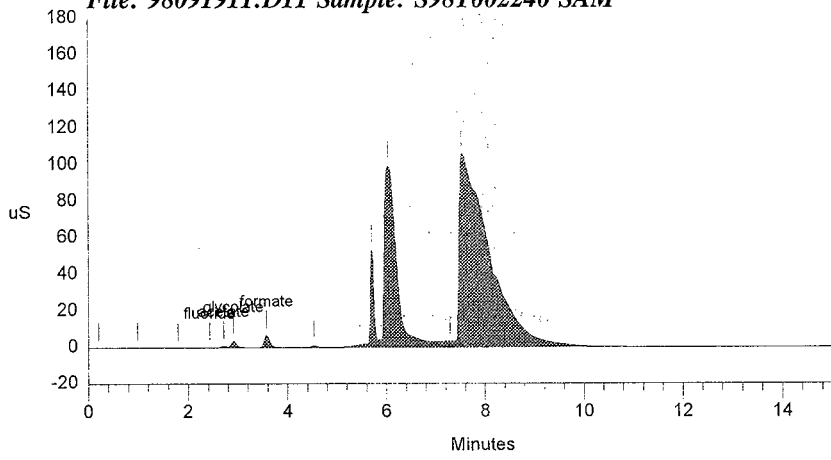
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           606   4500  5Hz   0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.21		0.000	29	441	1	
2	0.98		0.000	84	619	1	
3	1.80		0.000	50	1940	1	
4	2.43	fluoride	21.794	60	365	1	0.00
5	2.71	acetate	818.156	938	6658	2	0.00
6	2.91	glycolate	2610.157	3531	26120	2	0.00
7	3.57	formate	3097.819	6656	53227	1	0.00
8	4.53		0.000	938	8519	1	
9	5.71		0.000	53103	293153	2	
10	6.04		0.000	99115	1735547	3	
11	7.29		0.000	3216	62473	4	
12	7.53		0.000	105631	4475091	2	
Totals			6547.925	273351	6664152		

File: 98091911.D11 Sample: S98T002240 SAM



Data Reprocessed On 09/23/1998 07:54:00

```

=====
Sample Name: S98T002240 DUP                               Date: 09/20/1998 03:41:42
Data File  : E:\DATA\98091911.D12
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 12                      Detector: CDM-1
Analyst    : Ed Colvin      Column: AG4A-SC, AS4A-SC, SRS
=====
    
```

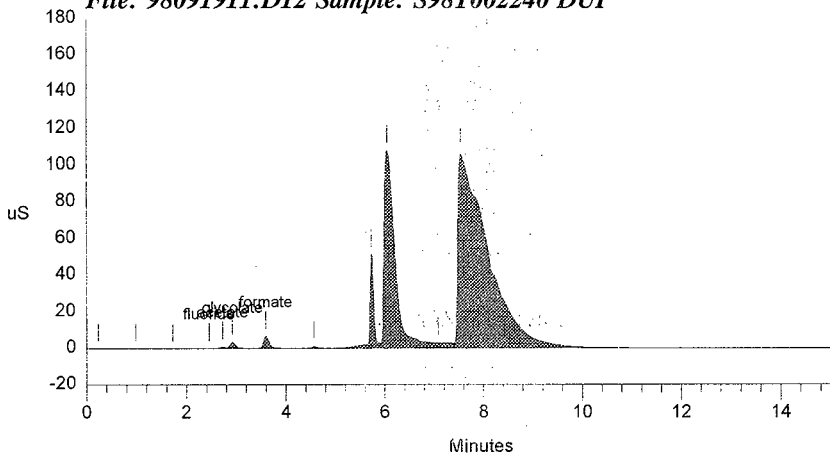
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           606   4500 5Hz   0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	24	277	1	
2	0.98		0.000	89	641	1	
3	1.73		0.000	40	1472	1	
4	2.45	fluoride	21.396	54	347	1	0.00
5	2.73	acetate	832.942	936	6778	2	0.00
6	2.92	glycolate	2619.699	3491	26227	2	0.00
7	3.59	formate	3121.782	6596	53664	1	0.00
8	4.57		0.000	918	8499	1	
9	5.73		0.000	51484	296833	2	
10	6.05		0.000	108048	1701831	3	
11	7.08		0.000	2099	56829	4	
12	7.54		0.000	106020	4482037	2	
Totals			6595.819	279802	6635435		

File: 98091911.D12 Sample: S98T002240 DUP



# LABCORE Completed Worklist Report for Worklist# 25769

Analyst: adp

Instrument: IC45S2

Book#: 130N20B

Method: LA-533-X105 <sup>OMP 9/24/98</sup> Rev/Mod F-D

Worklist Comment: U107, @IC4G-01, tdm

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	@IC4G-QC F*4	QC	1	<1.10e-2		ug/mL
1	CCB	0	@IC4G-QC ACETATE2	QC	1	<2.00e-2		ug/mL
1	CCB	0	@IC4G-QC FORMATE2	QC	1	<2.10e-2		ug/mL
1	CCB	0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2		ug/mL
2	ICV	0	@IC4G-QC F*4	QC	5.99e1	5.93e+01	98.998 %	Recovery
2	ICV	0	@IC4G-QC ACETATE2	QC	1.21e2	1.21e+02	100.000 %	Recovery
2	ICV	0	@IC4G-QC FORMATE2	QC	1.21e2	1.15e+02	95.041 %	Recovery
2	ICV	0	@IC4G-QC GLYCOLT1	QC	1.16e2	1.06e+02	91.379 %	Recovery
3	CCV	0	@IC4G-QC F*4	QC	5.90e1	5.63e+01	95.424 %	Recovery
3	CCV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.16e+02	99.145 %	Recovery
3	CCV	0	@IC4G-QC FORMATE2	QC	1.32e2	1.23e+02	93.182 %	Recovery
3	CCV	0	@IC4G-QC GLYCOLT1	QC	1.16e2	1.14e+02	98.276 %	Recovery
4	SAMPLE	S98T002244	@IC4G-01 F*4-01	LIQUID	N/A	2.070e+01	18.790	ug/mL
4	SAMPLE	S98T002244	@IC4G-01 ACETATE2	LIQUID	N/A	8.227e+02	35.150	ug/mL
4	SAMPLE	S98T002244	@IC4G-01 FORMATE2	LIQUID	N/A	3.265e+03	37.570	ug/mL
4	SAMPLE	S98T002244	@IC4G-01 GLYCOLT1	LIQUID	N/A	2.739e+03	33.940	ug/mL
5	DUP	S98T002244	@IC4G-01 F*4-01	LIQUID	2.07e+01	2.09e+01	0.962	RPD
5	DUP	S98T002244	@IC4G-01 ACETATE2	LIQUID	8.23e+02	8.58e+02	4.164	RPD
5	DUP	S98T002244	@IC4G-01 FORMATE2	LIQUID	3.26e+03	3.29e+03	0.916	RPD
5	DUP	S98T002244	@IC4G-01 GLYCOLT1	LIQUID	2.74e+03	2.77e+03	1.089	RPD
6	SAMPLE	S98T002248	@IC4G-01 F*4-01	LIQUID	N/A	2.034e+01	18.790	ug/mL
6	SAMPLE	S98T002248	@IC4G-01 ACETATE2	LIQUID	N/A	1.020e+03	35.150	ug/mL
6	SAMPLE	S98T002248	@IC4G-01 FORMATE2	LIQUID	N/A	3.877e+03	37.570	ug/mL
6	SAMPLE	S98T002248	@IC4G-01 GLYCOLT1	LIQUID	N/A	3.088e+03	33.940	ug/mL
7	DUP	S98T002248	@IC4G-01 F*4-01	LIQUID	2.03e+01	2.08e+01	2.433	RPD
7	DUP	S98T002248	@IC4G-01 ACETATE2	LIQUID	1.02e+03	1.04e+03	1.942	RPD
7	DUP	S98T002248	@IC4G-01 FORMATE2	LIQUID	3.88e+03	3.96e+03	2.041	RPD
7	DUP	S98T002248	@IC4G-01 GLYCOLT1	LIQUID	3.09e+03	3.13e+03	1.286	RPD
8	SPK	S98T002248	@IC4G-01 F*4-01	LIQUID	5.99e1	3.59e+01	59.933 %	Recovery
8	SPK	S98T002248	@IC4G-01 ACETATE2	LIQUID	1.21e2	1.25e+02	103.306 %	Recovery
8	SPK	S98T002248	@IC4G-01 FORMATE2	LIQUID	1.21e2	1.22e+02	100.826 %	Recovery
8	SPK	S98T002248	@IC4G-01 GLYCOLT1	LIQUID	1.16e2	8.93e+01	76.983 %	Recovery

Final page for worklist# 25769

Analyst Signature

Date

Analyst Signature

Date

*John M. Luge 9/24/98*

08/20/98 14:06  
A-0004-1

HNF-1661 REV. 0

Page: 1

**LABCORE Data Entry Template for Worklist# 25769**Analyst: ADP Instrument: IC \_\_\_\_\_ Book# 18JN20BMethod: LA-533-1<sup>105</sup> Rev/Mod F-0

Worklist Comment: U107, @IC4G-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Product
1	CCB		@IC4G-QC	QC		
2	ICV		@IC4G-QC	QC		
3	CCV		@IC4G-QC	QC		
4	SAMPLE	S98T002244 0	@IC4G-01	LIQUID	98000359	U-107 (2)
		<b>Analytes Requested:</b>	ACETATE2, F*4-01			FORMATE2, GLYCOLT1
5	DUP	S98T002244 0	@IC4G-01	LIQUID		
6	SAMPLE	S98T002248 0	@IC4G-01	LIQUID	98000359	U-107 (2)
		<b>Analytes Requested:</b>	ACETATE2, F*4-01			FORMATE2, GLYCOLT1
7	DUP	S98T002248 0	@IC4G-01	LIQUID		
8	SPK	S98T002248 0	@IC4G-01	LIQUID		

**Final page for worklist # 25769**

Anthony Puro 9-21-98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments:

uploaded, 9-23-98  
John Waneell  
25769SERCSV

Validated 9/24/98 mjays

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

HNF-1661 REV. 0

Data Reprocessed On 09/20/1998 21:50:30

Sample Name: 130N20-B Date: 09/20/1998 21:45:20  
 Data File : C:\DX\DATA\98092011.D14  
 Method : C:\DX\METHOD\GLYCOLIC.MET  
 ACI Address: 1 System: 2 Inject#: 14 Detector: CDM-1  
 Analyst : Ed Colvin Column: AG4A-SC, AS4A-SC, SRS

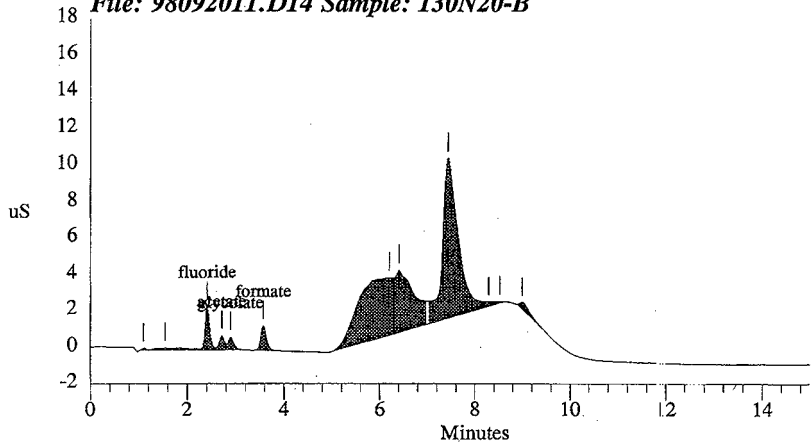
*Ed Colvin 9-20-98*

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	4500	5Hz	0.00	15.00		0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.10		0.000	86	526	2	
2	1.54		0.000	109	4890	2	
3	2.41	fluoride	59.285	2384	15282	2	0.00
4	2.71	acetate	121.432	762	5925	2	0.00
5	2.89	glycolate	106.020	689	5737	2	0.00
6	3.57	formate	114.534	1337	10914	1	0.00
7	6.21		0.000	3162	162470	2	
8	6.41		0.000	3433	95141	2	
9	7.43		0.000	8796	208162	3	
11	8.53		0.000	21	133	4	
12	9.00		0.000	375	5608	1	
Totals			401.273	21153	514787		

File: 98092011.D14 Sample: 130N20-B



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 807 TO 814.

*SS 1/00-10*

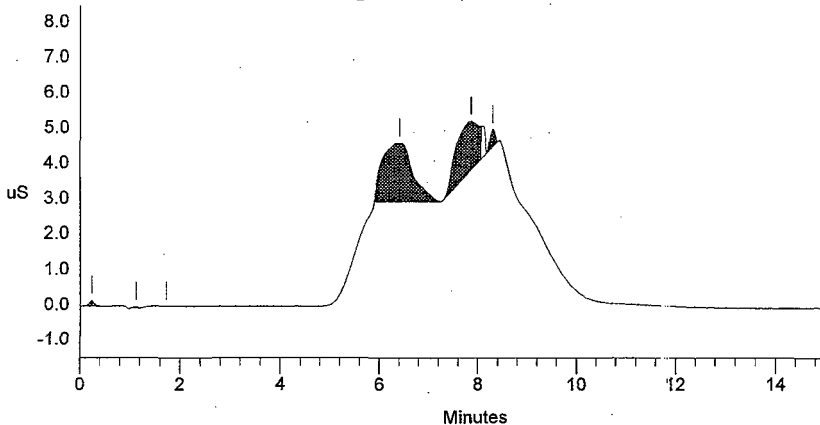
=====  
 Sample Name: BLANK Date: 09/21/1998 22:02:57  
 Data File : C:\DX\DATA\98092011.D15  
 Method : C:\DX\METHOD\GLYCOLIC.MET  
 ACTI Address: 1 System: 2 Inject#: 15 Detector:CDM-1  
 Analyst : Ed Colvin Column: AG4A-SC,AS4A-SC, SRS  
 =====

=====  
 Calibration Volume Dilution Points Rate Start Stop Area Reject  
 -----  
 External 1 1 4500 5Hz 0.00 15.00 0  
 =====

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	167	1201	1	
2	1.12		0.000	53	335	1	
3	1.73		0.000	6	48	1	
4	6.39		0.000	1658	70588	1	
5	7.84		0.000	1389	45348	2	
6	8.28		0.000	481	3326	2	
Totals			0.000	3754	120847		

File: 98092011.D15 Sample: BLANK



ADD  
 SS.100  
 SS |

Data Reprocessed On 09/23/1998 09:03:46

```

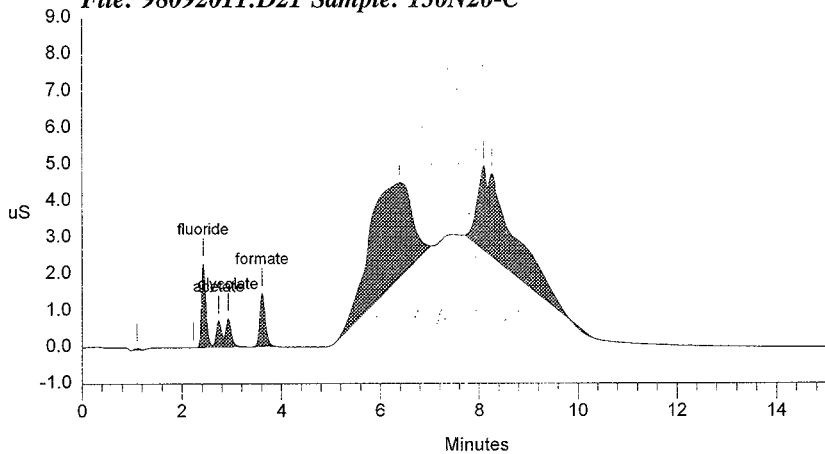
=====
Sample Name: 130N20-C                               Date: 09/21/1998 00:01:49
Data File  : E:\DATA\98092011.D21
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 21                Detector: CDM-1
Analyst    : Ed Colvin                               Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	4500	5Hz	0.00	15.00		0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.10		0.000	45	325	1	
2	2.22		0.000	6	26	2	
3	2.43	fluoride	56.253	2298	14461	2	0.00
4	2.73	acetate	116.095	729	5662	2	12.64
5	2.93	glycolate	114.248	790	6210	2	0.00
6	3.61	formate	123.233	1465	11798	1	0.00
7	6.39		0.000	2604	167414	1	
8	8.10		0.000	2315	30228	2	
9	8.26		0.000	2270	91343	2	
Totals			409.830	12523	327465		

File: 98092011.D21 Sample: 130N20-C



Data Reprocessed On 09/23/1998 09:05:19

```

=====
Sample Name: S98T002244 SAM                               Date: 09/20/1998 22:44:19
Data File  : E:\DATA\98092011.D17
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 17                      Detector: CDM-1
Analyst    : Ed Colvin                                    Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

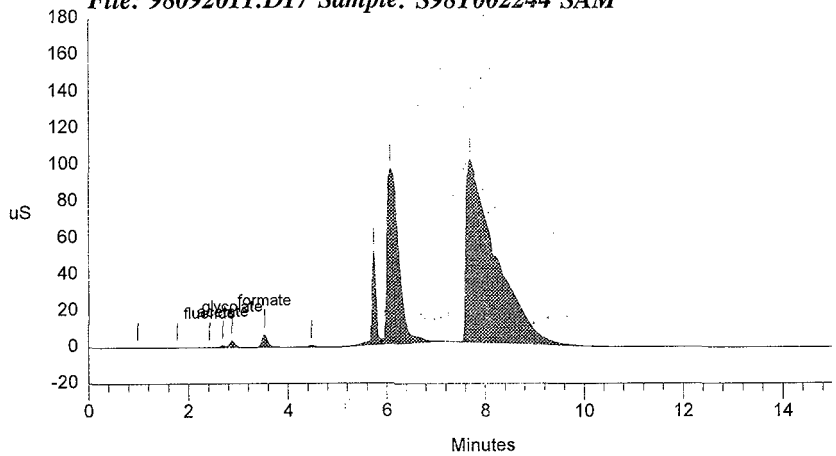
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           606 4500 5Hz  0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.98		0.000	77	562	1	
2	1.77		0.000	25	758	1	
3	2.42	fluoride	20.703	53	316	1	0.00
4	2.69	acetate	822.682	974	6695	2	0.00
5	2.87	glycolate	2738.632	3681	27569	2	0.00
6	3.53	formate	3264.688	6978	56279	1	0.00
7	4.47		0.000	991	8910	1	
8	5.73		0.000	51245	287722	2	
9	6.06		0.000	96015	1662920	2	
10	7.67		0.000	99904	4140957	1	
Totals			6846.705	259944	6192688		

