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Tank Farm Surveillance and Waste Status Summary Report for June 1990

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**TANK FARM SURVEILLANCE AND WASTE STATUS
SUMMARY REPORT FOR JUNE 1990**

B. M. Hanlon

ABSTRACT

This report is Westinghouse Hanford Company's official inventory for radioactive waste stored in the 200 Areas underground tanks at the Hanford Site. Data that depict the status of stored radioactive waste and tank vessel integrity are contained within the report. The intent of the report is to provide data on each of the existing 177 large underground waste storage tanks and 56 smaller catch tanks, and to provide supplemental information regarding tank surveillance anomalies and ongoing investigations.

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**TANK FARM SURVEILLANCE AND WASTE STATUS SUMMARY
REPORT FOR JUNE 1990****SUMMARY**

Note: Changes from the previous month are in bold print.

TANK STATUS

Category	Quantity	Date of Last Change
In-service tanks	28 double-shell	October 1986
Out-of-service tanks	149 single-shell	July 1988 ^a
Assumed-leaker tanks	66 single-shell	September 1988
Interim-stabilized tanks ^b	101 single-shell	September 1989
Interim-isolated tanks	91 single-shell	October 1989

^aAll 149 single-shell tanks were removed from service (i.e., no longer authorized to receive waste) as of November 21, 1980.

^bOf the 101 tanks classified as interim stabilized, 56 have been listed as Questionable Integrity or Confirmed Leakers in past documents.

TANK INVESTIGATIONS

Tank 241-SX-104. This tank is being pumped as a result of unexplained liquid level decreases. The tank was declared an "assumed leaker" on July 28, 1988. Approximately 113,231 gal (net) of liquid have been pumped since June 27, 1988. Last pumping occurred June 13, 1989. Jet pumping was scheduled to resume in May 1990, but was postponed until the Safety Analysis addressing the hydrogen issue has been completed.

Tank 241-SY-101. The surface level within this tank continues to fluctuate (Figure 1). The surface level increase/decrease phenomena has been observed since 1981 and is attributed to the buildup and release of gas beneath the crusted surface. An investigation into solutions to the slurry growth problem is ongoing. Multiple Event Fact Sheets, a Critique Report, Occurrence Reports #77-64, 77-92, 77-175, 77-207, 78-16, 79-11, Discrepancy Reports, and an Unusual Occurrence Report have been issued. The surface level showed a steady increase from 411.10 to 412.80 in. (+1.70 in.) during June 1990. The status of this tank will continue to be reported each month.

Tank 241-SX-109. The radiation peak level exceeded the increase criteria in a peripheral drywell, 41-00-08, near tank 109-SX, on May 11, 1990. Although 109-SX is categorized an "assumed leaker," further investigation was requested to determine, if possible, whether the plume migration is from the old leak or from a newer leak. The evaluation was completed by the Geoscience Group on June 29, 1990. It was concluded that the radiation peak level increase is the result of the spread of liquids from an old leak from 109-SX and is not indicative of a newer leak.

Tank 241-TX-107. This tank is categorized an "assumed leaker," and has been interim stabilized and isolated. Four drywells associated with this tank, 51-07-07, 51-07-18, 51-03-01 and 51-04-05, are continuing to show a trend of increasing radiation levels. The leak detection criteria for drywell radiation levels (200 cps) has not been exceeded. Monitoring of these wells has been increased from an annual to a monthly frequency.

Catch Tank 241-S-302-A. Surface level measurement decreases have been observed after noted increases attributed to rain. An in-tank video of the tank's contents was completed on May 31, 1990. On June 5, 1990, Single-Shell Tank Process Engineering completed an evaluation of the video and concluded that the surface level measurement device (automatic FIC) is contacting a clear liquid surface, with no obstruction that would cause measurement anomalies. The surface level decreases in this tank cannot be accounted for, and are therefore assumed to be indicative of a leak. Event Fact Sheet TF-EFS-90-042 was issued June 8, 1990. Pumping of the tank commenced June 14, 1990, and Unusual Occurrence Report WHC-UO-90-23-TF-05 was issued June 21, 1990. As of June 30, 1990, 1,835 gal have been pumped from this catch tank.

The following tanks are on report for potential in-leakage from known/unknown sources, but are not currently under investigation:

Last indication of
an intrusion

Tank 241-B-104	07/03/89
Tank 241-S-106	05/14/90
Tank 241-TX-112	03/15/90
Tank 241-TX-115	10/12/89
Tank 241-TY-102	07/03/89

Highlights

Changes to the report:

1) Appendix A. Tank and Equipment Code/Status Definitions

- a) Terms used in this appendix have been revised to standardize the terms between two external documents. This applies to the Double-Shell Tanks only at this time. Single-Shell Tanks will be revised after re-evaluation. Until SSTs are re-evaluated, there will be some duplication of Waste Type categories.

Waste Type Categories currently used in this report:

AGING - Aging Waste
 CC - Complexant Concentrate Waste
 CPLX - Complexed Waste (SST - until re-evaluation)
 DC - Dilute Complexed Waste
 DN - Dilute Non-Complexed Waste
 DSS - Double-Shell Slurry
 DSSF - Double-Shell Slurry Feed
 NCPLX - Non-Complexed Waste (SST - until reevaluation)
 PD - PUREX Decladding Solids (TRU)
 PT - PFP TRU Solids

NOTE: CHFW was dropped because, although 106-A still shows this category of waste material, the tank has no supernatant.

Tank Use Designations currently used in this report:

CWHT - Concentrated Waste Holding Tank
 DRCVR - Dilute Receiver Tank
 EVFD - Evaporate Feed Tank
 GRTFD - Grout Feed Tank
 SRCVR - Slurry Receiver Tank

The following changes in the DST Waste Material and Tank Use categories were made. The definitions of these new terms are in Appendix A.1 and A.3.

Tank #	Waste Mat'l Type		Use Designation	
	(Old)	(New)	(Old)	(New)
101-AN	WRCVR	DRCVR	NCPLX	DN
102-AN	SRCVR	CWHT	CC	CC
103-AN	SRCVR	CWHT	DSS	DSS

<u>Tank #</u>	<u>Waste Mat'l Type</u> <u>(Old)</u>	<u>(New)</u>	<u>Use Designation</u> <u>(Old)</u>	<u>(New)</u>
104-AN	SRCVR	CWHT	DSSF	DSSF
105-AN	SRCVR	CWHT	DSSF	DSSF
106-AN	SRCVR	CWHT	CHFW	CP
107-AN	SRCVR	CWHT	CC	CC
101-AP	WRCVR	DRCVR	NCPLX	DN
102-AP	WRCVR	GRTFD	HFW	DN
103-AP	WRCVR	DRCVR	NCPLX	DN
104-AP	WRCVR	GRTFD	HFW	DN
105-AP	WRCVR	CWHT	DSSF	DSSF
106-AP	WRCVR	DRCVR	NCPLX	DN
107-AP	SRCVR	DRCVR	NCPLX	DN
108-AP	SRCVR	DRCVR	NCPLX	DN
101-AW	SRCVR	CWHT	DSSF	DSSF
102-AW	EVFD	EVFD	NCPLX	DN
103-AW	WRCVR	DRCVR	NCPLX	DN/PD
104-AW	WRCVR	DRCVR	NCPLX	DN
105-AW	WRCVR	DRCVR	NCPLX	DN/PD
106-AW	SRCVR	SRCVR	DSSF	DN
101-AY	WRCVR	DRCVR	CPLX	DC
102-AY	WRCVR	DRCVR	NCPLX	DN
101-AZ	WRCVR	CWHT	AGING	AGING
102-AZ	WRCVR	DRCVR	AGING	AGING
101-SY	DSSHT	CWHT	CC	CC
102-SY	WRCVR	DRCVR	NCPLX	DN/PT
103-SY	SRCVR	CWHT	CC	CC

2) Appendix B. Monthly Summary

a) Inventory Summary by Tank Farm

This section has been revised to incorporate the changes in Appendix A, Tank Equipment Code and Status Definitions.

b) Inventory and Status by Tank

The Waste Material and Tank Use columns in the Double-Shell Tank section have been revised to incorporate the changes in Appendix A, Tank Equipment Code and Status Definitions.

3) Appendix C. Performance Summary

The categories in the Waste Generated section of this appendix have been revised to more accurately depict the source of the waste.

