1 of 1

**REQUEST FOR CLOSURE
UNDERGROUND STORAGE
TANK 2130-U**

**OAK RIDGE Y-12 PLANT
OAK RIDGE, TENNESSEE
FACILITY ID #0-010117**

December, 1993

**Environmental Management Department
Health, Safety, Environment, and
Accountability Organization**

Prepared by

**Science Applications International Corporation
Under Subcontract 18B-99928C
for the
Oak Ridge Y-12 Plant
Oak Ridge, Tennessee 37831**

Managed by

**Martin Marietta Energy Systems, Inc.
for the
U.S. Department of Energy
Under Contract No. DE-AC05-84OR21400**

MASTER

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ACRONYMS

BTEX	benzene, toluene, ethylbenzene, and xylene
QA/QC	quality assurance/quality control
TDEC	Tennessee Department of Environmental Conservation
TPH	total petroleum hydrocarbons
UST	underground storage tank

**REQUEST FOR CLOSURE
UNDERGROUND STORAGE TANK 2130-U
OAK RIDGE Y-12 PLANT, OAK RIDGE, TENNESSEE
FACILITY ID #0-010117**

1.0 Purpose and Scope

This document presents a summary of the activities and analytical data related to the removal of underground storage tank (UST) 2130-U, previously located at the Oak Ridge Y-12 Plant. Removal of this tank was conducted in accordance with Tennessee Department of Environment and Conservation (TDEC) regulation 1200-1-15 (1992). A completed copy of the State of Tennessee, Division of Underground Storage Tanks, Permanent Closure Report Form is included as Appendix A of this document. Based on the information and data presented herein, the Oak Ridge Y-12 Plant requests permanent closure for the tank 2130-U site.

2.0 Site Location and History

Tank 2130-U was located along the north side of Building 9204-4, which is located in the northwestern portion of the Protected Area of the Oak Ridge Y-12 Plant (Figure 1). It was a 550-gallon UST installed in 1960 and was used for the storage of gasoline product throughout its operational history. Piping, which extended from the tank to a dispenser located approximately 10 ft from the tank pit, was suction-type. During its operational history, tank 2130-U was used as a fueling source for security and production vehicles operating within the Protected Area of the Y-12 Plant.

3.0 Tank Excavation, Removal, and Disposal

This section summarizes the activities conducted on December 3 and 4, 1992, during the excavation and removal of tank 2130-U. These activities were performed in accordance with the requirements of TDEC Rule 1200-1-15-.07, Appendix 5 (April 1990), and this description supports items 6, 7, and 11 of the Permanent Closure Report Form. Additional information concerning tank removal activities is presented in the field oversight notes included in Appendix B of this document. Disposal records for tank 2130-U and associated scrap metal are contained in Appendix C-1.

Y-12 PLANT SITE

TANK 2130-U SITE

FIGURE 1

**MARTIN MARIETTA ENERGY SYSTEMS
ENVIRONMENTAL MANAGEMENT DEPARTMENT**

LOCATION OF THE TANK 2130-U SITE AT THE Y-12 PLANT

Prior to the excavation of tank 2130-U, the tank was pumped so that only 2 inches of gasoline product remained (approximately 5 gallons). The interior of the tank was then washed twice, using between 18 and 19 gallons of water per wash. All of the wash water was pumped out of the tank and transferred into a 55-gallon drum. Upon completion of the washing process, the tank was purged of vapors by placing 50 pounds of dry ice into the tank. The waste wash water generated at the site was transported to the Y-12 Plant West End Treatment Facility. Disposal records for the waste wash water are contained in Appendix C-2.

Next, the tank was excavated and removed from its pit, wrapped in heavy plastic and sealed with tape, and tagged with identification information. The tank was then transferred to the Y-12 Plant West End Clean Scrap Yard for disposal. Soil material excavated from the tank pit was taken to an adjacent paved parking lot, placed in a plastic-lined diked area, and covered with plastic sheeting. Visual inspection of the tank identified numerous rust pits and found the tank in poor physical condition. However, no visual evidence of product leakage from the tank was observed within the excavated tank pit. The tank pit was observed to be dry upon completion of excavation activities. Disposal records for stockpiled soil removed during excavation are contained in Appendix C-3.

Soil sampling of the tank 2130-U pit was conducted on December 4, 1992. Samples were collected from 5 locations, 3 at the west end of the tank pit and 2 at the east end of the pit. Samples from these locations were collected at depths ranging from 1 to 7 ft below the base of the tank pit (8 to 14 ft below ground level). The locations and depths at which soil samples were collected for the tank 2130-U removal are presented in Figure 2. During the course of sampling, the entire tank pit was over-excavated vertically to a total depth of 14 ft below ground level. The total volume of soil material excavated at the tank 2130-U site was approximately 40 cubic yards.

All soil samples were collected from material retrieved with a backhoe bucket in accordance with Method ESP-303-1, *Soil Sampling with a Spade and Scoop*. In reference to Permanent Closure Report Form items 25 and 26, all soil samples were containerized in accordance with Method ESP-701, *Sample Preservation and Container Materials*, using 8-ounce amber glass septum vials. All samples were transported to the Y-12 Plant Laboratory for analysis. Soil material collected from the 5-NE-7' location (Sample 006) in the northeastern corner of the tank pit was noted for a hydrocarbon odor during field sampling activities.

On December 8, 1992, 5 soil samples were collected from the stockpile of soil material excavated from the tank 2130-U site during tank removal activities. These samples were collected from the 4 corners and the center of the stockpile. The samples were collected in accordance with

FIRE STORAGE
BUILDING

BUILDING 9204-4

8-SW-7'

6-W-3'

7-NW-7'

TANK EXCAVATION

1-SE-1'
3-SE-3'

2-NE-1'
4-NE-3'
5-NE-7'

PARKING LOT

CONC. PAD
FOR STACK

CONC. BASE
FOR PUMP

LEGEND:

- .....SAMPLE LOCATIONS
- 6 .....SAMPLE NUMBER
- .....LOCATION DIRECTION
- W .....(RELATIVE TO EXCAVATION)
- SAMPLE DEPTH (BELOW BASE
OF ORIGINAL TANK PIT WHICH
3' .....WAS 7' BELOW GROUND LEVEL)

REFERENCES

PLOT FILES
030501-1.PLT

Science Applications
International Corporation

REVISION	DRAWN BY	CHECK BY	DATE
0	R. BECKER		04-30-83

FIGURE 2
MAP OF THE TANK PIT
SAMPLING LOCATIONS
FOR THE TANK
2130-U REMOVAL

SHEET 1 OF 1 / 03035/0005/030501-1 N/A
DRAWING # CAD FILE # NOT ANGLE

Method ESP-303-1 and were containerized in accordance with Method ESP-701. All of the stockpile samples were also transported to the Y-12 Plant Laboratory for analysis. Upon receipt of the analytical results for the stockpile soil samples, this material was transported to the spoil area of the Y-12 Plant Centralized Sanitary Landfill II for disposal.

4.0 Analytical Results for Soil Samples

Summary laboratory analytical results for the 8 soil samples collected during the tank 2130-U removal are presented in Table 1. Summary analytical results for the quality assurance/quality control (QA/QC) samples collected for the tank removal are presented in Table 2. Analytical results reported for all types of tank removal samples collected are presented in Appendix D-1. Reported analytical results for the tank removal samples demonstrate that the concentrations of total benzene, toluene, ethylbenzene, and xylene (BTEX) and total petroleum hydrocarbons (TPH) at the sampled locations are below the most stringent TDEC Closure Action Level for soil (Table 3), with the exception of the sample collected at the 4-NE-3' location. The 4-NE-3' soil sample was reported to contain a total BTEX concentration in excess of the most stringent TDEC Closure Action Level for soil. Analytical results for duplicate samples collected at the 1-SE-1' and 7-NW-7' locations show good correlation with the original samples collected at these locations. In addition, analytical results for the trip blank and equipment rinsate collected during the tank removal sampling show that no discernible contamination of the soil samples occurred during collection or transport to the laboratory.

Summary laboratory analytical results for the 5 soil samples collected from the tank 2130-U soil stockpile are presented in Table 4. Table 5 summarizes the analytical results for the QA/QC samples collected during the stockpile sampling. Analytical results reported for all types of soil stockpile samples collected are presented in Appendix D-2. The purpose of stockpile sampling was to determine if the segregated material met the TDEC criteria of less than or equal to 0.5 ppm extractable benzene and 10.0 ppm extractable TPH for disposal in a sanitary landfill or other similar facility. Reported analytical results for the stockpile samples demonstrate that the concentrations of extractable benzene and TPH at all sampled locations are below the TDEC disposal criteria. Analytical results for the duplicate sample collected at Location 5 show good correlation with the original sample collected at this location. Analytical results for the trip blank and equipment rinsate collected during the stockpile sampling show that no discernible contamination of the soil samples occurred during collection or transport to the laboratory.

**Table 1. Analytical Results for Soil Samples Collected During
Tank Removal Activities at the Tank 2130-U Site**

Contaminant: Method: Units:	Benzene 8020 ¹ (ppm)	Toluene 8020 ¹ (ppm)	Ethylbenzene 8020 ¹ (ppm)	Xylene 8020 ¹ (ppm)	ΣBTEX Total (ppm)	TPH 8015 (Mod.) ² (ppm)
Sample 001 Location (1-SE-1')	.0012U ³	.0012U	.0012U	.0024U	ND ⁴	.150U
Sample 003 Location (2-NE-1')	.099J ⁴	.900	.360	4.700	6.059J	79.000
Sample 004 Location (3-SE-3')	.0012U	.0012U	.0012U	.0024U	ND	.130
Sample 005 Location (4-NE-3')	.220	3.800	3.600	22.000	*29.62	.830
Sample 006 Location (5-NE-7')	.160U	.800	.200	4.900	5.90	78.000
Sample 007 Location (6-W-3')	.0011U	.0028	.0011U	.100	.1028	.580
Sample 008 Location (7-NW-7')	.0013U	.0013U	.0013U	.0026U	ND	.130U
Sample 010 Location (8-SW-7')	.0012U	.0012U	.0012U	.0026U	ND	2.700