File: 98092011.D17 Sample: S98T002244 SAM





Data Reprocessed On 09/23/1998 09:06:19

```

=====
Sample Name: S98T002244 DUP                      Date: 09/20/1998 23:00:16
Data File  : E:\DATA\98092011.D18
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 18             Detector: CDM-1
Analyst    : Ed Colvin                          Column: AG4A-SC, AS4A-SC, SRS
=====
    
```

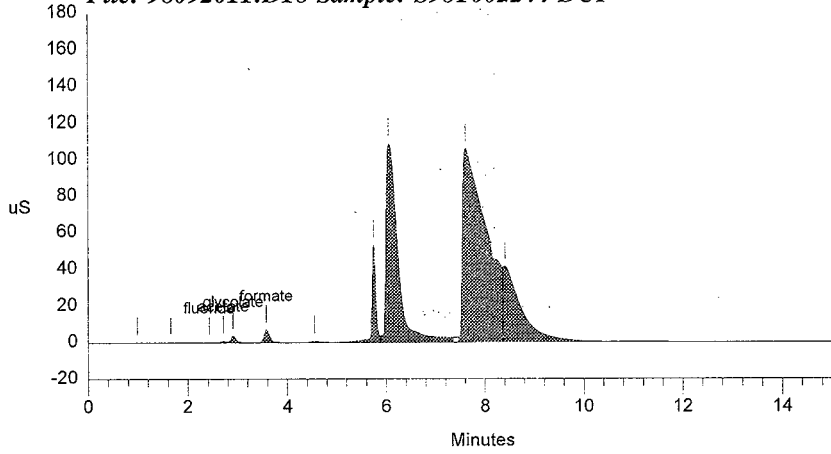
```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          606    4500 5Hz   0.00 15.00          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.98		0.000	73	577	1	
2	1.66		0.000	25	933	1	
3	2.43	fluoride	20.922	54	326	2	0.00
4	2.71	acetate	858.285	967	6985	2	0.00
5	2.91	glycolate	2774.302	3645	27975	2	0.00
6	3.57	formate	3287.579	6895	56699	1	0.00
7	4.55		0.000	977	9106	1	
8	5.75		0.000	53324	300522	2	
9	6.05		0.000	109042	1846136	2	
10	7.61		0.000	105781	3541563	2	
11	8.41		0.000	41499	1064612	2	
Totals			6941.088	322281	6855433		

File: 98092011.D18 Sample: S98T002244 DUP



Data Reprocessed On 09/23/1998 09:07:16

```

=====
Sample Name: S98T002248 SAM           Date: 09/21/1998 00:19:07
Data File  : E:\DATA\98092011.D22
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 22   Detector: CDM-1
Analyst    : Ed Colvin                Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

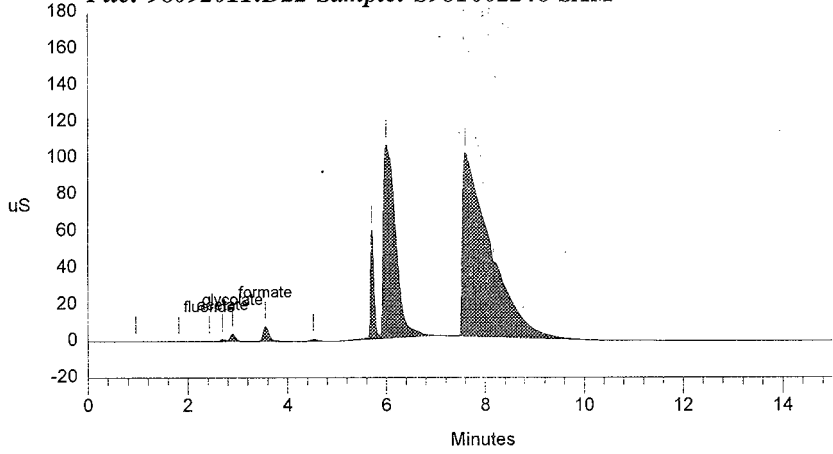
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           606 4500 5Hz  0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.96		0.000	84	756	1	
2	1.82		0.000	29	979	1	
3	2.43	fluoride	20.338	55	300	2	0.00
4	2.70	acetate	1020.489	1142	8301	2	0.00
5	2.89	glycolate	3088.461	4048	31609	2	0.00
6	3.56	formate	3876.636	8080	67622	1	0.00
7	4.53		0.000	1177	10692	1	
8	5.71		0.000	59080	305079	2	
9	6.00		0.000	105528	1844522	2	
10	7.60		0.000	99840	3930002	1	
Totals			8005.924	279064	6199861		

File: 98092011.D22 Sample: S98T002248 SAM



Data Reprocessed On 09/23/1998 09:08:11

```

=====
Sample Name: S98T002248 DUP                               Date: 09/21/1998 00:35:25
Data File  : E:\DATA\98092011.D23
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 23                     Detector: CDM-1
Analyst    : Ed Colvin                                   Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

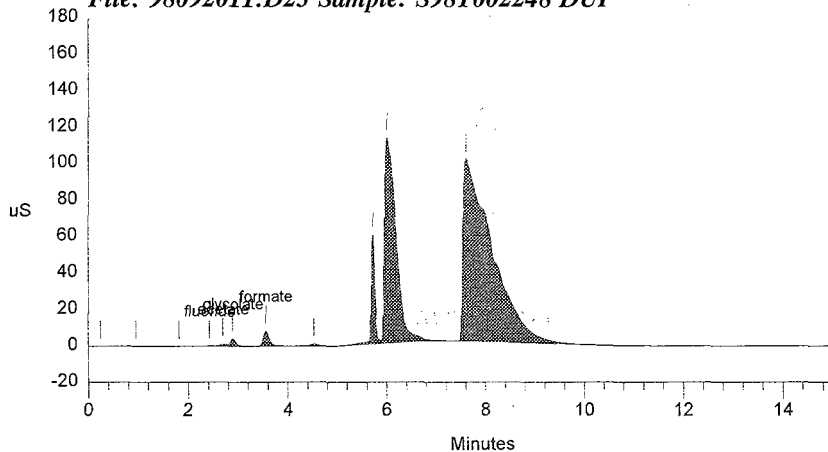
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           606 4500 5Hz  0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.26		0.000	31	354	1	
2	0.96		0.000	86	716	1	
3	1.82		0.000	48	1759	1	
4	2.43	fluoride	20.811	58	321	2	0.00
5	2.70	acetate	1037.272	1173	8437	2	0.00
6	2.89	glycolate	3129.631	4084	32094	2	0.00
7	3.56	formate	3955.186	8156	69095	2	0.00
8	4.53		0.000	1199	10918	1	
9	5.72		0.000	59978	320617	2	
10	6.01		0.000	112505	1830717	2	
11	7.61		0.000	99852	4055647	1	
Totals			8142.901	287171	6330675		

File: 98092011.D23 Sample: S98T002248 DUP



Data Reprocessed On 09/23/1998 09:08:51

```

=====
Sample Name: S98T002248 SPK          Date: 09/21/1998 00:52:23
Data File  : E:\DATA\98092011.D24
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 24  Detector: CDM-1
Analyst    : Ed Colvin              Column: AG4A-SC, AS4A-SC, SRS
=====
    
```

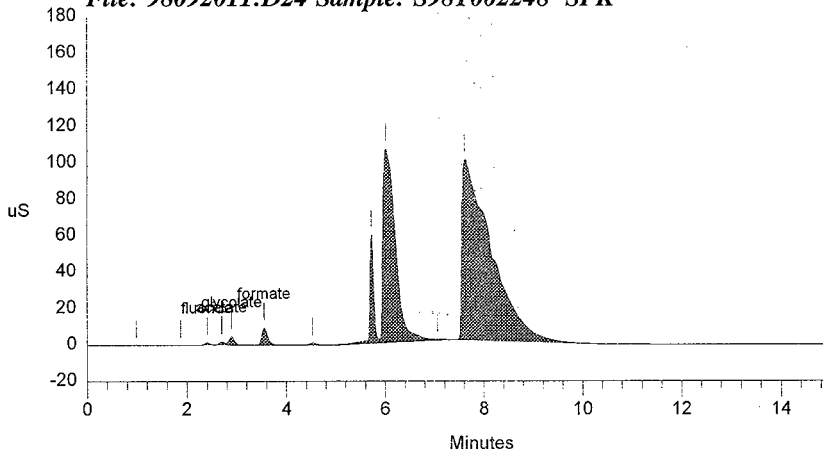
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          606    4500 5Hz   0.00 15.00          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.98		0.000	96	688	1	
2	1.87		0.000	44	1665	1	
3	2.40	fluoride	199.826	1304	8278	2	0.00
4	2.69	acetate	1646.381	1785	13282	2	0.00
5	2.89	glycolate	3534.740	4761	36983	2	0.00
6	3.55	formate	4488.109	9382	79204	1	0.00
7	4.53		0.000	1186	10893	1	
8	5.72		0.000	59360	319621	2	
9	6.01		0.000	106361	1873344	3	
10	7.06		0.000	127	974	4	
11	7.61		0.000	99133	4031516	1	
Totals			9869.056	283539	6376449		

File: 98092011.D24 Sample: S98T002248 SPK



# LABCORE Completed Worklist Report for Worklist# 25770

Analyst: adp

Instrument: IC45S2

Book#: 131N20B

Method: LA-533-1105 Rev/Mod FO

Worklist Comment: U107, @IC4G-01, tdm

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit	
1	CCB	0	@IC4G-QC F*4	QC	1	<1.10e-2		ug/mL	
1	CCB	0	@IC4G-QC ACETATE2	QC	1	<2.00e-2		ug/mL	
1	CCB	0	@IC4G-QC FORMATE2	QC	1	<2.10e-2		ug/mL	
1	CCB	0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2		ug/mL	
2	ICV	0	@IC4G-QC F*4	QC	5.80e1	5.96e+01	102.759 %	Recovery	
2	ICV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.16e+02	99.145 %	Recovery	
2	ICV	0	@IC4G-QC FORMATE2	QC	1.27e2	1.19e+02	93.701 %	Recovery	
2	ICV	0	@IC4G-QC GLYCOLT1	QC	1.01e2	1.01e+02	100.000 %	Recovery	
3	CCV	0	@IC4G-QC F*4	QC	5.90e1	5.59e+01	94.746 %	Recovery	
3	CCV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.09e+02	93.162 %	Recovery	
3	CCV	0	@IC4G-QC FORMATE2	QC	1.32e2	1.19e+02	90.152 %	Recovery	
3	CCV	0	@IC4G-QC GLYCOLT1	QC	1.16e2	1.09e+02	93.966 %	Recovery	
4	SAMPLE	S98T002252	0	@IC4G-01 F*4-01	LIQUID	N/A	2.112e+01	18.790 ug/mL	
4	SAMPLE	S98T002252	0	@IC4G-01 ACETATE2	LIQUID	N/A	1.256e+03	35.150 ug/mL	
4	SAMPLE	S98T002252	0	@IC4G-01 FORMATE2	LIQUID	N/A	4.503e+03	37.570 ug/mL	
4	SAMPLE	S98T002252	0	@IC4G-01 GLYCOLT1	LIQUID	N/A	3.158e+03	33.940 ug/mL	
5	DUP	S98T002252	0	@IC4G-01 F*4-01	LIQUID	2.11e+01	2.30e+01	8.617 RPD	
5	DUP	S98T002252	0	@IC4G-01 ACETATE2	LIQUID	1.26e+03	1.34e+03	6.154 RPD	
5	DUP	S98T002252	0	@IC4G-01 FORMATE2	LIQUID	4.50e+03	4.71e+03	4.560 RPD	
5	DUP	S98T002252	0	@IC4G-01 GLYCOLT1	LIQUID	3.16e+03	3.25e+03	2.808 RPD	
6	SPK	S98T002252	0	@IC4G-01 F*4-01	LIQUID	5.80e1	3.87e+01	66.724 %	Recovery
6	SPK	S98T002252	0	@IC4G-01 ACETATE2	LIQUID	1.17e2	1.40e+02	119.658 %	Recovery
6	SPK	S98T002252	0	@IC4G-01 FORMATE2	LIQUID	1.27e2	1.30e+02	102.362 %	Recovery
6	SPK	S98T002252	0	@IC4G-01 GLYCOLT1	LIQUID	1.01e2	9.42e+01	93.267 %	Recovery

Final page for worklist# 25770

Analyst Signature

Date

Analyst Signature

Date

*Jean M. Luge* 9/9/98  
Reviewer Signature Date

**LABCORE Data Entry Template for Worklist# 25770**

Analyst: ADD Instrument: IC 4552 Book# 131-N20-B

Method: LA-533-1205 Rev/Mod F-0

Worklist Comment: U107, @IC4G-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC4G-QC	QC		
2	ICV		@IC4G-QC	QC		
3	CCV		@IC4G-QC	QC		
4	SAMPLE	S98T002252 0	@IC4G-01 LIQUID		98000359 U-107 (2)	
		Analytes Requested: ACETATE2, F*4-01 , FORMATE2, GLYCOLT1				
5	DUP	S98T002252 0	@IC4G-01 LIQUID			
6	SPK	S98T002252 0	@IC4G-01 LIQUID			

**Final page for worklist # 25770**

ADD 9-7-98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

25770 sep.csv  
uploaded 9/9/98 MF

Validated 9/9/98 MF

Data Entry Comments:

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Data Reprocessed On 09/07/1998 09:29:41

Sample Name: ~~1031N20-B~~ 131N20-B Date: 09/07/1998 09:24:02  
 Data File : C:\DX\DATA\98090321.D03  
 Method : C:\DX\METHOD\GLYCOLIC.MET  
 ACI Address: 1 System: 2 Inject#: 3 Detector: CDM-1  
 Analyst : Ed Colvin Column: AG4A-SC, AS4A-SC, SRS

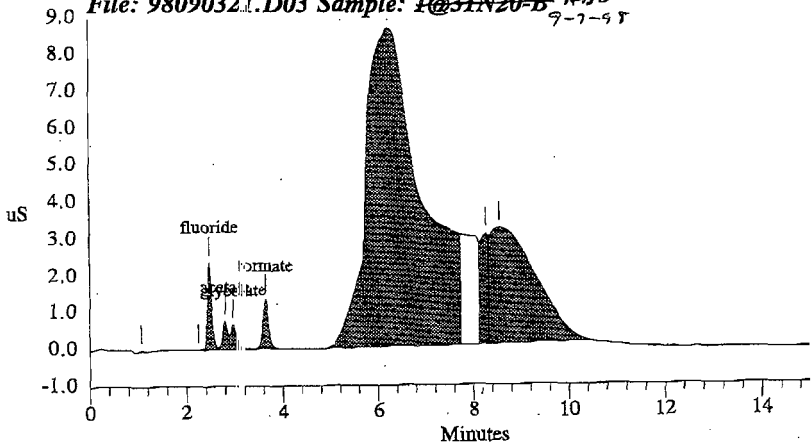
*Ed Colvin 9-7-98*

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	4500	5Hz	0.00	15.00		0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.07		0.000	47	363	1	
2	2.25		0.000	3	0	1	
3	2.48	fluoride	59.648	2385	14695	2	0.00
4	2.80	acetate	116.011	752	5633	2	0.00
5	2.97	glycolate	101.338	658	5225	2	0.00
6	3.64	formate	119.464	1334	10915	1	0.00
7	6.23		0.000	8728	709375	2	
8	8.27		0.000	3009	34465	2	
9	8.56		0.000	3174	209991	2	
Totals			396.461	20092	990663		

131N20-B  
 File: 98090321.D03 Sample: 1031N20-B  
 9-7-98



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 817 TO 822.

*65.600*

```

=====
Sample Name: BLANK                               Date: 09/07/1998 09:07:26
Data File  : C:\DX\DATA\98090321.D02
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System; 2 Inject#: 2             Detector: CDM-1
Analyst    : Ed Colvin                          Column: AG4A-SC, AS4A-SC, SRS
=====
    
```

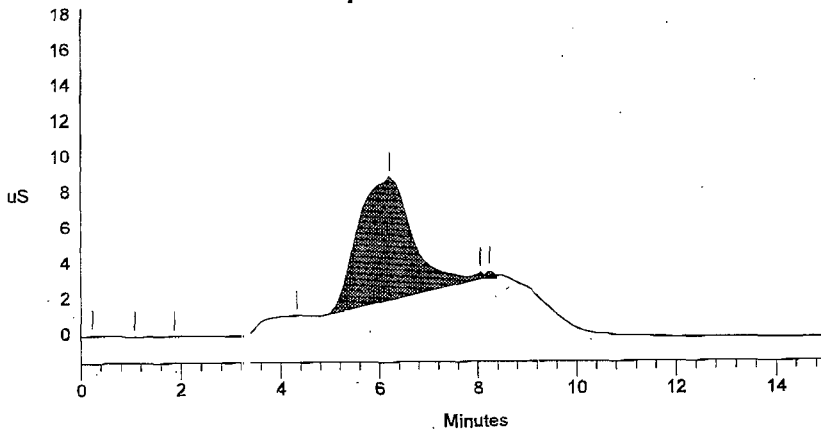
```

-----
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           1 4500 5Hz 0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	88	923	1	
2	1.07		0.000	59	439	1	
3	1.87		0.000	4	33	1	
4	4.33		0.000	11	19	1	
5	6.21		0.000	6994	540455	3	
6	8.06		0.000	172	969	4	
7	8.25		0.000	248	1736	4	
Totals			0.000	7577	544574		

File: 98090321.D02 Sample: BLANK



SS1



```

=====
Sample Name: 130N20-C                               Date: 09/07/1998 13:29:10
Data File  : C:\DX\DATA\98090331.D03
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACTI Address: 1 System: 2 Inject#: 3
Analyst    : Ed Colvin                               Column: AG4A-SC,AS4A-SC, SRS
Detector   : CDM-1
=====
    
```

