LOCKHEED MARTIN

ORNL/ER/Sub/87-99053/79

ENVIRONMENTAL RESTORATION PROGRAM

Results of 1995 Characterization of Gunite and Associated Tanks at Oak Ridge National Laboratory, Oak Ridge, Tennessee

ENERGY SYSTEMS ER

MANAGED BY
LOCKHEED MARTIN ENERGY SYSTEMS, INC.
FOR THE UNITED STATES
DEPARTMENT OF ENERGY

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Energy Systems Environmental Restoration Program

Results of 1995 Characterization of Gunite and Associated Tanks at Oak Ridge National Laboratory, Oak Ridge, Tennessee

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managed by
LOCKHEED MARTIN ENERGY SYSTEMS, INC.
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PREFACE

This technical memorandum (ORNL/ER/Sub/87-99053/79) (TM 01-09) was developed under Work Breakdown Structure numbers 1.4.12.6.1.01.41.12.02.11 and 1.4.12.6.1.01.41.14.02 (Activity Data Sheet 3301, "WAG 1"). This document provides the Environmental Restoration Program with field measurements and analytical results from sludge samples from the Gunite and Associated Tanks (GAAT). Information provided in this report forms part of the technical basis for criticality safety, systems safety, engineering design, and waste management as they apply to the GAAT treatability study and remediation.

CONTENTS

ABBREVIATIONS

BNAE	base/neutral/acid-extractable
CASD	Chemical and Analytical Sciences Division
DOE	Department of Energy
DQO	data quality objective
EPA	Environmental Protection Agency
GAAT	Gunite and Associated Tanks
GC-MS	gas chromatography-mass spectroscopy
GFAA	graphite furnace atomic absorption
IC	total inorganic carbon
ICP-AES	inductively coupled plasma atomic emission spectroscopy
IDL	instrument detection limit
IR	infrared
LCS	laboratory control sample
MDA	minimum detectable activity
MS/MSD	matrix spike/matrix spike duplicate
NIST	National Institute of Standards and Technology
OREIS	Oak Ridge Environmental Information System
ORNL	Oak Ridge National Laboratory
PRQL	project-required quantitation limit
QAPjP	quality assurance project plan
QC	quality control
RI/FS	remedial investigation/feasibility study
RMAL	Radioactive Materials Analytical Laboratory
RPD	relative percent difference
STPF	stabilized temperature platform furnace
SVOA	semivolatile organic analysis
TC	total carbon
TCS	tank characterization system
TM	technical memorandum
TOC	total organic carbon
TRU	transuranic
VOA	volatile organic analysis
VOC	volatile organic compound
WIPP	Waste Isolation Pilot Plant

EXECUTIVE SUMMARY

The Oak Ridge National Laboratory's Waste Area Grouping 1 Gunite and Associated Tanks (GAAT) Operable Unit has 12 Gunite Tanks. These tanks vary in size and type and in the quantity of radioactive mixed-waste sludges they contain. The Gunite Tanks Operable Unit was chosen as a high priority for remediation because of the potential risk presented by the concentration of contaminants and the deteriorating conditions of the Gunite Tank Walls.

The Characterization team was challenged by the GAAT data users to meet the following objectives:

- Retrieve samples from relatively any location in the tank and still go through existing open risers and determine heterogeneity or homogeneity of the tank contents.
- Perform in-tank video inspection to determine the condition of the tank walls and see any that may be a hindrance to the Treatability Study design and check the walls for further deterioration.
- Estimate sludge volume to forecast waste management needs.
- Obtain tank wall samples to determine contaminant penetration through 1/4 in. of tank wall.

The objectives were meet by using a Tank Characterization System that was specially developed to perform the activities outlined in the objectives. The Report that follows is the results of the 1995 tank characterization.

1. INTRODUCTION

This technical memorandum (TM) documents the 1995 characterization of eight underground radioactive waste tanks at Oak Ridge National Laboratory (ORNL). These tanks belong to the Gunite and Associated Tanks (GAAT) operable unit, and the characterization is part of the ongoing GAAT remedial investigation/feasibility study (RI/FS) process. This TM reports both field observations and analytical results; analytical results are also available from the Oak Ridge Environmental Information System (OREIS) data base under the project name GAAT (PROJ_NAME = GAAT). This characterization effort (Phase II) was a follow-up to the "Phase I" sampling campaign reported in *Results of Fall 1994 Sampling of Gunite and Associated Tanks at the Oak Ridge National Laboratory, Oak Ridge, Tennessee*, ORNL/ER/Sub/87-99053/74, June 1995. The information contained here should be used in conjunction with that in the previous TM.

The sampling plan is documented in *ORNL Inactive Waste Tanks Sampling and Analysis Plan*, ORNL/RAP/LTR-88/24, dated April 1988, as amended by *Addendum 1, Revision 2: ORNL Inactive Tanks Sampling and Analysis Plan*, DOE/OR/02-1354&D2, dated February 1995. Field team instructions are found in ORNL RI/FS Project Field Work Guides 01-WG-20, *Field Work Guide for Sampling of Gunite and Associated Tanks*, and 01-WG-21, *Field Work Guide for Tank Characterization System Operations at ORNL*. The field effort was conducted under the programmatic and procedural umbrella of the ORNL RI/FS Program, and the analysis was in accordance with ORNL Chemical and Analytical Sciences Division (CASD) procedures. The characterization campaign is intended to provide data for criticality safety, engineering design, and waste management as they apply to the GAAT treatability study and remediation. In addition, the Department of Energy (DOE) Carlsbad office was interested in results of this sampling campaign and provided funding for certain additional sample collection and analysis.

The eight tanks (W-3 and W-4 in the North Tank Farm and W-5 through W-10 in the South Tank Farm) were characterized from May through August 1995. Analysis of the samples began immediately upon receipt, and data validation and data base preparation were completed in December 1995.

This TM is organized as a brief discussion followed by series of appendices that present field measurements, analytical results, and narratives. This TM does not attempt to analyze the data with respect to GAAT treatability study objectives; a follow-up document is scheduled for that purpose.

2. FIELD CHARACTERIZATION

Access to the tanks was via existing risers. Two methods were used to collect information inside the tanks—pole samplers, as were used in Phase I, and the newly developed tank characterization system (TCS).

Tank W-7 contains almost no standing water; therefore, sludge samples were collected in 1-in.-diam tubes lowered vertically into the sludge directly beneath the risers. Clear plastic tubes were used for soft sludges so that any layering could be observed. Stainless steel tubes with honed edges were hand-driven

into the sludge bed to collect hard-pan sludge that may rest on the tank floor. Four samples were collected from tank W-7 in this manner: two in Lexan tubes and two in steel tubes.

The TCS, a floating system that uses the existing water in a tank as a platform and support for instruments and samplers, was developed because the tube sampler can only collect samples directly beneath existing tank risers. A floating boom is fed into the tank via an existing riser, its position is controlled by rotation and insertion/withdrawal, and an instrument or sampler is mounted at the end of the boom. This simple concept allows access to all parts of a tank using an inexpensive system assembled from off-the-shelf components. The major components of the TCS are

- boom system (support structure and floating boom),
- video camera and lights,
- sludge grab sampler,
- wall chip sampler, and
- sonar depth finder.

The TCS was used to characterize tanks W-3, W-4, W-5, W-6, W-8, W-9, and W-10.

The boom system consists of a plastic chain with added flotation and a lazy-suzan support structure that rests on top of the tank riser. Positioning of the TCS boom is recorded in polar coordinates—distance and angle. Mock-up testing showed positioning to be repeatable within a few inches.

The video camera was intended to do above- and below-water inspections of tank contents. However, underwater inspections were not successful because of unexpected optical properties of the wastewater (the camera could not focus, though it worked well in a swimming pool and a mock-up tank). The most useful video from the system was close-up, abovewater inspection of the deteriorated walls of tanks W-5 and W-6.

The sludge grab sampler was used to retrieve samples from the tanks. The sampler is a clamshell device that is lowered from the TCS boom (via a motorized reel) to the bottom of the tank. The sampler is then closed by a hydraulic actuator and retrieved. Because it is lowered from a floating system, the clamshell is rather lightweight. Though the hydraulic actuator is quite strong, the clamshell does not have enough weight to sink into denser sludges. This is likely to bias the samples somewhat toward lighter materials in the tanks.

The concrete wall chip sampler consists of a small pneumatic die grinder and vacuum collection system on the end of the floating boom. The sampler collected very small samples from the walls of tanks W-5 and W-8. More extensive concrete sampling was planned, but the concrete moisture content near the waterline caused frequent plugging of the collection tube by wet concrete dust. Results of the concrete sample analyses will be reported in a TM produced by CASD.

The sonar depth finder consists of a commercially available depth finder mounted on the floating boom. By varying the sensitivity of the system, the operator can discriminate between the sludge surface and the bottom of the tank. High sensitivity settings return the sludge surface position, and low sensitivity settings return the denser concrete bottom.

The samples retrieved were a variety of colors and consistencies. The grab sample from tank W-3 was a yellow soupy liquid with small flakes (Plate 1). The W-7 tube sample had three distinct layers (Plate 2): an orange, pasty layer; a brown, gravelly, sandy layer; and a yellow, silty layer. The grab

sample from W-10 (Plate 3) was a mixture of brown, gravelly, silty liquid sludge. The W-5 grab sample contained hard orange chunks (Plate 4) that were large enough to be separated out. The diversity of the samples provides the treatability study team with information to help define the bounds for making design decisions.

Appendix A presents a summary table of field observations, including tank number, sample date, sample location, sample number, and sample medium.

3. SLUDGE MAPPING

The maps in Appendix B were created from data collected by the TCS. The distances from the water surface to top-of-sludge and top-of-concrete were measured using a Lowrance X-70A sonar transponder. Testing at the GAAT test tank at the New Hydrofracture Facility showed the measurements to be accurate to $\pm$0.1 ft. This accuracy was confirmed by a 10% rate of duplicate field measurements. Further confirmation of the sonar measurements was provided by water and sludge measurements with an optical sludge probe directly below the tank risers. All maps were generated using "Surfer for Windows" software. Questionable sonar measurement points (where the field team noted objects or strange sonar signal characteristics) were removed from the Surfer data base before plotting.

For interpretation of the contour maps, note that the vertical scale is inverted and distances shown on the legend are measured down from the water surface rather than up from a baseline elevation. The contours have been shaded so that the higher elevations are lighter and deeper depths are darker. Measurement points are represented by solid dots. The surface plots are net sludge depths; they do not represent a physical contour but rather represent a hypothetical contour as if the bottom of the tank were flat. Note also that the readings are based on operator interpretation and that density variations in both the sludge and the "bottom" can cause variation in the results. In particular, if the bottom of a tank is covered with "hard sludge" or sand and gravel, its sonar signature may be similar to that of concrete.

Appendix C presents sludge volume estimates based on the sonar measurements.

4. SAMPLE ANALYSIS

Samples were analyzed by CASD. The lead laboratory was the Radioactive Materials Analytical Laboratory (RMAL) in Building 2026. Certain analyses were done at other ORNL laboratories, but all work was done on site and coordinated through RMAL.

Analyses were based on either ORNL procedures or Environmental Protection Agency (EPA) methods modified to incorporate radiological considerations. In some cases, deviations were required due to peculiarities of the samples. Appendix D gives a list of methods used and a narrative of deviations as reported by the laboratory. Other analyses (primarily physical and engineering properties such as solubility, X-ray diffraction, and scanning electron microscopy) are ongoing and will be reported elsewhere.

5. QUALITY ASSURANCE AND VALIDATION

Field sampling quality was assured by adherence to ORNL RI/FS Program project procedures and field work guides. During characterization of the tanks, field surveillances were conducted by Energy Systems Quality Control (QC), Bechtel QC, DOE QC (from both the Oak Ridge and Carlsbad area offices), and DOE Conduct-of-Operations auditors. None of the surveillances generated any findings that would affect data quality (though some minor administrative and housekeeping issues were identified and resolved).

The analytical data were validated in accordance with ORNL RI/FS project procedures, the quality assurance project plan for the Waste Isolation Pilot Plant (WIPP), and EPA protocols. Because these data are to be used primarily for engineering studies rather than an enforcement action, the lowest level of validation (known as level 1) was performed. This level of validation consists primarily of a "forms" review of results, including reported values, errors, and lab QC results. Except where necessary due to lack of summary reports, raw data such as instrument print-outs were not examined.

The GAAT data were found to be of sufficient quality for the intended uses. No radiological results were rejected. Of the metals, only silver analysis results were rejected (due to poor matrix spike recovery). Some miscellaneous organic results were rejected, but organics are not considered a contaminant of concern in this project. Appendix E discusses the data validation process and results and includes a list of validation codes for use in interpreting the reported results.

6. ANALYTICAL RESULTS

Appendix F presents the results of analysis of the GAAT samples by tank. Included are analyte name, method, results (or detection limit), error value, and validation codes and qualifiers. All results are reported on an as-received (i.e., wet weight) basis. All analytical results are also available in electronic form from the OREIS data base.

7. SUMMARY OF RESULTS

During Phase II GAAT characterization, radioactive waste samples were retrieved and analyzed to provide information for waste management, risk assessment, design, and facility safety classification. The detailed results of the analysis are documented in the appendices of this report and will be used by the various data users to draw conclusions regarding how the results affect the identified data issues. A follow-up TM will include statistical and regulatory/procedural analysis of the GAAT data.

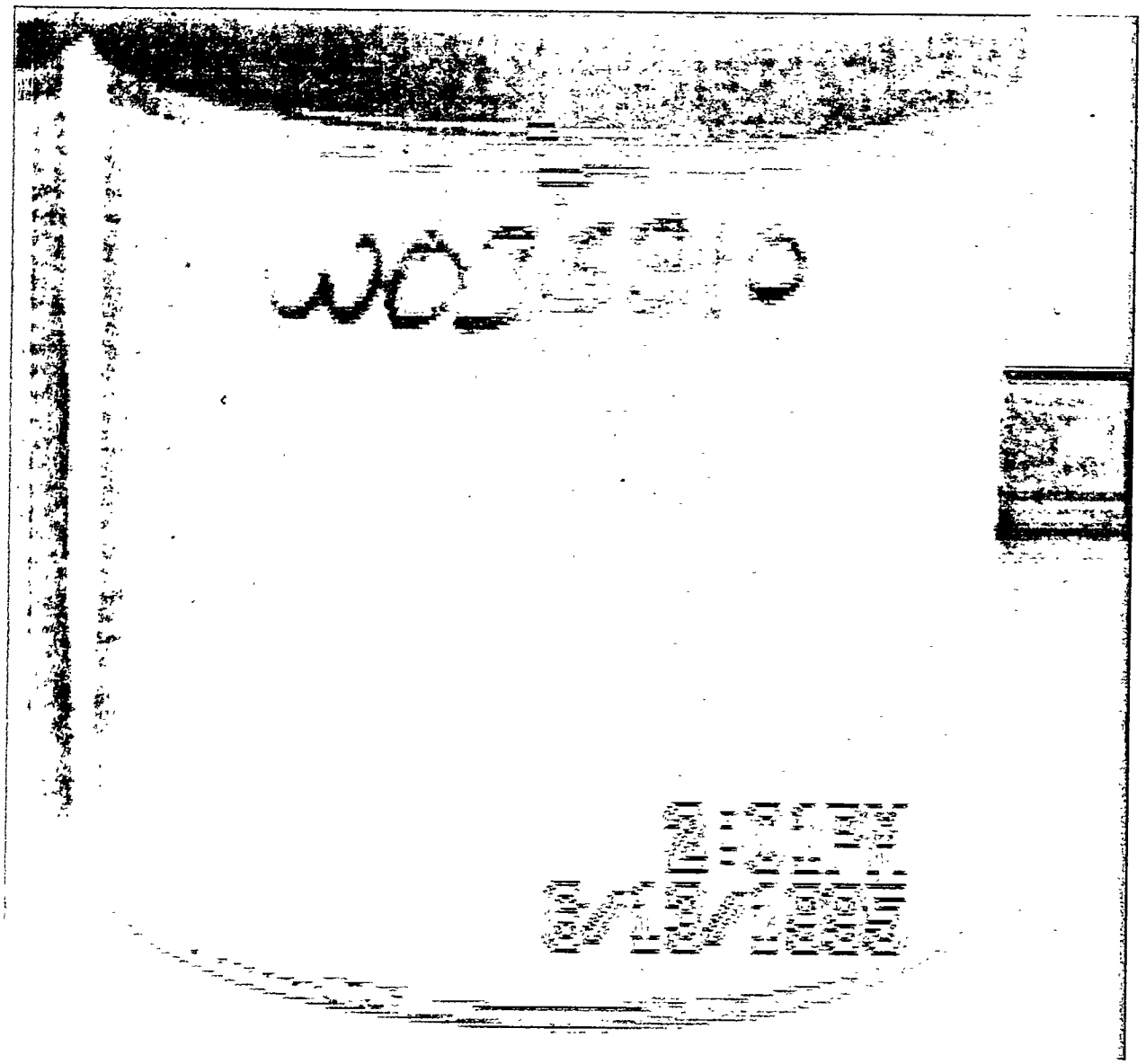


Plate 1.
Tank W-3 grab sample.

Plate 2.
Tank W-7 tube sample (W07H303).

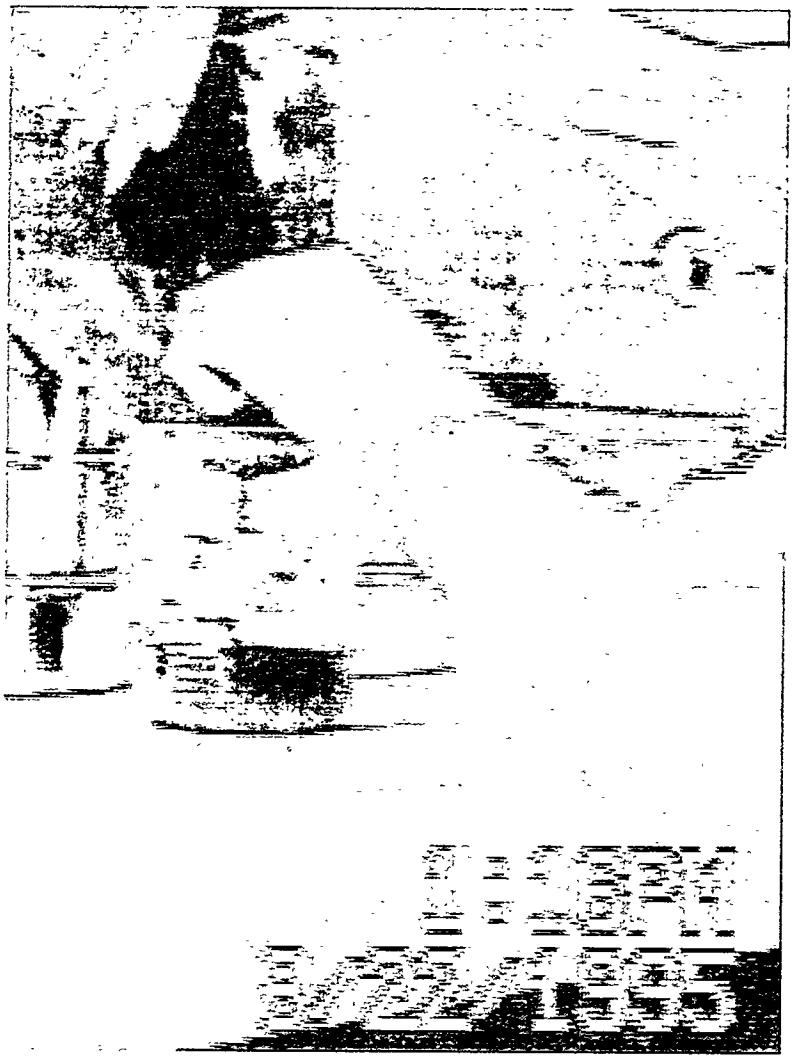


Plate 3.
Tank W-10 grab sample.

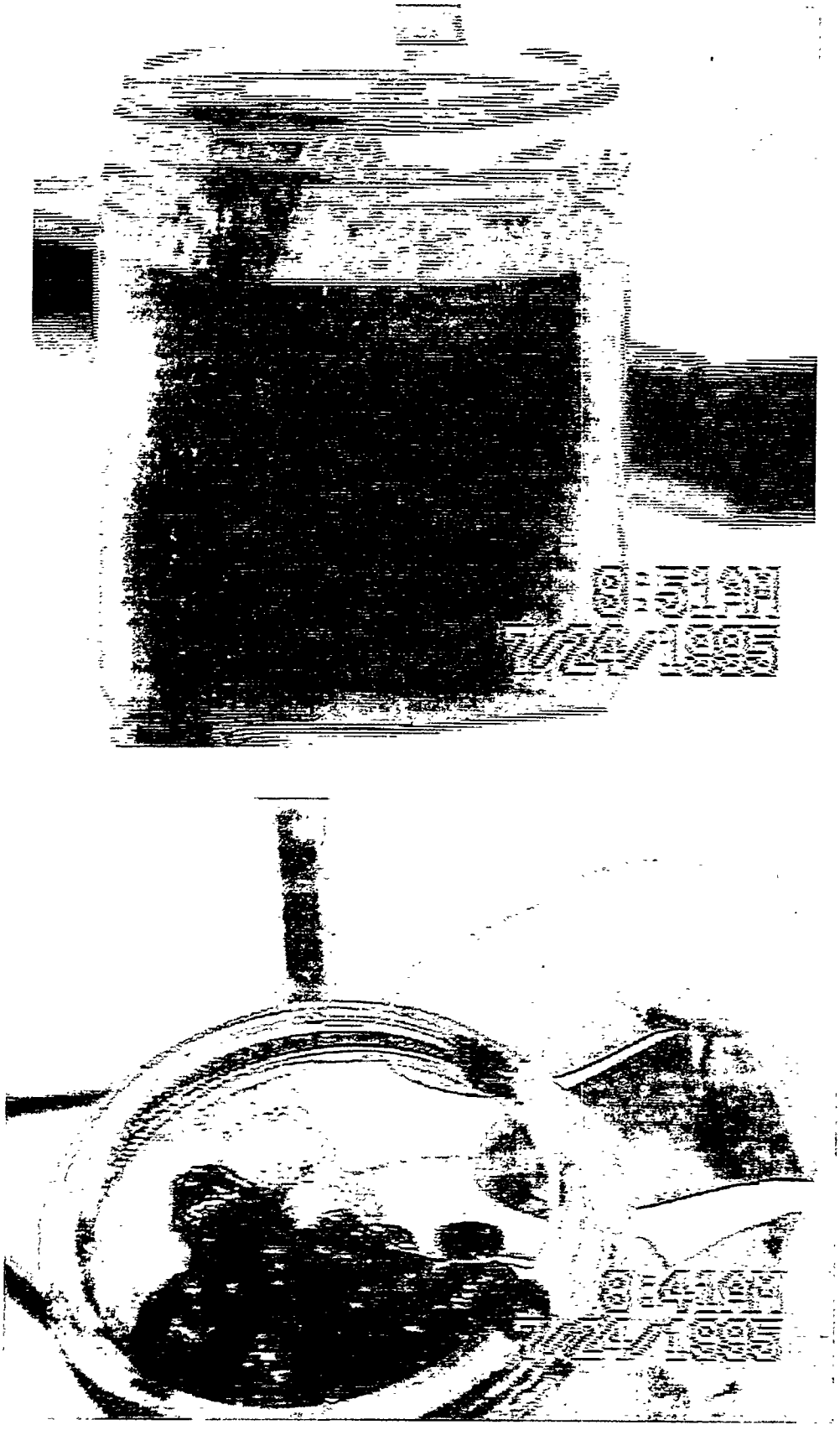


Plate 4.
Tank W-5 grab sample.

Appendix A
SAMPLE INFORMATION

GAAT Phase II

Sample ID, Type, Location, Date

Riser ID No.	Alias	Sample Information					Notes
		Sample ID	Type	Location	Riser Port	Sample Date	
01.TK003	(W-3)	W-03S308	Clamshell Grab	5' south	North 12"	6/12/95	a
		W-03S309	Clamshell Grab	12.5 south	North 12"	6/12/95	
		W-03S310	Clamshell Grab	23' south	North 12"	6/12/95	
		0491701	Trip Blank (QC)				
		W-03O311	Organic Layer		North 12"	6/13/95	b
01.TK004	(W-4)	W-04S305	Clamshell Grab	5' south	North 12"	6/8/95	a
		W-04S306	Clamshell Grab	12.5 south	North 12"	6/8/95	
		W-04S307	Clamshell Grab	23' south	North 12"	6/8/95	
		0491601	Trip Blank (QC)				
01.TK005	(W-5)	W-05S314	Clamshell Grab	260° @ 20'	Center 24"	7/17/95	
		W-05S315	Clamshell Grab	10° @ 20'	Center 24"	7/17/95	
		W-05C316	Gunite Wall	30°,120°,210°,300°	Center 24"	7/18/95	c
		0492001	Trip Blank (QC)				
01.TK006	(W-6)	W-06S311	Clamshell Grab	70° @ 22'	Center 24"	7/6/95	
		W-06S312	Clamshell Grab	310° @ 22'	Center 24"	7/6/95	
		W-06C313	Clamshell Grab	240° @ 22'	Center 24"	7/10/95	a
		0491801	Trip Blank (QC)				
		0491901	Trip Blank (QC)				
01.TK014	(W-7)	W-07H301	Stainless Push Tube	---	West Port Riser	5/3/95	
		W-07S302	Lexan Push Tube	---	West Port Riser	5/3/95	
01.TK015	(W-7)	W-07H303	Stainless Push Tube	---	East Port Riser	5/8/95	d
		W-07S304	Lexan Push Tube	---	East Port Riser	5/8/95	
01.TK008	(W-8)	W-08C317	Gunite Wall	0°,75°,150°,300°	Center 24"	7/31/95	c
		W-08L318	Rinseate (QC)			7/31/95	
		W-08S319	Clamshell Grab	20° @ 20'	Center 24"	8/1/95	a
		W-08S320	Clamshell Grab	220° @ 20'	Center 24"	8/1/95	
		W-08S321	Clamshell Grab	130° @ 20'	Center 24"	8/1/95	
		0492101	Trip Blank (QC)				
01.TK009	(W-9)	W-09S322	Clamshell Grab	30° @ 20'	Center 24"	8/14/95	a
		W-09S323	Clamshell Grab	290° @ 20'	Center 24"	8/14/95	
		W-09S324	Clamshell Grab	180° @ 15'	Center 24"	8/14/95	
		0492301	Trip Blank (QC)				
01.TK010	(W-10)	W-10S325	Clamshell Grab	30° @ 25'	South 30"	8/21/95	
		W-10S326	Clamshell Grab	350° @ 45'	South 30"	8/21/95	
		0492201	Trip Blank (QC)				

a. Archive samples that were not analyzed

b. Sample of a floating organic layer, results reported in July 7, 1995 letter from W.H. Griest to C.O. Wiles.

c. Analysis results will be reported in a future Technical Memorandum

d. Sample was split into four distinct samples based on color/consisntecy (W07H303A, B, C, and D)

Appendix B
SLUDGE MAPS

TCS GAAT SLUDGE MAP NOTES

The following maps represent the sonar data collected with the TCS. Contour maps are provided for the sludge surface (top-of-sludge) and tank floor (top-of-concrete). Surface maps are provided to represent the net sludge depth or thickness.

Key to map symbols:

- A white dot represents a sonar measurement.

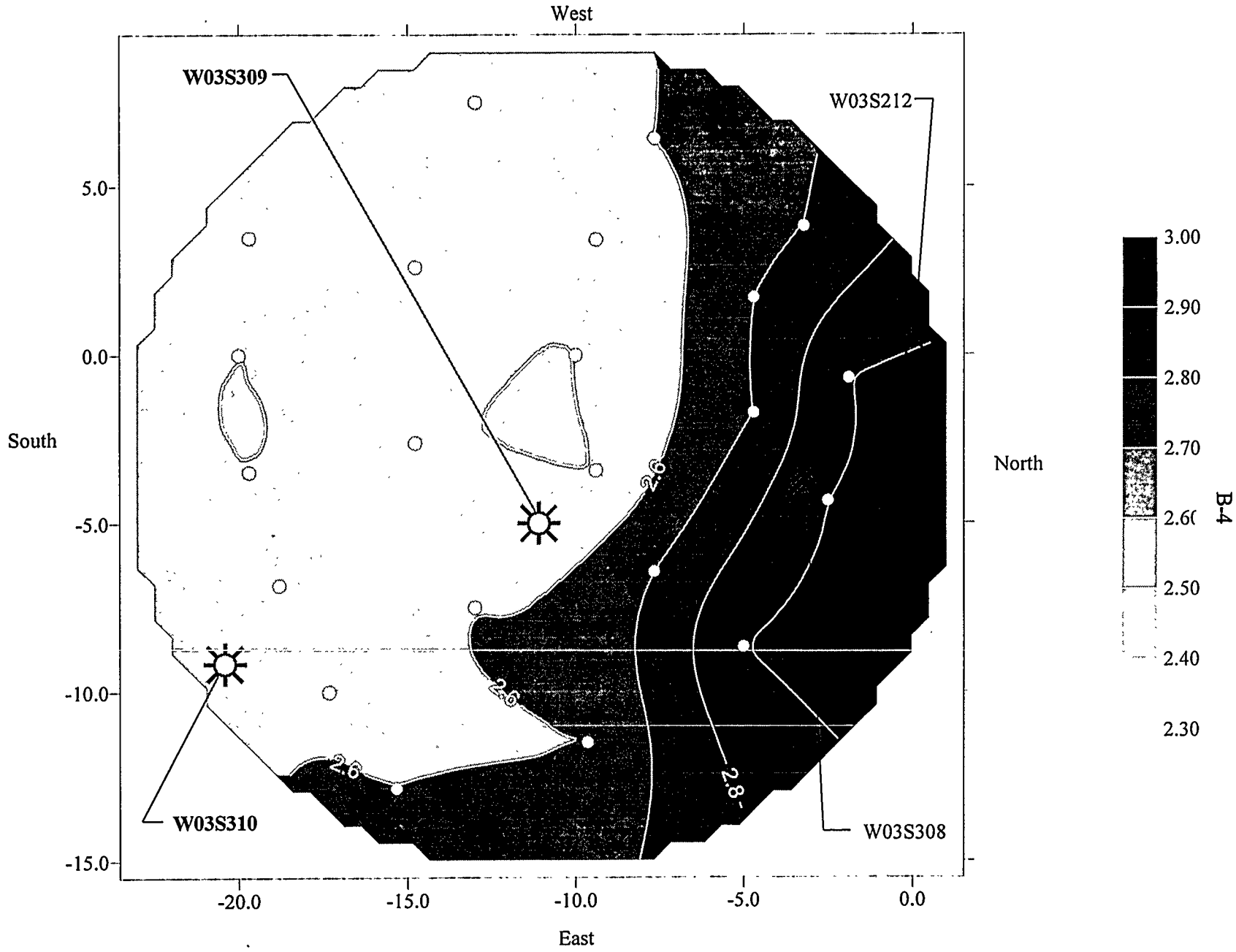
Clamshell grab sample location with results in this report.

Clamshell grab sample that was collected for another project and not reported here.

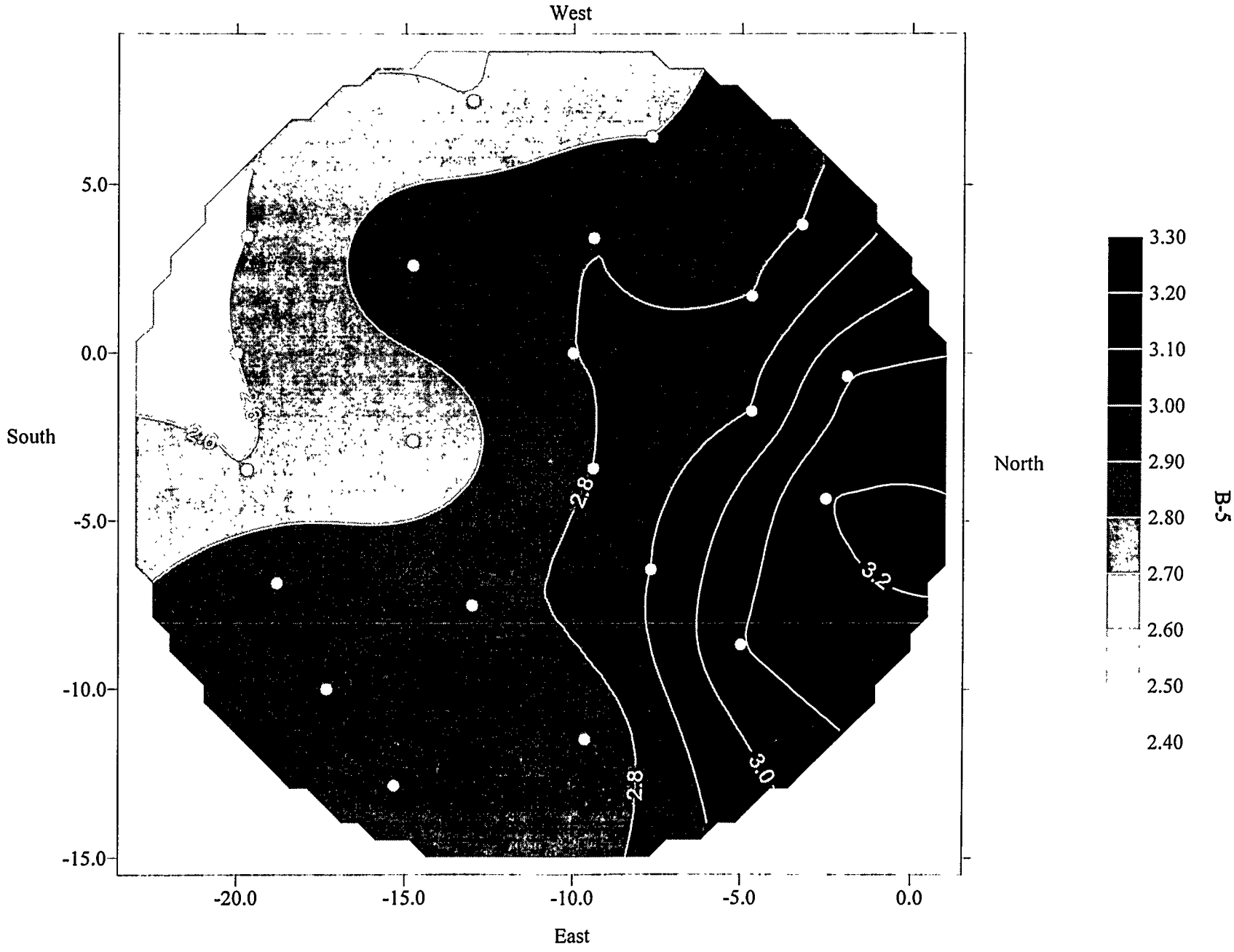
Push-tube sludge sample from Phase I sampling in 1994.

Notes:

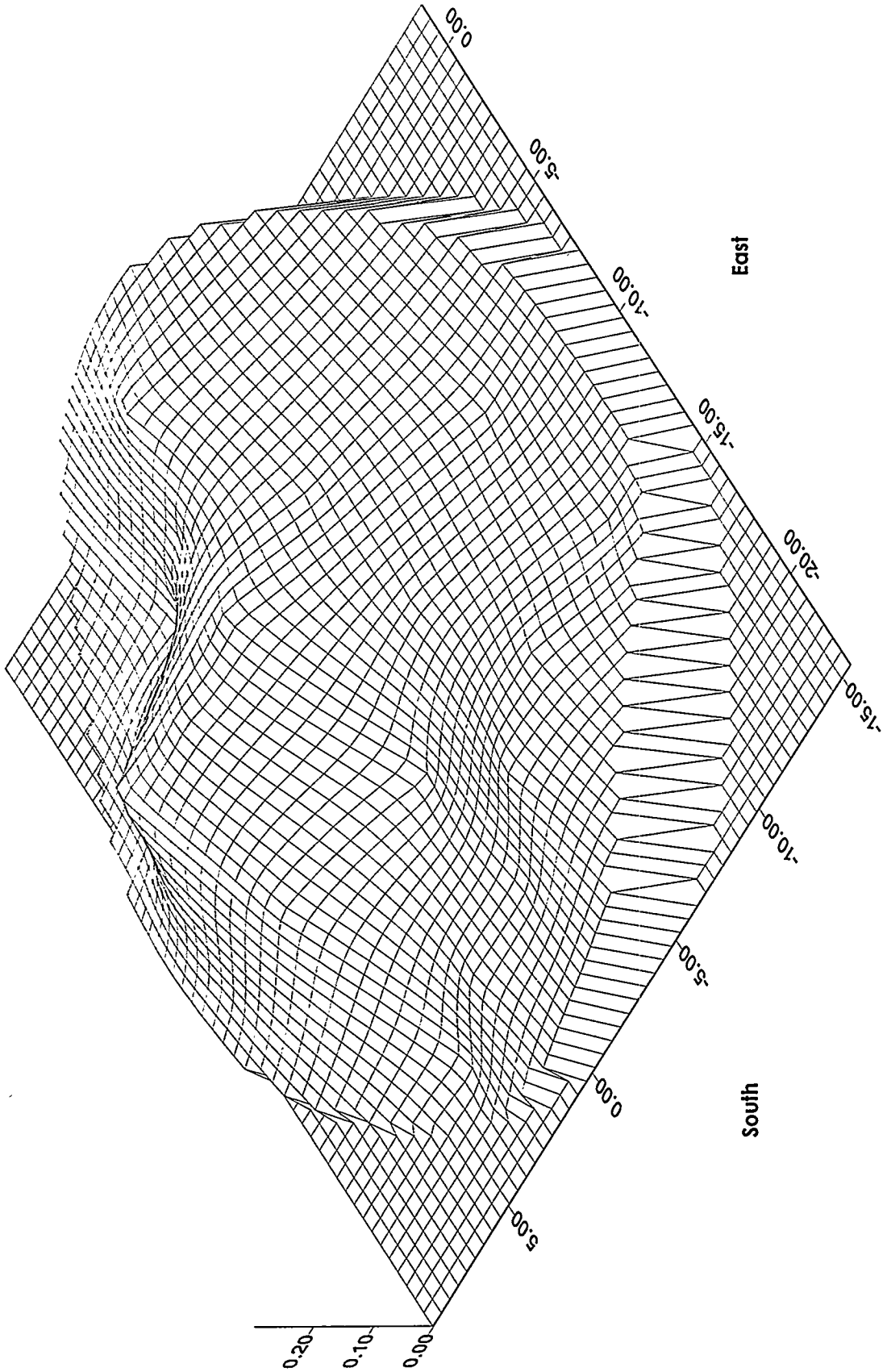
1. All dimensions are in feet.
2. Contours are at 0.1-ft intervals.
3. Vertical scale on surface maps is greatly exaggerated.
4. Data points that were noted by the field team as questionable due to interference (e.g., from nearby pipes) were removed from the Surfer database before plotting. Points that were not specifically noted by the field team were not removed, though they may appear to be outliers.
5. Analytical results for sample numbers in **bold** are found in this report.
6. The 0,0 coordinate on the sludge map X,Y axes is the riser where the TCS was inserted.
7. Lighter shading represents higher elevations (hills), and darker shading represents lower elevations (valleys).
8. Contour "elevations" are measured down from the sonar transponder, approximately 0.3 ft below the water surface.
9. The "top-of-concrete" measurement may, in some cases, be inaccurate due to "hard" sludge or debris on the bottom of the tank. The sonar signal is based on density variations, and materials resting on the bottom with densities similar to concrete may return signals similar to the tank bottom.