TABLE 1. TEMPERATURE DATA

TANKS CONTAINING FERROCYNANIDE
(>1000 moles)

SINGLE-SHELL TANKS WITH A HIGH
HEAT LOAD ($>40,000$ BTU/HR)

TANKS WITH POTENTIAL FOR HYDROGEN
OR FLAMMABLE GAS GENERATION

Maximum Temp.				Maximum Temp.				Est.Heat Load		Maximum Temp.						
Tank No.	(F)	Probe Position	Date	Tank No.	(F)	Probe Position	Date	(BTU/HR)	Tank No.	(F)	Probe Position	Date				
102-BX	66	TC	06/01/90	104-A	191	R	06/28/90	50000	101-A	158	TC	06/04/90				
106-BX	58	TC	06/01/90 (3)	105-A	133	R	06/28/90	50000	101-AX	145	TC	01/01/90				
110-BX	65	TC	06/01/90 (3)	105-C	97	TC	06/04/90	42000	103-AX	117	TC	06/09/90				
111-BX	70	TC	06/01/90 (3)	106-C	161	TC	06/04/90	150000	102-S	104	TC	06/04/90				
101-BY	76	TC	06/01/90	107-SX	169	TC	06/07/90	42000	111-S	100	TC	02/05/88				
103-BY	82	LOW	03/02/90 (2)	108-SX	195	TC	06/07/90	45000	112-S	93	TC	02/05/88				
104-BY	129	TC	06/01/90	109-SX	150	TC	06/07/90	50000	101-SX	137	TC	06/04/90				
105-BY	117	TC	06/01/90	110-SX	172	TC	06/07/90	42000	102-SX	147	TC	06/04/90				
106-BY	134	TC	06/01/90	111-SX	189	TC	06/07/90	44000	103-SX	164	TC	06/04/90				
107-BY	80	TC	06/01/90	112-SX	155	TC	06/07/90	43000	104-SX	161	TC	06/04/90				
108-BY	102	TC	06/02/90	114-SX	185	TC	06/07/90	58000	105-SX	173	TC	06/04/90				
110-BY	135	TC	06/01/90	11 Tanks					106-SX	98	TC	06/04/90				
111-BY	87	LOW	03/02/90 (2)	Legend: Probe Position TC=Thermocouple Tree LOW=Liquid Observation Well R=Riser					109-SX (1)	150	TC	06/07/90				
112-BY	72	LOW	03/02/90 (2)						110-T	64	TC	07/03/89				
108-C	77	TC	06/01/90						103-U	87	TC	07/01/89				
109-C	78	TC	06/01/90						105-U	89	TC	07/01/89				
111-C	74	TC	06/01/90	The temperature data for these tanks has been analyzed and there are no indications of an increasing trend. Ref: SD-WM-SAR-006, OSR 11.4.2.1					108-U	87	TC	07/01/89				
112-C	83	TC	06/01/90						109-U	85	TC	07/01/89				
101-T	81	TC	06/02/90						103-AN*	111	TC	06/25/90				
118-TX	78	TC	06/02/90						104-AN*	112	TC	06/25/90				
101-TY	62	TC	05/03/90 (4)						105-AN*	109	TC	06/25/90				
103-TY	69	LOW	06/02/90						101-SY*	137	TC	06/07/90				
22 Tanks													103-SY*	107	TC	06/26/90
												23 Tanks		* Double-shell tanks		

(1) 109-SX has the potential for flammable gas accumulation as other SX tanks vent through it.

(2) Temperature monitoring in LOWs has been delayed pending cleanup.

(3) These tanks are scheduled for interim stabilization during 1990

(4) No data for June - TC connection box O/S - work order written.

Figure 1. Tank 101-SY Surface Level Readings.

APPENDIX A

TANK AND EQUIPMENT CODE AND STATUS DEFINITIONS

TANK AND EQUIPMENT CODE/STATUS DEFINITIONS

1. TANK STATUS CODES

WASTE TYPE

AGING	Aging Waste
CC	Complexant Concentrate Waste
CP	Concentrated Phosphate Waste
CPLX	Complexed Waste
DC	Dilute Complexed Waste
DN	Dilute Non-Complexed Waste
DSS	Double-Shell Slurry
DSSF	Double-Shell Slurry Feed
NCPLX	Non-Complexed Waste
PD	PUREX Decladding Solids (TRU)
PT	PFP TRU Solids

TANK USE (DOUBLE-SHELL TANKS ONLY)

CWHT	Concentrated Waste Holding Tank
DRCVR	Dilute Receiver Tank
EVFD	Evaporate Feed Tank
GRTFD	Grout Feed Tank
SRCVR	Slurry Receiver Tank

2. SOLID AND LIQUID VOLUME DETERMINATION METHODS

F	FIC Automatic Surface Level Gauge
M	Manual Tape Surface Level Gauge
P	Photo Evaluation
S	Solids Level

3. DEFINITIONS

WASTE TYPES

Aging Waste (AGING)	High level, first cycle solvent extraction waste from PUREX.
Concentrated Complexant (CC)	Concentrated product from the evaporation of dilute complexed waste.
Concentrated Phosphate Waste (CP)	Waste originating from the decontamination of 100-N Area reactor. This waste is diluted to form dilute phosphate waste.
Complexed Waste (CPLX)	Dilute waste material containing relatively high concentrations of chelating agents, such as EDTA, HEDTA, from B Plant waste fractionization operation.

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Dilute Complexed Waste (DC)	Characterized by a high content of organic carbon including organic complexants: EDTA, citric acid, HEDTA, IDA being the major complexants used. Main sources of DC waste are saltwell liquid inventory.
Dilute Non-Complexed Waste (DN)	Low activity liquid waste originating from T and S Plants, the 300 and 400 Areas, PUREX facility (decladding supernate, and miscellaneous wastes), 100-N Area (sulfate waste, B Plant, saltwells, and PFP (supernate).
Double-Shell Slurry (DSS)	Waste evaporated just past its sodium aluminate saturation boundary or 6.5 molar hydroxide in the evaporator. For reporting purposes, DSS is considered a solid.
Double-Shell Slurry Feed (DSSF)	Waste evaporated just before reaching the sodium aluminate saturation boundary or 6.5 molar hydroxide in the evaporator. This form is not as concentrated as double-shell slurry.
Non-complexed (NCPLX)	General waste term applied to all Hanford liquors not identified as complexed.
PUREX Decladding (PD/PN)	PUREX Neutralized Cladding Removal Waste (NCRW) is the solids portion of the PUREX Facility neutralized cladding removal waste stream, received in Tank Farms as a slurry. Classified as TRU waste.
PFP TRU Solids (PT)	TRU solids from West Area operations.
Drainable Interstitial Liquid (DIL)	Interstitial Liquid that is not held in place by capillary forces, and will therefore migrate or move by gravity.
Supernatant	The liquid above the solids in waste storage tanks.

WASTE STATUS

In-Service Tank	The waste classification of a tank being used, or planned for use, for the storage of liquid (in excess of a minimum supernatant liquid heel) in conjunction with production and/or waste processing.
Out-of-Service Tank	A tank which does not meet the definition of an in-service tank. Before September 1988, these tanks were defined as inactive in this report. (Note: All Single-Shell tanks are out of service.)

STABILIZATION (Single-Shell Tanks only)

Interim Stabilized (IS)	A tank which contains less than 50,000 gallons of drainable interstitial liquid and less than 5,000 gallons of supernatant liquid.
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ISOLATION (Single-Shell Tanks only)

Partially Interim Isolated (PI)	The administrative designation reflecting the completion of the physical effort required for Interim Isolation except for isolation of risers and piping that is required for jet pumping or for other methods of stabilization.
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Interim Isolated (II)	The administrative designation reflecting the completion of the physical effort required to minimize the addition of liquids into an inactive storage tank, process vault, sump, catch tank, or diversion box.
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TANK INTEGRITY

Sound	The integrity classification of a waste storage tank for which surveillance data indicates no loss of liquid attributed to a breach of integrity.
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Assumed Leaker	The integrity classification of a waste storage tank for which surveillance data indicates a loss of liquid attributed to a breach of integrity.
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TANK INVESTIGATION

Intrusion	A term used to describe the infiltration of liquid into a waste tank.
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4. **INVENTORY AND STATUS BY TANK - COLUMN CALCULATIONS (SINGLE-SHELL TANKS)**

COLUMN HEADING

Total Waste	Solids volume plus Supernatant liquid.
Supernatant Liquid	Drainable Liquid Remaining minus Drainable Interstitial. Supernatant is usually derived by subtracting the solids level measurement from the liquid level measurement.
Drainable Interstitial	Drainable Liquid Remaining minus Supernatant. Drainable Interstitial Liquid is calculated based on the salt cake and sludge volumes, using average porosity values or actual data for each tank, when available.
Total Jet Pumped	Cumulative total pumped 1979 to date

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Drainable Liquid Remaining	Supernatant plus Drainable Interstitial.
Pumpable Liquid Remaining	Drainable Liquid Remaining less undrainable heel volume.
Sludge	Solids formed during Sodium Hydroxide additions to waste. Sludge usually was in the form of suspended solids when the waste was originally received in the tank by the waste generator. In-tank photographs may be used to estimate the volume.
Salt Cake	Results from crystalization and precipitation after concentration of liquid waste, usually in an evaporator. If salt cake is layered over sludge, it is only possible to measure total solids volume. In-tank photographs may be used to estimate the salt cake volume.
Solids Volume	Indicates the latest update of any change in the solids volume.
Solids Update Source - See Footnote	Indicates the source or basis of the latest solids volume update.
Last Photo Date	Date of latest in-tank photographs taken.
Change Since Last Monthly Report	Indicates any change made since the previous month. Explanation for the change follows the Inventory and Status by Tank section.