¹ Gas Chromatography, Aromatic Volatile Organics

² Gas Chromatography, Gasoline Range Organics

³ U - Contamination not detected above quantitation limit during analysis

⁴ ND - All components of the BTEX summation were below detection

⁵ J - Estimated Value

* Above the most stringent TDEC action level for Total BTEX in soil

**Table 2. Analytical Results for QA/QC Samples Collected During
Tank Removal Activities at the Tank 2130-U Site**

Contaminant: Method: Units:	Benzene 8020 ¹ (ppm)	Toluene 8020 ¹ (ppm)	Ethylbenzene 8020 ¹ (ppm)	Xylene 8020 ¹ (ppm)	ΣBTEX Total (ppm)	TPH 8015 (Mod.) ² (ppm)
Duplicates						
• Sample 002 Location (1-SE-1')	.0011U ³	.0011U	.0011U	.0022U	ND ⁴	.120U
• Sample 009 Location (7-NW-7')	.0013U	.0013U	.0013U	.0026U	ND ⁴	.130U
Trip Blank	.001U	.001	.001	.002	.004	NA ⁵
Equipment Rinse	.001	.001	.001	.002	.005	.060U

¹ Gas Chromatography, Aromatic Volatile Organics

² Gas Chromatography, Gasoline Range Organics

³ U - Contamination not detected above quantitation limit during analysis

⁴ ND - All components of the BTEX summation were below detection

⁵ NA - No analysis performed

Table 3. TDEC UST Closure Action Levels

Soil Cleanup Levels			
	<u>Soil Permeability</u>		
	$<10^{-4}$ cm/sec	10^{-4} to 10^{-6} cm/sec	$<10^{-6}$ cm/sec
TPH			
Drinking Water	100 ppm	250 ppm	500 ppm
Non-Drinking Water	250 ppm	500 ppm	1000 ppm
BTX			
Drinking Water	10 ppm	50 ppm	100 ppm
Non-Drinking Water	50 ppm	250 ppm	500 ppm

**Table 4. Analytical Results for Samples Collected from
the Tank 2130-U Soil Stockpile**

Contaminant: Method: Units:	Benzene 1311/8260¹ (ppm)	Lead 1311/200.7² (ppm)	TPH 1311/8015 (Mod.)³ (ppm)
Location 1	<0.50	<0.50	2.2
Location 2	<0.50	<0.50	<1.0
Location 3	<0.50	<0.50	<1.0
Location 4	<0.50	<0.50	<1.0
Location 5	<0.10	<0.50	2.2

¹ Toxicity Characteristic Leaching Procedure/Gas Chromotography, Volatile Organics

² Toxicity Characteristic Leaching Procedure/Induced Coupled Plasma

³ Toxicity Characteristic Leaching Procedure/Gas Chromotography, Gasoline Range Organics

**Table 5. Analytical Results for QA/QC Samples Collected During
Tank 2130-U Soil Stockpile Sampling Activities**

Contaminant: Method: Units:	Benzene 1311/8260 ¹ (ppm)	Lead 1311/200.7 ² (ppm)	TPH 1311/8015 (Mod.) ³ (ppm)
Duplicate • Location 5	<0.50	<0.50	1.5
Trip Blank	<0.50	NA ⁴	NA
Equipment Rinse	<0.50	<0.50	NA

¹ Toxicity Characteristic Leaching Procedure/Gas Chromotography, Volatile Organics

² Toxicity Characteristic Leaching Procedure/Induced Coupled Plasma

³ Toxicity Characteristic Leaching Procedure/Gas Chromotography, Gasoline Range Organics

⁴ NA - No analysis performed

Based on the information and analytical data presented in this document, it is concluded that no significant leakage of gasoline product occurred from tank 2130-U. Although the 4-NE-3' soil sample collected from the tank pit was found to contain a total BTEX concentration in excess of the most stringent TDEC Closure Action Level, contaminated material at this location above the most stringent level was removed during over-excavation of the tank pit at the time of the tank removal. The soil sample collected 4 ft below the 4-NE-3' location (5-NE-7') supports this conclusion. Therefore, the Oak Ridge Y-12 Plant requests that TDEC issue a notification of permanent closure for the tank 2130-U site.

APPENDIX A

STATE OF TENNESSEE
DIVISION OF UNDERGROUND STORAGE TANKS
PERMANENT CLOSURE REPORT FORM

STATE OF TENNESSEE
DIVISION OF UNDERGROUND STORAGE TANKS

PERMANENT CLOSURE REPORT FORM

Directions: Please address the following questions in detail. Attach extra sheets if necessary. This form must be completed and submitted with the laboratory analyses sheets.

1. Facility ID#: 0 - 0 1 0 1 1 7
2. Facility Name: DOE Oak Ridge Y-12 Plant (Building 9204-4/Tank 2130-U)
3. Did you notify this Division one working day prior to taking the soil samples for the closure?
Yes _____ No X
4. Was the tank atmosphere and the work zone regularly tested with a combustible gas indicator in accordance with Appendix 5 Part (3) of the UST regulations? Yes X No _____
5. Describe how the tank(s)'s atmosphere was purged: Filled tank with 50 pounds of dry ice
6. Describe how all liquids and sludge were removed from the tank(s): See Section 3.0 of Closure Report
7. Describe how all liquids and sludge were stored and disposed of: See Section 3.0 of Closure Report
8. Was the product in the piping drained into the tank to prevent spillage? Yes X No _____
9. How was the piping disposed? Removed X Capped _____ Other; (explain) _____
10. If the tank(s) was removed, was it labeled in accordance with Appendix 5 Part (4)(f) of the UST regulations?
Yes X No _____
11. How and where was the tank(s) disposed of? See Section 3.0 of Closure Report
12. Was bedrock encountered during tank system abandonment or removal? Yes _____ No X
13. Was water encountered in the tank pit during the tank system abandonment or removal activities?
Yes _____ No X
14. If "Yes" was checked for question 13, was water sampled? Yes _____ No _____ If yes, please attach the results.
15. Was obvious contamination encountered during the tank system abandonment or removal (i.e., discolored soil, soil with a hydrocarbon odor, etc.)? Yes _____ No X
16. Was more than one hundred cubic yards (100 yd³) of material removed during the tank system abandonment or removal?
Yes _____ No X
17. How much material was removed during the tank closure activities? -40 yards (cubic yards)
18. If "Yes" was checked for question 13, 15, or 16, did you notify this Division? Yes _____ No _____
Person Notified: _____ Date Notified: _____

19. What was done with the material after it was removed from the tank excavation? (Any excavated soil will be considered contaminated until proven otherwise through laboratory analyses.) When sampling this material, Technical Guidance Document 005, "Sampling Requirements for Aerated and Stockpiled Soils Containing Petroleum Hydrocarbons," shall be followed when applicable.

The material was taken to an adjacent paved area and encapsulated with plastic.

20. Are petroleum contaminated soils from this site being treated to reduce the contaminant concentrations to acceptable levels?
Yes _____ No X
21. If "Yes" was checked for question 20 and this material is being treated on the site of generation or on a site owned by the generator, or a subsidiary of the generator, a completed "Application to Treat Petroleum Contaminated Soils" shall be submitted to the appropriate UST field office for approval. If the soil is being treated on a site owned by a third party, the Tennessee Division of Solid Waste Management shall be contacted for a Solid Waste Processing Facility Permit. Have either of these been done? Yes _____ No _____ If "Yes", which Division approved the treatment?
22. Was contaminated material disposed off-site? Yes _____ No X Attach documentation (Special Waste Approval Letter, Landfill Tickets, Manifest, etc.) of the proper disposal.
23. Were all samples delivered to the laboratory within 72 hours of collection? Yes X No _____
24. Were all samples placed on ice immediately after being collected and kept at 4 degrees Celsius until submitted to the laboratory? Yes X No _____
25. Were all samples placed in proper sampling containers at the time they were taken? Yes X No _____
See Attached
26. Were the sampling containers properly prepared prior to the samples being taken? Yes X No _____
See Attached
27. Has an amended notification form been submitted to the UST central office in Nashville? Yes _____ No X
Failure to submit the amended Notification form may result in the assessment of additional UST fees.

Results from the analyses of all samples must be submitted with this report. Attach the original or carbon copies of the laboratory report forms; photocopies will not be accepted. The facility name, UST facility I.D. number, and sample location must be provided to the laboratory and printed on each sheet.

I certify that I have examined and am familiar with the information in this and all attached documents and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Name and Official Title of
Owner or Owner's Authorized
Representative (Print)

R. J. Spence/DOE Y-12 SITE MANAGER

Signature

Date

1/10/94

APPENDIX B
TANK REMOVAL OVERSIGHT FIELD NOTES
TANK 2130-U SITE

**BUILDING 9204-4 UST SITE (TANK 2130-U) TANK REMOVAL OVERSIGHT
FIELD NOTES, DECEMBER 3 AND 4, 1992**

Summary: One 550-gallon underground storage tank was excavated and removed at the Tank 2130-U site (Figure 1) as per guidelines in the sampling and analysis plan for the Building 9204-4 site (Martin Marietta Energy Systems, Inc., 1992). The locations for each of the tank pit soil samples collected during the tank removal are presented in Figure 2.

Personnel:

Y-12	-Don Bohrman (UST Program Manager)
	-Ed Ingram (UST Program Field Coordinator)
	-Dan Reichert (Health Physics)
	-Rudy Weigel (Industrial Health)
	-Mike Williams (Industrial Health)
	-Jeff Williams (Sampling Team)
	-Tony Garland (Sampling Team)
	-Ridenour, Crawford, and crew (maintenance)
X-10	-Jim Wade (Field Analysts)
SAIC	-Christopher Potter
	-Susan Abston

December 3, 1992

- 0810 Arrive at Y-12 Plant, meet Don Bohrman and proceed to site.
- 0830 Arrive at site. Weather: cold and partly sunny.
- 0940 Site health and safety meeting under the direction of Mr. Weigel.
- 1006 Depart site and the Y-12 Plant while the crews prepare for the excavation (transferring the necessary equipment to the site and establishing the exclusion zone).
- 1210 Return to the Y-12 Plant, meet Don Bohrman.
- 1220 Arrive at site.
- 1230 Work crew prepares to pump the remaining two inches (~5 gal) of gasoline from the tank.
- 1245 Approximately 19 gallons of water are poured into the tank using buckets.
- 1255 Water/gasoline mixture is pumped from tank into a drum using the gasoline pump that is still attached to the tank.
- 1310 Approximately 18 gallons of additional water are poured into the tank using buckets.
- 1315 The water/gasoline mixture is pumped from tank into a drum using the gasoline pump. All gasoline is removed from the tank.
- 1330 50 pounds of dry ice is placed into the tank to dissipate the hydrocarbon vapors.
- 1400 Electricians disconnect the electrical wires to the pump and remove all wiring.

