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**Eastern Trenches Data Transmittal
Data Gaps Limited Field Investigation
South Campus Disposal Site
Davis, California**

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1.0 Introduction

This data transmittal presents the results of the limited field investigation conducted within the Eastern Trenches area at the South Campus Disposal Site (SCDS), located in Davis, California. The investigation within the Eastern Trenches area was conducted by the University of California, Davis between July and September 1996 as part of the larger Data Gaps Limited Field Investigation (LFI). The LFI was conducted in accordance with the Revised Data Gaps Work Plan dated May 31, 1996, and in compliance with the Final Draft Remedial Investigation/Feasibility Study (RI/FS) Work Plan and associated Sampling and Analysis Plan, Quality Assurance Plan, and Health and Safety Plan.

The Eastern Trenches area is located within the boundaries of the former Laboratory for Energy-related Health Research (LEHR) site, specifically east of the former eastern dog pens (Figure 2). These trenches were primarily north-south trending and were active between about 1957 and 1965. Reportedly, these trenches were used to dispose of wastes from general campus activities that potentially contained radiologic materials, other campus chemicals and laboratory wastes, and solid wastes generated by DOE-sponsored research at the LEHR facility that may have contained low level radioactive materials.

The purpose of this transmittal is to document the LFI field activities conducted within the Eastern Trenches investigation area, to present the results and observations of the field activities, and to present the analytical results from analysis of the soil samples. It is anticipated that a detailed discussion of the Eastern Trenches results that incorporates previously collected data will be completed at a later date as part of an RI/FS report for the SCDS.

The remainder of the transmittal is organized into four sections and three Appendices. Section 2.0 includes a review of the scope of work for the Eastern Trenches investigation, Section 3.0 presents a summary of field activities, Section 4.0 summarizes the results of data validation, and Section 5.0 presents the analytical results for the soil and waste samples in tabular form. Appendix A presents trench logs and Appendix B presents soil boring logs. Appendix C presents a detailed discussion of data quality and Appendix D presents tritium screening results.

2.0 Scope of Data Gaps Work

The scope of work conducted within the Eastern Trenches investigation area was presented in the Data Gaps LFI Work Plan (Dames & Moore, 1996) and was developed based on a review of previous results from two reconnaissance trenching programs (Wahler, 1988; Dames & Moore 1990), a soil gas

investigation (PNL, 1995), and the drilling of two soil borings (PNL, 1995). The purpose and scope of the Eastern Trenches investigation as presented in the Data Gaps Work Plan are reviewed below.

2.1 Purpose

Based on the previously collected data, the LEHR stakeholders agreed that containment, partial removal, or treatment are possible as presumptive remedial alternatives for the Eastern Trenches. As a result, the Data Gaps LFI focussed on collecting data to evaluate these actions. The purpose of the investigation includes:

- ❖ to assess the composition, location, and depth of waste; and
- ❖ to assess and eventually remove (if present) the source of tritium impacts observed in site groundwater (the source is suspected to be in the burial hole area, but may also be partially located in trenches in the southern end of the Eastern Trenches).

2.2 Scope

In order to complete the evaluations necessary to assess the remedial alternatives for this area, the following scope of work was completed:

- ❖ 5 exploratory trenches were excavated that intersect waste trenches; and
- ❖ 3 soil borings were drilled and sampled within the Eastern Trenches area.

Trench and soil boring locations are shown on Figure 3. Exploratory trenches were excavated to locate and survey waste trenches and to evaluate the nature of waste. Each exploratory trench was excavated until a waste trench was encountered. In addition to locating waste burial trenches, soil and waste samples were collected from four of the five exploratory trenches.

Soil boring locations were selected based on previously collected data, and data from the exploratory trenching program. The borings were drilled to just above the average high groundwater elevation (approximately 35 feet bgs) and were sampled continuously through the waste zone. Below the waste zone, each borehole was continuously cored, and samples were collected every five feet.

3.0 Summary of Field Activities

Field activities conducted in the Eastern Trenches area included a backhoe trenching and soil sampling program, and a soil boring and soil sampling program. A description of these activities is presented below.

3.1 Exploratory Trenching and Soil and Waste Sampling

Exploratory trenching and soil sampling activities for the Eastern Trenches were conducted from July 31, 1996 through August 26, 1996. Excavation of trenches was performed by Remedial Constructors, Inc. (RCI) under the supervision of Dames & Moore using a backhoe. The purpose of the exploratory trenching activities was to locate waste disposal trenches in the Eastern Trenches area, evaluate the nature of waste, and to collect waste and soil samples for chemical analyses.

A total of 5 exploratory trenches were excavated within the Eastern Trenches investigation area (Figure 3). Exploratory trench locations were selected based on subsurface anomalies identified during the previously performed geophysics survey. Exploratory trenches were excavated to locate waste disposal trenches and ranged from 23 to 55 feet in length and to depths of up to 8 feet below ground surface (bgs). A total of 197 feet of exploratory trench was excavated during the investigation of the Eastern Trenches. During excavation of each backhoe trench, waste material and soil material were segregated. During backfill, soil and waste material were replaced to their original position and depth. A log of each exploratory trench is presented in Appendix A.

Observations

In general, observations of waste in exploratory trenches correlated with the results of the geophysics survey. Of the 5 exploratory trenches, waste disposal trenches were encountered approximately five times in trenches TRL45 and TRL46, and six times in trenches TRL47 and TRL48. Additionally, three possible trenches were encountered in TRL21. Two of these trenches appeared to be historic exploratory trenches, consisting of reworked soil and plastic sheeting. The third trench consisted of a layer of small snail shells below reworked soil.

Figure 3 presents the approximate extent of the Eastern Trenches. Waste disposal trenches within the Eastern Trenches area appear to be oriented in a north-south direction with the exception of the east-west trending trenches encountered in exploratory trench TRL21. Waste disposal trenches encountered appear to be approximately 2 feet in width.

Disposal trenches containing waste material were encountered in all trenches excavated in the Eastern Trenches area. Disposal material consisted of:

- ❖ Abundant dog pen-like gravel with bones (ox, sheep, horse, or calf), animal feces, horse manure, some broken glass, and a rusty can;
- ❖ A layer of dark brown seed pods in trench TRL48 which were 2 millimeters in diameter;
- ❖ Some laboratory waste in trenches TRL45 and TRL48 which included jars, bottles and vials containing liquids, powders, ceramic crocks, test tubes, plastic bags, and a heavy duty rubber glove;

- ❖ A layer of miscellaneous waste in trench TRL47 which included an animal carcass with bones, rusty cans, aluminum identification bands, and a light bulb; and
- ❖ A layer of small, conical snail shells in trench TRL21 which were 1 millimeter by 2 millimeters in size.

In general, waste was composed of dog pen-like gravel with bones and feces. The top of the waste material ranged from ground surface to four feet bgs. Waste disposal areas appear to be covered with a layer of silty sand fill material (possibly reworked native material). The bottom of the waste disposal cells were observed to vary from 5 to 6 feet bgs, however, the total depth of waste disposal was not investigated at each waste location. The waste disposal cells appear to be underlain by native deposits consisting of silty clay material.

Sampling

During exploratory trenching activities, waste and soil samples were collected for laboratory analyses and tritium screening. A total of six waste and six soil samples were collected for laboratory analyses. Five soil samples and five waste samples were submitted to the laboratory for "total" concentration analyses. One soil and one waste sample were analyzed by Waste Extraction Test (WET) method for leachable concentrations. Waste samples were analyzed for the parameters shown in Table 1. Analysis of soil and waste samples was conducted by Lockheed Analytical Services of Las Vegas, Nevada.

Tritium screening samples were analyzed by UC Davis using an on-site liquid scintillation counter and the worksheet presented in Appendix D. The procedure consisted of adding a known mass of soil sample to 20 milliliters of deionized water and shaking the sample for 15 minutes. The sample/deionized water mixture was centrifuged to settle out solid material, and ten milliliters of supernatant water was extracted and added to a scintillation vial with scintillation cocktail. The vial was then counted in the liquid scintillation counter and the results calculated and reported as pCi/g. Results of the tritium screening are presented in Appendix D.

Excavated soil and waste were screened in the field for volatile organic compounds (VOCs) using a photoionization detector (PID) and/or organic vapor detector (OVM). During field screening, detections of VOCs were only observed for waste material encountered in trench TRL48. No other detections of VOCs exceeding background readings were observed for the Eastern Trenches area. In addition, excavated soil and waste were field screened for total alpha and total beta-gamma radioactivity using an Eberline ESP-2 with Ludlum 43-5 and 44-9 probes, respectively. No detections of total alpha or total beta-gamma radioactivity exceeding background values were observed for material excavated from the Eastern Trenches area.

3.2 Soil Borings and Soil and Waste Sampling

Soil boring and soil and waste sampling activities for the Eastern Trenches were conducted on September 24 and 25, 1997. Soil borings were drilled and sampled by Gregg Drilling and Testing, Inc. of Martinez, California. The purpose of the soil borings was to locate waste disposal trenches and to collect soil and waste samples for chemical analyses.

A total of three soil borings were drilled and sampled within the Eastern Trenches (Figure 3). Soil boring SBL-43 was located in the open area west of the former Cobalt-60 irradiation source. The other two soil borings (SBL-41 and SBL-42) were located in the open area between the former eastern dog pens and the Cobalt-60 field. Soil boring locations were selected based on observations of waste disposal areas during the exploratory trenching program (see Section 3.2 above) and subsurface anomalies identified during the previously conducted geophysical investigation (see Section 3.1 above). Soil borings were drilled and continuously sampled to a total depth of 36.5 feet bgs.

Observations

All three soil borings were drilled along the approximate path of the waste trenches, just north of the trenches excavated during the exploratory trenching program. During the soil boring activities, waste zones, as identified during trenching and soil sampling activities, were observed to be overlain by a layer of silty sand fill material (possibly reworked native material) and underlain by relatively fine-grained deposits of silty clay.

Sampling

During soil boring activities, waste and soil samples were collected for laboratory analyses. A total of nine samples were collected from within the waste zones, and a total of twenty-one soil samples were collected at various depths below the waste zones. Two of the nine waste samples and seven of the twenty-one soil samples collected were submitted to the laboratory for "total" concentrations analyses in waste and soil. One waste and one soil sample were analyzed by WET method for leachable concentrations. Waste and soil samples were analyzed for the parameters shown in Table 1 by Lockheed Analytical Services of Las Vegas, Nevada.

During soil boring activities, soil and waste material were screened in the field for VOCs and total alpha and total beta-gamma radioactivity using the instruments described in Section 3.2. No detections of VOCs or total alpha and total beta-gamma were observed above background readings.

4.0 Data Validation

Analytical data were validated in accordance with standard operating procedures presented in the draft Quality Assurance Project Plan (QAPjP; Dames & Moore, 1996), and guidance provided in *USEPA National Functional Guidelines for Data Review, Organics and Inorganics* (EPA, 1994). A detailed discussion of data quality is presented in Appendix C. Data validation flags have been applied to those

sample results which fell outside of specified quality control tolerance limits. An explanation of the data qualifiers presented in this report is provided with the data tables.

Data validation results show that requested analyses were completed. More than 98 percent of the data were judged to be valid, according to criteria set forth in the QAPJP. Data qualified as estimated (J/U) exhibited some bias during analysis, and are considered an approximate measure of the respective analyte concentration. Data identified as unreliable are represented by the qualifier "R" in the data tables. Data determined to be unreliable, are rejected, and not considered for decision making purposes. Data collected as part of the Eastern Trenches field investigation, which were not qualified as rejected, include approximately 3,827 individual analytical results (both detected and non-detected) deemed reliable for their intended purpose.

5.0 Results

Results for chemical and radiological analysis of samples collected from the Eastern Trenches are presented in Tables 2 through 5. Tables 2 and 3 summarize results for soil and waste samples that were reported above the detection limit. Tables 4 and 5 present complete results, detections and non-detections, for soil and waste samples.

Tables 2 and 3 summarize detected results for total analyses and WET analyses, respectively, and are organized according to analyte group. Table 2 includes a summary of detections for total analysis of metals, general chemicals, semi-volatile organic compounds, organochlorine pesticides, volatile organic compounds, and radionuclides. Table 3 includes a summary of detections for WET analysis of metals, general chemicals, semi-volatile organic compounds, organochlorine pesticides, and radionuclides. Results included in the summary of detections tables do not include results for parameters that were not detected in the Eastern Trenches samples. For example, no trichloroethylene (TCE) was reported in the Eastern Trenches samples, therefore Tables 2 and 3 do not include a summary of TCE results.

As described above, Tables 2 through 5 present a summary of results for radionuclide analyses. Each result for the radionuclide analysis consists of three parts: a result reported in pCi/g; an error reported as \pm error value; and a minimum detectable activity (MDA). For the purpose of this transmittal, a "detection" for a radionuclide is considered to be any statistically positive result where the result exceeds the error value. For example, a tritium result of 230 pCi/g with an error of ± 140 pCi/g is considered to be statistically positive because 230 exceeds the error of 140.

Tables 4 and 5 present complete analytical results for total analyses and WET analyses, both detections and non-detections, for samples collected from the Eastern Trenches. Results reported below detection limits are represented by a "less than" symbol (<), followed by the detection limit value (e.g., < 140 μ g/L). Tables 4 and 5 are also organized according to analyte group. Table 4 includes results for total

analysis of parameters listed in Table 1. Table 5 includes analytical results for WET analysis of metals, general chemical parameters, semi-volatile organic compounds, organochlorine pesticides, and radionuclides.

Tables 2 through 5 include data qualification flags that were applied by the laboratory and by Dames & Moore during data validation. To interpret the data qualification flags, a list of data validation qualifier definitions and an interpretation key for both Dames & Moore flags and for laboratory flags has been placed in front of Table 2. A more detailed discussion of the data validation process and results is attached to this transmittal in Appendix C.

Table 1
Eastern Trenches
Summary of Analytical Parameters
South Campus Disposal Site, Davis, California

Trench	Sample	Matrix	ANALYSES											
			Metals ^a	Hexavalent Chromium	Nitrates (as N)	Organo-chlorine Pesticides	VOCs	SVOCs	Gross α Gross β	Tritium	C-14	Ra-226	Sr-90	Gamma
TRL21														
TRL45	SSUT44	waste	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
	SSUT45	soil	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SSUT46	soil	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SSUT47	waste	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
TRL46	SSUT48	waste	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
	SSUT49	soil	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TRL47	SSUT50	waste	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
	SSUT51 ^b	waste-WET	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
	SSUT52	soil	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SSUT53 ^b	soil-WET	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
TRL48	SSUT54	waste	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
	SSUT55	soil	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SBL-41	SSUT79 ^b	waste-WET	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
	SSUT80	soil	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SSUT81	soil	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SSUT82 ^b	woil-WET	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
	SSUT83	soil	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Table 1 (continued)
Eastern Trenches
Summary of Analytical Parameters
South Campus Disposal Site, Davis, California

Trench	Sample	Matrix	ANALYSES														
			Metals ^a	Hexavalent Chromium	Nitrates (as N)	Organo-chlorine Pesticides	VOCs	SVOCs	Gross α Gross β	Tritium	C-14	Ra-226	Sr-90	Gamma			
SBL-42	SSUT76	waste	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓
	SSUT77	soil	✓	✓	✓	✓	✓							✓	✓	✓	✓
	SSUT78	soil	✓	✓	✓	✓	✓							✓	✓	✓	✓
SBL-43	SSUT86	soil	✓	✓	✓	✓	✓							✓	✓	✓	✓
	SSUT87	waste	✓	✓	✓	✓	✓							✓	✓	✓	✓
	SSUT88	soil	✓	✓	✓	✓	✓							✓	✓	✓	✓

^a Metals include 17 CAM metals.

^b Waste samples were composited samples analyzed for "total" concentrations.

DATA VALIDATION QUALIFIER DEFINITIONS AND INTERPRETATION KEY⁽¹⁾
Assigned by Dames & Moore's Data Review Team

DAMES & MOORE DATA QUALIFIER DEFINITIONS

- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

DAMES & MOORE DATA QUALIFIER DEFINITIONS — REASON CODE DEFINITIONS

- a Analytical sequence deficiency or omission.
- b Gross compound breakdown (4,4'-DDT/Endrin).
- c Calibration failure; poor or unstable response.
- d Laboratory duplicate imprecision.
- e Laboratory or field duplicate control sample imprecision.
- g Poor chromatography.
- h Holding time violation.
- i Internal standard failure.
- j Poor mass spectrographic performance.
- k Serial dilution imprecision.
- l Laboratory control sample recovery failure.
- m Matrix spike/matrix spike duplicate recovery failure.
- n Interference check sample recovery failure.
- o Calibration blank contamination (metals/inorganics only).
- p Preparation blank contamination (metals/inorganics only).
- q No valid quantitation column present.
- r Linearity failure in initial calibration.
- s Surrogate spike recovery failure (GC organics and GC/MS organics only).
- t Instrument tuning failure.
- u Failure of confirmation column (GC Organics only).
- w Retention time (RT) outside of RT window
- x Field blank contamination.
- y Trip blank contamination
- z Method blank contamination.

(1) The key to laboratory data qualifier flags follows this page.

INTERPRETATION KEY

The following example shows how an analytical result which includes qualifiers assigned by both the Dames & Moore data review team and the analytical laboratory could be displayed in the data tables:

< 5.20 JB|Uz

The qualifier assigned by the laboratory precedes the "|"; the qualifier assigned by the Dames & Moore data review team follows it. In this example, the result is qualified as a non-detection due to the bias introduced by contamination of the associated method blank. Presence of the analyte in the method blank is indicated by the laboratory qualifier (B). The qualifier assigned by the Dames & Moore data review team (Uz) indicates that the analyte concentration is considered to be below the adjusted detection limit (quantitation limit) based on the level of contamination in the method blank.

Lockheed Analytical Services
DATA QUALIFIERS FOR ORGANIC ANALYSES

[Revised 02/09/1996]

For Use On The Analytical Data Reporting Forms	
A	<i>For CLP analyses Only</i> – The TIC is a suspected aldol-condensation product.
B	Any constituent that was also detected in the associated blank whose concentration was greater than the practical or reporting detection limit (PQL or RDL).
C	Constituent confirmed by GC/MS analysis. [<i>pesticide/PCB analyses only</i>]
D	Constituent detected in the diluted sample. It also indicates that an accurate quantitation is not possible due to <u>surrogates</u> being diluted out of the samples during the course of the analysis.
E	Constituent concentration exceeded the calibration range.
G	The quantitation is not gasoline or diesel but believed to be some other combination of hydrocarbons.
H	Sample analysis performed outside of method- or client-specified maximum holding time requirement.
J	<i>Estimated value</i> – (1) constituent detected at a level less than the RDL or PQL and greater than or equal to the MDL; (2) estimated concentration for TICs (<i>For CLP Reporting Only</i>).
N	<i>For CLP Reporting Only</i> – Tentatively identified constituents (TICs) identified based on mass spectral library search.
NQ	Analyte detected, but Not Quantified; see result from subsequent analysis
P	<i>For CLP Reporting Only</i> – The percent difference between the concentrations detected on both GC columns was greater than 25 percent [<i>pesticide/PCB analyses only</i>].
U	<i>For CLP Reporting Only</i> – Constituent was analyzed for but not detected (sample quantitation must be corrected for dilution and percent moisture).
X, Y, or Z	Analyst-defined qualifier.
N/A (% Moisture)	N/A in the % moisture cell indicates that data are reported on an "as received" basis. A value in the % moisture cell indicates that data are reported based on a "dry weight" basis.
For Use On The QC Data Reporting Forms	
*	QC data (i.e., percent recovery data for matrix spike, matrix spike duplicate, laboratory control standard, or surrogates; and RPD for matrix spike duplicate or unspiked duplicate) exceeded acceptance limits.
a¹	The spike recovery and/or RPD for matrix spike and matrix spike duplicates cannot be evaluated due to insufficient spiking level compared to the elevated sample analyte concentration.
b¹	The RPD cannot be computed because the sample and/or duplicate concentration was below the RDL.

¹ Used as footnote designations on the QC Summary Form.

Lockheed Analytical Services
DATA QUALIFIERS FOR INORGANIC ANALYSES

[Revised 08/28/92]

For Use on the Analytical Data Reporting Forms	
B	<i>For CLP Analyses Only</i> – Reported value is less than the contract required detection limit (CRDL) but greater than or equal to the instrument detection limit (IDL).
C	<i>For Routine, Non-CLP Analyses Only</i> – Any constituent that was also detected in the associated blank whose concentration was greater than the reporting detection limit (RDL).
D	Presence of high levels of interfering constituents required dilution of sample which increased the RDL by the dilution factor.
E	Estimated value due to presence of interference.
H	Sample analysis performed outside of method-or client-specified maximum holding time requirement.
M	<i>For CLP Analyses Only</i> – Duplicate injection precision criterion was not met.
N	Matrix spike recovery exceeded acceptance limits.
S	Reported value was determined from the method of standard addition.
U	<i>For CLP Reporting Only</i> – Constituent was analyzed for but not detected (sample quantitation must be corrected for dilution and percent moisture).
W	<i>For AAS Only</i> – Post-digestion spike for Furnace AAS did not meet acceptance criteria and sample absorbance is less than 50% of spike absorbance.
X, Y, or Z	Analyst-defined qualifier.
*	Relative percent difference (RPD) for duplicate analysis exceeded acceptance limits.
+	Correlation coefficient (r) for the MSA is less than 0.995.
For Use on the QC Data Reporting Forms	
a¹	The spike recovery and/or RPD for matrix spike and matrix spike duplicates cannot be evaluated due to insufficient spiking level compared to the elevated sample analyte concentration.
b¹	The RPD cannot be computed because the sample and/or duplicate concentration was below the RDL.

¹ Used as footnote designations on the QC summary form.

Lockheed Analytical Services
DATA QUALIFIERS FOR RADIOCHEMICAL ANALYSES
[Revised 04/05/96]

For Use on the Analytical Data Reporting Forms	
B	Any constituent that was detected in the associated method blank at a concentration was greater than the reporting detection limit (RDL).
C	The minimum detectable activity exceeded the RDL due to the residue weight limitations forcing a volume reduction.
D	Constituent detected in the diluted sample.
E	Constituent concentration exceeded the calibration or attenuation curve range.
F	<i>For Alpha Spectrometry Only</i> -- Full width half max exceeded the acceptance limits.
H	Sample analysis performed outside of method-specified maximum holding time requirement.
Y	Chemical yield exceeded acceptance limits.
For Use on the QC Data Reporting Forms	
*	QC data (i.e., percent recovery data for laboratory control standard and matrix spike; and RPD for replicate analyses) exceeded acceptance limits.
a¹	The spike recovery and/or RPD for matrix spike and duplicates cannot be evaluated due to insufficient spiking level compared to the elevated sample analyte concentration.
b¹	The RPD cannot be computed because the sample and/or duplicate concentration was below the MDA.

¹ Used as foot note designations on the QC summary form.

TABLE 2a
EASTERN TRENCHES
SUMMARY OF DETECTIONS
METALS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

ANALYTE	SAMPLE LOCATION DATE DEPTH (FT) TYPE UNITS	SSUT0044	SSUT0045	SSUT0046	SSUT0047	SSUT0048	SSUT0049	SSUT0050	SSUT0052
		TRL0045	TRL0045	TRL0045	TRL0045	TRL0046	TRL0046	TRL0047	TRL0047
		08/21/96 4.00 WASTE	08/21/96 4.00	08/21/96 4.00 DUPLICATE	08/21/96 3.70 WASTE	08/22/96 5.75 WASTE	08/22/96 6.50	08/23/96 5.50 WASTE	08/23/96 6.50
ARSENIC	mg/Kg	4.6	7.2	6.2	7.6	-- B	9.8	6.9	7.9
BARIUM	mg/Kg	143	151	158	181	89.7	264	447	187
CHROMIUM	mg/Kg	96.6 N* Jd	155 N* Jd	152 N* Jd	147 N* Jd	32.4 N* Jd	125 N* Jd	126 N* Jd	147 N* Jd
COBALT	mg/Kg	14.4	20.5	21.4	22.3	-- B	19.0	17.8	24.3
COPPER	mg/Kg	31.0	30.0	32.0	37.8	15.6	55.6	43.8	40.9
LEAD	mg/Kg	8.3 * Jd	6.6 * Jd	6.6 * Jd	9.9 * Jd	5.9 *	9.3 *	14.2 * Jd	8.6 * Jd
MERCURY	mg/Kg	0.60 N* Jd	0.26 N* Jd	0.48 N* Jd	4.8 N* Jd	0.25 N* Jd	0.16 N* Jd	0.23 N* Jd	0.27 N* Jd
NICKEL	mg/Kg	178 N* Jd	259 N* Jd	261 N* Jd	274 N* Jd	53.0 N* Jd	269 N* Jd	233 N* Jd	269 N* Jd
SELENIUM	mg/Kg	NA	NA	NA	NA	NA	NA	NA	NA
SILVER	mg/Kg	--	--	--	4.1	NA	NA	NA	NA
VANADIUM	mg/Kg	40.1	58.2	59.1	63.6	14.5	80.1	54.1	65.7
ZINC	mg/Kg	254 N* Jd	63.8 N* Jd	66.4 N* Jd	77.5 N* Jd	73.0 N* Jd	101 N* Jd	369 N* Jd	82.3 N* Jd

NA = Not analyzed. -- = Not detected.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

TABLE 2a
EASTERN TRENCHES
SUMMARY OF DETECTIONS
METALS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

ANALYTE	SAMPLE LOCATION DATE DEPTH (FT) TYPE UNITS	SSUT0054	SSUT0055	SSUT0076	SSUT0077	SSUT0078	SSUT0080	SSUT0081	SSUT0083
		TRL0048 08/26/96 6.50 WASTE	TRL0048 08/26/96 8.00	SBL00042 09/24/96 4.00 WASTE	SBL00042 09/24/96 10.00	SBL00042 09/24/96 20.00	SBL00041 09/24/96 5.50	SBL00041 09/24/96 10.00	SBL00041 09/24/96 20.00
ARSENIC	mg/Kg	8.8	9.0	7.4	8.1	8.5	8.5	8.7	9.5
BARIUM	mg/Kg	186	154	190	150	200	230	170	230
CHROMIUM	mg/Kg	156	122	150	110	110	120	100	97
COBALT	mg/Kg	25.0	23.2	24	22	25	25	23	27
COPPER	mg/Kg	42.1	46.2	35	37	43	52	43	50
LEAD	mg/Kg	20.3	8.2	6.6	6.7	7.8	8.3	7.5	8.6
MERCURY	mg/Kg	0.40	0.16	0.49	--	--	--	0.16	--
NICKEL	mg/Kg	267	235	260	230	220	250	230	220
SELENIUM	mg/Kg	1.5	1.9	1.9	2.1	2.5	2.0	1.6	2.1
SILVER	mg/Kg	NA	NA	NA	NA	NA	NA	NA	NA
VANADIUM	mg/Kg	68.0	75.0	59	60	67	76	66	70
ZINC	mg/Kg	84.7	85.0	68	71	79	88	81	86

NA = Not analyzed. -- = Not detected.
A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

TABLE 2a
EASTERN TRENCHES
SUMMARY OF DETECTIONS
METALS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

	SAMPLE LOCATION	SSUT0086 SBL00043	SSUT0087 SBL00043	SSUT0088 SBL00043
	DATE	09/25/96	09/25/96	09/25/96
	DEPTH (FT)	20.00	2.50	10.00
	TYPE		WASTE	
ANALYTE	UNITS			
ARSENIC	mg/Kg	7.6	8.0	7.9
BARIUM	mg/Kg	220 N Jm	260 N Jm	160 N Jm
CHROMIUM	mg/Kg	110	140	120
COBALT	mg/Kg	23	25	22
COPPER	mg/Kg	44 *N Jm	54 *N Jm	36 *N Jm
LEAD	mg/Kg	6.9 *N Jm	8.2 *N Jm	6.4 *N Jm
MERCURY	mg/Kg	0.15	0.14	0.38
NICKEL	mg/Kg	210	240	230
SELENIUM	mg/Kg	2.2	3.5	3.0
SILVER	mg/Kg	NA	NA	NA
VANADIUM	mg/Kg	69	78	64
ZINC	mg/Kg	82 * Jd	100 * Jd	72 * Jd

NA = Not analyzed. -- = Not detected.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

**TABLE 2b
EASTERN TRENCHES
SUMMARY OF DETECTIONS
GENERAL CHEMICALS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA**

	SAMPLE	SSUT0044	SSUT0045	SSUT0046	SSUT0047	SSUT0048	SSUT0049	SSUT0050	SSUT0052	SSUT0054	SSUT0055
	LOCATION	TRL0045	TRL0045	TRL0045	TRL0045	TRL0046	TRL0046	TRL0047	TRL0047	TRL0048	TRL0048
	DATE	08/21/96	08/21/96	08/21/96	08/21/96	08/22/96	08/22/96	08/23/96	08/23/96	08/26/96	08/26/96
	DEPTH (FT)	4.00	4.00	4.00	3.70	5.75	6.50	5.50	6.50	6.50	8.00
	TYPE	WASTE		DUPLICATE	WASTE	WASTE		WASTE		WASTE	
ANALYTE	UNITS										
NITRATE-N	mg/Kg	390 H Jh	6.1	5.1	5.1	77.	50.	700 H Jh	79.	27.	20.