Figure A-1. Single-Shell Tank Surveillance Instrumentation.

28905008.2

Figure A-2. Double-Shell Tank Surveillance Instrumentation.

28905008.1

APPENDIX B

**MONTHLY SUMMARY
TANK USE SUMMARY
INVENTORY SUMMARY BY TANK FARM
INVENTORY AND STATUS BY TANK**

TABLE B-1. MONTHLY SUMMARY (Sheet 1 of 2)

	TANK STATUS					
	200		200			
	EAST AREA	WEST AREA	TOTAL	SST TANKS	DST TANKS	TOTAL
IN SERVICE	25	3	28			
OUT OF SERVICE	66	83	149			
SOUND	59	52	111			
ASSUMED LEAKER	32	34	66			
INTERIM STABILIZED*	47	54	101			
ISOLATED						
PARTIAL INTERIM	27	31	58			
INTERIM	39	52	91			
WASTE VOLUMES (Kgallons)						
	200		200			
	EAST AREA	WEST AREA	TOTAL	SST TANKS	DST TANKS	TOTAL
SUPERNATANT						
AGING	1796	0	1796	0	1796	1796
CC	1969	195	2164	3	2161	2164
CP	1007	0	1007	0	1007	1007
CPLX	0	1	1	1	0	1
DC	832	0	832	0	832	832
DN	7091	0	7091	0	7091	7091
DN/PT	880	0	880	0	880	880
DSSF	0	506	506	0	506	506
NCPLX	3824	48	3872	48	3824	3872
	195	341	536	536	0	536
TOTAL SUPERNATANT	17594	1091	18685	588	18097	18685
SOLIDS						
Double-shell slurry	937	1134	2071	0	2071	2071
Sludge	8368	6212	14580	12644	1937	14581
Saltcake	6667	17641	24308	23548	760	24308
TOTAL SOLIDS	15972	24987	40959	36192	4768	40960
TOTAL WASTE	33566	26078	59644	36780	22865	59645
AVAILABLE SPACE IN TANKS	7638	962	8600	0	8600	8600

* Includes tanks that do not meet current established supernatant and interstitial liquid stabilization criteria.

Those tanks are B-104, B-107, B-110, B-111, BX-110, T-102, T-112, and U-110.

Note: +/- 1 Kgallon differences are due to computer rounding

TABLE B-1. MONTHLY SUMMARY (Sheet 2 of 2)

WASTE VOLUMES (Kgallons)						
	200	200				
	<u>EAST AREA</u>	<u>WEST AREA</u>	<u>TOTAL</u>	<u>SST TANKS</u>	<u>DST TANKS</u>	<u>TOTAL</u>
SUPERNATANT	17594	1091	18685	596	18089	18685
DRAINABLE INTERSTITIAL	<u>2429</u>	<u>4282</u>	<u>6711</u>	<u>6275</u>	<u>436</u>	<u>6711</u>
DRAINABLE LIQUID REMAINING	20023	5373	25396	6871	18525	25396
PUMPABLE LIQUID REMAINING	19300	4382	23682	5308	18374	23682

Note: +/- 1 Kgallon differences are due to computer rounding

TABLE B-2. TANK USE SUMMARY

TANK FARMS	IN SERVICE	OUT OF SERVICE	SOUND	ASSUMED LEAKER	ISOLATED TANKS		INTERIM STABILIZED TANKS
					PARTIAL	INTERIM	
EAST							
A	0	6	3	3	2	4	5
AN	7	0	7	0	0	0	0
AP	8	0	8	0	0	0	0
AW	6	0	6	0	0	0	0
AX	0	4	2	2	1	3	3
AY	2	0	2	0	0	0	0
AZ	2	0	2	0	0	0	0
B	0	16	6	10	0	16	16 *
BX	0	12	7	5	7	5	7 *
BY	0	12	7	5	9	3	7
C	0	16	9	7	8	8	9
Total	25	66	59	32	27	39	47
WEST							
S	0	12	11	1	11	1	2
SX	0	15	5	10	6	9	9
SY	3	0	3	0	0	0	0
T	0	16	10	6	5	11	11 *
TX	0	18	10	8	0	18	18
TY	0	6	1	5	0	6	6
U	0	16	12	4	9	7	8 *
Total	3	83	52	34	31	52	54
TOTAL	28	149	111	66	58	91	101

* Includes tanks that do not meet current established supernatant and interstitial liquid stabilization criteria. Those tanks are B-104, B-107, B-110, B-111, BX-110, T-102, T-112, and U-110.

TABLE B-3. INVENTORY SUMMARY BY TANK FARM
WASTE VOLUMES (Kgallons)

SUPERNATANT LIQUID VOLUMES															SOLIDS VOLUME		
TANK FARM	TOTAL WASTE	AVAIL SPACE	AGIN	CC	CP	DC	DN	DN/PT	DSSF	CPLX	NCPLX	TOTAL	DSS	SLUDGE	CAKE	TOTAL	
EAST																	
A	1537	0	0	0	0	0	0	0	8	0	0	8	0	556	972	1528	
AN	6587	1421	0	1966	1007	0	237	0	1936	0	0	5146	937	504	0	1441	
AP	5041	4111	0	0	0	0	4214	0	827	0	0	5041	0	0	0	0	
AW	5114	1750	0	0	0	0	1863	880	1053	0	0	3796	0	1122	196	1318	
AX	906	0	0	3	0	0	0	0	0	0	0	3	0	19	884	903	
AY	1723	277	0	0	0	832	777	0	0	0	0	1609	0	115	0	115	
AZ	1921	79	1796	0	0	0	0	0	0	0	0	1796	0	125	0	125	
B	2058	0	0	0	0	0	0	0	0	0	15	15	0	1697	345	2042	
BX	1558	0	0	0	0	0	0	0	0	0	63	63	0	1340	155	1495	
BY	4886	0	0	0	0	0	0	0	0	0	48	48	0	723	4115	4838	
C	2236	0	0	0	0	0	0	0	0	0	69	69	0	2167	0	2167	
Total	33567	7638	1796	1969	1007	832	7091	880	0	3824	0	17594	937	8368	6667	15972	
WEST																	
S	5982	0	0	0	0	0	0	0	17	0	29	46	0	1171	4765	5936	
SX	4468	0	0	0	0	0	0	0	0	1	93	94	0	1529	2845	4374	
SY	2470	962	0	195	0	0	0	506	0	0	0	701	1134	71	564	1769	
T	2065	0	0	0	0	0	0	0	0	0	74	74	0	1991	0	1991	
TX	6905	0	0	0	0	0	0	0	0	0	5	5	0	241	6659	6900	
TY	638	0	0	0	0	0	0	0	0	0	3	3	0	571	64	635	
U	3550	0	0	0	0	0	0	0	31	0	137	168	0	638	2744	3382	
Total	26078	962	0	195	0	0	0	506	48	1	341	1091	1134	6212	17641	24987	
TOTAL	59645	8500	1796	2164	1007	832	7091	880	506	3872	1	18685	2071	14580	24308	40959	

TABLE B-4. INVENTORY AND STATUS BY TANK
DOUBLE-SHELL TANKS

TANK STATUS				LIQUID VOLUME										SOLIDS VOLUME	VOLUME DETERMINATION																																																																																																																																																																																																																																																																																																																																																																																																																																																								
TANK	WASTE TANK	TANK INTEGRITY USE	EQUIVA- LENT	WASTE INCHES	TOTAL WASTE	SPACE	AVAIL	NATANT LIQUID	SUPER- ABLE	DRAIN- ABLE	JET PUMPED	TOTAL JET	DRAIN- ABLE	PUMP- ABLE	LIQUID	REMAIN	DSS	SLDG	CAKE	MTHD	VOL	SOLIDS	LAST PHOTO	DATE																																																																																																																																																																																																																																																																																																																																																																																																																																															
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WASTE VOLUMES IN THOUSANDS OF GALLONS

