

About PHOENIX

The Department of Energy has partnered with the Pacific Northwest National Laboratory on PHOENIX, a family of spatially enabled web applications providing quick access to decades of valuable scientific data and insight through intuitive query, visualization, and analysis tools.

PNNL-Hanford Online ENvironmental Information eXchange provides a single access point to multiple data sets via standard web browsers. PHOENIX also provides data visualization tools and provides explanations of key data sets to aid understanding. PHOENIX applications are based on the innovative technology applied by the Pacific Northwest National Laboratory (PNNL) to access and visualize other environmental data sets at the Hanford Site.

By integrating previously isolated datasets and developing relevant visualization and analysis tools, PHOENIX applications are enabling DOE to discover new correlations hidden in legacy data, allowing them to more effectively address complex issues at Hanford.

About Tank Farms Dashboard

The Tank Farms Dashboard provides a single dashboard of summary information about the tank farms at Hanford. The dashboard provides tank farm attributes, like total waste stored and tanks in retrieval.

The Tank Farms Dashboard links the user to specific single- or double-shell tank farm dashboards, which provide basic tank attributes, waste phase distributions, retrieval information and summary statistics about the wastes stored in the farm.

Individual tank farm dashboards are further linked to Tank Dashboards providing information about a single shell or double shell tank. Tank dashboards provide tank attributes, surface levels through time, waste phase distributions, retrieval information and best basis inventory of selected analytes.

Questions, Comments, Concerns, Feedback?

Contact the PHOENIX team: PHOENIX@pnnl.gov

Inventory and Status of Single- and Double-Shell Tanks

Total count of Single-Shell Tanks (SST) and Double-Shell Tanks (DST).

Inventory and Status						149 SSTs	28 DSTs	Prev
Single-Shell Tank Farms								
	Assumed Leakers	Total Waste	Total Capacity	In Retrieval	Retrieval Complete			
241-A	2 / 6	843.48	6000	0	0			
241-AX	0 / 4	498.96	4000	0	0			
241-B	10 / 16	2022.77	6580	0	0			
241-BX	5 / 12	1487.64	6360	0	0			
241-BY	5 / 12	4241.42	9096	0	0			
241-C	6 / 16	94.06	6580	2	14			
241-S	1 / 12	3996.97	9096	0	1			
241-SX	8 / 15	3337.49	15000	0	0			
241-T	7 / 16	1809.19	6580	0	0			
241-TX	8 / 18	6547.20	13644	0	0			
241-TY	5 / 6	618.55	4548	0	0			
241-U	4 / 16	2838.79	6580	0	0			
Total	61 / 149	28336.53 kGal	94064 kGal	2	15			
Double-Shell Tank Farms								
	Assumed Leakers	Total Waste	Total Capacity	Unused Space				
241-AN	0 / 7	6789.10	8120	1330.90				
241-AP	0 / 8	8068.37	10120	2051.63				
241-AW	0 / 6	5923.37	6960	1036.63				
241-AY	1 / 2	538.56	2036	1497.44				
241-AZ	0 / 2	1792.56	2036	243.44				
241-SY	0 / 3	2361.74	3480	1118.26				
Total	1 / 28	25473.70 kGal	32752 kGal	7278.30 kGal				

Click on a Tank Farm link to view tank waste phase distributions and summary information.

Notes:
NDA - no data available

Disclaimer:
The TWINS website (<https://twins.labworks.org>) is the official source of BBI data. BBI numbers displayed in PHOENIX may differ slightly (within 1%) from those downloaded from the official source because of computer rounding.



Tank Farms Dashboard

Return to the PHOENIX Gallery

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ASMD LKRs Total Waste

Stats
Total Capacity: 6000 kgal
Total Waste: 843.48 kgal
Construction Date: 1954-1955

Waste Phases
Sludge (Liquid & Solid): 45.41 kgal
Sludge Solid: 72.07 kgal
Saltcake Interstitial Liquid: 138.34 kgal
Saltcake Solid: 568.13 kgal
Supernatant: 12.41 kgal