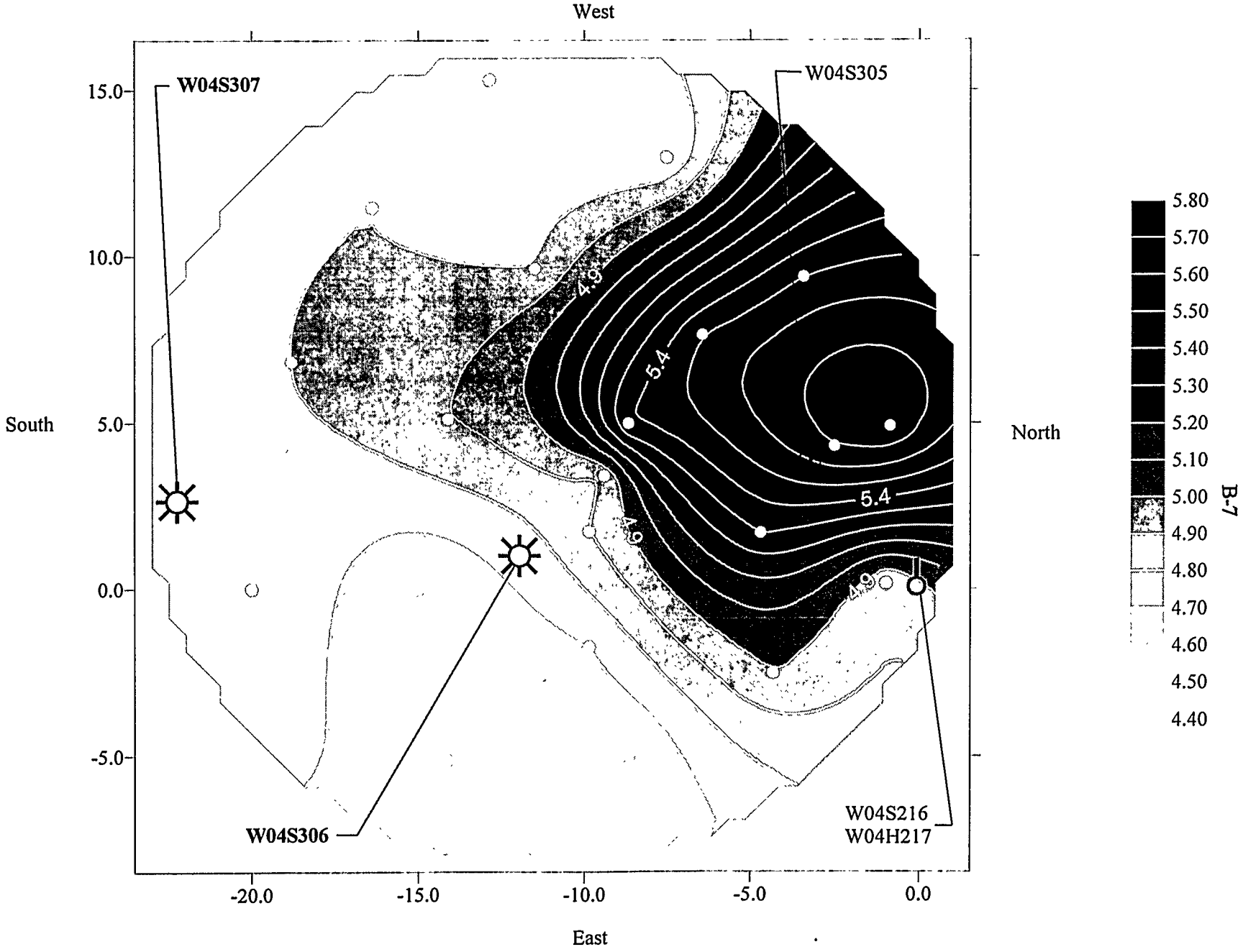
Tank W-3 top-of-sludge contour



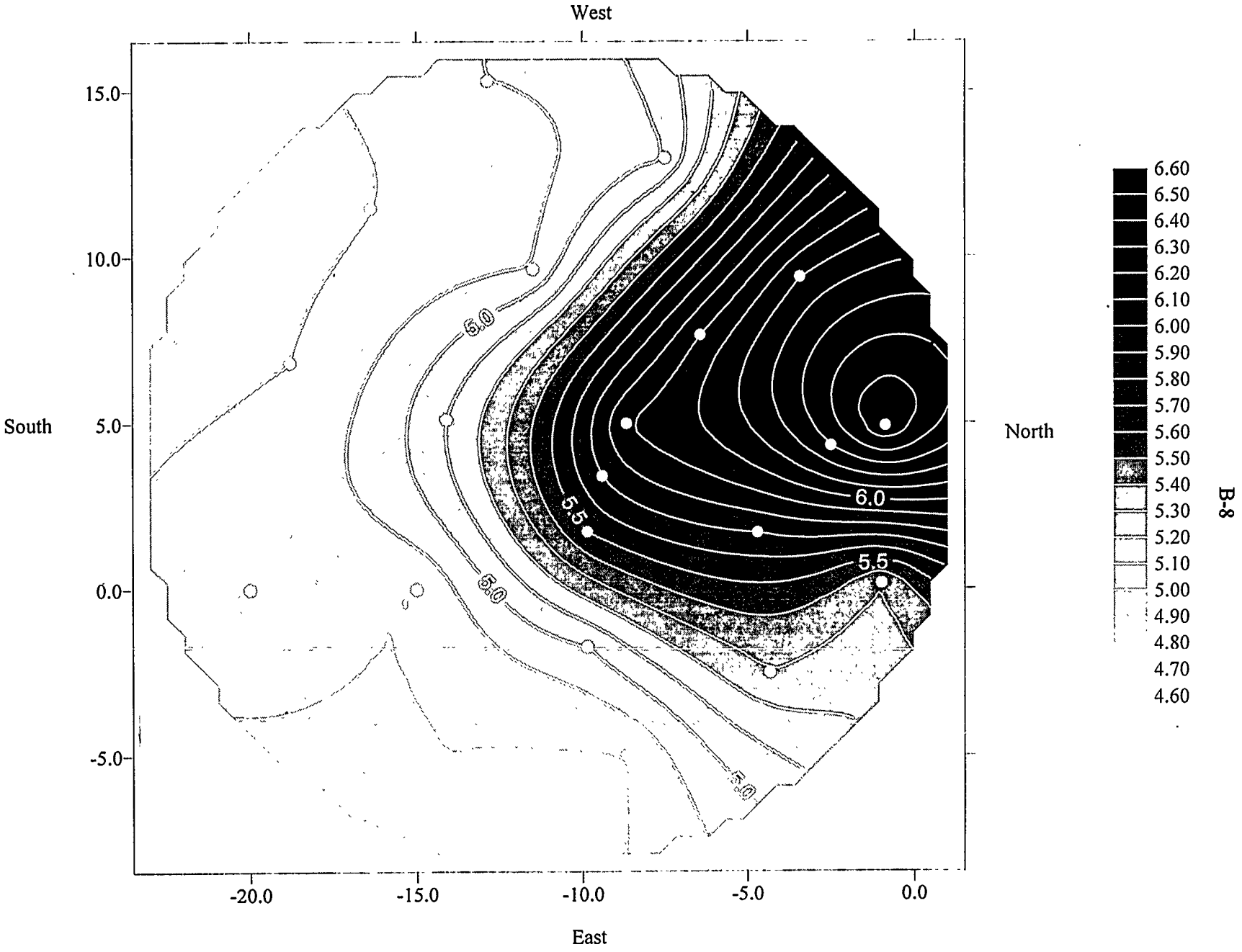
Tank W-3 top-of-concrete contour



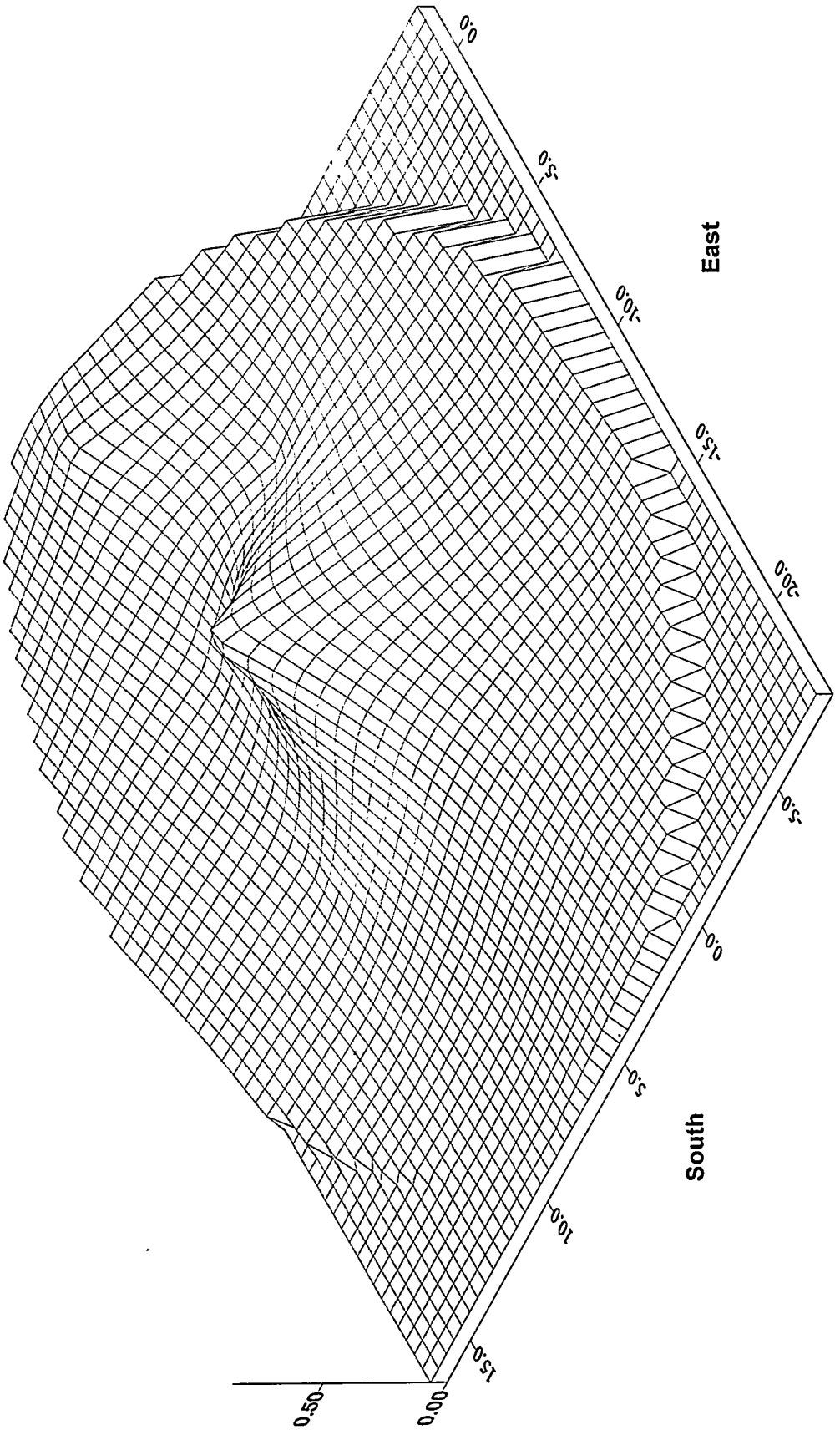
Tank W-3 net sludge depth



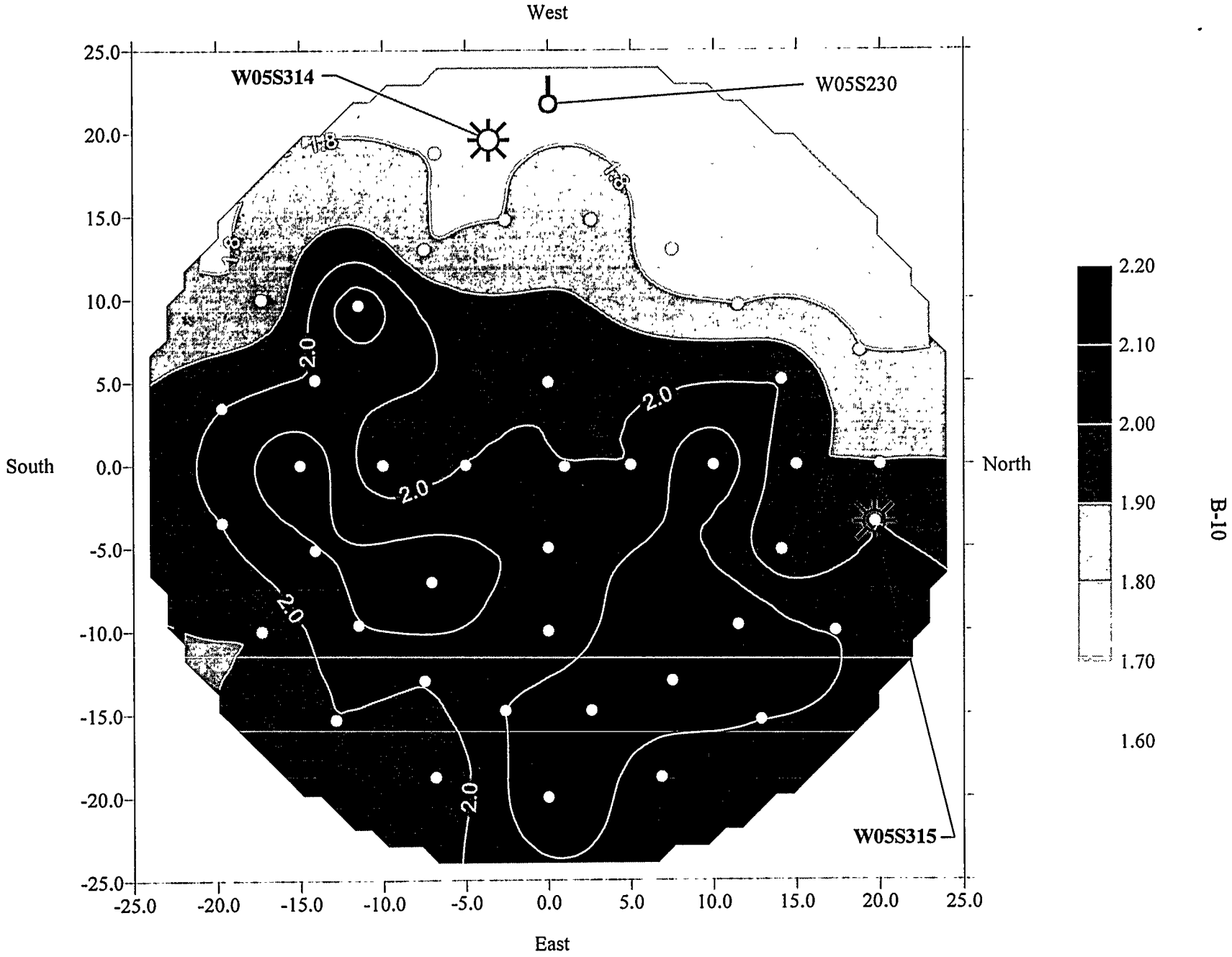
Tank W-4 top-of-sludge contour



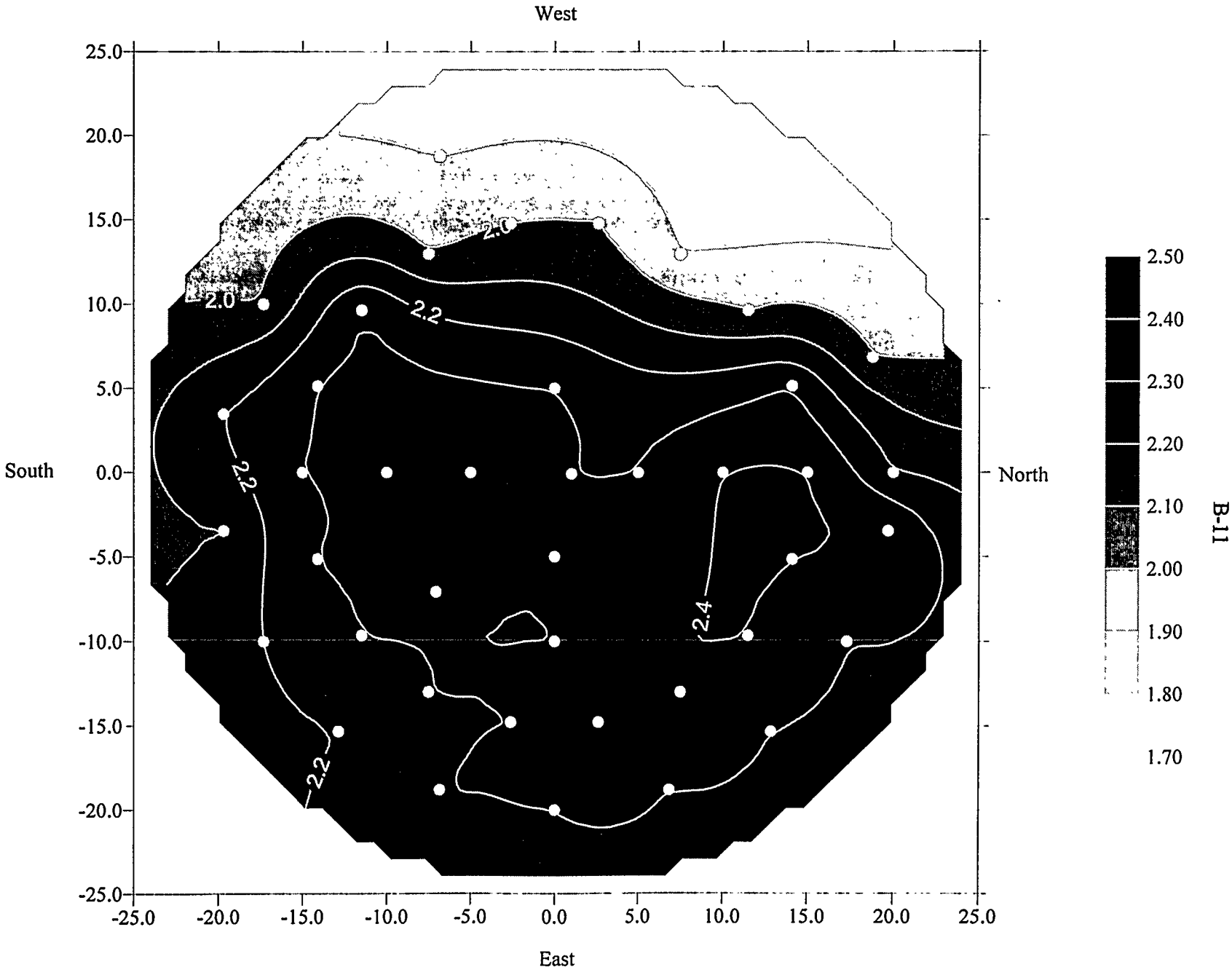
Tank W-4 top-of-concrete contour



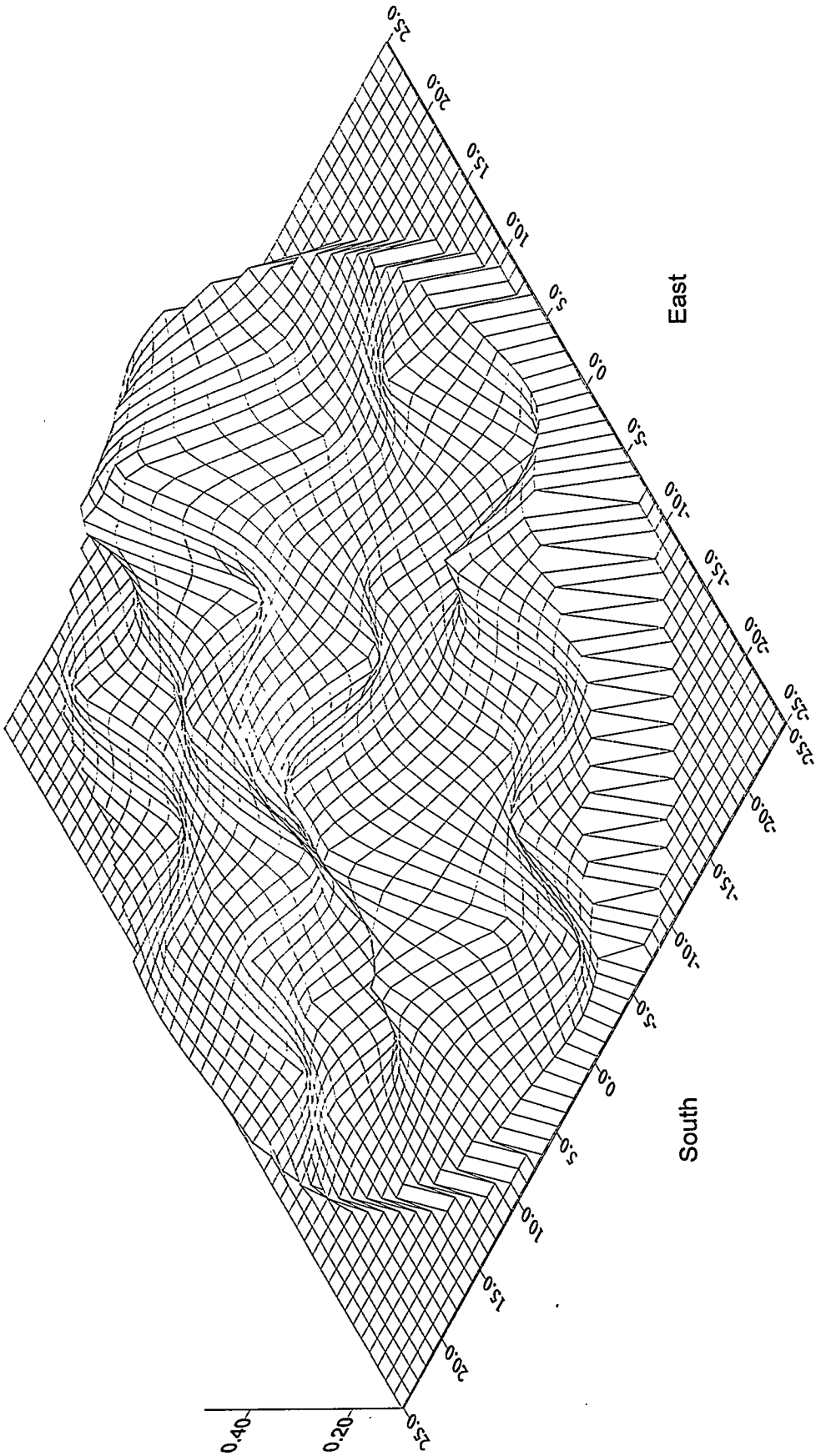
Tank W-4 net sludge depth



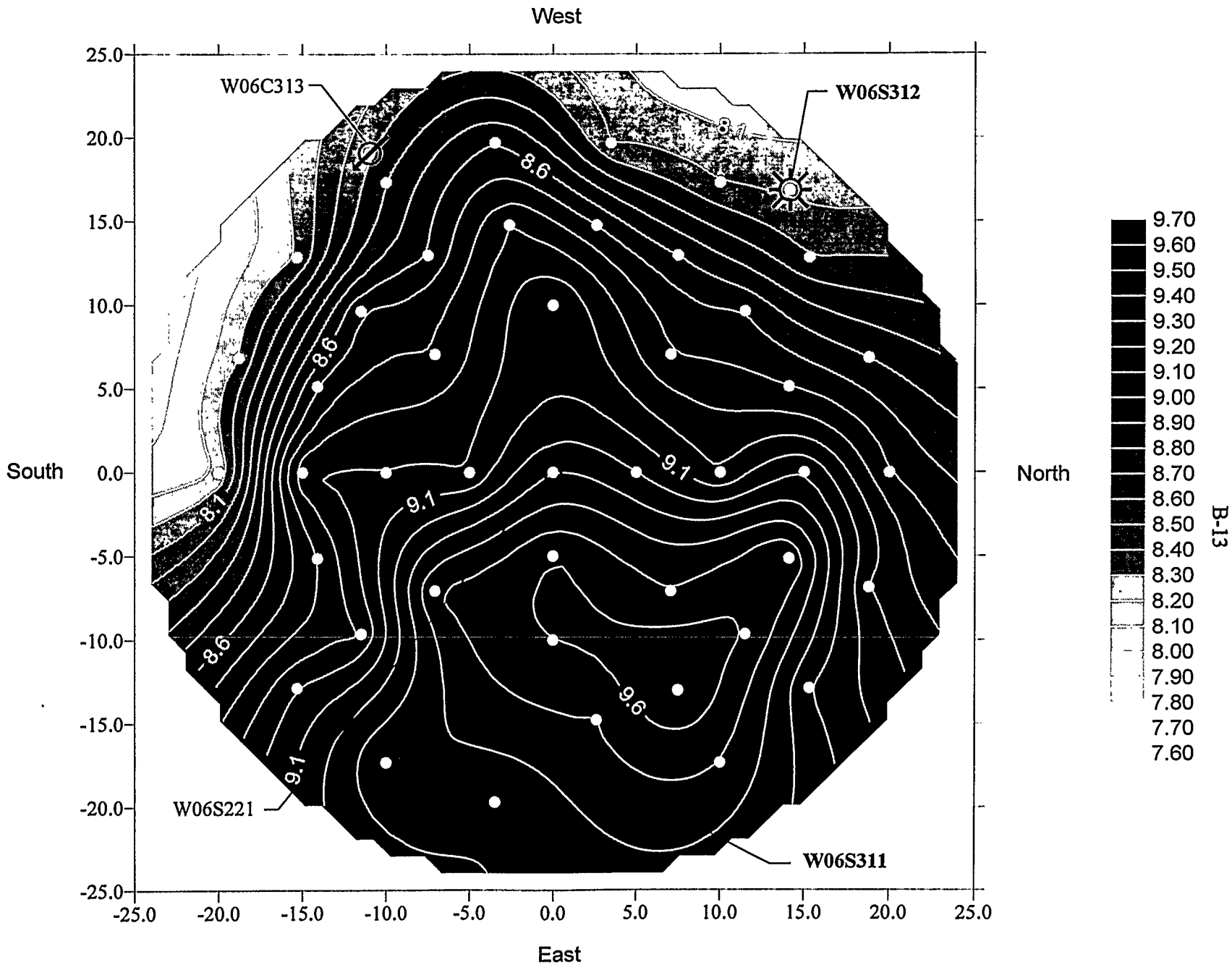
Tank W-5 top-of-sludge contour



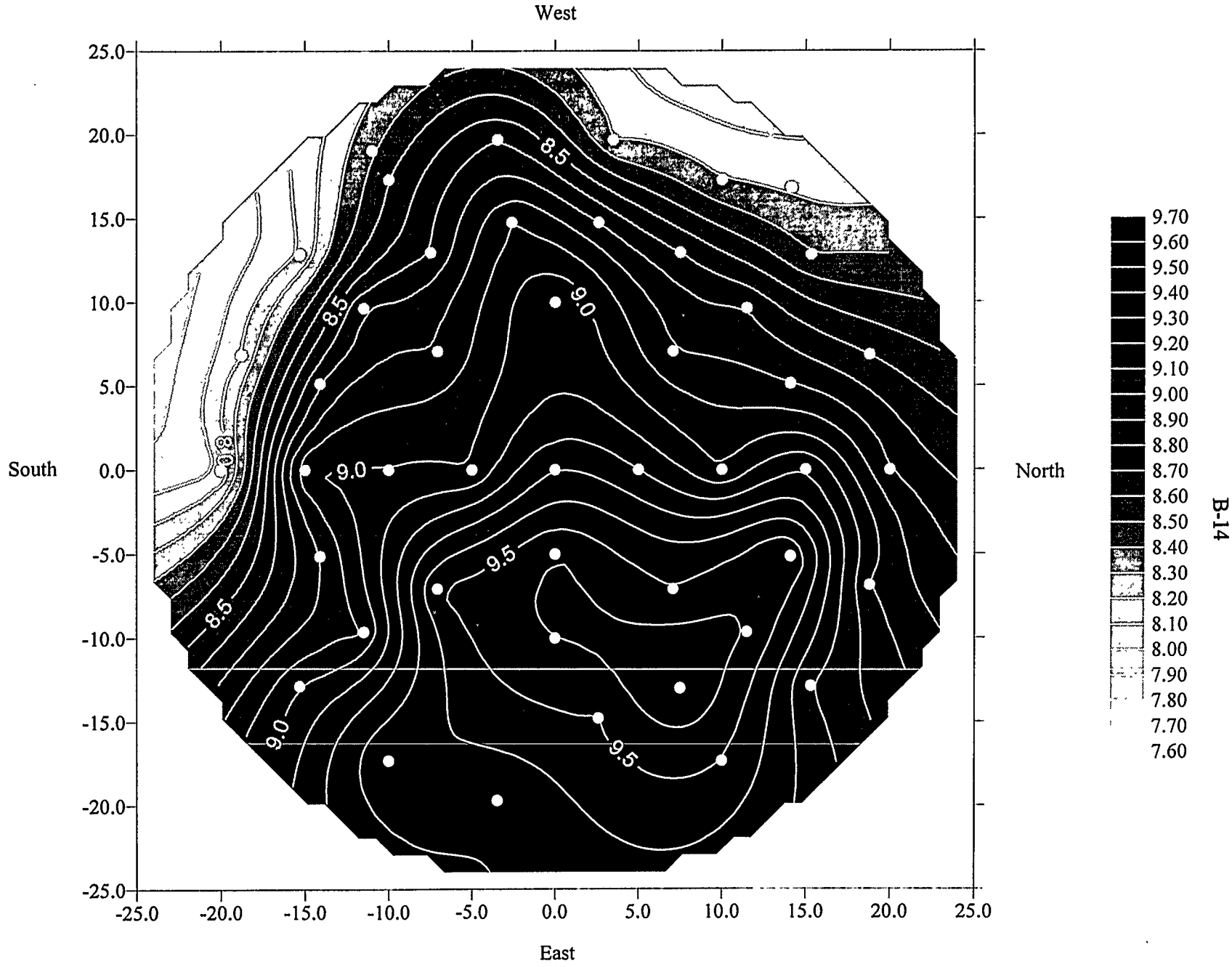
Tank W-5 top-of-concrete contour



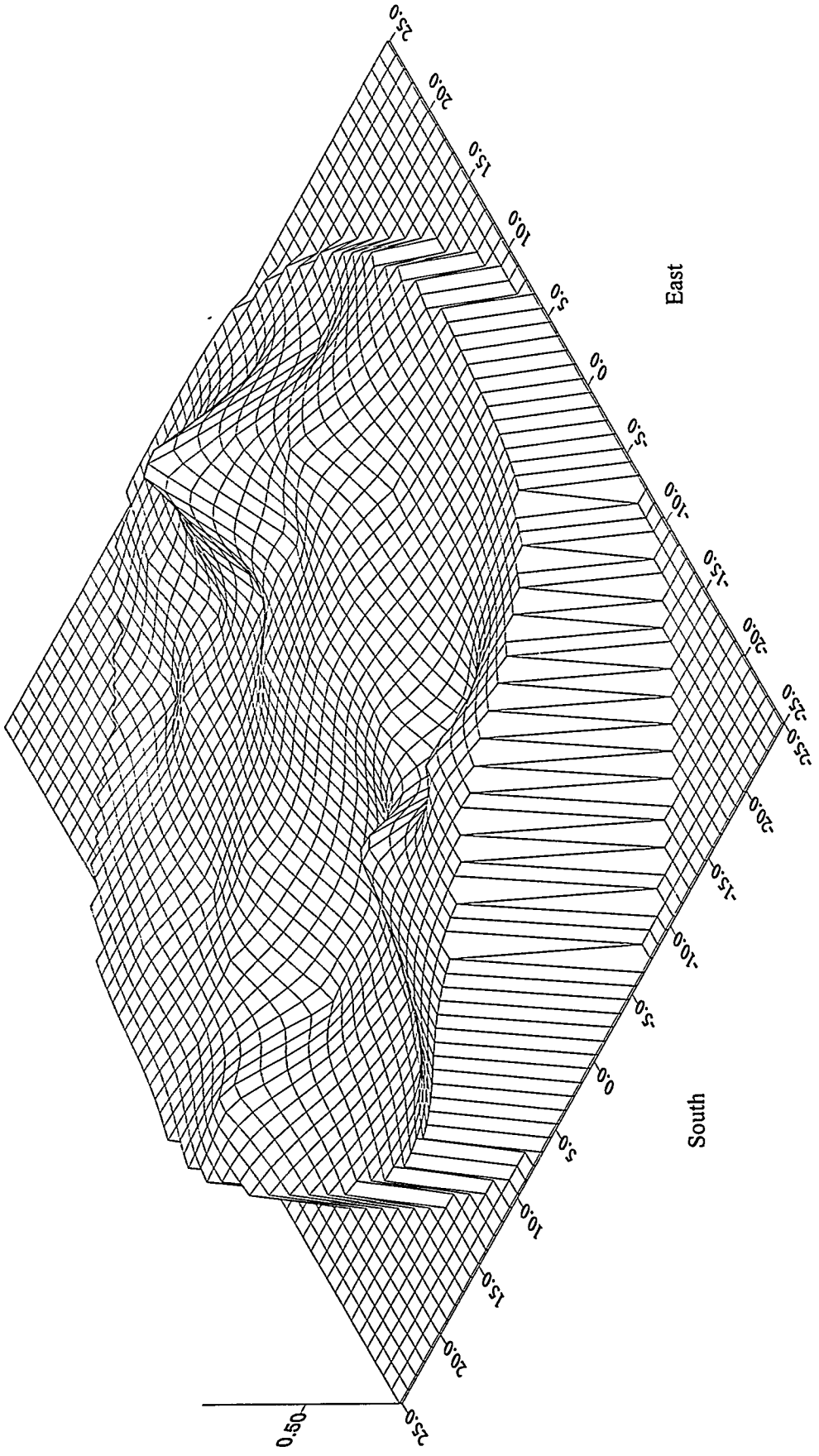
Tank W-5 net sludge depth



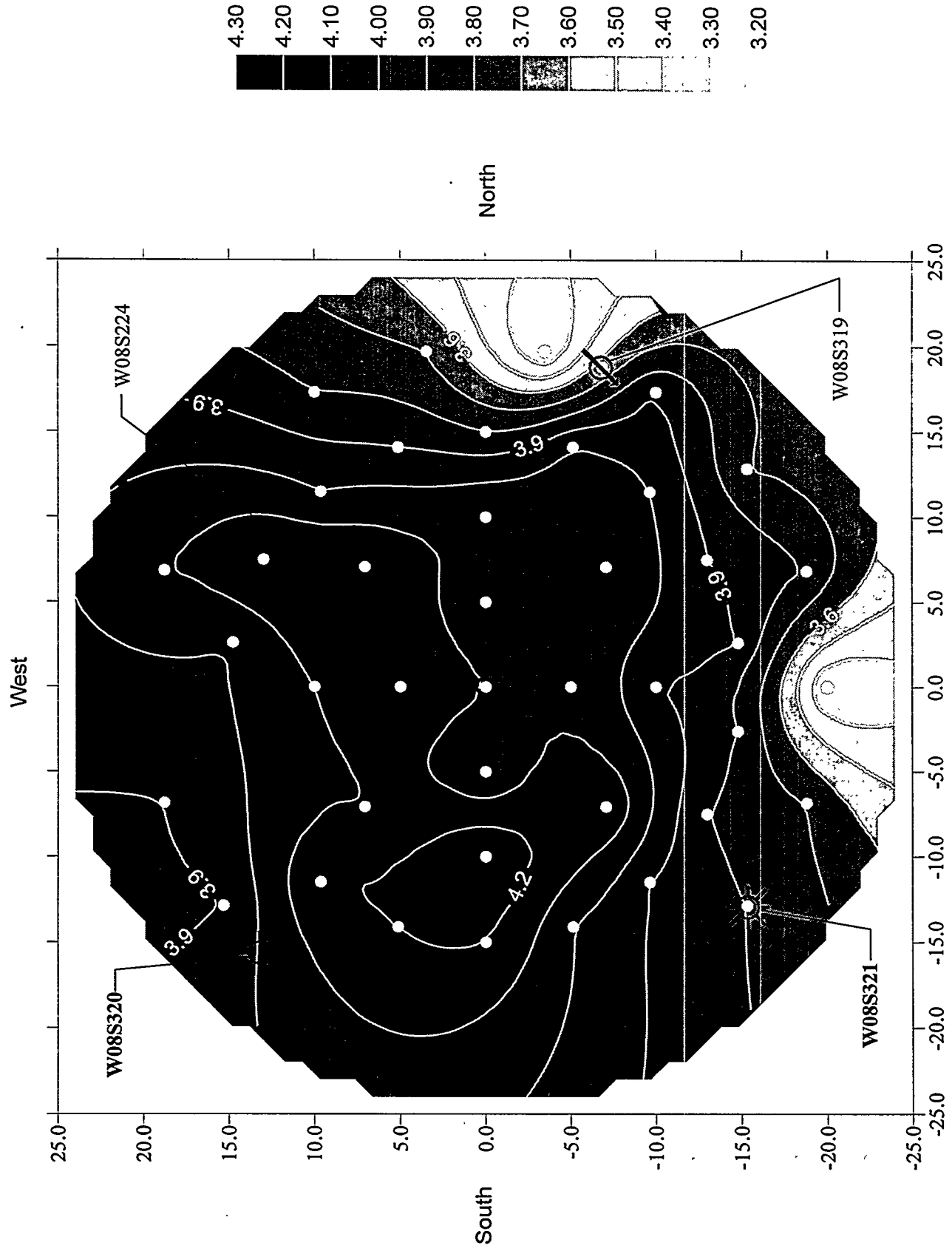
Tank W-6 top-of-sludge contour



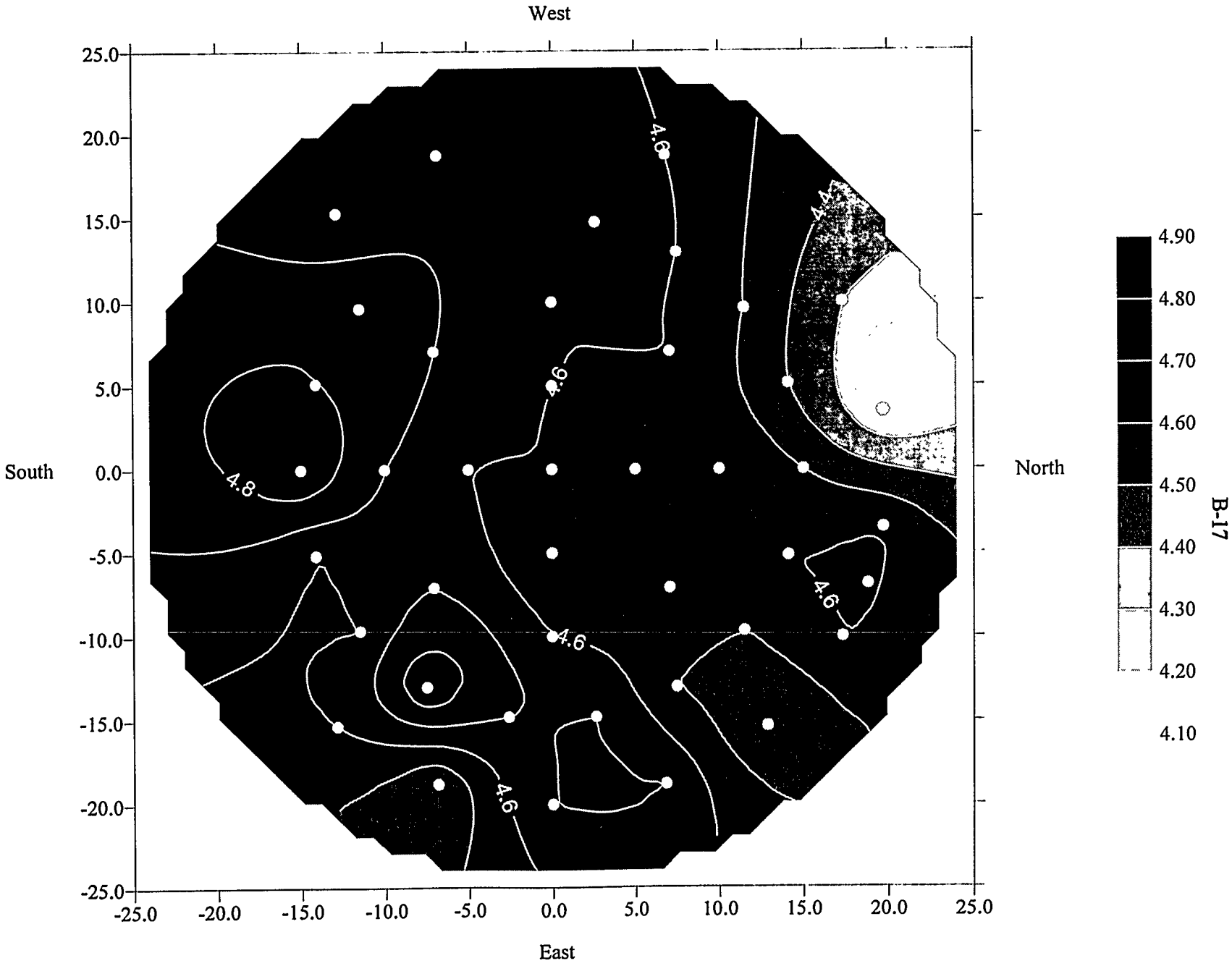
Tank W-6 top-of-concrete contour



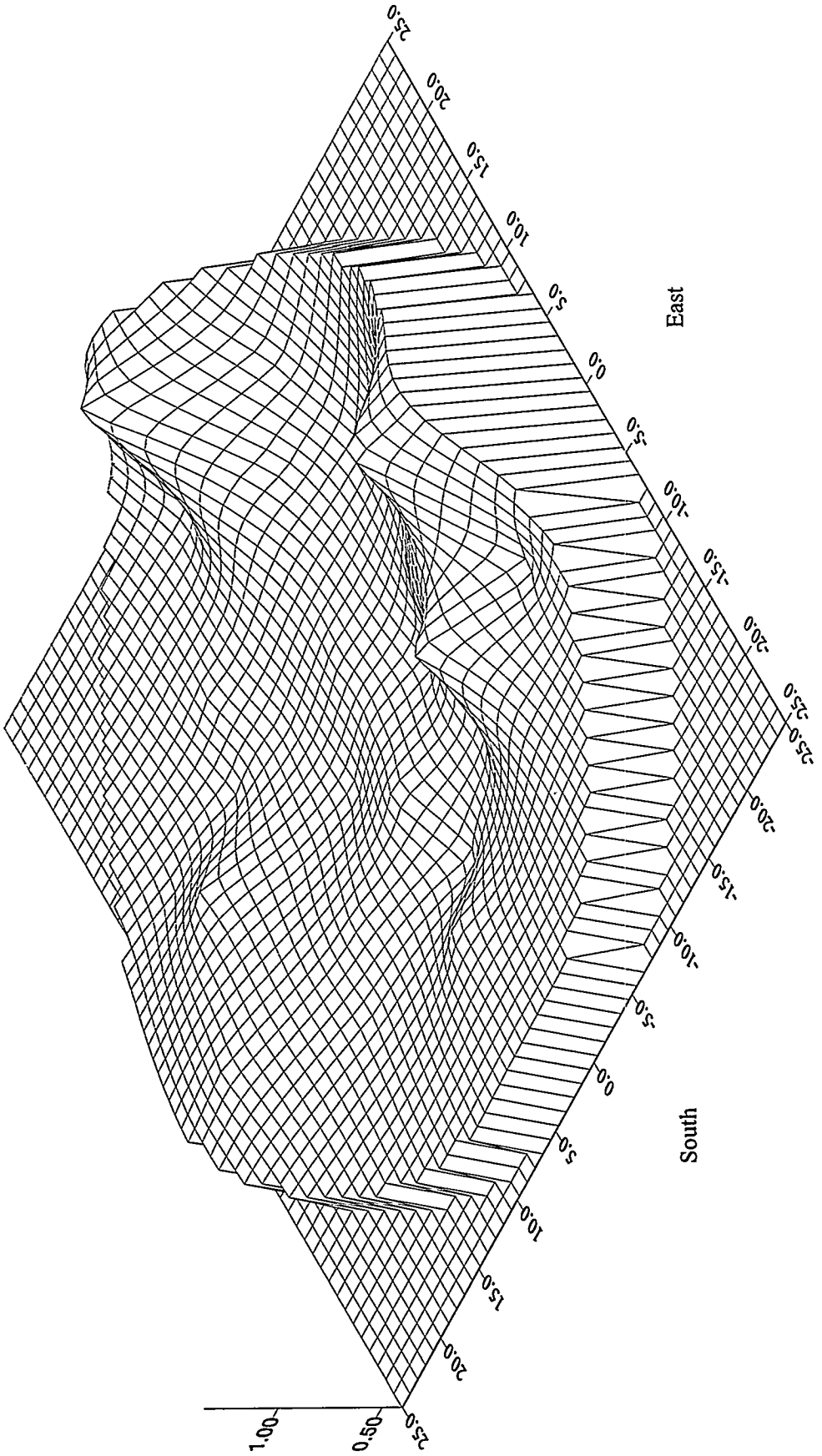
Tank W-6 net sludge depth



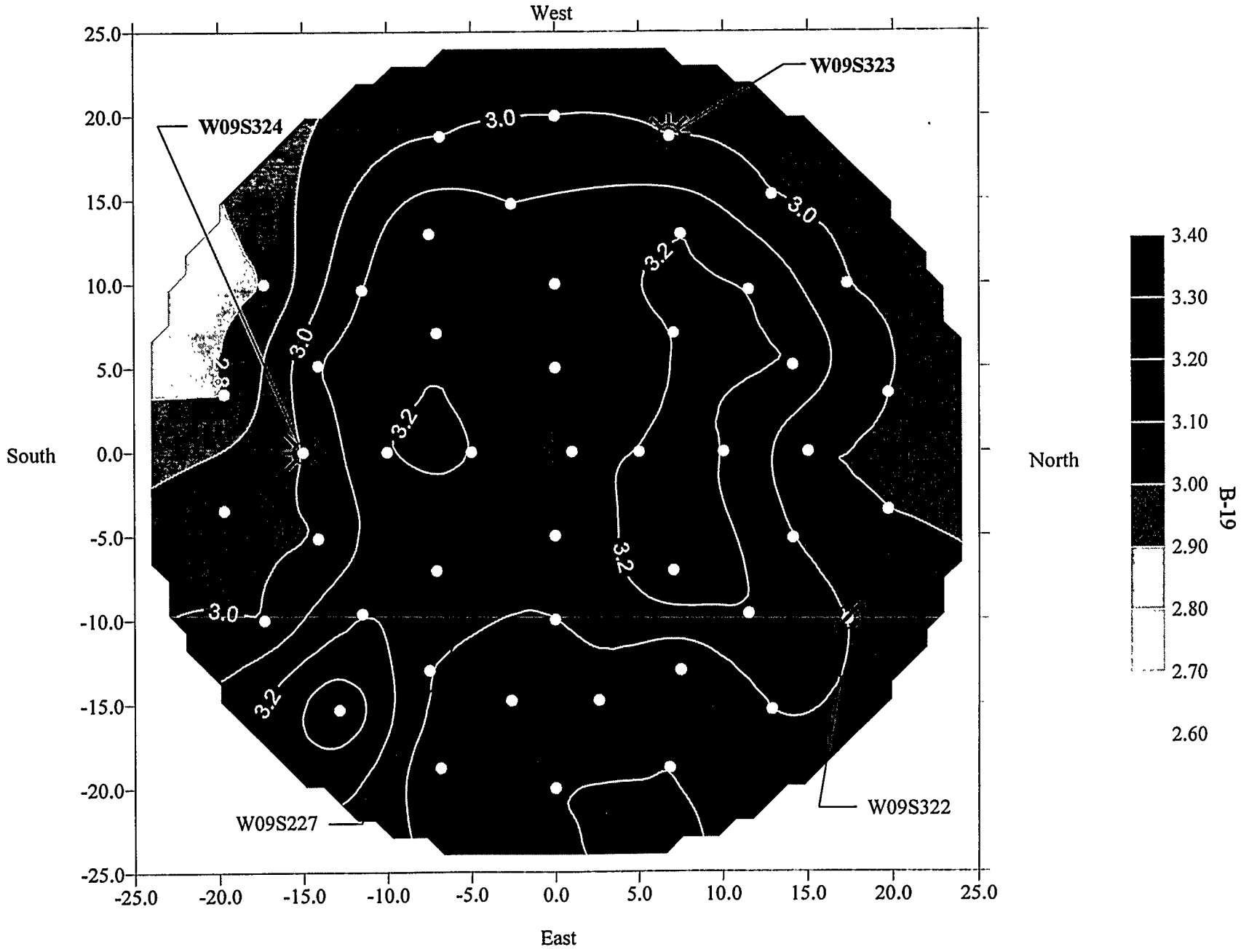
Tank W-8 top-of-sludge contour



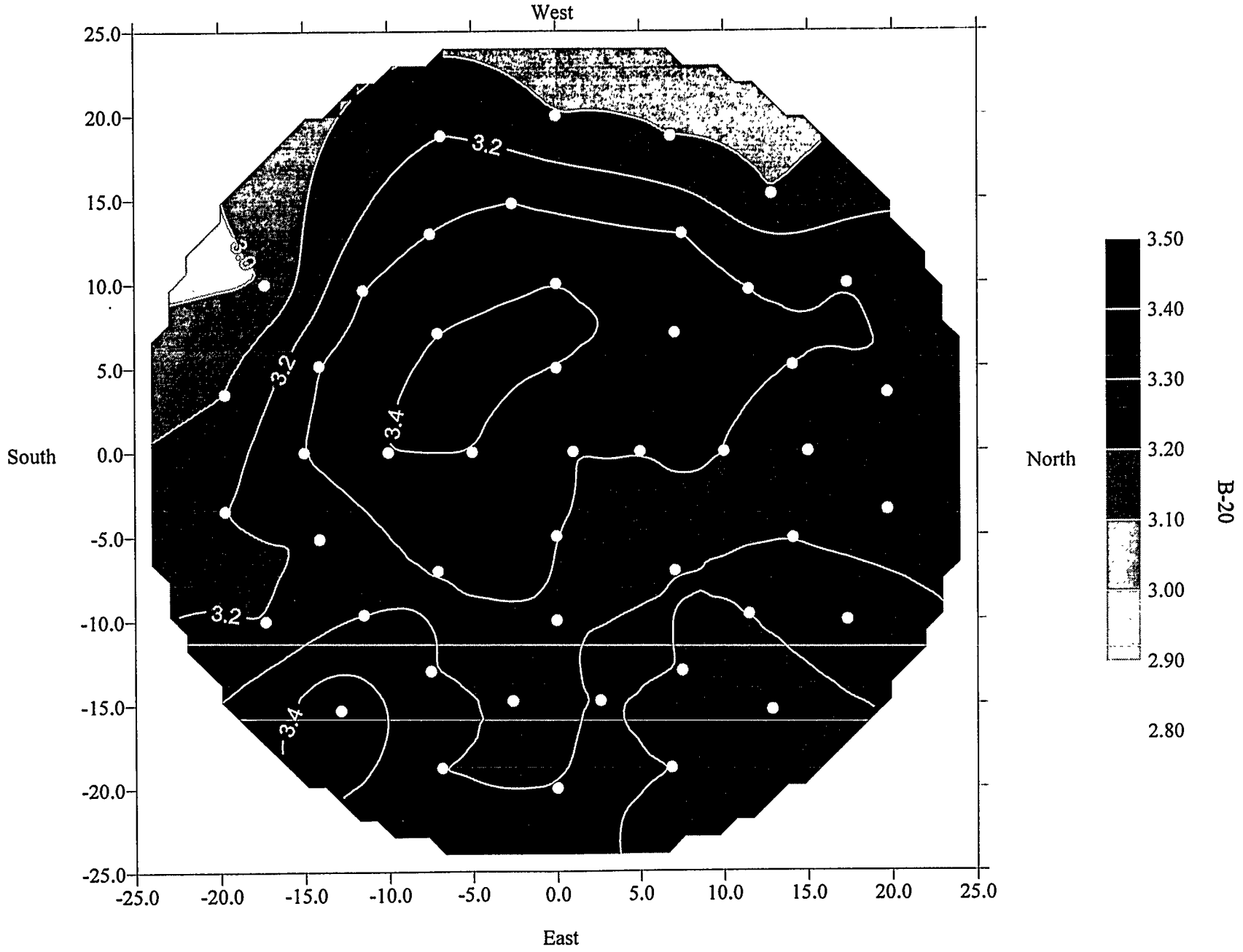
Tank W-8 top-of-concrete contour



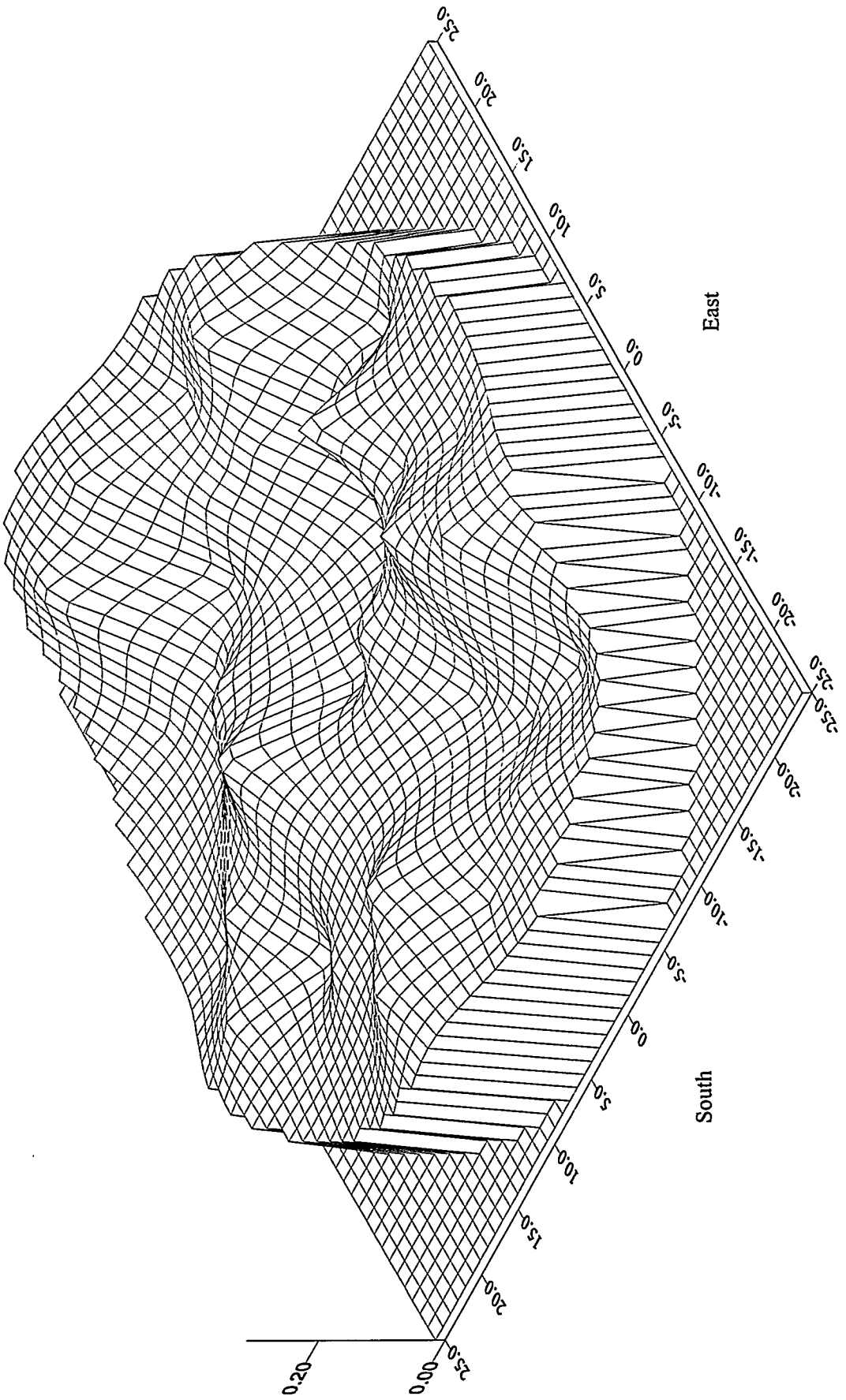
Tank W-8 net sludge depth



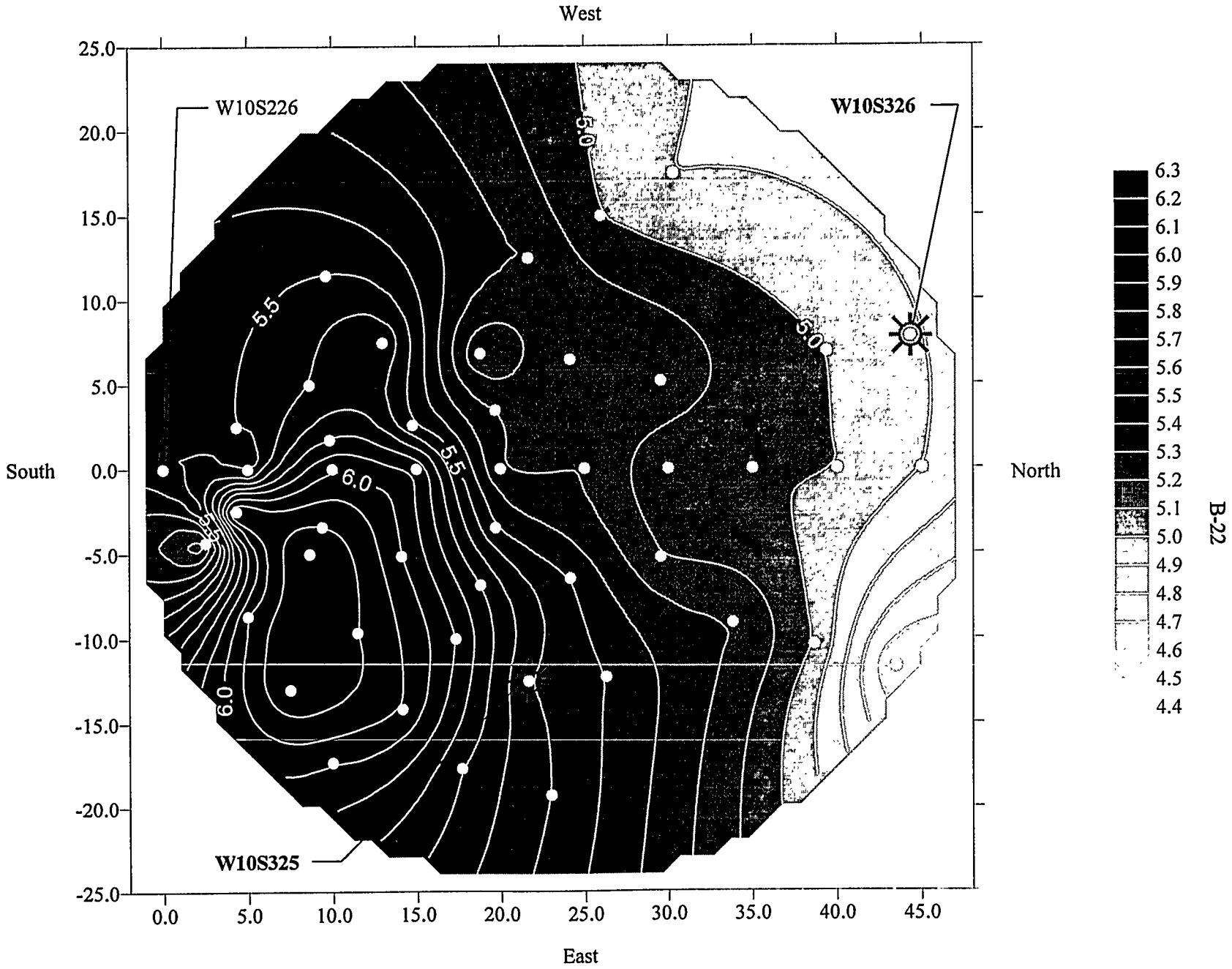
Tank W-9 top-of-sludge contour



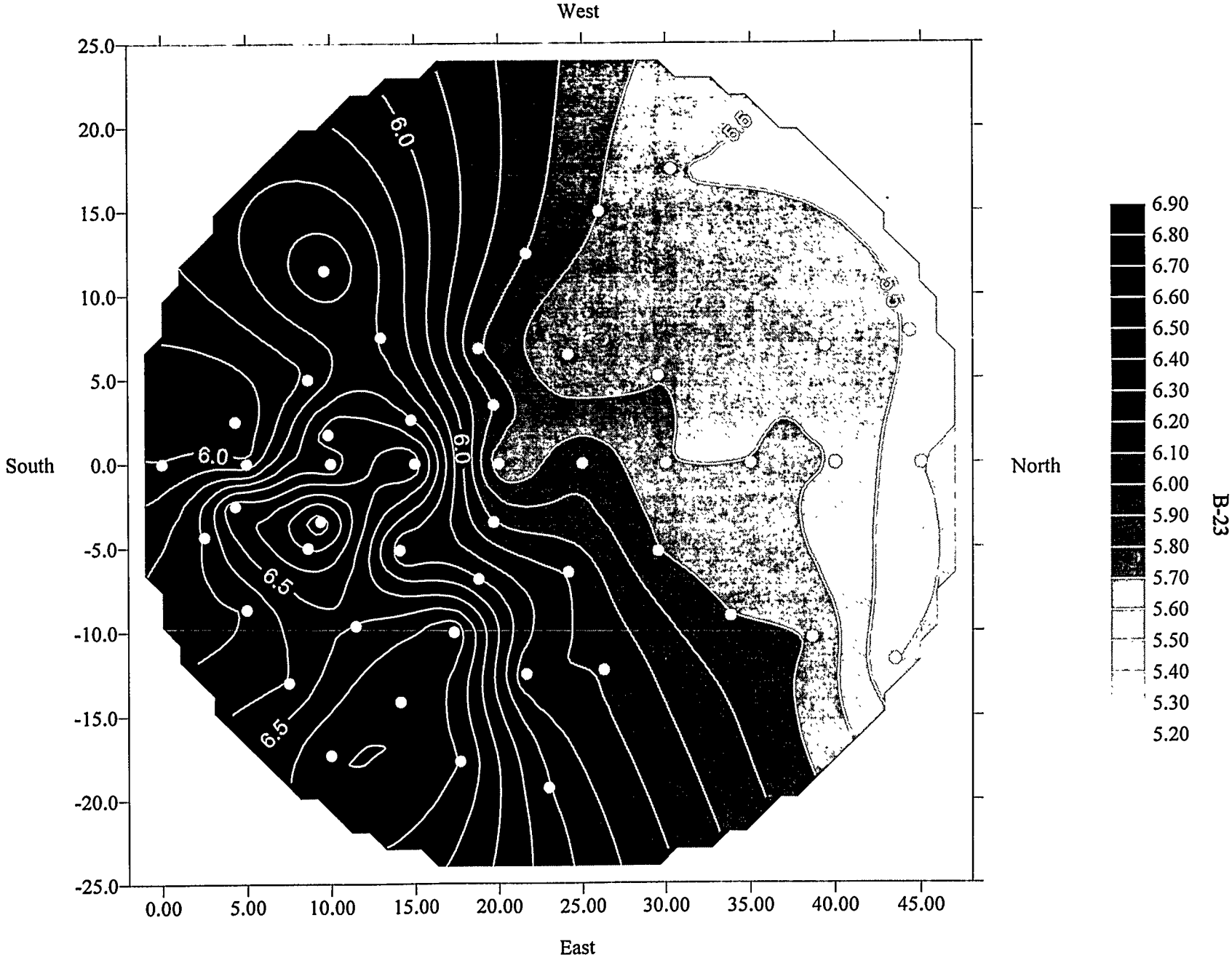
Tank W-9 top-of-concrete contour



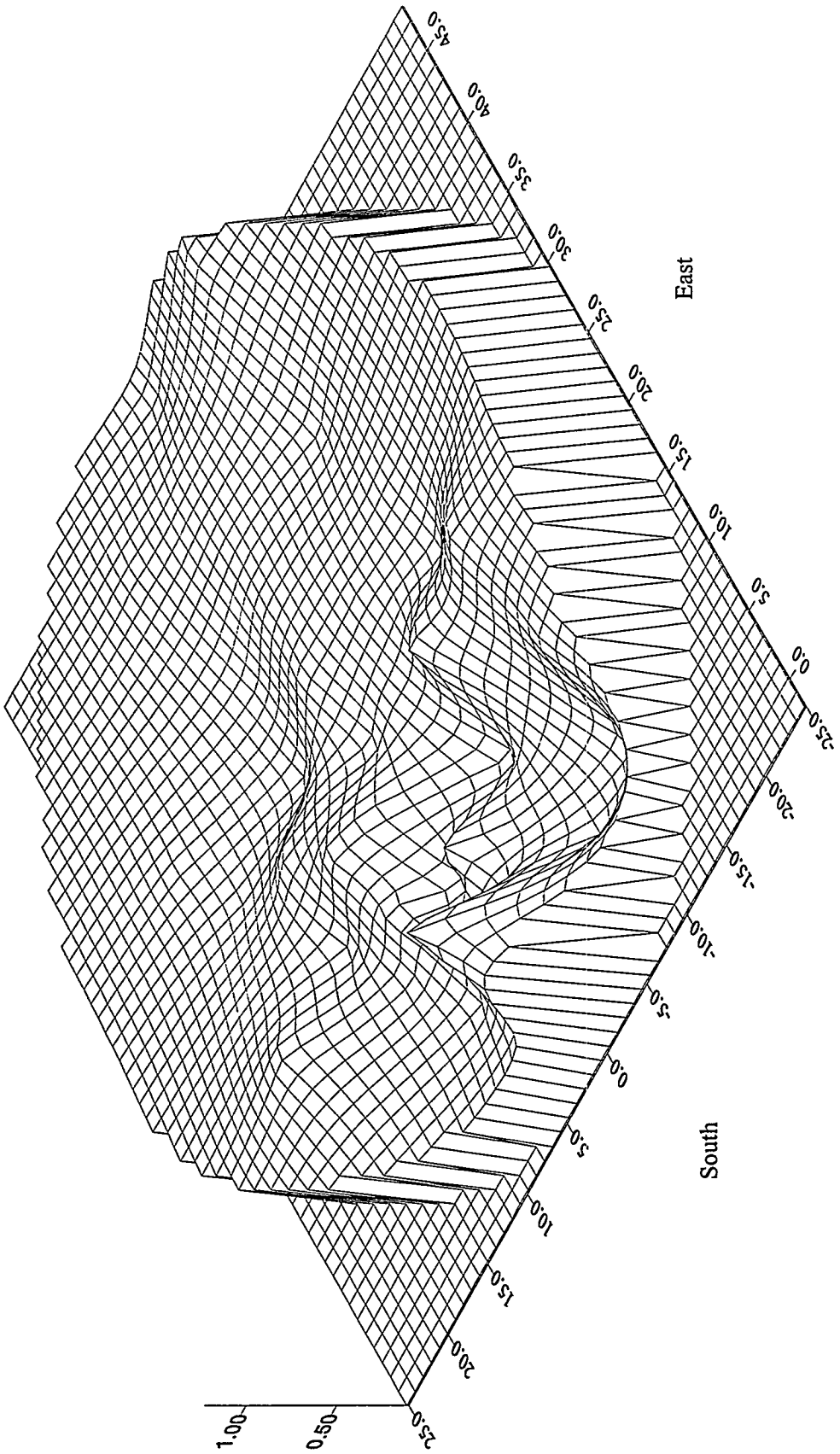
Tank W-9 net sludge depth



Tank W-10 top-of-sludge contour



Tank W-10 top-of-concrete contour



Tank W-10 net sludge depth

Appendix C
GUNITE AND ASSOCIATED TANKS
SLUDGE VOLUME ESTIMATE NOTES

GUNITE AND ASSOCIATED TANKS SLUDGE VOLUME ESTIMATE NOTES

The attached tables summarize sludge volume estimates based on the sonar measurements and compare various estimates from Phase I (1994) and Phase II (1995) Gunite and Associated Tanks (GAAT) characterization. The following assumptions apply.

- Based on sonar operator logs, questionable data points have been removed from the Phase II data base.
- Phase II estimates were made as follows:
  - "Average volume" is calculated by simple averaging of the net sludge depth at each measured point across a tank.
  - "Integrated volume" is calculated by Surfer for Windows™ software. Both the sludge surface and the concrete surface were contoured on a 1-ft × 1-ft grid. The integrated volume was calculated by summing the volume of each grid square using the trapezoidal rule to account for surface slopes. The volume calculated by Surfer was adjusted upward by 5% to account for Surfer's underestimation of the total surface area due to gridding/blanking edge effects.
- Phase I estimates are taken from ORNL/ER/Sub/87-99053/74, *Results of Fall 1994 Sampling of GAAT at ORNL*. See that report for details.

Bar charts are provided for graphical comparisons of tank volumes.

GAAT Sludge Volume Estimates

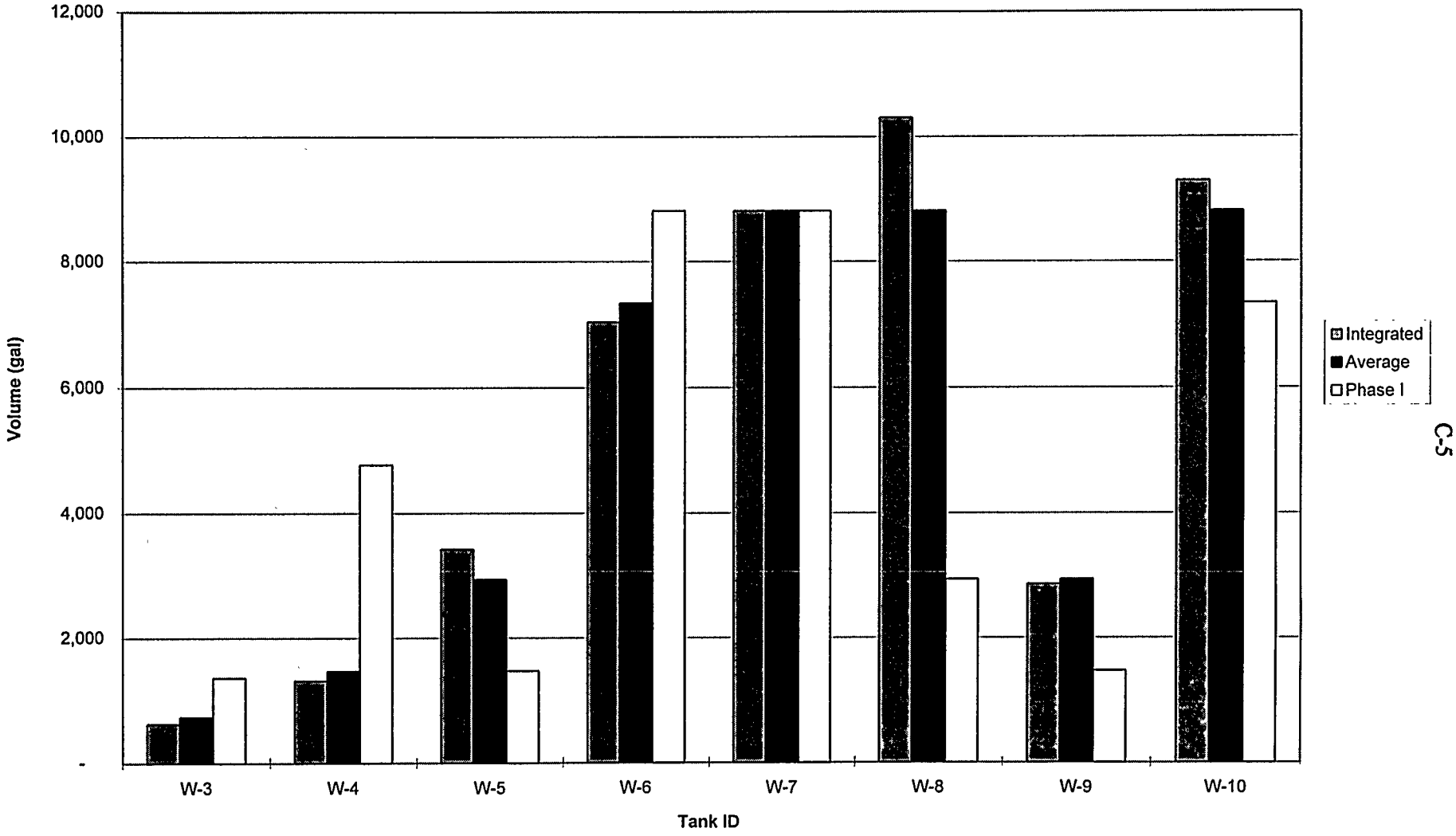
(gallons)

	Phase II (sonar)		Phase I (single point)		
Tank ID	Integrated	Average	Phase I	Phase I Min	Phase I Max
W-3	628	734	1,359	991	1,359
W-4	1,313	1,469	4,773	2,754	4,773
W-5	3,422	2,937	1,469	-	1,469
W-6	7,037	7,343	8,812	2,937	11,015
W-7	8,812	8,812	8,812	7,343	9,840
W-8	10,309	8,812	2,937	1,469	4,406
W-9	2,861	2,937	1,469	-	1,469
W-10	9,298	8,812	7,343	7,343	7,343

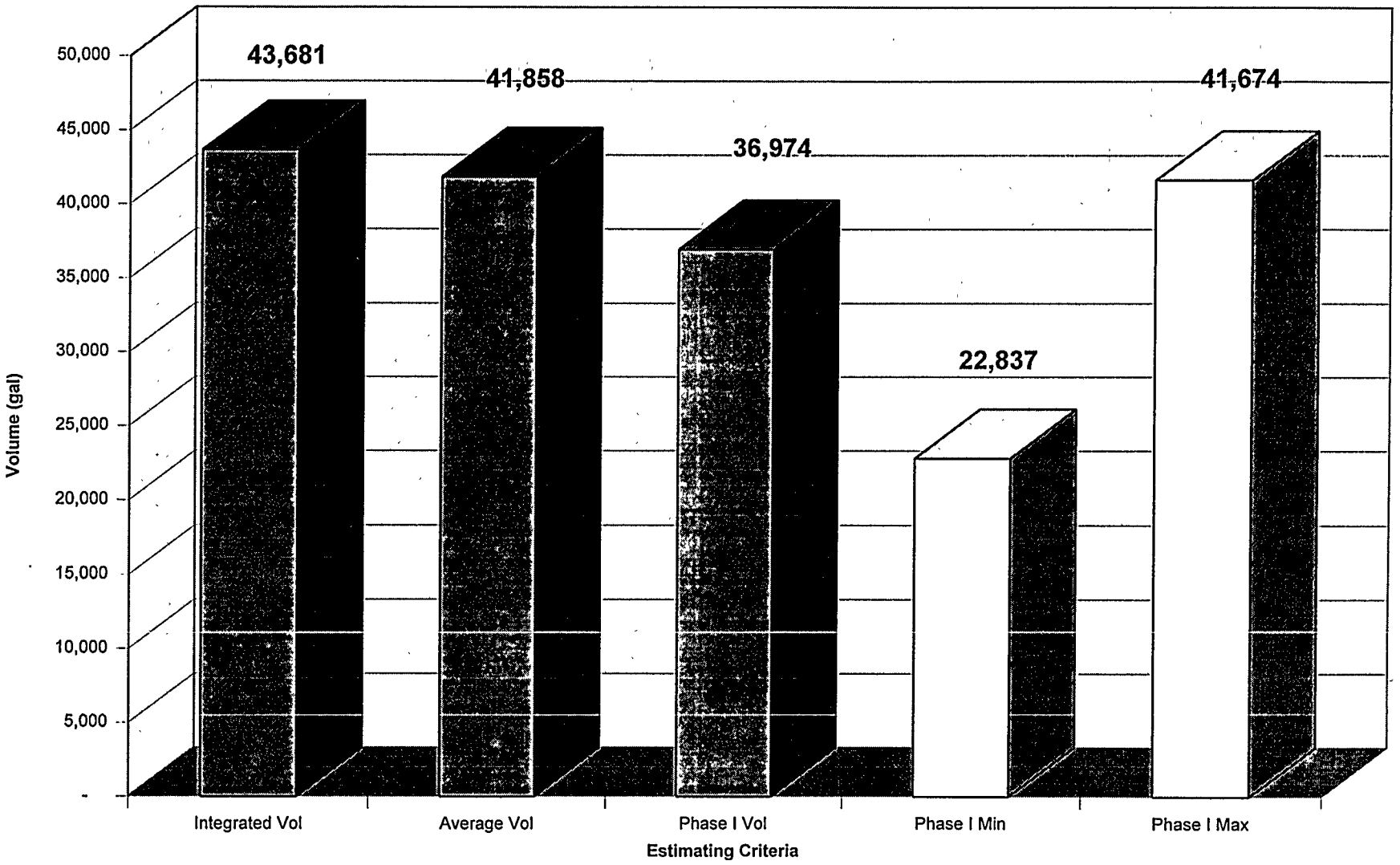
Integrated Vol	Average Vol	Phase I Vol	Phase I Min	Phase I Max
43,681	41,858	36,974	22,837	41,674

Note: Phase II integrated volume estimate should be considered the best estimate.

GAAT Sludge Volume Estimates



GAAT Total Sludge Volume Estimates
Tanks W-3 through W-10



Appendix D
ANALYTICAL METHODOLOGY

ANALYTICAL METHODOLOGY

The analytical methods followed to generate the data on the GAAT sludges and liquids are listed in Table D-1. Additional discussion on selected procedures and techniques is provided to give brief descriptions of analytical processes and to document any deviations from the procedures.

D1. METAL MEASUREMENTS

Sample Preparation for Metals and Radiochemical Analyses

Samples were prepared for all metals and radiochemical analyses by microwave digestion. The digestion procedures followed were SW-846 Method 3015, "Microwave Assisted Digestion of Aqueous Samples and Extracts," and Method 3051, "Microwave Assisted Digestion of Sediments, Sludges, Soils, and Oils.

Liquid samples were filtered through Whatman 20-micron ashless filter paper. Forty milliliters of the filtered sample was then transferred into a Teflon microwave vessel, and 5 mL of 15.8 $\underline{M}$ HNO_3 was added for the digestion.

Sludge samples were prepared by weighing 0.5 g of sample into a Teflon microwave vessel and adding 10 mL of 15.8 $\underline{M}$ HNO_3. After digestion, the residue was centrifuged; there was no appreciable residue left after digestion.

Metals Analysis by Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES)

A Spectroflame ICP Model FAO-05 was modified for use with radioactive samples by isolating the ICP torch box in a stainless steel enclosure for containment of radioactivity. The optic system for the ICP contains three polychromators, which allow for the simultaneous measurement of up to 22 metals, and a monochromator for sequential measurement of analytes with emission wavelengths between 210 and 800 nm. This system uses quartz fiber optics to carry light emitted from the plasma to the spectrometer, which makes it particularly well suited for analysis of radioactive samples. Cross flow nebulizer, which performs well for samples with high total dissolved solids, was used for all analyses.

Metals Analysis by Graphite Furnace Atomic Absorption (GFAA)

The instrumentation employed for GFAA measurements was a Perkin-Elmer 5100 AA system with an HGA-600 furnace option. Zeeman effect background correction was employed for all GFAA measurements. The spectrometer is enclosed in stainless steel, similar to the ICP system, to allow measurements on radioactive samples. The technique used for all GFAA samples was an approach called the stabilized temperature platform furnace (STPF) concept, developed by Perkin-Elmer Corporation. STPF is based on a number of principles, including the use of the L'vov platform, fast electronics, quantitation by peak area, matrix modifiers, pyrolytically coated graphite tubes, fast heating of the furnace, no flow or support gas during the atomization step, and Zeeman effect background correction. STPF results in increased sensitivity and lower detection limits. The furnace temperature program included a cool-down step to ambient temperature before the atomization step.

Mercury Analysis by Cold Vapor Technique

The mercury cold vapor technique was performed using a Thermo Jarrell Ash Q5-1 cold vapor atomic absorption mercury analyzer. The system included a heated 10-cm quartz cell that is placed in the flame AA light path of the 5100 system, a sample handling system, and a system controller for programming the addition of reductant and reaction times. The signal from the spectrometer is then processed by the 5100 system computer. The absorption signal over a set period of time was used for mercury quantitation.

TRU-Spec™ Cleanup