DOUBLE-SHELL TANKS

INVENTORY AND STATUS BY TANK

TANK STATUS		LIQUID VOLUME										SOLIDS VOLUME			VOLUME DETERMINATION							
TANK	WASTE TANK	MATL	INTEGRITY USE	EQUIVA- LENT	WASTE TOTAL INCHES	WASTE TOTAL SPACE	AVAIL NATANT LIQUID	SUPER- NATANT	DRAIN- ABLE INTER- STIT.	JET PUMPED THIS MONTH	TOTAL JET PUMPED	DRAIN- ABLE LIQUID REMAIN	PUMP- ABLE LIQUID REMAIN	DSS	SLDG	CAKE	MTHD	VOL UPDATE	SOLIDS VOLUME	LAST PHOTO	DATE	
+++++ AM FARM STATUS +++++																						
101AW	DSSF		SOUND	CWHT	413.5	1137	7	1053	2	0.0	0.0	1055	1053	0	84	0	FM	S	10/22/84	03/17/88		
102AW	DN		SOUND	EVFD	368.3	1013	131	1012	0	0.0	0.0	1012	1012	0	1	0	FM	S	02/29/84	02/02/83		
103AW	DN/PD		SOUND	DRCVR	232.5	639	505	276	37	0.0	0.0	313	291	0	363	0	FM	S	02/01/89	0/ 0/ 0		
104AW	DN		SOUND	DRCVR	323.8	890	254	600	49	0.0	0.0	649	627	0	179	111	FM	S	03/05/87	02/02/83		
105AW	DN/PD		SOUND	DRCVR	327.5	901	243	604	29	0.0	0.0	633	611	0	297	0	FM	S	03/05/87	0/ 0/ 0		
106AW	DN		SOUND	SRCVR	194.3	534	610	251	40	0.0	0.0	291	269	0	198	85	FM	S	06/24/89	02/02/83		
6 DOUBLE-SHELL TANKS					TOTALS:	5114	1750	3796	157	0.0	0.0	3953	3863	0	1122	196						
+++++ AY FARM STATUS +++++																						
101AY	DC		SOUND	DRCVR	332.5	914	86	832	2	0.0	0.0	834	832	0	83	0	FM	S	02/02/87	12/28/82		
102AY	DN		SOUND	DRCVR	294.1	809	191	777	0	0.0	0.0	777	777	0	32	0	FM	S	02/10/88	04/28/81		
2 DOUBLE-SHELL TANKS					TOTALS:	1723	277	1609	2	0.0	0.0	1611	1609	0	115	0						
+++++ AZ FARM STATUS +++++																						
101AZ	AGING		SOUND	CWHT	350.3	963	37	926	0	0.0	0.0	926	926	0	37	0	FM	S	06/06/89	08/18/83		
102AZ	AGING		SOUND	DRCVR	348.5	958	42	870	3	0.0	0.0	873	870	0	88	0	FM	S	06/03/89	12/24/84		
2 DOUBLE-SHELL TANKS					TOTALS:	1921	79	1796	3	0.0	0.0	1799	1796	0	125	0						

WASTE VOLUMES IN THOUSANDS OF GALLONS

DOUBLE-SHELL TANKS
INVENTORY AND STATUS BY TANK

TANK STATUS		LIQUID VOLUME										SOLIDS VOLUME				VOLUME DETERMINATION			
		EQUIVA- LENT		SUPER- NATANT		DRAIN- ABLE		JET PUMPED		TOTAL JET		DRAIN- ABLE		PUMP- ABLE		LIQ VOL		SOLIDS VOLUME	
TANK	MATL	WASTE	TANK	INCHES	TOTAL	WASTE	SPACE	AVAIL	WASTE	LIQUID	STIT.	INTER-	ABLE	ABLE	REMAIN	REMAIN	LIQUID	SALT	CAKE
101SY	CC	413.0	1142	2	21	237	0.0	0.0	0.0	0.0	258	236	561	0	560	FM	S	10/15/84	04/12/89
102SY	DN/PT	213.4	577	567	506	0	0.0	0.0	0.0	0.0	506	506	0	71	0	FM	S	05/12/87	04/29/81
103SY	CC	273.1	751	393	174	0	0.0	0.0	0.0	0.0	174	174	573	0	4	FM	S	10/22/84	10/01/85
3 DOUBLE-SHELL TANKS		TOTALS:	2470	962	701	237	0.0	0.0	0.0	0.0	938	916	1134	71	564				

WASTE VOLUMES IN THOUSANDS OF GALLONS

TABLE B-4. INVENTORY AND STATUS BY TANK
SINGLE-SHELL TANKS

TANK STATUS			LIQUID VOLUME					SOLIDS VOLUME					VOLUME DETERMINATION										CHG	
TANK	WASTE MATERIAL INTEGRITY	TANK ISOLATION STATUS	STABIL/ ISOLATION	TOTAL WASTE LIQUID (Kgal)	SUPER- ABLE	DRAIN- ABLE	JET PUMPED	TOTAL JET PUMPED	DRAIN- ABLE	PUMP- ABLE	LIQUID REMAIN	LIQUID REMAIN	SLUDGE (Kgal)	SALTCAKE (Kgal)	LIQUIDS VOLUME	SOLIDS VOLUME	SOLIDS VOLUME	SOLIDS VOLUME	UPDATE	SOURCE	LAST PHOTO	DATE	MONTHLY REPORT	
																								WASTE MATERIAL INTEGRITY
***** A FARM STATUS *****																								
101A	DSSF	SOUND	/PI	953	0	413	0.0	0.0	413	391	3	950	P	F	11/21/80	08/21/85								
102A	DSSF	SOUND	IS/PI	41	4	2	0.0	39.5	6	0	15	22	P	FP	07/27/89	(1)	07/20/89							
103A	DSSF	ASMD LKR	IS/II	371	4	13	0.0	111.0	17	0	366	0	-	FP	06/03/88	(1)	12/28/88							
104A	NCPLX	ASMD LKR	IS/II	28	0	0	0.0	0.0	0	0	28	0	M	PS	01/27/78		06/25/86							
105A	NCPLX	ASMD LKR	IS/II	19	0	4	0.0	0.0	4	0	19	0	P	MP	08/23/79	(1)	08/20/86							
106A	CHFW	SOUND	IS/II	125	0	7	0.0	0.0	7	0	125	0	P	M	09/07/82		08/17/86							
6 SINGLE-SHELL TANKS																								
TOTALS				1537	8	439	0.0	150.5	447	391	556	972												
***** AX FARM STATUS *****																								
101AX	DSSF	SOUND	/PI	748	0	320	0.0	0.0	320	298	3	745	P	F	05/06/82	08/18/87								
102AX	CC	ASMD LKR	IS/II	39	3	14	0.0	13.0	17	3	7	29	F	S	09/06/88	06/05/89								
103AX	CPLX	SOUND	IS/II	112	0	36	0.0	0.0	36	3	2	110	F	S	08/19/87	08/13/87								
104AX	NCPLX	ASMD LKR	IS/II	7	0	0	0.0	0.0	0	0	7	0	P	M	04/28/82	08/18/87								
TOTALS:				906	3	370	0.0	13.0	373	304	19	884												
4 SINGLE-SHELL TANKS																								

WHC-EP-0182-27

SINGLE-SHELL TANKS

+++++ B FARM STATUS +++++

[illegible]