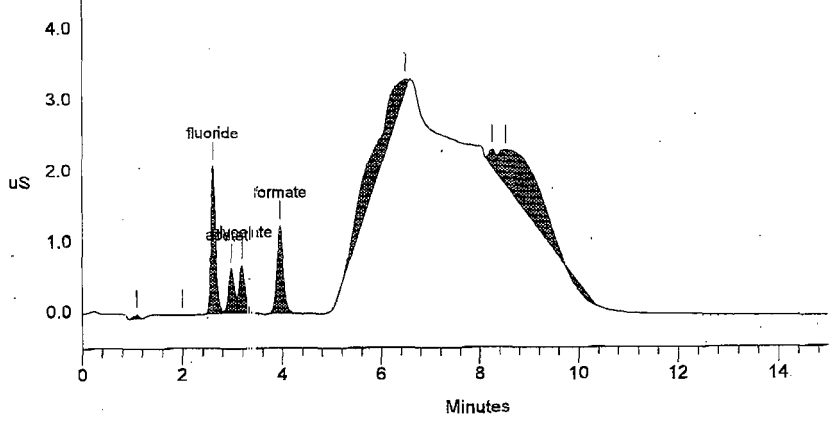
```

-----
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           101    4500 5Hz   0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.10		0.000	56	354	1	
2	2.01		0.000	8	91	1	
3	2.62	fluoride	55.877	2091	13709	2	0.00
4	2.98	acetate	109.221	640	5300	2	0.00
5	3.19	glycolate	108.740	681	5633	2	0.00
6	3.96	formate	118.871	1243	10857	1	0.00
7	6.51		0.000	173	31869	1	
8	8.27		0.000	240	2121	2	
9	8.54		0.000	493	36753	2	
Totals			392.710	5625	106687		

File: 98090331.D03 Sample: 130N20-C



SS .100-10

```

=====
Sample Name: S98T002252 SAM                               Date: 09/07/1998 13:47:37
Data File  : C:\DX\DATA\98090331.D04
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 4                       Detector: CDM-1
Analyst    : Ed Colvin      Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

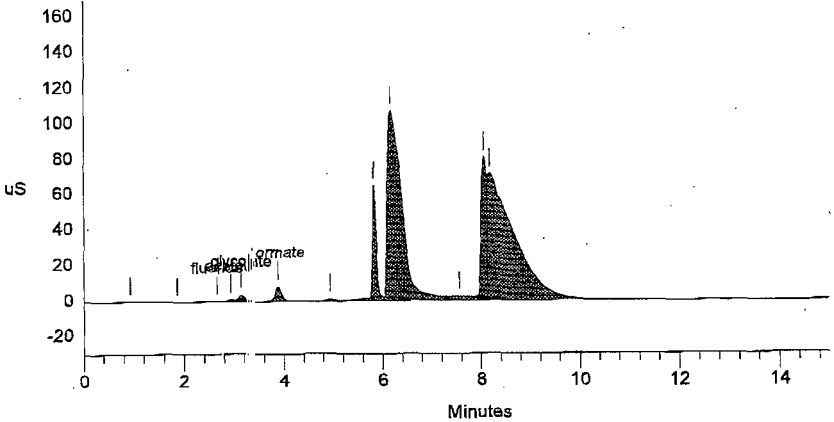
```

-----
Calibration Volume  Dilution Points Rate Start Stop Area Reject
-----
External           1           606 4500 5Hz 0.00 15.00 0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.93		0.000	81	645	1	
2	1.87		0.000	33	1391	1	
3	2.67	fluoride	21.120	38	214	2	0.00
4	2.94	acetate	1255.867	1315	10144	2	0.00
5	3.15	glycolate	3158.203	3812	30948	2	0.00
6	3.89	formate	4502.574	8677	78122	1	0.00
7	4.93		0.000	1217	12123	2	
8	5.83		0.000	65579	394211	2	
9	6.17		0.000	107587	2243893	3	
10	7.57		0.000	1933	54799	4	
11	8.06		0.000	81616	647422	2	
12	8.18		0.000	72148	2674903	2	
Totals			8937.764	344035	6148815		

File: 98090331.D04 Sample: S98T002252 SAM



SS.100-10 - 2-10



```

=====
Sample Name: S98T002252 SPK                               Date: 09/07/1998 14:22:20
Data File  : C:\DX\DATA\98090331.D06
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 6                       Detector: CDM-1
Analyst    : Ed Colvin                                     Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

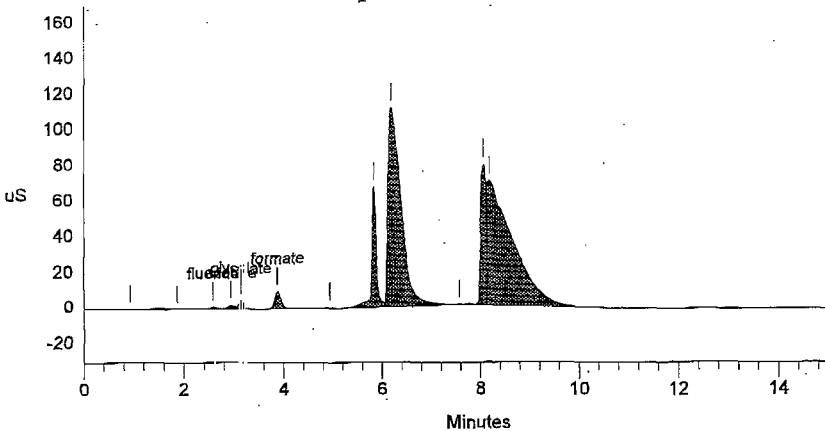
```

-----
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
-----
External           1           606   4500  5Hz   0.00  15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.93		0.000	86	675	1	
2	1.87		0.000	30	1282	1	
3	2.59	fluoride	214.816	1275	8491	2	0.00
4	2.94	acetate	1957.628	1900	15630	2	0.00
5	3.15	glycolate	3629.226	4471	36345	2	0.00
6	3.88	formate	5150.771	9778	90883	1	0.00
7	4.93		0.000	1098	9635	1	
8	5.83		0.000	68096	455561	2	
9	6.19		0.000	112186	2153629	3	
10	7.57		0.000	224	2071	4	
11	8.06		0.000	79358	610832	2	
12	8.18		0.000	69884	2508640	2	
Totals			10952.441	348386	5893674		

File: 98090331.D06 Sample: S98T002252 SPK



SS .100-10-2-10

SPK 131N20-B

# LABCORE Completed Worklist Report for Worklist# 26127

Analyst: kjt

Instrument: IC40S2

Book#: 21N21B

Method: LA-533-105

Rev/Mod F-0

Worklist Comment: U107, @IC-01, tdm

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	@IC-QC F	QC	1	<1.20e-2		ug/mL
1	CCB	0	@IC-QC CL	QC	1	<1.70e-2		ug/mL
1	CCB	0	@IC-QC NO2	QC	1	<1.08e-1		ug/mL
1	CCB	0	@IC-QC BR	QC	1	<1.25e-1		ug/mL
1	CCB	0	@IC-QC NO3	QC	1	<1.39e-1		ug/mL
1	CCB	0	@IC-QC P04	QC	1	<1.20e-1		ug/mL
1	CCB	0	@IC-QC S04	QC	1	<1.38e-1		ug/mL
1	CCB	0	@IC-QC OXALATEZ	QC	1	<1.05e-1		ug/mL
2	ICV	0	@IC-QC F	QC	5.90e1	6.06e+01	102.712 % Recovery	
2	ICV	0	@IC-QC CL	QC	8.00e1	7.81e+01	97.625 % Recovery	
2	ICV	0	@IC-QC NO2	QC	5.35e2	5.10e+02	95.327 % Recovery	
2	ICV	0	@IC-QC BR	QC	5.86e2	5.70e+02	97.270 % Recovery	
2	ICV	0	@IC-QC NO3	QC	5.92e2	5.80e+02	97.973 % Recovery	
2	ICV	0	@IC-QC P04	QC	5.47e2	5.17e+02	94.516 % Recovery	
2	ICV	0	@IC-QC S04	QC	6.38e2	6.12e+02	95.925 % Recovery	
2	ICV	0	@IC-QC OXALATEZ	QC	5.57e2	5.50e+02	98.743 % Recovery	
3	CCV	0	@IC-QC F	QC	6.40e1	6.42e+01	100.312 % Recovery	
3	CCV	0	@IC-QC CL	QC	9.00e1	9.20e+01	102.222 % Recovery	
3	CCV	0	@IC-QC NO2	QC	5.49e2	5.16e+02	93.989 % Recovery	
3	CCV	0	@IC-QC BR	QC	6.30e2	6.46e+02	102.540 % Recovery	
3	CCV	0	@IC-QC NO3	QC	6.98e2	7.53e+02	107.880 % Recovery	
3	CCV	0	@IC-QC P04	QC	6.32e2	6.34e+02	100.316 % Recovery	
3	CCV	0	@IC-QC S04	QC	6.99e2	7.02e+02	100.429 % Recovery	
3	CCV	0	@IC-QC OXALATEZ	QC	5.40e2	5.45e+02	100.926 % Recovery	
4	SAMPLE	S98T002469	@IC-01 F-02	LIQUID	<u>N/A</u>	6.838e+02	49.690	ug/mL
4	SAMPLE	S98T002469	@IC-01 CL-02	LIQUID	<u>N/A</u>	1.467e+04	70.400	ug/mL
4	SAMPLE	S98T002469	@IC-01 NO2-02	LIQUID	<u>N/A</u>	1.553e+05	447.200	ug/mL
4	SAMPLE	S98T002469	@IC-01 BR-02	LIQUID	<u>N/A</u>	< 5.176e+02	517.600	ug/mL
4	SAMPLE	S98T002469	@IC-01 NO3-02	LIQUID	<u>N/A</u>	1.828e+05	575.600	ug/mL
4	SAMPLE	S98T002469	@IC-01 P04-02	LIQUID	<u>N/A</u>	3.778e+03	496.900	ug/mL
4	SAMPLE	S98T002469	@IC-01 S04-02	LIQUID	<u>N/A</u>	2.790e+03	571.500	ug/mL
4	SAMPLE	S98T002469	@IC-01 OXALATEZ	LIQUID	<u>N/A</u>	< 4.348e+02	434.800	ug/mL
5	DUP	S98T002469	@IC-01 F-02	LIQUID	6.84e+02	6.57e+02	4.027	RPD
5	DUP	S98T002469	@IC-01 CL-02	LIQUID	1.47e+04	1.48e+04	0.678	RPD
5	DUP	S98T002469	@IC-01 NO2-02	LIQUID	1.55e+05	1.55e+05	0.000	RPD
5	DUP	S98T002469	@IC-01 BR-02	LIQUID	<5.18e2	<5.18e2		RPD
5	DUP	S98T002469	@IC-01 NO3-02	LIQUID	1.63e+05	1.63e+05	0.000	RPD
5	DUP	S98T002469	@IC-01 P04-02	LIQUID	3.78e+03	3.69e+03	2.410	RPD
5	DUP	S98T002469	@IC-01 S04-02	LIQUID	2.79e+03	2.85e+03	2.128	RPD
5	DUP	S98T002469	@IC-01 OXALATEZ	LIQUID	<4.35e2	<4.35e2		RPD
6	SAMPLE	S98T002534	@IC-01 F-02	LIQUID	<u>N/A</u>	2.235e+02	61.810	ug/mL

Units shown for QC (BLK/BKG) may not reflect the actual units.

HNF-1661 REV. 0

# LABCORE Completed Worklist Report for Worklist# 26127

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
6 SAMPLE	S98T002534	0	@IC-01 CL-02	LIQUID	N/A	6.769e+03	87.570	ug/mL
6 SAMPLE	S98T002534	0	@IC-01 NO2-02	LIQUID	N/A	8.044e+04	556.300	ug/mL
6 SAMPLE	S98T002534	0	@IC-01 BR-02	LIQUID	N/A	6.439e+02	643.900	ug/mL
6 SAMPLE	S98T002534	0	@IC-01 NO3-02	LIQUID	N/A	1.953e+05	716.000	ug/mL
6 SAMPLE	S98T002534	0	@IC-01 PO4-02	LIQUID	N/A	2.581e+03	618.100	ug/mL
6 SAMPLE	S98T002534	0	@IC-01 SO4-02	LIQUID	N/A	4.814e+03	710.800	ug/mL
6 SAMPLE	S98T002534	0	@IC-01 OXALATE2	LIQUID	N/A	5.409e+02	540.900	ug/mL
7 DUP	S98T002534	0	@IC-01 F-02	LIQUID	2.24e+02	5.52e+02	84.536	RPD
7 DUP	S98T002534	0	@IC-01 CL-02	LIQUID	6.77e+03	8.31e+03	20.424	RPD
7 DUP	S98T002534	0	@IC-01 NO2-02	LIQUID	8.04e+04	9.78e+04	19.529	RPD
7 DUP	S98T002534	0	@IC-01 BR-02	LIQUID	<6.44e2	<6.44e2		RPD
7 DUP	S98T002534	0	@IC-01 NO3-02	LIQUID	1.95e+05	2.37e+05	19.444	RPD
7 DUP	S98T002534	0	@IC-01 PO4-02	LIQUID	2.58e+03	2.80e+03	8.178	RPD
7 DUP	S98T002534	0	@IC-01 SO4-02	LIQUID	4.81e+03	6.43e+03	28.826	RPD
7 DUP	S98T002534	0	@IC-01 OXALATE2	LIQUID	<5.41e2	<5.41e2		RPD
8 TRIPL	S98T002534	0	@IC-01 F-02	LIQUID	223.50	5.89e+02	89.969	RPD
8 TRIPL	S98T002534	0	@IC-01 CL-02	LIQUID	6769.21	8.54e+03	23.134	RPD
8 TRIPL	S98T002534	0	@IC-01 NO2-02	LIQUID	80435.69	9.85e+04	20.191	RPD
8 TRIPL	S98T002534	0	@IC-01 BR-02	LIQUID	0	<6.44e2		RPD
8 TRIPL	S98T002534	0	@IC-01 NO3-02	LIQUID	195300.552	2.38e+05	19.709	RPD
8 TRIPL	S98T002534	0	@IC-01 PO4-02	LIQUID	2580.51	3.29e+03	24.171	RPD
8 TRIPL	S98T002534	0	@IC-01 SO4-02	LIQUID	4813.86	6.41e+03	28.442	RPD
8 TRIPL	S98T002534	0	@IC-01 OXALATE2	LIQUID	0	<5.41e2		RPD
9 SPK	S98T002534	0	@IC-01 F-02	LIQUID	5.90e1	5.34e+01	90.508	% Recovery
9 SPK	S98T002534	0	@IC-01 CL-02	LIQUID	8.00e1	7.53e+01	94.125	% Recovery
9 SPK	S98T002534	0	@IC-01 NO2-02	LIQUID	5.35e2	4.81e+02	89.907	% Recovery
9 SPK	S98T002534	0	@IC-01 BR-02	LIQUID	5.86e2	5.63e+02	96.075	% Recovery
9 SPK	S98T002534	0	@IC-01 NO3-02	LIQUID	5.92e2	4.37e+02	73.818	% Recovery
9 SPK	S98T002534	0	@IC-01 PO4-02	LIQUID	5.47e2	4.95e+02	90.494	% Recovery
9 SPK	S98T002534	0	@IC-01 SO4-02	LIQUID	6.38e2	5.96e+02	93.417	% Recovery
9 SPK	S98T002534	0	@IC-01 OXALATE2	LIQUID	5.57e2	5.53e+02	99.282	% Recovery

Final page for worklist# 26127

Analyst Signature

Date

Analyst Signature

Date

*Jan M. Eys*  
 Reviewer Signature Date 9/14/98

# LABCORE Data Entry Template for Worklist# 26127

Analyst: KFF Instrument: IC 4032 Book# 21N21B

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107, @IC-01, tdm

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	CCB				@IC-QC	QC		
2	ICV				@IC-QC	QC		
3	CCV				@IC-QC	QC		
4	SAMPLE	S98T002469 0			@IC-01	LIQUID	98000401	U-107 (2)
					Analytes Requested: BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02			
5	DUP	S98T002469 0			@IC-01	LIQUID		
6	SAMPLE	S98T002534 0			@IC-01	LIQUID	98000401	U-107 (2)
					Analytes Requested: BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02			
7	DUP	S98T002534 0			@IC-01	LIQUID		
8	TRIPL	S98T002534 0			@IC-01	LIQUID		
9	SPK	S98T002534 0			@IC-01	LIQUID		

**Final page for worklist # 26127**

See original  
Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

2627.esv

Data Entry Comments:

Validated 9/15/98

HNF-1661 REV. 0

09/11/98 08:13  
A-0004-1

Page: 1

**LABCORE Data Entry Template for Worklist# 26127**Analyst: KST Instrument: IC 4000sys2 Book# 21021BMethod: LA-533-105 Rev/Mod F-O

Worklist Comment: U107, @IC-01, tdm

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	CCB				@IC-QC	QC		
2	ICV				@IC-QC	QC		
3	CCV				@IC-QC	QC		
4	SAMPLE	S98T002469	0		@IC-01	LIQUID	98000401	U-107 (2)
		Analytes Requested: BR-02, CL-02, F-02, NO2-02, NO3-02, OXALATE2, PO4-02, SO4-02						
5	DUP	S98T002469	0		@IC-01	LIQUID		
6	SAMPLE	S98T002534	0		@IC-01	LIQUID	98000401	U-107 (2)
		Analytes Requested: BR-02, CL-02, F-02, NO2-02, NO3-02, OXALATE2, PO4-02, SO4-02						
7	DUP	S98T002534	0		@IC-01	LIQUID		
8	SPK	S98T002534	0		@IC-01	LIQUID		

**Final page for worklist # 26127**

Kathleen S. Romo de la  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments:

uploaded 9-15-98  
John Weisell  
26127SEP.CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.



21N21B

Sample Name: ICV 21N21B *9-15-98* Date: 09/14/1998 11:04:58  
 Data File : C:\DX\DATA\98091421.D02  
 Method : C:\DX\METHOD\4000SYS2.MET  
 ACI Address: 1 System: 2 Inject#: 2 Detector: CDM-1  
 Analyst : *KS Thorndike* Column: AG4A/AS4A anion column

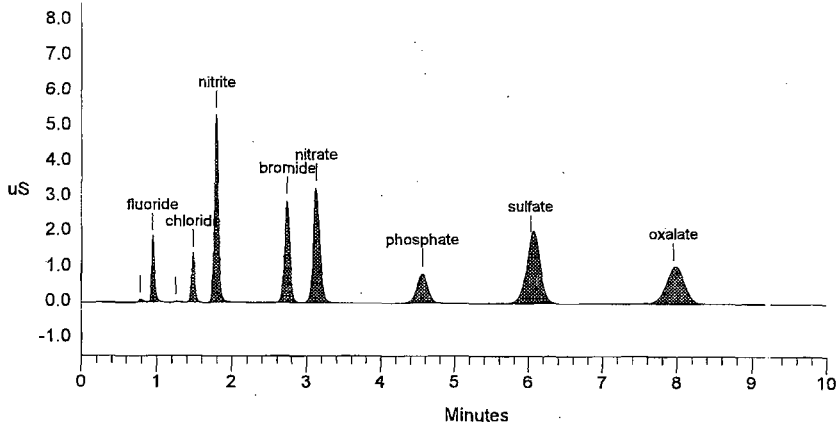
Calibration Volume Dilution Points Rate Start Stop Area Reject

External 1 101 3000 5Hz 0.00 10.00 30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	75	298	2	
2	0.95	fluoride	60.607	1829	5245	2	-0.35
3	1.26		0.000	34	147	1	
4	1.48	chloride	78.096	1362	4368	1	-1.77
5	1.79	nitrite	510.495	5318	19895	1	-2.00
6	2.73	bromide	570.259	2885	14705	1	-2.73
7	3.13	nitrate	580.189	3272	19917	1	-2.60
8	4.56	phosphate	516.772	849	8822	1	-1.72
9	6.03	sulfate	611.719	1814	25951	1	-1.74
10	7.95	oxalate	550.028	1043	18474	1	-1.32
Totals			3478.166	18481	117814		

File: 98091421.D02 Sample: ICV 21N2B



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 827 TO 835.

## HNF-1661 REV. 0