**BUILDING 9204-4 UST SITE (TANK 2130-U) TANK REMOVAL OVERSIGHT
FIELD NOTES, DECEMBER 3 AND 4, 1992**

- 1415 Backhoe and operator arrive at the site and excavation of the tank begins. The excavated soil is loaded directly into a truck for subsequent hauling to the prepared interim storage area.
- 1430 Plumbers removed the piping connections from the tank. The connections were not capped since all of the fittings were dry. No leakage was observed.
- 1445 Tank is located three feet below the ground surface and is removed from the excavation. Tank pit backfill consists of manufactured lime sand. Upon removal of the tank, the manufactured sand material was partially removed from the tank. Visual inspection of the tank found numerous rust pits, and the tank was in generally poor physical condition. However, no visual evidence of product leakage from the tank was observed within the excavated tank pit. The tank pit was observed to be dry up to completion of excavation activities.
- 1450 The tank is wrapped in heavy plastic, tape sealed and tagged with identification information. The tank will remain on site until picked up for transfer to the west end Clean Scrap Yard for disposal.
- 1500 The excavation remained dry and was covered with plastic sheeting. The work area was flagged off, the crew departed the site and activities were terminated for the day.
- 1530 Depart site.

December 4, 1992

- 0815 Arrive at Y-12 Plant, meet Ed Ingram and proceed to site.
- 0845 Arrive at site. Weather: cold and overcast.
- 0850 Y-12 Plant work crew drains remaining water from the tank and adds dry ice to the tank. Backhoe operator begins excavating the tank pit area.
- 0900 Dump truck departs with load of excavated soil to the prepared area (diked and bermed area that is lined with plastic) on an adjacent paved parking area.
- 0930 Dump truck departs with a half load of soil to prepared area.
- 0935 Soil sample 1-SE-1' is taken from the southeastern corner of the tank pit, 1 ft below the tank (8' below ground surface). Soil is a mottled lean yellowish brown clay with pockets of fat grayish white clay. Soil appears to be a fill derived from a local source. No evidence of potential hydrocarbon contamination is observed in the sample. Samples were taken from the center of a backhoe bucket-load by the Y-12 sampling team following Method ESP-303-1, *Soil Sampling with a Spade and Scoop*. The backhoe bucket was not decontaminated between samples. Samples were containerized in accordance with Method ESP-701 *Sample Preservation and Container Materials* and were to be transferred by the Y-12 sampling team to the Y-12 lab for analysis.

**BUILDING 9204-4 UST SITE (TANK 2130-U) TANK REMOVAL OVERSIGHT
FIELD NOTES, DECEMBER 3 AND 4, 1992**

- 0945 Soil sample 2-NE-1' is taken from the northeastern corner of the tank pit, 1 ft below the tank (8' below ground surface). No evidence of potential hydrocarbon contamination is observed in the sample.
- 1000 Soil sample 3-SE-3' is taken from the southeastern corner of the tank pit, 3 ft below the tank (10' below ground surface). No evidence of potential hydrocarbon contamination is observed in the sample.
- 1010 Soil sample 4-NE-3' is taken from the northeastern corner of the tank pit, 3 ft below the tank (10' below ground surface). No evidence of potential hydrocarbon contamination is observed in the sample.
- 1020 Soil sample 5-NE-7' is taken from the northeastern corner of the tank pit, 7 ft below the tank (14' below ground surface). A strong hydrocarbon odor was noted from the backhoe bucket of soil.
- 1025 Continued to excavate the tank pit area.
- 1045 Personnel depart from site for lunch.
- 1215 Return to site.
- 1230 Deviated from sampling plan due to the detection through field screening of potentially contaminated soil in the northeastern portion of the tank pit (field screening by X-10 personnel), and due to the distinct odor of hydrocarbons in the soil; one additional soil sample (6-W-3') is taken from the center of the west end of the tank pit excavation.
- 1240 Soil sample 7-NW-7' is taken from the northwestern corner of the tank pit, 7 ft below the tank elevation (14' below ground surface). No evidence of potential hydrocarbon contamination is observed in the soil at this depth.
- 1300 Soil sample 8-SW-7' is taken from the southwestern corner of the tank pit, 7 ft below the tank (14' below ground surface). No evidence of potential hydrocarbon contamination is observed in the sample.
- 1305 Dump truck departs with a load of soil to the prepared area.
- 1310 Unable to continue over-excavation to the northeast of the tank pit due to the undermining of a concrete pad that supports a large stack adjacent to the 9204-4 building. Overall dimensions of the tank pit upon completion of excavation are 13'x9'x10' in depth (bottom depth is irregular due to sampling). The excavation is backfilled with clean clay and the excavated soil in the interim storage area is covered with plastic sheeting.
- 1345 Depart site.

APPENDIX C
DISPOSAL RECORDS FOR TANK 2130-U

APPENDIX C-1

**DISPOSAL RECORDS FOR TANK 2130-U
AND ASSOCIATED PIPING AND HARDWARE**

RECEIPT FOR TRANSFER, STORAGE, OR DISPOSAL OF WASTES

(No Classified Information Should Be Entered When Using This Form.)

REQUEST NUMBER

37576

Information must be typed. WASTE GENERATOR COMPLETES THIS SECTION

1. DESCRIPTION OF MATERIAL (Only one type per form.) 550 gallon steel tank (2130-U) that was excavated ~~from the bottom~~ side of Building 9204-4. "Tennessee state requirement for tracking of the disposal of this item."		2. MATERIAL FORM (One Only) ☒ SOLID ☐ SLUDGE ☐ LIQUID ☐ AEROSOL ☐ GAS ☐ OIL	
3. IS WASTE CLASSIFIED? ☐ YES ☒ NO	4. DOES WASTE CONTAIN POLYCHLORINATED BIPHENYLS (PCB'S)? ☐ YES ☒ NO	5. DOES WASTE CONTAIN MERCURY? ☐ YES ☒ NO	6. DOES WASTE CONTAIN BERYLLIUM? ☐ YES ☒ NO
7. DOES WASTE CONTAIN ASBESTOS? ☐ YES ☒ NO	8. DOES WASTE CONTAIN CARCINOGEN? ☐ YES ☒ NO	9. IS WASTE RADIOACTIVE? ☐ YES ☒ NO	10. DOES WASTE CONTAIN OTHER CONTAMINANTS? ☐ YES ☒ NO (If yes, list name(s) and concentration(s) below.)
11. IS MATERIAL RCRA WASTE? ☐ YES ☒ NO BY ☒ PROCESS KNOWLEDGE ☐ ANALYSIS		IF YES, ENTER RCRA HAZARDOUS WASTE CODES. ACCUMULATION START DATE	
12. HAZARDS IN HANDLING LEL 0.0% O ₂ - 20.8		RESPIRATOR REQUIREMENTS Mask: Cartridge:	
13. CONTAINER TYPE (Drum, Polytank, Box, Bag, etc.) skid	14. HP SURVEY TAG COLOR green	15. NUMBER OF CONTAINERS 1	
16. NET VOLUME OF WASTE -1	VOL. UNITS (Cubic Feet or Gallons) units	17. GROSS WEIGHT OF CONTAINERS 800	WEIGHT UNITS lbs
18. WASTE LOCATION Building: 9204-4 Dock of Pickup Area: North side at ramp			
19. WASTE GENERATOR NAME (Print) E. M. Ingram	20. PHONE NO. 6-5716	21. BUILDING/MAIL STOP 9115/8219	22. CHARGE NO. S-2205F-19
23. WASTE GENERATOR SIGNATURE E. M. Ingram	I CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND CORRECT.		SIGNATURE E. M. Ingram
24. ENVIRONMENTAL OFFICER SIGNATURE JEANIE DODD	DATE 12-10-92	25. DERIVATIVE CLASSIFIER SIGNATURE J. L. J. J.	DATE 12/11/92
26. ENVIRONMENTAL OFFICER DIVISION 66			
INFORMATION BELOW TO BE COMPLETED BY WASTE MANAGEMENT			
27. TECHNICAL CONTACT C. J. J. J.	DATE ASSIGNED 12-10-92	28. PROPER DOT SHIPPING NAME	
29. HAZARD CLASSIFICATION K	30. UN OR NA NUMBER	31. FIELD REVIEW SIGNATURE C. J. J. J.	DATE 12/19/92
32. SAMPLE REQUISITION NO.	DATE SAMPLED	SAMPLING CODE NO.	
33. DISPOSAL INSTRUCTIONS NSY to cut up per Childs Drumhead. Please move to			
34. SPECIAL PROTECTIVE EQUIPMENT REQUIRED (Safety Glasses and Gloves to be worn as minimum.)			

MOVEMENT/DISPOSAL DATA

35. MOVED TO CODE 24-231	DATE MOVED 12-10-92	TRANSPORTER'S BADGE NO.
36. FACILITY -21-43	DATE WASTE RECEIVED 12-10-92	FACILITY LOCATION (BAY OR ROW)
37. FINAL DISPOSITION	TANK	COMPANY
		OPERATOR SIGNATURE K. J. J. J.
		OTHER

REQUEST FOR TRANSFER, STORAGE, OR DISPOSAL OF WASTES

(No Classified Information Should Be Entered When Using This Form.)

REQUEST NUMBER

37578

Information must be typed.

WASTE GENERATOR COMPLETES THIS SECTION

1. DESCRIPTION OF MATERIAL (Only one type per form.)

Scrap 1 1/2" pipe, flat steel and double guard post removed from excavated UST at the 9204-4 site. 1 1/2" pipe has been rinsed with H₂O. A fork lift will be needed to load guard post assembly.