Sludge samples with high levels of uranium and thorium had excessive spectral interferences in the analysis of several metals (aluminum, antimony, beryllium, copper, magnesium, silver, and vanadium). The uranium and thorium were removed through recently developed techniques using extraction chromatography, specifically the use of a commercially available EIChrom TRU-Spec™ column. The sludge digestate and a 4 *M* HNO^3 wash are passed through the column. All actinides (including uranium and thorium) are removed from the sample solution. The acid wash is diluted to a known volume and then analyzed by ICP.

Comments on Metals Analyses

Mercury was analyzed by the cold vapor technique. Arsenic, lead, selenium, and thallium were determined by GFAA. All other metals were determined by ICP.

Metals were prepared and analyzed using the protocols established in SW-846 methods. When excessive spectral interference was encountered during ICP analysis due to high uranium and thorium levels, a portion of the sample digestate was put through a TRU-Spec™ separation and this extract was analyzed per method 6010A.

Three integrations each were analyzed for ICP measurements and Thermal Jarrell Ash cold vapor atomic absorption, and two were analyzed for GFAA. The reported errors are equal to twice the standard deviation of the instrumental measurements.

D2. ANION MEASUREMENTS AND CARBON ANALYSIS

Common Anions

Liquid samples and a water wash of sludge samples were analyzed for bromide, chloride, fluoride, nitrate, phosphate, and sulfate by a Dionex series 4500i ion chromatograph configured with a pulsed electrochemical detector operating in the conductivity mode. For the anion separation, a carbonate eluant was used with a Dionex IonPac AS4A anion exchange column.

Carbon Analysis

Samples were analyzed for carbon content using a Dohrmann DC-90 carbon analyzer. For liquid samples, total carbon (TC) and total inorganic carbon (IC) were measured directly. Total organic carbon (TOC) results were obtained by taking the difference between TC and IC. The TC was measured by direct injection of sample into a 0.2% phosphoric acid carrier stream, followed by transport to a combustion tube packed with cobalt oxide and heated to a temperature of 900°C. The furnace was continually sparged with oxygen. All carbon in the sample was converted to carbon dioxide and

transported through scrubber systems to a nondispersive infrared (IR) detector. Liquids were assayed for IC by injection of sample into a phosphoric acid bath that converted carbonates to carbon dioxide gas. The phosphoric acid bath that continually sparged with oxygen, which transported the evolved carbon dioxide to the IR detector. For solid samples, TC was measured directly by weighing an aliquot of sample onto a platinum boat and then placing the boat into an 800°C furnace that was continuously sparged with oxygen. The combustion gases were directed to the IR detector via the scrubber systems. TOC was measured directly in the same manner except that after the aliquot was weighed onto the platinum boat, two drops of 50% nitric acid were placed on the sample and then dried at 80°C for 20 min to drive off the inorganic carbon prior to analysis. IC results were obtained by taking the difference between TC and TOC.

Comments on Anion, Carbon, and Alkalinity Analyses

The presence of small aliphatic acids (formate and acetate) interfered with the determination of fluoride in some of the liquid samples. In all cases, though, the interference could be electronically corrected for using the Dionex software program.

Sludge samples were prepared by placing 1 g of sludge in 10 mL of water and agitating for 10 min. The slurry was then filtered and the filtrate was analyzed for anion content.

The calibration curves for anion analyses were constructed from one blank and five calibration standards traceable to National Institute of Standards and Technology (NIST) standards. An independently prepared calibration check and a blind QC sample were analyzed to check the ion chromatograph's calibration. Acceptance criteria for the calibration check were ±10%, and the results for the blind QC sample had to be accepted before the analysis was performed. A continuing calibration standard was analyzed in accordance with method 9056, but due to the complexity of the sample matrices being analyzed, the acceptance criteria of the continuing calibration verification were raised to ±15% from ±5%. The Dohrmann carbon analyzer was calibrated using a one-point calibration curve per the manufacturer's instructions. The calibration standard was prepared using reagent grade potassium hydrogen phthalate that was weighed against weights that are NIST-traceable.

Two replicate measurements for the anions and four for carbons were analyzed. The reported errors are equal to twice the standard deviation of the instrumental measurements.

D3. ORGANIC ANALYSES

The analytical methods used for the GAAT sludges were the same as those used for the transuranic waste sludges in the transuranic (TRU) waste characterization program and are based on EPA SW-846 methods adapted for radioactive samples. These methods have met the method performance demonstration requirements of the TRU characterization program Quality Assurance Project Plan, Revision B. Blanks and matrix spike/matrix spike duplicate samples were prepared and run with the samples. The volatile organics analysis (VOA) and semivolatile organics analysis (SVOA) included surrogate standards.

Volatile Organics Analysis

The VOA was conducted by purge and trap gas chromatography-mass spectroscopy (GC-MS) according to the EPA SW-846 medium concentration level, method 8240. Two grams of sludge was extracted with 2 mL of methanol and 50 μL was added to the 10 mL of reagent water and subjected to the purge and trap GC-MS analysis.

Nonhalogenated VOA

The nonhalogenated VOA analysis was conducted in accordance with EPA SW-846 method 8015. Two grams of sludge was extracted with 10 mL of reagent water, and 1 μL of the supernatant was injected onto a gas chromatograph equipped with dual columns and dual flame ionization detectors.

Semivolatile Organics Analysis

The SVOA was conducted in accordance with EPA SW-846 methods 3550 and 8270. Ten grams of sludge was extracted with 100 mL of methylene chloride using a sealed jar and an ultrasonic bath. The extract was concentrated to 1 or 3 mL (3 mL volume when oil from the sludge prevented concentration to a smaller volume) and 1 μL was analyzed by GC-MS.

D4. MISCELLANEOUS MEASUREMENTS

Isotopic Determination of Uranium and Plutonium

To determine uranium isotopes, an extraction was performed on all samples (with the exception of the supernatants from tanks W-1 and W-2) using a Bio-Rad Dowex 1 × 4 resin column. The sample was converted to the Cl^- form, made 8 *M* HCl, then poured through a column conditioned with 8 *M* HCl. The uranium was stripped from the column using 8 *M* HNO^3 and analyzed by thermal ionization mass spectrometry to determine uranium isotopes. A NIST-certified isotopic standard (NBS 010) was analyzed with each batch to determine the bias associated with isotope ratio measurements. Isotopic plutonium analysis was performed on an aliquot taken from the Total Alpha Plutonium Analysis, which used thenoyltrifluaroactone to extract the plutonium.