NA = Not analyzed. -- = Not detected.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

TABLE 2b
EASTERN TRENCHES
SUMMARY OF DETECTIONS
GENERAL CHEMICALS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

	SAMPLE	SSUT0076	SSUT0077	SSUT0078	SSUT0080	SSUT0081	SSUT0083	SSUT0086	SSUT0087	SSUT0088
	LOCATION	SBL00042	SBL00042	SBL00042	SBL00041	SBL00041	SBL00041	SBL00043	SBL00043	SBL00043
	DATE	09/24/96	09/24/96	09/24/96	09/24/96	09/24/96	09/24/96	09/25/96	09/25/96	09/25/96
	DEPTH (FT)	4.00	10.00	20.00	5.50	10.00	20.00	20.00	2.50	10.00
	TYPE	WASTE								WASTE
	ANALYTE									
	UNITS									
NITRATE-N	mg/Kg	27.	13.	24.	95.	31.	32.	31.	2.1	16.

NA = Not analyzed. -- = Not detected.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

TABLE 2c
EASTERN TRENCHES
SUMMARY OF DETECTIONS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

ANALYTE	SAMPLE		UNITS	440
	LOCATION	DATE		
HEXACHLOROBENZENE	SSUT0050 TRL0047	08/23/96	5.5	WASTE

TABLE 2d
EASTERN TRENCHES
SUMMARY OF DETECTIONS
ORGANOCHLORINE PESTICIDES
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE		SSUT0044	SSUT0048	SSUT0049	SSUT0050	SSUT0052
LOCATION		TRL0045	TRL0046	TRL0046	TRL0047	TRL0047
DATE		08/21/96	08/22/96	08/22/96	08/23/96	08/23/96
DEPTH (FT)		4.00	5.75	6.50	5.50	6.50
TYPE		WASTE	WASTE		WASTE	
ANALYTE	UNITS					
4,4'-DDD	ug/Kg	140 D	NA	NA	NA	NA
4,4'-DDE	ug/Kg	210 DP Ju	NA	NA	NA	NA
4,4'-DDT	ug/Kg	NA	--	6.8	NA	NA
ALPHA-CHLORDANE	ug/Kg	17	52 D	--	87 DJ	2.6
DIELDRIN	ug/Kg	7.1 P Ju	NA	NA	NA	NA
ENDOSULFAN I	ug/Kg	NA	8.9 P Ju	--	NA	NA
ENDRIN ALDEHYDE	ug/Kg	NA	NA	NA	1088 DP Ru	8.5 P Ru
GAMMA-CHLORDANE	ug/Kg	17	63 D	--	105 DP Ru	3 P Ru

NA = Not analyzed. -- = Not detected.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

TABLE 2e
EASTERN TRENCHES
SUMMARY OF DETECTIONS
VOLATILE ORGANICS COMPOUNDS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

	SAMPLE	SSUT0054
	LOCATION	TRL0048
	DATE	08/26/96
	DEPTH (FT)	6.5
	TYPE	WASTE
ANALYTE	UNITS	
CHLOROFORM	ug/Kg	12
TOLUENE	ug/Kg	38
XYLENES (TOTAL)	ug/Kg	48

NA = Not analyzed. -- = Not detected.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

TABLE 2f
EASTERN TRENCHES
SUMMARY OF DETECTIONS
RADIONUCLIDES
SOUTH CAMPUS DISPOSAL SITE, DAVIS CALIFORNIA

ANALYTE	SAMPLE LOCATION DATE DEPTH (FT) TYPE UNITS	SSUT0044 TRL0045 08/21/96 4.00 WASTE MDA		SSUT0045 TRL0045 08/21/96 4.00 MDA		SSUT0046 TRL0045 08/21/96 4.00 DUPLICATE MDA		SSUT0047 TRL0045 08/21/96 3.70 WASTE MDA		SSUT0048 TRL0046 08/22/96 5.75 WASTE MDA	
		ACTINIUM-228	pCi/g	0.49±0.13	0.16	0.51±0.15	0.19	0.61±0.15	0.18	0.45±0.15	0.21
BISMUTH-212	pCi/g	0.45±0.25	0.29	--	0.35	--	0.42	0.36±0.21	0.28	0.34±0.25	0.29
BISMUTH-214	pCi/g	0.371±0.089	0.094	0.396±0.095	0.096	0.57±0.11	0.093	0.369±0.091	0.095	0.350±0.093	0.096
CESIUM-137	pCi/g	NA		NA		NA		NA		0.073±0.034	0.047
GROSS ALPHA	pCi/g	--	6.8 C	--	7.5 C	--	7.4 C	7.1±4.9	6.8 C	7.9±5.0	6.3 C
GROSS BETA	pCi/g	14.3±4.1	5.7	12.7±3.9	5.4	13.2±3.9	5.5	12.7±3.9	5.4	11.9±4.0	5.7
LEAD-212	pCi/g	0.467±0.084	0.074	0.603±0.099	0.077	0.567±0.093	0.076	0.634±0.10	0.077	0.504±0.086	0.070
LEAD-214	pCi/g	0.384±0.076	0.085	0.519±0.091	0.097	0.548±0.090	0.086	0.530±0.091	0.086	0.394±0.080	0.092
POTASSIUM-40	pCi/g	10.8±1.5	0.54	10.8±1.5	0.52	12.0±1.6	0.48	11.3±1.6	0.59	9.2±1.4	0.47
RADIUM-226	pCi/g	NA		NA		NA		NA		NA	
THALLIUM-208	pCi/g	0.171±0.046	0.046	0.194±0.052	0.050	0.155±0.049	0.052	0.170±0.049	0.049	0.148±0.048	0.051
TRITIUM	pCi/L	800±190	180	--	210	330±170	260	--	210	NA	

NA = Not analyzed. -- = Not detected.

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TABLE 2f
EASTERN TRENCHES
SUMMARY OF DETECTIONS
RADIONUCLIDES
SOUTH CAMPUS DISPOSAL SITE, DAVIS CALIFORNIA

ANALYTE	SAMPLE LOCATION DATE DEPTH (FT) TYPE UNITS	SSUT0049 TRL0046 08/22/96 6.50		SSUT0050 TRL0047 08/23/96 5.50 WASTE		SSUT0052 TRL0047 08/23/96 6.50		SSUT0054 TRL0048 08/26/96 6.50 WASTE		SSUT0055 TRL0048 08/26/96 8.00	
		MDA	MDA	MDA	MDA	MDA	MDA	MDA	MDA		
ACTINIUM-228	pCi/g	0.76±0.13	0.12	0.67±0.12	0.11	0.52±0.12	0.13	0.494±0.099	0.11	0.58±0.16	0.20
BISMUTH-212	pCi/g	0.36±0.21	0.25	--	0.27	0.30±0.20	0.25	0.28±0.18	0.22	--	0.37
BISMUTH-214	pCi/g	0.400±0.080	0.075	0.443±0.078	0.073	0.365±0.079	0.078	0.399±0.071	0.067	0.62±0.11	0.084
CESIUM-137	pCi/g	--	0.032	--	0.028	0.041±0.025	0.036	NA		NA	
GROSS ALPHA	pCi/g	7.7±5.1	6.6 C	7.6±5.1	6.8 C	--	7.2 C	NA		NA	
GROSS BETA	pCi/g	15.4±4.2	5.7	13.9±4.1	5.7	11.3±3.8	5.4	10.2±3.7	5.4	14.5±4.0	5.3
LEAD-212	pCi/g	0.642±0.089	0.061	0.567±0.080	0.054	0.432±0.077	0.068	0.433±0.068	0.052	0.73±0.11	0.074
LEAD-214	pCi/g	0.511±0.072	0.065	0.551±0.072	0.061	0.459±0.074	0.074	0.522±0.068	0.053	0.673±0.10	0.093
POTASSIUM-40	pCi/g	12.1±1.5	0.44	12.4±1.5	0.40	10.8±1.4	0.47	10.1±1.2	0.35	11.0±1.6	0.59
RADIUM-226	pCi/g	NA		NA		NA		NA		NA	
THALLIUM-208	pCi/g	0.201±0.042	0.036	0.169±0.037	0.034	0.133±0.038	0.039	0.158±0.035	0.032	0.197±0.052	0.050
TRITIUM	pCi/L	NA		NA		NA		NA		NA	

NA = Not analyzed. -- = Not detected.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

TABLE 2f
EASTERN TRENCHES
SUMMARY OF DETECTIONS
RADIONUCLIDES
SOUTH CAMPUS DISPOSAL SITE, DAVIS CALIFORNIA

ANALYTE	SAMPLE LOCATION DATE DEPTH (FT) TYPE UNITS	SSUT0076 SBL00042 09/24/96 4.00 WASTE MDA		SSUT0077 SBL00042 09/24/96 10.00 MDA		SSUT0078 SBL00042 09/24/96 20.00 MDA		SSUT0080 SBL00041 09/24/96 5.50 MDA		SSUT0081 SBL00041 09/24/96 10.00 MDA	
ACTINIUM-228	pCi/g	0.62±0.13	0.15	0.43±0.16	0.21	0.47±0.15	0.20	0.59±0.17	0.19	0.57±0.17	0.19
BISMUTH-212	pCi/g	NA		NA		NA		0.61±0.25	0.30	--	0.40
BISMUTH-214	pCi/g	0.389±0.087	0.094	0.51±0.11	0.092	0.53±0.12	0.11	0.60±0.11	0.085	0.49±0.11	0.099
CESIUM-137	pCi/g	NA		NA		NA		NA		NA	
GROSS ALPHA	pCi/g	--	6.9 C	--	8.6 C	7.4±4.9	6.6 C	NA		NA	
GROSS BETA	pCi/g	13.1±4.0	5.6	17.3±4.4	5.8	14.1±4.1	5.6	17.6±4.4	5.8	9.8±3.9	5.7
LEAD-212	pCi/g	0.563±0.088	0.067	0.64±0.11	0.095	0.504±0.090	0.079	0.65±0.11	0.090	0.594±0.099	0.076
LEAD-214	pCi/g	0.525±0.080	0.080	0.623±0.10	0.096	0.562±0.097	0.10	0.66±0.11	0.10	0.582±0.10	0.11
POTASSIUM-40	pCi/g	11.0±1.4	0.52	10.5±1.6	0.56	11.3±1.6	0.57	10.8±1.6	0.49	10.8±1.6	0.65
RADIUM-226	pCi/g	NA		NA		NA		NA		NA	
THALLIUM-208	pCi/g	0.215±0.046	0.040	0.203±0.056	0.054	0.195±0.054	0.051	0.179±0.055	0.057	0.176±0.054	0.054
TRITIUM	pCi/L	--	220	230±150	220	2330±340	220	--	220	--	220

NA = Not analyzed. -- = Not detected.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

TABLE 2f
EASTERN TRENCHES
SUMMARY OF DETECTIONS
RADIONUCLIDES
SOUTH CAMPUS DISPOSAL SITE, DAVIS CALIFORNIA

ANALYTE	SAMPLE LOCATION DATE DEPTH (FT) TYPE UNITS	SSUT0083 SBL00041 09/24/96 20.00		SSUT0086 SBL00043 09/25/96 20.00		SSUT0087 SBL00043 09/25/96 2.50 WASTE		SSUT0088 SBL00043 09/25/96 10.00	
		MDA		MDA		MDA		MDA	
ACTINIUM-228	pCi/g	0.58±0.15	0.19	0.68±0.16	0.15	0.40±0.12	0.16	0.52±0.14	0.19
BISMUTH-212	pCi/g	0.43±0.25	0.28	NA		NA		NA	
BISMUTH-214	pCi/g	0.465±0.10	0.11	0.454±0.10	0.098	0.354±0.083	0.071	0.371±0.094	0.091
CESIUM-137	pCi/g	NA		NA		NA		NA	
GROSS ALPHA	pCi/g	NA		7.3±5.1	7.2 C	6.7±4.7	6.4 C	11.1±5.7	6.9 C
GROSS BETA	pCi/g	15.1±4.1	5.5	17.6±4.3	5.6	12.1±3.8	5.3	14.3±4.1	5.6
LEAD-212	pCi/g	0.579±0.10	0.082	0.640±0.10	0.072	0.475±0.080	0.060	0.496±0.085	0.068
LEAD-214	pCi/g	0.571±0.099	0.096	0.601±0.094	0.091	0.457±0.077	0.075	0.479±0.084	0.082
POTASSIUM-40	pCi/g	10.9±1.6	0.66	10.7±1.5	0.52	9.6±1.3	0.46	10.8±1.5	0.42
RADIUM-226	pCi/g	NA		--	0.15 UJz,l	--	0.17 UJz,l	0.58±0.20	0.15
THALLIUM-208	pCi/g	0.190±0.051	0.048	0.228±0.056	0.051	0.119±0.039	0.043	0.201±0.050	0.044
TRITIUM	pCi/L	2020±320	220	--	210	860±170	180	--	210

NA = Not analyzed. -- = Not detected.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

TABLE 3a
EASTERN TRENCHES
SUMMARY OF DETECTIONS FOR WET ANALYSIS
METALS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

		SAMPLE	SSUT0051	SSUT0079
		LOCATION	TRL0047	SBL00041
		DATE	08/23/96	09/24/96
		DEPTH (FT)	5.50	4.00
		TYPE	WASTE	WASTE
ANALYTE	UNITS			
ARSENIC	mg/L	0.0173		--
BARIUM	mg/L	--	B	0.47
CHROMIUM	mg/L	0.0307		--
COPPER	mg/L	0.0423		--
LEAD	mg/L	0.0081		--
NICKEL	mg/L	0.117		--
ZINC	mg/L	0.236		-- B Up

NA = Not analyzed. -- = Not detected.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

TABLE 3b
EASTERN TRENCHES
SUMMARY OF DETECTIONS FOR WET ANALYSIS
GENERAL CHEMICALS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

		SAMPLE	SSUT0051	SSUT0053	SSUT0079	SSUT0082		
		LOCATION	TRL0047	TRL0047	SBL00041	SBL00041		
		DATE	08/23/96	08/23/96	09/24/96	09/24/96		
		DEPTH (FT)	5.5	6.5	4.0	15.		
		TYPE	WASTE		WASTE			
ANALYTE	UNITS							
NITRATE-N	mg/L	77	H Jh	9.2	6.9	H	4.2	H

NA = Not analyzed. -- = Not detected.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

TABLE 3c
EASTERN TRENCHES
SUMMARY OF DETECTIONS FOR WET ANALYSIS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

		SAMPLE	SSUT0079
		LOCATION	SBL00041
		DATE	09/24/96
		DEPTH (FT)	4.0
		TYPE	WASTE
ANALYTE	UNITS		
BENZYL BUTYL PHTHALATE	ug/L	25	
BIS(2-ETHYLHEXYL)PHTHALATE	ug/L	19	B
DI-N-BUTYLPHTHALATE	ug/L	140	B

NA = Not analyzed. -- = Not detected.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

TABLE 3d
EASTERN TRENCHES
SUMMARY OF DETECTIONS FOR WET ANALYSIS
ORGANOCHLORINE PESTICIDES
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

ANALYTE	SAMPLE		SSUT0051		SSUT0053	
	LOCATION	DATE	TRL0047	08/23/96	TRL0047	08/23/96
	DEPTH (FT)	TYPE	5.5	WASTE	6.5	
	UNITS					
ENDOSULFAN II	ug/L		33	Dj/w	0.27	PR <u>u</u>
ENDRIN ALDEHYDE	ug/L		16	DP <u>lu</u>	0.17	<u>ls</u>

TABLE 3e
EASTERN TRENCHES
SUMMARY OF DETECTIONS FOR WET ANALYSIS
RADIONUCLIDES
SOUTH CAMPUS DISPOSAL SITE, DAVIS CALIFORNIA

ANALYTE	SAMPLE		SSUT0051		SSUT0053		SSUT0079		SSUT0082	
	LOCATION	DATE	TRU0047	TRU0047	TRU0047	TRU0047	SBL00041	SBL00041	SBL00041	SBL00041
	DEPTH (FT)	DEPTH (FT)	WASTE	WASTE	WASTE	WASTE	WASTE	WASTE	WASTE	WASTE
	UNITS	UNITS	MDA	MDA	MDA	MDA	MDA	MDA	MDA	MDA
GROSS ALPHA	pCi/L		--	16.3±3.0	1.7	1.7	NA	NA	NA	NA
GROSS BETA	pCi/L	29.7±6.1	7.6	7.9±1.8	2.2	2.2	NA	NA	NA	NA
RADIUM-226	pCi/L	NA	7.4	NA	NA	NA	0.52±0.38	0.52	0.68±0.41	0.51
SR-89.90	pCi/L	NA	NA	NA	NA	NA	1.75±0.60	0.88	--	0.87
THALLIUM-208	pCi/L	--	9.2	9.4±6.8	7.6	7.6	NA	NA	NA	NA

NA = Not analyzed. -- = Not detected.
A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

TABLE 4a
EASTERN TRENCHES
ANALYTICAL RESULTS
METALS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0044	SSUT0045	SSUT0046	SSUT0047	SSUT0048	SSUT0049
LOCATION	TRL0045	TRL0045	TRL0045	TRL0045	TRL0046	TRL0046
DATE	08/21/96	08/21/96	08/21/96	08/21/96	08/22/96	08/22/96
DEPTH	4.00	4.00	4.00	3.70	5.75	6.50
TYPE	WASTE		DUPLICATE	WASTE	WASTE	
ANALYTE						
ANTIMONY	< 0.680 N UJl	< 0.660 N UJl	< 0.670 N UJl	< 0.620 N UJl	< 0.640 N UJm	< 0.690 N UJm
ARSENIC	4.600	7.200	6.200	7.600	< 2.120 B	9.800
BARIUM	143.000	151.000	158.000	181.000	89.700	264.000
BERYLLIUM	< 1.140 B	< 1.100 B	< 1.110 B	< 1.030 B	< 0.210	< 1.160 B
CADMIUM	< 0.680	< 0.660	< 0.670	< 0.620	< 0.640	< 0.690
CHROMIUM	96.600 N* Jd	155.000 N* Jd	152.000 N* Jd	147.000 N* Jd	32.400 N* Jd	125.000 N* Jd
CHROMIUM, HEXAVALENT (+6)	< 0.035	< 0.033	< 0.220 B	< 0.220 B	< 0.030	< 0.030
COBALT	14.400	20.500	21.400	22.300	< 10.620 B	19.000
COPPER	31.000	30.000	32.000	37.800	15.600	55.600
LEAD	8.300 * Jd	6.600 * Jd	6.600 * Jd	9.900 * Jd	5.900 *	9.300 *
MERCURY	0.600 N* Jd	0.260 N* Jd	0.480 N* Jd	4.800 N* Jd	0.250 N* Jd	0.160 N* Jd
MOLYBDENUM	< 45.620 B	< 2.200	< 2.200	< 2.100	< 2.100	< 2.300
NICKEL	178.000 N* Jd	259.000 N* Jd	261.000 N* Jd	274.000 N* Jd	53.000 N* Jd	269.000 N* Jd
SELENIUM	< 0.910	< 0.880	< 0.890	< 0.820	< 0.850	< 0.930
SILVER	< 1.400	< 1.300	< 1.300	4.100	< 1.300	< 1.400
THALLIUM	< 1.400	< 1.300	< 1.300	< 1.200	< 1.300	< 1.400
VANADIUM	40.100	58.200	59.100	63.600	14.500	80.100
ZINC	254.000 N* Jd	63.800 N* Jd	66.400 N* Jd	77.500 N* Jd	73.000 N* Jd	101.000 N* Jd

All units reported as mg/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 4a
EASTERN TRENCHES
ANALYTICAL RESULTS
METALS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0050	SSUT0052	SSUT0054	SSUT0055	SSUT0076	SSUT0077
LOCATION	TRL0047	TRL0047	TRL0048	TRL0048	SBL00042	SBL00042
DATE	08/23/96	08/23/96	08/26/96	08/26/96	09/24/96	09/24/96
DEPTH	5.50	6.50	6.50	8.00	4.00	10.00
TYPE	WASTE		WASTE		WASTE	
ANALYTE						
ANTIMONY	< 0.700 N UJL	< 0.660 N UJL	< 0.650 N UJm	< 0.700 N UJm	< 0.630 N UJL	< 0.650 N UJL
ARSENIC	6.900	7.900	8.800	9.000	7.400	8.100
BARIUM	447.000	187.000	186.000	154.000	190.000	150.000
BERYLLIUM	< 1.160 B	< 1.100 B	< 1.080 B	< 1.170 B	< 1.100 B	< 1.100 B
CADMIUM	< 0.700	< 0.660	< 0.650	< 0.700	< 0.630	< 0.650
CHROMIUM	126.000 N* Jd	147.000 N* Jd	156.000 N* Jd	122.000 N* Jd	150.000 N Jm	110.000 N Jm
CHROMIUM, HEXAVALENT (+6)	< 0.035	< 0.220 B	< 0.035	< 0.035	< 0.033	< 0.033
COBALT	17.800	24.300	25.000	23.200	24.000	22.000
COPPER	43.800	40.900	42.100	46.200	35.000	37.000
LEAD	14.200 * Jd	8.600 * Jd	20.300	8.200	6.600	6.700
MERCURY	0.230 N* Jd	0.270 N* Jd	0.400	0.160	0.490	< 0.110
MOLYBDENUM	< 46.450 B	< 2.200	< 2.200	< 2.300	< 42.100 B	< 2.200
NICKEL	233.000 N* Jd	269.000 N* Jd	267.000	235.000	260.000	230.000
SELENIUM	< 0.930	< 0.880	1.500	1.900	1.900	2.100
SILVER	< 1.400	< 1.300	< 1.300	< 1.400	< 1.300	< 1.300
THALLIUM	< 1.400	< 1.300	< 1.300	< 1.400	< 1.300	< 1.300
VANADIUM	54.100	65.700	68.000	75.000	59.000	60.000
ZINC	369.000 N* Jd	82.300 N* Jd	84.700	85.000	68.000	71.000

All units reported as mg/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 4a
EASTERN TRENCHES
ANALYTICAL RESULTS
METALS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0078	SSUT0080	SSUT0081	SSUT0083	SSUT0086	SSUT0087
LOCATION	SBL00042	SBL00041	SBL00041	SBL00041	SBL00043	SBL00043
DATE	09/24/96	09/24/96	09/24/96	09/24/96	09/25/96	09/25/96
DEPTH	20.00	5.50	10.00	20.00	20.00	2.50
TYPE						WASTE
ANALYTE						
ANTIMONY	< 0.700 N UJL	< 0.700 N UJL	< 0.690 N UJL	< 0.690 N UJL	< 0.640 N UJL	< 0.650 N UJL
ARSENIC	8.500	8.500	8.700	9.500	7.600	8.000
BARIUM	200.000	230.000	170.000	230.000	220.000 N Jm	260.000 N Jm
BERYLLIUM	< 1.200 B	< 1.200 B	< 1.200 B	< 1.100 B	< 1.100 B	< 1.100 B
CADMIUM	< 0.700	< 0.700	< 0.690	< 1.100 B	< 0.660	< 0.670
CHROMIUM	110.000 N Jm	120.000 N Jm	100.000 N Jm	97.000 N Jm	110.000	140.000
CHROMIUM, HEXAVALENT (+6)	< 0.036	< 0.035	< 0.035	< 0.036	< 0.034	< 0.035
COBALT	25.000	25.000	23.000	27.000	23.000	25.000
COPPER	43.000	52.000	43.000	50.000	44.000 *N Jm	54.000 *N Jm
LEAD	7.800	8.300	7.500	8.600	6.900 *N Jm	8.200 *N Jm
MERCURY	< 0.110	< 0.120	0.160	< 0.120	0.150	0.140
MOLYBDENUM	< 46.700 B	< 2.300	< 2.300	< 2.300	< 2.200	< 2.200
NICKEL	220.000	250.000	230.000	220.000	210.000	240.000
SELENIUM	2.500	2.000	1.600	2.100	2.200	3.500
SILVER	< 1.400	< 1.400	< 1.400	< 1.400	< 1.300	< 1.300
THALLIUM	< 1.400	< 1.400	< 1.400	< 1.400	< 1.300	< 1.300
VANADIUM	67.000	76.000	66.000	70.000	69.000	78.000
ZINC	79.000	88.000	81.000	86.000	82.000 * Jd	100.000 * Jd

All units reported as mg/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 4a
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 METALS
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

ANALYTE	SAMPLE	LOCATION	DATE	DEPTH	TYPE
	SSUT0088	SBL00043	09/25/96	10.00	
ANTIMONY	<	0.660	N	UJL	
ARSENIC		7.900			
BARIUM		160.000	N	Jm	
BERYLLIUM	<	1.000	B		
CADMIUM	<	1.000	B		
CHROMIUM		120.000			
CHROMIUM, HEXAVALENT (+6)	<	0.033			
COBALT		22.000			
COPPER		36.000	*N	Jm	
LEAD		6.400	*N	Jm	
MERCURY		0.380			
MOLYBDENUM	<	41.600	B		
NICKEL		230.000			
SELENIUM		3.000			
SILVER	<	1.200			
THALLIUM	<	1.300			
VANADIUM		64.000			
ZINC		72.000	*Jd		

All units reported as mg/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.
 A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.
 Depth = Feet below ground surface.