```

=====
Sample Name: CCB                               Date: 09/14/1998 10:42:50
Data File  : C:\DX\DATA\98091421.D01
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1, System: 2, Inject#: 1         Detector: CDM-1
Analyst    : KS Thomdike                   Column: AG4A/AS4A anion column
=====

```

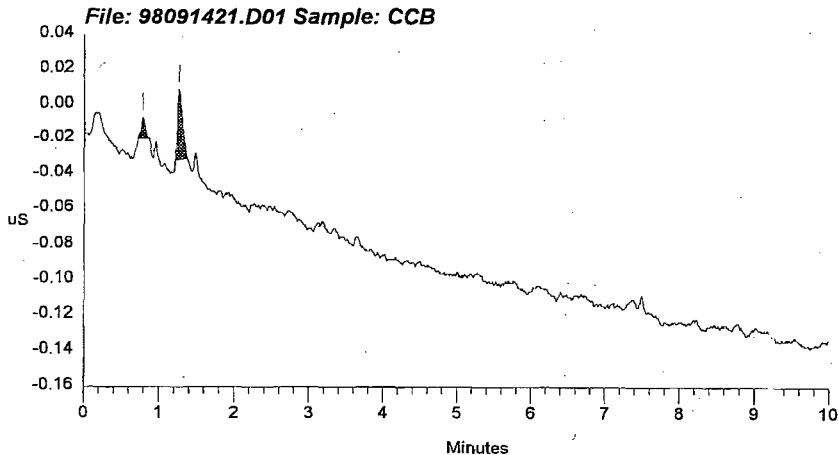
```

-----
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
-----
External           1             1  3000  5Hz   0.00  10.00           30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.78		0.000	12	44	1	
2	1.27		0.000	40	180	1	
Totals			0.000	52	224		



HNF-1661 REV. 0

CCB 98 9-15-98

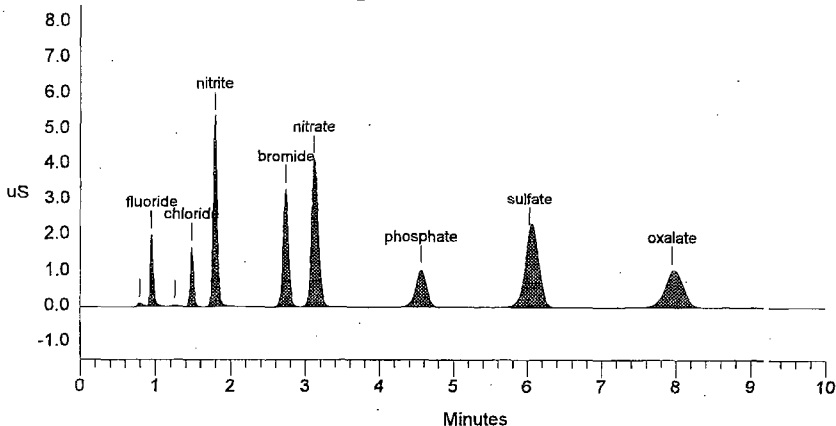
Sample Name: ~~ICV 21N20B~~ 20N218 Date: 09/14/1998 11:19:19  
 Data File : C:\DX\DATA\98091421.D03  
 Method : C:\DX\METHOD\4000SYS2.MET  
 ACI Address: 1 System: 2 Inject#: 3 Detector: CDM-1  
 Analyst : KS Thorndike Column: AG4A/AS4A anion column

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	84	318	2	
2	0.95	fluoride	64.215	1982	5561	2	-0.35
3	1.26		0.000	43	212	2	
4	1.48	chloride	91.979	1663	5160	2	-1.77
5	1.79	nitrite	516.255	5355	20124	1	-2.37
6	2.73	bromide	645.872	3301	16713	1	-2.73
7	3.11	nitrate	752.802	4143	26047	1	-3.01
8	4.56	phosphate	633.936	1047	10867	1	-1.72
9	6.03	sulfate	702.250	2122	29876	1	-1.74
10	7.95	oxalate	544.787	1035	18297	1	-1.32
Totals			3952.096	20774	133174		

File: 98091421.D03 Sample: ICV 21N20B



## HNF-1661 REV. 0

Data Reprocessed On 09/14/1998 13:58:20

```

=====
Sample Name: S98T002469                      Date: 09/14/1998 13:55:17
Data File  : C:\DX\DATA\98091421.D05
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 5          Detector: CDM-1
Analyst    : KS Thorndike Column: AG4A/AS4A anion column
=====

```

```

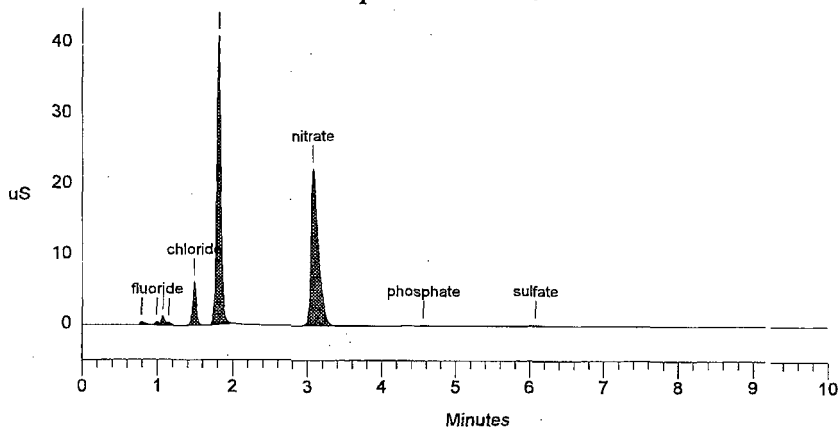
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          4141    3000  5Hz   0.00 10.00          30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	458	2206	2	
2	0.99	fluoride	683.830	505	1406	2	4.56
3	1.07		0.000	1277	3957	2	
4	1.15		0.000	390	1337	2	
5	1.49	chloride	14672.591	6057	21179	1	-1.33
6	1.81	nitrite	155297.019	40948	165760	1	-0.91
7	3.07	nitrate	162770.301	22162	154288	1	-0.11
8	4.56	phosphate	3778.301	138	1509	1	-1.72
9	6.08	sulfate	2790.203	216	2745	1	-0.87
Totals			339992.244	72152	354386		

File: 98091421.D05 Sample: S98T002469



0100-10-0250-10

HNF-1661 REV. 0

Data Reprocessed On 09/14/1998 14:14:24

```

=====
Sample Name: S98T002469 DUP           Date: 09/14/1998 14:06:02
Data File  : C:\DX\DATA\98091421.D06
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 6
Analyst    : KS Thordike           Column: AG4A/AS4A anion column
Detector: CDM-1
=====

```

```

-----
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
-----

```

```

External      1          4141    3000  5Hz   0.00  10.00          30
-----

```

```

***** Peak Report: All Peaks *****

```

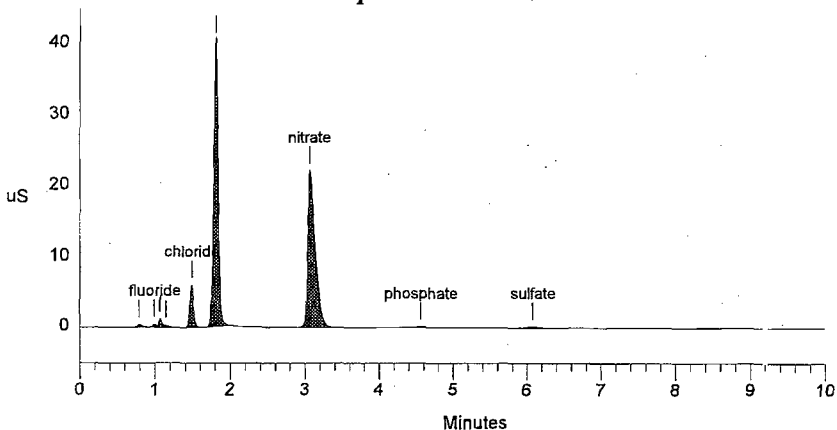
Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	456	2223	2	
2	0.99	fluoride	656.518	513	1348	2	4.56
3	1.07		0.000	1234	3968	2	
4	1.15		0.000	402	1435	2	
5	1.49	chloride	14754.053	6068	21305	1	-1.33
6	1.81	nitrite	155237.818	40494	165687	1	-1.28
7	3.06	nitrate	162511.881	22169	154004	1	0.00
8	4.56	phosphate	3685.230	141	1470	1	-1.72
9	6.08	sulfate	2846.646	216	2801	1	-0.87

```

-----
Totals      339692.147      71692      354248
-----

```

File: 98091421.D06 Sample: S98T002469 DUP



.100-10 - 250-10

Data Reprocessed On 09/14/1998 14:25:08

```

=====
Sample Name: S98T002534                      Date: 09/14/1998 14:21:43
Data File  : C:\DX\DATA\98091421.D07
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System; 2 Inject#: 7          Detector: CDM-1
Analyst    : KS Thorndike                 Column: AG4A/AS4A anion column
=====

```

```

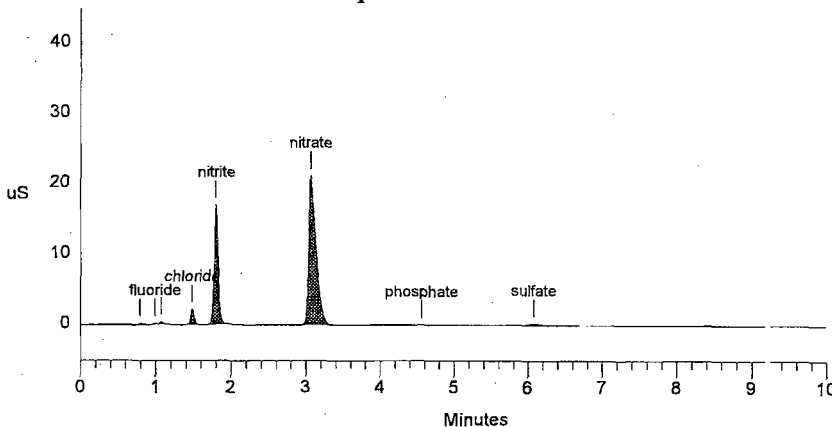
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          1       5151    3000 5Hz   0.00 10.00          30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	231	1055	1	
2	0.99	fluoride	223.508	160	345	2	4.56
3	1.07		0.000	391	946	2	
4	1.48	chloride	6769.211	2262	7508	1	-1.77
5	1.80	nitrite	80435.694	16949	63988	1	-1.64
6	3.06	nitrate	195300.552	21138	147984	1	0.00
7	4.56	phosphate	2580.510	72	802	1	-1.72
8	6.08	sulfate	4813.862	292	3853	1	-0.87
Totals			290123.337	41494	226478		

File: 98091421.D07 Sample: S98T002534



0100-10 - 0200-10

Data Reprocessed On 09/14/1998 15:08:31

```

=====
Sample Name: S98T002534 DUP                      Date: 09/14/1998 15:01:15
Data File  : C:\DX\DATA\98091421.D08
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System; 2 Inject#: 8
Analyst    : KS Thorndike                      Column: AG4A/AS4A anion column
Detector   : CDM-1
=====

```

```

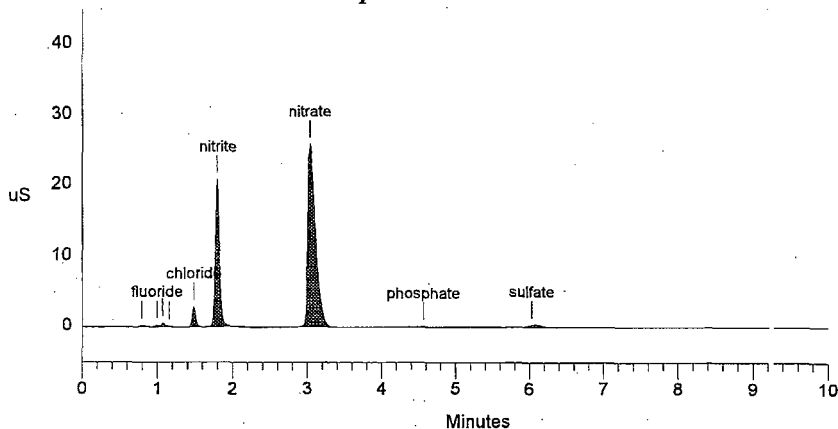
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          5151    3000 5Hz   0.00 10.00          30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	296	1407	2	
2	0.99	fluoride	552.350	327	901	2	4.56
3	1.07		0.000	600	1875	2	
4	1.15		0.000	185	613	2	
5	1.48	chloride	8313.375	2897	9276	1	-1.77
6	1.79	nitrite	97827.713	20763	78690	1	-2.00
7	3.03	nitrate	237331.407	25781	186190	1	-0.11
8	4.56	phosphate	2802.877	84	875	1	-1.72
9	6.03	sulfate	6425.029	330	5187	1	-1.74
Totals			353252.751	51263	285015		

File: 98091421.D08 Sample: S98T002534 DUP



.100-10 - .200-10

Data Reprocessed On 09/15/1998 09:40:50

```

=====
Sample Name: S98T002534 TRI                               Date: 09/14/1998 15:17:30
Data File  : F:\DATA\98091421.D09
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 9                       Detector: CDM-1
Analyst    :                                               Column: AG4A/AS4A anion column
=====
    