Bulk Density

A small portion of sludge was submersed in 4 *M* NaOH. The volume and weight change was noted and bulk density was calculated.

Percent Moisture

A sludge sample aliquot was uniformly heated to 105°C (221°F) for 6 to 8 h. The sample was cooled in a desiccator and weighed. This cycle of drying, cooling, and weighing was repeated until two consecutive weighings had less than 4% change or 0.5 mg (0.0075-grain) total change from last weighing, whichever was greater.

D5. RADIOCHEMICAL MEASUREMENTS

Gross Alpha/Alpha Spectrometry Measurements

Regardless of preparation method (TRU-Spec™ or microwave dissolution), all samples were pipetted onto clean 2-in. stainless steel planchets and slowly evaporated to dryness. After evaporation, the planchets were heated to a dull red glow over a meeker burner to fix the activity on the planchet. The amount of each sample plated was determined by the estimated activity of that sample. The planchets were then allowed to cool before counting on a Tennelec LB4000 low-level alpha/beta counter equipped with 2-pi gas-flow proportional detectors. This system, when used in the alpha-only mode, provides the gross alpha activity of the plated sample. Background subtraction, sample dilutions, and correction for activity absorption due to solids were considered in the final calculation of sample activity. It should be

noted that errors were based on counting statistics, not on error propagation. A duplicate and a blind control sample were analyzed with each batch of 20 samples. In many cases, more than one duplicate per batch was analyzed.

After gross alpha measurement, the planchets were analyzed for alpha nuclides using Tennelec TC256 alpha spectrometers with passive implanted planar silicon detectors and the ND9900 data acquisition system. The system identifies alpha isotopes based on their distinct energy peaks. A percentage of each isotope detected is determined. Based on these percentages, the activity of each detected nuclide can be calculated from the gross alpha result. An Amersham standard plate containing americium-241, plutonium-239, and curium-244 was used to perform an energy calibration of the alpha spectrometer before use.

Gross Beta Measurements

Due to the volatility of the cesium in these samples, gross beta (gross activity) was measured by liquid scintillation counting. Unlike gas flow proportional counting, preparation for liquid scintillation counting does not require heating. Preparation simply involved adding an aliquot of digested sample (0.1–2.0 mL, depending on the estimated sample activity) and 15 mL of Ultima Gold™ scintillation cocktail to a 20-mL plastic scintillation vial. The samples were vortexed and counted on a Packard 2500 TR liquid scintillation counter for gross beta activity. A blank, a blind control sample, and a strontium-90/yttrium-90 standard were counted along with each batch of samples. Calculated results used the value of the blank for background subtraction.

Gamma Spectrometry

Up to 10 mL of the microwave digested sample was pipetted into plastic scintillation vials and brought to a final volume of 10 mL, if necessary. The sample volume used was determined by the estimated activity of that sample and the observed dead time of the instrument. These vials were then counted on a high-purity germanium detector with a nominal 25% efficiency and Canberra, Nuclear Data's AccuSpec™ Genie-PC system. This system identifies gamma emitting nuclides based on their corresponding gamma ray energies. Backgrounds are counted on a routine basis and any identified peaks in the background are automatically subtracted from the sample spectra using Nuclear Data software. To check instrument performance, blind QC samples are analyzed daily prior to sample counting and results are recorded in a QC data base. Any "flags" on the QC check are investigated and/or corrected prior to sample counting.

Strontium-90 Analysis

Determination of strontium-90 requires a separation procedure to remove interferences caused by yttrium-90 during beta counting. Procedure AC-MM-2-21807 utilizes an extraction chromatographic column that absorbs strontium and elutes yttrium under high acid conditions. The strontium is then eluted from the column by the addition of a low nitric acid solution (0.1 *M*). This procedure was used on the GAAT samples to isolate strontium-90. A stable strontium carrier was added to the samples before application to the column for yield determination. Once the strontium was eluted from the column, the eluents were dried down on 2-in. stainless steel planchets, weighed, and flamed over a meeker burner. Yield corrections were determined by the recovered weight of the carrier on the planchet and applied to the final strontium-90 result. For some of the samples, due to high activity and matrix factors, measurement of the carrier weight was complicated. For these samples, a strontium-90/yttrium-90 standard was applied to the column and used for yield corrections.

Instrument backgrounds were taken into consideration for the measurement of all GAAT samples. A blank was analyzed to ensure that background activity due to the method was negligible. Blind control samples were also analyzed with each batch of samples.

Total Alpha Plutonium Analysis

Determination of total alpha plutonium requires a separation of plutonium from other alpha emitters in the sample that interfere in alpha measurements. The procedure followed (AC-MM-2-31621) uses an organic solvent, thenolytrifluoroacetone, to extract plutonium from acidic media. This procedure measures the total alpha plutonium. Plutonium-241 is not included since it is a beta emitter. After sample extraction, an aliquot of the organic phase was dried down on a 1-in. stainless steel plate and flamed over a meeker burner. The plate was analyzed for total plutonium activity using a Nuclear Measurements Corporation PCC 11T, 2-pi gas-flow proportional counter. Instrument background was subtracted from all sample results. A plutonium QC sample was analyzed with each batch of samples.

Table D-1. Analytical methods

Methods	Analysis
Test Methods for Evaluating Solid Waste, Physical/ Chemical, SW-846, 3RD Edition, Update 1, July 1992	
• Method 6010A	Metals determined by ICP
• Method 7000A	Metals determined by GFAA
• Method 7470	Mercury determination in liquids
• Method 7471	Mercury determination in solids
• Method 9060	Carbon analyses for sludges and liquids
• Method 9040	pH of liquids
• Method 9045A	pH of sludges
• Method 8240A	GC/MS for volatile organics
• Method 8015A	Nonhalogenated volatile organics
• Method 8270A	GC/MS spectrometry for semivolatile organics: capillary column technique
Test Methods for Evaluating Solid Waste, Physical/ Chemical, SW-846, 3RD Edition, Proposed Update 2, November 1992	
• Method 9056	Anion determination in liquids and sludges
• Method 3015	Microwave digestion of liquids
• Method 3051	Microwave digestion of sludges
Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma and Mass Spectroscopy, EPA-600/4-91/010, April 1991	
• Method 200.8	Isotopic determination of uranium
ORNL Procedures	
• Density of Liquids and Solids, AC-MM-11011	Sludge and liquid densities
• Total Pu by thenoyltrifluoroacetone extraction method, AC-MM2-31621	Total Pu determination on sludges and liquids
• Sample Management in the Radioactive Materials Analytical Laboratory, CASD-OP-RML-AD02	Sample and data management
• Total Radioactive Strontium in Aqueous Solutions: Extraction Chromatography Method, AC-MM-2-21807	Radioactive strontium
• Operation of Packard 2500TR Liquid Scintillation Counter, AC-MM-2-1111	Beta emitting radionuclides
• Operation of Nuclear Measurement Corporation Proportional Alpha Counting System, AC-MM-2-00356	Gross beta radioactivity

Methods	Analysis
• General Procedure for Isotopic Composition Measurement by Thermal Ionization Mass Spectrometry, AC-MM-40100	Isotopic determination of uranium and plutonium
• Gross Alpha Measurement in Solids and Soil, AC-MM-9 002302	Gross alpha determination
• Gross Alpha Measurement in Aqueous or Organic Solutions, AC-MM-9 1-002301	Gross alpha determination
• Alpha Spectrometry with the ND9900 Data Acquisition System, AC-MM-1-003115	Alpha emitting radionuclides
• Alpha and Gamma-Ray Spectrometry with the ND9900 Data Acquisition System, AC-MM-2-21996	Gamma emitting radionuclides
• Multielement Comparative Neutron Activation Analysis, AC-MM-222003	Gross fissile

Appendix E
DATA QUALITY EVALUATION
(VALIDATION)

DATA QUALITY EVALUATION (VALIDATION)

E1. INTRODUCTION

The GAAT phase II characterization involved collecting and analyzing tank liquid and sludge samples to provide a basis for the evaluation and selection of remediation alternatives. The data presented in this TM, except for rejected data, were determined to be usable following a technical evaluation described below.

E2. DATA SOURCES

Sample analyses were performed by the ORNL CASD. The metals, wet chemistry, and most radiochemical analyses were performed at the RMAL, uranium and plutonium isotopic analyses were performed at the Transuranium Research Laboratory, and organic analyses were performed by the Analytical Methods Group.

E3. VALIDATION LEVEL

Radiological parameters, metals, volatile organic compounds (VOCs), nonhalogenated VOCs, base/neutral/acid-extractables (BNAEs), TOC, and anions were validated. Density and percent moisture were not validated because of insufficient data or minimal QC required by the method. Selected density data were randomly evaluated and found to be acceptable.

During the planning stages of this GAAT characterization, it was agreed that the data generated would receive a level 1 validation. Therefore, no raw data were evaluated. All sample results and associated QC, where available, were evaluated. This validation approach reduced project costs while providing necessary information concerning data quality.

E4. DATA REVIEW AND VALIDATION

This section describes the review of the data associated with this characterization activity. Because no national guidelines exist for the review and qualification of SW-846 methods or for radiological methods, the project-developed protocol described here was used.

Chemical Data Review and Validation

Chemical data were validated to determine their level of usability or uncertainty by evaluating the various aspects of the measurement process to provide the data user with an indication of the quality for a particular data set. The data were examined to evaluate the potential for false negatives and to ensure that known false positives were eliminated. This produced a data set that more accurately reflects actual tank conditions.

Metals data were validated using the ORNL inactive tanks sampling and analysis plan and project-developed guidelines for SW-846 methodologies; wet chemistry parameters were validated using the sampling and analysis plan and project-developed guidelines. The VOCs, nonhalogenated VOCs, and BNAEs were validated using the TRU waste characterization quality assurance project plan (QAPjP), Revision B, Draft July 8, 1995, and the subsequent variances. Data were evaluated using the information supplied by ORNL. If various items could not be evaluated due to missing information, this was noted in the validation narrative. Data were not qualified based on missing information.

Qualification codes were assigned to indicate the useability of the data. A validation code was assigned to indicate whether the data are valid (VV) or invalid (VI). Table E-1 presents a list of validation codes, review qualifiers, and qualification codes.

Established data quality objectives (DQOs) were addressed in the WIPP QAPjP (organics) and ORNL inactive tanks sampling and analysis plan (metals, wet chemistry). These DQOs established the precision and accuracy limits for duplicates, matrix spikes, and laboratory control samples. Calibration requirements and the associated performance objectives were also addressed in the WIPP QAPjP. Items assessed during data validation were

- holding times,
- blanks,
- surrogate recovery (organics only),
- ICP interference check sample (metals only),
- duplicate sample analyses,
- matrix spike/matrix spike duplicate analyses,
- methods used,
- overall assessment of data for a case,
- trip blanks (organics only), and
- detection limits (where available).

Any problems encountered during the data assessment are documented in the data assessment summaries, as is the rationale for qualified data.

Radiological Data Review and Validation

A level 1 validation was performed on the radiological data using Project Procedure 1503.2, "Data Review for Radiological Data," Rev. 2, and the GAAT sampling and analysis plan. Level 1 radiological validation includes an assessment of

- holding times,
- detection limits (where provided),
- blanks (where provided)
  - method
  - instrument,
- chemical/tracer recoveries (where provided),
- laboratory control samples (where provided),
- matrix spike recoveries (where provided),
- duplicate analyses (where provided),
- field duplicate relative percent differences (RPDs),
- methodology employed, and
- overall assessment of data for a case.

Appropriate review qualifiers, qualification codes, and validation codes were assigned following this review. The rationale for all qualified data is presented in the data assessment accompanying each package.

E5. DATA SUMMARY

Chemical Data Summary

VOCs. All duplicate RPDs were within the precision limits specified in the WIPP QAPjP. W10S325 and 326 displayed high laboratory control sample (LCS) recoveries for 1,1-dichloroethene. All VOC matrix spikes were below the QC recovery limits for trichloroethene. Three out of four matrix spikes/matrix spike duplicates (MS/MSDs) were below the QC limits for toluene and were qualified accordingly. W08S320 had low recoveries for toluene, trichloroethene, benzene, and chlorobenzene. No sample results were rejected due to MS/MSD recoveries or LCS recoveries. All samples were analyzed within the 14-day holding time. No target compounds were detected in trip blanks. The method blank for W10S325 and 326 displayed 1.2 ppm of 1,1-dichloroethene. As a result of this high concentration, W10S325 was qualified as a nondetect. Completeness was assessed by an evaluation of the percentage of valid data. The project-defined completeness goal of 90% was achieved, and all project-required quantitation limits (PRQLs) were achieved for these samples. Cyclohexane and 2-nitropropane were reported but not requested in revised Table 13-2 of variance 95-014. All VOC results were reported on a wet weight basis. Correction for moisture content would result in a significant increase in sample quantitation limits and detected concentrations.

Nonhalogenated VOCs. W06S311 displayed high MS/MSD RPDs for acetone, methyl ethyl ketone, and butanol and were qualified accordingly. All MS/MSD recoveries were compliant with the exception of samples W06S311 and W07H303B. Spike recoveries for sample W07H303B were below the suggested recovery limits. W06S311 displayed erratic spike recoveries and was qualified accordingly. Several LCS recoveries were out of the specified control limits. Acetone was rejected for W07H303A and W07H303B because the LCS recovery was less than 10%. W08S320, W08S321, W09S323, W06S311, W06S312, and W09S324 were rejected for methanol because the LCS recovery was less than 10%. Methanol was rejected for samples W08S W06S311 and W06S312 because the LCS recovery was below 10%. Several other compounds were estimated due to low LCS recoveries. The QAPP requires that the LCS be re-prepared if it is out of the QC limits. This was not performed for any of the reported data. All method blanks were free of contamination, and all holding times were compliant. The 90% completeness goal was achieved, and all PRQLs were achieved. All VOC results were reported on a wet weight basis. Correction for moisture content would result in a significant increase in sample quantitation limits and detected concentrations.

BNAEs. All precision goals were achieved with the exception of sample W06S311, which had a high RPD for 4-nitrophenol and pentachlorophenol in the MSD. All LCS recoveries were acceptable. Several samples exhibited poor MS/MSD recoveries. Sample W08S320 had zero percent recoveries for seven spiking compounds. Sample W08S326 had low recoveries for three of the spiking compounds. Sample W06S311 also exhibited low spike recoveries. All affected samples were qualified accordingly, and no compounds were rejected. Method blanks contained the common lab contaminants bis(2-ethyl hexyl)phthalate and di-n-butylphthalate (non-target compounds). All samples containing less than 10 times the blank concentration were qualified as nondetects. The 90% completeness goal defined in the WIPP QAPjP was achieved, and all PRQLs were achieved. All BNAE results were reported on a wet weight basis. Correction for moisture content would result in a significant increase in sample quantitation limits and detected concentrations.

Metals. Samples analyzed for metals were primarily qualified due to low spike recoveries. Elements exhibiting poor recovery included silver, aluminum, calcium, and magnesium. Aluminum, calcium, and magnesium spike recoveries were poor because of high levels present in the samples.The only compound rejected for poor spike recovery was silver. All other compounds were estimated.

Minimal problems were observed for the continuing calibration standard recoveries for arsenic, selenium, thallium, boron, calcium, potassium, and strontium. Metals instrument detection limits for W085320, W085321, W095323, W095324, W055314, W055315, W065312, W065311, W095325, and W095326 were significantly higher than the instrument detection limits (IDLs) presented in the sampling and analysis plan. These IDLs are calculated every 6 months and change with each calculation. The IDLs presented in the sampling and analysis plan were those that were valid at that time. Minimal problems were noted for the aluminum high standard and initial calibration verification. W035309/310 and W045306/307 displayed high duplicate RPDs for calcium and were estimated accordingly. W105325/326 displayed high duplicate RPDs for uranium and were estimated. Post digestion spike information was not supplied with the graphite furnace data and was not evaluated during the validation.

Metal results were reported on a wet weight basis. A correction for moisture content would result in a significant increase in sample concentration.

Wet chemistry. Minimal data limitations were observed in the wet chemistry parameters. The GAAT sampling and analysis plan expanded the control limits for the anions continuing calibration verification (CCV). A control limit of 15% was used to evaluate the calibration data. Chloride, nitrate, phosphate, and sulfate data for W035309, W035310, W045306, and W045307 exceed the 15% control limit. No blank data were supplied for anion analysis; therefore, the data could not be validated against this missing information.

All data were reported on a wet weight basis. A moisture correction would result in a significant increase in the sample concentration. All "less than" values are IDLs multiplied by the dilution factor. This modification defines these values as sample quantitation levels.

Radiological Data Summary

The radiological parameters generally displayed minimal data limitations. Uranium and plutonium isotopes were analyzed by isotope ratio mass spectroscopy. Uncertainties for the uranium isotopic data are 1 sigma, which represents a 68% confidence level. No preparation blank was evaluated because none was analyzed. Standards were analyzed with each batch to correct for bias due to mass discrimination and instrument dead time and were evaluated by ORNL CASD. Minimal information for these was provided for validation. Validation of uranium and plutonium isotopics by mass spectroscopy was limited due to a lack of QC information. The validation of these analyses strictly indicates isotopic abundances that were greater or less than the IDL. "Less than" values represent isotopes that were below the lowest abundance that could be detected.

The IDLs defined in the GAAT sampling and analysis plan could not be evaluated because these values were not provided in the data packages. Attachment 2 of the GAAT sampling and analysis plan change 001 listed specific QC acceptance criteria for radioactive liquid/solid waste samples. The check standard specified for uranium and plutonium isotopics by mass spectrometry could not be evaluated because this information was not provided in the radiological data packages. The values reported for the radiological parameters have not been corrected for moisture content. All other "less than" values are representative of minimal detectable activities calculated from the background value for that sample.

E6. METHODS OF ANALYSIS

The methods employed for the chemical analyses are presented in Table D-1, as are radiochemical analysis methods.

E7. UNITS OF MEASURE

Units of measure for all reported parameters are listed in Table E-2.

E8. CONCLUSION

The data used to characterize the GAAT phase II waste have been evaluated for quality. The review consisted of a level 1 validation; blanks, spikes, duplicates, matrix spikes, holding times, and preservation were evaluated. Organics data were validated against the WIPP QAPjP and the associated variances. The radiochemical, wet chemistry, and metals data were validated against the GAAT sampling and analysis plan. Metals and wet chemistry data were validated using a project-specific validation based on SW-846 methodology. Radiological data were validated using project-specific validation procedures. Limitations associated with the data have been reflected through the application of review qualifiers. All data were reported on a wet weight basis and were not corrected for moisture. The resulting low bias should be considered when evaluating the data. Data that did not meet minimum quality standards were rejected.

Based on the review of the GAAT Phase II data set, it has been determined that the data are of sufficient quality, with the limitations outlined above, for use in the characterization of waste in the GAAT.

Table E-1. Validation codes, review qualifiers, and qualification codes

Review Qualifiers	Validation Codes
U	- UndetectedVV - Verified/Valid
J	- Estimated DetectVI- Verified/Invalid
UJ	- Estimated Nondetect
R	- Rejected
-	- Unqualified Result
Qualification Codes	
Radiological Data	
B	- Sample results ≤5× the blank, or blank is contaminated
C	- Certificate for spike unavailable
E	- Associated error is ≥ the result
H	- Missed 6-month holding time
I	- Instrument problems in analysis
M	- Matrix problem in analysis
N	- Tentatively identified radionuclide
P	- Procedural problem in analysis
D	- Duplicate difference if >2σ or 25% (35% for solids) when sample results >5× minimum detectable activity (MDA)
S	- Problem with spike recovery (JM<75% OR >125% recovery if results are >MDA; UJ> 125% if <MDA; R<75% if <MDA)
T	- Problem with tracer recovery (J<30 and R<15%)
-	- No problems requiring the qualification of results
Inorganic Data	
1	- Holding times12-Standards
2	- Sampling preservation13-N/A
3	- Sample custody14-Other
4	- Missing deliverables15-Furnace QC
5A	- Calibration (initial)16-ICP serial dilution
5B	- Calibration (continuing)17-Chemical recovery
6	- Field blank18-Trip blank
7	- Lab blank19-N/A
8	- Matrix spike20-Linear range exceeded
9	- Duplicate or matrix spike duplicate21-Potential range exceeded
10	- Laboratory control sample (LCS)22-Sample lost in analysis
11	- Detection limit

Table E-1. (continued)

Organics	
H	- Holding times were exceeded
M	- Tuning (bromofluorobenzene or decafluorotriphenylphosphine) was not compliant
L	- Laboratory control sample results were out of QC limits
R	- Relative response factor was 0.05
C	- Percent relative standard deviation or percent difference was outside of QC limits
B	- Presumed contamination from method blank
T	- Presumed contamination from trip blank
F	- Presumed contamination from field blank
S	- Surrogate recovery was outside of QC limits
Q	- MS/MSD recovery was poor or RPD was high
E	- Field duplicates showed poor agreement
I	- Internal standard performance was unsatisfactory
+	- False positive (reported compound was not present)
-	- False negative (compound was present but not reported)
$	- Reported result or other information was incorrect
?	- TIC identify or reported retention time has been changed
D	- Original analyses, dilutions, reanalysis, or duplicate data that should not be used because another more technically sound analysis is available
P	- Instrument performance for pesticides was poor
*	- Unusual problems with the data that have been described in the data summary
Z	- The QC level of validation has been reduced
X	- A difference between the original hardcopy and the electronic data was found
!	- Designated as a QC sample

Table E-1. (continued)

Wet Chemistry	
H	- Holding time exceeded
S	- Standard out of SOW/SOP specifications
C	- Correlation coefficient <0.995
R	- Percent recovery calibration (initial and continuing) out of control
B	- Presumed contamination from blank results
L	- LCS percent recovery out of control limits
E	- Duplicate sample results not within control
Q	- MSD, MS, or RPD out of control
F	- Field duplicates showed poor agreement
$	- Reported result or other information was incorrect
*	- Unusual problems with the data that have been described in the data summary
Z	- The QC level of validation has been reduced

Table E-2. ORNL units of measure

Parameter	Solid	Liquid
Metals	µg/g	µg/mL
Total carbon	µg/g	µg/mL
Anions	µg/g	µg/mL
Density	g/mL	g/mL
Alpha spectrometry	%	%
Gamma spectroscopy	Bq/g	Bq/mL
Gross fissile	µg/g	µg/mL
Gross alpha/beta	Bq/g	Bq/mL
Total radioactive strontium	Bq/g	Bq/mL
Plutonium-total	Bq/g	Bq/mL
Plutonium-isotopic (MS)	atom %	atom %
Uranium-total (ICP/MS)	NA	µg/mL
Uranium isotopic (MS)	atom %	atom %

Appendix F

ANALYTICAL RESULTS

Tank W-3

SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-03S309	SLUDGE	CARBON	SW846 9060	TOT C	6100	518		µg/g				V V
W-03S309	SLUDGE	CARBON	SW846 9060	TIC	1860	106		µg/g				V V
W-03S309	SLUDGE	CARBON	SW846 9060	TOC	4240	123		µg/g				V V
W-03S309	SLUDGE	ANION	SW846 9056	BR			<5.99	µg/g	<	U		V V
W-03S309	SLUDGE	ANION	SW846 9056	F	20.9	0.2		µg/g				V V
W-03S309	SLUDGE	ANION	SW846 9056	NO3			<12	µg/g	<	UJ	R	V V
W-03S309	SLUDGE	ANION	SW846 9056	PO4	1510	66		µg/g		J	R	V V
W-03S309	SLUDGE	ANION	SW846 9056	SO4	513	4		µg/g		J	R	V V
W-03S309	SLUDGE	METAL	SW846 6010A	AG	2.51E+01	4.00E-01		µg/g		J	10	V V
W-03S309	SLUDGE	METAL	SW846 6010A	AL	7.33E+02	8.00E-01		µg/g		J	8	V V
W-03S309	SLUDGE	METAL	SW846 6010A	B	3.30E+00	6.00E-01		µg/g				V V
W-03S309	SLUDGE	METAL	SW846 6010A	BA	5.40E+00	0.00E+00		µg/g				V V
W-03S309	SLUDGE	METAL	SW846 6010A	BE			<.02	µg/g	<	U		V V
W-03S309	SLUDGE	METAL	SW846 6010A	CA	1.34E+04	7.48E+01		µg/g		J	9	V V
W-03S309	SLUDGE	METAL	SW846 6010A	CD			<1.47	µg/g	<	U		V V
W-03S309	SLUDGE	METAL	SW846 6010A	CO	3.20E+00	1.40E+00		µg/g				V V
W-03S309	SLUDGE	METAL	SW846 6010A	CR	2.88E+02	9.99E-01		µg/g				V V
W-03S309	SLUDGE	METAL	SW846 6010A	CU	3.23E+01	4.00E-01		µg/g				V V
W-03S309	SLUDGE	METAL	SW846 6010A	FE	2.45E+02	8.00E-01		µg/g				V V
W-03S309	SLUDGE	METAL	SW846 6010A	K	3.34E+02	6.60E+00		µg/g				V V
W-03S309	SLUDGE	METAL	SW846 6010A	MG	8.74E+02	2.20E+00		µg/g		J	8	V V
W-03S309	SLUDGE	METAL	SW846 6010A	MN	2.64E+01	0.00E+00		µg/g				V V
W-03S309	SLUDGE	METAL	SW846 6010A	NA	9.54E+03	9.45E+01		µg/g				V V
W-03S309	SLUDGE	METAL	SW846 6010A	NI	5.50E+00	1.80E+00		µg/g				V V
W-03S309	SLUDGE	METAL	SW846 6010A	SB			<19.8	µg/g	<	U		V V
W-03S309	SLUDGE	METAL	SW846 6010A	SR	3.18E+01	0.00E+00		µg/g				V V
W-03S309	SLUDGE	METAL	SW846 6010A	TH	2.16E+03	2.86E+01		µg/g				V V
W-03S309	SLUDGE	METAL	SW846 6010A	U	4.79E+04	4.22E+02		µg/g				V V
W-03S309	SLUDGE	METAL	SW846 6010A	V			<.51	µg/g	<	U		V V
W-03S309	SLUDGE	METAL	SW846 6010A	ZN	3.10E+00	1.60E+00		µg/g		J	7	V V
W-03S309	SLUDGE	METAL	SW846 7000A	AS			<.5	µg/g	<	UJ	5B	V V
W-03S309	SLUDGE	METAL	SW846 7000A	PB			<5	µg/g	<	U		V V
W-03S309	SLUDGE	METAL	SW846 7000A	SE			<.5	µg/g	<	UJ	5B	V V
W-03S309	SLUDGE	METAL	SW846 7000A	TL			<.5	µg/g	<	UJ	5B	V V
W-03S309	SLUDGE	METAL	SW846 7471A	HG	2.23E+01	7.70E-03		µg/g		UJ	5B	V V
W-03S309	SLUDGE	METAL	SW846 9056	CL			<5.99	µg/g	<	UJ	R	V V
W-03S309	SLUDGE	PHYSC	GAAT SAP	MOISTURE	87.9			%				
W-03S309	SLUDGE	RADS	AC-MM-1 003115	PHA 4.20MEV U238	10.5			%				V V
W-03S309	SLUDGE	RADS	AC-MM-1 003115	PHA 4.82MEV U234/TH229	33.8			%				V V
W-03S309	SLUDGE	RADS	AC-MM-1 003115	PHA 5.15 MEV PU239/240	39.4			%				V V
W-03S309	SLUDGE	RADS	AC-MM-1 003115	PHA 5.50 MEV PU238/AM241	16.3			%				V V
W-03S309	SLUDGE	RADS	AC-MM-1 003115	PU-238	1.8E2	0.2E2		Bq/g				V V
W-03S309	SLUDGE	RADS	AC-MM-1 003115	PU-239/240	1.9E3	0.4E3		Bq/g				V V

Tank W-3

SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-03S309	SLUDGE	RADS	AC-MM-2 1111	G-BETA	1.4E5	0.1E5		Bq/g				V V
W-03S309	SLUDGE	RADS	AC-MM-2 21807	TOTAL-RAD-SR	3.9E4	0.2E4		Bq/g				V V
W-03S309	SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	2.1E3	0.4E3		Bq/g				V V
W-03S309	SLUDGE	RADS	EPA 900.0	G-ALPHA	6.5E3	0.5E3		Bq/g				V V
W-03S309	SLUDGE	RADS	EPA 901.1	AM-241	1.7E3	1.0E3		Bq/g				V V
W-03S309	SLUDGE	RADS	EPA 901.1	CO-60			<120	Bq/g	<	U		V V
W-03S309	SLUDGE	RADS	EPA 901.1	CS-134			<220	Bq/g	<	U		V V
W-03S309	SLUDGE	RADS	EPA 901.1	CS-137	4.7E4	0.1E4		Bq/g				V V
W-03S309	SLUDGE	RADS	EPA 901.1	EU-152			<880	Bq/g	<	U		V V
W-03S309	SLUDGE	RADS	EPA 901.1	EU-154			<340	Bq/g	<	U		V V
W-03S309	SLUDGE	RADS	EPA 901.1	EU-155			<640	Bq/g	<	U		V V
W-03S310	SLUDGE	CARBON	SW846 9060	TOT C	5590	396		µg/g				V V
W-03S310	SLUDGE	CARBON	SW846 9060	TIC	1110	55		µg/g				V V
W-03S310	SLUDGE	CARBON	SW846 9060	TOC	4480	128		µg/g				V V
W-03S310	SLUDGE	ANION	SW846 9056	BR			<4.8	µg/g	<	U		V V
W-03S310	SLUDGE	ANION	SW846 9056	F	17.5	0.8		µg/g				V V
W-03S310	SLUDGE	ANION	SW846 9056	NO3			<9.6	µg/g	<	UJ	R	V V
W-03S310	SLUDGE	ANION	SW846 9056	PO4	1370	7		µg/g		J	R	V V
W-03S310	SLUDGE	ANION	SW846 9056	SO4	539	11		µg/g		J	R	V V
W-03S310	SLUDGE	METAL	SW846 6010A	AG	2.27E+01	5.88E-01		µg/g		J	10	V V
W-03S310	SLUDGE	METAL	SW846 6010A	AL	9.13E+02	9.80E+00		µg/g		J	8	V V
W-03S310	SLUDGE	METAL	SW846 6010A	B	2.94E+00	0.00E+00		µg/g				V V
W-03S310	SLUDGE	METAL	SW846 6010A	BA	2.94E+00	0.00E+00		µg/g				V V
W-03S310	SLUDGE	METAL	SW846 6010A	BE			<.0196	µg/g	<	U		V V
W-03S310	SLUDGE	METAL	SW846 6010A	CA	8.12E+03	9.06E+01		µg/g		J	9	V V
W-03S310	SLUDGE	METAL	SW846 6010A	CD			<1.44	µg/g	<	U		V V
W-03S310	SLUDGE	METAL	SW846 6010A	CO	3.82E+00	9.80E-01		µg/g				V V
W-03S310	SLUDGE	METAL	SW846 6010A	CR	2.52E+02	1.76E+00		µg/g				V V
W-03S310	SLUDGE	METAL	SW846 6010A	CU	2.72E+01	1.96E-01		µg/g				V V
W-03S310	SLUDGE	METAL	SW846 6010A	FE	1.95E+02	9.80E-01		µg/g				V V
W-03S310	SLUDGE	METAL	SW846 6010A	K	2.98E+02	6.27E+00		µg/g				V V
W-03S310	SLUDGE	METAL	SW846 6010A	MG	5.77E+02	1.04E+01		µg/g		J	8	V V
W-03S310	SLUDGE	METAL	SW846 6010A	MN	4.41E+01	3.92E-01		µg/g				V V
W-03S310	SLUDGE	METAL	SW846 6010A	NA	8.38E+03	8.84E+01		µg/g				V V
W-03S310	SLUDGE	METAL	SW846 6010A	NI	5.78E+00	1.37E+00		µg/g				V V
W-03S310	SLUDGE	METAL	SW846 6010A	SB			<19.4	µg/g	<	U		V V
W-03S310	SLUDGE	METAL	SW846 6010A	SR	2.12E+01	3.92E-01		µg/g				V V
W-03S310	SLUDGE	METAL	SW846 6010A	TH	1.32E+03	0.00E+00		µg/g				V V
W-03S310	SLUDGE	METAL	SW846 6010A	U	4.23E+04	4.81E+02		µg/g				V V
W-03S310	SLUDGE	METAL	SW846 6010A	V			<.5	µg/g	<	U		V V
W-03S310	SLUDGE	METAL	SW846 6010A	ZN			<1.51	µg/g	<	UJ	7	V V
W-03S310	SLUDGE	METAL	SW846 7000A	AS			<.49	µg/g	<	UJ	5B	V V
W-03S310	SLUDGE	METAL	SW846 7000A	PB	9.90E+00	6.27E-01		µg/g				V V
W-03S310	SLUDGE	METAL	SW846 7000A	SE			<.49	µg/g	<	UJ	5B	V V
W-03S310	SLUDGE	METAL	SW846 7000A	TL			<.49	µg/g	<	UJ	5B	V V

Tank W-3

SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-03S310	SLUDGE	METAL	SW846 7471A	HG	1.67E+01	1.29E-01		µg/g		UJ	5B	V V
W-03S310	SLUDGE	METAL	SW846 9056	CL			<4.8	µg/g	<	UJ	R	V V
W-03S310	SLUDGE	PHYSC	GAAT SAP	MOISTURE	88.6			%				
W-03S310	SLUDGE	RADS	AC-MM-1 003115	PHA 4.20MEV U238	5.1			%				V V
W-03S310	SLUDGE	RADS	AC-MM-1 003115	PHA 4.82MEV U234/TH229	26.2			%				V V
W-03S310	SLUDGE	RADS	AC-MM-1 003115	PHA 5.15 MEV PU239/240	42.9			%				V V
W-03S310	SLUDGE	RADS	AC-MM-1 003115	PHA 5.50 MEV PU238/AM241	25.7			%				V V
W-03S310	SLUDGE	RADS	AC-MM-1 003115	PU-238	1.4E2	0.2E2		Bq/g				V V
W-03S310	SLUDGE	RADS	AC-MM-1 003115	PU-239/240	2.8E3	0.4E3		Bq/g				V V
W-03S310	SLUDGE	RADS	AC-MM-2 1111	G-BETA	1.5E5	0.1E5		Bq/g				V V
W-03S310	SLUDGE	RADS	AC-MM-2 21807	TOTAL-RAD-SR	1.9E4	0.1E4		Bq/g				V V
W-03S310	SLUDGE	RADS	AC-MM-2 22003	G-FISSILE(TOT)	2.7E2	0.1E2		ug/g				V V
W-03S310	SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	3.0E3	0.4E3		Bq/g				V V
W-03S310	SLUDGE	RADS	AC-MM-4 0100	PU-ISO-238	0.41	0.20		% atoms				V V
W-03S310	SLUDGE	RADS	AC-MM-4 0100	PU-ISO-239	88.22	0.24		% atoms				V V
W-03S310	SLUDGE	RADS	AC-MM-4 0100	PU-ISO-240	10.72	0.07		% atoms				V V
W-03S310	SLUDGE	RADS	AC-MM-4 0100	PU-ISO-241	0.33	0.01		% atoms				V V
W-03S310	SLUDGE	RADS	AC-MM-4 0100	PU-ISO-242	0.32	0.01		% atoms				V V
W-03S310	SLUDGE	RADS	AC-MM-4 0100	PU-ISO-244			<.01	% atoms	<	U		V V
W-03S310	SLUDGE	RADS	AC-MM-4 0100	U-ISO-233	0.008	0.001		% atoms				V V
W-03S310	SLUDGE	RADS	AC-MM-4 0100	U-ISO-234	0.005	0.0003		% atoms				V V
W-03S310	SLUDGE	RADS	AC-MM-4 0100	U-ISO-235	0.699	0.004		% atoms				V V
W-03S310	SLUDGE	RADS	AC-MM-4 0100	U-ISO-236	0.003	0.0002		% atoms				V V
W-03S310	SLUDGE	RADS	AC-MM-4 0100	U-ISO-238	99.285	0.005		% atoms				V V
W-03S310	SLUDGE	RADS	EPA 900.0	G-ALPHA	8.4E3	0.5E3		Bq/g				V V
W-03S310	SLUDGE	RADS	EPA 901.1	AM-241	2.3E3	1.0E3		Bq/g				V V
W-03S310	SLUDGE	RADS	EPA 901.1	CO-60			<150	Bq/g	<	U		V V
W-03S310	SLUDGE	RADS	EPA 901.1	CS-134			<210	Bq/g	<	U		V V
W-03S310	SLUDGE	RADS	EPA 901.1	CS-137	4.3E4	0.1E4		Bq/g				V V
W-03S310	SLUDGE	RADS	EPA 901.1	EU-152			<760	Bq/g	<	U		V V
W-03S310	SLUDGE	RADS	EPA 901.1	EU-154			<490	Bq/g	<	U		V V
W-03S310	SLUDGE	RADS	EPA 901.1	EU-155			<590	Bq/g	<	U		V V

Tank W-4

SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-04S306	SLUDGE	CARBON	SW846 9060	TOT C	2450	184		µg/g				V V
W-04S306	SLUDGE	CARBON	SW846 9060	TIC	1990	214		µg/g				V V
W-04S306	SLUDGE	CARBON	SW846 9060	TOC	453	63		µg/g				V V
W-04S306	SLUDGE	ANION	SW846 9056	BR			<4.96	µg/g	<	U		V V
W-04S306	SLUDGE	ANION	SW846 9056	F	22.6	1.5		µg/g				V V
W-04S306	SLUDGE	ANION	SW846 9056	NO3	1730	88		µg/g		J	R	V V
W-04S306	SLUDGE	ANION	SW846 9056	PO4	434	15		µg/g		J	R	V V
W-04S306	SLUDGE	ANION	SW846 9056	SO4	2220	55		µg/g		J	R	V V
W-04S306	SLUDGE	METAL	SW846 6010A	AG	2.31E+01	5.95E-01		µg/g		J	10	V V
W-04S306	SLUDGE	METAL	SW846 6010A	AL	8.15E+03	1.22E+02		µg/g		J	8	V V
W-04S306	SLUDGE	METAL	SW846 6010A	B	4.86E+00	7.93E-01		µg/g				V V
W-04S306	SLUDGE	METAL	SW846 6010A	BA	6.54E+00	0.00E+00		µg/g				V V
W-04S306	SLUDGE	METAL	SW846 6010A	BE	1.56E+01	1.98E-01		µg/g				V V
W-04S306	SLUDGE	METAL	SW846 6010A	CA	1.66E+03	1.53E+01		µg/g		J	9	V V
W-04S306	SLUDGE	METAL	SW846 6010A	CD	5.55E+00	9.91E-01		µg/g				V V
W-04S306	SLUDGE	METAL	SW846 6010A	CO	4.76E+00	3.96E-01		µg/g				V V
W-04S306	SLUDGE	METAL	SW846 6010A	CR	2.12E+02	1.39E+00		µg/g				V V
W-04S306	SLUDGE	METAL	SW846 6010A	CU	3.83E+01	7.93E-01		µg/g				V V
W-04S306	SLUDGE	METAL	SW846 6010A	FE	8.39E+02	7.73E+00		µg/g				V V
W-04S306	SLUDGE	METAL	SW846 6010A	K	2.19E+02	8.92E+00		µg/g				V V
W-04S306	SLUDGE	METAL	SW846 6010A	MG	2.91E+02	7.14E+00		µg/g		J	8	V V
W-04S306	SLUDGE	METAL	SW846 6010A	MN	1.80E+01	1.98E-01		µg/g				V V
W-04S306	SLUDGE	METAL	SW846 6010A	NA	1.17E+04	1.61E+02		µg/g				V V
W-04S306	SLUDGE	METAL	SW846 6010A	NI	1.52E+01	7.93E-01		µg/g				V V
W-04S306	SLUDGE	METAL	SW846 6010A	SB			<19.6	µg/g	<	U		V V
W-04S306	SLUDGE	METAL	SW846 6010A	SR	1.65E+01	3.96E-01		µg/g				V V
W-04S306	SLUDGE	METAL	SW846 6010A	TH	4.43E+03	0.00E+00		µg/g				V V
W-04S306	SLUDGE	METAL	SW846 6010A	U	4.31E+04	3.68E+02		µg/g				V V
W-04S306	SLUDGE	METAL	SW846 6010A	V			<.505	µg/g	<	U		V V
W-04S306	SLUDGE	METAL	SW846 6010A	ZN	7.93E+00	1.78E+00		µg/g		J	7	V V
W-04S306	SLUDGE	METAL	SW846 7000A	AS			<.496	µg/g	<	UJ	5B	V V
W-04S306	SLUDGE	METAL	SW846 7000A	PB	1.56E+01	1.98E-01		µg/g				V V
W-04S306	SLUDGE	METAL	SW846 7000A	SE			<.496	µg/g	<	UJ	5B	V V
W-04S306	SLUDGE	METAL	SW846 7000A	TL			<.496	µg/g	<	UJ	5B	V V
W-04S306	SLUDGE	METAL	SW846 7471A	HG	2.59E+01	7.63E-02		µg/g				V V
W-04S306	SLUDGE	METAL	SW846 9056	CL			<4.96	µg/g	<	UJ	R	V V
W-04S306	SLUDGE	PHYSC	GAAT SAP	MOISTURE	83.4			%				
W-04S306	SLUDGE	RADS	AC-MM-1 003115	PHA 4.20MEV U238	6.9			%				V V
W-04S306	SLUDGE	RADS	AC-MM-1 003115	PHA 4.82MEV U234/TH229	12.9			%				V V
W-04S306	SLUDGE	RADS	AC-MM-1 003115	PHA 5.15 MEV PU239/240	74.0			%				V V
W-04S306	SLUDGE	RADS	AC-MM-1 003115	PHA 5.50 MEV PU238/AM241	6.2			%				V V
W-04S306	SLUDGE	RADS	AC-MM-1 003115	PU-238	6.7E1	0.7E1		Bq/g				V V
W-04S306	SLUDGE	RADS	AC-MM-1 003115	PU-239/240	5.1E3	0.6E3		Bq/g				V V