TABLE 4b
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 GENERAL CHEMICALS
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	LOCATION	DATE	DEPTH	TYPE	NITRATE-N
					mg/Kg
EBUT0019	SBL00040	09/24/96	0.00	RINSTATE	< 0.1 B
EBUT0020	SBL00043	09/25/96	0.00	RINSTATE	< 0.1 B Jd
SSUT0044	TRL0045	08/21/96	4.00	WASTE	390.0 H Jh
SSUT0045	TRL0045	08/21/96	4.00		6.1
SSUT0046	TRL0045	08/21/96	4.00	DUPLICATE	5.1
SSUT0047	TRL0045	08/21/96	3.70	WASTE	5.1
SSUT0048	TRL0046	08/22/96	5.75	WASTE	77.0
SSUT0049	TRL0046	08/22/96	6.50		50.0
SSUT0050	TRL0047	08/23/96	5.50	WASTE	700.0 H Jh
SSUT0052	TRL0047	08/23/96	6.50		79.0
SSUT0054	TRL0048	08/26/96	6.50	WASTE	27.0
SSUT0055	TRL0048	08/26/96	8.00		20.0
SSUT0076	SBL00042	09/24/96	4.00	WASTE	27.0
SSUT0077	SBL00042	09/24/96	10.00		13.0
SSUT0078	SBL00042	09/24/96	20.00		24.0
SSUT0080	SBL00041	09/24/96	5.50		95.0
SSUT0081	SBL00041	09/24/96	10.00		31.0
SSUT0083	SBL00041	09/24/96	20.00		32.0
SSUT0086	SBL00043	09/25/96	20.00		31.0
SSUT0087	SBL00043	09/25/96	2.50	WASTE	2.1
SSUT0088	SBL00043	09/25/96	10.00		16.0

DATE refers to date sampled.

A key to data qualifier flags is presented in front to Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 4c
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 SEMI-VOLATILE ORGANIC COMPOUNDS
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE LOCATION	SSUT0044	SSUT0045	SSUT0046	SSUT0047	SSUT0048	SSUT0049
DATE	TRL0045	TRL0045	TRL0045	TRL0045	TRL0046	TRL0046
DEPTH	08/21/96	08/21/96	08/21/96	08/21/96	08/22/96	08/22/96
TYPE	4.00	4.00	4.00	3.70	5.75	6.50
ANALYTE	WASTE		DUPLICATE	WASTE	WASTE	
4-NITROANILINE	<930	<870	<870	<860	<850	<940
4-NITROPHENOL	<930	<870	<870	<860	<850	<940
ACENAPHTHENE	<380	<360	<360	<350	<350	<390
ACENAPHTHYLENE	<380	<360	<360	<350	<350	<390
ANTHRACENE	<380	<360	<360	<350	<350	<390
BENZO(A)ANTHRACENE	<380	<360	<360	<350	<350	<390
BENZO(A)PYRENE	<380	<360	<360	<350	<350	<390
BENZO(B)FLUORANTHENE	<380	<360	<360	<350	<350	<390
BENZO(G,H,I)PERYLENE	<380	<360	<360	<350	<350	<390
BENZO(K)FLUORANTHENE	<380	<360	<360	<350	<350	<390
BENZYL BUTYL PHTHALATE	<380	<360	<360	<350	<350	<390
BIS(2-CHLOROETHOXY)METHANE	<380	<360	<360	<350	<350	<390
BIS(2-CHLOROETHYL)ETHER	<380	<360	<360	<350	<350	<390
BIS(2-ETHYLHEXYL)PHTHALATE	<380 J	<360 J	<360 J	<350 J	<350 J	<390 J
CARBAZOLE	<380	<360	<360	<350	<350	<390
CHRYSENE	<380	<360	<360	<350	<350	<390
DI-N-BUTYLPHTHALATE	<380	<360	<360	<350	<350	<390
DI-N-OCTYLPHTHALATE	<380	<360	<360	<350	<350	<390
DIBENZO(A,H)ANTHRACENE	<380	<360	<360	<350	<350	<390
DIBENZOFURAN	<380	<360	<360	<350	<350	<390
DIETHYL PHTHALATE	<380	<360	<360	<350	<350	<390
DIMETHYL PHTHALATE	<380	<360	<360	<350	<350	<390
FLUORANTHENE	<380	<360	<360	<350	<350	<390
FLUORENE	<380	<360	<360	<350	<350	<390
HEXACHLOROBENZENE	<380	<360	<360	<350	<350	<390
HEXACHLOROBUTADIENE	<380	<360	<360	<350	<350	<390

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = feet below ground surface.

TABLE 4c
EASTERN TRENCHES
ANALYTICAL RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE LOCATION	SSUT0044 TRL0045	SSUT0045 TRL0045	SSUT0046 TRL0045	SSUT0047 TRL0045	SSUT0048 TRL0046	SSUT0049 TRL0046
DATE	08/21/96	08/21/96	08/21/96	08/21/96	08/22/96	08/22/96
DEPTH	4.00	4.00	4.00	3.70	5.75	6.50
TYPE	WASTE		DUPLICATE	WASTE	WASTE	
ANALYTE						
HEXACHLOROCYCLOPENTADIENE	<380	<360	<360	<350	<350	<390
HEXACHLOROETHANE	<380	<360	<360	<350	<350	<390
INDENO(1,2,3-CD)PYRENE	<380	<360	<360	<350	<350	<390
ISOPHORONE	<380	<360	<360	<350	<350	<390
N-NITROSODI-N-PROPYLAMINE	<380 UJL	<360 UJL	<360 UJL	<350 UJL	<350	<390
N-NITROSODIPHENYLAMINE	<380	<360	<360	<350	<350	<390
NAPHTHALENE	<380	<360	<360	<350	<350	<390
NITROBENZENE	<380	<360	<360	<350	<350	<390
PENTACHLOROPHENOL	<930	<870	<870	<860	<850	<940
PHENANTHRENE	<380	<360	<360	<350	<350	<390
PHENOL	<380	<360	<360	<350	<350	<390
PYRENE	<380	<360	<360	<350	<350	<390

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 4c
EASTERN TRENCHES
ANALYTICAL RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0044	SSUT0045	SSUT0046	SSUT0047	SSUT0048	SSUT0049
LOCATION	TRL0045	TRL0045	TRL0045	TRL0045	TRL0046	TRL0046
DATE	08/21/96	08/21/96	08/21/96	08/21/96	08/22/96	08/22/96
DEPTH	4.00	4.00	4.00	3.70	5.75	6.50
TYPE	WASTE		DUPLICATE	WASTE	WASTE	
ANALYTE						
HEXACHLOROCYCLOPENTADIENE	<380	<360	<360	<350	<350	<390
HEXACHLOROETHANE	<380	<360	<360	<350	<350	<390
INDENO(1,2,3-CD)PYRENE	<380	<360	<360	<350	<350	<390
ISOPHORONE	<380	<360	<360	<350	<350	<390
N-NITROSODI-N-PROPYLAMINE	<380 UJL	<360 UJL	<360 UJL	<350 UJL	<350	<390
N-NITROSODIPHENYLAMINE	<380	<360	<360	<350	<350	<390
NAPHTHALENE	<380	<360	<360	<350	<350	<390
NITROBENZENE	<380	<360	<360	<350	<350	<390
PENTACHLOROPHENOL	<930	<870	<870	<860	<850	<940
PHENANTHRENE	<380	<360	<360	<350	<350	<390
PHENOL	<380	<360	<360	<350	<350	<390
PYRENE	<380	<360	<360	<350	<350	<390

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 4c
EASTERN TRENCHES
ANALYTICAL RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0050	SSUT0052	SSUT0054	SSUT0055	SSUT0076	SSUT0077
LOCATION	TRL0047	TRL0047	TRL0048	TRL0048	SBL00042	SBL00042
DATE	08/23/96	08/23/96	08/26/96	08/26/96	09/24/96	09/24/96
DEPTH	5.50	6.50	6.50	8.00	4.00	10.00
TYPE	WASTE		WASTE		WASTE	
ANALYTE						
1,2,4-TRICHLOROBENZENE	<380 UJL	<370 UJL	<380 UJL	<380 UJL	<360 UJL	<360 UJL
1,2-DICHLOROBENZENE	<380	<370	<380	<380	<360	<360
1,3-DICHLOROBENZENE	<380	<370	<380	<380	<360	<360
1,4-DICHLOROBENZENE	<380	<370	<380	<380	<360	<360
2,2'-OXYBIS(1-CHLOROPROPANE)	<380	<370	<380	<380	<360	<360
2,4,5-TRICHLOROPHENOL	<910	<890	<920	<930	<880	<870
2,4,6-TRICHLOROPHENOL	<380	<370	<380	<380	<360	<360
2,4-DICHLOROPHENOL	<380	<370	<380	<380	<360	<360
2,4-DIMETHYLPHENOL	<380	<370	<380	<380	<360	<360
2,4-DINITROPHENOL	<910	<890	<920	<930	<880	<870
2,4-DINITROTOLUENE	<380	<370	<380	<380	<360	<360
2,6-DINITROTOLUENE	<380	<370	<380	<380	<360	<360
2-CHLORONAPHTHALENE	<380	<370	<380	<380	<360	<360
2-CHLOROPHENOL	<380	<370	<380	<380	<360	<360
2-METHYL-4,6-DINITROPHENOL	<910	<890	<920	<930	<880	<870
2-METHYLNAPHTHALENE	<380	<370	<380	<380	<360	<360
2-METHYLPHENOL	<380	<370	<380	<380	<360	<360
2-NITROANILINE	<910	<890	<920	<930	<880	<870
2-NITROPHENOL	<380	<370	<380	<380	<360	<360
3,3'-DICHLOROBENZIDINE	<380	<370	<380	<380	<360	<360
3-NITROANILINE	<910	<890	<920	<930	<880	<870
4-BROMOPHENYL PHENYL ETHER	<380	<370	<380	<380	<360	<360
4-CHLORO-3-METHYLPHENOL	<380	<370	<380	<380	<360	<360
4-CHLOROANILINE	<380	<370	<380	<380	<360	<360
4-CHLOROPHENYL PHENYL ETHER	<380	<370	<380	<380	<360	<360
4-METHYLPHENOL	<380	<370	<380	<380	<360	<360

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 4c
EASTERN TRENCHES
ANALYTICAL RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE LOCATION	SSUT0050	SSUT0052	SSUT0054	SSUT0055	SSUT0076	SSUT0077
DATE	08/23/96	08/23/96	08/26/96	08/26/96	09/24/96	09/24/96
DEPTH	5.50	6.50	6.50	8.00	4.00	10.00
TYPE	WASTE		WASTE		WASTE	
ANALYTE						
4-NITROANILINE	<910	<890	<920	<930	<880	<870
4-NITROPHENOL	<910	<890	<920	<930	<880	<870
ACENAPHTHENE	<380	<370	<380	<380	<360	<360
ACENAPHTHYLENE	<380	<370	<380	<380	<360	<360
ANTHRACENE	<380	<370	<380	<380	<360	<360
BENZO(A)ANTHRACENE	<380	<370	<380	<380	<360	<360
BENZO(A)PYRENE	<380	<370	<380	<380	<360	<360
BENZO(B)FLUORANTHENE	<380	<370	<380	<380	<360	<360
BENZO(G,H,I)PERYLENE	<380	<370	<380	<380	<360	<360
BENZO(K)FLUORANTHENE	<380	<370	<380	<380	<360	<360
BENZYL BUTYL PHTHALATE	<380	<370	<380	<380	<360	<360
BIS(2-CHLOROETHOXY)METHANE	<380	<370	<380	<380	<360	<360
BIS(2-CHLOROETHYL)ETHER	<380	<370	<380	<380	<360	<360
BIS(2-ETHYLHEXYL)PHTHALATE	<380 J	<370 J	<380	<380 J	<360	<360
CARBAZOLE	<380	<370	<380	<380	<360	<360
CHRYSENE	<380	<370	<380	<380	<360	<360
DI-N-BUTYLPHTHALATE	<380	<370	<380 J Uz	<380	<360	<360
DI-N-OCTYLPHTHALATE	<380	<370	<380	<380	<360	<360
DIBENZO(A,H)ANTHRACENE	<380	<370	<380	<380	<360	<360
DIBENZOFURAN	<380	<370	<380	<380	<360	<360
DIETHYL PHTHALATE	<380	<370	<380	<380	<360	<360
DIMETHYL PHTHALATE	<380	<370	<380	<380	<360	<360
FLUORANTHENE	<380	<370	<380	<380	<360	<360
FLUORENE	<380	<370	<380	<380	<360	<360
HEXACHLOROBENZENE	440	<370 J	<380	<380	<360	<360
HEXACHLOROBUTADIENE	<380	<370	<380	<380	<360	<360

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 4c
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 SEMI-VOLATILE ORGANIC COMPOUNDS
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0050	SSUT0052	SSUT0054	SSUT0055	SSUT0076	SSUT0077
LOCATION	TRL0047	TRL0047	TRL0048	TRL0048	SBL00042	SBL00042
DATE	08/23/96	08/23/96	08/26/96	08/26/96	09/24/96	09/24/96
DEPTH	5.50	6.50	6.50	8.00	4.00	10.00
TYPE	WASTE		WASTE		WASTE	
ANALYTE						
HEXACHLOROCYCLOPENTADIENE	<380	<370	<380	<380	<360	<360
HEXACHLOROETHANE	<380	<370	<380	<380	<360	<360
INDENO(1,2,3-CD)PYRENE	<380	<370	<380	<380	<360	<360
ISOPHORONE	<380	<370	<380	<380	<360	<360
N-NITROSODI-N-PROPYLAMINE	<380 UJL	<370 UJL	<380 UJL	<380 UJL	<360 UJL	<360 UJL
N-NITROSODIPHENYLAMINE	<380	<370	<380	<380	<360	<360
NAPHTHALENE	<380	<370	<380 J	<380	<360	<360
NITROBENZENE	<380	<370	<380	<380	<360	<360
PENTACHLOROPHENOL	<910	<890	<920	<930	<880	<870
PHENANTHRENE	<380	<370	<380	<380	<360	<360
PHENOL	<380	<370	<380	<380	<360	<360
PYRENE	<380	<370	<380	<380	<360	<360

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 4c
EASTERN TRENCHES
ANALYTICAL RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0078	SSUT0080	SSUT0081	SSUT0083	SSUT0086	SSUT0087
LOCATION	SBL00042	SBL00041	SBL00041	SBL00041	SBL00043	SBL00043
DATE	09/24/96	09/24/96	09/24/96	09/24/96	09/25/96	09/25/96
DEPTH	20.00	5.50	10.00	20.00	20.00	2.50
TYPE						WASTE
ANALYTE						
1,2,4-TRICHLOROBENZENE	<390 UJL	<390 UJL	<380 UJL	<390 UJL	<370 UJL	<380 UJs
1,2-DICHLOROBENZENE	<390	<390	<380	<390	<370	<380 UJs
1,3-DICHLOROBENZENE	<390	<390	<380	<390	<370	<380 UJs
1,4-DICHLOROBENZENE	<390	<390	<380	<390	<370	<380 UJs
2,2'-OXYBIS(1-CHLOROPROPANE)	<390	<390	<380	<390	<370	<380 UJs
2,4,5-TRICHLOROPHENOL	<940	<940	<920	<940	<900	<910 UJs
2,4,6-TRICHLOROPHENOL	<390	<390	<380	<390	<370	<380 UJs
2,4-DICHLOROPHENOL	<390	<390	<380	<390	<370	<380 UJs
2,4-DIMETHYLPHENOL	<390	<390	<380	<390	<370	<380 UJs
2,4-DINITROPHENOL	<940	<940	<920	<940	<900	<910 UJs
2,4-DINITROTOLUENE	<390	<390	<380	<390	<370	<380 UJs
2,6-DINITROTOLUENE	<390	<390	<380	<390	<370	<380 UJs
2-CHLORONAPHTHALENE	<390	<390	<380	<390	<370	<380 UJs
2-CHLOROPHENOL	<390	<390	<380	<390	<370	<380 UJs
2-METHYL-4,6-DINITROPHENOL	<940	<940	<920	<940	<900	<910 UJs
2-METHYLNAPHTHALENE	<390	<390	<380	<390	<370	<380 UJs
2-METHYLPHENOL	<390	<390	<380	<390	<370	<380 UJs
2-NITROANILINE	<940	<940	<920	<940	<900	<910 UJs
2-NITROPHENOL	<390	<390	<380	<390	<370	<380 UJs
3,3'-DICHLOROBENZIDINE	<390	<390	<380	<390	<370	<380 UJs
3-NITROANILINE	<940	<940	<920	<940	<900	<910 UJs
4-BROMOPHENYL PHENYL ETHER	<390	<390	<380	<390	<370	<380 UJs
4-CHLORO-3-METHYLPHENOL	<390	<390	<380	<390	<370	<380 UJs
4-CHLOROANILINE	<390	<390	<380	<390	<370	<380 UJs
4-CHLOROPHENYL PHENYL ETHER	<390	<390	<380	<390	<370	<380 UJs
4-METHYLPHENOL	<390	<390	<380	<390	<370	<380 UJs

All units reported as ug/Kg

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Depth = Feet below ground surface.

TABLE 4c
EASTERN TRENCHES
ANALYTICAL RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE LOCATION	SSUT0078 SBL00042	SSUT0080 SBL00041	SSUT0081 SBL00041	SSUT0083 SBL00041	SSUT0086 SBL00043	SSUT0087 SBL00043
DATE	09/24/96	09/24/96	09/24/96	09/24/96	09/25/96	09/25/96
DEPTH	20.00	5.50	10.00	20.00	20.00	2.50
TYPE						WASTE
ANALYTE						
4-NITROANILINE	<940	<940	<920	<940	<900	<910 UJs
4-NITROPHENOL	<940	<940	<920	<940	<900	<910 UJs
ACENAPHTHENE	<390	<390	<380	<390	<370	<380 UJs
ACENAPHTHYLENE	<390	<390	<380	<390	<370	<380 UJs
ANTHRACENE	<390	<390	<380	<390	<370	<380 UJs
BENZO(A)ANTHRACENE	<390	<390	<380	<390	<370	<380 UJs
BENZO(A)PYRENE	<390	<390	<380	<390	<370	<380 UJs
BENZO(B)FLUORANTHENE	<390	<390	<380	<390	<370	<380 UJs
BENZO(G, H, I)PERYLENE	<390	<390	<380	<390	<370	<380 UJs
BENZO(K)FLUORANTHENE	<390	<390	<380	<390	<370	<380 UJs
BENZYL BUTYL PHTHALATE	<390	<390	<380	<390	<370	<380 UJs
BIS(2-CHLOROETHOXY)METHANE	<390	<390	<380	<390	<370	<380 UJs
BIS(2-CHLOROETHYL)ETHER	<390	<390	<380	<390	<370	<380 UJs
BIS(2-ETHYLHEXYL)PHTHALATE	<390	<390 J	<380	<390	<370	<380 UJs
CARBAZOLE	<390	<390	<380	<390	<370	<380 UJs
CHRYSENE	<390	<390	<380	<390	<370	<380 UJs
DI-N-BUTYLPHthalate	<390	<390	<380	<390	<370	<380 UJs
DI-N-OCTYLPHthalate	<390	<390	<380	<390	<370	<380 UJs
DIBENZO(A, H)ANTHRACENE	<390	<390	<380	<390	<370	<380 UJs
DIBENZOFURAN	<390	<390	<380	<390	<370	<380 UJs
DIETHYL PHTHALATE	<390	<390	<380	<390	<370	<380 UJs
DIMETHYL PHTHALATE	<390	<390	<380	<390	<370	<380 UJs
FLUORANTHENE	<390	<390	<380	<390	<370	<380 UJs
FLUORENE	<390	<390	<380	<390	<370	<380 UJs
HEXACHLOROBENZENE	<390	<390	<380	<390	<370	<380 UJs
HEXACHLOROBUTADIENE	<390	<390	<380	<390	<370	<380 UJs

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 4c
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 SEMI-VOLATILE ORGANIC COMPOUNDS
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0078	SSUT0080	SSUT0081	SSUT0083	SSUT0086	SSUT0087
LOCATION	SBL00042	SBL00041	SBL00041	SBL00041	SBL00043	SBL00043
DATE	09/24/96	09/24/96	09/24/96	09/24/96	09/25/96	09/25/96
DEPTH	20.00	5.50	10.00	20.00	20.00	2.50
TYPE						WASTE
ANALYTE						
HEXACHLOROCYCLOPENTADIENE	<390	<390	<380	<390	<370	<380 UJs
HEXACHLOROETHANE	<390	<390	<380	<390	<370	<380 UJs
INDENO(1,2,3-CD)PYRENE	<390	<390	<380	<390	<370	<380 UJs
ISOPHORONE	<390	<390	<380	<390	<370	<380 UJs
N-NITROSODI-N-PROPYLAMINE	<390 UJl	<390 UJl	<380 UJl	<390 UJl	<370 UJl	<380 UJs
N-NITROSODIPHENYLAMINE	<390	<390	<380	<390	<370	<380 UJs
NAPHTHALENE	<390	<390	<380	<390	<370	<380 UJs
NITROBENZENE	<390	<390	<380	<390	<370	<380 UJs
PENTACHLOROPHENOL	<940	<940	<920	<940	<900	<910 UJs
PHENANTHRENE	<390	<390	<380	<390	<370	<380 UJs
PHENOL	<390	<390	<380	<390	<370	<380 UJs
PYRENE	<390	<390	<380	<390	<370	<380 UJs

All units reported as ug/Kg

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Depth = Feet below ground surface.

TABLE 4c
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 SEMI-VOLATILE ORGANIC COMPOUNDS
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0088
LOCATION	SBL00043
DATE	09/25/96
DEPTH	10.00
TYPE	
<hr/>	
ANALYTE	
1,2,4-TRICHLOROBENZENE	<370 UJL
1,2-DICHLOROBENZENE	<370
1,3-DICHLOROBENZENE	<370
1,4-DICHLOROBENZENE	<370
2,2'-OXYBIS(1-CHLOROPROPANE)	<370
2,4,5-TRICHLOROPHENOL	<890
2,4,6-TRICHLOROPHENOL	<370
2,4-DICHLOROPHENOL	<370
2,4-DIMETHYLPHENOL	<370
2,4-DINITROPHENOL	<890
2,4-DINITROTOLUENE	<370
2,6-DINITROTOLUENE	<370
2-CHLORONAPHTHALENE	<370
2-CHLOROPHENOL	<370
2-METHYL-4,6-DINITROPHENOL	<890
2-METHYLNAPHTHALENE	<370
2-METHYLPHENOL	<370
2-NITROANILINE	<890
2-NITROPHENOL	<370
3,3'-DICHLOROBENZIDINE	<370
3-NITROANILINE	<890
4-BROMOPHENYL PHENYL ETHER	<370
4-CHLORO-3-METHYLPHENOL	<370
4-CHLOROANILINE	<370
4-CHLOROPHENYL PHENYL ETHER	<370
4-METHYLPHENOL	<370

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

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Depth = Feet below ground surface.

TABLE 4c
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 SEMI-VOLATILE ORGANIC COMPOUNDS
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0088
LOCATION	SBL00043
DATE	09/25/96
DEPTH	10.00
TYPE	
<hr/>	
ANALYTE	
4-NITROANILINE	<890
4-NITROPHENOL	<890
ACENAPHTHENE	<370
ACENAPHTHYLENE	<370
ANTHRACENE	<370
BENZO(A)ANTHRACENE	<370
BENZO(A)PYRENE	<370
BENZO(B)FLUORANTHENE	<370
BENZO(G,H,I)PERYLENE	<370
BENZO(K)FLUORANTHENE	<370
BENZYL BUTYL PHTHALATE	<370
BIS(2-CHLOROETHOXY)METHANE	<370
BIS(2-CHLOROETHYL)ETHER	<370
BIS(2-ETHYLHEXYL)PHTHALATE	<370
CARBAZOLE	<370
CHRYSENE	<370
DI-N-BUTYLPHthalate	<370
DI-N-OCTYLPHthalate	<370
DIBENZO(A,H)ANTHRACENE	<370
DIBENZOFURAN	<370
DIETHYL PHTHALATE	<370
DIMETHYL PHTHALATE	<370
FLUORANTHENE	<370
FLUORENE	<370
HEXACHLOROBENZENE	<370
HEXACHLOROBUTADIENE	<370

All units reported as ug/Kg

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A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 4c
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 SEMI-VOLATILE ORGANIC COMPOUNDS
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

ANALYTE	SAMPLE	LOCATION	DATE	DEPTH	TYPE
	SSUT0088	SBL00043	09/25/96	10.00	
HEXACHLOROCYCLOPENTADIENE					<370
HEXACHLOROETHANE					<370
INDENO(1,2,3-CD)PYRENE					<370
ISOPHORONE					<370
N-NITROSODI-N-PROPYLAMINE					<370 UJl
N-NITROSODIPHENYLAMINE					<370
NAPHTHALENE					<370
NITROBENZENE					<370
PENTACHLOROPHENOL					<890
PHENANTHRENE					<370
PHENOL					<370
PYRENE					<370

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.
 A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.
 Depth = Feet below ground surface.