INVENTORY AND STATUS BY TANK

SINGLE-SHELL TANKS

TANK STATUS		LIQUID VOLUME				SOLIDS VOLUME				VOLUME DETERMINATION				CHG				
TANK	WASTE MATERIAL	TANK INTEGRITY	STABIL/ISOLATION STATUS	TOTAL WASTE (Kgal)	SUPER-ABLE TOTAL LIQUID (Kgal)	DRAIN-ABLE INTER-STIT. (Kgal)	JET PUMPED THIS MONTH	TOTAL JET PUMPED (Kgal)	DRAIN-ABLE LIQUID REMAIN (Kgal)	PUMP-ABLE LIQUID REMAIN (Kgal)	SLUDGE (Kgal)	SALTCAKE (Kgal)	LIQUIDS VOLUME METHOD	SOLIDS VOLUME METHOD	SOLIDS VOLUME UPDATE	SOURCE SEE FOOTNOTE	LAST PHOTO DATE	SINCE LAST MONTHLY REPORT
***** BX FARM STATUS *****																		
101B(X)	NCPLX	ASMD LKR	IS/II	43	1	0	0.0	0.0	1	0	42	0	P	M	04/28/82	11/24/88		
102B(X)	NCPLX	ASMD LKR	IS/II	96	0	4	0.0	0.0	4	0	96	0	P	M	04/28/82	09/18/85		
103B(X)	NCPLX	SOUND	IS/II	66	4	0	0.0	0.0	4	0	62	0	P	F	11/29/83	10/31/86		
104B(X)	NCPLX	SOUND	IS/PI	99	3	30	0.0	17.4	33	27	96	0	F	F	09/22/89	(1)	09/21/89	
105B(X)	NCPLX	SOUND	IS/II	51	5	6	0.0	15.0	11	4	43	3	F	S	09/03/86	(1)	10/23/86	
106B(X)	NCPLX	SOUND	/PI	46	15	0	0.0	0.0	15	15	31	0	MP	PS	04/28/82	05/19/88		
107B(X)	NCPLX	SOUND	/PI	354	0	30	16.1	16.1	30	24	354	0	FP	F	06/30/90	(2)	10/28/86	*
108B(X)	NCPLX	ASMD LKR	IS/II	5	0	1	0.0	0.0	1	0	5	0	M	PS	07/31/79	(1)	10/23/86	
109B(X)	NCPLX	SOUND	/PI	199	2	16	0.0	0.0	18	2	197	0	FP	F	04/28/82	05/08/86		
110B(X)	NCPLX	ASMD LKR	IS/PI	199	1	20	0.0	0.0	21	0	189	9	MP	M	08/22/85	(1)	07/31/85	
111B(X)	NCPLX	ASMD LKR	/PI	230	19	50	0.0	0.0	69	47	68	143	M	M	07/26/77	09/18/85		
112B(X)	NCPLX	SOUND	/PI	170	13	11	0.0	0.0	24	18	157	0	FP	F	07/24/85	07/28/89		
TOTALS:				1558	63	168	16.1	48.5	231	137	1340	155						
***** BY FARM STATUS *****																		
101B(Y)	NCPLX	SOUND	IS/II	387	0	5	0.0	35.8	5	0	109	278	P	M	05/30/84	09/19/89		
102B(Y)	NCPLX	SOUND	/PI	432	15	176	0.0	0.0	191	169	0	417	MP	M	04/30/83	09/11/87		
103B(Y)	NCPLX	ASMD LKR	/PI	400	0	108	0.0	78.5	108	86	5	395	MP	M	04/03/90	(2)	09/07/89	
104B(Y)	NCPLX	SOUND	IS/PI	406	0	18	0.0	329.5	18	0	40	366	P	M	04/28/82	04/27/83		
105B(Y)	NCPLX	ASMD LKR	/PI	503	0	194	0.0	0.0	194	172	44	459	P	MP	04/28/82	12/02/88		
106B(Y)	NCPLX	ASMD LKR	/PI	642	0	235	0.0	0.0	235	213	95	547	P	MP	04/28/82	11/04/82		
107B(Y)	NCPLX	ASMD LKR	IS/II	266	0	25	0.0	56.4	25	0	60	206	P	MP	04/28/82	10/15/86		

12 SINGLE-SHELL TANKS

INVENTORY AND STATUS BY TANK

SINGLE-SHELL TANKS

TANK STATUS		LIQUID VOLUME				SOLIDS VOLUME				VOLUME DETERMINATION				CHG				
TANK	WASTE MATERIAL INTEGRITY	TANK	STABIL/ISOLATION STATUS	TOTAL WASTE (Kgal)	SUPER-ABLE INTER-LIQUID STIT. (Kgal)	DRAIN-ABLE	JET PUMPED THIS MONTH	TOTAL JET PUMPED (Kgal)	DRAIN-ABLE LIQUID REMAIN (Kgal)	PUMP-ABLE LIQUID REMAIN (Kgal)	SLUDGE (Kgal)	SALTCAKE (Kgal)	LIQUIDS VOLUME METHOD	SOLIDS VOLUME METHOD	SOLIDS UPDATE SOURCE	LAST PHOTO DATE	SINCE LAST MONTHLY REPORT	
1083Y	NCPLX	ASMD LKR	IS/PI	228	0	9	0.0	27.5	9	0	154	74	MP	M	04/28/82		10/15/86	
1093Y	NCPLX	SOUND	/PI	474	33	147	0.0	0.0	180	158	87	354	F	PS	08/09/79		10/15/86	
1103Y	NCPLX	SOUND	IS/II	398	0	9	0.0	213.3	9	0	103	295	M	S	09/10/79		07/26/84	
1113Y	NCPLX	SOUND	IS/PI	459	0	0	0.0	313.2	0	0	21	438	P	M	04/28/82		10/31/86	
1123Y	NCPLX	SOUND	IS/PI	291	0	8	0.0	116.4	8	0	5	286	P	M	04/28/82		04/14/88	
TOTALS:				4886	48	934	0.0	1170.6	982	798	723	4115						
12 SINGLE-SHELL TANKS																		
+++++ C FARM STATUS +++++																		
101C	NCPLX	ASMD LKR	IS/II	88	0	3	0.0	0.0	3	0	88	0	M	M	11/29/83		11/17/87	
102C	NCPLX	SOUND	/PI	427	3	45	0.0	0.0	48	42	424	0	P	FP	04/28/82		05/18/76	
103C	NCPLX	SOUND	/PI	200	25	14	0.0	0.0	39	33	175	0	F	S	09/18/78		07/28/87	
104C	CPLX	SOUND	IS/PI	295	0	11	0.0	0.0	11	5	295	0	FP	P	09/22/89	(1)	04/14/88	
105C	NCPLX	SOUND	/PI	150	0	11	0.0	0.0	11	5	150	0	F	S	05/31/85		04/01/88	
106C	NCPLX	SOUND	/PI	229	32	16	0.0	0.0	48	42	197	0	F	PS	04/28/82		04/05/79	
107C	NCPLX	SOUND	/PI	337	0	34	0.0	0.0	34	28	337	0	F	S	07/19/78		00/00/00	
108C	NCPLX	SOUND	IS/II	66	0	0	0.0	0.0	0	0	66	0	M	S	02/24/84	(1)	12/05/74	
109C	NCPLX	SOUND	IS/II	66	4	0	0.0	0.0	4	0	62	0	M	PS	11/29/83		01/30/76	
110C	NCPLX	ASMD LKR	/PI	201	5	16	0.0	0.0	21	15	196	0	P	FMP	05/31/85		08/12/86	
111C	NCPLX	ASMD LKR	IS/II	57	0	0	0.0	0.0	0	0	57	0	M	S	04/28/82		02/25/70	
112C	NCPLX	SOUND	/PI	109	0	5	0.0	0.0	5	0	109	0	M	S	12/31/75		00/00/00	
201C	NCPLX	ASMD LKR	IS/II	2	0	0	0.0	0.0	0	0	2	0	P	MP	03/31/82		12/02/86	
202C	EMPTY	ASMD LKR	IS/II	1	0	0	0.0	0.0	0	0	1	0	P	M	01/19/79		12/09/86	
203C	NCPLX	ASMD LKR	IS/II	5	0	0	0.0	0.0	0	0	5	0	P	MP	04/28/82		12/09/86	