```

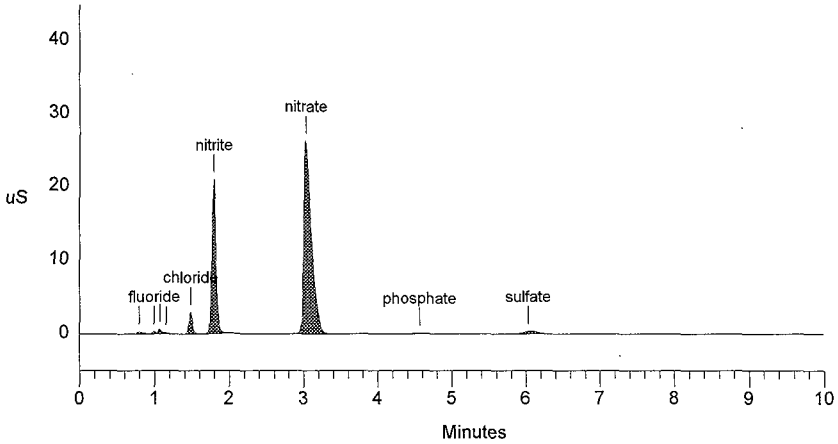
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           5151  3000  5Hz  0.00 10.00           30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	307	1494	2	
2	0.99	fluoride	588.692	361	962	2	4.56
3	1.07		0.000	629	2102	2	
4	1.15		0.000	205	707	2	
5	1.48	chloride	8542.961	2934	9541	1	-1.77
6	1.79	nitrite	98542.409	20913	79301	1	-2.00
7	3.03	nitrate	237666.641	26260	186508	1	-0.11
8	4.56	phosphate	3291.207	100	1038	1	-1.72
9	6.03	sulfate	6407.766	346	5173	1	-1.74
Totals			355039.675	52056	286826		

**File: 98091421.D09 Sample: S98T002534 TRI**





HNF-1661 REV. 0

Data Reprocessed On 09/14/1998 15:31:58

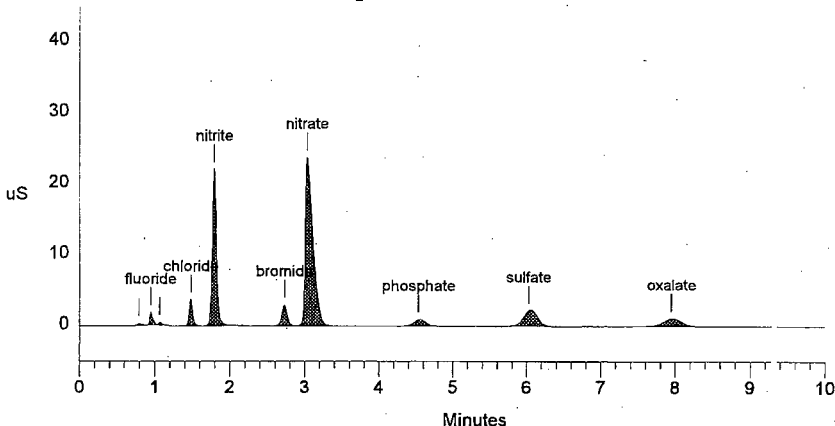
Sample Name: S98T002534 SPIKE Date: 09/14/1998 15:29:41  
 Data File : C:\DX\DATA\98091431.D10  
 Method : C:\DX\METHOD\4000SYS2.MET  
 ACI Address: 1 System: 2 Inject#: 10 Detector: CDM-1  
 Analyst : *KS Thomas* Column: AG4A/AS4A anion column

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	5151	3000	5Hz	0.00	10.00		30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	277	1148	1	
2	0.95	fluoride	2920.133	1668	4948	2	-0.35
3	1.07		0.000	349	865	2	
4	1.48	chloride	10570.158	3654	11897	1	-1.77
5	1.79	nitrite	104713.228	21995	84600	1	-2.00
6	2.73	bromide	28447.501	2892	14372	1	-2.97
7	3.03	nitrate	217395.230	23673	167682	1	0.11
8	4.53	phosphate	27580.903	834	9240	1	-2.30
9	6.03	sulfate	34914.841	2146	29110	1	-1.74
10	7.95	oxalate	27906.175	1048	18377	1	-1.32
Totals			454448.169	58535	342239		

File: 98091431.D10 Sample: S98T002534 SPIKE



# LABCORE Completed Worklist Report for Worklist# 26128

Analyst: adp

Instrument: IC40S2

Book#: 21N21C

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107, @IC-01, tdm

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	@IC-QC F	QC	1	<1.20e-2		ug/mL
1	CCB	0	@IC-QC CL	QC	1	<1.70e-2		ug/mL
1	CCB	0	@IC-QC NO2	QC	1	<1.08e-1		ug/mL
1	CCB	0	@IC-QC BR	QC	1	<1.25e-1		ug/mL
1	CCB	0	@IC-QC NO3	QC	1	<1.39e-1		ug/mL
1	CCB	0	@IC-QC PO4	QC	1	<1.20e-1		ug/mL
1	CCB	0	@IC-QC SO4	QC	1	<1.38e-1		ug/mL
1	CCB	0	@IC-QC OXALATE2	QC	1	<1.05e-1		ug/mL
2	ICV	0	@IC-QC F	QC	5.90e1	6.37e+01	107.966 %	Recovery
2	ICV	0	@IC-QC CL	QC	8.00e1	8.33e+01	104.125 %	Recovery
2	ICV	0	@IC-QC NO2	QC	5.38e2	5.27e+02	97.955 %	Recovery
2	ICV	0	@IC-QC BR	QC	5.86e2	6.05e+02	103.242 %	Recovery
2	ICV	0	@IC-QC NO3	QC	5.92e2	5.81e+02	98.142 %	Recovery
2	ICV	0	@IC-QC PO4	QC	5.47e2	5.39e+02	98.537 %	Recovery
2	ICV	0	@IC-QC SO4	QC	6.38e2	6.43e+02	100.784 %	Recovery
2	ICV	0	@IC-QC OXALATE2	QC	5.53e2	5.50e+02	99.458 %	Recovery
3	CCV	0	@IC-QC F	QC	6.40e1	6.49e+01	101.406 %	Recovery
3	CCV	0	@IC-QC CL	QC	9.00e1	9.29e+01	103.222 %	Recovery
3	CCV	0	@IC-QC NO2	QC	5.43e2	5.33e+02	98.158 %	Recovery
3	CCV	0	@IC-QC BR	QC	6.30e2	6.66e+02	105.714 %	Recovery
3	CCV	0	@IC-QC NO3	QC	6.98e2	7.24e+02	103.725 %	Recovery
3	CCV	0	@IC-QC PO4	QC	6.32e2	6.32e+02	100.000 %	Recovery
3	CCV	0	@IC-QC SO4	QC	6.99e2	7.09e+02	101.431 %	Recovery
3	CCV	0	@IC-QC OXALATE2	QC	5.33e2	5.50e+02	103.189 %	Recovery
4	SAMPLE	S98T002466	@IC-01 F-02	LIQUID	<u>N/A</u>	2.337e+02	61.810	ug/mL
4	SAMPLE	S98T002466	@IC-01 CL-02	LIQUID	<u>N/A</u>	1.086e+04	87.570	ug/mL
4	SAMPLE	S98T002466	@IC-01 BR-02	LIQUID	<u>N/A</u>	<6.439e+02	643.900	ug/mL
4	SAMPLE	S98T002466	@IC-01 NO3-02	LIQUID	<u>N/A</u>	1.396e+05	716.000	ug/mL
4	SAMPLE	S98T002466	@IC-01 PO4-02	LIQUID	<u>N/A</u>	2.730e+03	618.100	ug/mL
4	SAMPLE	S98T002466	@IC-01 SO4-02	LIQUID	<u>N/A</u>	2.862e+03	710.800	ug/mL
4	SAMPLE	S98T002466	@IC-01 OXALATE2	LIQUID	<u>N/A</u>	<5.409e+02	540.900	ug/mL
5	DUP	S98T002466	@IC-01 F-02	LIQUID	2.34e+02	2.21e+02	5.714	RPD
5	DUP	S98T002466	@IC-01 CL-02	LIQUID	1.09e+04	1.11e+04	1.818	RPD
5	DUP	S98T002466	@IC-01 NO2-02	LIQUID	1.21e+05	1.21e+05	0.000	RPD
5	DUP	S98T002466	@IC-01 BR-02	LIQUID	<6.44e2	<6.44e2		RPD
5	DUP	S98T002466	@IC-01 NO3-02	LIQUID	1.40e+05	1.40e+05	0.000	RPD
5	DUP	S98T002466	@IC-01 PO4-02	LIQUID	2.73e+03	2.72e+03	0.367	RPD
5	DUP	S98T002466	@IC-01 SO4-02	LIQUID	2.86e+03	2.87e+03	0.349	RPD
5	DUP	S98T002466	@IC-01 OXALATE2	LIQUID	<5.41e2	<5.41e2		RPD
6	SFK	S98T002466	@IC-01 F-02	LIQUID	5.90e1	5.71e+01	96.780 %	Recovery
6	SFK	S98T002466	@IC-01 CL-02	LIQUID	8.00e1	7.63e+01	95.375 %	Recovery

Units shown for QC (BLK/BKG) may not reflect the actual units.

# LABCORE Completed Worklist Report for Worklist# 26128

Seq Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
6 SPK	S98T002466	0		@IC-01	N02-02	LIQUID	5.38e2	2.72e+02	50.558 % Recovery
6 SPK	S98T002466	0		@IC-01	BR-02	LIQUID	5.86e2	5.96e+02	101.706 % Recovery
6 SPK	S98T002466	0		@IC-01	N03-02	LIQUID	5.92e2	5.92e+02	100.000 % Recovery
6 SPK	S98T002466	0		@IC-01	P04-02	LIQUID	5.47e2	5.40e+02	98.720 % Recovery
6 SPK	S98T002466	0		@IC-01	S04-02	LIQUID	6.38e2	6.44e+02	100.940 % Recovery
6 SPK	S98T002466	0		@IC-01	OXALATE2	LIQUID	5.53e2	5.62e+02	101.627 % Recovery

Final page for worklist# 26128

\_\_\_\_\_  
Analyst Signature      Date

\_\_\_\_\_  
Analyst Signature      Date

*James M. Luyke*      9/24/98  
\_\_\_\_\_  
Reviewer Signature      Date

# LABCORE Data Entry Template for Worklist# 26128

Analyst: ADP Instrument: IC 4052 Book# 21N21C

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107, @IC-01, tdm

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	CCB				@IC-QC	QC		
2	ICV				@IC-QC	QC		
3	CCV				@IC-QC	QC		
4	SAMPLE	S98T002466 0			@IC-01	LIQUID	98000401	U-107 (2)
		Analytes Requested: BR-02, CL-02, F-02, NO2-02, NO3-02, OXALATE2, PO4-02, SO4-02						
5	DUP	S98T002466 0			@IC-01	LIQUID		
6	SPK	S98T002466 0			@IC-01	LIQUID		

**Final page for worklist # 26128**

See attached worklist  
Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

*NO<sub>2</sub> rejected due to electronic glitch in spike peak*

*Rest validated 9/24/98 JM Luy*

*\* NO<sub>2</sub> reanalyzed on worklist # 26337.*

*[Signature] 11/5/99*

Data Entry Comments:

*uploaded 9-23-98  
John Warell  
26128SEP.CSV*

HNF-1661 REV. 0

Page: 1

09/11/98 08:14


A-0004-1

**LABCORE Data Entry Template for Worklist# 26128**Analyst: ADP Instrument: IC 4052 Book# 21121-CMethod: LA-533-105 Rev/Mod F-0

Worklist Comment: U107, @IC-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC-QC	QC		
2	ICV		@IC-QC	QC		
3	CCV		@IC-QC	QC		
4	SAMPLE	S98T002466 0	@IC-01	LIQUID	98000401	U-107 (2)
		<b>Analytes Requested:</b>	BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2 , PO4-02 , SO4-02			
5	DUP	S98T002466 0	@IC-01	LIQUID		
6	SAMPLE	S98T002525 0	@IC-01	LIQUID	98000401	U-107 (2)
		<b>Analytes Requested:</b>	BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2 , PO4-02 , SO4-02			
7	DUP	S98T002525 0	@IC-01	LIQUID		
8	SPK	S98T002525 0	@IC-01	LIQUID		

**Final page for worklist # 26128**

 9-19-98  
 Analyst Signature Date

\_\_\_\_\_  
 Analyst Signature Date

Data Entry Comments:

Sample 2525 used in Process

Put Spike with S98T002466 Please Read WorkList

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

HNF-1661 REV.0

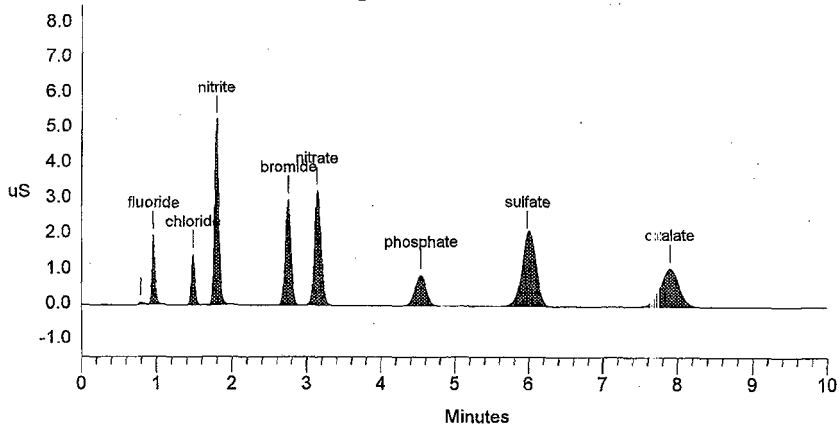
Sample Name: 21N21-C Date: 09/19/1998 23:05:18  
 Data File : C:\DX\DATA\98091531.D02  
 Method : C:\DX\METHOD\4000SYS2.MET  
 ACI Address: System: 2 Inject#: 2 Detector: CDM-1  
 Analyst : *M. J. Perry* Column: AG4A/AS4A anion column

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	3000	5Hz	0.00	10.00		30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	75	303	2	
2	0.95	fluoride	63.681	106.78	5514	2	0.35
3	1.48	chloride	83.301	104.13	4664	1	-1.77
4	1.79	nitrite	527.078	97.97	5230	1	-2.37
5	2.75	bromide	605.321	103.30	2976	1	-2.25
6	3.13	nitrate	580.614	98.08	3233	1	-2.39
7	4.53	phosphate	538.609	98.47	869	1	-2.30
8	5.97	sulfate	642.591	100.72	2020	1	-2.61
9	7.89	oxalate	550.176	99.49	1087	1	-1.99
Totals			3591.372		18864		121573

File: 98091531.D02 Sample: 21N21-C



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT  
 COMPLETELY VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 840 TO 845.

SS.100-10

840

HNF-1661 REV. 0

```

=====
Sample Name: BLANK                      Date: 09/11/1998 22:51:44
Data File  : C:\DX\DATA\98091531.D01
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 1      Detector: CDM-1
Analyst    :                            Column: AG4A/AS4A anion column
=====

```

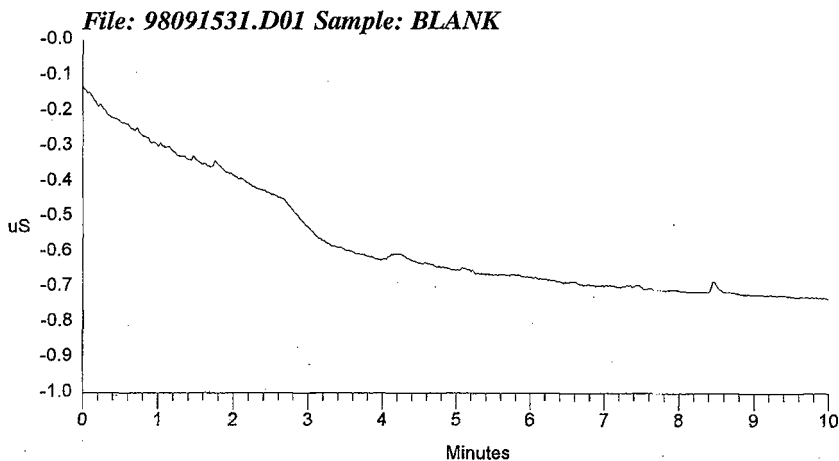
```

-----
Calibration Volume  Dilution Points Rate  Start  Stop Area Reject
-----
External            1                1  3000  5Hz   0.00  10.00        30

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		



SS1

## HNF-1661 REV. 0

```

=====
Sample Name: 20N21-C                      Date: 09/19/1998 23:28:41
Data File  : C:\DX\DATA\98091531.D03
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 3       Detector: CDM-1
Analyst    :                             Column: AG4A/AS4A anion column
=====

```

```

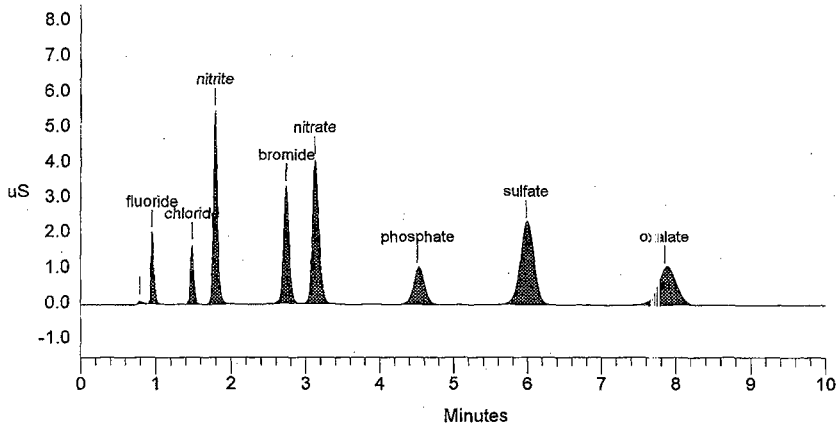
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           101    3000  5Hz  0.00 10.00          30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	77	303	2	
2	0.95	fluoride	64.853	1958	5617	2	-0.35
3	1.48	chloride	92.909	1635	5213	1	-1.77
4	1.79	nitrite	532.940	5441	20793	1	-2.37
5	2.73	bromide	665.830	3271	17245	1	-2.73
6	3.12	nitrate	724.365	4047	25033	1	-2.80
7	4.51	phosphate	632.308	967	10838	1	-2.87
8	5.97	sulfate	708.952	2277	30168	1	-2.61
9	7.84	oxalate	549.969	989	18472	1	-2.65
Totals			3972.125	20661	133682		

File: 98091531.D03 Sample: 20N21-C



SS.100-10



Data Reprocessed On 09/21/1998 13:59:58

```

=====
Sample Name: S98T002466 SAM                               Date: 09/19/1998 23:58:04
Data File  : F:\DATA\98091531.D05
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 5                       Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
=====
    
```

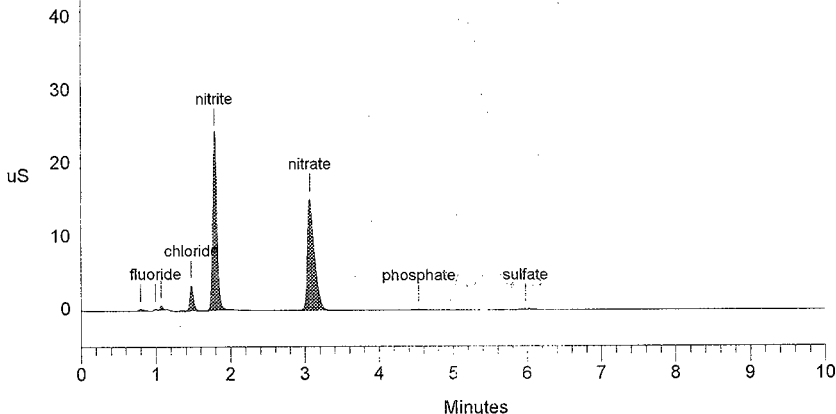
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          5151   3000 5Hz  0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	273	1283	1	
2	0.99	fluoride	233.671	188	362	2	4.56
3	1.07		0.000	598	1436	2	
4	1.47	chloride	10862.292	3562	12240	1	-2.21
5	1.79	nitrite	121258.605	24231	99017	1	-2.37
6	3.07	nitrate	139594.025	15316	101516	1	-0.11
7	4.53	phosphate	2729.759	82	851	1	-2.30
8	5.97	sulfate	2861.535	163	2240	1	-2.61
Totals			277539.887	44412	218944		

File: 98091531.D05 Sample: S98T002466 SAM



Data Reprocessed On 09/21/1998 14:00:35

```

=====
Sample Name: S98T002466 DUP           Date: 09/20/1998 00:09:56
Data File  : F:\DATA\98091531.D06
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 6   Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====
    
```

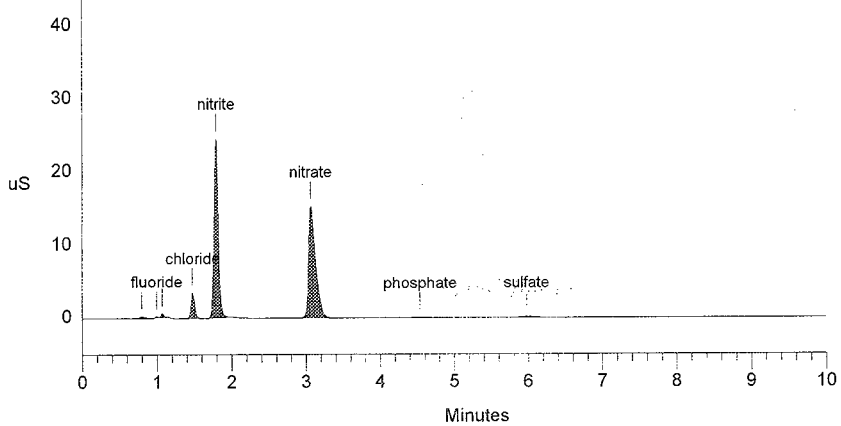
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          5151   3000 5Hz   0.00 10.00          30
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	277	1311	1	
2	0.99	fluoride	220.876	178	340	2	4.56
3	1.07		0.000	588	1420	2	
4	1.47	chloride	11140.677	3561	12567	1	-2.21
5	1.79	nitrite	120897.770	24552	98700	1	-2.00
6	3.06	nitrate	139915.589	15280	101772	1	0.00
7	4.53	phosphate	2720.769	82	848	1	-2.30
8	5.97	sulfate	2873.527	165	2250	1	-2.61
Totals			277769.206	44683	219207		

File: 98091531.D06 Sample: S98T002466 DUP