2. MATERIAL FORM (One Only)

☒ SOLID ☐ SLUDGE
☐ LIQUID ☐ AEROSOL
☐ GAS ☐ OIL

3. IS WASTE CLASSIFIED? ☐ YES ☒ NO	8. DOES WASTE CONTAIN CARCINOGEN? ☐ YES ☒ NO	IF YES, GIVE NAME. Possible petroleum by-product									
4. DOES WASTE CONTAIN POLYCHLORINATED BIPHENYLS (PCB'S)? ☐ YES ☒ NO	9. IS WASTE RADIOACTIVE? ☒ YES ☐ NO	IF YES, ENTER RADIOACTIVE CONSTITUENT(S). BETA contamination									
5. DOES WASTE CONTAIN MERCURY? ☐ YES ☒ NO	10. DOES WASTE CONTAIN OTHER CONTAMINANTS? ☐ YES ☒ NO	(If yes, list name(s) and concentration(s) below.)									
6. DOES WASTE CONTAIN BERYLLIUM? ☐ YES ☒ NO	<table border="1"> <thead> <tr> <th>NAME</th> <th>CONCENTRATION</th> <th>NAME</th> <th>CONCENTRATION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>			NAME	CONCENTRATION	NAME	CONCENTRATION				
NAME	CONCENTRATION	NAME	CONCENTRATION								
7. DOES WASTE CONTAIN ASBESTOS? ☐ YES ☒ NO											

11. IS MATERIAL RCRA WASTE? ☐ YES ☒ NO	BY ☒ PROCESS KNOWLEDGE ☐ ANALYSIS	IF YES, ENTER RCRA HAZARDOUS WASTE CODES.	ACCUMULATION START DATE
12. HAZARDS IN HANDLING Radiation and possible petroleum by-products and volatile organics		RESPIRATOR REQUIREMENTS Mask: NA Cartridge: NA	
13. CONTAINER TYPE (Drum, Polytank, Box, Bag, etc.) Loose	14. HP SURVEY TAG COLOR yellow	15. NUMBER OF CONTAINERS NA	
16. NET VOLUME OF WASTE NA	VOL. UNITS (Cubic Feet or Gallons) NA	17. GROSS WEIGHT OF CONTAINERS NA	WEIGHT UNITS 300 lbs

18. WASTE LOCATION Building: 9204-4 Dock of Pickup Area: North side at ramp			
19. WASTE GENERATOR NAME (Print) E. M. Inoram	20. PHONE NO. 6-5716	21. BUILDING/MAIL STOP 9115/8219	22. CHARGE NO. S-2205-19

23. WASTE GENERATOR SIGNATURE E. M. Inoram	I CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND CORRECT.	SIGNATURE E. M. Inoram	10737	DATE 12-11-92
24. ENVIRONMENTAL OFFICER SIGNATURE [Signature]	DATE 12-16-92	25. DERIVATIVE CLASSIFIER SIGNATURE [Signature]	DATE 12/11/92	26. ENVIRONMENTAL OFFICER DIVISION 668

INFORMATION BELOW TO BE COMPLETED BY WASTE MANAGEMENT				
27. TECHNICAL CONTACT [Signature]	DATE ASSIGNED 1-6-93	28. PROPER DOT SHIPPING NAME		
29. HAZARD CLASSIFICATION H 11/12	30. UN OR NA NUMBER 2922	31. FIELD REVIEW SIGNATURE [Signature]	DATE 1-12-93	
32. SAMPLE REQUISITION NO.	DATE SAMPLED	SAMPLING CODE NO.		

33. DISPOSAL INSTRUCTIONS H 11/12
34. SPECIAL PROTECTIVE EQUIPMENT REQUIRED (Safety Glasses and Gloves to be worn as minimum.)

MOVEMENT/DISPOSAL DATA			
35. MOVED TO CODE H 11/12	DATE MOVED 1-12-93	TRANSPORTER'S BADGE NO. [Number]	
36. FACILITY [Signature]	DATE WASTE RECEIVED 1-21-93	FACILITY LOCATION (BAY OR ROW)	OPERATOR SIGNATURE [Signature]
37. FINAL DISPOSITION	TANK	COMPANY	OTHER

APPENDIX C-2

**DISPOSAL RECORDS FOR RINSE WATER
GENERATED DURING THE REMOVAL OF TANK 2130-U**

REQUEST FOR TRANSFER, STORAGE, OR DISPOSAL OF WASTES

(No Classified Information Should Be Entered When Using This Form.)

REQUEST NUMBER

37577

Information must be typed.

WASTE GENERATOR COMPLETES THIS SECTION

1. DESCRIPTION OF MATERIAL (Only one type per form.)

Rinse water from the excavation process of removing the Underground Storage Tank 2310-U from Building 920404. Potable water mixed with approximately four gallons of gasoline.

2. MATERIAL FORM (One Only)

☐ SOLID ☐ SLUDGE
☒ LIQUID ☐ AEROSOL
☐ GAS ☐ OIL

3. IS WASTE CLASSIFIED?

☐ YES ☒ NO

8. DOES WASTE CONTAIN CARCINOGEN?

☒ YES ☒ NO

IF YES, GIVE NAME.

Petroleum By-product

4. DOES WASTE CONTAIN POLYCHLORINATED BIPHENYLS (PCB'S)?

☐ YES ☒ NO

8. IS WASTE RADIOACTIVE?

☐ YES ☒ NO

IF YES, ENTER RADIOACTIVE CONSTITUENT(S).

5. DOES WASTE CONTAIN MERCURY?

☐ YES ☒ NO

10. DOES WASTE CONTAIN OTHER CONTAMINANTS?

☐ YES ☒ NO

(If yes, list name(s) and concentration(s) below.)

6. DOES WASTE CONTAIN BERYLLIUM?

☐ YES ☒ NO

NAME

CONCENTRATION

NAME

CONCENTRATION

7. DOES WASTE CONTAIN ASBESTOS?

☐ YES ☒ NO

AT

11. IS MATERIAL RCRA WASTE?

☐ YES ☒ NO

BY ☒ PROCESS KNOWLEDGE ☐ ANALYSIS

IF YES, ENTER RCRA HAZARDOUS WASTE CODES.
To be sampled at WFO.

ACCUMULATION START DATE

12. HAZARDS IN HANDLING Precautions necessary as may contain petroleum by-products and volatile organics.

Mask: NA

Cartridge:

13. CONTAINER TYPE (Drum, Polytank, Box, Bag, etc.)

55 gallon drum

14. HP SURVEY TAG COLOR

brown

15. NUMBER OF CONTAINERS

1

16. NET VOLUME OF WASTE

45

VOL. UNITS (Cubic Feet or Gallons)

gallons

17. GROSS WEIGHT OF CONTAINERS

405

WEIGHT UNITS

lbs

18. WASTE LOCATION

Building: 9204-4

Deck of Pickup Area: North side at ramp

19. WASTE GENERATOR NAME (Print)

E. M. Ingram

20. PHONE NO.

6-5716

21. BUILDING/MAIL STOP

9115/8219

22. CHARGE NO.

S-2205F19

23. WASTE GENERATOR SIGNATURE

I CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND CORRECT.

SIGNATURE

E.M. Ingram 10737

DATE

12-11-92

24. ENVIRONMENTAL OFFICER SIGNATURE

DATE

25. DERIVATIVE CLASSIFIER SIGNATURE

DATE

26. ENVIRONMENTAL OFFICER DIVISION

66

INFORMATION BELOW TO BE COMPLETED BY WASTE MANAGEMENT

27. TECHNICAL CONTACT

DATE ASSIGNED

28. PROPER DOT SHIPPING NAME

29. HAZARD CLASSIFICATION

30. UN OR NA NUMBER

31. FIELD REVIEW SIGNATURE

DATE

32. SAMPLE REQUISITION NO.

DATE SAMPLED

SAMPLING CODE NO.

33. DISPOSAL INSTRUCTIONS

34. SPECIAL PROTECTIVE EQUIPMENT REQUIRED (Safety Glasses and Gloves to be worn as minimum.)

MOVEMENT/DISPOSAL DATA

35. MOVED TO CODE

DATE MOVED

TRANSPORTER'S BADGE NO.

36. FACILITY

DATE WASTE RECEIVED

FACILITY LOCATION (BAY OR ROW)

OPERATOR SIGNATURE

37. FINAL DISPOSITION

TANK

COMPANY

OTHER

Building 9204-4/
Tank 2130-U
#0-010117

2109 # 37577

2109

Y12 WMD

N92006327

N92006327

VOL. 485 WT. 405

APPENDIX C-3

**DISPOSAL RECORDS FOR STOCKPILED SOIL REMOVED DURING
THE EXCAVATION OF TANK 2130-U**

93-051MS031093

REQUEST FOR TRANSFER, STORAGE, OR DISPOSAL OF WASTES

(No Classified Information Should Be Entered When Using This Form.)

REQUEST NUMBER

37580

Information must be typed. WASTE GENERATOR COMPLETES THIS SECTION

1. DESCRIPTION OF MATERIAL (Only one type per form.)

93 FEB -9 AM 10:42

Sand/soil excavated from Building 9204-4 UST site (2130-U).

2. MATERIAL FORM (One Only)

☒ SOLID ☐ SLUDGE
☐ LIQUID ☐ AEROSOL
☐ GAS ☐ OIL

3. IS WASTE CLASSIFIED? ☐ YES ☒ NO	8. DOES WASTE CONTAIN CARCINOGEN? ☒ YES ☐ NO	IF YES, GIVE NAME. Possible petroleum by-products	
4. DOES WASTE CONTAIN POLYCHLORINATED BIPHENYLS (PCBS)? ☐ YES ☒ NO	9. IS WASTE RADIOACTIVE? ☐ YES ☒ NO	IF YES, ENTER RADIOACTIVE CONSTITUENT(S)	
5. DOES WASTE CONTAIN MERCURY? ☐ YES ☒ NO	10. DOES WASTE CONTAIN OTHER CONTAMINANTS? ☐ YES ☒ NO	(If yes, list name(s) and concentration(s) below.)	
6. DOES WASTE CONTAIN BERYLLIUM? ☐ YES ☒ NO	NAME CONCENTRATION NAME CONCENTRATION		
7. DOES WASTE CONTAIN ASBESTOS? ☐ YES ☒ NO	(See analytical data attached)		

11. IS MATERIAL RCRA WASTE? ☐ YES ☒ NO	BY ☐ PROCESS KNOWLEDGE ☒ ANALYSIS	IF YES, ENTER RCRA HAZARDOUS WASTE CODES.	ACCUMULATION START DATE
12. HAZARDS IN HANDLING V/A		RESPIRATOR REQUIREMENTS Mask: Cartridge:	
13. CONTAINER TYPE (Drum, Polybag, Box, Bag, etc.) Bulk	14. HPS SURVEY TAG COLOR green (analyses)	15. NUMBER OF CONTAINERS 1	
16. NET VOLUME OF WASTE 310	VOL. UNITS (Cubic Feet or Gallons) cubic feet	17. GROSS WEIGHT OF CONTAINERS 60,000	WEIGHT UNITS lbs.

18. WASTE LOCATION Building: 9220-28		Deck of Pickup Area: west parking area	
19. WASTE GENERATOR NAME (Print) E. M. Ingram	20. PHONE NO. 6-5716	21. BUILDING/MAIL STOP 9115/8219	22. CHARGE NO. S2205F19
23. WASTE GENERATOR SIGNATURE E. M. Ingram	I CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND CORRECT.		DATE 1-26-93
24. ENVIRONMENTAL OFFICER SIGNATURE J. M. Hecker	DATE 2-1-93	25. DERIVATIVE CLASSIFIER SIGNATURE J. M. Hecker	DATE 1/27/93
26. ENVIRONMENTAL OFFICER DIVISION 66			

INFORMATION BELOW TO BE COMPLETED BY WASTE MANAGEMENT			
27. TECHNICAL CONTACT Wiginton 27208	DATE ASSIGNED	28. PROPER DOT SHIPPING NAME	
29. HAZARD CLASSIFICATION Not Regulated	30. UN OR NA NUMBER	31. FIELD REVIEW SIGNATURE M. C. Wiginton	DATE 2/12/93
32. SAMPLE REQUISITION NO.	DATE SAMPLED	SAMPLING CODE NO.	