TABLE 4d
EASTERN TRENCHES
ANALYTICAL RESULTS
ORGANOCHLORINE PESTICIDES
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0044	SSUT0045	SSUT0046	SSUT0047	SSUT0048	SSUT0049
LOCATION	TRL0045	TRL0045	TRL0045	TRL0045	TRL0046	TRL0046
DATE	08/21/96	08/21/96	08/21/96	08/21/96	08/22/96	08/22/96
DEPTH	4.00	4.00	4.00	3.70	5.75	6.50
TYPE	WASTE		DUPLICATE	WASTE	WASTE	
ANALYTE						
4,4'-DDD	140.0 D	< 3.6	< 3.7	< 3.5	< 3.5	< 3.9
4,4'-DDE	210.0 DP Ju	< 3.6 J	< 3.7	< 3.5 JP Ru	< 3.5	< 3.9
4,4'-DDT	< 3.9	< 3.6	< 3.7	< 3.5 J	< 3.5	6.8
ALDRIN	< 1.9	< 1.8	< 1.8	< 1.8	< 1.8	< 2.0
ALPHA-BHC	< 1.9 UJc	< 1.8 UJc	< 1.8 UJc	< 1.8 UJc	< 1.8 UJc	< 2.0 UJc
ALPHA-CHLORDANE	17.0	< 1.8	< 1.8	< 1.8 J	52.0 D	< 2.0
AROCLOR-1016	< 39.0	< 36.0	< 37.0	< 35.0	< 35.0	< 39.0
AROCLOR-1221	< 77.0	< 73.0	< 73.0	< 71.0	< 70.0	< 78.0
AROCLOR-1232	< 39.0	< 36.0	< 37.0	< 35.0	< 35.0	< 39.0
AROCLOR-1242	< 39.0	< 36.0	< 37.0	< 35.0	< 35.0	< 39.0
AROCLOR-1248	< 39.0	< 36.0	< 37.0	< 35.0	< 35.0	< 39.0
AROCLOR-1254	< 39.0	< 36.0	< 37.0	< 35.0	< 35.0	< 39.0
AROCLOR-1260	< 39.0	< 36.0	< 37.0	< 35.0	< 35.0	< 39.0
BETA-BHC	< 1.9 UJc	< 1.8 UJc	< 1.8 UJc	< 1.8 UJc	< 1.8	< 2.0
DELTA-BHC	< 1.9 UJc	< 1.8 UJc	< 1.8 UJc	< 1.8 UJc	< 1.8 UJc	< 2.0 UJc
DIELDRIN	7.1 P Ju	< 3.6	< 3.7	< 3.5 J	< 3.5	< 3.9 J
ENDOSULFAN I	< 1.9	< 1.8	< 1.8	< 1.8	8.9 P Ju	< 2.0
ENDOSULFAN II	< 3.9	< 3.6	< 3.7	< 3.5	< 3.5	< 3.9
ENDOSULFAN SULFATE	< 3.9	< 3.6	< 3.7	< 3.5	< 3.5	< 3.9
ENDRIN	< 3.9	< 3.6	< 3.7	< 3.5	< 3.5	< 3.9 J
ENDRIN ALDEHYDE	< 3.9	< 3.6	< 3.7	< 3.5	< 3.5	< 3.9
ENDRIN KETONE	< 3.9	< 3.6	< 3.7	< 3.5	< 3.5	< 3.9
GAMMA-BHC	< 1.9 UJc	< 1.8 UJc	< 1.8 UJc	< 1.8 UJc	< 1.8 UJc	< 2.0 UJc
GAMMA-CHLORDANE	17.0	< 1.8	< 1.8	< 1.8 JP Ju	63.0 D	< 2.0
HEPTACHLOR	< 1.9	< 1.8	< 1.8	< 1.8	< 1.8	< 2.0
HEPTACHLOR EPOXIDE	< 1.9	< 1.8	< 1.8	< 1.8	< 1.8	< 2.0

All units reported as ug/Kg

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Depth = Feet below ground surface.

TABLE 4d
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 ORGANOCHLORINE PESTICIDES
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

	SSUT0044	SSUT0045	SSUT0046	SSUT0047	SSUT0048	SSUT0049
SAMPLE LOCATION	TRL0045	TRL0045	TRL0045	TRL0045	TRL0046	TRL0046
DATE	08/21/96	08/21/96	08/21/96	08/21/96	08/22/96	08/22/96
DEPTH	4.00	4.00	4.00	3.70	5.75	6.50
TYPE	WASTE		DUPLICATE	WASTE	WASTE	
ANALYTE						
METHOXYCHLOR	< 19.0	< 18.0	< 18.0	< 18.0	< 18.0	< 20.0
TOXAPHENE	< 190.0	< 180.0	< 180.0	< 180.0	< 180.0	< 200.0

All units reported as ug/Kg

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 Depth = Feet below ground surface.

TABLE 4d
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 ORGANOCHEMICAL PESTICIDES
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

ANALYTE	SSUT0050	SSUT0052	SSUT0054	SSUT0055	SSUT0076	SSUT0077
SAMPLE LOCATION	TRL0047	TRL0047	TRL0048	TRL0048	SBL00042	SBL00042
DATE	08/23/96	08/23/96	08/26/96	08/26/96	09/24/96	09/24/96
DEPTH	5.50	6.50	6.50	8.00	4.00	10.00
TYPE	WASTE	WASTE	WASTE	WASTE	WASTE	
4,4'-DDD	< 3.8 Rs	< 3.7	< 3.9 Rs	< 3.9	< 3.7	< 3.7
4,4'-DDE	< 3.8 Rs	< 3.7	< 3.9 Rs	< 3.9	< 3.7	< 3.7
4,4'-DDT	< 3.8 Rs	< 3.7	< 3.9 Rs	< 3.9	< 3.7 UJc	< 3.7 UJc
ALDRIN	< 1.9 Rs	< 1.9	< 1.9 Rs	< 1.9	< 1.8	< 1.8
ALPHA-BHC	< 1.9 Rs	< 1.9 UJc	< 1.9 Rs	< 1.9 UJc	< 1.8 UJc	< 1.8 UJc
ALPHA-CHLORDANE	87.0 DJ	2.6	< 1.9 Rs	< 1.9	< 1.8	< 1.8
AROCLOR-1016	< 38.0 Rs	< 37.0	< 39.0 Rs	< 39.0	< 37.0	< 37.0
AROCLOR-1221	< 76.0 Rs	< 75.0	< 77.0 Rs	< 77.0	< 73.0	< 74.0
AROCLOR-1232	< 38.0 Rs	< 37.0	< 39.0 Rs	< 39.0	< 37.0	< 37.0
AROCLOR-1242	< 38.0 Rs	< 37.0	< 39.0 Rs	< 39.0	< 37.0	< 37.0
AROCLOR-1248	< 38.0 Rs	< 37.0	< 39.0 Rs	< 39.0	< 37.0	< 37.0
AROCLOR-1254	< 38.0 Rs	< 37.0	< 39.0 Rs	< 39.0	< 37.0	< 37.0
AROCLOR-1260	< 38.0 Rs	< 37.0	< 39.0 Rs	< 39.0	< 37.0	< 37.0
BETA-BHC	< 1.9 Rs	< 1.9	< 1.9 Rs	< 1.9	< 1.8	< 1.8
DELTA-BHC	< 1.9 Rs	< 1.9 UJc	< 1.9 Rs	< 1.9 UJc	< 1.8 UJc	< 1.8 UJc
DIELDRIN	< 3.8 Rs	< 3.7	< 3.9 Rs	< 3.9	< 3.7	< 3.7
ENDOSULFAN I	< 1.9 Rs	< 1.9	< 1.9 Rs	< 1.9	< 1.8	< 1.8
ENDOSULFAN II	< 3.8 Rs	< 3.7	< 3.9 Rs	< 3.9	< 3.7	< 3.7
ENDOSULFAN SULFATE	< 3.8 Rs	< 3.7	< 3.9 Rs	< 3.9	< 3.7	< 3.7
ENDRIN	< 3.8 Rs	< 3.7	< 3.9 Rs	< 3.9	< 3.7 UJc	< 3.7 UJc
ENDRIN ALDEHYDE	1088.0 DP RU	8.5 P RU	< 3.9 Rs	< 3.9	< 3.7	< 3.7
ENDRIN KETONE	< 3.8 Rs	< 3.7	< 3.9 Rs	< 3.9	< 3.7	< 3.7
GAMMA-BHC	< 1.9 Rs	< 1.9 UJc	< 1.9 Rs	< 1.9 UJc	< 1.8	< 1.8
GAMMA-CHLORDANE	105.0 DP RU	3.0 P RU	< 1.9 Rs	< 1.9	< 1.8	< 1.8
HEPTACHLOR	< 1.9 Rs	< 1.9	< 1.9 Rs	< 1.9	< 1.8	< 1.8
HEPTACHLOR EPOXIDE	< 1.9 Rs	< 1.9	< 1.9 Rs	< 1.9	< 1.8	< 1.8

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 4d
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 ORGANOCHLORINE PESTICIDES
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0050	SSUT0052	SSUT0054	SSUT0055	SSUT0076	SSUT0077
LOCATION	TRL0047	TRL0047	TRL0048	TRL0048	SBL00042	SBL00042
DATE	08/23/96	08/23/96	08/26/96	08/26/96	09/24/96	09/24/96
DEPTH	5.50	6.50	6.50	8.00	4.00	10.00
TYPE	WASTE		WASTE		WASTE	
ANALYTE						
METHOXYCHLOR	< 19.0 Rs	< 19.0	< 19.0 Rs	< 19.0	< 18.0 UJc	< 18.0 UJc
TOXAPHENE	< 190.0 Rs	< 190.0	< 190.0 Rs	< 190.0	< 180.0	< 180.0

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.
 Depth = Feet below ground surface.

TABLE 4d
EASTERN TRENCHES
ANALYTICAL RESULTS
ORGANOCHLORINE PESTICIDES
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0078	SSUT0080	SSUT0081	SSUT0083	SSUT0086	SSUT0087
LOCATION	SBL00042	SBL00041	SBL00041	SBL00041	SBL00043	SBL00043
DATE	09/24/96	09/24/96	09/24/96	09/24/96	09/25/96	09/25/96
DEPTH	20.00	5.50	10.00	20.00	20.00	2.50
TYPE						WASTE
ANALYTE						
4,4'-DDD	< 3.9	< 3.9	< 3.9	< 4.0	< 3.8	< 3.9
4,4'-DDE	< 3.9	< 3.9	< 3.9	< 4.0	< 3.8	< 3.9
4,4'-DDT	< 3.9 UJc	< 3.9 UJc	< 3.9 UJc	< 4.0 UJc	< 3.8	< 3.9
ALDRIN	< 2.0	< 2.0	< 1.9	< 2.0	< 1.9	< 1.9
ALPHA-BHC	< 2.0 UJc	< 2.0 UJc	< 1.9 UJc	< 2.0 UJc	< 1.9 UJc	< 1.9 UJc
ALPHA-CHLORDANE	< 2.0	< 2.0	< 1.9	< 2.0	< 1.9	< 1.9
AROCLOR-1016	< 39.0	< 39.0	< 39.0	< 40.0	< 38.0	< 39.0
AROCLOR-1221	< 79.0	< 78.0	< 78.0	< 80.0	< 76.0	< 78.0
AROCLOR-1232	< 39.0	< 39.0	< 39.0	< 40.0	< 38.0	< 39.0
AROCLOR-1242	< 39.0	< 39.0	< 39.0	< 40.0	< 38.0	< 39.0
AROCLOR-1248	< 39.0	< 39.0	< 39.0	< 40.0	< 38.0	< 39.0
AROCLOR-1254	< 39.0	< 39.0	< 39.0	< 40.0	< 38.0	< 39.0
AROCLOR-1260	< 39.0	< 39.0	< 39.0	< 40.0	< 38.0	< 39.0
BETA-BHC	< 2.0	< 2.0	< 1.9	< 2.0	< 1.9	< 1.9
DELTA-BHC	< 2.0 UJc	< 2.0 UJc	< 1.9 UJc	< 2.0 UJc	< 1.9 UJc	< 1.9 UJc
DIELDRIN	< 3.9	< 3.9	< 3.9	< 4.0	< 3.8	< 3.9
ENDOSULFAN I	< 2.0	< 2.0	< 1.9	< 2.0	< 1.9	< 1.9
ENDOSULFAN II	< 3.9	< 3.9	< 3.9	< 4.0	< 3.8	< 3.9
ENDOSULFAN SULFATE	< 3.9	< 3.9	< 3.9	< 4.0	< 3.8	< 3.9
ENDRIN	< 3.9 UJc	< 3.9 UJc	< 3.9 UJc	< 4.0 UJc	< 3.8	< 3.9
ENDRIN ALDEHYDE	< 3.9	< 3.9	< 3.9	< 4.0	< 3.8	< 3.9
ENDRIN KETONE	< 3.9	< 3.9	< 3.9	< 4.0	< 3.8	< 3.9
GAMMA-BHC	< 2.0	< 2.0	< 1.9	< 2.0	< 1.9	< 1.9
GAMMA-CHLORDANE	< 2.0	< 2.0	< 1.9	< 2.0	< 1.9	< 1.9
HEPTACHLOR	< 2.0	< 2.0	< 1.9	< 2.0	< 1.9	< 1.9
HEPTACHLOR EPOXIDE	< 2.0	< 2.0	< 1.9	< 2.0	< 1.9	< 1.9

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 4d
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 ORGANOCHLORINE PESTICIDES
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0078	SSUT0080	SSUT0081	SSUT0083	SSUT0086	SSUT0087
LOCATION	SBL00042	SBL00041	SBL00041	SBL00041	SBL00043	SBL00043
DATE	09/24/96	09/24/96	09/24/96	09/24/96	09/25/96	09/25/96
DEPTH	20.00	5.50	10.00	20.00	20.00	2.50
TYPE						WASTE
ANALYTE						
METHOXYCHLOR	< 20.0 UJc	< 20.0 J UJc	< 19.0 J UJc	< 20.0 UJc	< 19.0	< 19.0
TOXAPHENE	< 200.0	< 200.0	< 190.0	< 200.0	< 190.0	< 190.0

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = feet below ground surface.

TABLE 4d
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 ORGANOCHLORINE PESTICIDES
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

ANALYTE	SAMPLE	LOCATION	DATE	DEPTH	TYPE
	SSUT0088	SBL00043	09/25/96	10.00	
4,4'-DDD	<	3.7			
4,4'-DDE	<	3.7			
4,4'-DDT	<	3.7			
ALDRIN	<	1.9			
ALPHA-BHC	<	1.9	UJc		
ALPHA-CHLORDANE	<	1.9			
AROCLOR-1016	<	37.0			
AROCLOR-1221	<	74.0			
AROCLOR-1232	<	37.0			
AROCLOR-1242	<	37.0			
AROCLOR-1248	<	37.0			
AROCLOR-1254	<	37.0			
AROCLOR-1260	<	37.0			
BETA-BHC	<	1.9			
DELTA-BHC	<	1.9	UJc		
DIELDRIN	<	3.7			
ENDOSULFAN I	<	1.9			
ENDOSULFAN II	<	3.7			
ENDOSULFAN SULFATE	<	3.7			
ENDRIN	<	3.7			
ENDRIN ALDERHYDE	<	3.7			
ENDRIN KETONE	<	3.7			
GAMMA-BHC	<	1.9			
GAMMA-CHLORDANE	<	1.9			
HEPTACHLOR	<	1.9			
HEPTACHLOR EPOXIDE	<	1.9			

All units reported as ug/kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.
 A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.
 Depth = Feet below ground surface.

TABLE 4d
EASTERN TRENCHES
ANALYTICAL RESULTS
ORGANOCHLORINE PESTICIDES
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0088
LOCATION	SBL00043
DATE	09/25/96
DEPTH	10.00
TYPE	

ANALYTE	
METHOXYCHLOR	< 19.0
TOXAPHENE	< 190.0

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 4e
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 VOLATILE ORGANIC COMPOUNDS
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

ANALYTE	SSUT0044 LOCATION DATE DEPTH TYPE	SSUT0045 TRL0045 08/21/96 4.00 WASTE	SSUT0046 TRL0045 08/21/96 4.00 DUPLICATE	SSUT0047 TRL0045 08/21/96 3.70 WASTE	SSUT0048 TRL0046 08/22/96 5.75 WASTE	SSUT0049 TRL0046 08/22/96 6.50
1,1,1-TRICHLOROETHANE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
1,1,2-TETRACHLOROETHANE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
1,1,2-TRICHLOROETHANE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
1,1-DICHLOROETHANE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
1,1-DICHLOROETHENE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
1,2-DICHLOROETHANE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
1,2-DICHLOROETHENE (TOTAL)	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
1,2-DICHLOROPROPANE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
2-BUTANONE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
2-HEXANONE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
4-METHYL-2-PENTANONE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
ACETONE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
BENZENE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
BROMODICHLOROMETHANE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
BROMOFORM	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
BROMOMETHANE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
CARBON DISULFIDE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
CARBON TETRACHLORIDE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
CHLOROBENZENE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
CHLOROETHANE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
CHLOROFORM	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
CHLOROMETHANE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
CIS-1,3-DICHLOROPROPENE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
DIBROMOCHLOROMETHANE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
ETHYL BENZENE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
METHYLENE CHLORIDE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0

All units reported as ug/kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.
 A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.
 Depth = Feet below ground surface.

TABLE 4e
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 VOLATILE ORGANIC COMPOUNDS
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0044	SSUT0045	SSUT0046	SSUT0047	SSUT0048	SSUT0049
LOCATION	TRL0045	TRL0045	TRL0045	TRL0045	TRL0046	TRL0046
DATE	08/21/96	08/21/96	08/21/96	08/21/96	08/22/96	08/22/96
DEPTH	4.00	4.00	4.00	3.70	5.75	6.50
TYPE	WASTE		DUPLICATE	WASTE	WASTE	
ANALYTE						
STYRENE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
TETRACHLOROETHENE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
TOLUENE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
TRANS-1,3-DICHLOROPROPENE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
TRICHLOROETHENE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
VINYL CHLORIDE	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0
XYLENES (TOTAL)	<12.0	<11.0	<11.0	<11.0	<11.0	<12.0

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

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Depth = Feet below ground surface.

TABLE 4e
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 VOLATILE ORGANIC COMPOUNDS
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

ANALYTE	SSUT0050 LOCATION DATE DEPTH TYPE	SSUT0052 TRL0047 08/23/96 6.50 WASTE	SSUT0054 TRL0048 08/26/96 6.50 WASTE	SSUT0055 TRL0048 08/26/96 8.00	SSUT0076 SBL00042 09/24/96 4.00 WASTE	SSUT0077 SBL00042 09/24/96 10.00
1,1,1-TRICHLOROETHANE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
1,1,2,2-TETRACHLOROETHANE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
1,1,2-TRICHLOROETHANE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
1,1-DICHLOROETHANE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
1,1-DICHLOROETHENE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
1,2-DICHLOROETHANE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
1,2-DICHLOROETHENE (TOTAL)	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
1,2-DICHLOROPROPANE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
2-BUTANONE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
2-HEXANONE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
4-METHYL-2-PENTANONE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
ACETONE	<12.0	<11.0 JB uz	<11.0 J uz	<12.0 JB uz	<11.0	<11.0
BENZENE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
BROMODICHLOROMETHANE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
BROMOFORM	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
BROMOMETHANE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
CARBON DISULFIDE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
CARBON TETRACHLORIDE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
CHLOROBENZENE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
CHLOROETHANE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
CHLOROFORM	<12.0	<11.0	12.0	<12.0	<11.0	<11.0
CHLOROMETHANE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
CIS-1,3-DICHLOROPROPENE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
DIBROMOCHLOROMETHANE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
ETHYL BENZENE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
METHYLENE CHLORIDE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0

All units reported as ug/kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.
 Depth = Feet below ground surface.

TABLE 4e
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 VOLATILE ORGANIC COMPOUNDS
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

	SSUT0050	SSUT0052	SSUT0054	SSUT0055	SSUT0076	SSUT0077
SAMPLE LOCATION	TRL0047	TRL0047	TRL0048	TRL0048	SBL00042	SBL00042
DATE	08/23/96	08/23/96	08/26/96	08/26/96	09/24/96	09/24/96
DEPTH	5.50	6.50	6.50	8.00	4.00	10.00
TYPE	WASTE		WASTE		WASTE	
ANALYTE						
STYRENE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
TETRACHLOROETHENE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
TOLUENE	<12.0	<11.0	38.0	<12.0	<11.0	<11.0
TRANS-1,3-DICHLOROPROPENE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
TRICHLOROETHENE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
VINYL CHLORIDE	<12.0	<11.0	<11.0	<12.0	<11.0	<11.0
XYLENES (TOTAL)	<12.0	<11.0	48.0	<12.0	<11.0	<11.0

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 4e
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 VOLATILE ORGANIC COMPOUNDS
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0078	SSUT0080	SSUT0081	SSUT0083	SSUT0086	SSUT0087
LOCATION	SBL00042	SBL00041	SBL00041	SBL00041	SBL00043	SBL00043
DATE	09/24/96	09/24/96	09/24/96	09/24/96	09/25/96	09/25/96
DEPTH	20.00	5.50	10.00	20.00	20.00	2.50
TYPE						WASTE
ANALYTE						
1,1,1-TRICHLOROETHANE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
1,1,2,2-TETRACHLOROETHANE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
1,1,2-TRICHLOROETHANE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
1,1-DICHLOROETHANE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
1,1-DICHLOROETHENE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
1,2-DICHLOROETHANE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
1,2-DICHLOROETHENE (TOTAL)	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
1,2-DICHLOROPROPANE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
2-BUTANONE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
2-HEXANONE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
4-METHYL-2-PENTANONE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
ACETONE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0 JB Uz
BENZENE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
BROMODICHLOROMETHANE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
BROMOFORM	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
BROMOMETHANE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
CARBON DISULFIDE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
CARBON TETRACHLORIDE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
CHLORO BENZENE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
CHLOROETHANE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
CHLOROFORM	<12.0	<12.0	<12.0	<12.0	< 9.9 J	<12.0
CHLOROMETHANE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
CIS-1,3-DICHLOROPROPENE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
DIBROMOCHLOROMETHANE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
ETHYL BENZENE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
METHYLENE CHLORIDE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 4e
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 VOLATILE ORGANIC COMPOUNDS
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0078	SSUT0080	SSUT0081	SSUT0083	SSUT0086	SSUT0087
LOCATION	SBL00042	SBL00041	SBL00041	SBL00041	SBL00043	SBL00043
DATE	09/24/96	09/24/96	09/24/96	09/24/96	09/25/96	09/25/96
DEPTH	20.00	5.50	10.00	20.00	20.00	2.50
TYPE						WASTE
ANALYTE						
STYRENE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
TETRACHLOROETHENE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
TOLUENE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
TRANS-1,3-DICHLOROPROPENE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
TRICHLOROETHENE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
VINYL CHLORIDE	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0
XYLENES (TOTAL)	<12.0	<12.0	<12.0	<12.0	< 9.9	<12.0

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 4e
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 VOLATILE ORGANIC COMPOUNDS
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0088
LOCATION	SBL00043
DATE	09/25/96
DEPTH	10.00
TYPE	
ANALYTE	
1,1,1-TRICHLOROETHANE	<11.0
1,1,2,2-TETRACHLOROETHANE	<11.0
1,1,2-TRICHLOROETHANE	<11.0
1,1-DICHLOROETHANE	<11.0
1,1-DICHLOROETHENE	<11.0
1,2-DICHLOROETHANE	<11.0
1,2-DICHLOROETHENE (TOTAL)	<11.0
1,2-DICHLOROPROPANE	<11.0
2-BUTANONE	<11.0
2-HEXANONE	<11.0
4-METHYL-2-PENTANONE	<11.0
ACETONE	<15.0 B Uz
BENZENE	<11.0
BROMODICHLOROMETHANE	<11.0
BROMOFORM	<11.0
BROMOMETHANE	<11.0
CARBON DISULFIDE	<11.0
CARBON TETRACHLORIDE	<11.0
CHLOROBENZENE	<11.0
CHLOROETHANE	<11.0
CHLOROFORM	<11.0
CHLOROMETHANE	<11.0
CIS-1,3-DICHLOROPROPENE	<11.0
DIBROMOCHLOROMETHANE	<11.0
ETHYL BENZENE	<11.0
METHYLENE CHLORIDE	<11.0

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.
 A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.
 Depth = Feet below ground surface.

TABLE 4e
EASTERN TRENCHES
ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0088
LOCATION	SBL00043
DATE	09/25/96
DEPTH	10.00
TYPE	

ANALYTE	
STYRENE	<11.0
TETRACHLOROETHENE	<11.0
TOLUENE	<11.0
TRANS-1,3-DICHLOROPROPENE	<11.0
TRICHLOROETHENE	<11.0
VINYL CHLORIDE	<11.0
XYLENES (TOTAL)	<11.0

All units reported as ug/Kg

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 4f
EASTERN TRENCHES
ANALYTICAL RESULTS
RADIONUCLIDES
SOUTH CAMPUS DISPOSAL SITE, DAVIS CALIFORNIA

SAMPLE LOCATION DATE DEPTH TYPE ANALYTE	SSUT0044 TRL0045 08/21/96 4.00 WASTE		SSUT0045 TRL0045 08/21/96 4.00		SSUT0046 TRL0045 08/21/96 4.00 DUPLICATE	
	MDA		MDA		MDA	
ACTINIUM-228	0.49±0.13	0.16	0.51±0.15	0.19	0.61±0.15	0.18
BISMUTH-212	0.45±0.25	0.29	0.16±0.22	0.35	0.25±0.31	0.42
BISMUTH-214	0.371±0.089	0.094	0.396±0.095	0.096	0.57±0.11	0.093
CARBON-14	-1.4±5.9	11.	-4.6±5.4	11.	-1.7±5.8	11.
CESIUM-134	--		--		--	
CESIUM-137	-0.006±0.024	0.042	-0.005±0.022	0.052	0.018±0.029	0.048
COBALT-57	--		--		--	
COBALT-60	-0.003±0.011	0.037	-0.01±0.021	0.051	-0.002±0.017	0.041
GROSS ALPHA	2.3±3.8	6.8	2.3±4.2	7.5	3.7±4.5	7.4
GROSS BETA	14.3±4.1	5.7	12.7±3.9	5.4	13.2±3.9	5.5
LEAD-210	3.2±9.3	13.	0.51±0.66	0.99	1.12±0.81	1.2
LEAD-212	0.467±0.084	0.074	0.603±0.099	0.077	0.567±0.093	0.076
LEAD-214	0.384±0.076	0.085	0.519±0.091	0.097	0.548±0.090	0.086
POTASSIUM-40	10.8±1.5	0.54	10.8±1.5	0.52	12.0±1.6	0.48
RADIUM-223	0.21±0.26	0.68	-0.04±0.25	0.84	-0.12±0.21	0.78
RADIUM-226	0.19±0.17	0.25	0.81±0.24	0.19	0.30±0.18	0.23
SR-89,90	0.13±0.33	0.57	0.15±0.31	0.53	0.22±0.33	0.56
THALLIUM-208	0.171±0.046	0.046	0.194±0.052	0.050	0.155±0.049	0.052
THORIUM-234	0.52±0.44	1.3	0.57±0.37	1.0	0.69±0.38	1.2
TRITIUM	800±190	180	-20±110	210	330±170	260
URANIUM-235	-0.08±0.13	0.24	-0.01±0.12	0.21	0.05±0.14	0.22

All units report as pCi/g
Depth = Feet below ground surface.