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-04S306	SLUDGE	RADS	AC-MM-2 1111	G-BETA	9.0E5	0.1E5		Bq/g				V V
W-04S306	SLUDGE	RADS	AC-MM-2 21807	TOTAL-RAD-SR	2.6E5	0.1E5		Bq/g				V V
W-04S306	SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	5.16E3	0.6E3		Bq/g				V V
W-04S306	SLUDGE	RADS	EPA 900.0	G-ALPHA	7.2E3	0.5E3		Bq/g				V V
W-04S306	SLUDGE	RADS	EPA 901.1	AM-241			<2000	Bq/g	<	U		V V
W-04S306	SLUDGE	RADS	EPA 901.1	CO-60			<140	Bq/g	<	U		V V
W-04S306	SLUDGE	RADS	EPA 901.1	CS-134			<260	Bq/g	<	U		V V
W-04S306	SLUDGE	RADS	EPA 901.1	CS-137	8.5E4	0.2E4		Bq/g				V V
W-04S306	SLUDGE	RADS	EPA 901.1	EU-152			<1200	Bq/g	<	U		V V
W-04S306	SLUDGE	RADS	EPA 901.1	EU-154			<480	Bq/g	<	U		V V
W-04S306	SLUDGE	RADS	EPA 901.1	EU-155			<960	Bq/g	<	U		V V
W-04S307	SLUDGE	CARBON	SW846 9060	TOT C	2510	81		µg/g				V V
W-04S307	SLUDGE	CARBON	SW846 9060	TIC	1380	61		µg/g				V V
W-04S307	SLUDGE	CARBON	SW846 9060	TOC	1130	63		µg/g				V V
W-04S307	SLUDGE	ANION	SW846 9056	BR			<4.8	µg/g	<	U		V V
W-04S307	SLUDGE	ANION	SW846 9056	F	20.0	2.8		µg/g				V V
W-04S307	SLUDGE	ANION	SW846 9056	NO3	1420	107		µg/g		J	R	V V
W-04S307	SLUDGE	ANION	SW846 9056	PO4	147	4		µg/g		J	R	V V
W-04S307	SLUDGE	ANION	SW846 9056	SO4	1530	43		µg/g		J	R	V V
W-04S307	SLUDGE	METAL	SW846 6010A	AG	2.63E+01	6.05E-01		µg/g		J	10	V V
W-04S307	SLUDGE	METAL	SW846 6010A	AL	7.48E+03	7.31E+01		µg/g		J	8	V V
W-04S307	SLUDGE	METAL	SW846 6010A	B	5.44E+00	4.03E-01		µg/g				V V
W-04S307	SLUDGE	METAL	SW846 6010A	BA	1.80E+01	2.02E-01		µg/g				V V
W-04S307	SLUDGE	METAL	SW846 6010A	BE	6.55E+00	0.00E+00		µg/g				V V
W-04S307	SLUDGE	METAL	SW846 6010A	CA	2.04E+03	1.77E+01		µg/g		J	9	V V
W-04S307	SLUDGE	METAL	SW846 6010A	CD	4.84E+00	2.02E-01		µg/g				V V
W-04S307	SLUDGE	METAL	SW846 6010A	CO	5.64E+00	1.21E+00		µg/g				V V
W-04S307	SLUDGE	METAL	SW846 6010A	CR	2.27E+02	1.81E+00		µg/g				V V
W-04S307	SLUDGE	METAL	SW846 6010A	CU	3.96E+01	6.05E-01		µg/g				V V
W-04S307	SLUDGE	METAL	SW846 6010A	FE	1.70E+03	8.87E+00		µg/g				V V
W-04S307	SLUDGE	METAL	SW846 6010A	K	4.59E+02	6.25E+00		µg/g				V V
W-04S307	SLUDGE	METAL	SW846 6010A	MG	5.38E+02	1.01E+01		µg/g		J	8	V V
W-04S307	SLUDGE	METAL	SW846 6010A	MN	2.86E+01	2.02E-01		µg/g				V V
W-04S307	SLUDGE	METAL	SW846 6010A	NA	1.09E+04	4.43E+00		µg/g				V V
W-04S307	SLUDGE	METAL	SW846 6010A	NI	1.42E+01	1.01E+00		µg/g				V V
W-04S307	SLUDGE	METAL	SW846 6010A	SB			<20	µg/g	<	U		V V
W-04S307	SLUDGE	METAL	SW846 6010A	SR	2.22E+01	4.03E-01		µg/g				V V
W-04S307	SLUDGE	METAL	SW846 6010A	TH	3.05E+03	1.06E+02		µg/g				V V
W-04S307	SLUDGE	METAL	SW846 6010A	U	4.99E+04	1.24E+02		µg/g				V V
W-04S307	SLUDGE	METAL	SW846 6010A	V			<.514	µg/g	<	U		V V
W-04S307	SLUDGE	METAL	SW846 6010A	ZN	1.03E+01	1.61E+00		µg/g				V V
W-04S307	SLUDGE	METAL	SW846 7000A	AS			<.504	µg/g	<	UJ	5B	V V
W-04S307	SLUDGE	METAL	SW846 7000A	PB	1.71E+01	8.06E-01		µg/g				V V
W-04S307	SLUDGE	METAL	SW846 7000A	SE			<.504	µg/g	<	UJ	5B	V V
W-04S307	SLUDGE	METAL	SW846 7000A	TL			<.504	µg/g	<	UJ	5B	V V

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-04S307	SLUDGE	METAL	SW846 7471A	HG	6.26E+01	6.65E-02		µg/g				V V
W-04S307	SLUDGE	METAL	SW846 9056	CL			<4.8	µg/g	<	UJ	R	V V
W-04S307	SLUDGE	PHYSC	AC-MM-1 1011	DENSITY	1.20	0.15		g/ml				
W-04S307	SLUDGE	PHYSC	GAAT SAP	MOISTURE	76.6			%				
W-04S307	SLUDGE	RADS	AC-MM-1 003115	PHA 4.20MEV U238	3.6			%				V V
W-04S307	SLUDGE	RADS	AC-MM-1 003115	PHA 4.82MEV U234/TH229	15.7			%				V V
W-04S307	SLUDGE	RADS	AC-MM-1 003115	PHA 5.15 MEV PU239/240	71.2			%				V V
W-04S307	SLUDGE	RADS	AC-MM-1 003115	PHA 5.50 MEV PU238/AM241	9.6			%				V V
W-04S307	SLUDGE	RADS	AC-MM-1 003115	PU-238	1.7E2	0.2E2		Bq/g				V V
W-04S307	SLUDGE	RADS	AC-MM-1 003115	PU-239/240	1.2E4	0.1E4		Bq/g				V V
W-04S307	SLUDGE	RADS	AC-MM-2 1111	G-BETA	9.2E5	0.1E5		Bq/g				V V
W-04S307	SLUDGE	RADS	AC-MM-2 21807	TOTAL-RAD-SR	1.7E5	0.1E5		Bq/g				V V
W-04S307	SLUDGE	RADS	AC-MM-2 22003	G-FISSILE(TOT)	3.4E2	0.1E2		ug/g				V V
W-04S307	SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	1.2E4	0.1E4		Bq/g				V V
W-04S307	SLUDGE	RADS	AC-MM-4 0100	PU-ISO-238	0.02	0.01		% atoms				V V
W-04S307	SLUDGE	RADS	AC-MM-4 0100	PU-ISO-239	96.74	0.02		% atoms				V V
W-04S307	SLUDGE	RADS	AC-MM-4 0100	PU-ISO-240	3.15	0.01		% atoms				V V
W-04S307	SLUDGE	RADS	AC-MM-4 0100	PU-ISO-241	0.05	0.001		% atoms				V V
W-04S307	SLUDGE	RADS	AC-MM-4 0100	PU-ISO-242	0.04	0.001		% atoms				V V
W-04S307	SLUDGE	RADS	AC-MM-4 0100	PU-ISO-244			<.01	% atoms	<	U		V V
W-04S307	SLUDGE	RADS	AC-MM-4 0100	U-ISO-233			<.001	% atoms	<	U		V V
W-04S307	SLUDGE	RADS	AC-MM-4 0100	U-ISO-234	0.0055	0.0001		% atoms				V V
W-04S307	SLUDGE	RADS	AC-MM-4 0100	U-ISO-235	0.705	0.006		% atoms				V V
W-04S307	SLUDGE	RADS	AC-MM-4 0100	U-ISO-236	0.003	0.0002		% atoms				V V
W-04S307	SLUDGE	RADS	AC-MM-4 0100	U-ISO-238	99.286	0.006		% atoms				V V
W-04S307	SLUDGE	RADS	EPA 900.0	G-ALPHA	1.6E4	0.1E4		Bq/g				V V
W-04S307	SLUDGE	RADS	EPA 901.1	AM-241			<3100	Bq/g	<	U		V V
W-04S307	SLUDGE	RADS	EPA 901.1	CO-60			<140	Bq/g	<	U		V V
W-04S307	SLUDGE	RADS	EPA 901.1	CS-134			<480	Bq/g	<	U		V V
W-04S307	SLUDGE	RADS	EPA 901.1	CS-137	3.4E5	0.1E5		Bq/g				V V
W-04S307	SLUDGE	RADS	EPA 901.1	EU-152			<2300	Bq/g	<	U		V V
W-04S307	SLUDGE	RADS	EPA 901.1	EU-154			<340	Bq/g	<	U		V V
W-04S307	SLUDGE	RADS	EPA 901.1	EU-155			<1500	Bq/g	<	U		V V

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-05S314	SLUDGE	CARBON	SW846 9060	TOT C	2740	447		µg/g				V V
W-05S314	SLUDGE	CARBON	SW846 9060	TIC	1900	281		µg/g				V V
W-05S314	SLUDGE	CARBON	SW846 9060	TOC	847	113		µg/g				V V
W-05S314	SLUDGE	ANION	SW846 9056	BR			<33.6	µg/g	<	U		V V
W-05S314	SLUDGE	ANION	SW846 9056	F	1880	67		µg/g				V V
W-05S314	SLUDGE	ANION	SW846 9056	NO3	602	21		µg/g				V V
W-05S314	SLUDGE	ANION	SW846 9056	PO4	3090	143		µg/g				V V
W-05S314	SLUDGE	ANION	SW846 9056	SO4	308	28		µg/g				V V
W-05S314	SLUDGE	METAL	SW846 6010A	AG			<3.94	µg/g	<	R	8	V I
W-05S314	SLUDGE	METAL	SW846 6010A	AL	1.57E+04	7.05E+02		µg/g				V V
W-05S314	SLUDGE	METAL	SW846 6010A	B	1.63E+01	4.15E-01		µg/g		J	5B	V V
W-05S314	SLUDGE	METAL	SW846 6010A	BA	3.97E+01	1.45E+00		µg/g				V V
W-05S314	SLUDGE	METAL	SW846 6010A	BE			<1.5	µg/g	<	U		V V
W-05S314	SLUDGE	METAL	SW846 6010A	CA	9.00E+03	1.04E+02		µg/g				V V
W-05S314	SLUDGE	METAL	SW846 6010A	CD	2.38E+00	2.07E-01		µg/g				V V
W-05S314	SLUDGE	METAL	SW846 6010A	CO			<2.51	µg/g	<	U		V V
W-05S314	SLUDGE	METAL	SW846 6010A	CR	1.58E+03	3.92E+01		µg/g				V V
W-05S314	SLUDGE	METAL	SW846 6010A	CU	4.05E+01	1.66E+00		µg/g		J	5B	V V
W-05S314	SLUDGE	METAL	SW846 6010A	FE	1.94E+04	5.40E+02		µg/g				V V
W-05S314	SLUDGE	METAL	SW846 6010A	K	5.09E+02	2.07E+01		µg/g		J	5B	V V
W-05S314	SLUDGE	METAL	SW846 6010A	MG	1.01E+04	2.70E+02		µg/g				V V
W-05S314	SLUDGE	METAL	SW846 6010A	MN	4.33E+02	1.31E+01		µg/g				V V
W-05S314	SLUDGE	METAL	SW846 6010A	NA	5.27E+04	4.95E+03		µg/g				V V
W-05S314	SLUDGE	METAL	SW846 6010A	NI	9.63E+01	3.11E+00		µg/g				V V
W-05S314	SLUDGE	METAL	SW846 6010A	SB			<10.7	µg/g	<	U		V V
W-05S314	SLUDGE	METAL	SW846 6010A	SR	2.45E+01	1.24E+00		µg/g		J	5B	V V
W-05S314	SLUDGE	METAL	SW846 6010A	TH	8.37E+03	2.87E+02		µg/g				V V
W-05S314	SLUDGE	METAL	SW846 6010A	U	4.55E+04	1.36E+03		µg/g				V V
W-05S314	SLUDGE	METAL	SW846 6010A	V			<2.65	µg/g	<	U		V V
W-05S314	SLUDGE	METAL	SW846 6010A	ZN	2.71E+01	4.15E+00		µg/g				V V
W-05S314	SLUDGE	METAL	SW846 7000A	AS	6.95E-01	1.87E-01		µg/g				V V
W-05S314	SLUDGE	METAL	SW846 7000A	PB	2.13E+02	5.55E+01		µg/g				V V
W-05S314	SLUDGE	METAL	SW846 7000A	SE			<.518	µg/g	<	U		V V
W-05S314	SLUDGE	METAL	SW846 7000A	TL			<.518	µg/g	<	U		V V
W-05S314	SLUDGE	METAL	SW846 7471A	HG	1.32E+02	1.02E-01		µg/g				V V
W-05S314	SLUDGE	METAL	SW846 9056	CL			<33.6	µg/g	<	U		V V
W-05S314	SLUDGE	PHYSC	AC-MM-1 1011	DENSITY	1.26	0.01		g/ml				
W-05S314	SLUDGE	PHYSC	GAAT SAP	MOISTURE	68.3			%				
W-05S314	SLUDGE	RADS	AC-MM-1 003115	4.20 MEV U238	7.5			%				V V
W-05S314	SLUDGE	RADS	AC-MM-1 003115	4.40 MEV U235	9.9			%				V V
W-05S314	SLUDGE	RADS	AC-MM-1 003115	4.70 MEV TH230	14.4			%				V V
W-05S314	SLUDGE	RADS	AC-MM-1 003115	4.80 MEV U233/U234	17.6			%				V V
W-05S314	SLUDGE	RADS	AC-MM-1 003115	PHA 5.15 MEV PU239/240	27.0			%				V V

Tank W-5

SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-05S314	SLUDGE	RADS	AC-MM-1 003115	PHA 5.50 MEV PU238/AM241	12.8			%				V V
W-05S314	SLUDGE	RADS	AC-MM-1 003115	PHA 5.80 MEV CM244	10.8			%				V V
W-05S314	SLUDGE	RADS	AC-MM-2 1111	G-BETA	9.9E4	0.1E4		Bq/g				V V
W-05S314	SLUDGE	RADS	AC-MM-2 21807	TOTAL-RAD-SR	2.4E4	0.1E4		Bq/g				V V
W-05S314	SLUDGE	RADS	AC-MM-2 21996	PU-238	37	8		Bq/g				V V
W-05S314	SLUDGE	RADS	AC-MM-2 21996	PU-239/240	3.4E2	0.7E2		Bq/g				V V
W-05S314	SLUDGE	RADS	AC-MM-2 21996	PU-242			<4.1	Bq/g	<	U		V V
W-05S314	SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	3.8E2	0.8E2		Bq/g				V V
W-05S314	SLUDGE	RADS	EPA 900.0	G-ALPHA	9.0E2	1.8E2		Bq/g				V V
W-05S314	SLUDGE	RADS	EPA 901.1	CO-60	1.4E2	1.2E2		Bq/g				V V
W-05S314	SLUDGE	RADS	EPA 901.1	CS-137	1.5E4	0.1E4		Bq/g				V V
W-05S314	SLUDGE	RADS	EPA 901.1	EU-152			<440	Bq/g	<	U		V V
W-05S314	SLUDGE	RADS	EPA 901.1	EU-154			<350	Bq/g	<	U		V V
W-05S314	SLUDGE	RADS	EPA 901.1	EU-155			<330	Bq/g	<	U		V V
W-05S315	SLUDGE	CARBON	SW846 9060	TOT C	2620	80		µg/g				V V
W-05S315	SLUDGE	CARBON	SW846 9060	TIC	1990	120		µg/g				V V
W-05S315	SLUDGE	CARBON	SW846 9060	TOC	627	57		µg/g				V V
W-05S315	SLUDGE	ANION	SW846 9056	BR			<38.1	µg/g	<	U		V V
W-05S315	SLUDGE	ANION	SW846 9056	F	2080	10		µg/g				V V
W-05S315	SLUDGE	ANION	SW846 9056	NO3	639	18		µg/g				V V
W-05S315	SLUDGE	ANION	SW846 9056	PO4	3650	190		µg/g				V V
W-05S315	SLUDGE	ANION	SW846 9056	SO4	315	83		µg/g				V V
W-05S315	SLUDGE	METAL	SW846 6010A	AG			<3.83	µg/g	<	R	6	V I
W-05S315	SLUDGE	METAL	SW846 6010A	AL	1.04E+04	1.36E+02		µg/g				V V
W-05S315	SLUDGE	METAL	SW846 6010A	B	1.18E+01	6.05E-01		µg/g		J	5B	V V
W-05S315	SLUDGE	METAL	SW846 6010A	BA	9.53E+01	5.45E+00		µg/g				V V
W-05S315	SLUDGE	METAL	SW846 6010A	BE			<1.46	µg/g	<	U		V V
W-05S315	SLUDGE	METAL	SW846 6010A	CA	1.99E+04	2.84E+02		µg/g				V V
W-05S315	SLUDGE	METAL	SW846 6010A	CD			<2.2	µg/g	<	U		V V
W-05S315	SLUDGE	METAL	SW846 6010A	CO			<2.44	µg/g	<	U		V V
W-05S315	SLUDGE	METAL	SW846 6010A	CR	1.02E+03	3.77E+01		µg/g				V V
W-05S315	SLUDGE	METAL	SW846 6010A	CU	2.65E+01	1.41E+00		µg/g		J	5B	V V
W-05S315	SLUDGE	METAL	SW846 6010A	FE	1.44E+04	1.23E+02		µg/g				V V
W-05S315	SLUDGE	METAL	SW846 6010A	K	4.36E+02	2.68E+01		µg/g		J	5B	V V
W-05S315	SLUDGE	METAL	SW846 6010A	MG	4.76E+02	1.82E+01		µg/g				V V
W-05S315	SLUDGE	METAL	SW846 6010A	MN	5.30E+02	1.92E+01		µg/g				V V
W-05S315	SLUDGE	METAL	SW846 6010A	NA	3.09E+04	1.04E+03		µg/g				V V
W-05S315	SLUDGE	METAL	SW846 6010A	NI	8.69E+01	3.63E+00		µg/g				V V
W-05S315	SLUDGE	METAL	SW846 6010A	SB			<10.4	µg/g	<	U		V V
W-05S315	SLUDGE	METAL	SW846 6010A	SR	3.31E+01	6.05E-01		µg/g		J	5B	V V
W-05S315	SLUDGE	METAL	SW846 6010A	TH	3.19E+02	1.76E+01		µg/g				V V
W-05S315	SLUDGE	METAL	SW846 6010A	U	8.95E+02	5.55E+01		µg/g				V V
W-05S315	SLUDGE	METAL	SW846 6010A	V			<2.58	µg/g	<	U		V V
W-05S315	SLUDGE	METAL	SW846 6010A	ZN	2.60E+01	2.82E+00		µg/g				V V
W-05S315	SLUDGE	METAL	SW846 7000A	AS	7.06E-01	8.07E-02		µg/g				V V

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-05S315	SLUDGE	METAL	SW846 7000A	PB	3.03E+02	1.21E+01		µg/g				V V
W-05S315	SLUDGE	METAL	SW846 7000A	SE			<.504	µg/g	<	U		V V
W-05S315	SLUDGE	METAL	SW846 7000A	TL			<.504	µg/g	<	U		V V
W-05S315	SLUDGE	METAL	SW846 7471A	HG	7.18E+01	1.61E-01		µg/g				V V
W-05S315	SLUDGE	METAL	SW846 9056	CL	72.7	1.1		µg/g				V V
W-05S315	SLUDGE	PHYSC	AC-MM-1 1011	DENSITY	1.07			g/ml				
W-05S315	SLUDGE	PHYSC	GAAT SAP	MOISTURE	78.0			%				
W-05S315	SLUDGE	RADS	AC-MM-1 003115	4.20 MEV U238	5.9			%				V V
W-05S315	SLUDGE	RADS	AC-MM-1 003115	4.40 MEV U235	7.0			%				V V
W-05S315	SLUDGE	RADS	AC-MM-1 003115	4.70 MEV TH230	11.0			%				V V
W-05S315	SLUDGE	RADS	AC-MM-1 003115	4.80 MEV U233/U234	13.9			%				V V
W-05S315	SLUDGE	RADS	AC-MM-1 003115	PHA 5.15 MEV PU239/240	37.6			%				V V
W-05S315	SLUDGE	RADS	AC-MM-1 003115	PHA 5.50 MEV PU238/AM241	17.2			%				V V
W-05S315	SLUDGE	RADS	AC-MM-1 003115	PHA 5.80 MEV CM244	7.4			%				V V
W-05S315	SLUDGE	RADS	AC-MM-2 1111	G-BETA	8.1E4	0.1E4		Bq/g				V V
W-05S315	SLUDGE	RADS	AC-MM-2 21807	TOTAL RAD SR	1.6E4	0.1E4		Bq/g				V V
W-05S315	SLUDGE	RADS	AC-MM-2 21996	PU-238	29	6		Bq/g				V V
W-05S315	SLUDGE	RADS	AC-MM-2 21996	PU-239/240	4.7E2	0.8E2		Bq/g				V V
W-05S315	SLUDGE	RADS	AC-MM-2 21996	PU-242			<5.5	Bq/g	<	U		V V
W-05S315	SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	5.0E2	0.9E2		Bq/g				V V
W-05S315	SLUDGE	RADS	EPA 900.0	G-ALPHA	9.4E2	1.8E2		Bq/g				V V
W-05S315	SLUDGE	RADS	EPA 901.1	CO-60	1.1E2	1.0E2		Bq/g				V V
W-05S315	SLUDGE	RADS	EPA 901.1	CS-137	1.9E4	0.1E4		Bq/g				V V
W-05S315	SLUDGE	RADS	EPA 901.1	EU-152			<460	Bq/g	<	U		V V
W-05S315	SLUDGE	RADS	EPA 901.1	EU-154			<300	Bq/g	<	U		V V
W-05S315	SLUDGE	RADS	EPA 901.1	EU-155			<340	Bq/g	<	U		V V

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
0491801	LIQUID	VOA	SW846 8240	1,1,1-TRICHLOROETHANE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	1,1,2,2-TETRACHLOROETHANE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	1,1,2-TRICHLOROETHANE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	1,1,2-TRICHLOROTRIFLUOROETHANE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	1,1-DICHLOROETHYLENE	5.0E-03			mg/L	U	UJ		V V
0491801	LIQUID	VOA	SW846 8240	1,2-DICHLOROETHANE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	1,4-DICHLOROBENZENE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	2-NITROPROPANE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	BENZENE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	BROMOFORM	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	CARBON DISULFIDE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	CARBON TETRACHLORIDE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	CHLOROBENZENE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	CHLOROFORM	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	CYCLOHEXANE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	ETHYLBENZENE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	METHYLENE CHLORIDE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	ORTHO-DICHLOROBENZENE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	TETRACHLOROETHYLENE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	TOLUENE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	TRICHLOROETHYLENE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	TRICHLOROFLUOROMETHANE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	VINYL CHLORIDE	5.0E-03			mg/L	U	UJ	C	V V
0491801	LIQUID	VOA	SW846 8240	XYLENE	5.0E-03			mg/L	U	U		V V
W-06S311	SLUDGE	CARBON	SW846 9060	TOT C	6790	680		µg/g				V V
W-06S311	SLUDGE	CARBON	SW846 9060	TIC	3480	233		µg/g				V V
W-06S311	SLUDGE	CARBON	SW846 9060	TOC	3310	112		µg/g				V V
W-06S311	SLUDGE	ANION	SW846 9056	BR			<42.1	µg/g	<	U		V V
W-06S311	SLUDGE	ANION	SW846 9056	F	4170	30		µg/g				V V
W-06S311	SLUDGE	ANION	SW846 9056	NO3	11600	300		µg/g				V V
W-06S311	SLUDGE	ANION	SW846 9056	PO4	6660	200		µg/g				V V
W-06S311	SLUDGE	ANION	SW846 9056	SO4	8510	260		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	AG			<3.83	µg/g	<	R	8	V I
W-06S311	SLUDGE	METAL	SW846 6010A	AL	1.21E+04	1.44E+02		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	B	9.87E+00	2.01E-01		µg/g		J	5B	V V
W-06S311	SLUDGE	METAL	SW846 6010A	BA	2.10E+02	2.18E+01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	BE			<1.46	µg/g	<	U		V V
W-06S311	SLUDGE	METAL	SW846 6010A	CA	2.58E+04	2.96E+02		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	CD	6.75E+00	8.06E-01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	CO	7.35E+00	2.01E-01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	CR	9.30E+02	1.03E+01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	CU	4.15E+01	5.64E+00		µg/g		J	5B	V V
W-06S311	SLUDGE	METAL	SW846 6010A	FE	9.95E+03	7.62E+01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	K	7.64E+02	1.01E+02		µg/g		J	5B	V V
W-06S311	SLUDGE	METAL	SW846 6010A	MG	9.09E+01	4.03E-01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	MN	6.01E+02	5.62E+01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	NA	3.58E+04	9.31E+01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	NI	1.38E+02	6.85E+00		µg/g				V V

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-06S311	SLUDGE	METAL	SW846 6010A	SB			<10.4	µg/g	<	U		V V
W-06S311	SLUDGE	METAL	SW846 6010A	SR	6.51E+01	3.83E+00		µg/g		J	5B	V V
W-06S311	SLUDGE	METAL	SW846 6010A	TH	8.62E+01	1.61E+00		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	U	1.79E+04	1.44E+02		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	V			<2.58	µg/g	<	U		V V
W-06S311	SLUDGE	METAL	SW846 6010A	ZN	1.57E+02	1.07E+01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 7000A	AS	6.95E-01	6.25E-01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 7000A	PB	2.11E+03	6.04E+00		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 7000A	SE			<.504	µg/g	<	U		V V
W-06S311	SLUDGE	METAL	SW846 7000A	TL			<.504	µg/g	<	U		V V
W-06S311	SLUDGE	METAL	SW846 7471A	HG	8.28E+01	8.46E-02		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 9056	CL	167	4		µg/g				V V
W-06S311	SLUDGE	NHVOA	SW846 8015	ACETONE	1.0E+01			mg/kg	U	U		V V
W-06S311	SLUDGE	NHVOA	SW846 8015	BUTANOL	16			mg/kg	J	J	Q	V V
W-06S311	SLUDGE	NHVOA	SW846 8015	ETHYL ETHER	1.0E+01			mg/kg	U	U		V V
W-06S311	SLUDGE	NHVOA	SW846 8015	ISOBUTANOL	1.0E+01			mg/kg	U	UJ	L	V V
W-06S311	SLUDGE	NHVOA	SW846 8015	METHANOL	1.0E+01			mg/kg	U	R	C,L	V I
W-06S311	SLUDGE	NHVOA	SW846 8015	METHYL ETHYL KETONE	1.0E+01			mg/kg	U	UJ	Q	V V
W-06S311	SLUDGE	NHVOA	SW846 8015	PYRIDINE	1.0E+01			mg/kg	U	U		V V
W-06S311	SLUDGE	PHYSC	AC-MM-1 1011	DENSITY	1.17	0.14		g/ml				
W-06S311	SLUDGE	PHYSC	GAAT SAP	MOISTURE	72.8			%				
W-06S311	SLUDGE	RADS	AC-MM-1 003115	PHA 5.15 MEV PU239/240	14.6			%				V V
W-06S311	SLUDGE	RADS	AC-MM-1 003115	PHA 5.50 MEV PU238/AM241	17.5			%				V V
W-06S311	SLUDGE	RADS	AC-MM-1 003115	PHA 5.80 MEV CM244	68.0			%				V V
W-06S311	SLUDGE	RADS	AC-MM-2 1111	G-BETA	3.0E6	0.1E6		Bq/g				V V
W-06S311	SLUDGE	RADS	AC-MM-2 21807	TOTAL-RAD-SR	9.5E5	0.1E5		Bq/g				V V
W-06S311	SLUDGE	RADS	AC-MM-2 21996	PHA PU 238	6.0E2	0.5E2		Bq/g				V V
W-06S311	SLUDGE	RADS	AC-MM-2 21996	PHA PU 239/240	4.9E3	0.4E3		Bq/g				V V
W-06S311	SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	5.5E3	0.4E3		Bq/g				V V
W-06S311	SLUDGE	RADS	EPA 900.0	G-ALPHA	3.3E4	0.3E4		Bq/g				V V
W-06S311	SLUDGE	RADS	EPA 901.1	CO-60	1.4E3	0.2E3		Bq/g				V V
W-06S311	SLUDGE	RADS	EPA 901.1	CS-137	1.5E5	0.1E5		Bq/g				V V
W-06S311	SLUDGE	RADS	EPA 901.1	EU-152			<1300	Bq/g	<	U		V V
W-06S311	SLUDGE	RADS	EPA 901.1	EU-154	1.1E3	0.3E3		Bq/g				V V
W-06S311	SLUDGE	RADS	EPA 901.1	EU-155			<1200	Bq/g	<	U		V V
W-06S311	SLUDGE	SVOA	SW846 8270	2,4-DINITROTOLUENE	9.0E-01			mg/kg	UD	U		V V
W-06S311	SLUDGE	SVOA	SW846 8270	2-METHYLPHENOL	1.5E+01			mg/kg	UD	UJ	Q	V V
W-06S311	SLUDGE	SVOA	SW846 8270	4-METHYLPHENOL	1.5E+01			mg/kg	UD	UJ	Q	V V
W-06S311	SLUDGE	SVOA	SW846 8270	HEXACHLOROBENZENE	9.0E-01			mg/kg	UD	U		V V
W-06S311	SLUDGE	SVOA	SW846 8270	HEXACHLOROETHANE	1.5E+01			mg/kg	UD	U		V V
W-06S311	SLUDGE	SVOA	SW846 8270	NITROBENZENE	1.5E+01			mg/kg	UD	U		V V
W-06S311	SLUDGE	SVOA	SW846 8270	PENTACHLOROPHENOL	1.5E+01			mg/kg	UD	UJ	Q	V V
W-06S311	SLUDGE	VOA	SW846 8240	1,1,1-TRICHLOROETHANE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	1,1,2,2-TETRACHLOROETHANE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROETHANE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROTRIFLUOROETHANE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	1,1-DICHLOROETHYLENE	1.0E+00			mg/kg	U	U		V V

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
0491801	LIQUID	VOA	SW846 8240	1,1,1-TRICHLOROETHANE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	1,1,2,2-TETRACHLOROETHANE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	1,1,2-TRICHLOROETHANE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	1,1,2-TRICHLOROTRIFLUOROETHANE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	1,1-DICHLOROETHYLENE	5.0E-03			mg/L	U	UJ		V V
0491801	LIQUID	VOA	SW846 8240	1,2-DICHLOROETHANE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	1,4-DICHLOROBENZENE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	2-NITROPROPANE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	BENZENE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	BROMOFORM	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	CARBON DISULFIDE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	CARBON TETRACHLORIDE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	CHLOROBENZENE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	CHLOROFORM	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	CYCLOHEXANE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	ETHYLBENZENE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	METHYLENE CHLORIDE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	ORTHO-DICHLOROBENZENE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	TETRACHLOROETHYLENE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	TOLUENE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	TRICHLOROETHYLENE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	TRICHLOROFLUOROMETHANE	5.0E-03			mg/L	U	U		V V
0491801	LIQUID	VOA	SW846 8240	VINYL CHLORIDE	5.0E-03			mg/L	U	UJ	C	V V
0491801	LIQUID	VOA	SW846 8240	XYLENE	5.0E-03			mg/L	U	U		V V
W-06S311	SLUDGE	CARBON	SW846 9060	TOT C	6790	680		µg/g				V V
W-06S311	SLUDGE	CARBON	SW846 9060	TIC	3480	233		µg/g				V V
W-06S311	SLUDGE	CARBON	SW846 9060	TOC	3310	112		µg/g				V V
W-06S311	SLUDGE	ANION	SW846 9056	BR			<42.1	µg/g	<	U		V V
W-06S311	SLUDGE	ANION	SW846 9056	F	4170	30		µg/g				V V
W-06S311	SLUDGE	ANION	SW846 9056	NO3	11600	300		µg/g				V V
W-06S311	SLUDGE	ANION	SW846 9056	PO4	6660	200		µg/g				V V
W-06S311	SLUDGE	ANION	SW846 9056	SO4	8510	260		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	AG			<3.83	µg/g	<	R	8	V I
W-06S311	SLUDGE	METAL	SW846 6010A	AL	1.21E+04	1.44E+02		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	B	9.87E+00	2.01E-01		µg/g		J	5B	V V
W-06S311	SLUDGE	METAL	SW846 6010A	BA	2.10E+02	2.18E+01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	BE			<1.46	µg/g	<	U		V V
W-06S311	SLUDGE	METAL	SW846 6010A	CA	2.58E+04	2.96E+02		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	CD	6.75E+00	8.06E-01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	CO	7.35E+00	2.01E-01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	CR	9.30E+02	1.03E+01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	CU	4.15E+01	5.64E+00		µg/g		J	5B	V V
W-06S311	SLUDGE	METAL	SW846 6010A	FE	9.95E+03	7.62E+01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	K	7.64E+02	1.01E+02		µg/g		J	5B	V V
W-06S311	SLUDGE	METAL	SW846 6010A	MG	9.09E+01	4.03E-01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	MN	8.01E+02	5.62E+01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	NA	3.58E+04	9.31E+01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	NI	1.38E+02	6.65E+00		µg/g				V V

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-06S311	SLUDGE	METAL	SW846 6010A	SB			<10.4	µg/g	<	U		V V
W-06S311	SLUDGE	METAL	SW846 6010A	SR	6.51E+01	3.83E+00		µg/g		J	5B	V V
W-06S311	SLUDGE	METAL	SW846 6010A	TH	8.62E+01	1.61E+00		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	U	1.79E+04	1.44E+02		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 6010A	V			<2.58	µg/g	<	U		V V
W-06S311	SLUDGE	METAL	SW846 6010A	ZN	1.57E+02	1.07E+01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 7000A	AS	6.95E-01	6.25E-01		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 7000A	PB	2.11E+03	6.04E+00		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 7000A	SE			<.504	µg/g	<	U		V V
W-06S311	SLUDGE	METAL	SW846 7000A	TL			<.504	µg/g	<	U		V V
W-06S311	SLUDGE	METAL	SW846 7471A	HG	8.28E+01	8.46E-02		µg/g				V V
W-06S311	SLUDGE	METAL	SW846 9056	CL	167	4		µg/g				V V
W-06S311	SLUDGE	NHVOA	SW846 8015	ACETONE	1.0E+01			mg/kg	U	U		V V
W-06S311	SLUDGE	NHVOA	SW846 8015	BUTANOL	16			mg/kg	J	J	Q	V V
W-06S311	SLUDGE	NHVOA	SW846 8015	ETHYL ETHER	1.0E+01			mg/kg	U	U		V V
W-06S311	SLUDGE	NHVOA	SW846 8015	ISOBUTANOL	1.0E+01			mg/kg	U	UJ	L	V V
W-06S311	SLUDGE	NHVOA	SW846 8015	METHANOL	1.0E+01			mg/kg	U	R	C,L	V R
W-06S311	SLUDGE	NHVOA	SW846 8015	METHYL ETHYL KETONE	1.0E+01			mg/kg	U	UJ	Q	V V
W-06S311	SLUDGE	NHVOA	SW846 8015	PYRIDINE	1.0E+01			mg/kg	U	U		V V
W-06S311	SLUDGE	PHYSC	AC-MM-1 1011	DENSITY	1.17	0.14		g/ml				
W-06S311	SLUDGE	PHYSC	GAAT SAP	MOISTURE	72.8			%				
W-06S311	SLUDGE	RADS	AC-MM-1 003115	PHA 5.15 MEV PU239/240	14.6			%				V V
W-06S311	SLUDGE	RADS	AC-MM-1 003115	PHA 5.50 MEV PU238/AM241	17.5			%				V V
W-06S311	SLUDGE	RADS	AC-MM-1 003115	PHA 5.80 MEV CM244	68.0			%				V V
W-06S311	SLUDGE	RADS	AC-MM-2 1111	G-BETA	3.0E6	0.1E6		Bq/g				V V
W-06S311	SLUDGE	RADS	AC-MM-2 21807	TOTAL-RAD-SR	9.5E5	0.1E5		Bq/g				V V
W-06S311	SLUDGE	RADS	AC-MM-2 21996	PHA PU 238	6.0E2	0.5E2		Bq/g				V V
W-06S311	SLUDGE	RADS	AC-MM-2 21996	PHA PU 239/240	4.9E3	0.4E3		Bq/g				V V
W-06S311	SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	5.5E3	0.4E3		Bq/g				V V
W-06S311	SLUDGE	RADS	EPA 900.0	G-ALPHA	3.3E4	0.3E4		Bq/g				V V
W-06S311	SLUDGE	RADS	EPA 901.1	CO-60	1.4E3	0.2E3		Bq/g				V V
W-06S311	SLUDGE	RADS	EPA 901.1	CS-137	1.5E5	0.1E5		Bq/g				V V
W-06S311	SLUDGE	RADS	EPA 901.1	EU-152			<1300	Bq/g	<	U		V V
W-06S311	SLUDGE	RADS	EPA 901.1	EU-154	1.1E3	0.3E3		Bq/g				V V
W-06S311	SLUDGE	RADS	EPA 901.1	EU-155			<1200	Bq/g	<	U		V V
W-06S311	SLUDGE	SVOA	SW846 8270	2,4-DINITROTOLUENE	9.0E-01			mg/kg	UD	U		V V
W-06S311	SLUDGE	SVOA	SW846 8270	2-METHYLPHENOL	1.5E+01			mg/kg	UD	UJ	Q	V V
W-06S311	SLUDGE	SVOA	SW846 8270	4-METHYLPHENOL	1.5E+01			mg/kg	UD	UJ	Q	V V
W-06S311	SLUDGE	SVOA	SW846 8270	HEXACHLOROBENZENE	9.0E-01			mg/kg	UD	U		V V
W-06S311	SLUDGE	SVOA	SW846 8270	HEXACHLOROETHANE	1.5E+01			mg/kg	UD	U		V V
W-06S311	SLUDGE	SVOA	SW846 8270	NITROBENZENE	1.5E+01			mg/kg	UD	U		V V
W-06S311	SLUDGE	SVOA	SW846 8270	PENTACHLOROPHENOL	1.5E+01			mg/kg	UD	UJ	Q	V V
W-06S311	SLUDGE	VOA	SW846 8240	1,1,1-TRICHLOROETHANE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	1,1,2,2-TETRACHLOROETHANE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROETHANE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROTRIFLUOROETHANE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	1,1-DICHLOROETHYLENE	1.0E+00			mg/kg	U	U		V V

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-06S311	SLUDGE	VOA	SW846 8240	1,2-DICHLOROETHANE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	1,4-DICHLOROBENZENE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	2-NITROPROPANE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	BENZENE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	BROMOFORM	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	CARBON DISULFIDE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	CARBON TETRACHLORIDE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	CHLOROBENZENE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	CHLOROFORM	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	CYCLOHEXANE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	ETHYLBENZENE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	METHYLENE CHLORIDE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	ORTHO-DICHLOROBENZENE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	TETRACHLOROETHYLENE	1.4E+00			mg/kg	J	J	S	V V
W-06S311	SLUDGE	VOA	SW846 8240	TOLUENE	1.0E+00			mg/kg	U	UJ	Q	V V
W-06S311	SLUDGE	VOA	SW846 8240	TRICHLOROETHYLENE	1.0E+00			mg/kg	U	UJ	Q	V V
W-06S311	SLUDGE	VOA	SW846 8240	TRICHLOROFLUOROMETHANE	1.0E+00			mg/kg	U	U		V V
W-06S311	SLUDGE	VOA	SW846 8240	VINYL CHLORIDE	1.0E+00			mg/kg	U	UJ	C	V V
W-06S311	SLUDGE	VOA	SW846 8240	XYLENE	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	CARBON	SW846 9060	TOT C	16647	300		µg/g				V V
W-06S312	SLUDGE	CARBON	SW846 9060	TIC	4990	100		µg/g				V V
W-06S312	SLUDGE	CARBON	SW846 9060	TOC	11657	1600		µg/g				V V
W-06S312	SLUDGE	ANION	SW846 9056	BR			<39.6	µg/g	<	U		V V
W-06S312	SLUDGE	ANION	SW846 9056	F	1760	40		µg/g				V V
W-06S312	SLUDGE	ANION	SW846 9056	NO3	8570	340		µg/g				V V
W-06S312	SLUDGE	ANION	SW846 9056	PO4	4430	140		µg/g				V V
W-06S312	SLUDGE	ANION	SW846 9056	SO4	5690	270		µg/g				V V
W-06S312	SLUDGE	METAL	SW846 6010A	AG	9.21E+00	5.88E-01		µg/g		R	8	V I
W-06S312	SLUDGE	METAL	SW846 6010A	AL	9.63E+03	9.87E+01		µg/g				V V
W-06S312	SLUDGE	METAL	SW846 6010A	B	1.43E+01	9.80E-01		µg/g		J	5B	V V
W-06S312	SLUDGE	METAL	SW846 6010A	BA	1.07E+02	3.53E+00		µg/g				V V
W-06S312	SLUDGE	METAL	SW846 6010A	BE			<1.42	µg/g	<	U		V V
W-06S312	SLUDGE	METAL	SW846 6010A	CA	2.98E+04	2.37E+02		µg/g				V V
W-06S312	SLUDGE	METAL	SW846 6010A	CD	8.13E+00	9.80E-01		µg/g				V V
W-06S312	SLUDGE	METAL	SW846 6010A	CO	2.42E+01	1.57E+00		µg/g				V V
W-06S312	SLUDGE	METAL	SW846 6010A	CR	1.77E+03	8.23E+00		µg/g				V V
W-06S312	SLUDGE	METAL	SW846 6010A	CU	5.88E+01	2.74E+00		µg/g		J	5B	V V
W-06S312	SLUDGE	METAL	SW846 6010A	FE	1.42E+04	9.05E+01		µg/g				V V
W-06S312	SLUDGE	METAL	SW846 6010A	K	1.12E+03	3.10E+01		µg/g		J	5B	V V
W-06S312	SLUDGE	METAL	SW846 6010A	MG	3.54E+03	6.58E+01		µg/g				V V
W-06S312	SLUDGE	METAL	SW846 6010A	MN	3.41E+02	8.62E+00		µg/g				V V
W-06S312	SLUDGE	METAL	SW846 6010A	NA	4.24E+04	1.45E+03		µg/g				V V
W-06S312	SLUDGE	METAL	SW846 6010A	NI	2.12E+02	6.86E+00		µg/g				V V
W-06S312	SLUDGE	METAL	SW846 6010A	SB			<10.1	µg/g	<	U		V V
W-06S312	SLUDGE	METAL	SW846 6010A	SR	6.46E+01	3.92E-01		µg/g		J	5B	V V
W-06S312	SLUDGE	METAL	SW846 6010A	TH	1.32E+03	1.23E+02		µg/g				V V
W-06S312	SLUDGE	METAL	SW846 6010A	U	9.11E+04	5.74E+02		µg/g				V V
W-06S312	SLUDGE	METAL	SW846 6010A	V			<2.51	µg/g	<	U		V V
W-06S312	SLUDGE	METAL	SW846 6010A	ZN	3.62E+02	9.60E+00		µg/g				V V