INVENTORY AND STATUS BY TANK

SINGLE-SHELL TANKS

TANK STATUS		LIQUID VOLUME										SOLIDS VOLUME				VOLUME DETERMINATION										CHG			
TANK	WASTE MATERIAL INTEGRITY	TANK ISOLATION STATUS	STABIL/ISOLATION STATUS	TOTAL WASTE (Kgal)	SUPER-NATANT LIQUID (Kgal)	DRAIN-ABLE INTER-STIT. (Kgal)		JET PUMPED THIS MONTH	TOTAL JET PUMPED (Kgal)	DRAIN-ABLE LIQUID REMAIN (Kgal)		SLUDGE (Kgal)	SALTCAKE (Kgal)	LIQUIDS VOLUME METHOD	SOLIDS VOLUME UPDATE	SOLIDS SOURCE SEE FOOTNOTE	DATE PHOTO	LAST MONTHLY REPORT	CHG SINCE LAST										
						ABLE	INTER-STIT.			ABLE	LIQUID REMAIN									LIQUID REMAIN									
204C	NCPLX	ASMD LKR	IS/II	3	0	0	0	0.0	0.0	0	0	3	0	P	MP	04/28/82		12/09/86											
16 SINGLE-SHELL TANKS				TOTALS:	2236	69	155	0.0	0.0	224	170	2167	0																
+++++ S FARM STATUS +++++																													
101S	NCPLX	SOUND	/PI	427	12	84	0.0	0.0	0.0	96	74	244	171	F	PS	09/16/80		03/18/88											
102S	DSSF	SOUND	/PI	549	0	230	0.0	0.0	0.0	230	208	4	545	P	FP	04/28/82		03/18/88											
103S	DSSF	SOUND	/PI	248	17	85	0.0	0.0	0.0	102	80	10	221	M	S	11/20/80		06/01/89											
104S	NCPLX	ASMD LKR	IS/II	294	1	28	0.0	0.0	0.0	29	23	293	0	M	M	12/20/84	(1)	12/12/84											
105S	NCPLX	SOUND	IS/PI	456	0	35	0.0	114.3	35	13	13	2	454	MP	S	09/26/88		04/12/89											
106S	NCPLX	SOUND	/PI	543	0	115	0.0	99.8	115	93	93	32	511	P	FP	06/28/82		03/17/89											
107S	NCPLX	SOUND	/PI	368	6	45	0.0	0.0	0.0	51	29	293	69	F	PS	09/25/80		03/12/87											
108S	NCPLX	SOUND	/PI	604	0	103	0.0	151.6	103	81	81	4	600	P	MP	04/28/82		03/12/87											
109S	NCPLX	SOUND	/PI	568	0	124	0.0	111.0	124	102	102	13	555	F	PS	09/30/75		08/24/84											
110S	NCPLX	SOUND	/PI	692	0	60	0.0	185.9	60	38	38	131	561	F	PS	01/31/79		03/12/87											
111S	NCPLX	SOUND	/PI	596	10	192	0.0	3.3	202	180	180	139	447	P	FP	04/28/82		08/10/89											
112S	NCPLX	SOUND	/PI	637	0	144	0.0	125.1	144	122	122	6	631	P	FP	06/28/82		03/24/87											
12 SINGLE-SHELL TANKS				TOTALS:	5982	46	1245	0.0	791.0	1291	1043	1171	4765																

INVENTORY AND STATUS BY TANK

SINGLE-SHELL TANKS

TANK STATUS			LIQUID VOLUME										SOLIDS VOLUME				VOLUME DETERMINATION									
TANK	WASTE MATERIAL	TANK INTEGRITY	STATUS	STABIL/ ISOLATION	TOTAL WASTE (Kgal)	SUPER- NATANT LIQUID (Kgal)	DRAIN- ABLE INTER- STIT. (Kgal)		JET PUMPED THIS MONTH	TOTAL JET PUMPED (Kgal)	DRAIN- ABLE LIQUID REMAIN (Kgal)		PUMP- ABLE LIQUID REMAIN (Kgal)	SLUDGE (Kgal)	SALTCAKE (Kgal)	LIQUIDS VOLUME METHOD	SOLIDS VOLUME METHOD	SOLIDS VOLUME UPDATE	SOLIDS UPDATE	FOOTNOTE	DATE	PHOTO	LAST MONTHLY REPORT			
							ABLE	INTER-			ABLE	LIQUID												REMAIN	LIQUID	REMAIN
+++++ SX FARM STATUS +++++																										
101SX	CPLX	SOUND	/PI		456	1	145	0.0	0.0	0.0	146	124		112	343		P	FP	04/28/82			03/10/89				
102SX	DSSF	SOUND	/PI		543	0	183	0.0	0.0	0.0	183	161		117	426		P	M	04/28/82			01/07/88				
103SX	NCPLX	SOUND	/PI		667	32	226	0.0	0.0	0.0	258	236		112	523		F	S	04/28/82			12/17/87				
104SX	DSSF	ASMD LKR	/PI		614	0	138	0.0	0.0	113.2	138	116		136	478		F	S	07/07/89			09/08/88				
105SX	DSSF	SOUND	/PI		683	0	261	0.0	0.0	0.0	261	239		73	610		P	F	04/28/82			06/15/88				
105SX	NCPLX	SOUND	/PI		538	61	194	0.0	0.0	0.0	255	233		12	465		F	PS	10/28/80			06/01/89				
107SX	NCPLX	ASMD LKR	IS/II		104	0	5	0.0	0.0	0.0	5	0		104	0		P	M	04/28/82			03/06/87				
103SX	NCPLX	ASMD LKR	IS/II		115	0	6	0.0	0.0	0.0	6	0		115	0		P	M	04/28/82			03/06/87				
109SX	NCPLX	ASMD LKR	IS/II		250	0	10	0.0	0.0	0.0	10	0		250	0		P	M	04/28/82			05/21/86				
110SX	NCPLX	ASMD LKR	IS/II		62	0	0	0.0	0.0	0.0	0	0		62	0		M	PS	10/06/76			02/20/87				
111SX	NCPLX	ASMD LKR	IS/II		125	0	7	0.0	0.0	0.0	7	0		125	0		M	PS	05/31/74			03/10/87				
112SX	NCPLX	ASMD LKR	IS/II		92	0	3	0.0	0.0	0.0	3	0		92	0		P	M	04/28/82			03/10/87				
1113SX	NCPLX	ASMD LKR	IS/II		26	0	0	0.0	0.0	0.0	0	0		26	0		P	M	04/28/82			03/18/88				
1114SX	NCPLX	ASMD LKR	IS/II		181	0	14	0.0	0.0	0.0	14	0		181	0		P	M	04/28/82			02/26/87				
1115SX	NCPLX	ASMD LKR	IS/II		12	0	0	0.0	0.0	0.0	0	0		12	0		P	M	04/28/82			03/31/88				
15 SINGLE-SHELL TANKS				TOTALS:	4468	94	1192	0.0	0.0	113.2	1286	1109		1529	2845											

INVENTORY AND STATUS BY TANK

SINGLE-SHELL TANKS

TANK STATUS		LIQUID VOLUME										SOLIDS VOLUME					VOLUME DETERMINATION										CHG	
TANK	WASTE MATERIAL	TANK INTEGRITY	STATUS	STABIL/ ISOLATION	TOTAL WASTE (Kgal)	TOTAL NATANT LIQUID (Kgal)	DRAIN- ABLE		JET PUMPED THIS MONTH	TOTAL JET PUMPED	DRAIN- ABLE		PUMP- ABLE		SLUDGE (Kgal)	SALTCAKE (Kgal)	LIQUIDS VOLUME		SOLIDS VOLUME		SOLIDS UPDATE		SOURCE	LAST PHOTO	DATE	MONTHLY REPORT		
							INTER- STIT.	(Kgal)			ABLE	LIQUID	REMAIN	LIQUID			REMAIN	(Kgal)	(Kgal)	(Kgal)	(Kgal)	METHOD					UPDATE	FOOTNOTE
+++++ T FARM STATUS +++++																												
101T	NCPLX	SOUND	/PI		133	30	5	0.0	0.0	0.0	35	30			103	0	F	S	08/31/84						07/03/84			
102T	NCPLX	SOUND	IS/II		32	13	0	0.0	0.0	0.0	13	13			19	0	P	FP	08/31/84						06/28/89			
103T	NCPLX	ASMD LKR	IS/II		27	4	0	0.0	0.0	0.0	4	0			23	0	F	FP	11/29/83		(1)				07/02/84			
104T	NCPLX	SOUND	/PI		445	3	47	0.0	0.0	0.0	50	44			442	0	P	MP	04/28/82						06/29/89			
105T	NCPLX	SOUND	IS/II		98	0	23	0.0	0.0	0.0	23	17			98	0	P	F	05/29/87						05/14/87			
106T	NCPLX	ASMD LKR	IS/II		21	2	0	0.0	0.0	0.0	2	0			19	0	P	FP	04/28/82						06/29/89			
107T	NCPLX	ASMD LKR	/PI		180	9	13	0.0	0.0	0.0	22	16			171	0	P	FP	08/31/84						07/12/84			
108T	NCPLX	ASMD LKR	IS/II		44	0	0	0.0	0.0	0.0	0	0			44	0	P	M	04/28/82						07/17/84			
109T	NCPLX	ASMD LKR	IS/II		58	0	0	0.0	0.0	0.0	0	0			58	0	M	M	12/30/84		(1)				07/03/84			
110T	NCPLX	SOUND	/PI		379	3	39	0.0	0.0	0.0	42	36			376	0	P	FP	04/28/82						07/12/84			
111T	NCPLX	ASMD LKR	/PI		458	2	49	0.0	0.0	0.0	51	45			456	0	P	FP	04/28/82						08/02/84			
112T	NCPLX	SOUND	IS/II		67	7	0	0.0	0.0	0.0	7	7			60	0	P	FP	04/28/82						08/01/84			
201T	NCPLX	SOUND	IS/II		29	1	3	0.0	0.0	0.0	4	0			28	0	M	PS	05/31/78						04/15/86			
202T	NCPLX	SOUND	IS/II		21	0	2	0.0	0.0	0.0	2	0			21	0	FP	P	07/12/81						07/06/89			
203T	NCPLX	SOUND	IS/II		35	0	4	0.0	0.0	0.0	4	0			35	0	M	PS	01/31/78						08/03/89			
204T	NCPLX	SOUND	IS/II		38	0	4	0.0	0.0	0.0	4	0			38	0	FP	P	07/22/81						08/03/89			
TOTALS:		2065	74	189	0.0	0.0	263	208	1991	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
16 SINGLE-SHELL TANKS																												