33. DISPOSAL INSTRUCTIONS Sanitary Landfill II Spill Area
34. SPECIAL PROTECTIVE EQUIPMENT REQUIRED (Safety Glasses and Gloves to be worn as minimum.)

MOVEMENT/DISPOSAL DATA		
35. MOVED TO CODE	DATE MOVED	
36. FACILITY	DATE WASTE RECEIVED	FACILITY LOCATION (BAY OR ROW)
37. DISPOSITION	TANK	COMPANY

UCN-2108 (2 10-90)

DISTRIBUTION: WHITE - Retained By Waste Man
CANARY - To Waste Generator Att
PINK - To Environmental Office
GREEN - Retained By Waste Gen

C-9

Ed-
This 2109 should
accompany the
Sand/soil to the
Landfill. Give it to
the landfill technician.
Mam

Building 9204-4/
Tank 2130-U
#0-010117

2109 # 37580

810 cu. Ft. SOIL/SAND

RFD

Y12C9306702

Y12C9306702

VOL. 456 WT. 6000

APPENDIX D
REPORTED LABORATORY ANALYTICAL REPORTS
FOR TANK 2130-U

APPENDIX D-1

**REPORTED LABORATORY ANALYTICAL RESULTS
FOR TANK REMOVAL SOIL SAMPLES
TANK 2130-U**

93-051MS/031093

CJM

ENDS001 Y-12 PLANT LAB ENVIRONMENTAL ANALYSES REPORT

Requisition: AOU308 Env Sample Code: 8403 Sample desc: GRAB SOIL/U
Sample loc: MULTIPLE Requester name: HANZELKA, K
Date: 12-04-92 Addr: 9207 , 8225, 0000
Time: 13:30 Phone: 4-1599
Sampled by: 30096 / 30095 Date received: 12-07-92
Ref Id: Reported: 01-18-93
Handling: NEED 12-11-92 Charge code: S2205F19
Remarks: AOU309 Approved by: SLAGLE /LCL

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EC	CAS NUMBER	DETERMINATION	BASIS/PREP	/PHASE	ANSWER	UNITS	DATE	TIME	METHOD	ANA

Sample: 001 Location: A1-2'

020	7439-92-1	Lead	As Rec/Total	/Complete	12.8	ug/kg	12/25/92	13:00	7421	042
634	8006-61-9	Total Petroleum Hydrocarbons-	As Rec/Total	/Complete	150 U	ug/kg	12/18/92	13:00	8015	042

UST Survey Parameters

509	71-43-2	Benzene	As Rec/Total	/Complete	1.2 U	ug/kg	12/16/92	13:00	8020	042
546	100-41-4	Ethylbenzene	As Rec/Total	/Complete	1.2 U	ug/kg	12/16/92	13:00	8020	042
623	1330-20-7	M-XYLENE and/or P-XYLENE	As Rec/Total	/Complete	2.4 U	ug/kg	12/16/92	13:00	8020	042
600	108-88-3	Toluene	As Rec/Total	/Complete	1.2 U	ug/kg	12/16/92	13:00	8020	042

Sample: 002 Location: A1 DUPLICATE -2'

020	7439-92-1	Lead	As Rec/Total	/Complete	8.3	ug/kg	12/25/92	13:00	7421	042
634	8006-61-9	Total Petroleum Hydrocarbons-	As Rec/Total	/Complete	120 U	ug/kg	12/18/92	13:00	8020	042

UST Survey Parameters

509	71-43-2	Benzene	As Rec/Total	/Complete	1.1 U	ug/kg	12/16/92	13:00	8020	042
546	100-41-4	Ethylbenzene	As Rec/Total	/Complete	1.1 U	ug/kg	12/16/92	13:00	8020	042
623	1330-20-7	M-XYLENE and/or P-XYLENE	As Rec/Total	/Complete	2.2 U	ug/kg	12/16/92	13:00	8020	042
600	108-88-3	Toluene	As Rec/Total	/Complete	1.1 U	ug/kg	12/16/92	13:00	8020	042

1/19/93
R. E. Slagle

ENDS001 Y-12 PLANT LAB ENVIRONMENTAL ANALYSES REPORT

Requisition: AOU308

PAGE: 2

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DC	CAS NUMBER	DETERMINATION	BASIS/PRP	/PHASE	ANSWER	UNITS	DATE	TIME	METHOD	ANA

Sample: 003 Location: B1-2'

020	7439-92-1	Lead	As Rec/Total	/Complete	15.2	ug/kg	12/25/92	13:00	7421	042
634	8006-61-9	Total Petroleum Hydrocarbons-	As Rec/Total	/Complete	79000	ug/kg	12/18/92	13:00	8015	042

UST Survey Parameters

509	71-43-2	Benzene	As Rec/Total	/Complete	99 J	ug/kg	12/17/92	13:00	8020	042
546	100-41-4	Ethylbenzene	As Rec/Total	/Complete	360 +/-40	ug/kg	12/17/92	13:00	8020	042
623	1330-20-7	M-XYLENE and/or P-XYLENE	As Rec/Total	/Complete	4700 +/-500	ug/kg	12/17/92	13:00	8020	042
600	108-88-3	Toluene	As Rec/Total	/Complete	900 +/-90	ug/kg	12/17/92	13:00	8020	042

Sample: 004 Location: A3-4'

020	7439-92-1	Lead	As Rec/Total	/Complete	10.9	ug/kg	12/25/92	13:00	7421	042
634	8006-61-9	Total Petroleum Hydrocarbons-	As Rec/Total	/Complete	130	ug/kg	12/18/92	13:00	8015	042

UST Survey Parameters

509	71-43-2	Benzene	As Rec/Total	/Complete	1.2 U	ug/kg	12/17/92	13:00	8020	042
546	100-41-4	Ethylbenzene	As Rec/Total	/Complete	1.2 U	ug/kg	12/17/92	13:00	8020	042
623	1330-20-7	M-XYLENE and/or P-XYLENE	As Rec/Total	/Complete	2.4 U	ug/kg	12/17/92	13:00	8020	042
600	108-88-3	Toluene	As Rec/Total	/Complete	1.2 U	ug/kg	12/17/92	13:00	8020	042

Sample: 005 Location: B3-4'

020	7439-92-1	Lead	As Rec/Total	/Complete	55	ug/kg	12/27/92	13:00	7421	042
634	8006-61-9	Total Petroleum Hydrocarbons-	As Rec/Total	/Complete	830	ug/kg	12/18/92	13:00	8015	042

UST Survey Parameters

509	71-43-2	Benzene	As Rec/Total	/Complete	220 +/-20	ug/kg	12/17/92	13:00	8020	042
546	100-41-4	Ethylbenzene	As Rec/Total	/Complete	3600 +/-400	ug/kg	12/17/92	13:00	8020	042
623	1330-20-7	M-XYLENE and/or P-XYLENE	As Rec/Total	/Complete	22000 +/-2000	ug/kg	12/17/92	13:00	8020	042
600	108-88-3	Toluene	As Rec/Total	/Complete	3800 +/-400	ug/kg	12/17/92	13:00	8020	042

Sample: 006 Location: B5-7'

020	7439-92-1	Lead	As Rec/Total	/Complete	14.5	ug/kg	12/25/92	13:00	7421	042
634	8006-61-9	Total Petroleum Hydrocarbons-	As Rec/Total	/Complete	78000	ug/kg	12/18/92	13:00	8015	042

UST Survey Parameters

509	71-43-2	Benzene	As Rec/Total	/Complete	160 U	ug/kg	12/16/92	13:00	8020	042
546	100-41-4	Ethylbenzene	As Rec/Total	/Complete	200 +/-20	ug/kg	12/16/92	13:00	8020	042

ENDS001 Y-12 PLANT LAB ENVIRONMENTAL ANALYSES REPORT

Requisition: AOU308

PAGE: 3

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DC	CAS NUMBER	DETERMINATION	BASIS/PREP	/PHASE	ANSWER	UNITS	DATE	TIME	METHOD	ANA	
623	1330-20-7	M-XYLENE and/or P-XYLENE	As Rec/Total	/Complete	4900	+/-500	ug/kg	12/16/92	13:00	8020	042
600	108-88-3	Toluene	As Rec/Total	/Complete	800	+/-80	ug/kg	12/16/92	13:00	8020	042

Sample: 007 Location: C3-3'

020	7439-92-1	Lead	As Rec/Total	/Complete	7.9		mg/kg	12/25/92	13:00	7421	042
634	8006-61-9	Total Petroleum Hydrocarbons	As Rec/Total	/Complete	580		ug/kg	12/18/92	13:00	8015	042

UST Survey Parameters

509	71-43-2	Benzene	As Rec/Total	/Complete	1.1 U		ug/kg	12/18/92	13:00	8020	042
546	100-41-4	Ethylbenzene	As Rec/Total	/Complete	1.1 U		ug/kg	12/18/92	13:00	8020	042
623	1330-20-7	M-XYLENE and/or P-XYLENE	As Rec/Total	/Complete	100	+/-10	ug/kg	12/18/92	13:00	8020	042
600	108-88-3	Toluene	As Rec/Total	/Complete	2.8	+/-0.3	ug/kg	12/18/92	13:00	8020	042

Sample: 008 Location: D3-7'

020	7439-92-1	Lead	As Rec/Total	/Complete	11.6		mg/kg	12/25/92	13:00	7421	042
634	8006-61-9	Total Petroleum Hydrocarbons	As Rec/Total	/Complete	130 U		ug/kg	12/18/92	13:00	8015	042

UST Survey Parameters

509	71-43-2	Benzene	As Rec/Total	/Complete	1.3 U		ug/kg	12/18/92	13:00	8020	042
546	100-41-4	Ethylbenzene	As Rec/Total	/Complete	1.3 U		ug/kg	12/18/92	13:00	8020	042
623	1330-20-7	M-XYLENE and/or P-XYLENE	As Rec/Total	/Complete	2.6 U		ug/kg	12/18/92	13:00	8020	042
600	108-88-3	Toluene	As Rec/Total	/Complete	1.3 U	+/-0.1	ug/kg	12/18/92	13:00	8020	042

Sample: 009 Location: D3 DUPLICATE 7'

020	7439-92-1	Lead	As Rec/Total	/Complete	14.3		mg/kg	12/25/92	13:00	7421	042
634	8006-61-9	Total Petroleum Hydrocarbons	As Rec/Total	/Complete	130 U		ug/kg	12/18/92	13:00	8015	042