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-06S312	SLUDGE	METAL	SW846 7000A	AS	2.22E+00	3.33E-01		µg/g				V V
W-06S312	SLUDGE	METAL	SW846 7000A	PB	7.32E+03	1.04E+02		µg/g				V V
W-06S312	SLUDGE	METAL	SW846 7000A	SE			<.49	µg/g	<	U		V V
W-06S312	SLUDGE	METAL	SW846 7000A	TL			<.49	µg/g	<	U		V V
W-06S312	SLUDGE	METAL	SW846 7471A	HG	1.12E+02	2.04E-01		µg/g				V V
W-06S312	SLUDGE	METAL	SW846 9056	CL	144	11		µg/g				V V
W-06S312	SLUDGE	NHVOA	SW846 8015	ACETONE	1.0E+01			mg/kg	U	U		V V
W-06S312	SLUDGE	NHVOA	SW846 8015	BUTANOL	1.0E+01			mg/kg	U	U		V V
W-06S312	SLUDGE	NHVOA	SW846 8015	ETHYL ETHER	1.0E+01			mg/kg	U	U		V V
W-06S312	SLUDGE	NHVOA	SW846 8015	ISOBUTANOL	1.0E+01			mg/kg	U	UJ	L	V V
W-06S312	SLUDGE	NHVOA	SW846 8015	METHANOL	1.0E+01			mg/kg	U	R	C,L	V L
W-06S312	SLUDGE	NHVOA	SW846 8015	METHYL ETHYL KETONE	1.0E+01			mg/kg	U	U		V V
W-06S312	SLUDGE	NHVOA	SW846 8015	PYRIDINE	1.0E+01			mg/kg	U	U		V V
W-06S312	SLUDGE	PHYSC	AC-MM-1 1011	DENSITY	1.46			g/ml				
W-06S312	SLUDGE	PHYSC	GAAT SAP	MOISTURE	62.5			%				
W-06S312	SLUDGE	RADS	AC-MM-1 003115	PHA 5.15 MEV PU239/240	51.0			%				V V
W-06S312	SLUDGE	RADS	AC-MM-1 003115	PHA 5.50 MEV PU238/AM241	15.2			%				V V
W-06S312	SLUDGE	RADS	AC-MM-1 003115	PHA 5.80 MEV CM244	33.8			%				V V
W-06S312	SLUDGE	RADS	AC-MM-2 1111	G-BETA	1.2E6	0.1E6		Bq/g				V V
W-06S312	SLUDGE	RADS	AC-MM-2 21807	TOTAL-RAD-SR	4.0E5	0.1E5		Bq/g				V V
W-06S312	SLUDGE	RADS	AC-MM-2 21996	PHA PU 238	2.0E2	0.1E2		Bq/g				V V
W-06S312	SLUDGE	RADS	AC-MM-2 21996	PHA PU 239/240	7.9E3	0.5E3		Bq/g				V V
W-06S312	SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	8.1E3	0.5E3		Bq/g				V V
W-06S312	SLUDGE	RADS	EPA 900.0	G-ALPHA	2.2E4	0.3E4		Bq/g				V V
W-06S312	SLUDGE	RADS	EPA 901.1	CO-60	4.5E2	1.3E2		Bq/g				V V
W-06S312	SLUDGE	RADS	EPA 901.1	CS-137	1.8E5	0.1E5		Bq/g				V V
W-06S312	SLUDGE	RADS	EPA 901.1	EU-152			<1200	Bq/g	<	U		V V
W-06S312	SLUDGE	RADS	EPA 901.1	EU-154			<480	Bq/g	<	U		V V
W-06S312	SLUDGE	RADS	EPA 901.1	EU-155			<840	Bq/g	<	U		V V
W-06S312	SLUDGE	SVOA	SW846 8270	2,4-DINITROTOLUENE	9.0E-01			mg/kg	UD	U		V V
W-06S312	SLUDGE	SVOA	SW846 8270	2-METHYLPHENOL	1.5E+01			mg/kg	UD	U		V V
W-06S312	SLUDGE	SVOA	SW846 8270	4-METHYLPHENOL	1.5E+01			mg/kg	UD	U		V V
W-06S312	SLUDGE	SVOA	SW846 8270	HEXACHLOROBENZENE	9.0E-01			mg/kg	UD	U		V V
W-06S312	SLUDGE	SVOA	SW846 8270	HEXACHLOROETHANE	1.5E+01			mg/kg	UD	U		V V
W-06S312	SLUDGE	SVOA	SW846 8270	NITROBENZENE	1.5E+01			mg/kg	UD	U		V V
W-06S312	SLUDGE	SVOA	SW846 8270	PENTACHLOROPHENOL	1.5E+01			mg/kg	UD	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	1,1,1-TRICHLOROETHANE	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	1,1,2,2-TETRACHLOROETHANE	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROETHANE	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROTRIFLUOROETHANE	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	1,1-DICHLOROETHYLENE	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	1,2-DICHLOROETHANE	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	1,4-DICHLOROBENZENE	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	2-NITROPROPANE	1.0E+00			mg/kg	UD	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	BENZENE	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	BROMOFORM	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	CARBON DISULFIDE	1.0E+00			mg/kg	U	U		V V

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-06S312	SLUDGE	VOA	SW846 8240	CARBON TETRACHLORIDE	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	CHLOROBENZENE	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	CHLOROFORM	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	CYCLOHEXANE	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	ETHYLBENZENE	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	METHYLENE CHLORIDE	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	ORTHO-DICHLOROBENZENE	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	TETRACHLOROETHYLENE	4.0			mg/kg	J	J	S	V V
W-06S312	SLUDGE	VOA	SW846 8240	TOLUENE	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	TRICHLOROETHYLENE	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	TRICHLOROFLUOROMETHANE	1.0E+00			mg/kg	U	U		V V
W-06S312	SLUDGE	VOA	SW846 8240	VINYL CHLORIDE	1.0E+00			mg/kg	U	UJ	C	V V
W-06S312	SLUDGE	VOA	SW846 8240	XYLENE	1.0E+00			mg/kg	U	U		V V

Tank W-7

SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	ET_LIMI	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-07H301	HARD SLUDGE	ANION	SW846 9056	BR	101	13		µg/g				VV
W-07H301	HARD SLUDGE	ANION	SW846 9056	F	2770	155		µg/g				VV
W-07H301	HARD SLUDGE	ANION	SW846 9056	NO3	30000	195		µg/g				VV
W-07H301	HARD SLUDGE	ANION	SW846 9056	PO4	3470	99		µg/g				VV
W-07H301	HARD SLUDGE	ANION	SW846 9056	SO4	6540	144		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	AG			<1.24	µg/g	<	R	8	VI
W-07H301	HARD SLUDGE	METAL	SW846 6010A	AL	6.58E+03	9.70E+01		µg/g		J	5A	VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	B	2.42E+01	4.95E-01		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	BA	5.47E+01	4.95E-01		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	BE	9.90E-01	0.00E+00		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	CA	2.60E+03	4.45E+01		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	CD			<3.64	µg/g	<	U		VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	CO			<2.7	µg/g	<	U		VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	CR	1.15E+02	1.48E+00		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	CU	1.15E+02	1.48E+00		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	FE	5.25E+03	7.57E+01		µg/g		J	8	VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	K	1.30E+04	1.21E+02		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	MG	4.09E+02	7.42E+00		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	MN	8.34E+01	1.48E+00		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	NA	4.11E+04	7.00E+02		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	NI	3.71E+01	1.48E+00		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	PB	6.26E+01	5.94E+00		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	SB			<49	µg/g	<	U		VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	SR	1.61E+01	4.95E-01		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	TH	4.18E+03	8.27E+01		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	U	8.46E+04	3.00E+02		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	V	2.47E+00	0.00E+00		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 6010A	ZN	4.97E+01	9.90E-01		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 7000A	TL			<346	µg/g		U		VV
W-07H301	HARD SLUDGE	METAL	SW846 7471A	HG	2.64E+02	9.66E-01		µg/g				VV
W-07H301	HARD SLUDGE	METAL	SW846 9056	CL	2360	60		µg/g				VV
W-07H301	HARD SLUDGE	PHYSC	GAAT SAP	MOISTURE	65.9			%				
W-07H301	HARD SLUDGE	RADS	AC-MM-2 21996	4.20 MEV U238	5.7			%				VV
W-07H301	HARD SLUDGE	RADS	AC-MM-2 21996	4.80 MEV U234	8.6			%				VV
W-07H301	HARD SLUDGE	RADS	AC-MM-2 21996	5.15 MEV PU239/240	14.8			%				VV
W-07H301	HARD SLUDGE	RADS	AC-MM-2 21996	5.50 MEV PU238/AM241	15.1			%				VV
W-07H301	HARD SLUDGE	RADS	AC-MM-2 21996	5.80 MEV CM244	55.8			%				VV
W-07H301	HARD SLUDGE	RADS	EPA 900.0	G-ALPHA	1.7E4	0.2E4		Bq/g				VV
W-07H301	HARD SLUDGE	RADS	EPA 900.0	G-BETA	3.3E6	0.1E6		Bq/g				VV
W-07H301	HARD SLUDGE	RADS	EPA 901.1	AM-241			<11000	Bq/g	<	U		VV
W-07H301	HARD SLUDGE	RADS	EPA 901.1	CO-60	2.9E3	0.8E3		Bq/g				VV
W-07H301	HARD SLUDGE	RADS	EPA 901.1	CS-134			<1600	Bq/g	<	U		VV
W-07H301	HARD SLUDGE	RADS	EPA 901.1	CS-137	1.1E6	0.1E6		Bq/g				VV
W-07H301	HARD SLUDGE	RADS	EPA 901.1	EU-152			<7900	Bq/g	<	U		VV
W-07H301	HARD SLUDGE	RADS	EPA 901.1	EU-154			<1900	Bq/g	<	U		VV
W-07H301	HARD SLUDGE	RADS	EPA 901.1	EU-155			<5200	Bq/g	<	U		VV
W-07H301	HARD SLUDGE	RADS	EPA 905.0	TOTAL-RAD-SR	9.5E5	0.1E5		Bq/g				VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	ET_LIMI	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-07S302	SLUDGE	CARBON	SW846 9060	TC	6030	615		µg/g				VV
W-07S302	SLUDGE	CARBON	SW846 9060	TIC	4290	572		µg/g				VV
W-07S302	SLUDGE	CARBON	SW846 9060	TOC	1740	374		µg/g				VV
W-07S302	SLUDGE	ANION	SW846 9056	BR	106	15		µg/g				VV
W-07S302	SLUDGE	ANION	SW846 9056	F	2480	9		µg/g				VV
W-07S302	SLUDGE	ANION	SW846 9056	NO3	42000	719		µg/g				VV
W-07S302	SLUDGE	ANION	SW846 9056	PO4	4490	100		µg/g				VV
W-07S302	SLUDGE	ANION	SW846 9056	SO4	8720	76		µg/g				VV
W-07S302	SLUDGE	METAL	SW846 6010A	AG			<1.24	µg/g	<	R	8	VI
W-07S302	SLUDGE	METAL	SW846 6010A	AL	4.13E+03	6.07E+01		µg/g		J	5A	VV
W-07S302	SLUDGE	METAL	SW846 6010A	B	1.99E+01	1.49E+00		µg/g				VV
W-07S302	SLUDGE	METAL	SW846 6010A	BA	2.39E+01	0.00E+00		µg/g				VV
W-07S302	SLUDGE	METAL	SW846 6010A	BE			<.0497	µg/g	<	U		VV
W-07S302	SLUDGE	METAL	SW846 6010A	CA	7.91E+02	7.96E+00		µg/g				VV
W-07S302	SLUDGE	METAL	SW846 6010A	CD			<3.65	µg/g	<	U		VV
W-07S302	SLUDGE	METAL	SW846 6010A	CO			<2.71	µg/g	<	U		VV
W-07S302	SLUDGE	METAL	SW846 6010A	CR	1.43E+02	2.49E+00		µg/g				VV
W-07S302	SLUDGE	METAL	SW846 6010A	CU	8.00E+01	4.97E-01		µg/g				VV
W-07S302	SLUDGE	METAL	SW846 6010A	FE	8.67E+02	1.14E+01		µg/g		J	8	VV
W-07S302	SLUDGE	METAL	SW846 6010A	K	9.17E+03	1.84E+01		µg/g				VV
W-07S302	SLUDGE	METAL	SW846 6010A	MG	2.67E+02	7.96E+00		µg/g				VV
W-07S302	SLUDGE	METAL	SW846 6010A	MN	3.48E+01	4.97E-01		µg/g				VV
W-07S302	SLUDGE	METAL	SW846 6010A	NA	5.44E+04	1.21E+03		µg/g				VV
W-07S302	SLUDGE	METAL	SW846 6010A	NI	1.96E+01	1.99E+00		µg/g				VV
W-07S302	SLUDGE	METAL	SW846 6010A	SB			<49.2	µg/g	<	U		VV
W-07S302	SLUDGE	METAL	SW846 6010A	SR	7.71E+00	0.00E+00		µg/g				VV
W-07S302	SLUDGE	METAL	SW846 6010A	TH	3.18E+03	8.53E+01		µg/g				VV
W-07S302	SLUDGE	METAL	SW846 6010A	U	6.35E+04	6.83E+02		µg/g				VV
W-07S302	SLUDGE	METAL	SW846 6010A	V	1.74E+00	9.94E-01		µg/g				VV
W-07S302	SLUDGE	METAL	SW846 6010A	ZN	3.18E+01	3.48E+00		µg/g				VV
W-07S302	SLUDGE	METAL	SW846 7000A	AS			<4.97	µg/g	<	U		VV
W-07S302	SLUDGE	METAL	SW846 7000A	PB	3.92E+01	9.94E-01		µg/g				VV
W-07S302	SLUDGE	METAL	SW846 7000A	SE			<4.97	µg/g	<	U		VV
W-07S302	SLUDGE	METAL	SW846 7000A	TL			<4.97	µg/g	<	U		VV
W-07S302	SLUDGE	METAL	SW846 7471A	HG	1.38E+02	6.40E-01		µg/g				VV
W-07S302	SLUDGE	METAL	SW846 9056	CL	3280	25		µg/g				VV
W-07S302	SLUDGE	PHYSC	AC-MM-1 1011	DENSITY	1.47			g/ml				
W-07S302	SLUDGE	PHYSC	GAAT SAP	MOISTURE	74.7			%				
W-07S302	SLUDGE	RADS	AC-MM-2 21996	4.20 MEV U238	6.3			%				VV
W-07S302	SLUDGE	RADS	AC-MM-2 21996	4.80 MEV U234	9.1			%				VV
W-07S302	SLUDGE	RADS	AC-MM-2 21996	5.15 MEV PU239/240	8.7			%				VV
W-07S302	SLUDGE	RADS	AC-MM-2 21996	5.50 MEV PU238/AM241	18.8			%				VV
W-07S302	SLUDGE	RADS	AC-MM-2 21996	5.80 MEV CM244	57.1			%				VV
W-07S302	SLUDGE	RADS	AC-MM-2 21996	PU-238	2.1E3	0.2E3		Bq/g				VV
W-07S302	SLUDGE	RADS	AC-MM-2 21996	PU-239	8.3E2	0.8E2		Bq/g				VV
W-07S302	SLUDGE	RADS	AC-MM-2 21996	PU-242	1.4E1	0.2E1		Bq/g				VV
W-07S302	SLUDGE	RADS	AC-MM-2 21996	PU-PHA-4.90	1.4E1			Bq/g				VV
W-07S302	SLUDGE	RADS	AC-MM-2 21996	PU-PHA-5.15	8.3E2			Bq/g				VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	ET_LIMI	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-07S302	SLUDGE	RADS	AC-MM-2 21996	PU-PHA-5.50	2.1E3			Bq/g				VV
W-07S302	SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	3.0E3	0.3E3		Bq/g				VV
W-07S302	SLUDGE	RADS	EPA 900.0	G-ALPHA	1.2E4	0.1E4		Bq/g				VV
W-07S302	SLUDGE	RADS	EPA 900.0	G-BETA	2.5E6	0.1E6		Bq/g				VV
W-07S302	SLUDGE	RADS	EPA 901.1	AM-241			<9700	Bq/g	<	U		VV
W-07S302	SLUDGE	RADS	EPA 901.1	CO-60	1.4E3	0.6E3		Bq/g				VV
W-07S302	SLUDGE	RADS	EPA 901.1	CS-134			<1500	Bq/g	<	U		VV
W-07S302	SLUDGE	RADS	EPA 901.1	CS-137	8.9E5	0.1E5		Bq/g				VV
W-07S302	SLUDGE	RADS	EPA 901.1	EU-152			<7400	Bq/g	<	U		VV
W-07S302	SLUDGE	RADS	EPA 901.1	EU-154			<1300	Bq/g	<	U		VV
W-07S302	SLUDGE	RADS	EPA 901.1	EU-155			<4800	Bq/g	<	U		VV
W-07S302	SLUDGE	RADS	EPA 905.0	TOTAL-RAD-SR	6.8E5	0.1E5		Bq/g				VV
W-07S304	SLUDGE	CARBON	SW846 9060	TC	5830	329		µg/g				VV
W-07S304	SLUDGE	CARBON	SW846 9060	TIC	5040	280		µg/g				VV
W-07S304	SLUDGE	CARBON	SW846 9060	TOC	798	69		µg/g				VV
W-07S304	SLUDGE	ANION	SW846 9056	BR	109	42		µg/g				VV
W-07S304	SLUDGE	ANION	SW846 9056	F	1720	5		µg/g				VV
W-07S304	SLUDGE	ANION	SW846 9056	NO3	36700	96		µg/g				VV
W-07S304	SLUDGE	ANION	SW846 9056	PO4	5185	273		µg/g				VV
W-07S304	SLUDGE	ANION	SW846 9056	SO4	7510	381		µg/g				VV
W-07S304	SLUDGE	METAL	SW846 6010A	AG	4.06E+00	5.07E-01		µg/g		R	8	VI
W-07S304	SLUDGE	METAL	SW846 6010A	AL	3.16E+03	1.47E+01		µg/g		J	5A	VV
W-07S304	SLUDGE	METAL	SW846 6010A	BA	1.67E+01	0.00E+00		µg/g				VV
W-07S304	SLUDGE	METAL	SW846 6010A	BE			<.0507	µg/g	<	U		VV
W-07S304	SLUDGE	METAL	SW846 6010A	CA	4.77E+02	3.04E+00		µg/g				VV
W-07S304	SLUDGE	METAL	SW846 6010A	CD			<3.73	µg/g	<	U		VV
W-07S304	SLUDGE	METAL	SW846 6010A	CO			<2.76	µg/g	<	U		VV
W-07S304	SLUDGE	METAL	SW846 6010A	CR	1.32E+02	1.01E+00		µg/g				VV
W-07S304	SLUDGE	METAL	SW846 6010A	CU	7.84E+01	0.00E+00		µg/g				VV
W-07S304	SLUDGE	METAL	SW846 6010A	FE	7.15E+02	2.54E+00		µg/g		J	8	VV
W-07S304	SLUDGE	METAL	SW846 6010A	K	1.09E+04	5.22E+01		µg/g				VV
W-07S304	SLUDGE	METAL	SW846 6010A	MG	1.45E+02	3.04E+00		µg/g				VV
W-07S304	SLUDGE	METAL	SW846 6010A	MN	2.05E+01	0.00E+00		µg/g				VV
W-07S304	SLUDGE	METAL	SW846 6010A	NA	6.35E+04	2.56E+03		µg/g				VV
W-07S304	SLUDGE	METAL	SW846 6010A	NI	7.35E+00	3.04E+00		µg/g				VV
W-07S304	SLUDGE	METAL	SW846 6010A	SB			<50.2	µg/g	<	U		VV
W-07S304	SLUDGE	METAL	SW846 6010A	SE			<5.07	µg/g	<	U		VV
W-07S304	SLUDGE	METAL	SW846 6010A	SR	3.80E+00	0.00E+00		µg/g				VV
W-07S304	SLUDGE	METAL	SW846 6010A	TH	4.71E+03	8.70E+01		µg/g				VV
W-07S304	SLUDGE	METAL	SW846 6010A	U	1.95E+05	1.74E+03		µg/g				VV
W-07S304	SLUDGE	METAL	SW846 6010A	V			<1.29	µg/g	<	U		VV
W-07S304	SLUDGE	METAL	SW846 6010A	ZN	2.21E+01	5.58E+00		µg/g				VV
W-07S304	SLUDGE	METAL	SW846 7000A	AS			<5.07	µg/g	<	U		VV
W-07S304	SLUDGE	METAL	SW846 7000A	PB	1.87E+01	8.11E-01		µg/g				VV
W-07S304	SLUDGE	METAL	SW846 7000A	TL			<5.07	µg/g	<	U		VV
W-07S304	SLUDGE	METAL	SW846 7471A	HG	1.04E+02	9.12E-01		µg/g				VV
W-07S304	SLUDGE	METAL	SW846 9056	CL	2730	165		µg/g				VV
W-07S304	SLUDGE	PHYSC	AC-MM-1 1011	DENSITY	1.57			g/ml				

Tank W-7

SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	ET_LIMI	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-07S304	SLUDGE	PHYSC	GAAT SAP	MOISTURE	57.7			%				
W-07S304	SLUDGE	RADS	AC-MM-2 21807	TOTAL-RAD SR	1.4E5	0.1E5		Bq/g				VV
W-07S304	SLUDGE	RADS	AC-MM-2 21996	4.20 MEV U238	27.6			%				VV
W-07S304	SLUDGE	RADS	AC-MM-2 21996	4.80 MEV U234	33.9			%				VV
W-07S304	SLUDGE	RADS	AC-MM-2 21996	5.15 MEV PU239/240	21.8			%				VV
W-07S304	SLUDGE	RADS	AC-MM-2 21996	5.50 MEV PU238/AM241	9.6			%				VV
W-07S304	SLUDGE	RADS	AC-MM-2 21996	5.80 MEV CM244	7.1			%				VV
W-07S304	SLUDGE	RADS	AC-MM-2 21996	PU-238	5.0E2	0.5E2		Bq/g				VV
W-07S304	SLUDGE	RADS	AC-MM-2 21996	PU-239	1.3E3	0.1E3		Bq/g				VV
W-07S304	SLUDGE	RADS	AC-MM-2 21996	PU-242	2.2	1.2		Bq/g				VV
W-07S304	SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	1.8E3	0.2E3		Bq/g				VV
W-07S304	SLUDGE	RADS	EPA 900.0	G-ALPHA	7.1E3	1.0E3		Bq/g				VV
W-07S304	SLUDGE	RADS	EPA 900.0	G-BETA	2.8E6	0.1E6		Bq/g				VV
W-07S304	SLUDGE	RADS	EPA 901.1	AM-241			<15000	Bq/g	<	U		VV
W-07S304	SLUDGE	RADS	EPA 901.1	CO-60	7.6E2	3.7E2		Bq/g				VV
W-07S304	SLUDGE	RADS	EPA 901.1	CS-134			<2200	Bq/g	<	U		VV
W-07S304	SLUDGE	RADS	EPA 901.1	CS-137	2.2E6	0.1E6		Bq/g				VV
W-07S304	SLUDGE	RADS	EPA 901.1	EU-152			<12000	Bq/g	<	U		VV
W-07S304	SLUDGE	RADS	EPA 901.1	EU-154			<1200	Bq/g	<	U		VV
W-07S304	SLUDGE	RADS	EPA 901.1	EU-155			<6900	Bq/g	<	U		VV
W07H303A	HARD SLUDGE	CARBON	SW846 9060	TC	4950	399		µg/g				VV
W07H303A	HARD SLUDGE	CARBON	SW846 9060	TIC	4080	389		µg/g				VV
W07H303A	HARD SLUDGE	CARBON	SW846 9060	TOC	866	119		µg/g				VV
W07H303A	HARD SLUDGE	ANION	SW846 9056	BR	118	16		µg/g				VV
W07H303A	HARD SLUDGE	ANION	SW846 9056	F	1100	41		µg/g				VV
W07H303A	HARD SLUDGE	ANION	SW846 9056	NO3	37300	1821		µg/g				VV
W07H303A	HARD SLUDGE	ANION	SW846 9056	PO4	4770	58		µg/g				VV
W07H303A	HARD SLUDGE	ANION	SW846 9056	SO4	7700	216		µg/g				VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	AG			<1.24	µg/g	<	R	8	VI
W07H303A	HARD SLUDGE	METAL	SW846 6010A	AL	1.19E+03	4.45E+00		µg/g		J	5A	VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	B	1.63E+01	4.65E-01		µg/g				VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	BA	6.11E+01	0.00E+00		µg/g				VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	BE			<0.0495	µg/g	<	U		VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	CA	3.84E+02	4.45E+00		µg/g				VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	CD			<3.64	µg/g	<	U		VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	CO			<2.7	µg/g	<	U		VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	CR	1.68E+02			µg/g				VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	CU	5.98E+01	9.89E-01		µg/g				VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	FE	7.87E+02	9.89E-01		µg/g		J	8	VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	K	1.02E+04	5.29E+01		µg/g				VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	MG	9.50E+01	2.47E+00		µg/g				VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	MN	3.66E+01	0.00E+00		µg/g				VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	NA	6.61E+04	3.90E+03		µg/g				VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	NI	1.26E+01			µg/g				VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	SB			<49	µg/g	<	U		VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	SR	4.20E+00	0.00E+00		µg/g				VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	TH	4.24E+03	0.00E+00		µg/g				VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	U	1.79E+05	9.79E+02		µg/g				VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	ET_LIMI	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W07H303A	HARD SLUDGE	METAL	SW846 6010A	V	1.48E+00	4.95E-01		µg/g				VV
W07H303A	HARD SLUDGE	METAL	SW846 6010A	ZN	1.85E+01	1.98E+00		µg/g				VV
W07H303A	HARD SLUDGE	METAL	SW846 7060A	AS			<4.95	µg/g	<	U		VV
W07H303A	HARD SLUDGE	METAL	SW846 7421	PB	1.50E+01			µg/g				VV
W07H303A	HARD SLUDGE	METAL	SW846 7471A	HG	1.21E+02			µg/g				VV
W07H303A	HARD SLUDGE	METAL	SW846 7740	SE			<5	µg/g	<	U		VV
W07H303A	HARD SLUDGE	METAL	SW846 7841	TL			<5	µg/g	<	U		VV
W07H303A	HARD SLUDGE	METAL	SW846 9056	CL	2820	35		µg/g				VV
W07H303A	HARD SLUDGE	NHVOA	SW846 8015	ACETONE	10			mg/kg	U	R	L	VI
W07H303A	HARD SLUDGE	NHVOA	SW846 8015	BUTANOL	10			mg/kg	U	UJ	L	VV
W07H303A	HARD SLUDGE	NHVOA	SW846 8015	ETHYL ETHER	10			mg/kg	U	UJ	L	VV
W07H303A	HARD SLUDGE	NHVOA	SW846 8015	ISOBUTANOL	10			mg/kg	U	UJ	L	VV
W07H303A	HARD SLUDGE	NHVOA	SW846 8015	METHANOL	10			mg/kg	U	UJ	L	VV
W07H303A	HARD SLUDGE	NHVOA	SW846 8015	METHYL ETHYL KETONE	10			mg/kg	U	UJ	L	VV
W07H303A	HARD SLUDGE	NHVOA	SW846 8015	PYRIDINE	10			mg/kg	U	UJ	L	VV
W07H303A	HARD SLUDGE	PHYSC	AC-MM-1 1011	DENSITY	1.18			g/ml				
W07H303A	HARD SLUDGE	PHYSC	GAAT SAP	MOISTURE	58.7			%				
W07H303A	HARD SLUDGE	RADS	AC-MM-2 21807	TOTAL-RAD-SR	1.1E5	0.1E5		Bq/g				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-2 21996	4.20 MEV U238	32.2			%				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-2 21996	4.80 MEV U234	33.9			%				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-2 21996	5.15 MEV PU239/240	15.8			%				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-2 21996	5.50 MEV PU238/AM241	10.3			%				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-2 21996	5.80 MEV CM244	7.8			%				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-2 21996	PU-238	3.9E2	0.7E2		Bq/g				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-2 21996	PU-239	7.1E2	1.3E2		Bq/g				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-2 21996	PU-242	2.1	0.4		Bq/g				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-2 22003	G-FISSILE(TOT)	1.2E3	0.1E3		µg/g				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	1.1E3	0.2E3		Bq/g				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-4 0100	PU-ISO-238	0.74	0.29		% atoms				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-4 0100	PU-ISO-239	96.29	0.26		% atoms				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-4 0100	PU-ISO-240	2.83	0.03		% atoms				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-4 0100	PU-ISO-241	0.03	0.01		% atoms				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-4 0100	PU-ISO-242	0.10	0.01		% atoms				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-4 0100	PU-ISO-244			<.01	% atoms	<	U		VV
W07H303A	HARD SLUDGE	RADS	AC-MM-4 0100	U-ISO-233			<.001	% atoms	<	U		VV
W07H303A	HARD SLUDGE	RADS	AC-MM-4 0100	U-ISO-234	0.006	0.0001		% atoms				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-4 0100	U-ISO-235	0.722	0.006		% atoms				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-4 0100	U-ISO-236	0.001	0.0002		% atoms				VV
W07H303A	HARD SLUDGE	RADS	AC-MM-4 0100	U-ISO-238	99.271	.006		% atoms				VV
W07H303A	HARD SLUDGE	RADS	EPA 900.0	G-ALPHA	6.5E3	0.9E3		Bq/g				VV
W07H303A	HARD SLUDGE	RADS	EPA 900.0	G-BETA	3.9E6	0.1E6		Bq/g				VV
W07H303A	HARD SLUDGE	RADS	EPA 901.1	AM-241			<17000	Bq/g	<	U		VV
W07H303A	HARD SLUDGE	RADS	EPA 901.1	CO-60			<470	Bq/g	<	U		VV
W07H303A	HARD SLUDGE	RADS	EPA 901.1	CS-134			<2800	Bq/g	<	U		VV
W07H303A	HARD SLUDGE	RADS	EPA 901.1	CS-137	3.1E6	0.1E6		Bq/g				VV
W07H303A	HARD SLUDGE	RADS	EPA 901.1	EU-152			<13000	Bq/g	<	U		VV
W07H303A	HARD SLUDGE	RADS	EPA 901.1	EU-154			<1500	Bq/g	<	U		VV
W07H303A	HARD SLUDGE	RADS	EPA 901.1	EU-155			<8100	Bq/g	<	U		VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	ET_LIMI	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W07H303A	HARD SLUDGE	SVOA	SW846 8270	2,4-DINITROTOLUENE	0.6			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	SVOA	SW846 8270	2-METHYLPHENOL	10.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	SVOA	SW846 8270	4-METHYLPHENOL	10.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	SVOA	SW846 8270	DI-N-BUTYLPHTHALATE	6.2			mg/kg		U	B	VV
W07H303A	HARD SLUDGE	SVOA	SW846 8270	HEXACHLOROBENZENE	0.6			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	SVOA	SW846 8270	HEXACHLOROETHANE	10.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	SVOA	SW846 8270	NITROBENZENE	10.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	SVOA	SW846 8270	PENTACHLOROPHENOL	10.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	SVOA	SW846 8270	UNKNOWN	1.1			mg/kg	J	NJ		VV
W07H303A	HARD SLUDGE	SVOA	SW846 8270	UNKNOWN	3.4			mg/kg	J	NJ		VV
W07H303A	HARD SLUDGE	SVOA	SW846 8270	UNKNOWN	1.0			mg/kg	J	NJ		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	1,1,1-TRICHLOROETHANE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	1,1,2,2-TETRACHLOROETHANE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROETHANE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROTRIFLUOROETHANE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	1,1-DICHLOROETHYLENE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	1,2-DICHLOROETHANE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	1,4-DICHLOROBENZENE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	2-NITROPROPANE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	BENZENE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	BROMOFORM	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	CARBON DISULFIDE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	CARBON TETRACHLORIDE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	CHLOROBENZENE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	CHLOROFORM	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	CYCLOHEXANE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	ETHYLBENZENE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	METHYLENE CHLORIDE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	ORTHO-DICHLOROBENZENE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	TETRACHLOROETHYLENE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	TOLUENE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	TRICHLOROETHYLENE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	TRICHLOROFLUOROMETHANE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	VINYL CHLORIDE	1.0			mg/kg	U	U		VV
W07H303A	HARD SLUDGE	VOA	SW846 8240	XYLENE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	CARBON	SW846 9060	TC	5960	214		µg/g				VV
W07H303B	HARD SLUDGE	CARBON	SW846 9060	TIC	4450	189		µg/g				VV
W07H303B	HARD SLUDGE	CARBON	SW846 9060	TOC	1520	104		µg/g				VV
W07H303B	HARD SLUDGE	ANION	SW846 9056	BR	102	3		µg/g				VV
W07H303B	HARD SLUDGE	ANION	SW846 9056	F	3850	40		µg/g				VV
W07H303B	HARD SLUDGE	ANION	SW846 9056	NO3	37700	1582		µg/g				VV
W07H303B	HARD SLUDGE	ANION	SW846 9056	PO4	5200	146		µg/g				VV
W07H303B	HARD SLUDGE	ANION	SW846 9056	SO4	7990	28		µg/g				VV
W07H303B	HARD SLUDGE	METAL	SW846 6010A	AG			<1.23	µg/g	<	R	8	VI
W07H303B	HARD SLUDGE	METAL	SW846 6010A	AL	4.66E+03	3.49E+01		µg/g		J	5A	VV
W07H303B	HARD SLUDGE	METAL	SW846 6010A	B	6.19E+01	1.47E+00		µg/g				VV
W07H303B	HARD SLUDGE	METAL	SW846 6010A	BA	3.18E+02			µg/g				VV
W07H303B	HARD SLUDGE	METAL	SW846 6010A	BE			<.05	µg/g	<	U		VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	ET_LIMI	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W07H303B	HARD SLUDGE	METAL	SW846 6010A	CA	1.02E+03	9.83E+00		µg/g				W
W07H303B	HARD SLUDGE	METAL	SW846 6010A	CD			<3.6	µg/g	<	U		W
W07H303B	HARD SLUDGE	METAL	SW846 6010A	CO			<2.68	µg/g	<	U		W
W07H303B	HARD SLUDGE	METAL	SW846 6010A	CR	1.55E+03			µg/g				W
W07H303B	HARD SLUDGE	METAL	SW846 6010A	CU	4.38E+01	9.83E-01		µg/g				W
W07H303B	HARD SLUDGE	METAL	SW846 6010A	FE	2.03E+04	2.21E+02		µg/g		J	8	W
W07H303B	HARD SLUDGE	METAL	SW846 6010A	K	6.15E+03	3.39E+01		µg/g				W
W07H303B	HARD SLUDGE	METAL	SW846 6010A	MG	2.03E+02	5.41E+00		µg/g				W
W07H303B	HARD SLUDGE	METAL	SW846 6010A	MN	4.79E+02	4.42E+00		µg/g				W
W07H303B	HARD SLUDGE	METAL	SW846 6010A	NA	6.87E+04	2.68E+03		µg/g				W
W07H303B	HARD SLUDGE	METAL	SW846 6010A	NI	1.78E+02	3.44E+00		µg/g				W
W07H303B	HARD SLUDGE	METAL	SW846 6010A	SB			<48.7	µg/g	<	U		W
W07H303B	HARD SLUDGE	METAL	SW846 6010A	SR	1.30E+01	00.0E+00		µg/g				W
W07H303B	HARD SLUDGE	METAL	SW846 6010A	TH	1.51E+03	6.28E+01		µg/g				W
W07H303B	HARD SLUDGE	METAL	SW846 6010A	U	6.31E+04	1.45E+03		µg/g				W
W07H303B	HARD SLUDGE	METAL	SW846 6010A	V	1.47E+00	4.92E-01		µg/g				W
W07H303B	HARD SLUDGE	METAL	SW846 6010A	ZN	2.88E+01	1.97E+00		µg/g				W
W07H303B	HARD SLUDGE	METAL	SW846 7060A	AS			<5	µg/g	<	U		W
W07H303B	HARD SLUDGE	METAL	SW846 7421	PB	1.06E+02	4.97E+01		µg/g				W
W07H303B	HARD SLUDGE	METAL	SW846 7471A	HG	1.40E+02	9.03E-01		µg/g				W
W07H303B	HARD SLUDGE	METAL	SW846 7740	SE			<5	µg/g	<	U		W
W07H303B	HARD SLUDGE	METAL	SW846 7841	TL			<5	µg/g	<	U		W
W07H303B	HARD SLUDGE	METAL	SW846 9056	CL	2930	39		µg/g				W
W07H303B	HARD SLUDGE	NHVOA	SW846 8015	ACETONE	10			mg/kg	U	R	Q,L	W
W07H303B	HARD SLUDGE	NHVOA	SW846 8015	BUTANOL	10			mg/kg	U	UJ	Q,L	W
W07H303B	HARD SLUDGE	NHVOA	SW846 8015	ETHYL ETHER	10			mg/kg	U	UJ	L	W
W07H303B	HARD SLUDGE	NHVOA	SW846 8015	ISOBUTANOL	10			mg/kg	U	UJ	L	W
W07H303B	HARD SLUDGE	NHVOA	SW846 8015	METHANOL	10			mg/kg	U	UJ	L	W
W07H303B	HARD SLUDGE	NHVOA	SW846 8015	METHYL ETHYL KETONE	10			mg/kg	U	UJ	Q,L	W
W07H303B	HARD SLUDGE	NHVOA	SW846 8015	PYRIDINE	10			mg/kg	U	UJ	L	W
W07H303B	HARD SLUDGE	PHYSC	AC-MM-1 1011	DENSITY	1.45			g/ml				
W07H303B	HARD SLUDGE	PHYSC	GAAT SAP	MOISTURE	62.1			%				
W07H303B	HARD SLUDGE	RADS	AC-MM-2 21807	TOTAL-RAD-SR	1.8E4	0.1E4		Bq/g				W
W07H303B	HARD SLUDGE	RADS	AC-MM-2 21996	4.20 MEV U238	27.6			%				W
W07H303B	HARD SLUDGE	RADS	AC-MM-2 21996	4.80 MEV U234	40.7			%				W
W07H303B	HARD SLUDGE	RADS	AC-MM-2 21996	5.15 MEV PU239/240	20.7			%				W
W07H303B	HARD SLUDGE	RADS	AC-MM-2 21996	5.50 MEV PU238/AM241	8.1			%				W
W07H303B	HARD SLUDGE	RADS	AC-MM-2 21996	5.80 MEV CM244	2.8			%				W
W07H303B	HARD SLUDGE	RADS	AC-MM-2 21996	PU-238	2.1E2	0.4E2		Bq/g				W
W07H303B	HARD SLUDGE	RADS	AC-MM-2 21996	PU-239	5.7E2	1.1E2		Bq/g				W
W07H303B	HARD SLUDGE	RADS	AC-MM-2 21996	PU-242	2.8E0	0.6		Bq/g				W
W07H303B	HARD SLUDGE	RADS	AC-MM-2 22003	G-FISSILE(TOT)	4.4E2	0.1E2		µg/g				W
W07H303B	HARD SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	7.8E2	1.5E2		Bq/g				W
W07H303B	HARD SLUDGE	RADS	AC-MM-4 0100	PU-ISO-238	2.13	0.93		% atoms				W
W07H303B	HARD SLUDGE	RADS	AC-MM-4 0100	PU-ISO-239	96.98	0.92		% atoms				W
W07H303B	HARD SLUDGE	RADS	AC-MM-4 0100	PU-ISO-240	0.83	0.01		% atoms				W
W07H303B	HARD SLUDGE	RADS	AC-MM-4 0100	PU-ISO-241	0.01	0.001		% atoms				W
W07H303B	HARD SLUDGE	RADS	AC-MM-4 0100	PU-ISO-242	0.05	0.001		% atoms				W
W07H303B	HARD SLUDGE	RADS	AC-MM-4 0100	PU-ISO-244			<.01	% atoms	<	U		W