```

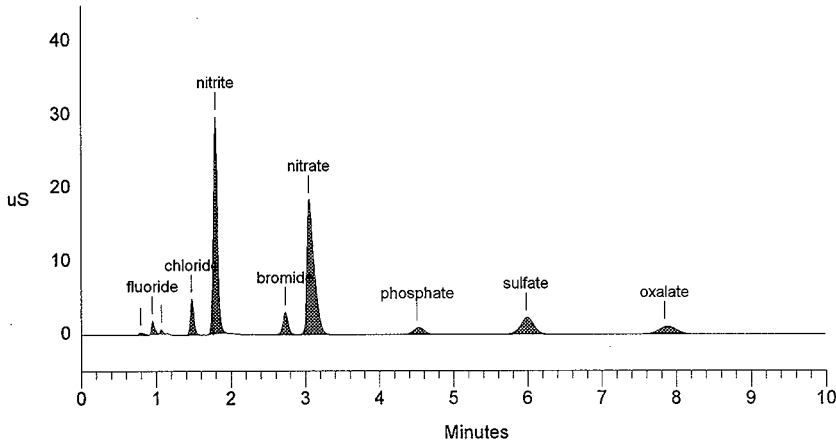
Sample Name: S98T002466 SPK                               Date: 09/20/1998 00:21:17
Data File  : F:\DATA\98091531.D07
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 7                       Detector: CDM-1
Analyst    :                                             Column: AG4A/AS4A anion column
    
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	5151	3000	5Hz	0.00	10.00		30

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	325	1475	1	
2	0.95	fluoride	3118.899	1777	5291	2	-0.35
3	1.07		0.000	582	1474	2	
4	1.47	chloride	14718.286	4795	16837	1	-2.21
5	1.79	nitrite	135000.434	29569	111237	1	-2.00
6	2.73	bromide	30090.376	3057	15227	1	-2.97
7	3.05	nitrate	169514.278	18368	125950	1	-0.11
8	4.51	phosphate	30019.454	906	10074	1	-2.87
9	5.97	sulfate	35378.341	2259	29505	1	-2.61
10	7.84	oxalate	28379.375	1015	18691	1	-2.65
Totals			446219.443	62655	335761		

**File: 98091531.D07 Sample: S98T002466 SPK**



# LABCORE Completed Worklist Report for Worklist# 26130

Analyst: adp

Instrument: IC45S2

Book#: 130N20C

Method: LA-533-<sup>gmF 10/28/98</sup>105 Rev/Mod F-0

Worklist Comment: U107, @IC4G-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB 0	@IC4G-QC F*4	QC	1	<1.10e-2		ug/mL
1	CCB 0	@IC4G-QC ACETATE2	QC	1	<2.00e-2		ug/mL
1	CCB 0	@IC4G-QC FORMATE2	QC	1	<2.10e-2		ug/mL
1	CCB 0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2		ug/mL
2	ICV 0	@IC4G-QC F*4	QC	5.80e1	5.36e+01	92.414 %	Recovery
2	ICV 0	@IC4G-QC ACETATE2	QC	1.17e2	1.07e+02	91.453 %	Recovery
2	ICV 0	@IC4G-QC FORMATE2	QC	1.27e2	1.09e+02	85.827 %	Recovery
2	ICV 0	@IC4G-QC GLYCOLT1	QC	1.01e2	8.97e+01	88.812 %	Recovery
3	CCV 0	@IC4G-QC F*4	QC	5.90e1	5.63e+01	95.424 %	Recovery
3	CCV 0	@IC4G-QC ACETATE2	QC	1.17e2	1.10e+02	94.017 %	Recovery
3	CCV 0	@IC4G-QC FORMATE2	QC	1.32e2	1.22e+02	92.424 %	Recovery
3	CCV 0	@IC4G-QC GLYCOLT1	QC	1.16e2	1.16e+02	100.000 %	Recovery
4	SAMPLE S98T002466 0	@IC4G-01 F*4-01	LIQUID	N/A	1.879e+01	18.790	ug/mL
4	SAMPLE S98T002466 0	@IC4G-01 ACETATE2	LIQUID	N/A	1.261e+03	35.150	ug/mL
4	SAMPLE S98T002466 0	@IC4G-01 FORMATE2	LIQUID	N/A	3.757e+01	37.570	ug/mL
4	SAMPLE S98T002466 0	@IC4G-01 GLYCOLT1	LIQUID	N/A	2.778e+03	33.940	ug/mL
5	DUP S98T002466 0	@IC4G-01 F*4-01	LIQUID	<1.88e1	<1.88e1		RPD
5	DUP S98T002466 0	@IC4G-01 ACETATE2	LIQUID	1.26e+03	1.31e+03	3.891	RPD
5	DUP S98T002466 0	@IC4G-01 FORMATE2	LIQUID	<3.76e1	<3.76e1		RPD
5	DUP S98T002466 0	@IC4G-01 GLYCOLT1	LIQUID	2.78e+03	2.77e+03	0.360	RPD

Final page for worklist# 26130

Analyst Signature

Date

Analyst Signature

Date

*Janet M. Jure 10/28/98*  
 Reviewer Signature Date

08/25/98 13:45  
A-0004-1

# LABCORE Data Entry Template for Worklist# 26130

26130

Analyst: ADP Instrument: IC \_\_\_\_\_ Book# 131V20-B

Method: LA-533-1:05 Rev/Mod F-0

Worklist Comment: U107, @IC4G-01, tdm

Check  
≤ 50 min/hr  
E 30 can

S	Type	Sample#	R	A	Test	Matrix	Group#	Project
1	CCB				@IC4G-QC	QC		
2	ICV				@IC4G-QC	QC		
3	CCV				@IC4G-QC	QC		
4	SAMPLE	S98T002466 0			@IC4G-01 LIQUID		98000401	U-107 (2)
		Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCOLT1						
5	DUP	S98T002466 0			@IC4G-01 LIQUID			

## Final page for worklist # 26130

Anthony Purota  
Analyst Signature Date 10-25-98

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments:

uploaded 10-28-98  
John Wonnell

validated 10/28/98 JM Luye

261300CT.CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Data Reprocessed On 10/25/1998 09:01:25

Date: 10/25/1998 08:55:14

Sample Name: 131N20-B ICV  
 Data File : C:\DX\DATA\98102501.D03  
 Method : C:\DX\METHOD\GLYCOLIC.MET  
 ACI Address: 1 System: 2 Inject#: 3 Detector: CDM-1  
 Analyst : Ed Colvin Column: AG4A-SC, AS4A-SC, SRS

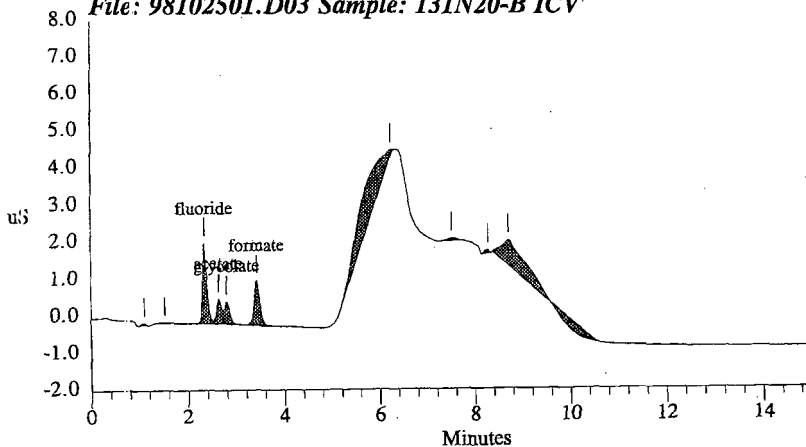
*Calibration Points 10-25-98*

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	101	4500	5Hz	0.00	15.00		0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.10		0.000	62	351	1	
2	1.52		0.000	27	703	1	
3	2.35	fluoride	53.605	2161	13744	2	0.00
4	2.64	acetate	106.895	678	5207	2	0.00
5	2.80	glycolate	89.713	616	4804	2	0.00
6	3.43	formate	108.617	1215	10314	1	0.00
7	5.25		0.000	186	43701	1	
8	7.52		0.000	89	1205	1	
9	8.28		0.000	100	621	1	
10	8.71		0.000	681	17269	1	
Totals			358.830	5815	97920		

File: 98102501.D03 Sample: 131N20-B ICV



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 848 TO 852.

Date: 10/25/1998 07:53:38

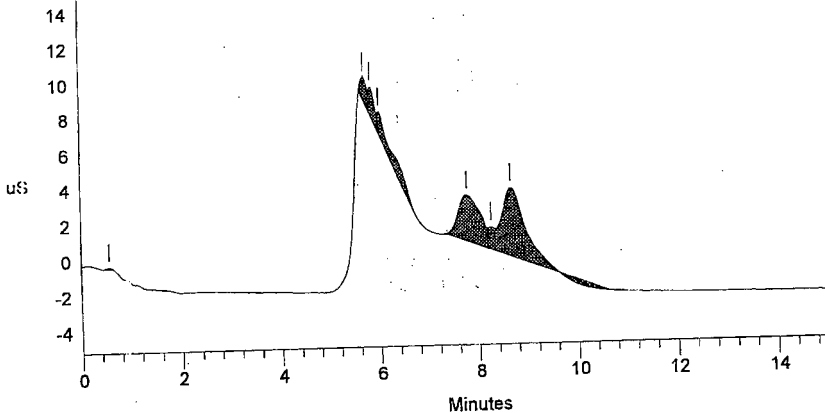
Sample Name: BLANK  
 Data File : C:\DX\DATA\98102501.D01  
 Method : C:\DX\METHOD\GLYCOLIC.MET  
 ACI Address: 1 System: 2 Inject#: 1  
 Analyst : Ed Colvin Column: AG4A-SC,AS4A-SC, SRS  
 Detector: CDM-1

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	4500	5Hz	0.00	15.00		0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.56		0.000	112	819		1
2	5.71		0.000	1273	11700		2
3	5.85		0.000	1637	13628		2
4	5.01		0.000	1242	31478		2
5	7.78		0.000	2625	81374		2
6	8.26		0.000	1291	11237		2
7	8.67		0.000	3928	118299		2
Totals			0.000	12107	268536		

File: 98102501.D01 Sample: BLANK



Data Reprocessed On 10/25/1998 10:50:31

```

=====
Sample Name: 130N20-C CCV                               Date: 10/25/1998 10:47:30
Data File  : C:\DX\DATA\98102501.D04
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 4
Analyst    : Ed Colvin                                   Column: AG4A-SC,AS4A-SC, SRS
Detector   : CDM-1
=====
    
```

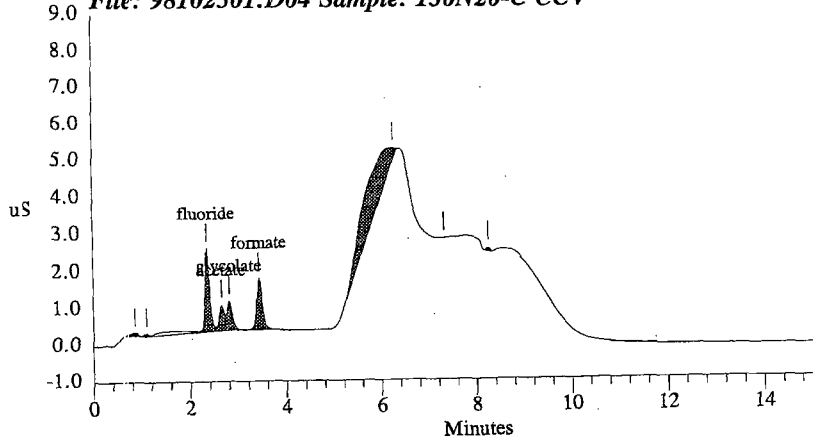
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          101    4500 5Hz   0.00 15.00          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.86	0.000	92	1371	1	
2	1.10	0.000	83	535	2	
3	2.35 fluoride	56.293	2244	14471	2	0.00
4	2.65 acetate	109.853	702	5354	2	0.00
5	2.81 glycolate	115.709	795	6294	2	0.00
6	3.44 formate	121.586	1399	11631	1	0.00
7	5.27	0.000	340	53135	1	
8	7.34	0.000	16	66	1	
9	8.26	0.000	108	575	1	
Totals		403.442	5780	93431		

File: 98102501.D04 Sample: 130N20-C CCV





Data Reprocessed On 10/28/1998 11:07:09

```

=====
Sample Name: S98T002466 SAM                               Date: 10/25/1998 11:09:39
Data File  : E:\DATA\98102501.D05
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 5                       Detector: CDM-1
Analyst    : Ed Colvin                                     Column: AG4A-SC,AS4A-SC, SRS
=====

```

```

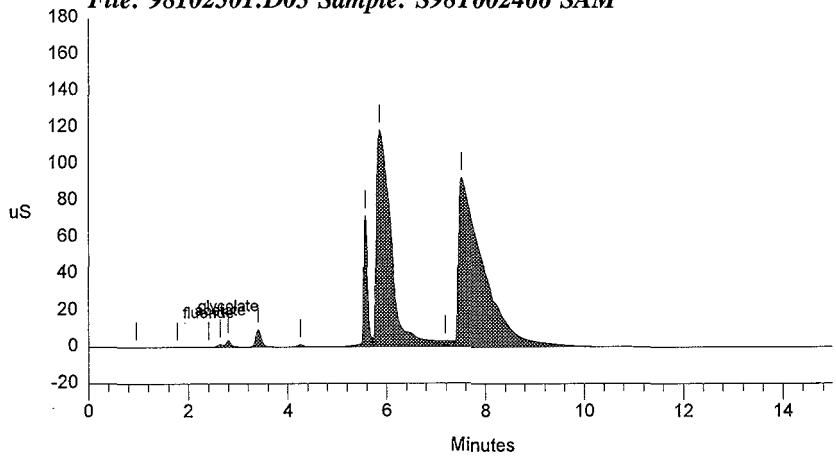
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           606    4500  5Hz   0.00 15.00           0
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.96		0.000	77	637	1	
2	1.77		0.000	29	1001	1	
3	2.41	fluoride	16.340	37	124	2	0.00
4	2.64	acetate	1261.261	1492	10235	2	0.00
5	2.80	glycolate	2778.132	3709	28018	2	0.00
6	3.40		0.000	9579	79254	1	
7	4.25		0.000	1302	11451	1	
8	5.57		0.000	71835	414207	2	
9	5.86		0.000	118459	2474560	3	
10	7.19		0.000	2646	41250	4	
11	7.51		0.000	92353	3267191	2	
Totals			4055.733	301519	6327928		

File: 98102501.D05 Sample: S98T002466 SAM



Data Reprocessed On 10/28/1998 11:07:52

```

=====
Sample Name: S98T002466 DUP                               Date: 10/25/1998 11:26:27
Data File  : E:\DATA\98102501.D06
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 6                       Detector: CDM-1
Analyst    : Ed Colvin                                     Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

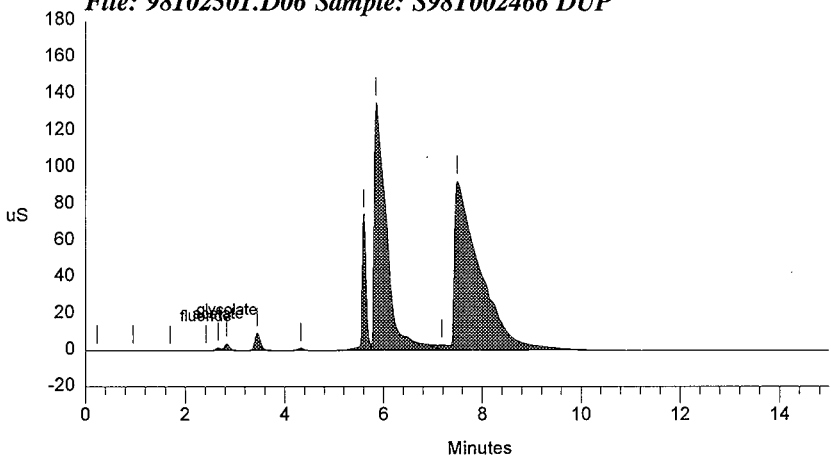
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           606 4500 5Hz  0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.23		0.000	57	582	1	
2	0.96		0.000	91	660	1	
3	1.70		0.000	30	1098	1	
4	2.42	fluoride	16.660	31	138	2	0.00
5	2.66	acetate	1309.621	1486	10621	2	0.00
6	2.83	glycolate	2772.508	3666	27954	2	0.00
7	3.45		0.000	9500	79758	2	
8	4.33		0.000	1292	11786	1	
9	5.60		0.000	74545	430262	2	
10	5.85		0.000	135469	2420958	3	
11	7.19		0.000	2554	34368	4	
12	7.50		0.000	92839	3351688	2	
Totals			4098.789	321558	6369874		

File: 98102501.D06 Sample: S98T002466 DUP



# LABCORE Completed Worklist Report for Worklist# 26131

Analyst: adp

Instrument: IC45S2

Book#: 131N20B

Method: LA-533-1105 Rev/Mod F-0

Worklist Comment: U107, @IC4G-01, tdm

Seq Type	Sample# R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1 CCB	0	@IC4G-QC F*4	QC	1	<1.10e-2		ug/mL
1 CCB	0	@IC4G-QC ACETATE2	QC	1	<2.00e-2		ug/mL
1 CCB	0	@IC4G-QC FORMATE2	QC	1	<2.10e-2		ug/mL
1 CCB	0	@IC4G-QC GLYCOLT1	QC	1	<2.00e-2		ug/mL
2 ICV	0	@IC4G-QC F*4	QC	5.80e1	5.73e+01	98.793 % Recovery	
2 ICV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.18e+02	100.855 % Recovery	
2 ICV	0	@IC4G-QC FORMATE2	QC	1.27e2	1.16e+02	91.339 % Recovery	
2 ICV	0	@IC4G-QC GLYCOLT1	QC	1.01e2	9.35e+01	92.574 % Recovery	
3 CCV	0	@IC4G-QC F*4	QC	5.90e1	5.50e+01	93.220 % Recovery	
3 CCV	0	@IC4G-QC ACETATE2	QC	1.17e2	1.11e+02	94.872 % Recovery	
3 CCV	0	@IC4G-QC FORMATE2	QC	1.32e2	1.20e+02	90.909 % Recovery	
3 CCV	0	@IC4G-QC GLYCOLT1	QC	1.16e2	1.12e+02	96.552 % Recovery	
4 SAMPLE	S98T002534	@IC4G-01 F*4-01	LIQUID	<u>N/A</u>	2.374e+01	18.790	ug/mL
4 SAMPLE	S98T002534	@IC4G-01 ACETATE2	LIQUID	<u>N/A</u>	7.249e+02	35.150	ug/mL
4 SAMPLE	S98T002534	@IC4G-01 FORMATE2	LIQUID	<u>N/A</u>	3.014e+03	37.570	ug/mL
4 SAMPLE	S98T002534	@IC4G-01 GLYCOLT1	LIQUID	<u>N/A</u>	2.585e+03	33.940	ug/mL
5 DUP	S98T002534	@IC4G-01 F*4-01	LIQUID	2.37e+01	2.44e+01	2.911	RPD
5 DUP	S98T002534	@IC4G-01 ACETATE2	LIQUID	7.25e+02	8.14e+02	11.566	RPD
5 DUP	S98T002534	@IC4G-01 FORMATE2	LIQUID	3.01e+03	3.08e+03	2.299	RPD
5 DUP	S98T002534	@IC4G-01 GLYCOLT1	LIQUID	2.58e+03	2.63e+03	1.919	RPD
6 SPK	S98T002534	@IC4G-01 F*4-01	LIQUID	5.80e1	4.36e+01	75.172 % Recovery	
6 SPK	S98T002534	@IC4G-01 ACETATE2	LIQUID	1.17e2	1.35e+02	115.385 % Recovery	
6 SPK	S98T002534	@IC4G-01 FORMATE2	LIQUID	1.27e2	1.53e+02	120.472 % Recovery	
6 SPK	S98T002534	@IC4G-01 GLYCOLT1	LIQUID	1.01e2	1.21e+02	119.802 % Recovery	

Final page for worklist# 26131

Analyst Signature

Date

Analyst Signature

Date

*Jan M. Lyle* 10/8/98  
Reviewer Signature Date

# LABCORE Data Entry Template for Worklist# 26131

Analyst: ADD Instrument: IC 4502 Book# 131N20-B

Method: LA-533-1705 Rev. Mod F-6

Worklist Comment: U107, @IC4G-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC4G-QC	QC		
2	ICV		@IC4G-QC	QC		
3	CCV		@IC4G-QC	QC		
4	SAMPLE	S98T002534 0	@IC4G-01	LIQUID	98000401	U-107 (2)
		Analytes Requested: ACETATE2, F*4-01, FORMATE2, GLYCOLTI				
5	DUP	S98T002534 0	@IC4G-01	LIQUID		
6	SPK	S98T002534 0	@IC4G-01	LIQUID		

### Final page for worklist # 26131

Anthony Peruto 9-11-98  
Analyst Signature Date

\_\_\_\_\_  
Analyst Signature Date

Data Entry Comments:

uploaded 10-8-98  
JL Wauell  
26131SEP.CSV

Validated 10/8/98 gmt

S = Worklist Slot Number, R = Replica? Number, A = Aliquot Code.