TABLE 4f
EASTERN TRENCHES
ANALYTICAL RESULTS
RADIONUCLIDES
SOUTH CAMPUS DISPOSAL SITE, DAVIS CALIFORNIA

SAMPLE LOCATION DATE DEPTH TYPE	SSUT0047 TRL0045 08/21/96 3.70 WASTE		SSUT0048 TRL0046 08/22/96 5.75 WASTE		SSUT0049 TRL0046 08/22/96 6.50	
ANALYTE	MDA		MDA		MDA	
ACTINIUM-228	0.45±0.15	0.21	0.45±0.14	0.17	0.76±0.13	0.12
BISMUTH-212	0.36±0.21	0.28	0.34±0.25	0.29	0.36±0.21	0.25
BISMUTH-214	0.369±0.091	0.095	0.350±0.093	0.096	0.400±0.080	0.075
CARBON-14	-4.3±5.5	11.	-2.4±5.8	11.	0.5±6.1	11.
CESIUM-134	--		--		--	
CESIUM-137	0.014±0.034	0.047	0.073±0.034	0.047	0.011±0.020	0.032
COBALT-57	--		--		--	
COBALT-60	0.003±0.018	0.045	-0.013±0.016	0.039	-0.001±0.012	0.019
GROSS ALPHA	7.1±4.9	6.8	7.9±5.0	6.3	7.7±5.1	6.6
GROSS BETA	12.7±3.9	5.4	11.9±4.0	5.7	15.4±4.2	5.7
LEAD-210	0.57±0.70	1.0	0.81±0.79	1.2	2.3±2.7	3.6
LEAD-212	0.634±0.10	0.077	0.504±0.086	0.070	0.642±0.089	0.061
LEAD-214	0.530±0.091	0.086	0.394±0.080	0.092	0.511±0.072	0.065
POTASSIUM-40	11.3±1.6	0.59	9.2±1.4	0.47	12.1±1.5	0.44
RADIUM-223	-0.19±0.25	0.81	0.04±0.29	0.72	-0.02±0.14	0.60
RADIUM-226	0.38±0.19	0.22	0.19±0.18	0.28	0.63±0.23	0.22
SR-89,90	0.33±0.37	0.62	0.32±0.32	0.53	0.1±0.31	0.54
THALLIUM-208	0.170±0.049	0.049	0.148±0.048	0.051	0.201±0.042	0.036
THORIUM-234	0.78±0.38	0.99	0.72±0.38	1.1	0.47±0.43	1.4
TRITIUM	-79.±96.	210	90±100	170	-10±110	210
URANIUM-235	0.06±0.14	0.21	-0.057±0.086	0.22	0.01±0.13	0.21

All units report as pCi/g
Depth = Feet below ground surface.

TABLE 4f
EASTERN TRENCHES
ANALYTICAL RESULTS
RADIONUCLIDES
SOUTH CAMPUS DISPOSAL SITE, DAVIS CALIFORNIA

SAMPLE LOCATION DATE DEPTH TYPE	SSUT0050 TRL0047 08/23/96 5.50 WASTE		SSUT0052 TRL0047 08/23/96 6.50 WASTE		SSUT0054 TRL0048 08/26/96 6.50 WASTE	
	ANALYTE	MDA	MDA	MDA	MDA	MDA
ACTINIUM-228	0.67±0.12	0.11	0.52±0.12	0.13	0.494±0.099	0.11
BISMUTH-212	0.20±0.20	0.27	0.30±0.20	0.25	0.28±0.18	0.22
BISMUTH-214	0.443±0.078	0.073	0.365±0.079	0.078	0.399±0.071	0.067
CARBON-14	-4.3±5.0	9.9	-3.1±5.6	11.	1.7±6.1	11.
CESIUM-134	--		--		--	
CESIUM-137	0.015±0.018	0.028	0.041±0.025	0.036	0.004±0.019	0.026
COBALT-57	--		--		--	
COBALT-60	0.007±0.015	0.027	-0.0075±0.0096	0.031	-0.0056±0.0099	0.030
GROSS ALPHA	7.6±5.1	6.8	5.3±4.7	7.2	7.1±5.1	7.2
GROSS BETA	13.9±4.1	5.7	11.3±3.8	5.4	10.2±3.7	5.4
LEAD-210	0.3±2.5	3.7	2.0±3.1	4.3	1.1±2.3	3.2
LEAD-212	0.567±0.080	0.054	0.432±0.077	0.068	0.433±0.068	0.052
LEAD-214	0.551±0.072	0.061	0.459±0.074	0.074	0.522±0.068	0.053
POTASSIUM-40	12.4±1.5	0.40	10.8±1.4	0.47	10.1±1.2	0.35
RADIUM-223	-0.11±0.19	0.55	0.10±0.23	0.58	0.08±0.17	0.52
RADIUM-226	0.78±0.27	0.20	0.63±0.23	0.20	0.34±0.16	0.19
SR-89,90	0.08±0.29	0.50	0.15±0.27	0.46	0.14±0.35	0.59
THALLIUM-208	0.169±0.037	0.034	0.133±0.038	0.039	0.158±0.035	0.032
THORIUM-234	0.33±0.40	1.4	0.46±0.46	1.5	0.46±0.35	1.2
TRITIUM	120±120	200	70±110	190	90±120	210
URANIUM-235	0.05±0.12	0.18	0.08±0.14	0.21	0.09±0.11	0.15

All units report as pCi/g
Depth = Feet below ground surface.

TABLE 4f
EASTERN TRENCHES
ANALYTICAL RESULTS
RADIONUCLIDES
SOUTH CAMPUS DISPOSAL SITE, DAVIS CALIFORNIA

SAMPLE	SSUT0055		SSUT0076		SSUT0077	
LOCATION	TRL0048		SBL00042		SBL00042	
DATE	08/26/96		09/24/96		09/24/96	
DEPTH	8.00		4.00		10.00	
TYPE			WASTE			
ANALYTE	MDA		MDA		MDA	
ACTINIUM-228	0.58±0.16	0.20	0.62±0.13	0.15	0.43±0.16	0.21
BISMUTH-212	0.31±0.28	0.37	0.23±0.23	0.31	0.15±0.23	0.37
BISMUTH-214	0.62±0.11	0.084	0.389±0.087	0.094	0.51±0.11	0.092
CARBON-14	1.3±5.5	9.9	-0.08±0.54	0.99	-0.02±0.57	1.0
CESIUM-134	--	--	--	--	--	--
CESIUM-137	-0.039±0.022	0.058	-0.022±0.017	0.044	0.028±0.036	0.046
COBALT-57	--	--	--	--	--	--
COBALT-60	-0.009±0.016	0.055	0.011±0.020	0.038	-0.019±0.019	0.068
GROSS ALPHA	5.5±4.5	6.7	3.4±4.2	6.9	4.6±5.2	8.6
GROSS BETA	14.5±4.0	5.3	13.1±4.0	5.6	17.3±4.4	5.8
LEAD-210	0.64±0.72	1.1	-0.8±8.3	12.	1.17±0.85	1.2
LEAD-212	0.73±0.11	0.074	0.563±0.088	0.067	0.64±0.11	0.095
LEAD-214	0.673±0.10	0.093	0.525±0.080	0.080	0.623±0.10	0.096
POTASSIUM-40	11.0±1.6	0.59	11.0±1.4	0.52	10.5±1.6	0.56
RADIUM-223	-0.30±0.22	0.92	-0.08±0.20	0.67	0.07±0.25	0.88
RADIUM-226	0.72±0.21	0.16	0.59±0.19	0.14	0.56±0.21	0.20
SR-89,90	0.16±0.37	0.64	-0.07±0.32	0.58	-0.08±0.42	0.74
THALLIUM-208	0.197±0.052	0.050	0.215±0.046	0.040	0.203±0.056	0.054
THORIUM-234	0.96±0.38	1.0	0.49±0.43	1.2	0.80±0.41	1.1
TRITIUM	190±140	210	110±140	220	230±150	220
URANIUM-235	0.08±0.15	0.23	-0.07±0.12	0.22	-0.01±0.13	0.23

All units report as pCi/g
Depth = Feet below ground surface.

TABLE 4f
EASTERN TRENCHES
ANALYTICAL RESULTS
RADIONUCLIDES
SOUTH CAMPUS DISPOSAL SITE, DAVIS CALIFORNIA

SAMPLE LOCATION	SSUT0078 SBL00042		SSUT0080 SBL00041		SSUT0081 SBL00041	
DATE	09/24/96		09/24/96		09/24/96	
DEPTH	20.00		5.50		10.00	
TYPE						
ANALYTE	MDA		MDA		MDA	
ACTINIUM-228	0.47±0.15	0.20	0.59±0.17	0.19	0.57±0.17	0.19
BISMUTH-212	0.26±0.30	0.40	0.61±0.25	0.30	0.31±0.31	0.40
BISMUTH-214	0.53±0.12	0.11	0.60±0.11	0.085	0.49±0.11	0.099
CARBON-14	0.17±0.59	1.1	-0.48±0.52	1.0	0.04±0.57	1.0
CESIUM-134	--		--		--	
CESIUM-137	0.016±0.036	0.047	-0.006±0.024	0.058	-0.029±0.027	0.067
COBALT-57	--		--		--	
COBALT-60	-0.022±0.020	0.065	0.005±0.020	0.044	0.001±0.026	0.057
GROSS ALPHA	7.4±4.9	6.6	6.2±5.1	7.5	3.3±4.1	6.8
GROSS BETA	14.1±4.1	5.6	17.6±4.4	5.8	9.8±3.9	5.7
LEAD-210	0.98±0.85	1.3	1.04±0.80	1.1	1.24±0.91	1.3
LEAD-212	0.504±0.090	0.079	0.65±0.11	0.090	0.594±0.099	0.076
LEAD-214	0.562±0.097	0.10	0.66±0.11	0.10	0.582±0.10	0.11
POTASSIUM-40	11.3±1.6	0.57	10.8±1.6	0.49	10.8±1.6	0.65
RADIUM-223	0.02±0.31	0.78	0.08±0.26	0.93	0.17±0.34	0.82
RADIUM-226	0.34±0.17	0.19	0.66±0.21	0.16	0.60±0.21	0.20
SR-89,90	-0.12±0.32	0.58	0.27±0.38	0.64	0.05±0.30	0.53
THALLIUM-208	0.195±0.054	0.051	0.179±0.055	0.057	0.176±0.054	0.054
THORIUM-234	0.85±0.43	1.2	0.81±0.41	1.1	0.92±0.44	1.3
TRITIUM	2330±340	220	20±120	220	120±130	220
URANIUM-235	0.17±0.15	0.23	0.05±0.14	0.22	-0.05±0.15	0.24

All units report as pCi/g
Depth = Feet below ground surface.

TABLE 4f
 EASTERN TRENCHES
 ANALYTICAL RESULTS
 RADIONUCLIDES
 SOUTH CAMPUS DISPOSAL SITE, DAVIS CALIFORNIA

ANALYTE	SSUT0083		SSUT0086		SSUT0087		SSUT0088	
	LOCATION	DATE	LOCATION	DATE	LOCATION	DATE	LOCATION	DATE
		DEPTH		DEPTH		DEPTH		DEPTH
		TYPE		TYPE		TYPE		TYPE
		MDA		MDA		MDA		MDA
ACTINIUM-228	0.58±0.15	0.19	0.68±0.16	0.15	0.40±0.12	0.16	0.52±0.14	0.19
BISMUTH-212	0.43±0.25	0.28	--	0.098	0.354±0.083	0.071	--	0.091
BISMUTH-214	0.465±0.10	0.11	0.454±0.10	1.1	-0.28±0.51	0.99	0.371±0.094	1.1
CARBON-14	-0.17±0.54	1.0	0.14±0.61	0.038	-0.003±0.014	0.029	-0.06±0.61	0.040
CESIUM-134	--	0.019±0.020	0.019±0.020	0.047	-0.001±0.025	0.036	-0.006±0.014	0.042
CESIUM-137	-0.0024±0.0047	0.048	0.013±0.035	0.024	0.004±0.014	0.020	0.007±0.031	0.023
COBALT-57	--	0.003±0.017	0.003±0.017	0.044	0.004±0.014	0.042	-0.0081±0.0099	0.042
COBALT-60	0.005±0.018	0.038	0.005±0.023	7.2	-0.001±0.018	0.042	0.016±0.023	0.042
GROSS ALPHA	6.6±5.2	7.8	7.3±5.1	5.6	6.7±4.7	6.4	11.1±5.7	6.9
GROSS BETA	15.1±4.1	5.5	17.6±4.3	5.6	12.1±3.8	5.3	14.3±4.1	5.6
LEAD-210	-0.2±3.7	5.7	--	0.072	--	0.060	--	0.068
LEAD-212	0.579±0.10	0.082	0.640±0.10	0.091	0.475±0.080	0.075	0.496±0.085	0.082
LEAD-214	0.571±0.099	0.096	0.601±0.094	0.52	0.457±0.077	0.46	0.479±0.084	0.42
POTASSIUM-40	10.9±1.6	0.66	10.7±1.5	0.15	9.6±1.3	0.17	10.8±1.5	0.42
RADIUM-223	0.04±0.29	0.95	--	0.42	--	0.47	--	0.15
RADIUM-226	0.78±0.24	0.21	0.61±0.19	0.15	0.73±0.22	0.17	UJz, l 10.58±0.20	0.59
SR-89,90	0.16±0.39	0.67	0.00±0.24	0.42	0.12±0.28	0.47	0.46±0.36	0.044
THALLIUM-208	0.190±0.051	0.048	0.228±0.056	0.051	0.119±0.039	0.043	0.201±0.050	1.1
THORIUM-234	0.03±0.58	2.1	0.91±0.40	1.2	0.62±0.31	0.82	0.48±0.36	210
TRITIUM	2020±320	220	110±130	210	860±170	180	100±120	210
URANIUM-235	-0.13±0.15	0.30	0.11±0.14	0.21	0.057±0.10	0.17	-0.02±0.11	0.19

All units report as pci/g
 Depth = Feet below ground surface.

TABLE 5a
EASTERN TRENCHES
ANALYTICAL RESULTS FOR WET ANALYSIS
METALS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

	SAMPLE	EBUT0019	EBUT0020	SSUT0051	SSUT0053	SSUT0079	SSUT0082
	LOCATION	SBL00040	SBL00043	TRL0047	TRL0047	SBL00041	SBL00041
	DATE	09/24/96	09/25/96	08/23/96	08/23/96	09/24/96	09/24/96
	DEPTH	0.00	0.00	5.50	6.50	4.00	15.00
	TYPE	RINSTATE	RINSTATE	WASTE		WASTE	
ANALYTE							
ANTIMONY		<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
ARSENIC		<0.0030	<0.0030	0.0173	<0.0030	<0.0030	<0.0030
BARIIUM		<0.0080	<0.0080	<0.2000 B	<0.2000 B	0.4700	<0.2000 B
BERYLLIUM		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
CADMIUM		<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
CHROMIUM		<0.0060	<0.0060	0.0307	<0.0060	<0.0060	<0.0060
CHROMIUM, HEXAVALENT (+6)		<0.0030	<0.0030	<0.0030 H	<0.0030 H	<0.0200 HB	<0.0030 H
COBALT		<0.0040	<0.0040	<0.0500 B	<0.0040	<0.0040	<0.0040
COPPER		<0.0060	<0.0060	0.0423	<0.0060	<0.0060	<0.0060
LEAD		<0.0020	<0.0020	0.0081	<0.0020	<0.0020	<0.0020
MERCURY		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MOLYBDENUM		<0.0100	<0.0100	<0.2000 B	<0.2000 B	<0.0100	<0.0100
NICKEL		<0.0120	<0.0120	0.1170	<0.0120	<0.0120	<0.0120
SELENIUM		<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
SILVER		<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
THALLIUM		<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
VANADIUM		<0.0060	<0.0060	<0.0500 B	<0.0500 B	<0.0060	<0.0500 B
ZINC		<0.0200 B* UJp,d	<0.0030	0.2360	<0.0200 B	<0.0200 B Up	<0.0200 B Up

All units reported as mg/L

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 5b
 EASTERN TRENCHES
 ANALYTICAL RESULTS FOR WET ANALYSIS
 GENERAL CHEMICALS
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	LOCATION	DATE	DEPTH	TYPE	NITRATE-N
					mg/L
SSUT0051	TRL0047	08/23/96	5.50	WASTE	77.0 H Jh
SSUT0053	TRL0047	08/23/96	6.50		9.2
SSUT0079	SBL00041	09/24/96	4.00	WASTE	6.9 H
SSUT0082	SBL00041	09/24/96	15.00		4.2 H

DATE refers to date sampled.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Feet below ground surface.

TABLE 5c
EASTERN TRENCHES
ANALYTICAL RESULTS FOR WET ANALYSIS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0051	SSUT0053	SSUT0079	SSUT0082
LOCATION	TRL0047	TRL0047	SBL00041	SBL00041
DATE	08/23/96	08/23/96	09/24/96	09/24/96
DEPTH	5.50	6.50	4.00	15.00
TYPE	WASTE		WASTE	
ANALYTE				
1,2,4-TRICHLOROBENZENE	< 11 RI	< 12 RI	< 11	< 11
1,2-DICHLOROBENZENE	< 11 UJs	< 12 UJs	< 11	< 11
1,3-DICHLOROBENZENE	< 11 UJs	< 12 UJs	< 11	< 11
1,4-DICHLOROBENZENE	< 11 RI	< 12 RI	< 11	< 11
2,2'-OXYBIS(1-CHLOROPROPANE)	< 11 UJs	< 12 UJs	< 11	< 11
2,4,5-TRICHLOROPHENOL	< 27 UJs	< 29 UJs	< 27	< 27
2,4,6-TRICHLOROPHENOL	< 11 UJs	< 12 UJs	< 11	< 11
2,4-DICHLOROPHENOL	< 11 UJs	< 12 UJs	< 11	< 11
2,4-DIMETHYLPHENOL	< 11 UJs	< 12 UJs	< 11	< 11
2,4-DINITROPHENOL	< 27 UJs	< 29 UJs	< 27	< 27
2,4-DINITROTOLUENE	< 11 UJs	< 12 UJs	< 11	< 11
2,6-DINITROTOLUENE	< 11 UJs	< 12 UJs	< 11	< 11
2-CHLORONAPHTHALENE	< 11 UJs	< 12 UJs	< 11	< 11
2-CHLOROPHENOL	< 11 UJs	< 12 UJs	< 11	< 11
2-METHYL-4,6-DINITROPHENOL	< 27 UJs	< 29 UJs	< 27	< 27
2-METHYLNAPHTHALENE	< 11 UJs	< 12 UJs	< 11	< 11
2-METHYLPHENOL	< 11 UJs	< 12 UJs	< 11	< 11
2-NITROANILINE	< 27 UJs	< 29 UJs	< 27	< 27
2-NITROPHENOL	< 11 UJs	< 12 UJs	< 11	< 11
3,3'-DICHLOROBENZIDINE	< 11 UJs	< 12 UJs	< 11	< 11
3-NITROANILINE	< 27 UJs	< 29 UJs	< 27	< 27
4-BROMOPHENYL PHENYL ETHER	< 11 UJs	< 12 UJs	< 11	< 11
4-CHLORO-3-METHYLPHENOL	< 11 UJs	< 12 UJs	< 11	< 11
4-CHLOROANILINE	< 11 UJs	< 12 UJs	< 11	< 11
4-CHLOROPHENYL PHENYL ETHER	< 11 UJs	< 12 UJs	< 11	< 11
4-METHYLPHENOL	< 11 UJs	< 12 UJs	< 11	< 11

All units reported as ug/L

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

Depth = Depth below ground surface.

TABLE 5c
 EASTERN TRENCHES
 ANALYTICAL RESULTS FOR MET ANALYSIS
 SEMI-VOLATILE ORGANIC COMPOUNDS
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

ANALYTE	SSUT0051 LOCATION DATE DEPTH TYPE	SSUT0053 TRL0047 08/23/96 6.50 WASTE	SSUT0079 SBL00041 09/24/96 4.00 WASTE	SSUT0082 SBL00041 09/24/96 15.00
4-NITROANILINE	< 27 UJs	< 29 UJs	< 27	< 27
4-NITROPHENOL	< 27 UJs	< 29 UJs	< 27	< 27
ACENAPHTHENE	< 11 UJL	< 12 UJL	< 11	< 11
ACENAPHTHYLENE	< 11 UJs	< 12 UJs	< 11	< 11
ANTHRACENE	< 11 UJs	< 12 UJs	< 11	< 11
BENZO(A)ANTHRACENE	< 11 UJs	< 12 UJs	< 11	< 11
BENZO(A)PYRENE	< 11 UJs	< 12 UJs	< 11	< 11
BENZO(B)FLUORANTHENE	< 11 UJs	< 12 UJs	< 11	< 11
BENZO(G,H,I)PERYLENE	< 11 UJs	< 12 UJs	< 11	< 11
BENZO(K)FLUORANTHENE	< 11 UJs	< 12 UJs	< 11	< 11
BENZYL BUTYL PHTHALATE	< 11 UJs	< 12 UJs	25	< 11
BIS(2-CHLOROETHOXY)METHANE	< 11 UJs	< 12 UJs	< 11	< 11
BIS(2-CHLOROETHYL)ETHER	< 11 UJs	< 12 UJs	< 11	< 11
BIS(2-ETHYLHEXYL)PHTHALATE	< 11 JB UJs,z	< 12 JB UJz,s	< 11	< 11 JB Uz
CARBAZOLE	< 11 UJs	< 12 UJs	< 11	< 11
CHRYSENE	< 11 UJs	< 12 UJs	< 11	< 11
DI-N-BUTYLPHthalate	< 11 UJs	< 12 UJs	< 11	< 11
DI-N-OCTYLPHthalate	< 11 J UJs	< 12 UJs	140 B	< 11 JB Uz
DIBENZO(A,H)ANTHRACENE	< 11 UJs	< 12 UJs	< 11	< 11
DIBENZOFURAN	< 11 UJs	< 12 UJs	< 11	< 11
DIETHYL PHTHALATE	< 11 UJs	< 12 UJs	< 11	< 11 J
DIMETHYL PHTHALATE	< 11 UJs	< 12 UJs	< 11	< 11
FLUORANTHENE	< 11 UJs	< 12 UJs	< 11	< 11
FLUORENE	< 11 UJs	< 12 UJs	< 11	< 11
HEXACHLOROBENZENE	< 11 UJs	< 12 UJs	< 11	< 11
HEXACHLOROBUTADIENE	< 11 UJs	< 12 UJs	< 11	< 11

All units reported as ug/L

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.
 A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.
 Depth = Depth below ground surface.

TABLE 5c
 EASTERN TRENCHES
 ANALYTICAL RESULTS FOR WET ANALYSIS
 SEMI-VOLATILE ORGANIC COMPOUNDS
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

SAMPLE	SSUT0051	SSUT0053	SSUT0079	SSUT0082
LOCATION	TRL0047	TRL0047	SBL00041	SBL00041
DATE	08/23/96	08/23/96	09/24/96	09/24/96
DEPTH	5.50	6.50	4.00	15.00
TYPE	WASTE		WASTE	
ANALYTE				
HEXACHLOROCYCLOPENTADIENE	< 11 UJs	< 12 UJs	< 11	< 11
HEXACHLOROETHANE	< 11 UJs	< 12 UJs	< 11	< 11
INDENO(1,2,3-CD)PYRENE	< 11 UJs	< 12 UJs	< 11	< 11
ISOPHORONE	< 11 UJs	< 12 UJs	< 11	< 11
N-NITROSODI-N-PROPYLAMINE	< 11 UJs	< 12 UJs	< 11	< 11
N-NITROSODIPHENYLAMINE	< 11 UJs	< 12 UJs	< 11	< 11
NAPHTHALENE	< 11 UJs	< 12 UJs	< 11	< 11
NITROBENZENE	< 11 UJs	< 12 UJs	< 11	< 11
PENTACHLOROPHENOL	< 27 UJs	< 29 UJs	< 27	< 27
PHENANTHRENE	< 11 UJs	< 12 UJs	< 11	< 11
PHENOL	< 11 UJs	< 12 UJs	< 11	< 11
PYRENE	< 11 UJs	< 12 UJs	< 11	< 11

All units reported as ug/L

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.
 A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.
 Depth = Depth below ground surface.