UST Survey Parameters

509	71-43-2	Benzene	As Rec/Total	/Complete	1.3 U		ug/kg	12/18/92	13:00	8020	042
546	100-41-4	Ethylbenzene	As Rec/Total	/Complete	1.3 U		ug/kg	12/18/92	13:00	8020	042
623	1330-20-7	M-XYLENE and/or P-XYLENE	As Rec/Total	/Complete	2.6 U		ug/kg	12/18/92	13:00	8020	042
600	108-88-3	Toluene	As Rec/Total	/Complete	1.3 U		ug/kg	12/18/92	13:00	8020	042

Sample: 010 Location: E3-9'

020	7439-92-1	Lead	As Rec/Total	/Complete	10.5		mg/kg	12/25/92	13:00	7421	042
634	8006-61-9	Total Petroleum Hydrocarbons	As Rec/Total	/Complete	2700		ug/kg	12/18/92	13:00	8015	042

ENDS001 Y-12 PLANT LAB ENVIRONMENTAL ANALYSES REPORT

Requisition: AOU308

PAGE: 4

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DC	CAS NUMBER	DETERMINATION	BASIS/PRP	/PHASE	ANSWER	UNITS	DATE	TIME	METHOD	ANA

UST Survey Parameters

509	71-43-2	Benzene	As Rec/Total	/Complete	1.2 U	+/-0.1	ug/kg	12/18/92	13:00	8020	042
546	100-41-4	Ethylbenzene	As Rec/Total	/Complete	1.2 U		ug/kg	12/18/92	13:00	8020	042
623	1330-20-7	M-XYLENE and/or P-XYLENE	As Rec/Total	/Complete	2.6 U	+/-0.3	ug/kg	12/18/92	13:00	8020	042
600	108-88-3	Toluene	As Rec/Total	/Complete	1.2 U		ug/kg	12/18/92	13:00	8020	042

CJM

ENDS001 Y-12 PLANT LAB ENVIRONMENTAL ANALYSES REPORT

Requisition: AOU309 Env Sample Code: 8601 Sample desc: H2O

Sample loc: TRIP BLANK
Date: 12-04-92
Time: 08:00

Requester name: HANZELKA, K
Addr: 9207 , 8225, 0001
Phone: 4-1599

Sampled by: 30096 / 30095
Ref Id: 40000\

Date received: 12-07-92
Reported: 01-18-93

Handling: NEED 12-11-92

Charge code: S2211601

Remarks: AOU308 / AOU311

Approved by: SLAGLE /LCL

*****

DC	CAS NUMBER	DETERMINATION	BASIS/REP	/PHASE	ANALYST	UNITS	DATE	TIME	METHOD	ANA

UST Survey Parameters

509	71-43-2	Benzene	As Rec/Total	/Complete	1.0 U	ug/l	12/18/92	13:00	8020	042
546	100-41-4	Ethylbenzene	As Rec/Total	/Complete	1.0	+/-0.1 ug/l	12/18/92	13:00	8020	042
623	1330-20-7	M-XYLENE and/or P-XYLENE	As Rec/Total	/Complete	2.0	+/-0.2 ug/l	12/18/92	13:00	8020	042
600	108-88-3	Toluene	As Rec/Total	/Complete	1.0	+/-0.1 ug/l	12/18/92	13:00	8020	042

CJM

ENDS001 Y-12 PLANT LAB ENVIRONMENTAL ANALYSES REPORT

Requisition: AOU311 Env Sample Code: 8601 Sample desc: GRAB H2O

Sample loc: EQUIPMENT RINSE
Date: 12-04-92
Time: 13:00

Requester name: HANZELKA, K
Addr: 9207, 8225, 0000
Phone: 4-1599

Sampled by: 30096 / 30095
Ref Id: 400001

Date received: 12-07-92
Reported: 01-18-93

Handling: NEED 12-11-92

Charge code: S2205F19

Remarks: AOU309

Approved by: SLAGLE /LCL

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PC	CAS NUMBER	DETERMINATION	BASIS/PREP	/PHASE	ANSWER	UNITS	DATE	TIME	METHOD	ANA
020	7439-92-1	Lead	As Rec/Total	/Complete	<0.002	mg/l	12/25/92	13:00	7421	042
634	8006-61-9	Total Petroleum Hydrocarbons	As Rec/Total	/Complete	60 U	ug/l	12/18/92	13:00	8015	042

UST Survey Parameters

509	71-43-2	Benzene	As Rec/Total	/Complete	1.0	+/-0.1 ug/l	12/19/92	13:00	8020	042
546	100-41-4	Ethylbenzene	As Rec/Total	/Complete	1.0	+/-0.1 ug/l	12/19/92	13:00	8020	042
623	1330-20-7	M-XYLENE and/or P-XYLENE	As Rec/Total	/Complete	2.0	+/-0.2 ug/l	12/19/92	13:00	8020	042
600	108-88-3	Toluene	As Rec/Total	/Complete	1.0	+/-0.1 ug/l	12/19/92	13:00	8020	042

APPENDIX D-2

**REPORTED LABORATORY ANALYTICAL RESULTS
FOR STOCKPILE SOIL SAMPLES
TANK 2130-U**

93-051MS/031093

CJM

ENDS001 Y-12 PLANT LAB ENVIRONMENTAL ANALYSES REPORT

Requisition: AOU320 Env Sample Code: 8403 Sample desc: SOIL COMP.

Sample loc: MULTIPLE Requester name: HANZELKA, K G
Date: 12-08-92 Addr: 9207, 8225, 0000
Time: 13:00 Phone: 4-1599

Sampled by: 30096 Date received: 12-08-92
Ref Id: Reported: 01-19-93

Handling: NEED 1-19-93 Charge code: S2205F19

Remarks: UTS 2130-U WASTE PILE Approved by: SLAGLE /DHB

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DC	CAS NUMBER	DETERMINATION	BASIS/REP	/PHASE	ANSWER	UNITS	DATE	TIME	METHOD	ANA

Sample: 001 Location: MAP LOCATION #1

344		TCLP - Total Petroleum Hydroc	As Rec/TCLP	/Complete	2.2	mg/l	12/18/92	13:00	*****	008
102	12587-46-1	Alpha Activity	As Rec/Total	/Complete	4.1	pci/g	12/21/92	13:00	7162	176
105	12587-47-2	Beta Activity	As Rec/Total	/Complete	6.2	pci/g	12/21/92	13:00	7162	176
024	7439-97-6	Mercury	As Rec/Total	/Complete	0.20	ug/g	01/05/93	10:10	7471	187
142	7440-61-1	Uranium, Total	As Rec/Total	/Complete	8.22	ug/g	12/28/92	13:00	7165	176
139		Uranium-235 Percent	As Rec/Total	/Complete	0.37	%	12/28/92	13:00	7165	176

TCLP - Metals

003	7440-38-2	Arsenic	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
004	7440-39-3	Barium	As Rec/TCLP	/Complete	<10	mg/l	12/23/92	00:52	200.7	099
008	7440-43-9	Cadmium	As Rec/TCLP	/Complete	<0.10	mg/l	12/23/92	00:52	200.7	099
011	7440-47-3	Chromium	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
020	7439-92-1	Lead	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
024	7439-97-6	Mercury	As Rec/TCLP	/Complete	<0.02	mg/l	12/28/92	13:00	7470	187
036	7782-49-2	Selenium	As Rec/TCLP	/Complete	<0.1	mg/l	12/15/92	13:00	7740	168
038	7440-22-4	Silver	As Rec/TCLP	/Complete	<0.50	mg/l	12/29/92	17:31	200.7	099

TCLP - Volatile Organics

579	75-35-4	1,1-Dichloroethene	As Rec/TCLP	/Complete	<0.07	mg/l	12/16/92	17:13	8260	078
584	107-06-2	1,2-Dichloroethane	As Rec/TCLP	/Complete	<0.05	mg/l	12/16/92	17:13	8260	078
590	106-46-7	1,4-Dichlorobenzene	As Rec/TCLP	/Complete	<0.75	mg/l	12/16/92	17:13	8260	078
568	78-93-3	2-Butanone	As Rec/TCLP	/Complete	<20	mg/l	12/16/92	17:13	8260	078
509	71-43-2	Benzene	As Rec/TCLP	/Complete	<0.05	mg/l	12/16/92	17:13	8260	078
524	56-23-5	Carbon tetrachloride	As Rec/TCLP	/Complete	<0.05	mg/l	12/16/92	17:13	8260	078

1/19/93
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Requisition: AOU320

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DC	CAS NUMBER	DETERMINATION	BASIS/PREP	/PHASE	ANSWER	UNITS	DATE	TIME	METHOD	ANA
525	108-90-7	Chlorobenzene	As Rec/TCLP	/Complete	<10	mg/l	12/16/92	17:13	8260	078
528	67-66-3	Chloroform	As Rec/TCLP	/Complete	<0.06	mg/l	12/16/92	17:13	8260	078
596	127-18-4	Tetrachloroethene	As Rec/TCLP	/Complete	<0.07	mg/l	12/16/92	17:13	8260	078
607	79-01-6	Trichloroethene	As Rec/TCLP	/Complete	<0.05	mg/l	12/16/92	17:13	8260	078
622	75-01-4	Vinyl chloride	As Rec/TCLP	/Complete	<0.02	mg/l	12/16/92	17:13	8260	078

Sample: 002 Location: MAP LOCATION #2

344		TCLP - Total Petroleum Hydroc	As Rec/TCLP	/Complete	<1.0	mg/l	12/10/92	01:30	*****	015
102	12587-46-1	Alpha Activity	As Rec/Total	/Complete	5.3	pci/g	12/21/92	13:00	7162	176
105	12587-47-2	Beta Activity	As Rec/Total	/Complete	4.4	pci/g	12/21/92	13:00	7162	176
024	7439-97-6	Mercury	As Rec/Total	/Complete	<0.2	ug/g	01/05/93	10:10	7671	187
142	7440-61-1	Uranium, Total	As Rec/Total	/Complete	14.3	ug/g	12/28/92	13:00	7165	176
139		Uranium-235 Percent	As Rec/Total	/Complete	0.21	%	12/28/92	13:00	7165	176

TCLP - Metals

003	7440-38-2	Arsenic	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
004	7440-39-3	Barium	As Rec/TCLP	/Complete	<10	mg/l	12/23/92	00:52	200.7	099
008	7440-43-9	Cadmium	As Rec/TCLP	/Complete	<0.10	mg/l	12/23/92	00:52	200.7	099
011	7440-47-3	Chromium	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
020	7439-92-1	Lead	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
024	7439-97-6	Mercury	As Rec/TCLP	/Complete	<0.02	mg/l	12/23/92	15:15	7670	187
036	7782-49-2	Selenium	As Rec/TCLP	/Complete	<0.1	mg/l	12/15/92	13:00	7760	168
038	7440-22-4	Silver	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099