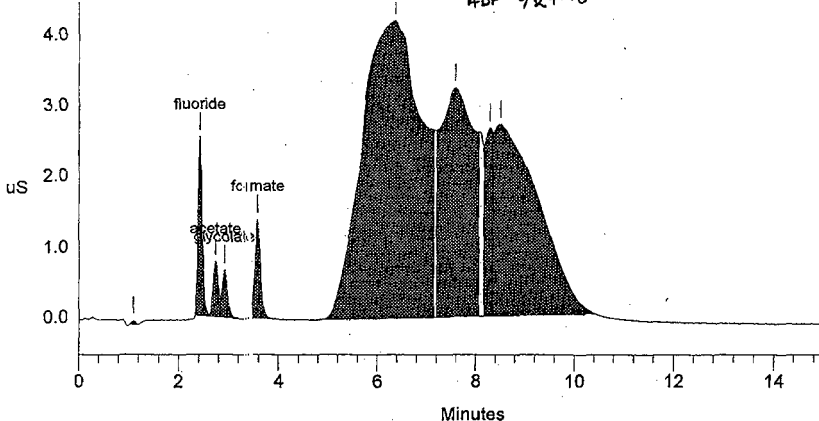
Sample Name: ~~130N20-C~~ <sup>131N20-B</sup> Date: 09/29/1998 19:50:22  
 Data File : C:\DX\DATA\98092811.D02  
 Method : C:\DX\METHOD\GLYCOLIC.MET  
 ACI Address: 1 System: 2 Inject#: 2 Detector: CDM-1  
 Analyst: *Ed Colvin* Column: AG4A-SC, AS4A-SC, SRS

Calibration Volume Dilution Points Rate Start Stop Area Reject  
 External 1 101 4500 5Hz 0.00 15.00 0

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.10		0.000	47	276	1	
2	2.42	fluoride	57.278	<i>98.76</i> 2525	14738	2	0.00
3	2.73	acetate	118.136	<i>100.97</i> 787	5762	2	0.00
4	2.91	glycolate	93.488	<i>92.56</i> 676	5019	2	0.00
5	3.57	formate	115.911	<i>91.27</i> 1398	11054	1	0.00
6	6.37		0.000	4213	347313	2	
7	7.59		0.000	3239	148256	2	
8	8.28		0.000	2658	28223	2	
9	8.50		0.000	2705	170315	2	
Totals			384.812	18248	730955		

File: 98092811.D02 Sample: ~~130N20-C~~ <sup>131N20-B</sup>  
*ADP 929-98*



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 855 TO 860.  
*S.S. 700-10*

HNF-1661 REV. 0

```

=====
Sample Name: BLANK                               Date: 09/29/1998 19:28:36
Data File  : C:\DX\DATA\98092811.D01
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 1             Detector: CDM-1
Analyst    : Ed Colvin                          Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

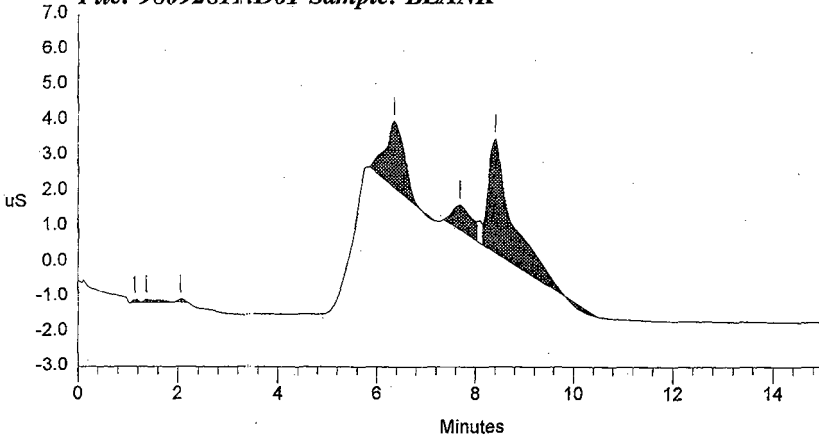
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          1    4500 5Hz   0.00 15.00          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.14		0.000	71	554		2
2	1.38		0.000	80	1778		2
3	2.05		0.000	80	701		2
4	6.35		0.000	1870	50742		1
5	7.69		0.000	686	19064		2
6	8.40		0.000	3182	104845		2
Totals			0.000	5970	177685		

File: 98092811.D01 Sample: BLANK



HNF-1661 REV.0

Data Reprocessed On 09/29/1998 20:41:26

```

=====
Sample Name: 130N20-C                               Date: 09/29/1998 20:10:31
Data File  : C:\DX\DATA\98092811.D03
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 3
Analyst    : Ed Colvin                               Column: AG4A-SC,AS4A-SC, SRS
Detector   : CDM-1
=====
    
```

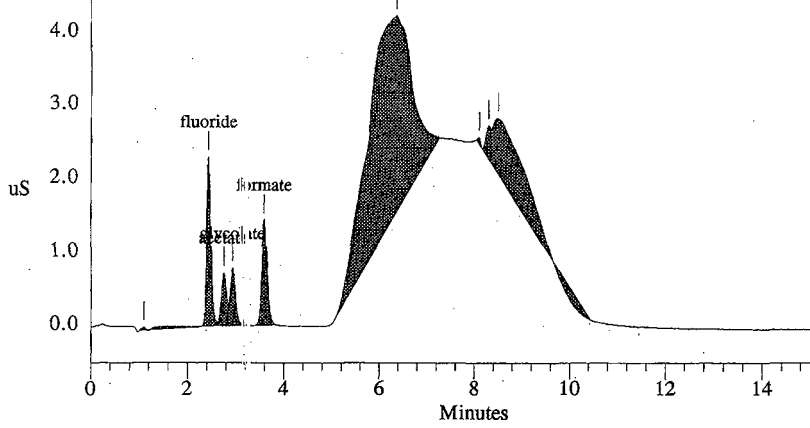
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External      1      101      4500 5Hz  0.00 15.00      0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.10		0.000	44	1773	1	
2	2.43	fluoride	54.955	2294	14109	2	0.00
3	2.75	acetate	111.168	720	5419	2	0.00
4	2.93	glycolate	112.408	783	6104	2	0.00
5	3.59	formate	119.918	1434	11461	1	0.00
6	6.36		0.000	2676	181843	1	
7	8.09		0.000	84	319	1	
8	8.29		0.000	444	3012	2	
9	8.50		0.000	756	34531	2	
Totals			398.448	9235	258571		

File: 98092811.D03 Sample: 130N20-C



SS 100-10

857

Data Reprocessed On 10/07/1998 10:03:13

```

=====
Sample Name: S98T002534 SAM                      Date: 09/29/1998 21:12:31
Data File  : E:\DATA\98092811.D04
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 4              Detector: CDM-1
Analyst    : Ed Colvin                          Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

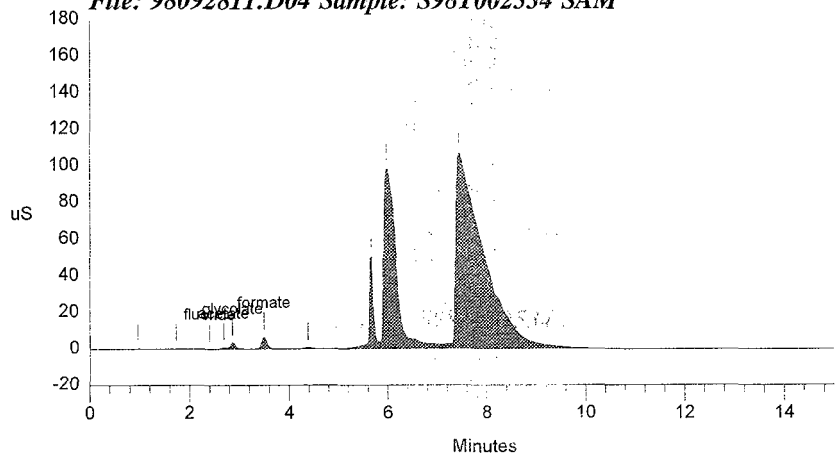
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           606 4500 5Hz  0.00 15.00           0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.96		0.000	99	759	1	
2	1.73		0.000	15	450	1	
3	2.39	fluoride	23.738	72	451	2	0.00
4	2.68	acetate	724.892	880	5894	2	0.00
5	2.85	glycolate	2584.874	3433	25837	2	0.00
6	3.49	formate	3013.851	6482	51698	1	0.00
7	4.37		0.000	899	8130	1	
8	5.65		0.000	50842	302389	2	
9	5.97		0.000	98732	1737053	2	
10	7.43		0.000	106768	4187912	2	
Totals			6347.355	268223	6320573		

File: 98092811.D04 Sample: S98T002534 SAM





```

=====
Sample Name: S98T002534 DUP                               Date: 09/29/1998 21:31:19
Data File  : C:\DX\DATA\98092811.D05
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 5                       Detector: CDM-1
Analyst    : Ed Colvin Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

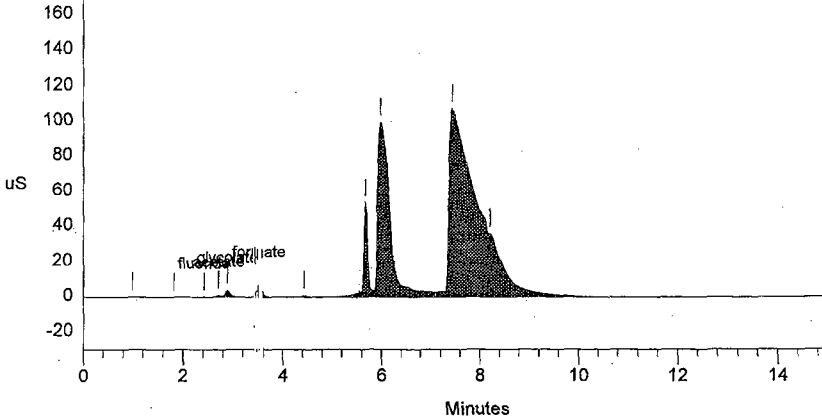
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          606   4500 5Hz   0.00 15.00          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.98		0.000	80	568	1	
2	1.82		0.000	25	933	1	
3	2.42	fluoride	24.368	72	478	2	0.00
4	2.71	acetate	813.959	939	6623	2	0.00
5	2.89	glycolate	2628.030	3570	26320	2	0.00
6	3.53	formate	3081.167	6673	52924	1	0.00
7	4.43		0.000	941	8395	1	
8	5.67		0.000	53594	314051	2	
9	5.98		0.000	99290	1752092	2	
10	7.43		0.000	107263	3561714	2	
11	8.20		0.000	35724	829465	2	
Totals			6547.524	308172	6553563		

File: 98092811.D05 Sample: S98T002534 DUP



SS.100-10-2-10

```

=====
Sample Name: S98T002534 SPK                               Date: 09/29/1998 21:49:00
Data File  : C:\DX\DATA\98092811.D06
Method     : C:\DX\METHOD\GLYCOLIC.MET
ACI Address: 1 System: 2 Inject#: 6                       Detector: CDM-1
Analyst    : Ed Colvin      Column: AG4A-SC,AS4A-SC, SRS
=====
    
```

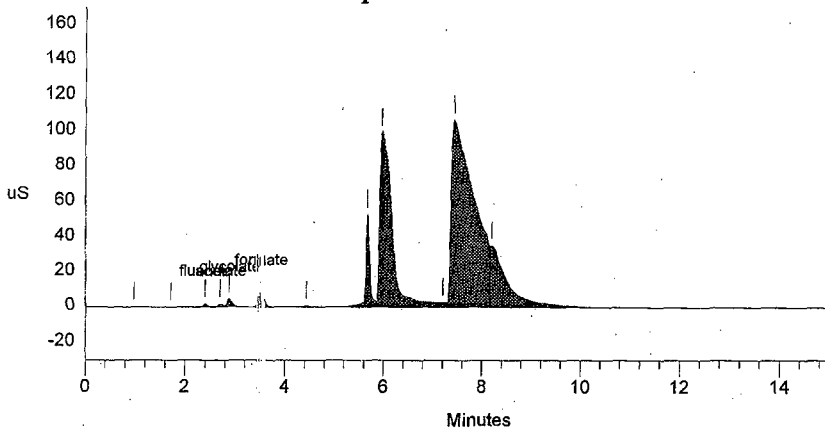
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-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           606   4500  5Hz  0.00 15.00          0
    
```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.98		0.000	82	635	1	
2	1.73		0.000	26	932	1	
3	2.40	fluoride	241.504	1690	10144	2	0.00
4	2.71	acetate	1401.194	1609	11349	2	0.00
5	2.89	glycolate	3189.000	4284	32798	2	0.00
6	3.53	formate	3779.106	7981	65798	1	0.00
7	4.44		0.000	933	8528	1	
8	5.67		0.000	53141	315559	2	
9	5.97		0.000	99197	1723563	3	
10	7.21		0.000	2546	24284	4	
11	7.43		0.000	106646	3471335	2	
12	8.21		0.000	35345	847466	2	
Totals			8610.804	313479	6512390		

File: 98092811.D06 Sample: S98T002534 SPK



SS .100-10-2-10 SPK#  
860 131N20-B

# LABCORE Completed Worklist Report for Worklist# 26184

Analyst: tam2

Instrument: IC40S2

Book#: 21N21C

Method: LA-533-105 Rev/Mod F-D

Worklist Comment: U107, @IC-01, tdm

Seq Type	Sample#	R A	Test	Matrix	Actual	Found	DL or Yield	Unit
1	CCB	0	@IC-QC F	QC	1	<1.20e-2		ug/mL
1	CCB	0	@IC-QC CL	QC	1	<1.70e-2		ug/mL
1	CCB	0	@IC-QC NO2	QC	1	<1.08e-1		ug/mL
1	CCB	0	@IC-QC BR	QC	1	<1.25e-1		ug/mL
1	CCB	0	@IC-QC NO3	QC	1	<1.39e-1		ug/mL
1	CCB	0	@IC-QC PO4	QC	1	<1.20e-1		ug/mL
1	CCB	0	@IC-QC SO4	QC	1	<1.38e-1		ug/mL
1	CCB	0	@IC-QC OXALATE2	QC	1	<1.05e-1		ug/mL
2	ICV	0	@IC-QC F	QC	5.90e1	6.49e+01	110.000 % Recovery	
2	ICV	0	@IC-QC CL	QC	8.00e1	8.51e+01	106.375 % Recovery	
2	ICV	0	@IC-QC NO2	QC	5.38e2	5.10e+02	94.796 % Recovery	
2	ICV	0	@IC-QC BR	QC	5.86e2	6.24e+02	106.485 % Recovery	
2	ICV	0	@IC-QC NO3	QC	5.92e2	6.17e+02	104.223 % Recovery	
2	ICV	0	@IC-QC PO4	QC	5.47e2	5.53e+02	101.097 % Recovery	
2	ICV	0	@IC-QC SO4	QC	6.38e2	6.59e+02	103.292 % Recovery	
2	ICV	0	@IC-QC OXALATE2	QC	5.53e2	5.89e+02	106.510 % Recovery	
3	CCV	0	@IC-QC F	QC	6.40e1	6.56e+01	102.500 % Recovery	
3	CCV	0	@IC-QC CL	QC	9.00e1	9.56e+01	106.222 % Recovery	
3	CCV	0	@IC-QC NO2	QC	5.43e2	5.17e+02	95.212 % Recovery	
3	CCV	0	@IC-QC BR	QC	6.30e2	6.58e+02	104.444 % Recovery	
3	CCV	0	@IC-QC NO3	QC	6.98e2	7.42e+02	106.304 % Recovery	
3	CCV	0	@IC-QC PO4	QC	6.32e2	6.34e+02	100.316 % Recovery	
3	CCV	0	@IC-QC SO4	QC	6.99e2	7.15e+02	102.289 % Recovery	
3	CCV	0	@IC-QC OXALATE2	QC	5.33e2	5.66e+02	106.191 % Recovery	
4	SAMPLE	S98T002458	@IC-01 F-02	LIQUID	<u>N/A</u>	2.781e+02	122.400	ug/mL
4	SAMPLE	S98T002458	@IC-01 CL-02	LIQUID	<u>N/A</u>	1.381e+04	173.400	ug/mL
4	SAMPLE	S98T002458	@IC-01 NO2-02	LIQUID	<u>N/A</u>	1.545e+05	1102.000	ug/mL
4	SAMPLE	S98T002458	@IC-01 BR-02	LIQUID	<u>N/A</u>	< 1.275e+03	1275.000	ug/mL
4	SAMPLE	S98T002458	@IC-01 NO3-02	LIQUID	<u>N/A</u>	1.489e+05	1418.000	ug/mL
4	SAMPLE	S98T002458	@IC-01 PO4-02	LIQUID	<u>N/A</u>	2.986e+03	1224.000	ug/mL
4	SAMPLE	S98T002458	@IC-01 SO4-02	LIQUID	<u>N/A</u>	3.069e+03	1408.000	ug/mL
4	SAMPLE	S98T002458	@IC-01 OXALATE2	LIQUID	<u>N/A</u>	< 1.071e+03	1071.000	ug/mL
5	DUP	S98T002458	@IC-01 F-02	LIQUID	2.78e+02	2.64e+02	5.166	RPD
5	DUP	S98T002458	@IC-01 CL-02	LIQUID	1.38e+04	1.35e+04	2.198	RPD
5	DUP	S98T002458	@IC-01 NO2-02	LIQUID	1.54e+05	1.52e+05	1.307	RPD
5	DUP	S98T002458	@IC-01 BR-02	LIQUID	<1.28e3	<1.28e3		RPD
5	DUP	S98T002458	@IC-01 NO3-02	LIQUID	1.49e+05	1.45e+05	2.721	RPD
5	DUP	S98T002458	@IC-01 PO4-02	LIQUID	2.99e+03	2.97e+03	0.671	RPD
5	DUP	S98T002458	@IC-01 SO4-02	LIQUID	3.07e+03	2.87e+03	6.734	RPD
5	DUP	S98T002458	@IC-01 OXALATE2	LIQUID	<1.07e3	<1.07e3		RPD
6	SPK	S98T002458	@IC-01 F-02	LIQUID	5.90e1	5.54e+01	93.898 % Recovery	