TABLE 5d
 EASTERN TRENCHES
 ANALYTICAL RESULTS FOR WET ANALYSIS
 ORGANOCHEMICAL PESTICIDES
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

ANALYTE	SSUT0051	SSUT0053	SSUT0079	SSUT0082
SAMPLE LOCATION	TRL0047	TRL0047	SBL00041	SBL00041
DATE	08/23/96	08/23/96	09/24/96	09/24/96
DEPTH	5.50	6.50	4.00	15.00
TYPE	WASTE	WASTE	WASTE	WASTE
4,4'-DDD	< 0.110 UJC	< 0.120 UJC	< 0.110 UJS	< 0.110 UJS
4,4'-DDE	< 0.110 UJS	< 0.120 UJS	< 0.110 UJS	< 0.110 UJS
4,4'-DDT	< 0.110 UJS	< 0.120 UJS	< 0.110 UJS	< 0.110 UJS
ALDRIN	< 0.055 UJS	< 0.058 UJS	< 0.054 UJS	< 0.054 UJS
ALPHA-BHC	< 0.055 UJC	< 0.058 UJC	< 0.054 UJS	< 0.054 UJS
ALPHA-CHLORDANE	< 0.055 UJS	< 0.058 UJS	< 0.054 UJS	< 0.054 UJS
AROCLOR-1016	< 1.100 UJS	< 1.200 UJS	< 1.100 UJS	< 1.100 UJS
AROCLOR-1221	< 2.200 UJS	< 2.300 UJS	< 2.200 UJS	< 2.200 UJS
AROCLOR-1232	< 1.100 UJS	< 1.200 UJS	< 1.100 UJS	< 1.100 UJS
AROCLOR-1242	< 1.100 UJS	< 1.200 UJS	< 1.100 UJS	< 1.100 UJS
AROCLOR-1248	< 1.100 UJS	< 1.200 UJS	< 1.100 UJS	< 1.100 UJS
AROCLOR-1254	< 1.100 UJS	< 1.200 UJS	< 1.100 UJS	< 1.100 UJS
AROCLOR-1260	< 1.100 UJS	< 1.200 UJS	< 1.100 UJS	< 1.100 UJS
BETA-BHC	< 0.055 UJC	< 0.058 UJC	< 0.054 UJS	< 0.054 UJS
DELTA-BHC	< 0.055 UJC	< 0.058 UJC	< 0.054 UJS	< 0.054 UJS
DELDRIN	< 0.110 UJS	< 0.120 JP JU	< 0.110 UJS	< 0.110 UJS
ENDOSULFAN I	< 0.055 UJS	< 0.058 UJS	< 0.054 UJS	< 0.054 UJS
ENDOSULFAN II	33.000 D JW	0.270 P RU	< 0.110 UJS	< 0.110 UJS
ENDOSULFAN SULFATE	< 0.110 UJS	< 0.120 UJS	< 0.110 UJS	< 0.110 UJS
ENDRIN	< 0.110 UJS	< 0.120 UJS	< 0.110 UJS	< 0.110 UJS
ENDRIN ALDEHYDE	16.000 DP JU	0.170 JS	< 0.110 UJS	< 0.110 UJS
ENDRIN KETONE	< 0.110 UJS	< 0.120 UJS	< 0.110 UJS	< 0.110 UJS
GAMMA-BHC	< 0.055 UJC	< 0.058 UJC	< 0.054 UJS	< 0.054 UJS
GAMMA-CHLORDANE	< 0.055 UJS	< 0.058 UJS	< 0.054 UJS	< 0.054 UJS
HEPTACHLOR	< 0.055 UJS	< 0.058 UJS	< 0.054 UJS	< 0.054 UJS
HEPTACHLOR EPOXIDE	< 0.055 UJS	< 0.058 UJS	< 0.054 UJS	< 0.054 UJS

All units reported as ug/L

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.
 A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.
 Depth = feet below ground surface.

TABLE 5d
 EASTERN TRENCHES
 ANALYTICAL RESULTS FOR WET ANALYSIS
 ORGANOCHLORINE PESTICIDES
 SOUTH CAMPUS DISPOSAL SITE, DAVIS, CALIFORNIA

	SSUT0051	SSUT0053	SSUT0079	SSUT0082
SAMPLE	TRL0047	TRL0047	SBL00041	SBL00041
LOCATION	08/23/96	08/23/96	09/24/96	09/24/96
DATE	5.50	6.50	4.00	15.00
DEPTH	WASTE		WASTE	
TYPE	ANALYTE			
METHOXYCHLOR	< 0.550 UJs	< 0.580 UJs	< 0.540 UJs	< 0.540 UJs
TOXAPHENE	< 5.500 UJs	< 5.800 UJs	< 5.400 UJs	< 5.400 UJs

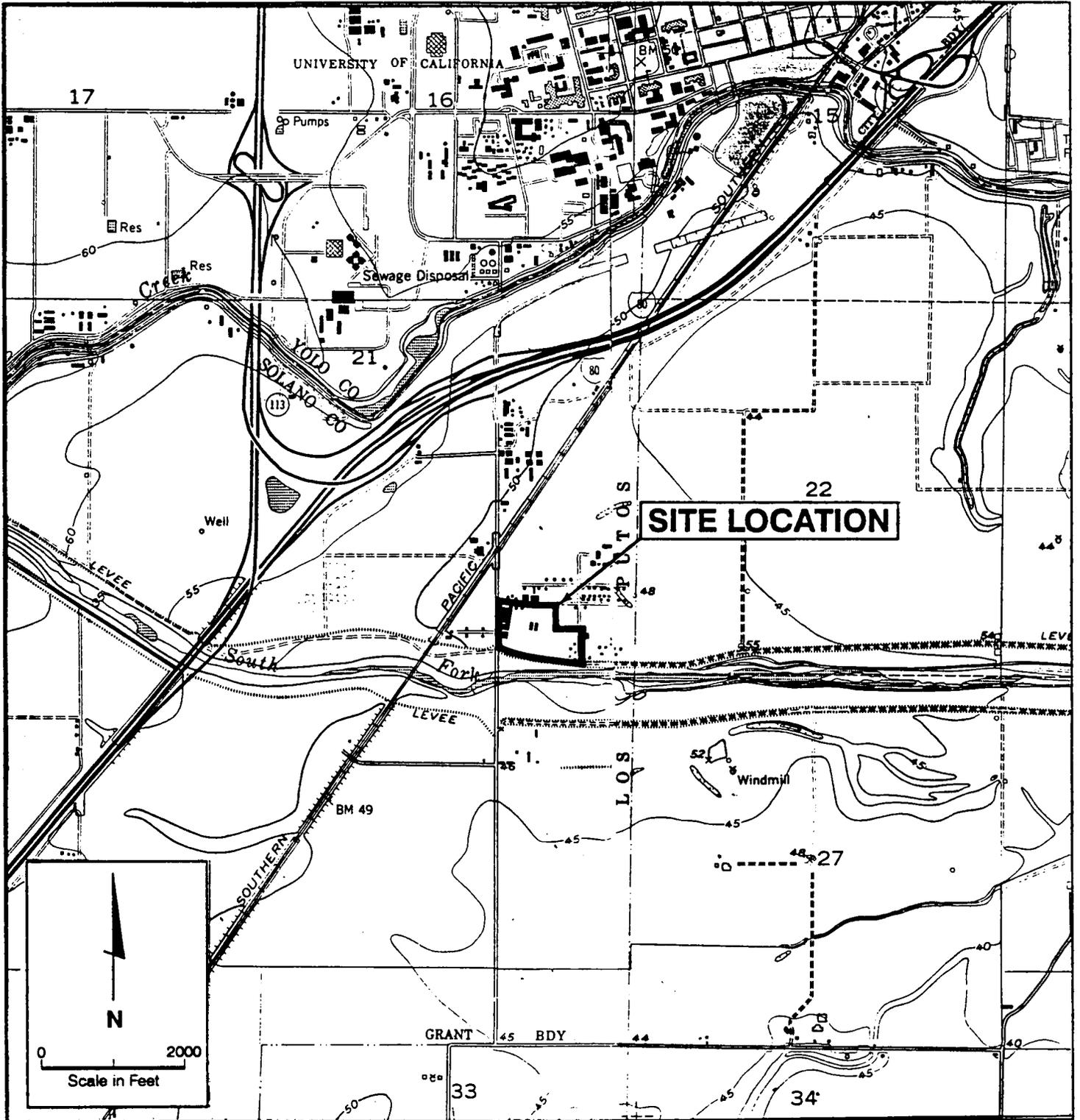
All units reported as ug/L

< = Constituent below detection limit. Detection limits may vary depending on interference by other sample constituents.
 A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.
 Depth = Feet below ground surface.

TABLE 5e
EASTERN TRENCHES
ANALYTICAL RESULTS FOR WET ANALYSIS
RADIONUCLIDES
SOUTH CAMPUS DISPOSAL SITE, DAVIS CALIFORNIA

ANALYTE	SAMPLE	SSUT0051	SSUT0053		SSUT0079	SSUT0082			
	LOCATION	TRL0047	TRL0047		SBL00041	SBL00041			
	DATE	08/23/96	08/23/96		09/24/96	09/24/96			
	DEPTH	5.50	6.50		4.00	15.00			
	TYPE	WASTE	WASTE		WASTE	WASTE			
		MDA	MDA		MDA	MDA			
ACTINIUM-228	-19.±10.	39.	2.±22.	41.	-0.6±9.1	18.	4.±21.	33.	
BISMUTH-212	-29.±24.	74.	-21.±23.	72.	1.±20.	28.	-21.±36.	70.	
BISMUTH-214	-7.8±9.9	21.	0±12.	19.	8.9±7.4	11.	-3.±14.	23.	
CARBON-14	-8.±23.	43.	3.±24.	43.	-59.±53.	110	-32.±54.	100	
CESIUM-137	-6.1±3.5	11.	-5.8±5.4	11.	0.3±2.2	3.9	0.7±5.0	8.9	
COBALT-60	-1.8±4.0	8.9	2.3±3.9	7.6	-0.17±0.65	3.1	1.8±3.5	8.4	
GROSS ALPHA	3.1±4.5	7.6	C JL 16.3±3.0	1.7	JL 1.1±1.8	3.2	C -0.3±1.5	3.3	C
GROSS BETA	29.7±6.1	7.4	C 7.9±1.8	2.2	2.2±3.0	5.1	C -0.3±3.0	5.3	C
LEAD-210	-40±100	160	B Uz 40±100	160	B Uz 90±390	540	10±100	160	
LEAD-212	2.4±9.0	13.	-1.1±9.6	14.	1.5±5.8	8.5	1.5±9.6	14.	
LEAD-214	0±10.	17.	3.±10.	16.	8.3±6.3	9.4	3.±11.	19.	
POTASSIUM-40	65.±73.	98.	-62.±30.	130	-5.±34.	58.	24.±76.	120	
RADIUM-223	28.±52.	140	5.±51.	150	-13.±16.	78.	-62.±29.	150	
RADIUM-226	0.91±0.83	1.2	0.49±0.60	0.98	0.52±0.38	0.52	Jm 0.68±0.41	0.51	Jm
SR-89,90	1.2±1.2	2.0	1.1±1.1	1.9	1.75±0.60	0.88	0.10±0.50	0.87	
THALLIUM-208	-0.4±6.3	9.2	9.4±6.8	7.6	0.8±3.6	5.3	4.9±6.9	9.2	
THORIUM-234	10.±70.	180	2.±70.	180	61.±61.	210	-15.±70.	180	
TRITIUM	100±120	200	40±150	270	90±130	220	100±130	220	
URANIUM-235	13.±26.	38.	3.±27.	42.	2.±18.	26.	-12.±15.	42.	

All units report as pCi/L
Depth = Feet below ground surface.

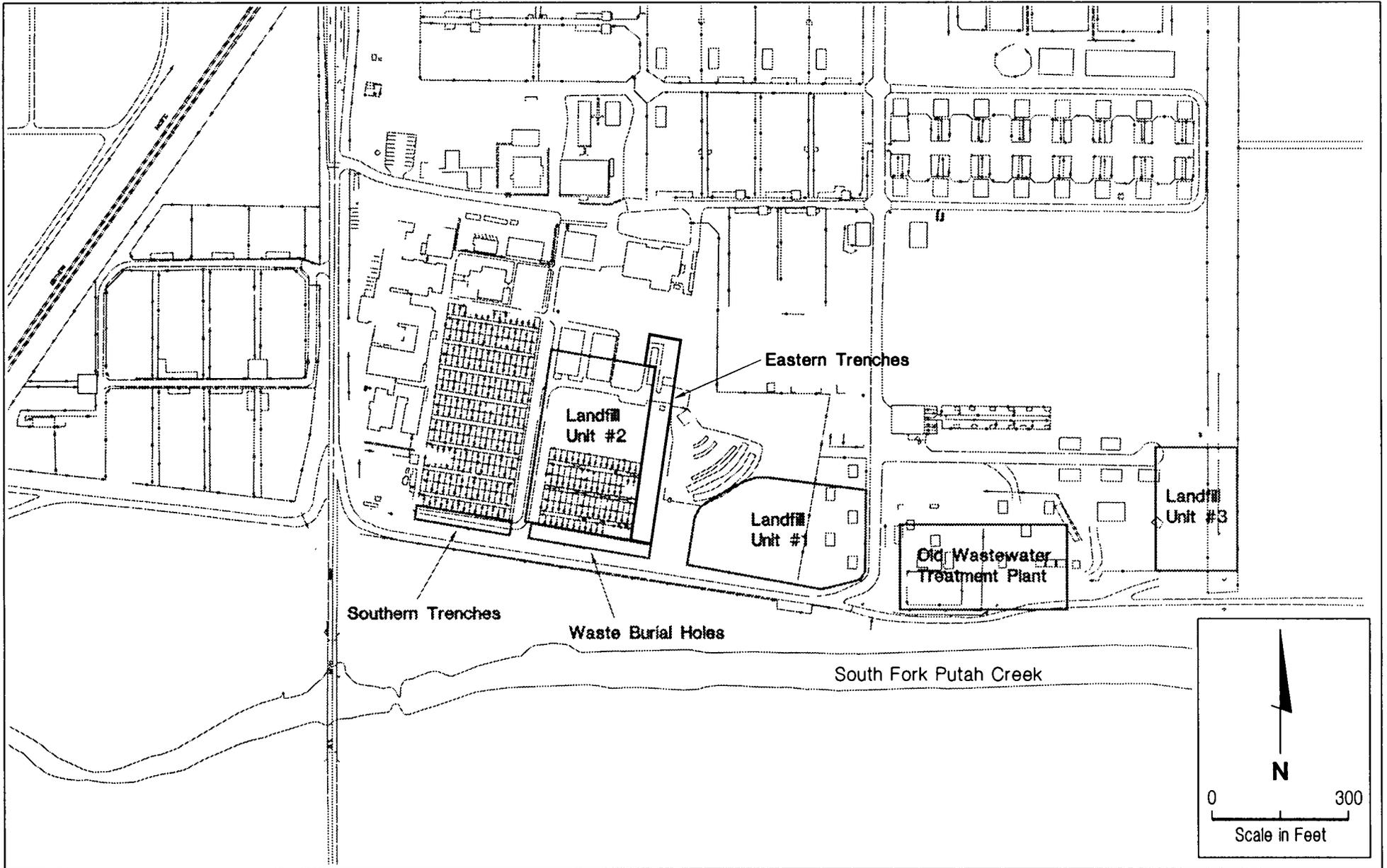


REFERENCE: USGS 7.5' Quadrangle; Merritt, CA, 1952, photorevised 1981;
and Davis, CA, 1952, photorevised 1981.



SITE VICINITY MAP

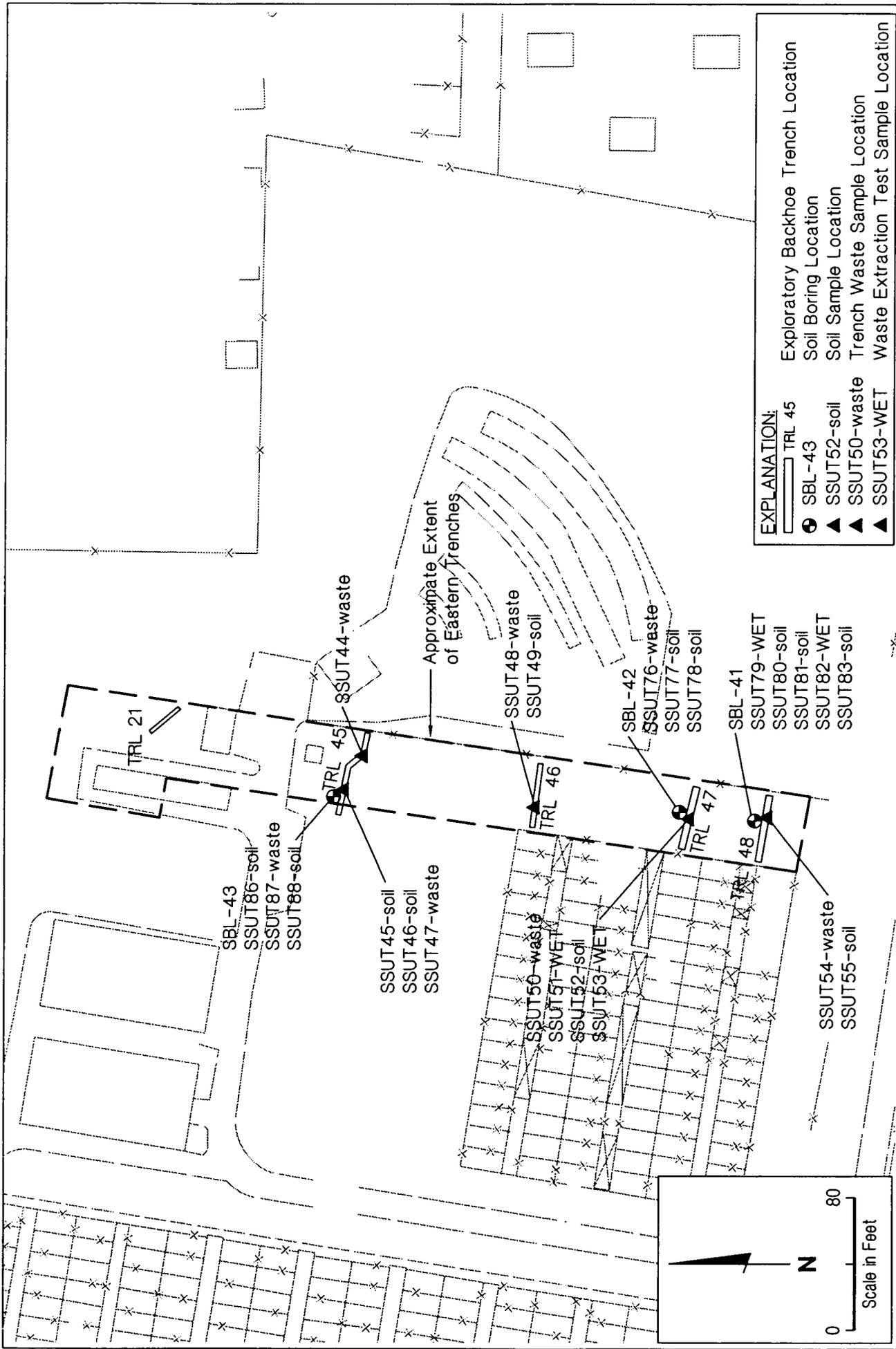
Data Gaps LFI - Data Transmittal
South Campus Disposal Site
Davis, California



LOCATION - EASTERN TRENCHES

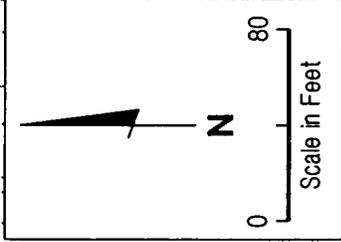
Data Gaps LFI - Data Transmittal
 South Campus Disposal Site
 Davis, California

FIGURE 2



EXPLANATION:

○	TRL 45	Exploratory Backhoe	Trench Location
●	SBL-43	Soil Boring Location	
▲	SSUT52-soil	Soil Sample Location	
▲	SSUT50-waste	Trench Waste Sample Location	
▲	SSUT53-WET	Waste Extraction Test Sample Location	



SOIL BORING AND TRENCH LOCATIONS EASTERN TRENCHES

Data Gaps LFI - Data Transmittal
South Campus Disposal Site
Davis, California

APPENDIX A
EXPLORATORY TRENCH LOGS

Date Started: 7/31/96 Date Completed: 7/31/96
 Water Level: Dry
 Orientation: NW-SE - Southwest wall
 Logged By: GAD
 Subcontractor: RCI
 Equipment: CAT416B
 Weather: Sunny and hot

EXPLANATION

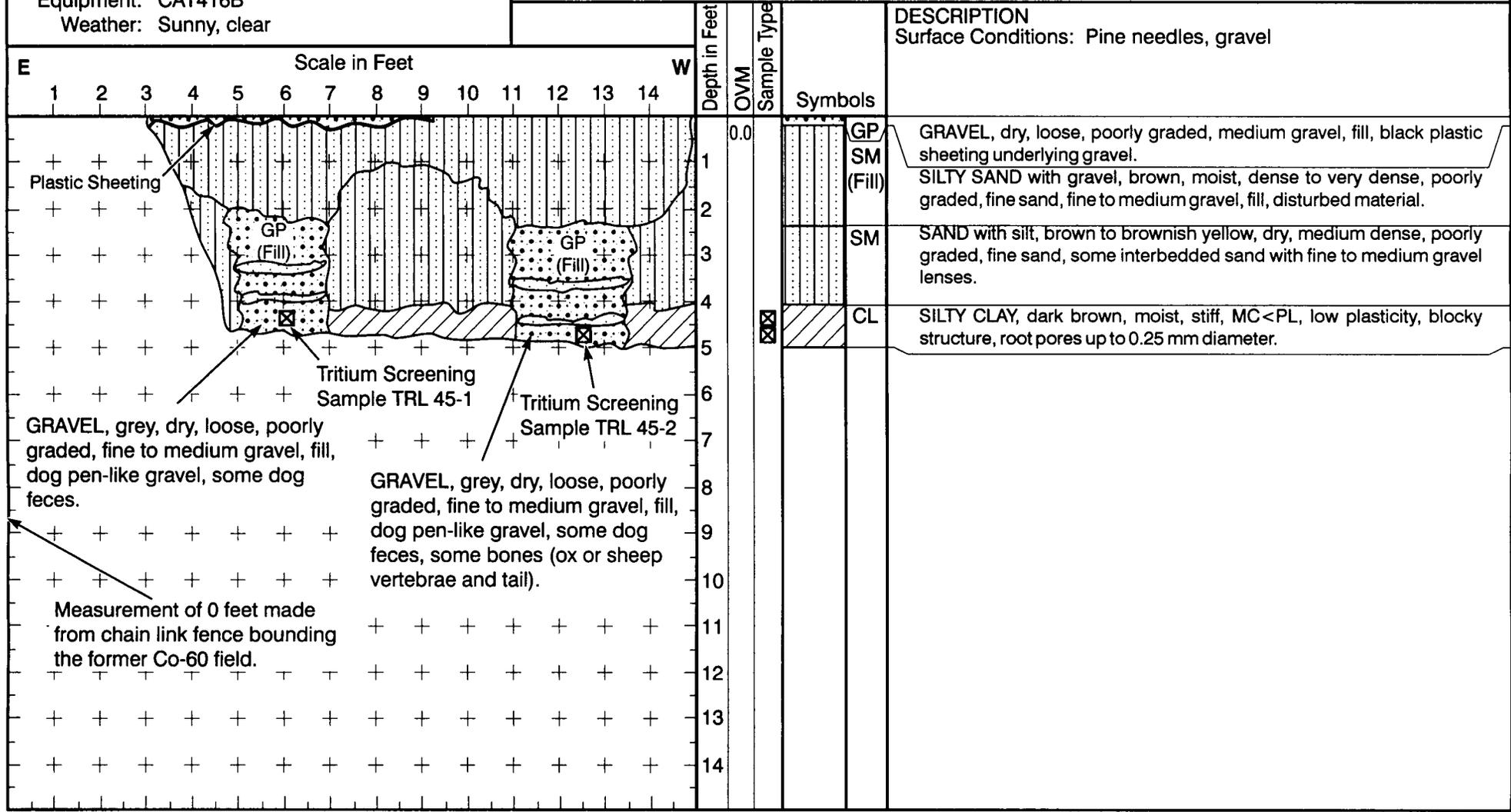
- Grab Sample for Chemical Analysis
- Hand Driven Sampler
- Formation Contact
- - - - Inferred Contact
- Gradational Formation Contact

Scale in Feet		Depth in Feet	Sample Type	Symbols	DESCRIPTION
NW	SE	1			DISCED FIELD, SPARSE VEGETATION. SILTY SAND/SAND with silt, brown to yellowish brown, dry, medium dense, poorly graded, very fine to fine sand, some interbedded SAND layers. GRAVELLY SAND, dry, loose, gravel is well graded, fine to coarse gravel, SAND is poorly graded, medium sand. CLAYEY SILT, dark brown, moist, stiff, MC < PL, low plasticity.
		2			
		3			
		4			
		5			Possible historic trench (disturbed material including: clear plastic, a nail, clasts of clayey silt from the underlying zone). Possible historic trench (disturbed material and tiny conical snail shells (1mm x 2mm))
		6			
		7			
		8			
		9			
		10			
		11			
		12			
		13			
		14			

Date Started: 8/21/96 Date Completed: 8/21/96
 Water Level: Dry
 Orientation: E-W
 Logged By: GAD
 Subcontractor: RCI
 Equipment: CAT416B
 Weather: Sunny, clear

EXPLANATION

- ☒ Grab Sample for Chemical Analysis
- Hand Driven Sampler
- Formation Contact
- - - - Inferred Contact
- ↘ Gradational Formation Contact

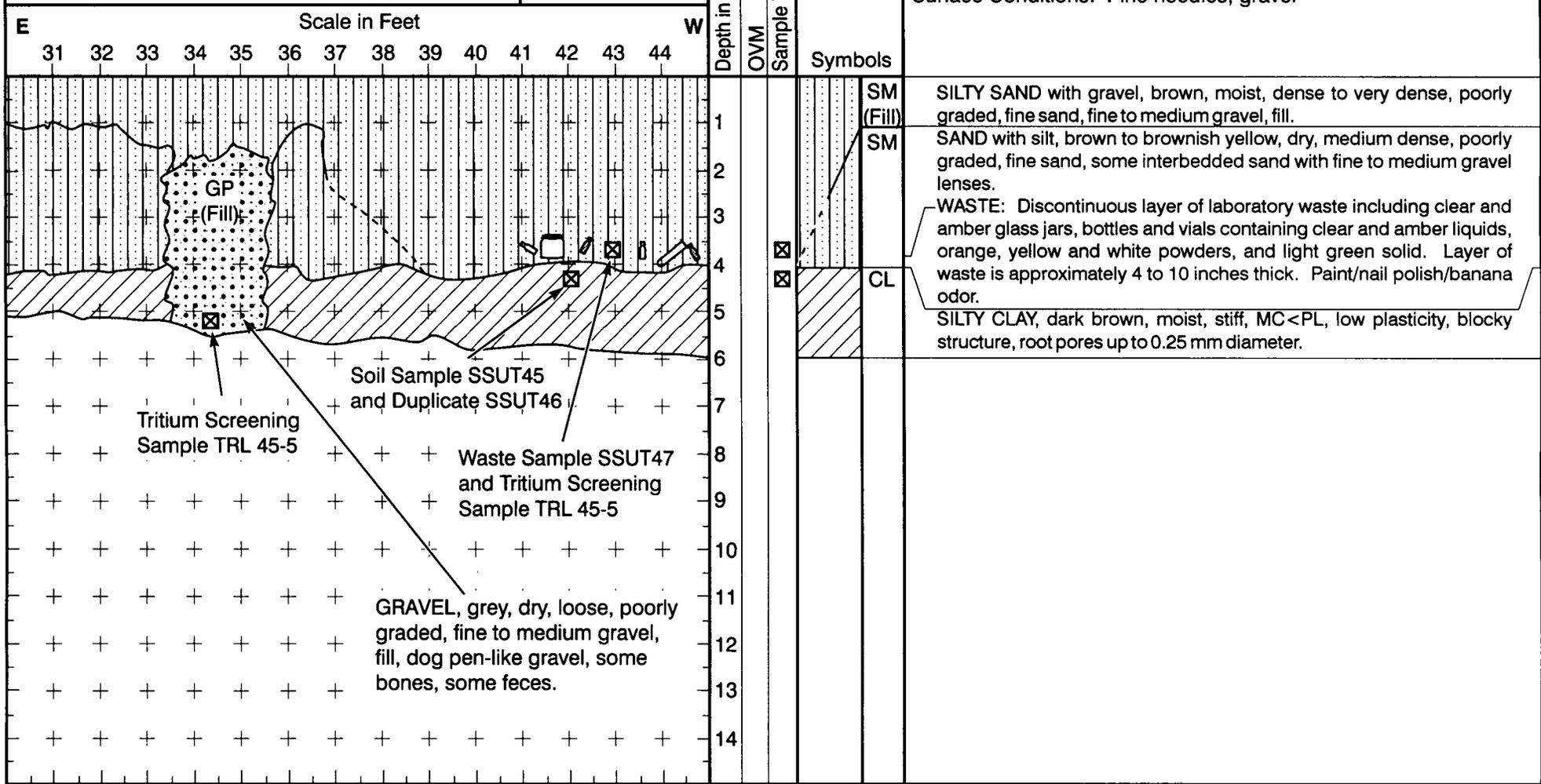


EASTERN TRENCHES - TRENCH LOG TRL 45

South Campus Disposal Site
 University of California
 Davis, California

Date Started: 8/21/96 Date Completed: 8/21/96
 Water Level: Dry
 Orientation: E-W
 Logged By: GAD
 Subcontractor: RCI
 Equipment: CAT416B
 Weather: Sunny, clear