TCLP - Volatile Organics

579	75-35-4	1,1-Dichloroethene	As Rec/TCLP	/Complete	<0.07	mg/l	12/17/92	16:24	8260	078
584	107-06-2	1,2-Dichloroethane	As Rec/TCLP	/Complete	<0.05	mg/l	12/17/92	16:24	8260	078
590	106-46-7	1,4-Dichlorobenzene	As Rec/TCLP	/Complete	<0.75	mg/l	12/17/92	16:24	8260	078
568	78-93-3	2-Butanone	As Rec/TCLP	/Complete	<20.0	mg/l	12/17/92	16:24	8260	078
509	71-43-2	Benzene	As Rec/TCLP	/Complete	<0.05	mg/l	12/17/92	16:24	8260	078
524	56-23-5	Carbon tetrachloride	As Rec/TCLP	/Complete	<0.05	mg/l	12/17/92	16:24	8260	078
525	108-90-7	Chlorobenzene	As Rec/TCLP	/Complete	<10.0	mg/l	12/17/92	16:24	8260	078
528	67-66-3	Chloroform	As Rec/TCLP	/Complete	<0.06	mg/l	12/17/92	16:24	8260	078
596	127-18-4	Tetrachloroethene	As Rec/TCLP	/Complete	<0.07	mg/l	12/17/92	16:24	8260	078
607	79-01-6	Trichloroethene	As Rec/TCLP	/Complete	<0.05	mg/l	12/17/92	16:24	8260	078
622	75-01-4	Vinyl chloride	As Rec/TCLP	/Complete	<0.02	mg/l	12/17/92	16:24	8260	078

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DC	CAS NUMBER	DETERMINATION	BASIS/REP	/PHASE	ANSWER	UNITS	DATE	TIME	METHOD	ANA

Sample: 003 Location: MAP LOCATION #3

344		TCLP - Total Petroleum Hydroc	As Rec/TCLP	/Complete	<1.0	mg/l	12/10/92	01:30	*****	015
102	12587-46-1	Alpha Activity	As Rec/Total	/Complete	3.4	pci/g	12/21/92	13:00	7162	176
105	12587-47-2	Beta Activity	As Rec/Total	/Complete	4.6	pci/g	12/21/92	13:00	7162	176
024	7439-97-6	Mercury	As Rec/Total	/Complete	0.52	ug/g	01/05/93	10:10	7471	187
142	7440-61-1	Uranium, Total	As Rec/Total	/Complete	13.3	ug/g	12/28/92	13:00	7165	176
139		Uranium-235 Percent	As Rec/Total	/Complete	0.26	%	12/28/92	13:00	7165	176

TCLP - Metals

003	7440-38-2	Arsenic	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
004	7440-39-3	Barium	As Rec/TCLP	/Complete	<10	mg/l	12/23/92	00:52	200.7	099
008	7440-43-9	Cadmium	As Rec/TCLP	/Complete	<0.10	mg/l	12/23/92	00:52	200.7	099
011	7440-47-3	Chromium	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
020	7439-92-1	Lead	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
024	7439-97-6	Mercury	As Rec/TCLP	/Complete	<0.02	mg/l	12/23/92	15:15	7470	187
036	7782-49-2	Selenium	As Rec/TCLP	/Complete	<0.1	mg/l	12/15/92	13:00	7740	168
038	7440-22-4	Silver	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099

TCLP - Volatile Organics

579	75-35-4	1,1-Dichloroethene	As Rec/TCLP	/Complete	<0.07	mg/l	12/16/92	19:11	8260	078
584	107-06-2	1,2-Dichloroethane	As Rec/TCLP	/Complete	<0.05	mg/l	12/16/92	19:11	8260	078
590	106-46-7	1,4-Dichlorobenzene	As Rec/TCLP	/Complete	<0.75	mg/l	12/16/92	19:11	8260	078
568	78-93-3	2-Butanone	As Rec/TCLP	/Complete	<20	mg/l	12/16/92	19:11	8260	078
509	71-43-2	Benzene	As Rec/TCLP	/Complete	<0.05	mg/l	12/16/92	19:11	8260	078
524	56-23-5	Carbon tetrachloride	As Rec/TCLP	/Complete	<0.05	mg/l	12/16/92	19:11	8260	078
525	108-90-7	Chlorobenzene	As Rec/TCLP	/Complete	<10	mg/l	12/16/92	19:11	8260	078
528	67-66-3	Chloroform	As Rec/TCLP	/Complete	<0.06	mg/l	12/16/92	19:11	8260	078
596	127-18-4	Tetrachloroethene	As Rec/TCLP	/Complete	<0.07	mg/l	12/16/92	19:11	8260	078
607	79-01-6	Trichloroethene	As Rec/TCLP	/Complete	<0.05	mg/l	12/16/92	19:11	8260	078
622	75-01-4	Vinyl chloride	As Rec/TCLP	/Complete	<0.02	mg/l	12/16/92	19:11	8260	078

Sample: 004 Location: MAP LOCATION #4

344		TCLP - Total Petroleum Hydroc	As Rec/TCLP	/Complete	<1	mg/l	12/18/92	03:00	*****	015
102	12587-46-1	Alpha Activity	As Rec/Total	/Complete	4.6	pci/g	12/21/92	13:00	7162	176
105	12587-47-2	Beta Activity	As Rec/Total	/Complete	9.6	pci/g	12/21/92	13:00	7162	176
024	7439-97-6	Mercury	As Rec/Total	/Complete	<0.2	ug/g	01/05/93	10:10	7471	187
142	7440-61-1	Uranium, Total	As Rec/Total	/Complete	13.5	ug/g	12/28/92	13:00	7165	176
139		Uranium-235 Percent	As Rec/Total	/Complete	0.24	%	12/28/92	13:00	7165	176

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DC	CAS NUMBER	DETERMINATION	BASIS/PREP	/PHASE	ANSWER	UNITS	DATE	TIME	METHOD	ANA

TCLP - Metals

003	7440-38-2	Arsenic	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
004	7440-39-3	Barium	As Rec/TCLP	/Complete	<10	mg/l	12/23/92	00:52	200.7	099
008	7440-43-9	Cadmium	As Rec/TCLP	/Complete	<0.10	mg/l	12/23/92	00:52	200.7	099
011	7440-47-3	Chromium	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
020	7439-92-1	Lead	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
024	7439-97-6	Mercury	As Rec/TCLP	/Complete	<0.02	mg/l	12/23/92	15:15	7470	187
036	7782-49-2	Selenium	As Rec/TCLP	/Complete	<0.1	mg/l	12/17/92	13:00	7740	168
038	7440-22-4	Silver	As Rec/TCLP	/Complete	<0.50	mg/l	12/29/92	17:31	200.7	099

TCLP - Volatile Organics

579	75-35-4	1,1-Dichloroethene	As Rec/TCLP	/Complete	<0.07	mg/l	12/18/92	15:13	8260	078
584	107-06-2	1,2-Dichloroethane	As Rec/TCLP	/Complete	<0.05	mg/l	12/18/92	15:13	8260	078
590	106-46-7	1,4-Dichlorobenzene	As Rec/TCLP	/Complete	<0.75	mg/l	12/18/92	15:13	8260	078
568	78-93-3	2-Butanone	As Rec/TCLP	/Complete	<20	mg/l	12/18/92	15:13	8260	078
509	71-43-2	Benzene	As Rec/TCLP	/Complete	<0.05	mg/l	12/18/92	15:13	8260	078
524	56-23-5	Carbon tetrachloride	As Rec/TCLP	/Complete	<0.05	mg/l	12/18/92	15:13	8260	078
525	108-90-7	Chlorobenzene	As Rec/TCLP	/Complete	<10	mg/l	12/18/92	15:13	8260	078
528	67-66-3	Chloroform	As Rec/TCLP	/Complete	<0.06	mg/l	12/18/92	15:13	8260	078
596	127-18-4	Tetrachloroethene	As Rec/TCLP	/Complete	<0.07	mg/l	12/18/92	15:13	8260	078
607	79-01-6	Trichloroethene	As Rec/TCLP	/Complete	<0.05	mg/l	12/18/92	15:13	8260	078
622	75-01-4	Vinyl chloride	As Rec/TCLP	/Complete	<0.02	mg/l	12/18/92	15:13	8260	078

Sample: 005 Location: MAP LOCATION #5

344	TCLP - Total Petroleum Hydroc	As Rec/TCLP	/Complete	2.2		mg/l	12/14/92	03:00	*****	015
102	12587-46-1 Alpha Activity	As Rec/Total	/Complete	1.5	+/-0.89	pci/g	12/21/92	13:00	7162	176
105	12587-47-2 Beta Activity	As Rec/Total	/Complete	4.3	+/-0.85	pci/g	12/21/92	13:00	7162	176
024	7439-97-6 Mercury	As Rec/Total	/Complete	0.20	+/-0.02	ug/g	01/05/93	10:10	7471	187
142	7440-61-1 Uranium, Total	As Rec/Total	/Complete	10.7		ug/g	12/28/92	13:00	7165	176
139	Uranium-235 Percent	As Rec/Total	/Complete	0.25		%	12/28/92	13:00	7165	176

TCLP - Metals

003	7440-38-2	Arsenic	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
004	7440-39-3	Barium	As Rec/TCLP	/Complete	<10	mg/l	12/23/92	00:52	200.7	099
008	7440-43-9	Cadmium	As Rec/TCLP	/Complete	<0.10	mg/l	12/23/92	00:52	200.7	099
011	7440-47-3	Chromium	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
020	7439-92-1	Lead	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
024	7439-97-6	Mercury	As Rec/TCLP	/Complete	<0.02	mg/l	12/23/92	15:15	7470	187

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DC	CAS NUMBER	DETERMINATION	BASIS/PRCP	/PHASE	ANSWER	UNITS	DATE	TIME	METHOD	ANA
036	7782-49-2	Selenium	As Rec/TCLP	/Complete	<0.1	mg/l	12/17/92	13:00	7740	168
038	7440-22-4	Silver	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099