# LABCORE Completed Worklist Report for Worklist# 26184

Seq Type	Sample#	R	A	Test	Matrix	Actual	Found	DL or Yield	Unit
6 SPK	S98T002458	0		@IC-01	CL-02	LIQUID	8.00e1	8.45e+01	105.625 % Recovery
6 SPK	S98T002458	0		@IC-01	NO2-02	LIQUID	5.38e2	5.28e+02	98.141 % Recovery
6 SPK	S98T002458	0		@IC-01	BR-02	LIQUID	5.86e2	5.96e+02	101.706 % Recovery
6 SPK	S98T002458	0		@IC-01	NO3-02	LIQUID	5.92e2	5.96e+02	100.676 % Recovery
6 SPK	S98T002458	0		@IC-01	PO4-02	LIQUID	5.47e2	5.27e+02	96.344 % Recovery
6 SPK	S98T002458	0		@IC-01	SO4-02	LIQUID	6.38e2	6.37e+02	99.843 % Recovery
6 SPK	S98T002458	0		@IC-01	OXALATE2	LIQUID	5.53e2	5.69e+02	102.893 % Recovery
7 SAMPLE	S98T002462	0		@IC-01	F-02	LIQUID	N/A	2.554e+02	122.400 ug/mL
7 SAMPLE	S98T002462	0		@IC-01	CL-02	LIQUID	N/A	1.251e+04	173.400 ug/mL
7 SAMPLE	S98T002462	0		@IC-01	NO2-02	LIQUID	N/A	1.399e+05	1102.000 ug/mL
7 SAMPLE	S98T002462	0		@IC-01	BR-02	LIQUID	N/A	1.275e+03	1275.000 ug/mL
7 SAMPLE	S98T002462	0		@IC-01	NO3-02	LIQUID	N/A	1.570e+05	1418.000 ug/mL
7 SAMPLE	S98T002462	0		@IC-01	PO4-02	LIQUID	N/A	2.164e+03	1224.000 ug/mL
7 SAMPLE	S98T002462	0		@IC-01	SO4-02	LIQUID	N/A	4.279e+03	1408.000 ug/mL
7 SAMPLE	S98T002462	0		@IC-02	OXALATE2	LIQUID	N/A	1.071e+03	1071.000 ug/mL
8 DUP	S98T002462	0		@IC-01	F-02	LIQUID	2.55e+02	2.40e+02	6.061 RPD
8 DUP	S98T002462	0		@IC-01	CL-02	LIQUID	1.25e+04	1.32e+04	5.447 RPD
8 DUP	S98T002462	0		@IC-01	NO2-02	LIQUID	1.40e+05	1.45e+05	3.509 RPD
8 DUP	S98T002462	0		@IC-01	BR-02	LIQUID	<1.28e3	<1.28e3	RPD
8 DUP	S98T002462	0		@IC-01	NO3-02	LIQUID	1.57e+05	1.55e+05	1.282 RPD
8 DUP	S98T002462	0		@IC-01	PO4-02	LIQUID	2.16e+03	3.23e+03	39.703 RPD
8 DUP	S98T002462	0		@IC-01	SO4-02	LIQUID	4.28e+03	3.66e+03	15.617 RPD
8 DUP	S98T002462	0		@IC-01	OXALATE2	LIQUID	<1.07e3	<1.07e3	RPD

Final page for worklist# 26184

Analyst Signature

Date

Analyst Signature

Date

*James M. Lutz* 10/8/98  
Reviewer Signature Date

09/28/98 11:58  
A-0004-1

Page: 1

# LABCORE Data Entry Template for Worklist# 26184

Analyst: Jan V Instrument: IC 4052 Book# 21221-C

Method: LA-533-105 Rev/Mod F-0

Worklist Comment: U107, @IC-01, tdm

S Type	Sample#	R A	Test	Matrix	Group#	Project
1	CCB		@IC-QC	QC		
2	ICV		@IC-QC	QC		
3	CCV		@IC-QC	QC		
4	SAMPLE	S98T002458 0	@IC-01	LIQUID	98000401	U-107 (2)
			Analytes Requested: BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02			
5	DUP	S98T002458 0	@IC-01	LIQUID		
6	SPK	S98T002458 0	@IC-01	LIQUID		
7	SAMPLE	S98T002462 0	@IC-01	LIQUID	98000401	U-107 (2)
			Analytes Requested: BR-02 , CL-02 , F-02 , NO2-02 , NO3-02 , OXALATE2, PO4-02 , SO4-02			
8	DUP	S98T002462 0	@IC-01	LIQUID		

### Final page for worklist # 26184

*Jan V* 9/29/98

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Analyst Signature \_\_\_\_\_ Date \_\_\_\_\_

Data Entry Comments:

unloaded 10-8-98 Validated 10/8/98 JmLuz  
John W. Howell

261845EP.CSV

S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

```

=====
Sample Name: CCB                               Date: 09/29/1998 09:36:49
Data File  : C:\DX\DATA\98092901.D01
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 1           Detector: CDM-1
Analyst    JM Taylor Column: AG4A/AS4A anion column
=====

```

```

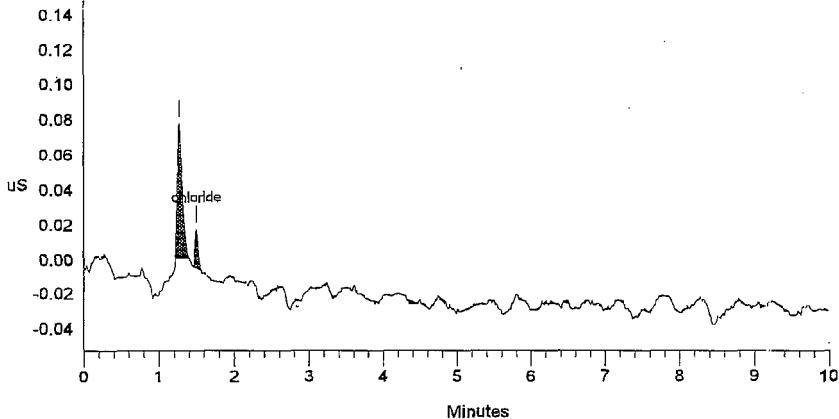
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External           1           1    3000 5Hz  0.00 10.00      30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	1.27		0.000	76	355	1	
2	1.50	chloride	0.014	22	64	1	-0.44
Totals			0.014	98	419		

File: 98092901.D01 Sample: CCB



SIGNATURE ABOVE REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 867 TO 877.

## HNF-1661 REV. 0

```

=====
Sample Name: ICV21N21-C                               Date: 09/29/1998 10:11:52
Data File  : C:\DX\DATA\98092901.D03
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 3                   Detector: CDM-1
Analyst    :                                           Column: AG4A/AS4A anion column
=====

```

```

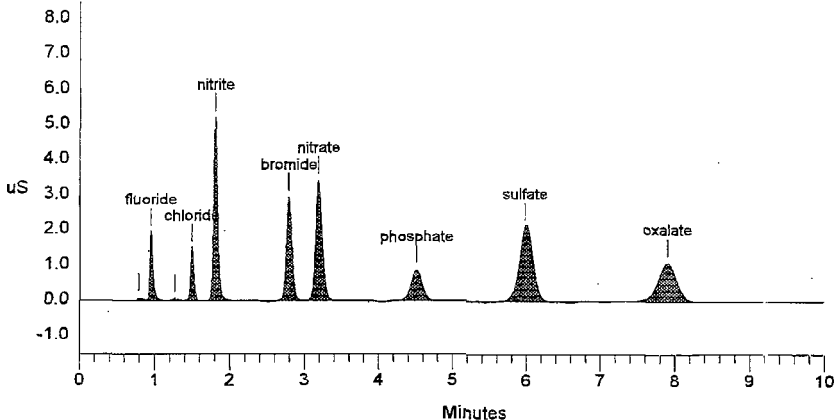
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           101 3000 5Hz 0.00 10.00           30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	74	285	2	
2	0.95	fluoride	64.888	1926	5620	2	-0.35
3	1.27		0.000	71	377	2	
4	1.49	chloride	85.070	1483	4765	2	-1.33
5	1.80	nitrite	510.271	5197	19884	1	-1.64
6	2.78	bromide	624.167	2939	16135	1	-1.07
7	3.18	nitrate	616.967	3407	21213	1	-0.93
8	4.51	phosphate	552.645	891	9447	1	-2.87
9	5.97	sulfate	659.130	2132	28005	1	-2.61
10	7.89	oxalate	588.938	1116	19789	1	-1.99
Totals			3702.077	19236	125524		

File: 98092901.D03 Sample: ICV21N21-C



902 → 1102

```

=====
Sample Name: CCV20N21C                               Date: 09/29/1998 09:53:59
Data File  : C:\DX\DATA\98092901.D02
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 2                   Detector: CDM-1
Analyst    :                                           Column: AG4A/AS4A anion column
=====

```

```

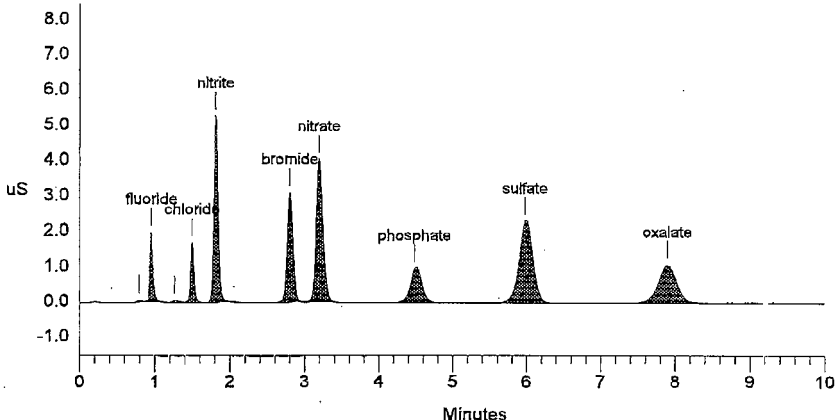
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           101    3000 5Hz   0.00 10.00           30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	82	309	1	
2	0.95	fluoride	65.598 <i>102.4</i>	1980	5683	1	0.35
3	1.27		0.000	75	414	2	
4	1.49	chloride	95.558 <i>106.1</i>	1706	5364	2	-0.88
5	1.81	nitrite	517.137 <i>95.2</i>	5272	20159	1	-1.28
6	2.79	bromide	657.951 <i>104.4</i>	3109	17035	1	-0.59
7	3.19	nitrate	741.787 <i>106.2</i>	4039	25654	1	-0.73
8	4.48	phosphate	633.925 <i>100.3</i>	963	10866	1	-3.45
9	5.97	sulfate	714.520 <i>102.2</i>	2305	30410	1	-2.61
10	7.89	oxalate	566.024 <i>106.1</i>	1081	19014	1	-1.99
Totals			3992.499	20613	134910		

File: 98092901.D02 Sample: CCV20N21C





HNF-1661 REV. 0

```

=====
Sample Name: S98T002458      Date: 09/29/1998 11:14:36
Data File  : C:\DX\DATA\98092901.D05
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 5      Detector: CDM-1
Analyst    :                      Column: AG4A/AS4A anion column
=====

```

```

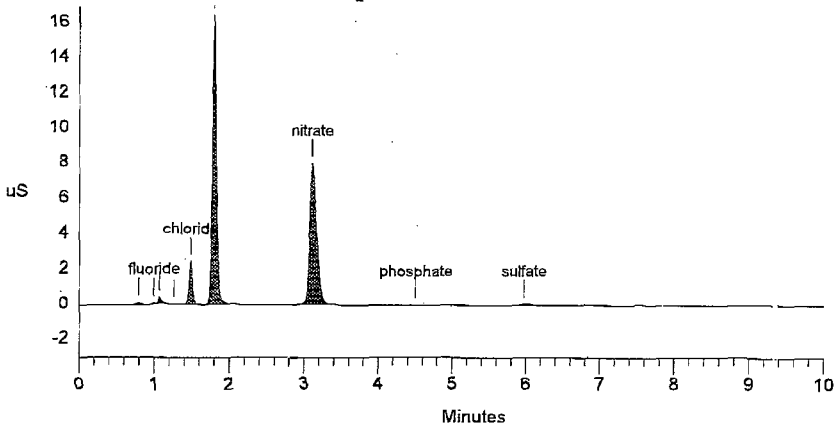
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          10201  3000  5Hz  0.00 10.00          30
-----

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	170	802	1	
2	0.99	fluoride	278.071	106	204	2	4.56
3	1.07		0.000	366	918	2	
4	1.27		0.000	26	111	1	
5	1.48	chloride	13814.868	2448	7743	1	-1.77
6	1.79	nitrite	154526.804	16451	61977	1	-2.00
7	3.11	nitrate	148860.078	7979	52346	1	-3.22
8	4.51	phosphate	2986.217	42	443	1	-2.87
9	5.97	sulfate	3068.742	74	1158	1	-2.61
Totals			323534.781	27661	125703		

File: 98092901.D05 Sample: S98T002458



```

=====
Sample Name: S98T002458DUP          Date: 09/29/1998 11:30:31
Data File  : C:\DX\DATA\98092901.D06
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 6   Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====

```

```

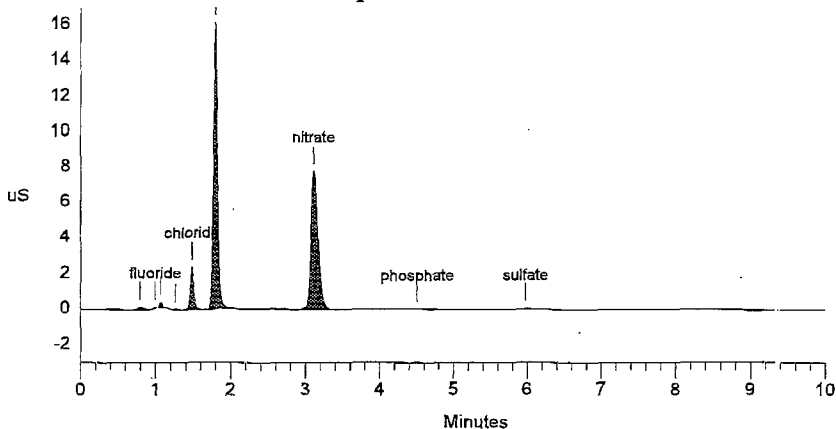
=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           10201 3000 5Hz 0.00 10.00           30
=====

```

\*\*\*\*\* Peak Report: All Peaks \*\*\*\*\*

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	168	815	1	
2	0.99	fluoride	264.080	98	192	1	4.56
3	1.07		0.000	368	906	1	
4	1.27		0.000	22	79	1	
5	1.48	chloride	13509.175	2410	7568	1	-1.77
6	1.79	nitrite	151715.384	16150	60795	1	-2.00
7	3.11	nitrate	145124.012	7806	50968	1	-3.22
8	4.51	phosphate	2968.987	35	440	1	-2.87
9	5.97	sulfate	2872.757	68	1076	1	-2.61
Totals			316454.395	27125	122839		

File: 98092901.D06 Sample: S98T002458DUP



```

=====
Sample Name: S98T002458SPK          Date: 09/29/1998 14:43:39
Data File  : C:\DX\DATA\98092901.D07
Method     : C:\DX\METHOD\4000SYS2.MET
ACI Address: 1 System: 2 Inject#: 7   Detector: CDM-1
Analyst    :                          Column: AG4A/AS4A anion column
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----

```

```

External      1      10201      3000      5Hz      0.00  10.00      30

```

```

***** Peak Report: All Peaks *****

```

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	0.79		0.000	225	1000	1	
2	0.95	fluoride	5874.718	1753	5028	2	-0.35
3	1.07		0.000	364	943	2	
4	1.48	chloride	22346.523	4029	12735	1	-1.77
5	1.79	nitrite	207877.666	21950	84820	1	-2.00
6	2.74	bromide	60215.612	3053	15391	1	-2.49
7	3.09	nitrate	209042.575	11414	75004	1	-3.84
8	4.51	phosphate	56243.038	900	9520	1	-2.87
9	5.97	sulfate	67417.650	2137	28368	1	-2.61
10	7.84	oxalate	57521.613	993	19132	1	-2.65
Totals			686539.396	46817	251941		

File: 98092901.D07 Sample: S98T002458SPK