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	ET_LIMI	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W07H303B	HARD SLUDGE	RADS	AC-MM-4 0100	U-ISO-233			<.001 .	% atoms	<	U		VV
W07H303B	HARD SLUDGE	RADS	AC-MM-4 0100	U-ISO-234	0.0055	0.0001		% atoms				VV
W07H303B	HARD SLUDGE	RADS	AC-MM-4 0100	U-ISO-235	0.711	0.004		% atoms				VV
W07H303B	HARD SLUDGE	RADS	AC-MM-4 0100	U-ISO-236	0.0004	0.0001		% atoms				VV
W07H303B	HARD SLUDGE	RADS	AC-MM-4 0100	U-ISO-238	99.283	0.004		% atoms				VV
W07H303B	HARD SLUDGE	RADS	EPA 900.0	G-ALPHA	2.4E3	0.6E3		Bq/g				VV
W07H303B	HARD SLUDGE	RADS	EPA 900.0	G-BETA	2.5E6	0.1E6		Bq/g				VV
W07H303B	HARD SLUDGE	RADS	EPA 901.1	AM-241			<14000	Bq/g	<	U		VV
W07H303B	HARD SLUDGE	RADS	EPA 901.1	CO-60			<720	Bq/g	<	U		VV
W07H303B	HARD SLUDGE	RADS	EPA 901.1	CS-134			<2300	Bq/g	<	U		VV
W07H303B	HARD SLUDGE	RADS	EPA 901.1	CS-137	2.1E6	0.1E6		Bq/g				VV
W07H303B	HARD SLUDGE	RADS	EPA 901.1	EU-152			<11000	Bq/g	<	U		VV
W07H303B	HARD SLUDGE	RADS	EPA 901.1	EU-154			<1400	Bq/g	<	U		VV
W07H303B	HARD SLUDGE	RADS	EPA 901.1	EU-155			<6700	Bq/g	<	U		VV
W07H303B	HARD SLUDGE	SVOA	SW846 8270	2,4-DINITROTOLUENE	0.6			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	SVOA	SW846 8270	2-METHYLPHENOL	10.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	SVOA	SW846 8270	4-METHYLPHENOL	10.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	SVOA	SW846 8270	DI-N-BUTYLPHTHALATE	16.0			mg/kg	J	NJ		VV
W07H303B	HARD SLUDGE	SVOA	SW846 8270	HEXACHLOROBENZENE	0.6			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	SVOA	SW846 8270	HEXACHLOROETHANE	10.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	SVOA	SW846 8270	NITROBENZENE	10.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	SVOA	SW846 8270	PENTACHLOROPHENOL	10.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	SVOA	SW846 8270	UNKNOWN HYDROCARBON	2.0			mg/kg	J	NJ		VV
W07H303B	HARD SLUDGE	SVOA	SW846 8270	UNKNOWN HYDROCARBON	3.3			mg/kg	J	NJ		VV
W07H303B	HARD SLUDGE	VOA	SW846 8270	UNKNOWN	3.5			mg/kg	J	NJ		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	1,1,1-TRICHLOROETHANE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	1,1,2,2-TETRACHLOROETHANE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROETHANE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROTRIFLUOROETHANE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	1,1-DICHLOROETHYLENE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	1,2-DICHLOROETHANE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	1,4-DICHLOROBENZENE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	2-NITROPROPANE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	BENZENE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	BROMOFORM	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	CARBON DISULFIDE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	CARBON TETRACHLORIDE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	CHLOROBENZENE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	CHLOROFORM	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	CYCLOHEXANE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	ETHYLBENZENE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	METHYLENE CHLORIDE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	ORTHO-DICHLOROBENZENE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	TETRACHLOROETHYLENE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	TOLUENE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	TRICHLOROETHYLENE	1.0			mg/kg	U	UJ	Q	VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	TRICHLOROFLUOROMETHANE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	VINYL CHLORIDE	1.0			mg/kg	U	U		VV
W07H303B	HARD SLUDGE	VOA	SW846 8240	XYLENE	1.0			mg/kg	U	U		VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	ET_LIMI	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W07H303C	HARD SLUDGE	METAL	SW846 6010A	AG	1.80E+01	0.00E+00		µg/g		R	8	VI
W07H303C	HARD SLUDGE	METAL	SW846 6010A	AL	1.75E+01	4.85E-01		µg/g		J	5A	VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	B	1.36E+01	4.85E-01		µg/g				VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	BA	7.69E+01	9.70E-01		µg/g				VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	BE			<.0485	µg/g	<	U		VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	CA	3.01E+02	2.91E+00		µg/g				VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	CD			<3.57	µg/g	<	U		VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	CO	2.67E+00	1.94E+00		µg/g				VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	CR	1.24E+02	9.70E-01		µg/g				VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	CU	3.08E+01	4.85E-01		µg/g				VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	FE	2.40E+02	9.70E-01		µg/g		J	8	VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	K	1.11E+04	9.70E+01		µg/g				VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	MG	2.47E+02	5.34E+00		µg/g				VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	MN	2.79E+01	0.00E+00		µg/g				VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	NA	5.95E+04	1.27E+03		µg/g				VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	NI			<4.63	µg/g	<	U		VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	PB	4.10E+01	1.50E+01		µg/g				VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	SB			<48.1	µg/g	<	U		VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	SR	2.43E+00	00.0E+00		µg/g				VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	TH	5.16E+03	8.11E+01		µg/g				VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	U	2.22E+05	1.84E+03		µg/g				VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	V	2.91E+00	9.70E-01		µg/g				VV
W07H303C	HARD SLUDGE	METAL	SW846 6010A	ZN	8.25E+00	4.37E+00		µg/g				VV
W07H303C	HARD SLUDGE	METAL	SW846 7471A	HG	5.86E+01	2.38E-01		µg/g				VV
W07H303C	HARD SLUDGE	RADS	AC-MM-2 21807	TOTAL-RAD-SR	1.8E4	0.1E4		Bq/g				VV
W07H303C	HARD SLUDGE	RADS	AC-MM-2 21996	4.20 MEV U238	42.6			%				VV
W07H303C	HARD SLUDGE	RADS	AC-MM-2 21996	4.80 MEV U234	39.5			%				VV
W07H303C	HARD SLUDGE	RADS	AC-MM-2 21996	5.15 MEV PU239/240	9.6			%				VV
W07H303C	HARD SLUDGE	RADS	AC-MM-2 21996	5.50 MEV PU238/AM241	8.3			%				VV
W07H303C	HARD SLUDGE	RADS	AC-MM-2 21996	5.80 MEV CM244			<1	%	<	U		VV
W07H303C	HARD SLUDGE	RADS	EPA 900.0	G-ALPHA	5.8E3	0.9E3		Bq/g				VV
W07H303C	HARD SLUDGE	RADS	EPA 900.0	G-BETA	6.4E6	0.1E6		Bq/g				VV
W07H303C	HARD SLUDGE	RADS	EPA 901.1	AM-241			<22000	Bq/g	<	U		VV
W07H303C	HARD SLUDGE	RADS	EPA 901.1	CO-60			<720	Bq/g	<	U		VV
W07H303C	HARD SLUDGE	RADS	EPA 901.1	CS-134			<3500	Bq/g	<	U		VV
W07H303C	HARD SLUDGE	RADS	EPA 901.1	CS-137	5.4E6	0.1E6		Bq/g				VV
W07H303C	HARD SLUDGE	RADS	EPA 901.1	EU-152			<17000	Bq/g	<	U		VV
W07H303C	HARD SLUDGE	RADS	EPA 901.1	EU-154			<700	Bq/g	<	U		VV
W07H303C	HARD SLUDGE	RADS	EPA 901.1	EU-155			<11000	Bq/g	<	U		VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	AG	1.01E+01	1.01E+00		µg/g		R	8	VI
W07H303D	HARD SLUDGE	METAL	SW846 6010A	AL	1.17E+03	3.03E+00		µg/g		J	5A	VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	B	1.34E+01	5.06E-01		µg/g				VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	BA	2.48E+01	0.00E+00		µg/g				VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	BE			<.0506	µg/g	<	U		VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	CA	3.26E+02	5.06E-01		µg/g				VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	CD			<3.72	µg/g	<	U		VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	CO			<2.76	µg/g	<	U		VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	CR	1.14E+02	1.52E+00		µg/g				VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	CU	4.93E+01	1.01E+00		µg/g				VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	FE	4.23E+02	2.02E+00		µg/g		J	8	VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	ET_LIMI	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W07H303D	HARD SLUDGE	METAL	SW846 6010A	HG	6.05E+01	2.90E-01		µg/g				VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	K	8.93E+03	1.77E+01		µg/g				VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	MG	1.76E+02	2.53E+00		µg/g				VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	MN	1.95E+01	0.00E+00		µg/g				VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	NA	5.61E+04	2.20E+03		µg/g				VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	NI			<4.83	µg/g	<	U		VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	PB	5.61E+01	3.14E+01		µg/g				VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	SB			<50.1	µg/g	<	U		VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	SR	3.79E+00	00.0E+00		µg/g				VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	TH	5.06E+03	2.48E+01		µg/g				VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	U	2.12E+05	1.68E+03		µg/g				VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	V	2.28E+00	1.01E+00		µg/g				VV
W07H303D	HARD SLUDGE	METAL	SW846 6010A	ZN	8.09E+00	2.02E+00		µg/g				VV
W07H303D	HARD SLUDGE	RADS	AC-MM-2 21807	TOTAL-RAD-SR	1.0E5	0.1E5		Bq/g				VV
W07H303D	HARD SLUDGE	RADS	AC-MM-2 21996	4.20 MEV U238	37.3			%				VV
W07H303D	HARD SLUDGE	RADS	AC-MM-2 21996	4.80 MEV U234	39.1			%				VV
W07H303D	HARD SLUDGE	RADS	AC-MM-2 21996	5.15 MEV PU239/240	11.1			%				VV
W07H303D	HARD SLUDGE	RADS	AC-MM-2 21996	5.50 MEV PU238/AM241	8.5			%				VV
W07H303D	HARD SLUDGE	RADS	AC-MM-2 21996	5.80 MEV CM244	4.0			%				VV
W07H303D	HARD SLUDGE	RADS	EPA 900.0	G-ALPHA	6.3E3	1.0E3		Bq/g				VV
W07H303D	HARD SLUDGE	RADS	EPA 900.0	G-BETA	3.1E6	0.1E6		Bq/g				VV
W07H303D	HARD SLUDGE	RADS	EPA 901.1	AM-241			<15000	Bq/g	<	U		VV
W07H303D	HARD SLUDGE	RADS	EPA 901.1	CO-60			<620	Bq/g	<	U		VV
W07H303D	HARD SLUDGE	RADS	EPA 901.1	CS-134			<2300	Bq/g	<	U		VV
W07H303D	HARD SLUDGE	RADS	EPA 901.1	CS-137	2.5E6	0.1E6		Bq/g				VV
W07H303D	HARD SLUDGE	RADS	EPA 901.1	EU-152			<12000	Bq/g	<	U		VV
W07H303D	HARD SLUDGE	RADS	EPA 901.1	EU-154			<1400	Bq/g	<	U		VV
W07H303D	HARD SLUDGE	RADS	EPA 901.1	EU-155			<7300	Bq/g	<	U		VV
W07H303D	HARD SLUDGE	SVOA	SW846 8270	2,4-DINITROTOLUENE	0.6			mg/kg	U	U		VV
W07H303D	HARD SLUDGE	SVOA	SW846 8270	2-METHYLPHENOL	10.0			mg/kg	U	U		VV
W07H303D	HARD SLUDGE	SVOA	SW846 8270	4-METHYLPHENOL	10.0			mg/kg	U	U		VV
W07H303D	HARD SLUDGE	SVOA	SW846 8270	DI-N-BUTYLPHTHALATE	8.4			mg/kg	J	U	B	VV
W07H303D	HARD SLUDGE	SVOA	SW846 8270	HEXACHLOROBENZENE	0.6			mg/kg	U	U		VV
W07H303D	HARD SLUDGE	SVOA	SW846 8270	HEXACHLOROETHANE	10.0			mg/kg	U	U		VV
W07H303D	HARD SLUDGE	SVOA	SW846 8270	NITROBENZENE	10.0			mg/kg	U	U		VV
W07H303D	HARD SLUDGE	SVOA	SW846 8270	PENTACHLOROPHENOL	10.0			mg/kg	U	U		VV
W07H303D	HARD SLUDGE	SVOA	SW846 8270	UNKNOWN HYDROCARBON	1.1			mg/kg	J	NJ		VV
W07H303D	HARD SLUDGE	SVOA	SW846 8270	UNKNOWN PHTHALATE	1.6			mg/kg	J	NJ		VV
W07H303D	HARD SLUDGE	SVOA	SW846 8270	UNKNOWN	3.4			mg/kg	J	NJ		VV
W07H303D	HARD SLUDGE	SVOA	SW846 8270	UNKNOWN	1.1			mg/kg	J	NJ		VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
0492101	LIQUID	VOA	SW846 8240	1,1,1-TRICHLOROETHANE	5.0E-03			mg/L	U	U		VV
0492101	LIQUID	VOA	SW846 8240	1,1,2,2-TETRACHLOROETHANE	5.0E-03			mg/L	U			VV
0492101	LIQUID	VOA	SW846 8240	1,1,2-TRICHLOROETHANE	5.0E-03			mg/L	U			VV
0492101	LIQUID	VOA	SW846 8240	1,1,2-TRICHLOROTRIFLUOROETHANE	5.0E-03			mg/L	U			VV
0492101	LIQUID	VOA	SW846 8240	1,1-DICHLOROETHYLENE	5.0E-03			mg/L	U			VV
0492101	LIQUID	VOA	SW846 8240	1,2-DICHLOROETHANE	5.0E-03			mg/L	U			VV
0492101	LIQUID	VOA	SW846 8240	1,4-DICHLOROBENZENE	5.0E-03			mg/L	U	U		VV
0492101	LIQUID	VOA	SW846 8240	2-NITROPROPANE	5.0E-03			mg/L	U	U		VV
0492101	LIQUID	VOA	SW846 8240	BENZENE	5.0E-03			mg/L	U			VV
0492101	LIQUID	VOA	SW846 8240	BROMOFORM	5.0E-03			mg/L	U	U		VV
0492101	LIQUID	VOA	SW846 8240	CARBON DISULFIDE	5.0E-03			mg/L	U	U		VV
0492101	LIQUID	VOA	SW846 8240	CARBON TETRACHLORIDE	5.0E-03			mg/L	U	U		VV
0492101	LIQUID	VOA	SW846 8240	CHLOROBENZENE	5.0E-03			mg/L	U	U		VV
0492101	LIQUID	VOA	SW846 8240	CHLOROFORM	5.0E-03			mg/L	U	U		VV
0492101	LIQUID	VOA	SW846 8240	CYCLOHEXANE	5.0E-03			mg/L	U			VV
0492101	LIQUID	VOA	SW846 8240	ETHYLBENZENE	5.0E-03			mg/L	U			VV
0492101	LIQUID	VOA	SW846 8240	METHYLENE CHLORIDE	5.0E-03			mg/L	U			VV
0492101	LIQUID	VOA	SW846 8240	ORTHO-DICHLOROBENZENE	5.0E-03			mg/L	U	U		VV
0492101	LIQUID	VOA	SW846 8240	TETRACHLOROETHYLENE	5.0E-03			mg/L	U	U		VV
0492101	LIQUID	VOA	SW846 8240	TOLUENE	5.0E-03			mg/L	U	U		VV
0492101	LIQUID	VOA	SW846 8240	TRICHLOROETHYLENE	5.0E-03			mg/L	U	U		VV
0492101	LIQUID	VOA	SW846 8240	TRICHLOROFLUOROMETHANE	5.0E-03			mg/L	U	U		VV
0492101	LIQUID	VOA	SW846 8240	VINYL CHLORIDE	5.0E-03			mg/L	U	UJ	C	VV
0492101	LIQUID	VOA	SW846 8240	XYLENE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	1,1,1-TRICHLOROETHANE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	1,1,2,2-TETRACHLOROETHANE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	1,1,2-TRICHLOROETHANE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	1,1,2-TRICHLOROTRIFLUOROETHANE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	1,1-DICHLOROETHYLENE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	1,2-DICHLOROETHANE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	1,4-DICHLOROBENZENE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	2-NITROPROPANE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	BENZENE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	BROMOFORM	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	CARBON DISULFIDE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	CARBON TETRACHLORIDE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	CHLOROBENZENE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	CHLOROFORM	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	CYCLOHEXANE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	ETHYLBENZENE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	METHYLENE CHLORIDE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	ORTHO-DICHLOROBENZENE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	TETRACHLOROETHYLENE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	TOLUENE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	TRICHLOROETHYLENE	5.0E-03			mg/L	U	U		VV
W-08L318	LIQUID	VOA	SW846 8240	TRICHLOROFLUOROMETHANE	5.0E-03			mg/L	U	U		VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-08L318	LIQUID	VOA	SW846 8240	VINYL CHLORIDE	5.0E-03			mg/L	U	UJ	C	VV
W-08L318	LIQUID	VOA	SW846 8240	XYLENE	5.0E-03			mg/L	U	U		VV
W-08S320	SLUDGE	CARBON	SW846 9060	TOT C	12500	578		µg/g				VV
W-08S320	SLUDGE	CARBON	SW846 9060	TIC	6050	397		µg/g				VV
W-08S320	SLUDGE	CARBON	SW846 9060	TOC	6420	546		µg/g				VV
W-08S320	SLUDGE	ANION	SW846 9056	BR	9.63	2.63		µg/g				VV
W-08S320	SLUDGE	ANION	SW846 9056	F	151	8		µg/g				VV
W-08S320	SLUDGE	ANION	SW846 9056	NO3	2690	36		µg/g				VV
W-08S320	SLUDGE	ANION	SW846 9056	PO4	191	2		µg/g				VV
W-08S320	SLUDGE	ANION	SW846 9056	SO4	3470	87		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 6010A	AG			<3.74	µg/g	<	R	8	VI
W-08S320	SLUDGE	METAL	SW846 6010A	AL	9.88E+03	3.68E+01		µg/g		J	8	VV
W-08S320	SLUDGE	METAL	SW846 6010A	B	1.31E+01	3.94E-01		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 6010A	BA	4.59E+01	1.97E-01		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 6010A	BE	1.46E+01	0.00E+00		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 6010A	CA	7.85E+03	4.12E+01		µg/g		J	8	VV
W-08S320	SLUDGE	METAL	SW846 6010A	CD	5.22E+00	1.97E-01		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 6010A	CO	2.95E+00	3.94E-01		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 6010A	CR	2.56E+02	9.85E-01		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 6010A	CU	6.22E+01	5.91E-01		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 6010A	FE	5.92E+03	1.73E+01		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 6010A	K	1.50E+03	5.63E+01		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 6010A	MG	5.46E+03	1.52E+01		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 6010A	MN	1.42E+02	3.94E-01		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 6010A	NA	1.01E+04	3.47E+01		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 6010A	NI	1.30E+02	2.76E+00		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 6010A	SB			<10.1	µg/g	<	U		VV
W-08S320	SLUDGE	METAL	SW846 6010A	SR	5.02E+01	3.94E-01		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 6010A	TH	1.43E+04	5.42E+01		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 6010A	U	5.69E+03	8.88E+01		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 6010A	V	4.63E+00	3.94E-01		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 6010A	ZN	9.56E+01	4.14E+00		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 7060A	AS			<.492	µg/g	<	U		VV
W-08S320	SLUDGE	METAL	SW846 7421	PB	1.52E+03	6.30E+00		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 7471A	HG	8.13E+01	1.65E-01		µg/g				VV
W-08S320	SLUDGE	METAL	SW846 7740	SE			<.492	µg/g	<	U		VV
W-08S320	SLUDGE	METAL	SW846 7841	TL			<.492	µg/g	<	U		VV
W-08S320	SLUDGE	METAL	SW846 9056	CL	422	20		µg/g				VV
W-08S320	SLUDGE	NHVOA	SW846 8015	ACETONE	1.0E+01			mg/kg	U	U		VV
W-08S320	SLUDGE	NHVOA	SW846 8015	BUTANOL	1.0E+01			mg/kg	U	U		VV
W-08S320	SLUDGE	NHVOA	SW846 8015	ETHYL ETHER	1.0E+01			mg/kg	U	U		VV
W-08S320	SLUDGE	NHVOA	SW846 8015	ISOBUTANOL	1.0E+01			mg/kg	U	UJ	L	VV
W-08S320	SLUDGE	NHVOA	SW846 8015	METHANOL	1.0E+01			mg/kg	U	R	C,L	VI
W-08S320	SLUDGE	NHVOA	SW846 8015	METHYL ETHYL KETONE	1.0E+01			mg/kg	U	U		VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-08S320	SLUDGE	NHVOA	SW846 8015	PYRIDINE	1.0E+01			mg/kg	U	U		VV
W-08S320	SLUDGE	PHYSC	AC-MM-1 1011	DENSITY	1.08	0.10		g/ml				
W-08S320	SLUDGE	PHYSC	GAAT SAP	MOISTURE	83.4			%				
W-08S320	SLUDGE	RADS	AC-MM-2 1111	G-BETA	6.4E6	0.1E6		Bq/g				VV
W-08S320	SLUDGE	RADS	AC-MM-2 21807	TOTAL-RAD-SR	2.2E6	0.1E6		Bq/g				VV
W-08S320	SLUDGE	RADS	AC-MM-2 21996	5.15 MEV PU239/240	20.8			%				VV
W-08S320	SLUDGE	RADS	AC-MM-2 21996	5.50 MEV PU238/AM241	25.7			%				VV
W-08S320	SLUDGE	RADS	AC-MM-2 21996	5.80 MEV CM244/TH227	53.5			%				VV
W-08S320	SLUDGE	RADS	AC-MM-2 21996	PU-238	2.7E3	0.2E3		Bq/g				VV
W-08S320	SLUDGE	RADS	AC-MM-2 21996	PU-239/240	5.4E3	0.5E3		Bq/g				VV
W-08S320	SLUDGE	RADS	AC-MM-2 21996	PU-242			<90	Bq/g	<	U		VV
W-08S320	SLUDGE	RADS	AC-MM-2 22003	G-FISSILE(TOT)	41	4		µg/g				VV
W-08S320	SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	8.1E3	0.7E3		Bq/g				VV
W-08S320	SLUDGE	RADS	AC-MM-4 0100	PU-238 BY MS	0.51	0.19		% atoms				VV
W-08S320	SLUDGE	RADS	AC-MM-4 0100	PU-239 BY MS	93.89	0.09		% atoms				VV
W-08S320	SLUDGE	RADS	AC-MM-4 0100	PU-240 BY MS	5.21	0.12		% atoms				VV
W-08S320	SLUDGE	RADS	AC-MM-4 0100	PU-241 BY MS	0.11	0.01		% atoms				VV
W-08S320	SLUDGE	RADS	AC-MM-4 0100	PU-242 BY MS	0.27	0.03		% atoms				VV
W-08S320	SLUDGE	RADS	AC-MM-4 0100	PU-244 BY MS	0.01	0.01		% atoms		U		VV
W-08S320	SLUDGE	RADS	AC-MM-4 0100	U-233	0.0370	0.0010		% atoms				VV
W-08S320	SLUDGE	RADS	AC-MM-4 0100	U-234	0.0059	0.0004		% atoms				VV
W-08S320	SLUDGE	RADS	AC-MM-4 0100	U-235	0.6734	0.0022		% atoms				VV
W-08S320	SLUDGE	RADS	AC-MM-4 0100	U-236	0.0029	0.0002		% atoms				VV
W-08S320	SLUDGE	RADS	AC-MM-4 0100	U-238	99.2808	0.0028		% atoms				VV
W-08S320	SLUDGE	RADS	EPA 900.0	G-ALPHA	3.3E4	1.0E4		Bq/g				VV
W-08S320	SLUDGE	RADS	EPA 901.1	AM-241	5.7E3	2.3E3		Bq/g				VV
W-08S320	SLUDGE	RADS	EPA 901.1	CO-60	3.3E3	0.2E3		Bq/g				VV
W-08S320	SLUDGE	RADS	EPA 901.1	CS-134			<420	Bq/g	<	U		VV
W-08S320	SLUDGE	RADS	EPA 901.1	CS-137	6.9E5	0.1E5		Bq/g				VV
W-08S320	SLUDGE	RADS	EPA 901.1	EU-152	2.0E3	0.5E3		Bq/g				VV
W-08S320	SLUDGE	RADS	EPA 901.1	EU-154	2.3E3	0.4E3		Bq/g				VV
W-08S320	SLUDGE	RADS	EPA 901.1	EU-155			<1500	Bq/g	<	U		VV
W-08S320	SLUDGE	SVOA	SW846 8270	2,4-DINITROTOLUENE	9.0E-01			mg/kg	UD	U		VV
W-08S320	SLUDGE	SVOA	SW846 8270	2-METHYLPHENOL	1.5E+01			mg/kg	UD	UJ	Q	VV
W-08S320	SLUDGE	SVOA	SW846 8270	4-METHYLPHENOL	1.5E+01			mg/kg	UD	UJ	Q	VV
W-08S320	SLUDGE	SVOA	SW846 8270	HEXACHLOROBENZENE	9.0E-01			mg/kg	UD	U		VV
W-08S320	SLUDGE	SVOA	SW846 8270	HEXACHLOROETHANE	1.5E+01			mg/kg	UD	U		VV
W-08S320	SLUDGE	SVOA	SW846 8270	NITROBENZENE	1.5E+01			mg/kg	UD	U		VV
W-08S320	SLUDGE	SVOA	SW846 8270	PENTACHLOROPHENOL	1.5E+01			mg/kg	UD	UJ	Q	VV
W-08S320	SLUDGE	VOA	SW846 8240	1,1,1-TRICHLOROETHANE	1.0E+00			mg/kg	U	U		VV
W-08S320	SLUDGE	VOA	SW846 8240	1,1,2,2-TETRACHLOROETHANE	1.0E+00			mg/kg	U	U		VV
W-08S320	SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROETHANE	1.0E+00			mg/kg	U	U		VV
W-08S320	SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROTRIFLUOROETHANE	1.0E+00			mg/kg	U	U		VV
W-08S320	SLUDGE	VOA	SW846 8240	1,1-DICHLOROETHYLENE	1.0E+00			mg/kg	U	U		VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-08S320	SLUDGE	VOA	SW846 8240	1,2-DICHLOROETHANE	1.0E+00			mg/kg	U	U		VV
W-08S320	SLUDGE	VOA	SW846 8240	1,4-DICHLOROBENZENE	1.0E+00			mg/kg	U	U		VV
W-08S320	SLUDGE	VOA	SW846 8240	2-NITROPROPANE	1.0E+00			mg/kg	U	U		VV
W-08S320	SLUDGE	VOA	SW846 8240	BENZENE	1.0E+00			mg/kg	U	J	Q	VV
W-08S320	SLUDGE	VOA	SW846 8240	BROMOFORM	1.0E+00			mg/kg	U	U		VV
W-08S320	SLUDGE	VOA	SW846 8240	CARBON DISULFIDE	1.0E+00			mg/kg	U	U		VV
W-08S320	SLUDGE	VOA	SW846 8240	CARBON TETRACHLORIDE	1.0E+00			mg/kg	U	U		VV
W-08S320	SLUDGE	VOA	SW846 8240	CHLOROBENZENE	1.0E+00			mg/kg	U	J	Q	VV
W-08S320	SLUDGE	VOA	SW846 8240	CHLOROFORM	1.0E+00			mg/kg	U	U		VV
W-08S320	SLUDGE	VOA	SW846 8240	CYCLOHEXANE	1.0E+00			mg/kg	U	U		VV
W-08S320	SLUDGE	VOA	SW846 8240	ETHYLBENZENE	1.0E+00			mg/kg	U	U		VV
W-08S320	SLUDGE	VOA	SW846 8240	METHYLENE CHLORIDE	1.0E+00			mg/kg	U	U		VV
W-08S320	SLUDGE	VOA	SW846 8240	ORTHO-DICHLOROBENZENE	1.0E+00			mg/kg	U	U		VV
W-08S320	SLUDGE	VOA	SW846 8240	TETRACHLOROETHYLENE	1.0E+00			mg/kg	U	U		VV
W-08S320	SLUDGE	VOA	SW846 8240	TOLUENE	1.0E+00			mg/kg	U	J	Q	VV
W-08S320	SLUDGE	VOA	SW846 8240	TRICHLOROETHYLENE	1.0E+00			mg/kg	U	J	Q	VV
W-08S320	SLUDGE	VOA	SW846 8240	TRICHLOROFLUOROMETHANE	1.0E+00			mg/kg	U	U		VV
W-08S320	SLUDGE	VOA	SW846 8240	VINYL CHLORIDE	1.0E+00			mg/kg	U	UJ	C	VV
W-08S320	SLUDGE	VOA	SW846 8240	XYLENE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	CARBON	SW846 9060	TOT C	9530	596		µg/g				VV
W-08S321	SLUDGE	CARBON	SW846 9060	TIC	4240	218		µg/g				VV
W-08S321	SLUDGE	CARBON	SW846 9060	TOC	5290	213		µg/g				VV
W-08S321	SLUDGE	ANION	SW846 9056	BR	9.04	1.62		µg/g				VV
W-08S321	SLUDGE	ANION	SW846 9056	F	130	13		µg/g				VV
W-08S321	SLUDGE	ANION	SW846 9056	NO3	2580	156		µg/g				VV
W-08S321	SLUDGE	ANION	SW846 9056	PO4	361	19		µg/g				VV
W-08S321	SLUDGE	ANION	SW846 9056	SO4	3280	66		µg/g				VV
W-08S321	SLUDGE	METAL	SW846 6010A	AG			<3.88	µg/g	<	R	8	VI
W-08S321	SLUDGE	METAL	SW846 6010A	AL	1.03E+04	1.80E+01		µg/g		J	8	VV
W-08S321	SLUDGE	METAL	SW846 6010A	B	1.06E+01	2.04E-01		µg/g				VV
W-08S321	SLUDGE	METAL	SW846 6010A	BA	2.54E+01	2.04E-01		µg/g				VV
W-08S321	SLUDGE	METAL	SW846 6010A	BE	9.71E+00	0.00E+00		µg/g				VV
W-08S321	SLUDGE	METAL	SW846 6010A	CA	7.23E+03	2.70E+01		µg/g		J	8	VV
W-08S321	SLUDGE	METAL	SW846 6010A	CD	3.78E+00	8.17E-01		µg/g				VV
W-08S321	SLUDGE	METAL	SW846 6010A	CO			<2.47	µg/g	<	U		VV
W-08S321	SLUDGE	METAL	SW846 6010A	CR	2.06E+02	1.23E+00		µg/g				VV
W-08S321	SLUDGE	METAL	SW846 6010A	CU	4.40E+01	2.04E-01		µg/g				VV
W-08S321	SLUDGE	METAL	SW846 6010A	FE	4.10E+03	1.35E+01		µg/g				VV
W-08S321	SLUDGE	METAL	SW846 6010A	K	1.37E+03	2.47E+01		µg/g				VV
W-08S321	SLUDGE	METAL	SW846 6010A	MG	1.11E+04	4.50E+01		µg/g				VV
W-08S321	SLUDGE	METAL	SW846 6010A	MN	9.85E+01	4.09E-01		µg/g				VV
W-08S321	SLUDGE	METAL	SW846 6010A	NA	9.73E+03	4.50E+01		µg/g				VV
W-08S321	SLUDGE	METAL	SW846 6010A	NI	9.56E+01	6.13E-01		µg/g				VV
W-08S321	SLUDGE	METAL	SW846 6010A	SB			<10.5	µg/g	<	U		VV
W-08S321	SLUDGE	METAL	SW846 6010A	SR	3.54E+01	4.09E-01		µg/g				VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-08S321	SLUDGE	METAL	SW846 6010A	TH	9.75E+03	6.52E+01		µg/g				VV
W-08S321	SLUDGE	METAL	SW846 6010A	U	5.93E+03	8.09E+01		µg/g				VV
W-08S321	SLUDGE	METAL	SW846 6010A	V			<2.62	µg/g	<	U		VV
W-08S321	SLUDGE	METAL	SW846 6010A	ZN	7.85E+01	2.45E+00		µg/g				VV
W-08S321	SLUDGE	METAL	SW846 7060A	AS			<.511	µg/g	<	U		VV
W-08S321	SLUDGE	METAL	SW846 7421	PB	1.15E+03	2.25E+01		µg/g				VV
W-08S321	SLUDGE	METAL	SW846 7471A	HG	5.54E+01	8.58E-02		µg/g				VV
W-08S321	SLUDGE	METAL	SW846 7740	SE			<.511	µg/g	<	U		VV
W-08S321	SLUDGE	METAL	SW846 7841	TL			<.511	µg/g	<	U		VV
W-08S321	SLUDGE	METAL	SW846 9056	CL	423	6		µg/g				VV
W-08S321	SLUDGE	NHVOA	SW846 8015	ACETONE	1.0E+01			mg/kg	U	U		VV
W-08S321	SLUDGE	NHVOA	SW846 8015	BUTANOL	1.0E+01			mg/kg	U	U		VV
W-08S321	SLUDGE	NHVOA	SW846 8015	ETHYL ETHER	1.0E+01			mg/kg	U	U		VV
W-08S321	SLUDGE	NHVOA	SW846 8015	ISOBUTANOL	1.0E+01			mg/kg	U	UJ	L	VV
W-08S321	SLUDGE	NHVOA	SW846 8015	METHANOL	1.0E+01			mg/kg	U	R	C,L	VI
W-08S321	SLUDGE	NHVOA	SW846 8015	METHYL ETHYL KETONE	1.0E+01			mg/kg	U	U		VV
W-08S321	SLUDGE	NHVOA	SW846 8015	PYRIDINE	1.0E+01			mg/kg	U	U		VV
W-08S321	SLUDGE	PHYSC	AC-MM-1 1011	DENSITY	1.19			g/ml				
W-08S321	SLUDGE	PHYSC	GAAT SAP	MOISTURE	83.5			%				
W-08S321	SLUDGE	RADS	AC-MM-2 1111	G-BETA	4.8E6	0.1E6		Bq/g				VV
W-08S321	SLUDGE	RADS	AC-MM-2 21996	5.15 MEV PU239/240	26.0			%				VV
W-08S321	SLUDGE	RADS	AC-MM-2 21996	5.50 MEV PU238/AM241	35.3			%				VV
W-08S321	SLUDGE	RADS	AC-MM-2 21996	5.80 MEV CM244/TH227	38.7			%				VV
W-08S321	SLUDGE	RADS	AC-MM-2 21996	PU-238	2.0E3	0.2E3		Bq/g				VV
W-08S321	SLUDGE	RADS	AC-MM-2 21996	PU-239/240	4.6E3	0.5E3		Bq/g				VV
W-08S321	SLUDGE	RADS	AC-MM-2 21996	PU-242			<80	Bq/g	<	U		VV
W-08S321	SLUDGE	RADS	AC-MM-2 22003	G-FISSILE(TOT)	44	4		µg/g				VV
W-08S321	SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	6.6E3	0.7E3		Bq/g				VV
W-08S321	SLUDGE	RADS	AC-MM-4 0100	PU-238 BY MS	0.20	0.02		% atoms				VV
W-08S321	SLUDGE	RADS	AC-MM-4 0100	PU-239 BY MS	94.13	0.09		% atoms				VV
W-08S321	SLUDGE	RADS	AC-MM-4 0100	PU-240 BY MS	5.36	0.09		% atoms				VV
W-08S321	SLUDGE	RADS	AC-MM-4 0100	PU-241 BY MS	0.09	0.02		% atoms				VV
W-08S321	SLUDGE	RADS	AC-MM-4 0100	PU-242 BY MS	0.20	0.03		% atoms				VV
W-08S321	SLUDGE	RADS	AC-MM-4 0100	PU-244 BY MS	0.02	0.01		% atoms				VV
W-08S321	SLUDGE	RADS	AC-MM-4 0100	U-233	0.0269	0.0007		% atoms				VV
W-08S321	SLUDGE	RADS	AC-MM-4 0100	U-234	0.0057	0.0002		% atoms				VV
W-08S321	SLUDGE	RADS	AC-MM-4 0100	U-235	0.6850	0.0080		% atoms				VV
W-08S321	SLUDGE	RADS	AC-MM-4 0100	U-236	0.0026	0.0003		% atoms				VV
W-08S321	SLUDGE	RADS	AC-MM-4 0100	U-238	99.2798	0.0081		% atoms				VV
W-08S321	SLUDGE	RADS	EPA 900.0	G-ALPHA	2.4E4	0.9E4		Bq/g				VV
W-08S321	SLUDGE	RADS	EPA 901.1	AM-241	4.0E3	2.1E3		Bq/g				VV
W-08S321	SLUDGE	RADS	EPA 901.1	CO-60	1.9E3	0.2E3		Bq/g				VV
W-08S321	SLUDGE	RADS	EPA 901.1	CS-134			<360	Bq/g	<	U		VV
W-08S321	SLUDGE	RADS	EPA 901.1	CS-137	5.1E5	0.1E5		Bq/g				VV
W-08S321	SLUDGE	RADS	EPA 901.1	EU-152	1.3E3	0.3E3		Bq/g				VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-08S321	SLUDGE	RADS	EPA 901.1	EU-154			<6300	Bq/g	<	U		VV
W-08S321	SLUDGE	RADS	EPA 901.1	EU-155			<1300	Bq/g	<	U		VV
W-08S321	SLUDGE	RADS	EPA 905.0	TOTAL-RAD-SR	1.8E6	0.1E6		Bq/g				VV
W-08S321	SLUDGE	SVOA	SW846 8270	2,4-DINITROTOLUENE	9.0E-01			mg/kg	UD	U		VV
W-08S321	SLUDGE	SVOA	SW846 8270	2-METHYLPHENOL	1.5E+01			mg/kg	UD	R	S	VI
W-08S321	SLUDGE	SVOA	SW846 8270	4-METHYLPHENOL	1.5E+01			mg/kg	UD	R	S	VI
W-08S321	SLUDGE	SVOA	SW846 8270	HEXACHLOROBENZENE	9.0E-01			mg/kg	UD	U		VV
W-08S321	SLUDGE	SVOA	SW846 8270	HEXACHLOROETHANE	1.5E+01			mg/kg	UD	U		VV
W-08S321	SLUDGE	SVOA	SW846 8270	NITROBENZENE	1.5E+01			mg/kg	UD	U		VV
W-08S321	SLUDGE	SVOA	SW846 8270	PENTACHLOROPHENOL	1.5E+01			mg/kg	UD	R	S	VI
W-08S321	SLUDGE	VOA	SW846 8240	1,1,1-TRICHLOROETHANE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	1,1,2,2-TETRACHLOROETHANE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROETHANE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROTRIFLUOROETHANE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	1,1-DICHLOROETHYLENE	1.1E+00			mg/kg	J	J		VV
W-08S321	SLUDGE	VOA	SW846 8240	1,2-DICHLOROETHANE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	1,4-DICHLOROBENZENE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	2-NITROPROPANE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	BENZENE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	BROMOFORM	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	CARBON DISULFIDE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	CARBON TETRACHLORIDE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	CHLOROBENZENE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	CHLOROFORM	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	CYCLOHEXANE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	ETHYLBENZENE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	METHYLENE CHLORIDE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	ORTHO-DICHLOROBENZENE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	TETRACHLOROETHYLENE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	TOLUENE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	TRICHLOROETHYLENE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	TRICHLOROFLUOROMETHANE	1.0E+00			mg/kg	U	U		VV
W-08S321	SLUDGE	VOA	SW846 8240	VINYL CHLORIDE	1.0E+00			mg/kg	U	UJ	C	VV
W-08S321	SLUDGE	VOA	SW846 8240	XYLENE	1.0E+00			mg/kg	U	U		VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
0492301	LIQUID	VOA	SW846 8240	1,1,1-TRICHLOROETHANE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	1,1,2,2-TETRACHLOROETHANE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	1,1,2-TRICHLOROETHANE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	1,1,2-TRICHLOROTRIFLUOROETHANE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	1,1-DICHLOROETHYLENE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	1,2-DICHLOROETHANE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	1,4-DICHLOROBENZENE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	2-NITROPROPANE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	BENZENE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	BROMOFORM	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	CARBON DISULFIDE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	CARBON TETRACHLORIDE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	CHLOROBENZENE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	CHLOROFORM	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	CYCLOHEXANE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	ETHYLBENZENE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	METHYLENE CHLORIDE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	ORTHO-DICHLOROBENZENE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	TETRACHLOROETHYLENE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	TOLUENE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	TRICHLOROETHYLENE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	TRICHLOROFLUOROMETHANE	5.0E-03			mg/L	U	U		VV
0492301	LIQUID	VOA	SW846 8240	VINYL CHLORIDE	5.0E-03			mg/L	U	UJ	C	VV
0492301	LIQUID	VOA	SW846 8240	XYLENE	5.0E-03			mg/L	U	U		VV
W-09S323	SLUDGE	CARBON	SW846 9060	TOT C	4520	277		µg/g				VV
W-09S323	SLUDGE	CARBON	SW846 9060	TIC	1590	96		µg/g				VV
W-09S323	SLUDGE	CARBON	SW846 9060	TOC	2930	174		µg/g				VV
W-09S323	SLUDGE	ANION	SW846 9056	BR	7.27	0.87		µg/g				VV
W-09S323	SLUDGE	ANION	SW846 9056	F	76.6	2.7		µg/g				VV
W-09S323	SLUDGE	ANION	SW846 9056	NO3	572	14		µg/g				VV
W-09S323	SLUDGE	ANION	SW846 9056	PO4	2990	52		µg/g				VV
W-09S323	SLUDGE	ANION	SW846 9056	SO4	476	22		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 6010A	AG			<3.68	µg/g	<	R	8	VI
W-09S323	SLUDGE	METAL	SW846 6010A	AL	8.54E+03	6.18E+01		µg/g		J	8	VV
W-09S323	SLUDGE	METAL	SW846 6010A	B	7.07E+00	3.87E-01		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 6010A	BA	9.93E+01	1.94E-01		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 6010A	BE	7.26E+00	0.00E+00		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 6010A	CA	6.09E+03	2.77E+01		µg/g		J	8	VV
W-09S323	SLUDGE	METAL	SW846 6010A	CD	3.10E+00	5.81E-01		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 6010A	CO	3.10E+00	5.81E-01		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 6010A	CR	1.13E+02	1.94E-01		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 6010A	CU	4.86E+01	5.81E-01		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 6010A	FE	3.04E+03	6.39E+00		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 6010A	K	2.52E+03	2.56E+01		µg/g				VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-09S323	SLUDGE	METAL	SW846 6010A	MG	8.45E+02	5.81E+00		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 6010A	MN	1.44E+02	7.75E-01		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 6010A	NA	6.31E+03	2.56E+01		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 6010A	NI	7.30E+01	9.68E-01		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 6010A	SB			<9.96	µg/g	<	U		VV
W-09S323	SLUDGE	METAL	SW846 6010A	SR	3.93E+01	3.87E-01		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 6010A	TH	5.78E+03	6.18E+01		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 6010A	U	1.40E+04	1.64E+02		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 6010A	V			<2.48	µg/g	<	U		VV
W-09S323	SLUDGE	METAL	SW846 6010A	ZN	5.10E+01	2.52E+00		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 7060A	AS			<.484	µg/g	<	U		VV
W-09S323	SLUDGE	METAL	SW846 7421	PB	4.87E+02	5.04E+00		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 7471A	HG	7.53E+01	9.49E-02		µg/g				VV
W-09S323	SLUDGE	METAL	SW846 7740	SE			<.484	µg/g	<	U		VV
W-09S323	SLUDGE	METAL	SW846 7841	TL			<.484	µg/g	<	U		VV
W-09S323	SLUDGE	METAL	SW846 9056	CL	134	2		µg/g				VV
W-09S323	SLUDGE	NHVOA	SW846 8015	ACETONE	1.0E+01			mg/kg	U	U		VV
W-09S323	SLUDGE	NHVOA	SW846 8015	BUTANOL	1.0E+01			mg/kg	U	U		VV
W-09S323	SLUDGE	NHVOA	SW846 8015	ETHYL ETHER	1.0E+01			mg/kg	U	U		VV
W-09S323	SLUDGE	NHVOA	SW846 8015	ISOBUTANOL	1.0E+01			mg/kg	U	U		VV
W-09S323	SLUDGE	NHVOA	SW846 8015	METHANOL	1.0E+01			mg/kg	U	U		VV
W-09S323	SLUDGE	NHVOA	SW846 8015	METHYL ETHYL KETONE	1.0E+01			mg/kg	U	U		VV
W-09S323	SLUDGE	NHVOA	SW846 8015	PYRIDINE	1.0E+01			mg/kg	U	U		VV
W-09S323	SLUDGE	PHYSC	AC-MM-1 1011	DENSITY	1.28			g/ml				
W-09S323	SLUDGE	PHYSC	GAAT SAP	MOISTURE	86.6			%				
W-09S323	SLUDGE	RADS	AC-MM-2 1111	G-BETA	4.9E6	0.1E6		Bq/g				VV
W-09S323	SLUDGE	RADS	AC-MM-2 21807	TOTAL-RAD-SR	1.7E6	0.1E6		Bq/g				VV
W-09S323	SLUDGE	RADS	AC-MM-2 21996	4.80 MEV U233/U234	2.0			%				VV
W-09S323	SLUDGE	RADS	AC-MM-2 21996	5.15 MEV PU239/240	7.9			%				VV
W-09S323	SLUDGE	RADS	AC-MM-2 21996	5.50 MEV PU238/AM241	22.5			%				VV
W-09S323	SLUDGE	RADS	AC-MM-2 21996	5.80 MEV CM244/TH227	67.6			%				VV
W-09S323	SLUDGE	RADS	AC-MM-2 21996	PU-236	7.8E3	0.7E3		Bq/g				VV
W-09S323	SLUDGE	RADS	AC-MM-2 21996	PU-239/240	4.2E3	0.3E3		Bq/g				VV
W-09S323	SLUDGE	RADS	AC-MM-2 21996	PU-242			<130	Bq/g	<	U		VV
W-09S323	SLUDGE	RADS	AC-MM-2 22003	G-FISSILE(TOT)	94	9		µg/g				VV
W-09S323	SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	1.2E4	0.1E4		Bq/g				VV
W-09S323	SLUDGE	RADS	AC-MM-4 0100	PU-238 BY MS	1.77	0.04		% atoms				VV
W-09S323	SLUDGE	RADS	AC-MM-4 0100	PU-239 BY MS	88.37	0.01		% atoms				VV
W-09S323	SLUDGE	RADS	AC-MM-4 0100	PU-240 BY MS	8.37	0.07		% atoms				VV
W-09S323	SLUDGE	RADS	AC-MM-4 0100	PU-241 BY MS	0.20	0.01		% atoms				VV
W-09S323	SLUDGE	RADS	AC-MM-4 0100	PU-242 BY MS	1.25	0.02		% atoms				VV
W-09S323	SLUDGE	RADS	AC-MM-4 0100	PU-244 BY MS	0.04	0.01		% atoms				VV
W-09S323	SLUDGE	RADS	AC-MM-4 0100	U-233	0.0162	0.0004		% atoms				VV
W-09S323	SLUDGE	RADS	AC-MM-4 0100	U-234	0.0051	0.0002		% atoms				VV
W-09S323	SLUDGE	RADS	AC-MM-4 0100	U-235	0.6287	0.004		% atoms				VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-09S323	SLUDGE	RADS	AC-MM-4 0100	U-236	0.0033	0.0005		% atoms				VV
W-09S323	SLUDGE	RADS	AC-MM-4 0100	U-238	99.3467	0.0038		% atoms				VV
W-09S323	SLUDGE	RADS	EPA 900.0	G-ALPHA	6.1E4	1.4E4		Bq/g				VV
W-09S323	SLUDGE	RADS	EPA 901.1	AM-241	5.4E3	1.9E3		Bq/g				VV
W-09S323	SLUDGE	RADS	EPA 901.1	CO-60	7.0E3	0.4E3		Bq/g				VV
W-09S323	SLUDGE	RADS	EPA 901.1	CS-134			<310	Bq/g	<	U		VV
W-09S323	SLUDGE	RADS	EPA 901.1	CS-137	3.3E5	0.1E5		Bq/g				VV
W-09S323	SLUDGE	RADS	EPA 901.1	EU-152	3.8E3	0.6E3		Bq/g				VV
W-09S323	SLUDGE	RADS	EPA 901.1	EU-154	4.6E3	0.5E3		Bq/g				VV
W-09S323	SLUDGE	RADS	EPA 901.1	EU-155			<1200	Bq/g	<	U		VV
W-09S323	SLUDGE	SVOA	SW846 8270	2,4-DINITROTOLUENE	9.0E-01			mg/kg	UD	U		VV
W-09S323	SLUDGE	SVOA	SW846 8270	2-METHYLPHENOL	1.5E+01			mg/kg	UD	U		VV
W-09S323	SLUDGE	SVOA	SW846 8270	4-METHYLPHENOL	1.5E+01			mg/kg	UD	U		VV
W-09S323	SLUDGE	SVOA	SW846 8270	HEXACHLOROBENZENE	9.0E-01			mg/kg	UD	U		VV
W-09S323	SLUDGE	SVOA	SW846 8270	HEXACHLOROETHANE	1.5E+01			mg/kg	UD	U		VV
W-09S323	SLUDGE	SVOA	SW846 8270	NITROBENZENE	1.5E+01			mg/kg	UD	U		VV
W-09S323	SLUDGE	SVOA	SW846 8270	PENTACHLOROPHENOL	1.5E+01			mg/kg	UD	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	1,1,1-TRICHLOROETHANE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	1,1,2,2-TETRACHLOROETHANE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROETHANE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROTRIFLUOROETHANE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	1,1-DICHLOROETHYLENE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	1,2-DICHLOROETHANE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	1,4-DICHLOROBENZENE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	2-NITROPROPANE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	BENZENE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	BROMOFORM	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	CARBON DISULFIDE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	CARBON TETRACHLORIDE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	CHLOROBENZENE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	CHLOROFORM	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	CYCLOHEXANE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	ETHYLBENZENE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	METHYLENE CHLORIDE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	ORTHO-DICHLOROBENZENE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	TETRACHLOROETHYLENE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	TOLUENE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	TRICHLOROETHYLENE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	TRICHLOROFLUOROMETHANE	1.0E+00			mg/kg	U	U		VV
W-09S323	SLUDGE	VOA	SW846 8240	VINYL CHLORIDE	1.0E+00			mg/kg	U	UJ	C	VV
W-09S323	SLUDGE	VOA	SW846 8240	XYLENE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	CARBON	SW846 9060	TOT C	4300	252		µg/g				VV
W-09S324	SLUDGE	CARBON	SW846 9060	TIC	2180	158		µg/g				VV
W-09S324	SLUDGE	CARBON	SW846 9060	TOC	2120	182		µg/g				VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-09S324	SLUDGE	ANION	SW846 9056	BR	7.43	1.16		µg/g				VV
W-09S324	SLUDGE	ANION	SW846 9056	F	83.8	0.1		µg/g				VV
W-09S324	SLUDGE	ANION	SW846 9056	NO3	613	7		µg/g				VV
W-09S324	SLUDGE	ANION	SW846 9056	PO4	2230	108		µg/g				VV
W-09S324	SLUDGE	ANION	SW846 9056	SO4	511	1		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 6010A	AG			<3.67	µg/g	<	R	8	VI
W-09S324	SLUDGE	METAL	SW846 6010A	AL	9.15E+03	2.76E+01		µg/g		J	8	VV
W-09S324	SLUDGE	METAL	SW846 6010A	B	6.76E+00	5.79E-01		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 6010A	BA	1.14E+02	3.86E-01		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 6010A	BE	7.53E+00	0.00E+00		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 6010A	CA	6.35E+03	1.70E+01		µg/g		J	8	VV
W-09S324	SLUDGE	METAL	SW846 6010A	CD	2.70E+00	7.72E-01		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 6010A	CO	2.90E+00	3.86E-01		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 6010A	CR	1.15E+02	3.86E-01		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 6010A	CU	4.61E+01	1.93E-01		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 6010A	FE	3.17E+03	8.49E+00		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 6010A	K	2.43E+03	6.37E+01		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 6010A	MG	8.43E+02	3.09E+00		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 6010A	MN	1.52E+02	3.86E-01		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 6010A	NA	5.66E+03	4.03E+01		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 6010A	NI	7.18E+01	1.93E+00		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 6010A	SB			<9.93	µg/g	<	U		VV
W-09S324	SLUDGE	METAL	SW846 6010A	SR	4.16E+01	3.86E-01		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 6010A	TH	5.87E+03	2.12E+01		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 6010A	U	1.19E+04	2.76E+01		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 6010A	V			<2.47	µg/g	<	U		VV
W-09S324	SLUDGE	METAL	SW846 6010A	ZN	5.01E+01	2.51E+00		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 7060A	AS			<.483	µg/g	<	U		VV
W-09S324	SLUDGE	METAL	SW846 7421	PB	4.88E+02	1.45E+01		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 7471A	HG	6.21E+01	1.93E-01		µg/g				VV
W-09S324	SLUDGE	METAL	SW846 7740	SE			<.483	µg/g	<	U		VV
W-09S324	SLUDGE	METAL	SW846 7841	TL			<.483	µg/g	<	U		VV
W-09S324	SLUDGE	METAL	SW846 9056	CL	141	2		µg/g				VV
W-09S324	SLUDGE	NHVOA	SW846 8015	ACETONE	1.0E+01			mg/kg	U	U		VV
W-09S324	SLUDGE	NHVOA	SW846 8015	BUTANOL	1.0E+01			mg/kg	U	U		VV
W-09S324	SLUDGE	NHVOA	SW846 8015	ETHYL ETHER	1.0E+01			mg/kg	U	U		VV
W-09S324	SLUDGE	NHVOA	SW846 8015	ISOBUTANOL	1.0E+01			mg/kg	U	U		VV
W-09S324	SLUDGE	NHVOA	SW846 8015	METHANOL	1.0E+01			mg/kg	U	U		VV
W-09S324	SLUDGE	NHVOA	SW846 8015	METHYL ETHYL KETONE	1.0E+01			mg/kg	U	U		VV
W-09S324	SLUDGE	NHVOA	SW846 8015	PYRIDINE	1.0E+01			mg/kg	U	U		VV
W-09S324	SLUDGE	PHYSC	AC-MM-1 1011	DENSITY	1.25			g/ml				
W-09S324	SLUDGE	PHYSC	GAAT SAP	MOISTURE	86.7			%				
W-09S324	SLUDGE	RADS	AC-MM-2 1111	G-BETA	5.2E6	0.1E6		Bq/g				VV
W-09S324	SLUDGE	RADS	AC-MM-2 21807	TOTAL-RAD-SR	1.8E6	0.1E6		Bq/g				VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-09S324	SLUDGE	RADS	AC-MM-2 21996	4.80 MEV U233/U234	2.1			%				VV
W-09S324	SLUDGE	RADS	AC-MM-2 21996	5.15 MEV PU239/240	9.7			%				VV
W-09S324	SLUDGE	RADS	AC-MM-2 21996	5.50 MEV PU238/AM241	19.3			%				VV
W-09S324	SLUDGE	RADS	AC-MM-2 21996	5.80 MEV CM244/TH227	68.9			%				VV
W-09S324	SLUDGE	RADS	AC-MM-2 21996	PU-238	6.3E3	0.6E3		Bq/g				VV
W-09S324	SLUDGE	RADS	AC-MM-2 21996	PU-239/240	3.7E3	0.4E3		Bq/g				VV
W-09S324	SLUDGE	RADS	AC-MM-2 21996	PU-242			<110	Bq/g	<	U		VV
W-09S324	SLUDGE	RADS	AC-MM-2 22003	G-FISSILE(TOT)	74	7		µg/g				VV
W-09S324	SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	1.0E4	0.1E4		Bq/g				VV
W-09S324	SLUDGE	RADS	AC-MM-4 0100	PU-238 BY MS	1.38	0.4		% atoms				VV
W-09S324	SLUDGE	RADS	AC-MM-4 0100	PU-239 BY MS	87.40	0.9		% atoms				VV
W-09S324	SLUDGE	RADS	AC-MM-4 0100	PU-240 BY MS	9.54	0.13		% atoms				VV
W-09S324	SLUDGE	RADS	AC-MM-4 0100	PU-241 BY MS	0.23	0.02		% atoms				VV
W-09S324	SLUDGE	RADS	AC-MM-4 0100	PU-242 BY MS	1.41	0.04		% atoms				VV
W-09S324	SLUDGE	RADS	AC-MM-4 0100	PU-244 BY MS	0.04	0.01		% atoms				VV
W-09S324	SLUDGE	RADS	AC-MM-4 0100	U-233	0.0186	0.0006		% atoms				VV
W-09S324	SLUDGE	RADS	AC-MM-4 0100	U-234	0.0050	0.0003		% atoms				VV
W-09S324	SLUDGE	RADS	AC-MM-4 0100	U-235	0.6129	0.0055		% atoms				VV
W-09S324	SLUDGE	RADS	AC-MM-4 0100	U-236	0.0033	0.0002		% atoms				VV
W-09S324	SLUDGE	RADS	AC-MM-4 0100	U-238	99.3602	0.0056		% atoms				VV
W-09S324	SLUDGE	RADS	EPA 900.0	G-ALPHA	6.5E4	1.4E4		Bq/g				VV
W-09S324	SLUDGE	RADS	EPA 901.1	AM-241	5.2E3	2.1E3		Bq/g				VV
W-09S324	SLUDGE	RADS	EPA 901.1	CO-60	7.1E3	0.4E3		Bq/g				VV
W-09S324	SLUDGE	RADS	EPA 901.1	CS-134			<300	Bq/g	<	U		VV
W-09S324	SLUDGE	RADS	EPA 901.1	CS-137	3.3E5	0.1E5		Bq/g				VV
W-09S324	SLUDGE	RADS	EPA 901.1	EU-152	4.0E3	0.7E3		Bq/g				VV
W-09S324	SLUDGE	RADS	EPA 901.1	EU-154	4.7E3	0.5E3		Bq/g				VV
W-09S324	SLUDGE	RADS	EPA 901.1	EU-155			<1200	Bq/g	<	U		VV
W-09S324	SLUDGE	SVOA	SW846 8270	2,4-DINITROTOLUENE	9.0E-01			mg/kg	UD	U		VV
W-09S324	SLUDGE	SVOA	SW846 8270	2-METHYLPHENOL	1.5E+01			mg/kg	UD	U		VV
W-09S324	SLUDGE	SVOA	SW846 8270	4-METHYLPHENOL	1.5E+01			mg/kg	UD	U		VV
W-09S324	SLUDGE	SVOA	SW846 8270	HEXACHLOROBENZENE	9.0E-01			mg/kg	UD	U		VV
W-09S324	SLUDGE	SVOA	SW846 8270	HEXACHLOROETHANE	1.5E+01			mg/kg	UD	U		VV
W-09S324	SLUDGE	SVOA	SW846 8270	NITROBENZENE	1.5E+01			mg/kg	UD	U		VV
W-09S324	SLUDGE	SVOA	SW846 8270	PENTACHLOROPHENOL	1.5E+01			mg/kg	UD	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	1,1,1-TRICHLOROETHANE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	1,1,2,2-TETRACHLOROETHANE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROETHANE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROTRIFLUOROETHANE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	1,1-DICHLOROETHYLENE	1.4E+00			mg/kg	J	J		VV
W-09S324	SLUDGE	VOA	SW846 8240	1,2-DICHLOROETHANE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	1,4-DICHLOROBENZENE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	2-NITROPROPANE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	BENZENE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	BROMOFORM	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	CARBON DISULFIDE	1.0E+00			mg/kg	U	U		VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-09S324	SLUDGE	VOA	SW846 8240	CARBON TETRACHLORIDE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	CHLOROBENZENE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	CHLOROFORM	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	CYCLOHEXANE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	ETHYLBENZENE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	METHYLENE CHLORIDE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	ORTHO-DICHLOROBENZENE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	TETRACHLOROETHYLENE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	TOLUENE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	TRICHLOROETHYLENE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	TRICHLOROFLUOROMETHANE	1.0E+00			mg/kg	U	U		VV
W-09S324	SLUDGE	VOA	SW846 8240	VINYL CHLORIDE	1.0E+00			mg/kg	U	UJ	C	VV
W-09S324	SLUDGE	VOA	SW846 8240	XYLENE	1.0E+00			mg/kg	U	U		VV