TCLP - Volatile Organics

579	75-35-4	1,1-Dichloroethane	As Rec/TCLP	/Complete	0.14 U	mg/l	12/22/92	13:00	8260	100
584	107-06-2	1,2-Dichloroethane	As Rec/TCLP	/Complete	0.10 U	mg/l	12/22/92	13:00	8260	100
590	106-46-7	1,4-Dichlorobenzene	As Rec/TCLP	/Complete	1.5 U	mg/l	12/22/92	13:00	8260	100
568	78-93-3	2-Butanone	As Rec/TCLP	/Complete	<40.0	mg/l	12/22/92	13:00	8260	100
509	71-43-2	Benzene	As Rec/TCLP	/Complete	<0.10	mg/l	12/22/92	13:00	8260	100
524	56-23-5	Carbon tetrachloride	As Rec/TCLP	/Complete	0.10 U	mg/l	12/22/92	13:00	8260	100
525	106-90-7	Chlorobenzene	As Rec/TCLP	/Complete	20.0 U	mg/l	12/22/92	13:00	8260	100
528	67-66-3	Chloroform	As Rec/TCLP	/Complete	0.12 U	mg/l	12/22/92	13:00	8260	100
596	127-18-4	Tetrachloroethane	As Rec/TCLP	/Complete	0.14 U	mg/l	12/22/92	13:00	8260	100
607	79-01-6	Trichloroethane	As Rec/TCLP	/Complete	0.10 U	mg/l	12/22/92	13:00	8260	100
622	75-01-4	Vinyl chloride	As Rec/TCLP	/Complete	0.04 U	mg/l	12/22/92	13:00	8260	100

Sample: 006 Location: MAP LOCATION #5 DUP

344		TCLP - Total Petroleum Hydroc	As Rec/TCLP	/Complete	1.5	mg/l	12/14/92	03:00	*****	015
102	12587-46-1	Alpha Activity	As Rec/Total	/Complete	5.6	pci/g	12/21/92	13:00	7162	176
105	12587-47-2	Beta Activity	As Rec/Total	/Complete	6.5	pci/g	12/21/92	13:00	7162	176
024	7439-97-6	Mercury	As Rec/Total	/Complete	0.25	ug/g	01/05/93	10:10	7471	187
142	7440-61-1	Uranium, Total	As Rec/Total	/Complete	8.23	ug/g	12/28/92	13:00	7165	176
139		Uranium-235 Percent	As Rec/Total	/Complete	0.25	%	12/28/92	13:00	7165	176

TCLP - Metals

003	7440-38-2	Arsenic	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
004	7440-39-3	Barium	As Rec/TCLP	/Complete	<10	mg/l	12/23/92	00:52	200.7	099
008	7440-43-9	Cadmium	As Rec/TCLP	/Complete	<0.10	mg/l	12/23/92	00:52	200.7	099
011	7440-47-3	Chromium	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
020	7439-92-1	Lead	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
024	7439-97-6	Mercury	As Rec/TCLP	/Complete	<0.02	mg/l	12/23/92	15:15	7470	187
036	7782-49-2	Selenium	As Rec/TCLP	/Complete	<0.1	mg/l	12/17/92	13:00	7740	168
038	7440-22-4	Silver	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099

TCLP - Volatile Organics

579	75-35-4	1,1-Dichloroethane	As Rec/TCLP	/Complete	<0.07	mg/l	12/22/92	13:00	8260	100
584	107-06-2	1,2-Dichloroethane	As Rec/TCLP	/Complete	<0.05	mg/l	12/22/92	13:00	8260	100
590	106-46-7	1,4-Dichlorobenzene	As Rec/TCLP	/Complete	<0.75	mg/l	12/22/92	13:00	8260	100
568	78-93-3	2-Butanone	As Rec/TCLP	/Complete	<20.0	mg/l	12/22/92	13:00	8260	100

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Requisition: AOU320

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DC	CAS NUMBER	DETERMINATION	BASIS/PRP	/PHASE	ANSWER	UNITS	DATE	TIME	METHOD	ANA
509	71-43-2	Benzene	As Rec/TCLP	/Complete	<0.05	mg/l	12/22/92	13:00	8260	100
524	56-23-5	Carbon tetrachloride	As Rec/TCLP	/Complete	<0.05	mg/l	12/22/92	13:00	8260	100
525	106-90-7	Chlorobenzene	As Rec/TCLP	/Complete	<10.0	mg/l	12/22/92	13:00	8260	100
528	67-66-3	Chloroform	As Rec/TCLP	/Complete	<0.06	mg/l	12/22/92	13:00	8260	100
596	127-18-4	Tetrachloroethane	As Rec/TCLP	/Complete	<0.07	mg/l	12/22/92	13:00	8260	100
607	79-01-6	Trichloroethane	As Rec/TCLP	/Complete	<0.05	mg/l	12/22/92	13:00	8260	100
622	75-01-4	Vinyl chloride	As Rec/TCLP	/Complete	<0.02	mg/l	12/22/92	13:00	8260	100

ENDS001 Y-12 PLANT LAB ENVIRONMENTAL ANALYSES REPORT

Requisition: AOU321 Env Sample Code: 8601 Sample desc: H2O GRAB
Sample loc: EQUIPMENT RINSE Requester name: HANZELKA, K
Date: 12-08-92 Addr: 9207 , 8225, 0000
Time: 13:30 Phone: 4-1599
Sampled by: 30096 Date received: 12-08-92
Ref Id: Reported: 01-18-93
Handling: Charge code: S2205F19
Remarks: Approved by: SLAGLE /DHB

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PC	CAS NUMBER	DETERMINATION	BASIS/PRP	/PHASE	ANALYST	UNITS	DATE	TIME	METHOD	ANA
102	12587-44-1	Alpha Activity	As Rec/Total	/Complete	7.4 +/-3.0	pci/l	12/17/92	13:00	7162	033
105	12587-47-2	Beta Activity	As Rec/Total	/Complete	0.79 +/-0.16	pci/l	12/17/92	13:00	7162	033
024	7439-97-6	Mercury	As Rec/Total	/Complete	<0.0002	mg/l	12/14/92	13:45	245.1	187
142	7440-61-1	Uranium, Total	As Rec/Total	/Complete	<0.001	mg/l	12/29/92	13:00	7165	191
139		Uranium-235 Percent	As Rec/Total	/Complete	CANCEL	%	12/29/92	13:00	7165	191

TCLP - Metals

003	7440-38-2	Arsenic	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
004	7440-39-3	Barium	As Rec/TCLP	/Complete	<10	mg/l	12/23/92	00:52	200.7	099
008	7440-43-9	Cadmium	As Rec/TCLP	/Complete	<0.10	mg/l	12/23/92	00:52	200.7	099
011	7440-47-3	Chromium	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
020	7439-92-1	Lead	As Rec/TCLP	/Complete	<0.50	mg/l	12/23/92	00:52	200.7	099
024	7439-97-6	Mercury	As Rec/TCLP	/Complete	<0.02	mg/l	12/23/92	15:15	7470	187
036	7782-49-2	Selenium	As Rec/TCLP	/Complete	<0.1	mg/l	12/17/92	13:00	7740	168
038	7440-22-4	Silver	As Rec/TCLP	/Complete	<0.50	mg/l	12/29/92	17:31	200.7	099

TCLP - Volatile Organics

579	75-35-4	1,1-Dichloroethene	As Rec/TCLP	/Complete	<0.07	mg/l	12/18/92	12:36	8260	078
584	107-06-2	1,2-Dichloroethane	As Rec/TCLP	/Complete	<0.05	mg/l	12/18/92	12:36	8260	078
590	106-46-7	1,4-Dichlorobenzene	As Rec/TCLP	/Complete	<0.75	mg/l	12/18/92	12:36	8260	078
568	78-93-3	2-Butanone	As Rec/TCLP	/Complete	<20	mg/l	12/18/92	12:36	8260	078
509	71-43-2	Benzene	As Rec/TCLP	/Complete	<0.05	mg/l	12/18/92	12:36	8260	078
524	56-23-5	Carbon tetrachloride	As Rec/TCLP	/Complete	<0.05	mg/l	12/18/92	12:36	8260	078
525	108-90-7	Chlorobenzene	As Rec/TCLP	/Complete	<10	mg/l	12/18/92	12:36	8260	078
528	67-66-3	Chloroform	As Rec/TCLP	/Complete	<0.06	mg/l	12/18/92	12:36	8260	078
596	127-18-4	Tetrachloroethene	As Rec/TCLP	/Complete	<0.07	mg/l	12/18/92	12:36	8260	078

ENDS001 Y-12 PLANT LAB ENVIRONMENTAL ANALYSES REPORT

Requisition: AOU321

PAGE: 2

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DC	CAS NUMBER	DETERMINATION	BASIS/PRFP	/PHASE	ANSWER	UNITS	DATE	TIME	METHOD	ANA
607	79-01-6	Trichloroethene	As Rec/TCLP	/Complete	<0.05	mg/l	12/18/92	12:36	8260	078
622	75-01-4	Vinyl chloride	As Rec/TCLP	/Complete	<0.02	mg/l	12/18/92	12:36	8260	078

KEH

ENDS001 Y-12 PLANT LAB ENVIRONMENTAL ANALYSES REPORT

Requisition: AOU322 Env Sample Code: 8601 Sample desc: GRAB H2O

Sample loc: EQUIPMENT RINSE TB
Date: 12-08-92
Time: 12:50

Requester name: HANZELKA, K G
Addr: 9207, 8225, 0000
Phone: 4-1599

Sampled by: 30096
Ref Id: U00001

Date received: 12-08-92
Reported: 12-29-92

Handling:

Charge code: 82211601

Remarks:

Approved by: JONES /RWB

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DC CAS NUMBER DETERMINATION BASIS/PREP /PHASE ANSWER UNITS DATE TIME METHOD ANA

TCLP - Volatile Organics

579 73-35-4	1,1-Dichloroethane	As Rec/TCLP	/Complete	<0.07	mg/l	12/18/92	13:15	8260	078
584 107-06-2	1,2-Dichloroethane	As Rec/TCLP	/Complete	<0.05	mg/l	12/18/92	13:15	8260	078
590 106-46-7	1,4-Dichlorobenzene	As Rec/TCLP	/Complete	<0.75	mg/l	12/18/92	13:15	8260	078
568 78-93-3	2-Butanone	As Rec/TCLP	/Complete	<20	mg/l	12/18/92	13:15	8260	078
509 71-43-2	Benzene	As Rec/TCLP	/Complete	<0.05	mg/l	12/18/92	13:15	8260	078
524 56-23-5	Carbon tetrachloride	As Rec/TCLP	/Complete	<0.05	mg/l	12/18/92	13:15	8260	078
525 106-90-7	Chlorobenzene	As Rec/TCLP	/Complete	<10	mg/l	12/18/92	13:15	8260	078
528 67-66-3	Chloroform	As Rec/TCLP	/Complete	<0.06	mg/l	12/18/92	13:15	8260	078
596 127-18-4	Tetrachloroethane	As Rec/TCLP	/Complete	<0.07	mg/l	12/18/92	13:15	8260	078
607 79-01-6	Trichloroethane	As Rec/TCLP	/Complete	<0.05	mg/l	12/18/92	13:15	8260	078
622 75-01-4	Vinyl chloride	As Rec/TCLP	/Complete	<0.02	mg/l	12/18/92	13:15	8260	078

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