EXPLANATION
 Grab Sample for Chemical Analysis
 Hand Driven Sampler
 — Formation Contact
 - - - - Inferred Contact
 \ Gradational Formation Contact



EASTERN TRENCHES - TRENCH LOG TRL 45

South Campus Disposal Site
 University of California
 Davis, California

Date Started: 8/21/96 Date Completed: 8/21/96
 Water Level: Dry
 Orientation: E-W
 Logged By: GAD
 Subcontractor: RCI
 Equipment: CAT416B
 Weather: Sunny, clear

EXPLANATION

- Grab Sample for Chemical Analysis
- Hand Driven Sampler
- Formation Contact
- - - - Inferred Contact
- Gradational Formation Contact

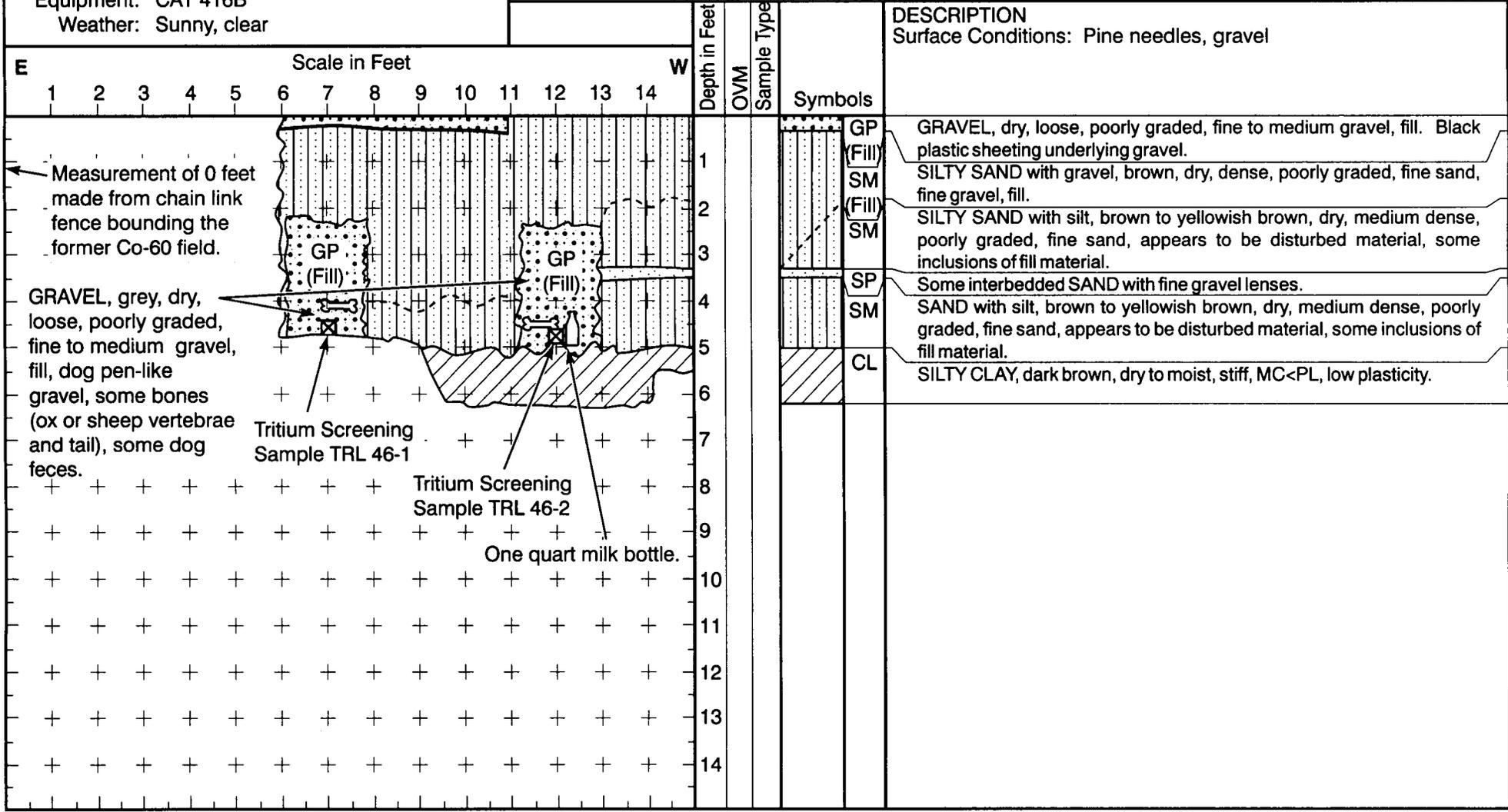
Scale in Feet												Depth in Feet	OVM	Sample Type	Symbols	DESCRIPTION		
E	46	47	48	49	50	51	52	53	54	55	56						57	58
															1		SM (Fill)	SILTY SAND with gravel, brown, moist, dense to very dense, poorly graded, fine sand, fine to medium gravel, fill.
															2		SM	SAND with silt, brown to brownish yellow, dry, medium dense, poorly graded, fine sand, some interbedded sand with fine to medium gravel lenses.
															3			WASTE: Discontinuous layer of laboratory waste including clear and amber glass jars, bottles and vials containing clear and amber liquids, orange, yellow and white powders, and light green solid. Layer of waste is approximately 4 to 10 inches thick. Paint/nail polish/banana odor.
															4		CL	SILTY CLAY, dark brown, moist, stiff, MC<PL, low plasticity, blocky structure, root pores up to 0.25 mm diameter.
															5			
															6			
															7			
															8			
															9			
															10			
															11			
															12			
															13			
															14			

EASTERN TRENCHES - TRENCH LOG TRL 45

South Campus Disposal Site
 University of California
 Davis, California

Date Started: 8/22/96 Date Completed: 8/22/96
 Water Level: Dry
 Orientation: E-W
 Logged By: GAD
 Subcontractor: RCI
 Equipment: CAT 416B
 Weather: Sunny, clear

EXPLANATION	
☒ Grab Sample for Chemical Analysis	— Formation Contact
○ Hand Driven Sampler	- - - - Inferred Contact
	↘ Gradational Formation Contact



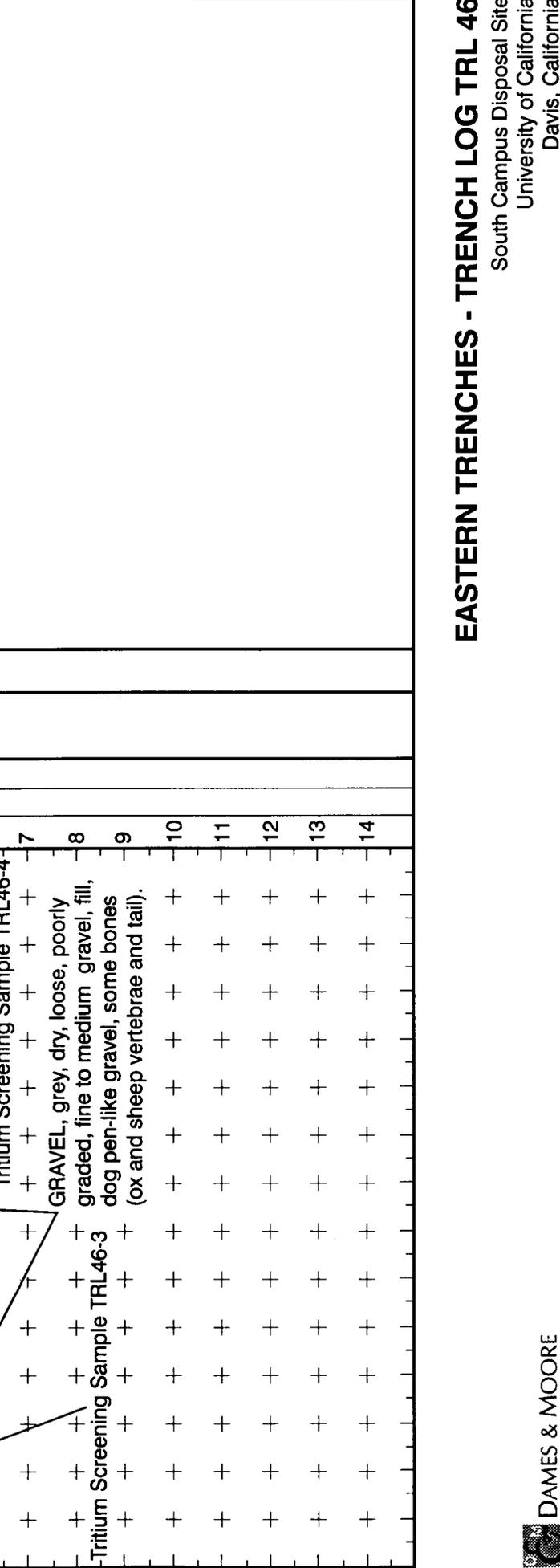
EASTERN TRENCHES - TRENCH LOG TRL 46

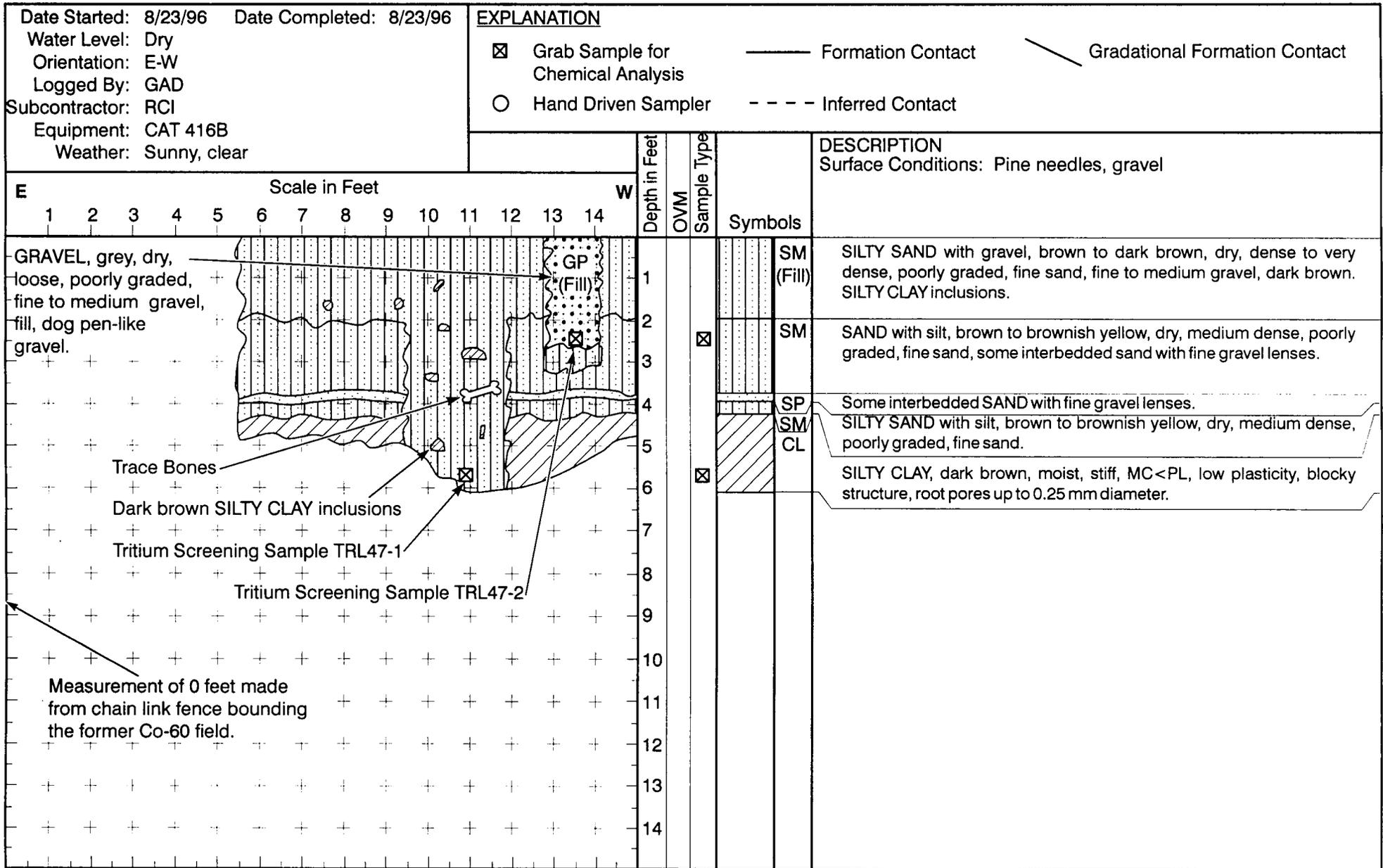
South Campus Disposal Site
 University of California
 Davis, California

Date Started: 8/22/96 **Date Completed:** 8/22/96
Water Level: Dry
Orientation: E-W
Logged By: GAD
Subcontractor: RCI
Equipment: CAT 416B
Weather: Sunny, clear

EXPLANATION
 Grab Sample for Chemical Analysis
 Hand Driven Sampler
 — Formation Contact
 - - - - Inferred Contact
 \ Gradational Formation Contact

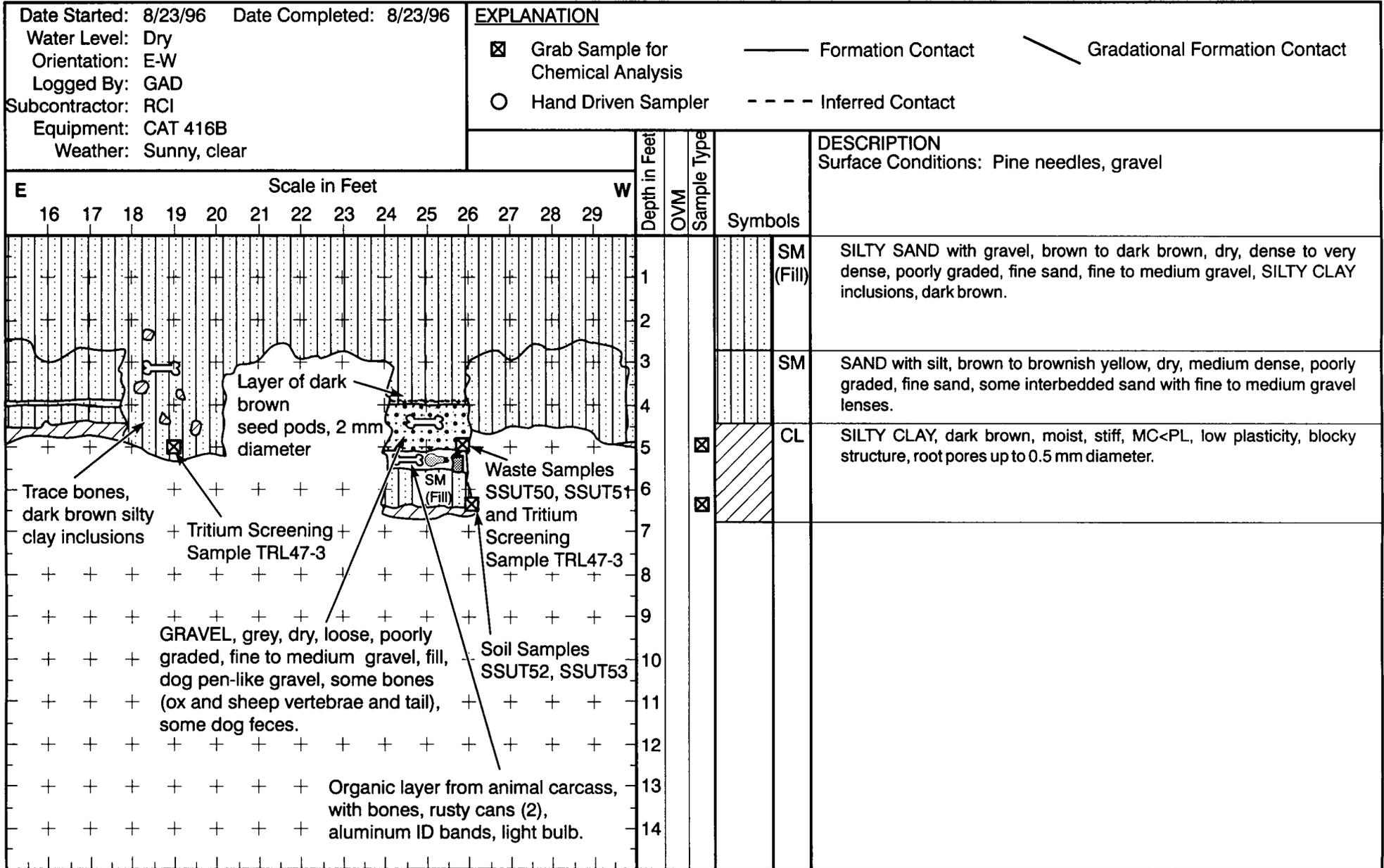
Scale in Feet	Depth in Feet	Sample Type	Symbols	DESCRIPTION
16	1		SM (Fill)	SILTY SAND with gravel, brown, dry, dense, poorly graded, fine sand, fine gravel, fill.
17	2		SM	SAND with silt, brown to yellowish, dry, medium dense, poorly graded, fine sand, appears to be disturbed material, some inclusions of fill material.
18	3		SP/SM	Some interbedded SAND with fine gravel lenses.
19	4		SM	SAND with silt, brown to brownish yellow, moist, medium dense, poorly graded, fine sand.
20	5	<input checked="" type="checkbox"/>	CL	SILTY CLAY, dark brown, dry to moist, stiff, MC < PL, low plasticity.





EASTERN TRENCHES - TRENCH LOG TRL 47

South Campus Disposal Site
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EASTERN TRENCHES - TRENCH LOG TRL 47

South Campus Disposal Site
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 Davis, California

Date Started: 8/23/96 Date Completed: 8/23/96
 Water Level: Dry
 Orientation: E-W
 Logged By: GAD
 Subcontractor: RCI
 Equipment: CAT 416B
 Weather: Sunny, clear

EXPLANATION

- Grab Sample for Chemical Analysis
- Hand Driven Sampler
- Formation Contact
- Inferred Contact
- \ Gradational Formation Contact

Scale in Feet														Depth in Feet	OVM	Sample Type	Symbols	DESCRIPTION
E	31	32	33	34	35	36	37	38	39	40	41	42	43					
														1		SM (Fill)	SILTY SAND with gravel, brown to dark brown, dry, dense to very dense, poorly graded, fine sand, fine to medium gravel, SILTY CLAY inclusions, dark brown.	
														2		SM	SAND with silt, brown to brownish yellow, dry, medium dense, poorly graded, fine sand, some interbedded sand with fine gravel lenses.	
														3				
														4	<input checked="" type="checkbox"/>			
														5	<input checked="" type="checkbox"/>	CL	SILTY CLAY, dark brown, moist, stiff, MC<PL, low plasticity, blocky structure, root pores up to 0.5 mm diameter.	
														6				
														7				
														8				
														9				
														10				
														11				
														12				
														13				
														14				

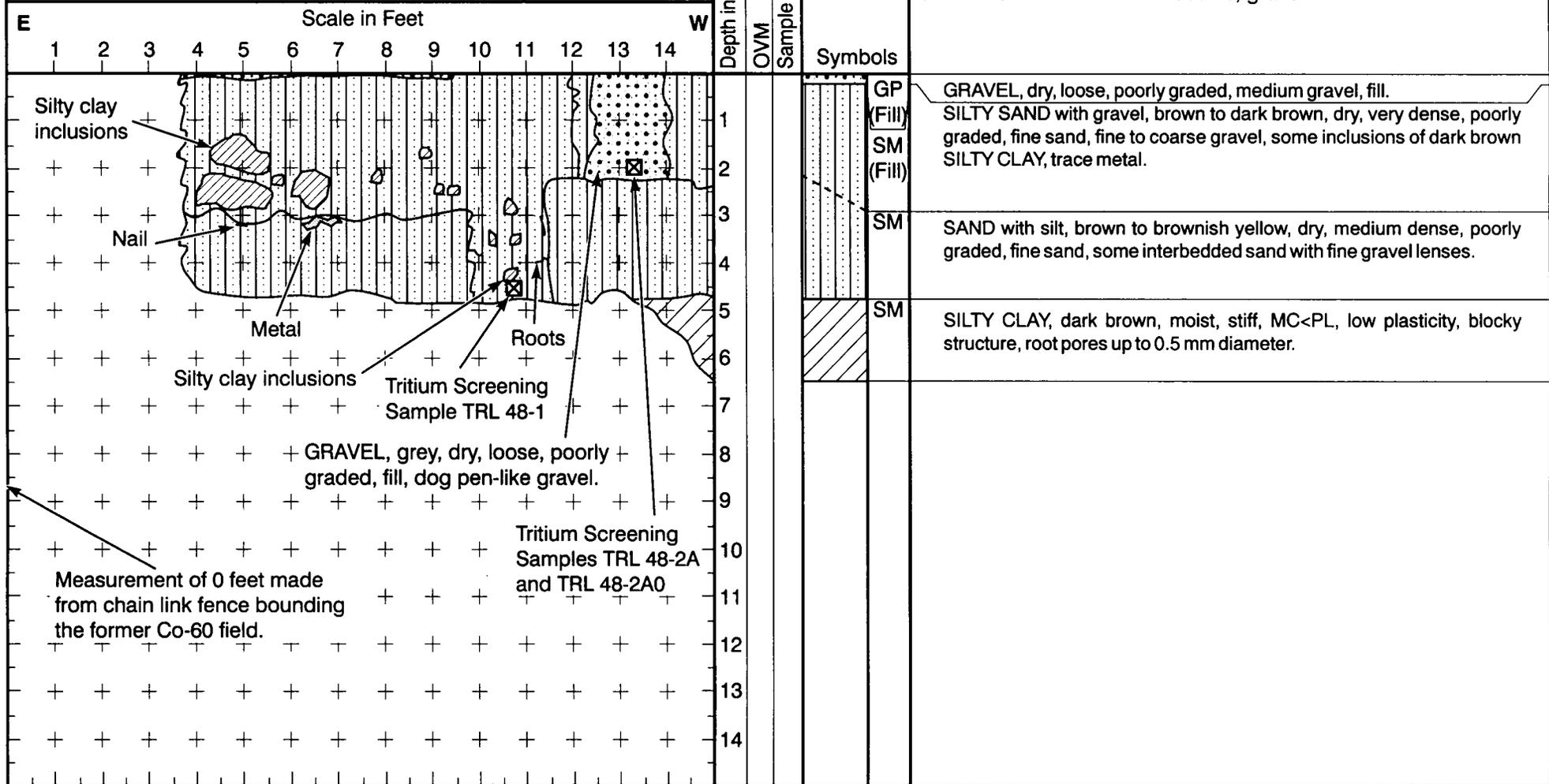
EASTERN TRENCHES - TRENCH LOG TRL 47

South Campus Disposal Site
 University of California
 Davis, California

Date Started: 8/26/96 Date Completed: 8/26/96
 Water Level: Dry
 Orientation: E-W
 Logged By: GAD
 Subcontractor: RCI
 Equipment: CAT 416B
 Weather: Sunny, clear

EXPLANATION

- ☒ Grab Sample for Chemical Analysis
- Hand Driven Sampler
- Formation Contact
- - - - Inferred Contact
- ↘ Gradational Formation Contact