16

SINGLE-SHELL TANKS

TANK STATUS

LIQUID VOLUME

SOLIDS VOLUME

VOLUME DETERMINATION

[illegible]

TX FARM STATUS ++++++

	87	3	2	0.0	5	0	84	0	F	P	02/02/84	(1)
10/1TX NCPLX SOUND	IS/II								SOUND			
10/2TX NCPLX SOUND	IS/II	6	22	0.0	94.4	0	0	113	M	S	08/31/84	10/24/85
10/3TX NCPLX SOUND	IS/II	0	15	0.0	68.3	0	157	0	F	S	08/14/80	10/31/85
10/4TX NCPLX SOUND	IS/II	1	14	0.0	3.6	0	0	64	F	FP	04/06/84	10/15/84
10/5TX NCPLX ASMD LKR	IS/II	0	20	0.0	121.5	0	0	609	M	PS	08/22/77	10/24/89
10/6TX NCPLX SOUND	IS/II	0	10	0.0	134.6	0	0	453	M	S	08/29/77	10/31/85
10/7TX NCPLX ASMD LKR	IS/II	1	1	0.0	0.0	0	0	35	FP	FP	01/20/84	10/31/85
10/8TX NCPLX SOUND	IS/II	0	0	0.0	13.7	0	0	134	P	FP	05/30/83	09/12/89
10/9TX NCPLX SOUND	IS/II	0	10	0.0	72.3	0	0	384	F	PS	05/30/83	10/24/89
11/0TX NCPLX ASMD LKR	IS/II	0	15	0.0	115.1	0	0	462	M	PS	05/30/83	10/24/89
11/1TX NCPLX SOUND	IS/II	0	9	0.0	98.4	0	0	370	M	PS	07/26/77	09/12/89
11/2TX NCPLX SOUND	IS/II	0	24	0.0	94.0	0	0	649	P	PS	05/30/83	11/19/87
11/3TX NCPLX ASMD LKR	IS/II	0	16	0.0	19.2	0	0	607	M	PS	05/30/83	04/11/83
11/4TX NCPLX ASMD LKR	IS/II	0	15	0.0	104.3	0	0	535	M	PS	05/30/83	04/11/83
11/5TX NCPLX ASMD LKR	IS/II	0	19	0.0	99.1	0	0	640	M	S	03/25/83	06/15/88
11/6TX NCPLX ASMD LKR	IS/II	0	23	0.0	23.8	0	0	631	M	PS	03/31/72	10/17/89
11/7TX NCPLX ASMD LKR	IS/II	0	8	0.0	54.3	0	0	626	M	PS	12/31/71	04/11/83
11/8TX NCPLX SOUND	IS/II	0	27	0.0	89.1	0	0	347	F	S	11/17/80	12/19/79

18 SINGLE-SHELL TANKS	TOTALS:	6905	5	250	0.0	1205.7	255	0	241	6659
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INVENTORY AND STATUS BY TANK

SINGLE-SHELL TANKS

TANK STATUS			LIQUID VOLUME					SOLIDS VOLUME			VOLUME DETERMINATION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
TANK	WASTE MATERIAL	TANK INTEGRITY	STATUS	STABIL/ ISOLATION	TOTAL WASTE (Kgal)	SUPER- NATANT LIQUID (Kgal)	DRAIN- ABLE INTER- STIT. (Kgal)	JET PUMPED THIS MONTH	TOTAL JET PUMPED (Kgal)	DRAIN- ABLE LIQUID REMAIN (Kgal)	PUMP- ABLE LIQUID REMAIN (Kgal)	SLUDGE (Kgal)	SALTICAKE (Kgal)	LIQUIDS VOLUME METHOD	SOLIDS VOLUME METHOD	SOLIDS UPDATE SOURCE	CHG SINCE LAST MONTHLY REPORT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

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INVENTORY AND STATUS BY TANK

SINGLE-SHELL TANKS

TANK STATUS		LIQUID VOLUME				SOLIDS VOLUME				VOLUME DETERMINATION									
WASTE TANK	TANK MATERIAL INTEGRITY	STABIL/ ISOLATION STATUS	TOTAL WASTE (Kgal)	SUPER- ABLE INTER- LIQUID STIT. (Kgal)	JET PUMPED THIS MONTH	TOTAL JET PUMPED (Kgal)	DRAIN- ABLE LIQUID REMAIN (Kgal)	PUMP- ABLE LIQUID REMAIN (Kgal)	SLUDGE (Kgal)	SALTCAKE (Kgal)	LIQUIDS VOLUME METHOD	SOLIDS VOLUME METHOD	SOLIDS VOLUME UPDATE	SOLIDS SOURCE SEE FOOTNOTE	SOLIDS UPDATE	LAST PHOTO DATE	SINCE LAST MONTHLY REPORT		
202U	NCPLX	SOUND	5	1	0	0.0	0.0	1	0	4	0	M	S	08/15/79			08/08/89		
203U	NCPLX	SOUND	3	1	0	0.0	0.0	1	0	2	0	M	S	08/15/79			06/13/89		
204U	NCPLX	SOUND	3	1	0	0.0	0.0	1	0	2	0	M	S	08/15/79			06/13/89		
16 SINGLE-SHELL TANKS		TOTALS:	3550	168	1138	0.0	0.0	1306	1106	638	2744								

8-19

- (1) SST STABILIZATION RECORD
(2) TANK FARMS COGNIZANT ENGINEER MONTHLY INPUT (RETAINED 5 YEARS)

CHANGES MADE IN THE INVENTORY & STATUS BY TANK (SST) SECTION FOR MONTH OF JUNE 1990

TANK

COMMENTS

107-BX Jet pumping began 6/29/90. Info per Stabilization Engineer
Following entries were changed:
Total Waste from 370 to 354, Supernatant from 9 to 0. Drainable Interstitial Liquid from 37 to 30,
Drainable Liquid Remaining from 46 to 30, Pumpable Liquid Remaining from 40 to 24
Jet Pumped This Month and Total Jet Pumped from 0 to 16.1

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APPENDIX C
PERFORMANCE SUMMARY

PERFORMANCE SUMMARY

WASTE VOLUMES (Kgallions)

WASTE GENERATED			CURRENT EVAPORATION			
SOURCE	THIS MONTH	FY TO DATE	WASTE VOLUME REDUCTION		THROUGHPUT	
			242-A	242-S	242-S	242-S
B PLANT	33	525				
PUREX TOTAL *	17	1785	0	0	0	0
PFP*	0	14	0	0	0	0
T PLANT*	0	20	65227	41983	182437	134587
S PLANT*	0	32				
300/400 AREAS*	0	36				
N 504	0	51				
TANK FARMS	28	234				
OTHER GAINS	27	180				
Slurry increase	8					
Condensate	19 (1)					
Instrument error	0					
Unknown	0					
OTHER LOSSES	-47	-325				
Slurry decrease	21					
Evaporation	26 (2)					
Instrument error	0					
Unknown	0					
242-A EVAPORATOR	0	0				
GROUTED	0	0				
TOTAL WASTE	58	2552				

*Including Flush

(1) Aging waste tanks

(2) Aging waste tanks and miscellaneous evaporation

APPENDIX D

LIQUID STATUS AND PUMPABLE LIQUID
REMAINING IN TANKS

LIQUID STATUS AND PUMPABLE LIQUID REMAINING IN TANKS

WASTE VOLUMES (Kgallons)

TANK FARMS	SUPERNATANT LIQUID	DRAINABLE INTERSTITIAL LIQUID	DRAINABLE LIQUID REMAINING	PUMPABLE LIQUID REMAINING
EAST				
A	8	439	447	391
AN	5146	37	5183	5149
AP	5041	0	5041	5041
AW	3796	157	3953	3863
AX	3	370	373	304
AY	1609	2	1611	1609
AZ	1796	3	1799	1796
B	15	164	179	42
BX	63	168	231	137
BY	48	934	982	798
C	69	155	224	170
TOTAL	17594	2429	20023	19300
WEST				
S	46	1245	1291	1043
SX	94	1192	1286	1109
SY	701	237	938	916
T	74	189	263	208
TX	5	250	255	0
TY	3	31	34	0
U	168	1138	1306	1106
TOTAL	1091	4282	5373	4382
TOTAL	18685	6711	25396	23682