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
0492201	LIQUID	VOA	SW846 8240	1,1,1-TRICHLOROETHANE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	1,1,2,2-TETRACHLOROETHANE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	1,1,2-TRICHLOROETHANE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	1,1,2-TRICHLOROTRIFLUOROETHANE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	1,1-DICHLOROETHYLENE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	1,2-DICHLOROETHANE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	1,4-DICHLOROBENZENE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	2-NITROPROPANE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	BENZENE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	BROMOFORM	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	CARBON DISULFIDE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	CARBON TETRACHLORIDE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	CHLOROBENZENE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	CHLOROFORM	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	CYCLOHEXANE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	ETHYLBENZENE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	METHYLENE CHLORIDE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	ORTHO-DICHLOROBENZENE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	TETRACHLOROETHYLENE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	TOLUENE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	TRICHLOROETHYLENE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	TRICHLOROFLUOROMETHANE	5.0E-03			mg/L	U	U		V V
0492201	LIQUID	VOA	SW846 8240	VINYL CHLORIDE	5.0E-03			mg/L	U	UJ	C	V V
0492201	LIQUID	VOA	SW846 8240	XYLENE	5.0E-03			mg/L	U	U		V V
W-10S325	SLUDGE	CARBON	SW846 9060	TOT C	6180	179		µg/g				V V
W-10S325	SLUDGE	CARBON	SW846 9060	TIC	3550	122		µg/g				V V
W-10S325	SLUDGE	CARBON	SW846 9060	TOC	2640	105		µg/g				V V
W-10S325	SLUDGE	ANION	SW846 9056	BR	13.0	0.3		µg/g				V V
W-10S325	SLUDGE	ANION	SW846 9056	F	364	23		µg/g				V V
W-10S325	SLUDGE	ANION	SW846 9056	NO3	4440	105		µg/g				V V
W-10S325	SLUDGE	ANION	SW846 9056	PO4	291	6		µg/g				V V
W-10S325	SLUDGE	ANION	SW846 9056	SO4	1770	119		µg/g				V V
W-10S325	SLUDGE	METAL	SW846 6010A	AG	5.82E+00	1.68E-01		µg/g		R	8	V I
W-10S325	SLUDGE	METAL	SW846 6010A	AL	3.40E+04	2.56E+02		µg/g		J	5A	V V
W-10S325	SLUDGE	METAL	SW846 6010A	B	3.47E+00	3.75E-01		µg/g				V V
W-10S325	SLUDGE	METAL	SW846 6010A	BA	3.10E+02	1.31E+00		µg/g				V V
W-10S325	SLUDGE	METAL	SW846 6010A	BE	7.22E+00	0.00E+00		µg/g				V V
W-10S325	SLUDGE	METAL	SW846 6010A	CA	1.39E+04	9.06E+01		µg/g				V V
W-10S325	SLUDGE	METAL	SW846 6010A	CD	5.44E+00	7.51E-01		µg/g				V V
W-10S325	SLUDGE	METAL	SW846 6010A	CO			<2.27	µg/g	<	U		V V
W-10S325	SLUDGE	METAL	SW846 6010A	CR	1.22E+02	5.63E-01		µg/g				V V
W-10S325	SLUDGE	METAL	SW846 6010A	CU	7.14E+01	3.75E-01		µg/g				V V
W-10S325	SLUDGE	METAL	SW846 6010A	FE	4.01E+03	3.15E+01		µg/g				V V
W-10S325	SLUDGE	METAL	SW846 6010A	K	3.24E+03	6.70E+01		µg/g				V V

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SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-10S325	SLUDGE	METAL	SW846 6010A	MG	7.28E+02	2.06E+00		µg/g				V V
W-10S325	SLUDGE	METAL	SW846 6010A	MN	2.70E+02	1.13E+00		µg/g				V V
W-10S325	SLUDGE	METAL	SW846 6010A	NA	1.23E+04	7.88E+01		µg/g				V V
W-10S325	SLUDGE	METAL	SW846 6010A	NI	8.43E+01	2.25E+00		µg/g				V V
W-10S325	SLUDGE	METAL	SW846 6010A	SB			<9.66	µg/g	<	U		V V
W-10S325	SLUDGE	METAL	SW846 6010A	SR	6.62E+01	1.88E-01		µg/g				V V
W-10S325	SLUDGE	METAL	SW846 6010A	TH	1.04E+04	1.18E+02		µg/g				V V
W-10S325	SLUDGE	METAL	SW846 6010A	U	1.06E+04	1.14E+02		µg/g		J	9	V V
W-10S325	SLUDGE	METAL	SW846 6010A	V			<2.4	µg/g	<	U		V V
W-10S325	SLUDGE	METAL	SW846 6010A	ZN	1.23E+02	7.69E+00		µg/g				V V
W-10S325	SLUDGE	METAL	SW846 7060A	AS			<.469	µg/g	<	U		V V
W-10S325	SLUDGE	METAL	SW846 7421	PB	7.06E+02	0.00E+00		µg/g				V V
W-10S325	SLUDGE	METAL	SW846 7471A	HG	9.31E+01	0.00E+00		µg/g				V V
W-10S325	SLUDGE	METAL	SW846 7740	SE			<.469	µg/g	<	U		V V
W-10S325	SLUDGE	METAL	SW846 7841	TL			<.469	µg/g	<	U		V V
W-10S325	SLUDGE	METAL	SW846 9056	CL	571	10		µg/g				V V
W-10S325	SLUDGE	NHVOA	SW846 8015	ACETONE	1.0E+01			mg/kg	U	U		V V
W-10S325	SLUDGE	NHVOA	SW846 8015	BUTANOL	1.0E+01			mg/kg	U	U		V V
W-10S325	SLUDGE		SW846 8015	ETHYL ETHER	1.0E+01			mg/kg	U	U		V V
W-10S325	SLUDGE		SW846 8015	ISOBUTANOL	1.0E+01			mg/kg	U	UJ	L	V V
W-10S325	SLUDGE	NHVOA	SW846 8015	METHANOL	1.0E+01			mg/kg	U	J	C	V V
W-10S325	SLUDGE	NHVOA	SW846 8015	METHYL ETHYL KETONE	1.0E+01			mg/kg	U	U		V V
W-10S325	SLUDGE	NHVOA	SW846 8015	PYRIDINE	1.0E+01			mg/kg	U	U		V V
W-10S325	SLUDGE	PHYSC	AC-MM-1 1011	DENSITY	1.25	0.02		g/ml				
W-10S325	SLUDGE	PHYSC	GAAT SAP	MOISTURE	61.1			%				
W-10S325	SLUDGE	RADS	AC-MM-2 1111	G-BETA	8.0E6	0.1E6		Bq/g				V V
W-10S325	SLUDGE	RADS	AC-MM-2 21807	TOTAL-RAD-SR	3.0E6	0.1E6		Bq/g				V V
W-10S325	SLUDGE	RADS	AC-MM-2 21996	4.80 MEV U233/U234	3.0			%				V V
W-10S325	SLUDGE	RADS	AC-MM-2 21996	5.15 MEV PU239/240	7.0			%				V V
W-10S325	SLUDGE	RADS	AC-MM-2 21996	5.50 MEV PU238/AM241	18.5			%				V V
W-10S325	SLUDGE	RADS	AC-MM-2 21996	5.80 MEV CM244/TH227	71.5			%				V V
W-10S325	SLUDGE	RADS	AC-MM-2 21996	PU-238	6.7E3	0.6E3		Bq/g				V V
W-10S325	SLUDGE	RADS	AC-MM-2 21996	PU-239/240	4.4E3	0.4E3		Bq/g				V V
W-10S325	SLUDGE	RADS	AC-MM-2 21996	PU-242			<120	Bq/g	<	U		V V
W-10S325	SLUDGE	RADS	AC-MM-2 22003	G-FISSILE(TOT)	56	6		µg/g				V V
W-10S325	SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	1.1E4	0.1E4		Bq/g				V V
W-10S325	SLUDGE	RADS	AC-MM-4 0100	PU-238 BY MS			<2	% atoms	<	U		V V
W-10S325	SLUDGE	RADS	AC-MM-4 0100	PU-239 BY MS	87.63	0.6		% atoms				V V
W-10S325	SLUDGE	RADS	AC-MM-4 0100	PU-240 BY MS	9.14	0.2		% atoms				V V
W-10S325	SLUDGE	RADS	AC-MM-4 0100	PU-241 BY MS	0.22	0.04		% atoms				V V
W-10S325	SLUDGE	RADS	AC-MM-4 0100	PU-242 BY MS	1.34	0.12		% atoms				V V
W-10S325	SLUDGE	RADS	AC-MM-4 0100	PU-244 BY MS	0.07	0.07		% atoms		U	E	V V
W-10S325	SLUDGE	RADS	AC-MM-4 0100	U-233	0.0357	0.0011		% atoms				V V
W-10S325	SLUDGE	RADS	AC-MM-4 0100	U-234	0.0048	0.0003		% atoms				V V
W-10S325	SLUDGE	RADS	AC-MM-4 0100	U-235	0.548	0.005		% atoms				V V

Tank W-10

SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-10S325	SLUDGE	RADS	AC-MM-4 0100	U-236	0.0055	0.0003		% atoms				V V
W-10S325	SLUDGE	RADS	AC-MM-4 0100	U-238	99.406	0.006		% atoms				V V
W-10S325	SLUDGE	RADS	EPA 900.0	G-ALPHA	4.4E4	1.2E4		Bq/g				V V
W-10S325	SLUDGE	RADS	EPA 901.1	AM-241	4.4E3	2.7E3		Bq/g				V V
W-10S325	SLUDGE	RADS	EPA 901.1	CO-60	6.6E3	0.3E3		Bq/g				V V
W-10S325	SLUDGE	RADS	EPA 901.1	CS-137	9.5E5	0.1E5		Bq/g				V V
W-10S325	SLUDGE	RADS	EPA 901.1	EU-152	4.3E3	0.6E3		Bq/g				V V
W-10S325	SLUDGE	RADS	EPA 901.1	EU-154	4.4E3	0.6E3		Bq/g				V V
W-10S325	SLUDGE	RADS	EPA 901.1	EU-155			<1700	Bq/g	<	U		V V
W-10S325	SLUDGE	SVOA	SW846 8270	2,4-DINITROTOLUENE	9.0E-01			mg/kg	UD	U		V V
W-10S325	SLUDGE	SVOA	SW846 8270	2-METHYLPHENOL	1.5E+01			mg/kg	UD	U		V V
W-10S325	SLUDGE	SVOA	SW846 8270	4-METHYLPHENOL	1.5E+01			mg/kg	UD	U		V V
W-10S325	SLUDGE	SVOA	SW846 8270	HEXACHLOROBENZENE	9.0E-01			mg/kg	UD	U		V V
W-10S325	SLUDGE	SVOA	SW846 8270	HEXACHLOROETHANE	1.5E+01			mg/kg	UD	U		V V
W-10S325	SLUDGE	SVOA	SW846 8270	NITROBENZENE	1.5E+01			mg/kg	UD	U		V V
W-10S325	SLUDGE	SVOA	SW846 8270	PENTACHLOROPHENOL	1.5E+01			mg/kg	UD	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	1,1,1-TRICHLOROETHANE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	1,1,2,2-TETRACHLOROETHANE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROETHANE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROTRIFLUOROETHANE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	1,1-DICHLOROETHYLENE	2.1E+00			mg/kg	JB	UJ	L,B	V V
W-10S325	SLUDGE	VOA	SW846 8240	1,2-DICHLOROETHANE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	1,4-DICHLOROBENZENE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	2-NITROPROPANE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	BENZENE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	BROMOFORM	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	CARBON DISULFIDE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	CARBON TETRACHLORIDE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	CHLOROBENZENE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	CHLOROFORM	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	CYCLOHEXANE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	ETHYLBENZENE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	METHYLENE CHLORIDE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	ORTHO-DICHLOROBENZENE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	TETRACHLOROETHYLENE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	TOLUENE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	TRICHLOROETHYLENE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	TRICHLOROFLUOROMETHANE	1.0E+00			mg/kg	U	U		V V
W-10S325	SLUDGE	VOA	SW846 8240	VINYL CHLORIDE	1.0E+00			mg/kg	U	UJ	C	V V
W-10S325	SLUDGE	VOA	SW846 8240	XYLENE	1.0E+00			mg/kg	U	U		V V
W-10S326	SLUDGE	CARBON	SW846 9060	TOT C	8300	656		µg/g				V V
W-10S326	SLUDGE	CARBON	SW846 9060	TIC	3430	210		µg/g				V V
W-10S326	SLUDGE	CARBON	SW846 9060	TOC	4870	212		µg/g				V V
W-10S326	SLUDGE	ANION	SW846 9056	BR	29.8	0.5		µg/g				V V

Tank W-10

SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-10S326	SLUDGE	ANION	SW846 9056	F	333	9		µg/g				V V
W-10S326	SLUDGE	ANION	SW846 9056	NO3	5760	144		µg/g				V V
W-10S326	SLUDGE	ANION	SW846 9056	PO4	242	13		µg/g				V V
W-10S326	SLUDGE	ANION	SW846 9056	SO4	1950	45		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 6010A	AG	8.40E+00	2.00E-01		µg/g		R	8	V I
W-10S326	SLUDGE	METAL	SW846 6010A	AL	2.90E+04	2.65E+02		µg/g		J	5A	V V
W-10S326	SLUDGE	METAL	SW846 6010A	B	3.50E+00	4.00E-01		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 6010A	BA	8.37E+01	4.00E-01		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 6010A	BE	3.90E+00	0.00E+00		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 6010A	CA	8.81E+03	2.94E+01		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 6010A	CD	2.70E+00	2.00E-01		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 6010A	CO	4.50E+00	4.00E-01		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 6010A	CR	2.14E+02	1.20E+00		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 6010A	CU	7.50E+01	4.00E-01		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 6010A	FE	1.09E+04	3.36E+01		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 6010A	K	2.65E+03	1.30E+02		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 6010A	MG	2.18E+03	1.68E+01		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 6010A	MN	1.80E+02	4.00E-01		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 6010A	NA	1.21E+04	5.86E+01		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 6010A	NI	2.33E+02	1.00E+00		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 6010A	SB			<10.3	µg/g	<	U		V V
W-10S326	SLUDGE	METAL	SW846 6010A	SR	6.39E+01	8.00E-01		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 6010A	TH	4.18E+03	8.40E+01		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 6010A	U	4.35E+03	6.72E+01		µg/g		J	9	V V
W-10S326	SLUDGE	METAL	SW846 6010A	V			<2.56	µg/g	<	U		V V
W-10S326	SLUDGE	METAL	SW846 6010A	ZN	1.02E+02	5.80E+00		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 7060A	AS			<.5	µg/g	<	U		V V
W-10S326	SLUDGE	METAL	SW846 7421	PB	9.20E+02	1.78E+01		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 7471A	HG	2.88E+02	9.58E-01		µg/g				V V
W-10S326	SLUDGE	METAL	SW846 7740	SE			<.5	µg/g	<	U		V V
W-10S326	SLUDGE	METAL	SW846 7841	TL			<.5	µg/g	<	U		V V
W-10S326	SLUDGE	METAL	SW846 9056	CL	597	20		µg/g				V V
W-10S326	SLUDGE	NHVOA	SW846 8015	ACETONE	1.0E+01			mg/kg	U	U		V V
W-10S326	SLUDGE	NHVOA	SW846 8015	BUTANOL	1.0E+01			mg/kg	U	U		V V
W-10S326	SLUDGE	NHVOA	SW846 8015	ETHYL ETHER	1.0E+01			mg/kg	U	U		V V
W-10S326	SLUDGE	NHVOA	SW846 8015	ISOBUTANOL	1.0E+01			mg/kg	U	UJ	L	V V
W-10S326	SLUDGE	NHVOA	SW846 8015	METHANOL	1.0E+01			mg/kg	U	J	C	V V
W-10S326	SLUDGE	NHVOA	SW846 8015	METHYL ETHYL KETONE	1.0E+01			mg/kg	U	U		V V
W-10S326	SLUDGE	NHVOA	SW846 8015	PYRIDINE	1.0E+01			mg/kg	U	U		V V
W-10S326	SLUDGE	PHYSC	AC-MM-1 1011	DENSITY	1.23			g/ml				
W-10S326	SLUDGE	PHYSC	GAAT SAP	MOISTURE	77.1			%				
W-10S326	SLUDGE	RADS	AC-MM-2 1111	G-BETA	1.2E7	0.1E7		Bq/g				V V
W-10S326	SLUDGE	RADS	AC-MM-2 21807	TOTAL-RAD-SR	4.7E6	0.1E6		Bq/g				V V
W-10S326	SLUDGE	RADS	AC-MM-2 21996	4.80 MEV U233/U234	0.6			%				V V

Tank W-10

SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-10S326	SLUDGE	RADS	AC-MM-2 21996	5.15 MEV PU239/240	6.1			%				V V
W-10S326	SLUDGE	RADS	AC-MM-2 21996	5.50 MEV PU238/AM241	6.8			%				V V
W-10S326	SLUDGE	RADS	AC-MM-2 21996	5.80 MEV CM244/TH227	86.5			%				V V
W-10S326	SLUDGE	RADS	AC-MM-2 21996	PU-238	2.6E3	0.2E3		Bq/g				V V
W-10S326	SLUDGE	RADS	AC-MM-2 21996	PU-239/240	5.9E3	0.5E3		Bq/g				V V
W-10S326	SLUDGE	RADS	AC-MM-2 21996	PU-242			<100	Bq/g	<		U	V V
W-10S326	SLUDGE	RADS	AC-MM-2 22003	G-FISSILE(TOT)	28	3		µg/g				V V
W-10S326	SLUDGE	RADS	AC-MM-2 31621	PU(TOTAL)	8.5E3	0.7E3		Bq/g				V V
W-10S326	SLUDGE	RADS	AC-MM-4 0100	PU-238 BY MS	0.37	0.02		% atoms				V V
W-10S326	SLUDGE	RADS	AC-MM-4 0100	PU-239 BY MS	90.05	0.2		% atoms				V V
W-10S326	SLUDGE	RADS	AC-MM-4 0100	PU-240 BY MS	8.46	0.06		% atoms				V V
W-10S326	SLUDGE	RADS	AC-MM-4 0100	PU-241 BY MS	0.11	0.01		% atoms				V V
W-10S326	SLUDGE	RADS	AC-MM-4 0100	PU-242 BY MS	0.96	0.02		% atoms				V V
W-10S326	SLUDGE	RADS	AC-MM-4 0100	PU-244 BY MS	0.05	0.01		% atoms				V V
W-10S326	SLUDGE	RADS	AC-MM-4 0100	U-233	0.0258	0.0004		% atoms				V V
W-10S326	SLUDGE	RADS	AC-MM-4 0100	U-234	0.0052	0.0002		% atoms				V V
W-10S326	SLUDGE	RADS	AC-MM-4 0100	U-235	0.634	0.002		% atoms				V V
W-10S326	SLUDGE	RADS	AC-MM-4 0100	U-236	0.0041	0.0002		% atoms				V V
W-10S326	SLUDGE	RADS	AC-MM-4 0100	U-238	99.331	0.003		% atoms				V V
W-10S326	SLUDGE	RADS	EPA 900.0	G-ALPHA	5.7E4	1.4E4		Bq/g				V V
W-10S326	SLUDGE	RADS	EPA 901.1	AM-241	5.2E3	2.8E3		Bq/g				V V
W-10S326	SLUDGE	RADS	EPA 901.1	CO-60	5.6E3	0.3E3		Bq/g				V V
W-10S326	SLUDGE	RADS	EPA 901.1	CS-137	7.9E5	0.1E5		Bq/g				V V
W-10S326	SLUDGE	RADS	EPA 901.1	EU-152	3.3E3	0.6E3		Bq/g				V V
W-10S326	SLUDGE	RADS	EPA 901.1	EU-154	3.2E3	0.5E3		Bq/g				V V
W-10S326	SLUDGE	RADS	EPA 901.1	EU-155			<1800	Bq/g	<		U	V V
W-10S326	SLUDGE	SVOA	SW846 8270	2,4-DINITROTOLUENE	9.0E-01			mg/kg	UD		U	V V
W-10S326	SLUDGE	SVOA	SW846 8270	2-METHYLPHENOL	1.5E+01			mg/kg	UD		U	V V
W-10S326	SLUDGE	SVOA	SW846 8270	4-METHYLPHENOL	1.5E+01			mg/kg	UD		U	V V
W-10S326	SLUDGE	SVOA	SW846 8270	HEXACHLOROBENZENE	9.0E-01			mg/kg	UD		U	V V
W-10S326	SLUDGE	SVOA	SW846 8270	HEXACHLOROETHANE	1.5E+01			mg/kg	UD		U	V V
W-10S326	SLUDGE	SVOA	SW846 8270	NITROBENZENE	1.5E+01			mg/kg	UD		U	V V
W-10S326	SLUDGE	SVOA	SW846 8270	PENTACHLOROPHENOL	1.5E+01			mg/kg	UD		U	V V
W-10S326	SLUDGE	VOA	SW846 8240	1,1,1-TRICHLOROETHANE	1.0E+00			mg/kg	U		U	V V
W-10S326	SLUDGE	VOA	SW846 8240	1,1,2,2-TETRACHLOROETHANE	1.0E+00			mg/kg	U		U	V V
W-10S326	SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROETHANE	1.0E+00			mg/kg	U		U	V V
W-10S326	SLUDGE	VOA	SW846 8240	1,1,2-TRICHLOROTRIFLUOROETHANE	1.0E+00			mg/kg	U		U	V V
W-10S326	SLUDGE	VOA	SW846 8240	1,1-DICHLOROETHYLENE	1.7E+00			mg/kg	JB		UJ	L,B V V
W-10S326	SLUDGE	VOA	SW846 8240	1,2-DICHLOROETHANE	1.0E+00			mg/kg	U		U	V V
W-10S326	SLUDGE	VOA	SW846 8240	1,4-DICHLOROBENZENE	1.0E+00			mg/kg	U		U	V V
W-10S326	SLUDGE	VOA	SW846 8240	2-NITROPROPANE	1.0E+00			mg/kg	U		U	V V
W-10S326	SLUDGE	VOA	SW846 8240	BENZENE	1.0E+00			mg/kg	U		U	V V
W-10S326	SLUDGE	VOA	SW846 8240	BROMOFORM	1.0E+00			mg/kg	U		U	V V
W-10S326	SLUDGE	VOA	SW846 8240	CARBON DISULFIDE	1.0E+00			mg/kg	U		U	V V
W-10S326	SLUDGE	VOA	SW846 8240	CARBON TETRACHLORIDE	1.0E+00			mg/kg	U		U	V V
W-10S326	SLUDGE	VOA	SW846 8240	CHLOROBENZENE	1.0E+00			mg/kg	U		U	V V

Tank W-10

SAMPLE_ID	MATRIX	ANA_TYPE	METHOD	ANALYTE	RESULT	ERROR	DET_LIMIT	UNITS	LAB_QUAL	REV_QUAL	QUAL_CODE	VAL_CODE
W-10S326	SLUDGE	VOA	SW846 8240	CHLOROFORM	1.0E+00			mg/kg	U	U		V V
W-10S326	SLUDGE	VOA	SW846 8240	CYCLOHEXANE	1.0E+00			mg/kg	U	U		V V
W-10S326	SLUDGE	VOA	SW846 8240	ETHYLBENZENE	1.0E+00			mg/kg	U	U		V V
W-10S326	SLUDGE	VOA	SW846 8240	METHYLENE CHLORIDE	1.0E+00			mg/kg	U	U		V V
W-10S326	SLUDGE	VOA	SW846 8240	ORTHO-DICHLOROBENZENE	1.0E+00			mg/kg	U	U		V V
W-10S326	SLUDGE	VOA	SW846 8240	TETRACHLOROETHYLENE	1.1E+00			mg/kg	J	J		V V
W-10S326	SLUDGE	VOA	SW846 8240	TOLUENE	1.0E+00			mg/kg	U	UJ	Q	V V
W-10S326	SLUDGE	VOA	SW846 8240	TRICHLOROETHYLENE	1.0E+00			mg/kg	U	UJ	Q	V V
W-10S326	SLUDGE	VOA	SW846 8240	TRICHLOROFLUOROMETHANE	1.0E+00			mg/kg	U	U		V V
W-10S326	SLUDGE	VOA	SW846 8240	VINYL CHLORIDE	1.0E+00			mg/kg	U	UJ	C	V V
W-10S326	SLUDGE	VOA	SW846 8240	XYLENE	1.0E+00			mg/kg	U	U		V V

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