Tank	Integrity	Waste Stored	Total Capacity	Waste Phases	Supernatant	DIL	Retained Gas	Surface Level	Tank Status	Amount Removed
241-A-101	SOUND	273.8 / 1000	1000		0.00	37.00	45.94	126.32		NDA
241-A-102	SOUND	40.9 / 1000	1000		2.11	9.00	0.00	15.02	WI	NDA
241-A-103	SOUND	388.3 / 1000	1000		10.30	86.00	0.00	136.85		NDA
241-A-104	ASMD LKR	24.6 / 1000	1000		0.00	0.00	0.00	8.72		NDA
241-A-105	ASMD LKR	36.7 / 1000	1000		0.00	0.00	0.00	14.35		NDA
241-A-106	SOUND	79.2 / 1000	1000		0.00	9.00	0.00	25.28		NDA

kgal

■ Sludge ■ Saltcake
■ Supernatant

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Notes:
NDA - no data available
NSR - not scheduled for retrieval
R - retrieval (tank in retrieval)
RC - retrieval complete
RCR - retrieval complete - in review
DIL - drainable interstitial liquid
ASMD LKR - assumed leaker
FG - flammable gas
AL - active leak
FLA - formal leak assessment
DE - level decrease evaluation
IE - level increase evaluation
WI - water intrusion

Tank Farm attributes.

Click on a Tank link to view the tank's waste phase distributions, retrieval information, and summary information.

Acronym definitions

Click **Prev** to return to the previous page (Inventory and Status).

Ratio of Assumed Leakers (**ASMD LKRs**) and **Total Waste** volume in kgal.

Total Waste Phase volumes for the Tank Farm and volume distributions for each phase.

☰ 241-A-101

A Farm
SST-4 Type
SOUND Integrity
1000 Capacity
NSR Retrieval
Prev

Status

Capacity: 1000 kGal
Integrity: SOUND
Stabilization Method: JET
Stabilization Date: November 2003
FG Facility Group: B
In Service Date: 1/1956

Retrieval

Not Scheduled for Retrieval

Waste Volume (kgal)

0 100 200 300 400 500 600 700 800 900

■ TPA ■ Current ■ Start ■ Capacity

Surface Level

Level: 126.32 in
Unused Space: 233.68 in
Max Operating Height: 360.00 in

5yr Surface Level (min / max)

No SL Data

Waste Phases

Published Date: 2/29/2008
Total Waste Volume: 273.77 kgal
Retained Gas: 45.94 kgal
Drainable Interstitial Liquid: 37.00 kgal

Waste Phases (kgal)

0 274

2.90 Sludge 270.86 Saltcake 0.00 Supernatant

Best Basis Inventory

Analyte	Sludge	Saltcake	Supernatant	Rank	Value Distribution		
Tc-99	1.30e+0 Ci	2.28e+2 Ci	0.00e+0 Ci	39	1.58e-6	1.23e+3	
I-129	7.83e-5 Ci	2.33e-1 Ci	0.00e+0 Ci	41	0.00e+0	1.49e+0	
Sr-90	5.37e+4 Ci	5.61e+4 Ci	0.00e+0 Ci	51	1.48e-1	4.80e+6	
Cs-137	1.04e+3 Ci	2.75e+5 Ci	0.00e+0 Ci	30	4.53e-1	4.92e+6	
Pu-239	4.67e+1 Ci	3.32e+1 Ci	0.00e+0 Ci	87	9.84e-3	7.01e+3	
Pu-240	1.15e+1 Ci	7.69e+0 Ci	0.00e+0 Ci	75	2.12e-3	1.69e+3	
Am-241	2.58e+2 Ci	1.18e+2 Ci	0.00e+0 Ci	46	3.22e-3	2.77e+4	
Cr	2.94e+1 kg	6.55e+3 kg	0.00e+0 kg	24	1.67e-1	4.00e+4	
U	4.52e+1 kg	1.24e+3 kg	0.00e+0 kg	93	1.01e-3	6.65e+4	
NO3	7.88e+2 kg	2.44e+5 kg	0.00e+0 kg	68	2.22e-2	1.72e+6	
					/177	Min	Max

Leaks

No Evidence of Leaks Observed

Intrusion

No Intrusion

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FG - flammable gas

Tank attributes.

Retrieval Data. The chart shows the current volume of waste in the tank, and—if retrieval is in process, pending, or complete—the starting waste volume (if available). The Tri-Party Agreement (TPA) mandated target volume is shown in green.

Acronym definitions

Click **Prev** to return to the previous page (Tank Farm attributes and Summary information).

Tank Summary information.

Analyte Inventory for each analyte compared to all other single- and double-shell tanks.

The maximum Analyte Inventory in all other single- and double-shell tanks.

The minimum Analyte Inventory in all other single- and double-shell tanks.

Waste level data.

Waste Phase volumes.

This tank's rank for Analyte Inventory (all phases) compared to all other single- and double-shell tanks. (lower number means higher inventory)

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