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APPENDIX E
SALTWELL PUMPING RECORD

SALTWELL PUMPING RECORD

TANK FARMS	PUMPED THIS MONTH	PUMPED FY TO DATE	CUMULATIVE
			TOTAL PUMPED 1979 TO DATE

EAST

A	0.0	0.0	150.5
AN	0.0	0.0	0.0
AP	0.0	0.0	0.0
AW	0.0	0.0	0.0
AX	0.0	0.0	13.0
AY	0.0	0.0	0.0
AZ	0.0	0.0	0.0
B	0.0	0.0	0.0
BX	16.1	16.1	48.5
BY	0.0	0.0	1170.6
C	0.0	0.0	0.0

TOTAL

16.1

16.1

1382.6

WEST

S	0.0	0.0	791.0
SX	0.0	0.0	113.2
SY	0.0	0.0	0.0
T	0.0	0.0	0.0
TX	0.0	0.0	1205.7
TY	0.0	0.0	29.9
U	0.0	0.0	0.0

TOTAL

0.0

0.0

2139.8

TOTAL

16.1

16.1

3522.4

APPENDIX F
CATCH TANKS

WEST AREA CATCH TANKS

June 1990

VOLUME

OF

ACTIVE* CONTENTS MONITORED

REMARKS

CATCH
TANK

LOCATION PURPOSE (receives waste from:)

YES NO (Gallons)

BY

S-302 S-FARM 240-S-151 DB

S-302-A S-FARM 241-S-151 DB

S-302-B S-FARM S ENCASEMENTS

SX-304(302) SX-FARM 152-SX TRANSFER BOX, 151-SX DB

T-301-B T-FARM 151-T, 152-T, 153-T, 252-T DB

TX-302 TX-FARM 153-TX DB

TX-302-X-B TX-FARM TX ENCASEMENTS

TX-302-C TX-FARM 154-TX DB

TX-302-B TX-FARM 155-TX DB

TY-302-A TY-FARM 153-TX DB

TY-302-B TY-FARM TY ENCASEMENTS

U-301-B U-FARM 151-U, 152-U, 153-U, 252-U DB

UX-302-A U-PLANT 154-UX DB

001-UR-TK/SMP U-FARM TRANSFER LINES

002-UR-TK/SMP U-FARM TRANSFER LINES

003-UR-TK/SMP U-FARM TRANSFER LINES

001-TXR-TK/SMP TX-FARM TRANSFER LINES

002-TXR-TK/SMP TX-FARM TRANSFER LINES

361-T-TANK T-PLANT DRAINAGE FROM T-PLANT

361-U-TANK U-PLANT DRAINAGE FROM U-PLANT

244-S-TK/SMP S-FARM DCRT - RECEIVES FROM SEVERAL FARMS X

244-TX-TK/SMP TX-FARM DCRT - RECEIVES FROM SEVERAL FARMS X

244-U-TK/SMP U-FARM DCRT - RECEIVES FROM SEVERAL FARMS X

TOTALS

5

8

38686

* ACTIVE - still running transfers through the associated diversion boxes or pipeline encaselements.

(1) SOURCE: WASTE STORAGE TANK STATUS & LEAK DETECTION CRITERIA document

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ASSUMED LEAKER TF-EFS-90-042
BEING PUMPED PER PM 90-062

ISOLATED 1985(1)

ISOLATED 1985(1)

ISOLATED 1985(1)

ISOLATED 1985(1)

ISOLATED 1985(1)

ISOLATED 1985(1)

WORK REQ. ISSUED TO REPLACE O/S MT

ISOLATED 1985(1)

ISOLATED 1985(1)

INTERIM STABILIZED, MT REMOVED 1985(1)

INTERIM STABILIZED, MT REMOVED 1985(1)

INTERIM STABILIZED, MT REMOVED 1985(1)

INTERIM STABILIZED, MT REMOVED 1984(1)

INTERIM STABILIZED, MT REMOVED 1984(1)

ISOLATED 1985(1)

INTERIM STABILIZED, MT REMOVED 1985(1)

NOT YET IN USE

LEGEND: DB - Diversion Box

DCRT - Double-Contained Receiver Tank

FIC - Food Instrument Corp.

MFIC - Manual FIC

MT - Manual Tape

CASS - Computer Automated Surveillance Sys

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APPENDIX G
TANK LEAK DATA

G-1/2

**Table G-1. Leak Volumes Estimated and Reported
Before CY 1989 (39 Tanks)**

TANK	VOLUME (Gallons)	LEAK REPORTED	INTERIM STABILIZED
241-A-103	5500	1987	8/88
241-A-104	2500	1975	9/78
241-A-105*	5000	1963	7/79
241-AX-102	3000	1988	9/88
241-B-107	8000	1980	3/85
241-B-110	10000	1981	12/84
241-B-201	1200	1980	8/81
241-B-203	300	1983	6/84
241-BX-102	70000	1971	11/78
241-BX-108	2500	1974	7/79
241-BY-103	<5000	1973	N/A
241-BY-108	<5000	1972	2/85
241-C-101	20000	1980	11/83
241-C-201	550	1988	3/82
241-C-202	450	1988	8/81
241-C-203	400	1984	3/82
241-C-204	350	1988	9/82
241-SX-104	6000	1988	N/A
241-SX-107	<5000	1964	10/79
241-SX-108	2400	1962	8/79
241-SX-109	5000	1965	5/81
241-SX-110	5500	1976	8/79
241-SX-111	2000	1974	7/79
241-SX-112	30000	1969	7/79
241-SX-113	15000	1962	11/78
241-SX-115	50000	1965	9/78
241-T-106	115000	1973	8/81
241-T-108	<1000	1974	11/78
241-T-111	<1000	1984	N/A
241-TX-107	2500	1984	10/79
241-TY-101	<1000	1973	8/83
241-TY-103	3000	1973	2/83
241-TY-104	1400	1981	1/83
241-TY-105	3500	1960	2/83
241-TY-106	20000	1959	11/78
241-U-101	30000	1959	9/79
241-U-104	55000	1961	10/78
241-U-110	8100	1975	12/84
241-U-112	8500	1980	9/78
Subtotal	542000 (39 tanks)		

*Cooling water was added to 241-A-105 after the tank was declared a leaker to aid in evaporative cooling. It is believed some of this water did not evaporate and therefore went into the ground. Past practice was to exclude the cooling water from the leak volume estimate. For consistency, this practice has been continued in this report. There is no method to accurately determine how much waste may have been leaked due to the cooling water addition.

N/A - not applicable

**Table G-2. Leak Volumes Estimated in CY 1989
From Previous Assumed Leaking Tanks (27 Tanks)**

TANK	VOLUME (Gallons)	LEAK REPORTED	INTERIM STABILIZED
241-B-204	400	1984	6/84
241-BY-107	15100	1984	7/79
241-C-111	5500	1968	3/84
241-S-104	24000	1968	12/84
241-T-103	<1000	1974	11/83
241-T-109	<1000	1974	12/84
Subtotal	47000 (6 Tanks)		
241-B-112	2000	1978	5/85
241-C-110	2000	1984	N/A
Subtotal	4000 (2 Tanks)		
241-AX-104	--	1977	8/81
241-B-101	--	1974	3/81
241-B-103	--	1978	2/85
241-B-105	--	1978	12/84
241-B-111	--	1978	6/85
241-BX-101	--	1972	9/78
241-BX-110	--	1976	8/85
241-BX-111	--	1984	N/A
241-BY-105	--	1984	N/A
241-BY-106	--	1984	N/A
241-SX-114	--	1972	7/79
241-T-107	--	1984	N/A
241-TX-105	--	1977	9/83
241-TX-110	--	1977	4/83
241-TX-113	--	1974	4/83
241-TX-114	--	1974	4/83
241-TX-115	--	1977	9/83
241-TX-116	--	1977	4/83
241-TX-117	--	1977	3/83
Subtotal	150000 (a) (19 Tanks)		
Subtotal	201000 Table G-2		
Subtotal	542000 Table G-1		
TOTAL	750000 (b)		

(a) Estimate rounded to nearest 10000 gallons.

(b) Rounded to nearest 50000 gallons.

N/A - not applicable

- END -

DATE FILMED

10 / 31 / 90