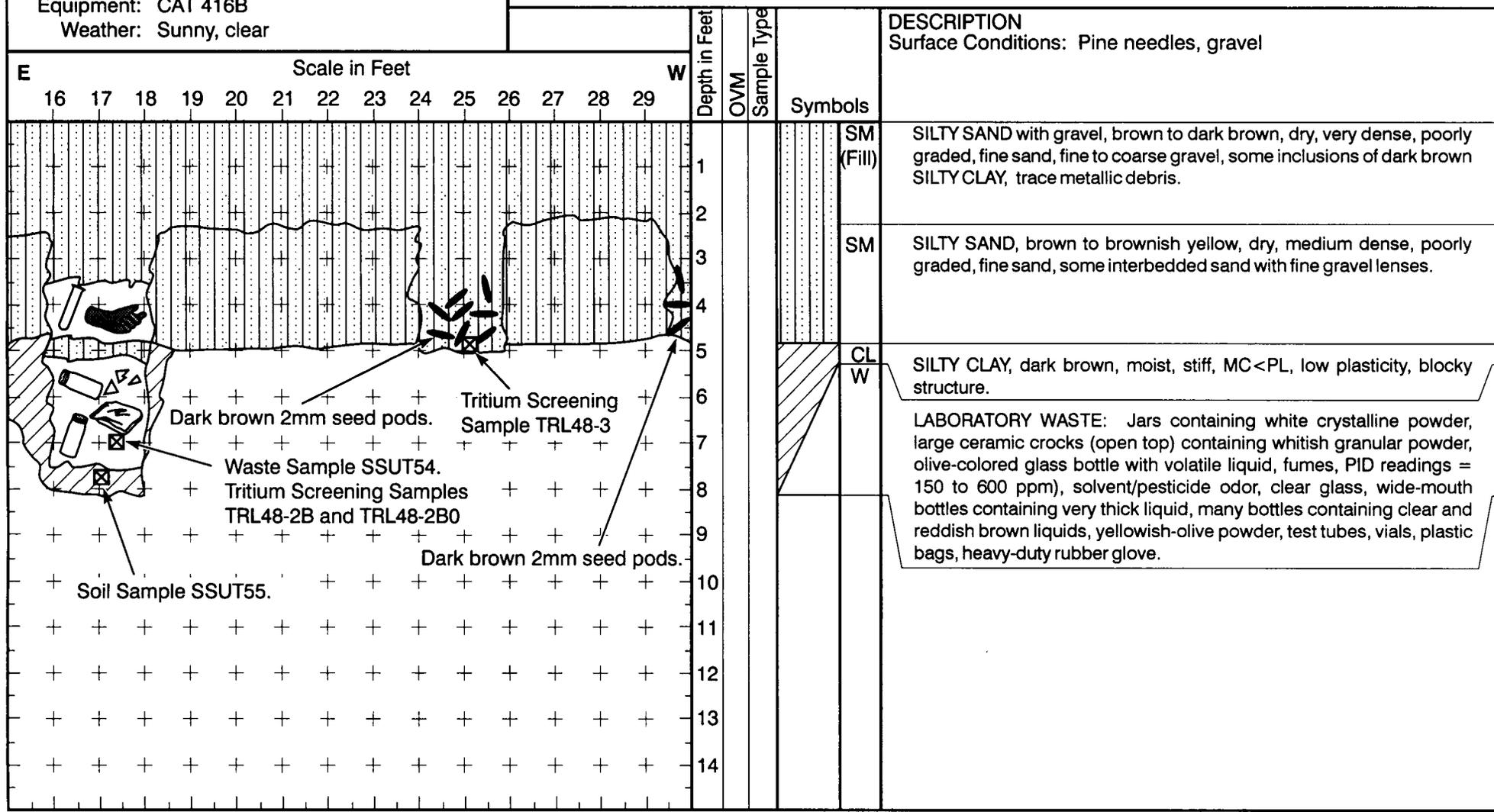
EASTERN TRENCHES - TRENCH LOG TRL 48

South Campus Disposal Site
 University of California
 Davis, California

Date Started: 8/26/96 Date Completed: 8/26/96
 Water Level: Dry
 Orientation: E-W
 Logged By: GAD
 Subcontractor: RCI
 Equipment: CAT 416B
 Weather: Sunny, clear

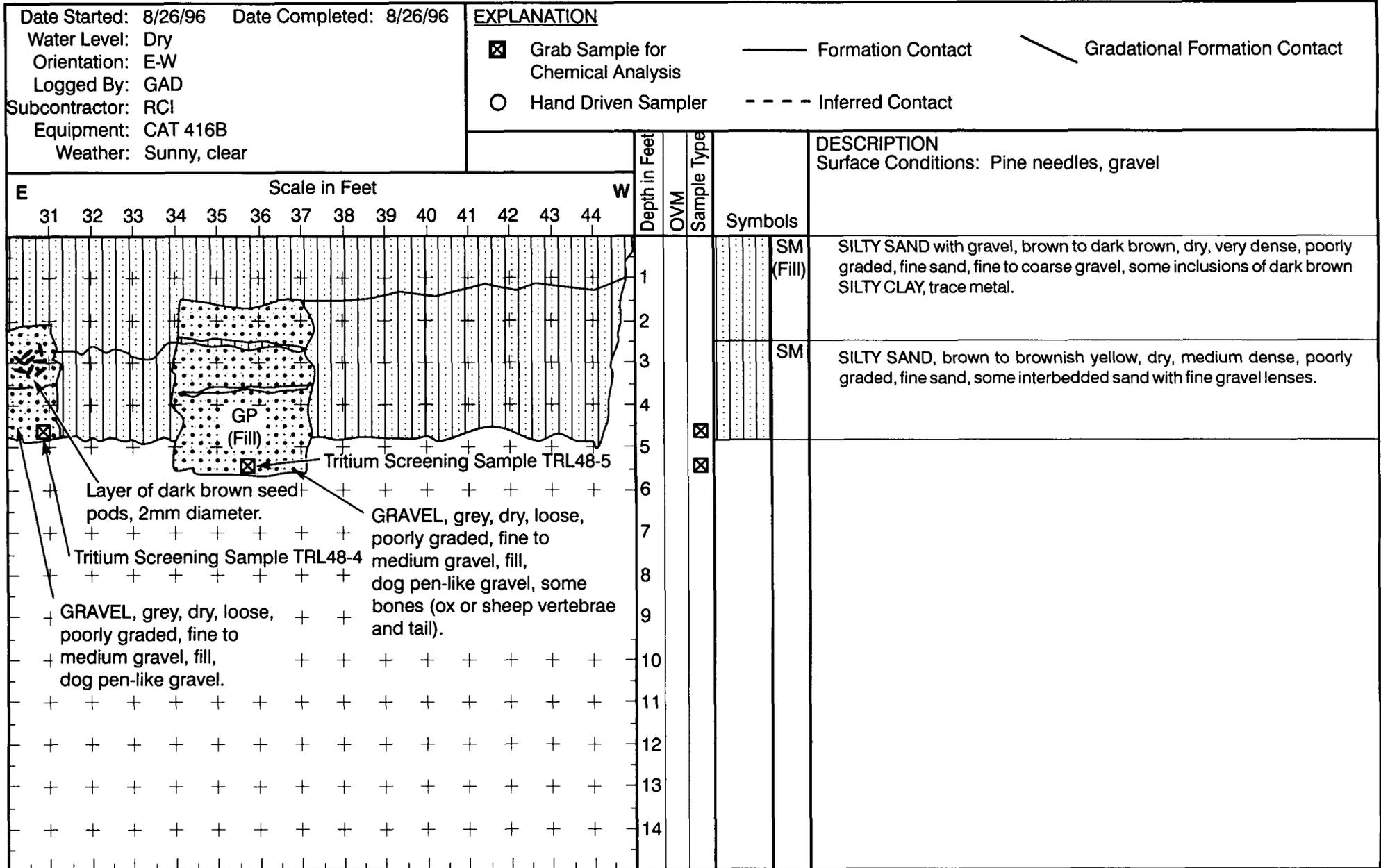
EXPLANATION

- Grab Sample for Chemical Analysis
- Hand Driven Sampler
- Formation Contact
- - - - Inferred Contact
- Gradational Formation Contact



EASTERN TRENCHES - TRENCH LOG TRL 48

South Campus Disposal Site
 University of California
 Davis, California



EASTERN TRENCHES - TRENCH LOG TRL 48

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 Davis, California

APPENDIX B
SOIL BORING LOGS

SOIL BORING

SBL-41

Location: Eastern Trenches
 Drilling Method: 8" Hollow Stem Auger Mobile M-11
 Sampling Method: Cal. Modified Split-spoon (DS); Cont. Core Barrel (CC)
 Date Completed: 9/24/96
 Elevation (Top of Casing):

SAMPLING						Samples	Symbols	USCS	Description
Sampler Type	Inches Driven/Rec	Blows per Foot	OVM Sample	α Activity Sample	β Activity Sample				
0	Drill DS	18/10	47	-	BKG	BKG	GP	GRAVEL, gray, dry, loose, poorly graded, fine to medium gravel, fill.	
	DS	18/18	27	-	BKG	BKG	SM (Fill)	SILTY SAND, with gravel, brown, dry, dense to very dense, poorly graded, fine sand, fill.	
	DS	18/10	8	-	BKG	BKG	CL	SILTY CLAY, dark brown, dry to moist, very stiff, MC<PL, low to medium plasticity, no structure.	
	DS	18/18	14	-	BKG	BKG	SM	SILTY SAND, with gravel, brown, dry, dense, poorly graded, fine sand, trace pores to 0.1 mm diameter, fine gravel.	
5	DS	18/18	24	-	BKG	BKG	SW	SAND, dark gray, dry, loose, well graded, fine to coarse sand.	
	CC	36/29					CL	SILTY CLAY, dark brown, dry to moist, very stiff, MC<PL, low to medium plasticity, blocky structure, some pores, trace roots. Color change to brown to dark brown, increase in pores to 0.25 mm diameter.	
	DS	18/11	25	-	BKG	BKG	ML	SANDY SILT with clay, brown, moist, dense, poorly graded, very fine sand, abundant pores to 0.25 mm diameter, some light brown clay lined pores.	
10	CC	42/30					SM/ML	SILTY SAND/SANDY SILT, brown, moist, dense, poorly graded, very fine sand, some clayey layers.	
	DS	18/14	29	-	BKG	BKG	SM	SILTY SAND, brown to brownish yellow, moist, medium dense, poorly graded, very fine sand, abundant pores to 1.0 mm diameter, predominantly 0.1 to 0.5 mm diameter.	
15	CC	42/42					ML	CLAYEY SILT, brown, moist, medium stiff, abundant pores, pores up to 3.0 mm diameter, clay lined pores, blocky structure.	
	DS	18/14	20	-	BKG	BKG	CL/ML	CLAYEY SILT/SILTY CLAY, brown, moist, medium stiff, MC≅PL, low plasticity, blocky structure, pores up to 0.5 mm diameter.	
20	CC	42/42					CL	Trace very fine sand. SILTY CLAY, brown to brownish yellow, moist, medium stiff, MC<PL, low to medium plasticity.	
	DS	18/10	22	-	BKG	BKG	CL/ML	SILTY CLAY/CLAYEY SILT, brown to brownish yellow, moist, medium stiff to stiff, MC<PL, low to medium plasticity, trace pores to 0.25 mm diameter, blocky structure.	
25	CC	42/42						Light brown concretions. Increase in very fine sand content, SANDY SILT lense.	
30	DS	18/14	37	-	BKG	BKG		Increase in concretions, some weakly cemented zones.	
35	CC	42/42							

EASTERN TRENCHES - SOIL BORING SBL-41

LEHR/SCDS Environmental Restoration
 University of California
 Davis, California

SOIL BORING

SBL-42

Location: Eastern Trenches
 Drilling Method: 8" Hollow Stem Auger Mobile M-11
 Sampling Method: Cal. Modified Split-spoon (DS); Cont. Core Barrel (CC)
 Date Completed: 9/24/96
 Elevation (Top of Casing):

SAMPLING						Samples	Symbols	USCS	Description
Sampler Type	Inches Driven/Rec	Blows per Foot	OVN Sample	α Activity Sample	β Activity Sample				
0	Drill DS	18/12	17	-	BKG	BKG	SM (Fill)	SILTY SAND, brown, dry, dense, well graded, very fine to medium sand, no structure. Fill. Decrease in silt content.	
	DS	18/15	11	-	BKG	BKG	SM	SILTY SAND/SAND with silt, brown, dry, poorly graded, very fine sand, roots. Decrease in silt content to SAND with silt lense, increase in grain size to fine to medium sand, some fine gravel.	
	DS	18/13	14	-	BKG	BKG	CL	Decrease in grain size to very fine to fine sand, increase in silt content.	
5	DS	18/12	35	-	BKG	BKG		SILTY CLAY, dark brown, dry to moist, very stiff to hard, no structure, MC << PL, low to medium plasticity, no pores. Moist, abundant pores up to 0.5 mm diameter, blocky structure, light brown clay lined pores, increase in silt content.	
	CC	18/18	61	-	BKG	BKG	ML	SANDY SILT, brown to brownish yellow, dry, dense, poorly graded, very fine sand, blocky structure, some pores up to 0.25 mm diameter.	
10	DS	18/9	21	-	BKG	BKG		SM	SILTY SAND, brown to brownish yellow, dry, dense, poorly graded, very fine sand, some pores up to 0.25 mm diameter. Increase in clay content.
	CC	42/38					ML CL	CLAYEY SILT/SILTY CLAY, brown to brownish yellow, moist, medium stiff, MC < PL, low plasticity, abundant pores to 2.0 mm.	
15	DS	18/12	32	-	BKG	BKG			
	CC	42/42					ML		
20	DS	18/12	20	-	BKG	BKG			
	CC	42/42					ML		
25	DS	18/12	36	-	BKG	BKG			Increase in consistency to stiff to very stiff.
	CC	42/42					ML		
30	DS	18/13	28	-	BKG	BKG		SM	CLAYEY SILT, brown to brownish yellow, moist, dense, MC < PL, low plasticity, some pores to 0.25 mm diameter.
	CC	42/42					SM	SILTY SAND, some clay, brown to brownish yellow, moist, dense, poorly graded, fine sand. Decrease in clay content to SILTY SAND.	
							ML	CLAYEY SILT, brown to brownish yellow, moist, dense, MC < PL, low plasticity, some pores to 0.25 mm diameter, some light brown concretions.	
							CL	SILTY CLAY, brown to brownish yellow, moist, medium stiff, MC < PL, low plasticity, some light brown concretions, some pores to 0.1 mm diameter.	
35									

ESTERN TRENCHES - SOIL BORING SBL-42

LEHR/SCDS Environmental Restoration
 University of California
 Davis, California

SOIL BORING

SBL-42

SAMPLING

Sampler Type	Inches Driven/Rec	Blows per Foot	OVM Sample	α Activity Sample	β Activity Sample
DS	18/15	36	-	BKG	BKG

Samples

Location: Eastern Trenches
 Drilling Method: 8" Hollow Stem Auger Mobile M-11
 Sampling Method: Cal. Modified Split-spoon (DS); Cont. Core Barrel (CC)
 Date Completed: 9/24/96
 Elevation (Top of Casing):

Depth (ft)	Symbols	USCS	Description
35		CL	
			T.D. @ 36.5 ft bgs.
40			
45			
50			
55			
60			
65			
70			

EASTERN TRENCHES - SOIL BORING SBL-42

LEHR/SCDS Environmental Restoration
 University of California
 Davis, California

SOIL BORING

SBL-43

Location: Eastern Trenches
 Drilling Method: 8" Hollow Stem Auger Mobile M-11
 Sampling Method: Calif. Modified Split-spoon (DS); Cont. Core Barrel (CC)
 Date Completed: 9/25/96
 Elevation (Top of Casing):

SAMPLING						Samples	Symbols	USCS	Description
Sampler Type	Inches Driven/Rec	Blows per Foot	OVM Sample	α Activity Sample	β Activity Sample				
0	Drill DS	18/17	12	0.0	BKG	BKG	SM (Fill)	SILTY SAND, brown, dry, medium dense, poorly graded, very fine to fine sand, trace fine gravel, roots, no structure. Fill.	
	DS	18/14	22 25	0.0	BKG	BKG	SP	SAND with silt and gravel, gray, dry, medium dense, poorly graded, medium sand, trace coarse sand, fine gravel.	
	DS	18/14	36	0.0	BKG	BKG	SM	SAND with silt, brown, dry, medium dense, poorly graded, fine sand. SILTY CLAY, dark brown, moist, stiff to very stiff, MC<PL, low to medium plasticity, blocky structure, some pores to 0.1 mm diameter.	
5	CC	54/48					CL		
							ML	CLAYEY SILT, some sand, brown, moist, very fine sand, MC<PL, low plasticity, blocky structure, some pores to 0.25 mm diameter.	
							SM		
10	DS	18/11	19	0.0	BKG	BKG	SM	SILTY SAND, brown, moist, medium dense, poorly graded, very fine sand, some pores to 0.25 mm diameter.	
	CC	42/42							
							ML	SANDY SILT, some clay, brown, moist, dense, very fine sand, some pores to 0.25 mm diameter.	
							CL		
15	DS	18/8	21	0.0	BKG	BKG	CL	SILTY CLAY, brown, moist, medium stiff, MC<PL, low plasticity, blocky structure, pores to 0.25 mm diameter.	
	CC	42/42							
							ML	SILTY CLAY/CLAYEY SILT, brown, moist, medium stiff, MC<PL, low plasticity, blocky structure, abundant pores, some pores up to 2.0 mm diameter.	
							CL		
20	DS	18/12	28	0.0	BKG	BKG	CL	SILTY CLAY, brown to brownish yellow, moist, stiff, MC<PL, low to medium plasticity, some pores 0.1 to 0.25 mm diameter.	
	CC	42/42						Increase in consistency to stiff to very stiff, some gray mottling, some light brown seams.	
							ML	CLAYEY SILT/SILTY CLAY, brown to brownish yellow, moist, medium stiff, MC<PL, low plasticity.	
							CL		
25	DS	18/10	33	0.0	BKG	BKG	ML	Some light brown concretions.	
	CC	42/42					CL		
							CL	SILTY CLAY, brown to brownish yellow, moist, stiff, MC<PL, low to medium plasticity, blocky structure, trace gray mottling, some light brown concretions.	
30	DS	18/16	28	0.0	BKG	BKG	CL		
	CC	42/42							
35									

EASTERN TRENCHES - SOIL BORING SBL-43

LEHR/SCDS Environmental Restoration
 University of California
 Davis, California

SOIL BORING

SBL-43

SAMPLING

Sampler Type	Inches Driven/Rec	Blows per Foot	OVM Sample	α Activity Sample	β Activity Sample
DS	18/12	40	0.0	BKG	BKG

Samples

Location: Eastern Trenches
 Drilling Method: 8" Hollow Stem Auger Mobile M-11
 Sampling Method: Calif. Modified Split-spoon (DS); Cont. Core Barrel (CC)
 Date Completed: 9/25/96
 Elevation (Top of Casing):

Depth (ft)	Symbols	USCS	Description
35		CL	
			T.D @ 36.5 ft bgs.
40			
45			
50			
55			
60			
65			
70			

EASTERN TRENCHES - SOIL BORING SBL-43

LEHR/SCDS Environmental Restoration
 University of California
 Davis, California



APPENDIX C
DATA QUALITY SUMMARY

APPENDIX C

DATA QUALITY SUMMARY

This appendix summarizes the quality of the data collected from the Eastern Trenches investigation as part of the Data Gaps Limited Field Investigation. Soil samples were collected from trench locations August 21-23 and 26, 1996 and from soil boring locations September 24 and 26, 1996, and submitted to Lockheed Analytical Services for analysis. Hardcopy formats of analytical results were received from the laboratory September 11 through October 16, 1996. This section summarizes the data validation process, and reviews validation results.

C-1.0 Data Validation

Samples were analyzed and validated according to criteria established in the program's Quality Assurance Project Plan (QAPjP). The QAPjP is presented in an appendix of the Final Draft RI/FS Work Plan-UC Davis Additional Field Investigations/LEHR Environmental Restoration project (Dames & Moore, 1994). In support of the Revised Data Gaps Work Plan (UC Davis, 1996) and other additional investigations conducted by UC Davis an addendum to the QAPjP was prepared and effective July 19, 1996. Included in the QAPjP Addendum are sections identifying quality control sample collection requirements and specific quality assurance objectives for the measurement of data associated with this task. These QA objectives, typically called data quality objectives (DQOs), are quantitative and qualitative statements that specify the quality of data used to support project decisions. They are expressed in terms of precision, accuracy, representativeness, comparability, and completeness (PARCCs).

The criteria for evaluating DQOs is presented in the QAPjP-Addendum (Dames & Moore, 1996). These criteria include review of quality control (QC) samples collected in the field, laboratory QC samples, and analytical method performance. The field QC samples and analytical data reports were reviewed in accordance with validation procedures presented in the QAPjP.

Quality control samples collected in the field and submitted for complete analysis include three field duplicates to assess precision and representativeness, and five associated travel blank samples, analyzed only for volatile organic compounds, to identify contaminants which may have been introduced during sample transit, handling, or during sample storage at the laboratory. Additionally, two equipment blank samples were collected and analyzed to evaluate the cleanliness of sampling equipment and containers. The laboratory also analyzed a method blank for each analytical batch to detect reagent contamination. In addition, a laboratory control sample was analyzed for each analytical batch except the volatile organic compounds to detect proper instrument performance. A laboratory control sample is not required by Contract Laboratory Program (CLP) protocol for soil volatile organic analyses.

C-2.0 Review of PARCC Parameters

The three primary objectives of data validation include; review of sampling, analytical, and data reduction protocols for correctness; quantitative assessment of the measurement data validity; and, assessment of data completeness. The project data validation procedures were designed to review each data set and identify biases inherent to the data including assessment of laboratory performance, overall precision and accuracy, representativeness and completeness.

Tables 4 through 6, located in the main body of this transmittal, present the data for the Eastern Trenches field investigation. Data validation flags have been applied to those sample results which fell outside of specified tolerance limits, and therefore, did not meet the program's quality assurance objectives. An explanation of the data qualifiers presented in this report is provided with the data tables.

C-2.1 Precision

Precision is a measure of the ability to reproduce results under a given set of conditions and is expressed as the relative percent difference (RPD) between a primary result and a duplicate result. The analysis of laboratory duplicates is used to assess precision of analytical procedures. The analysis of blind field duplicate samples evaluates sampling and analytical precision. The results of laboratory and field duplicates for Eastern Trenches samples are presented below.

Laboratory duplicate samples were analyzed to measure analytical precision for some metals, general chemistry, and radiochemistry methods. Laboratory duplicate samples were reviewed as part of the validation process. Some reported detections of chromium, nickel, lead, mercury, zinc, nitrate (as N), and radium-226, were qualified as estimated "J" due to duplicate imprecision.

Matrix spike analyses were performed in duplicate to assess analytical precision for the volatiles, semivolatiles, and pesticides analyses. Associated precision criteria were met for these analyses.

Field duplicates were collected by filling two identical sets of sample containers from the soil boring or trench and labeling one set with a fictitious sample identification. Field duplicates are traced using the Field Record of Soil Sampling Form and the Soil Sampling Tracking Form. When laboratory results are received, the fictitious sample name is changed to the appropriate location identification and designated in the database as a "duplicate sample."

Field duplicates were collected from one trench location, SSUT0045. There were no significant differences noted in the results of the field duplicate pairs. Evaluation of these results indicates acceptable sample collection techniques and good laboratory precision. These data were determined to be representative of field conditions.

C-2.2 Accuracy

Accuracy is a measure of the bias of an analytical method. Accuracy is evaluated by assessing the agreement of a measurement with a known true value, and is expressed using percent recovery. Percent recovery is calculated using matrix or surrogate spike samples and laboratory control spike samples.

The results of the sample matrix, surrogate recoveries, and laboratory control spike samples were reviewed as part of the validation process. Sample results reported above the detection can be qualified as estimated (J) or rejected (R), if QC criteria are not met. For non-detect results, the associated detection limit may be qualified as estimated (UJ) or rejected (R) if QC criteria are not met. Qualifications made to the Eastern Trenches data based on this review are described below.

- ❖ Detection limits for 1,4-dichlorobenzene and 1,2,4-trichlorobenzene in the semivolatile analysis have been qualified as rejected "R" in some samples due to extremely low LCS recoveries. These results are unusable.
- ❖ Slightly low LCS recoveries for N-nitroso-di-n-propylamine, 1,2,4-trichlorobenzene, and acenaphthene, in the semivolatile fraction, and antimony in the metals fraction resulted in the qualification of their detection limits as estimated "UJ" in some samples. These results are useable, but indicate some bias.
- ❖ The reported activities for radium-226 and gross alpha radioactivity have been qualified as estimated "UJ" or "J" due to poor LCS recoveries. These results are useable, but indicate some bias.
- ❖ Detection limits for antimony have been qualified as estimated "UJ" and the reported detections for barium, chromium, copper, nickel, lead, zinc, and mercury have been qualified as estimated "J" in some samples due to aberrant matrix recoveries. The reported activities for radium -226, carbon-14, and radioactive strontium have been qualified as estimated "J" in some samples due to aberrant matrix spike recoveries. These results are useable, but indicate some bias.

This evaluation indicates acceptable field performance, however, the laboratory performance resulted in some unusable data. Results qualified as estimated do not adversely impact data quality.

C-2.3 Representativeness

Representativeness is a qualitative parameter which evaluates how accurately the data represent the actual environmental conditions. Representativeness is determined by evaluating the results of trip blanks, equipment blanks, laboratory method blanks, blind duplicate samples, and laboratory duplicate

samples. The evaluations of duplicate samples collected and analyzed for this program are also used to indicate acceptable precision (see section on precision). The results of travel blanks, equipment blanks, and laboratory method blanks are discussed below.

Travel blanks were used to identify volatile organic contaminants which may have been introduced during sample transit or during sample storage at the laboratory. The blanks were supplied by Lockheed Analytical Services and returned each sampling day in the cooler used to transport samples for volatile analyses. The analytical results for five associated travel blank samples are presented in Table C-1. Acetone was reported in two travel blanks (TBLF0041 and TBUT0023), however, similar concentrations of acetone were detected in the associated method blanks and the reported detections of acetone in the travel blanks were qualified as anomalous "U." No field data were qualified on this basis.

Equipment blanks were used to identify contaminants and possible sources of contamination for field sampling instruments. The laboratory supplied water is passed through sampling equipment and placed in the empty sample container for analysis. The analytical results for two equipment blank samples are presented in Table C-2. Nitrate (as N) and acetone was reported in two associated equipment blanks (EBUT0019 and EBUT0020). However, acetone was detected in the associated method blanks and the reported detections in the equipment blanks were qualified as anomalous "U." No additional field data were qualified on this basis.

Laboratory method blanks were prepared and analyzed using identical reagents, technique and instrumentation as for field samples. Laboratory method blanks were reviewed as part of the validation process. The following qualifications were made as part of this review.

- ❖ Acetone was detected in eight method blanks of the volatile fraction and similar levels were seen in some associated samples, two trip blanks (TBLF0041 and TBUT0023), and two equipment blanks (EBUT0019 and EBUT0020).
- ❖ Di-n-butylphthalate and bis(2-ethylhexyl)phthalate were reported in three method blanks and at similar levels in some associated samples during the semivolatile analyses.
- ❖ Phenol and diethylphthalate were also reported in one method blanks in the semivolatile fraction and similar level were seen in some associated samples.
- ❖ During metals analysis, barium, lead, and zinc were reported in a reagent blank. Both barium and zinc were reported at similar concentrations in some samples.

- ❖ Radium-226 was reported in four method blanks associated with the radiochemistry analyses and similar levels were detected in associated samples.
- ❖ Radioactive strontium and lead-210 were reported in two method blanks associated with the radiochemistry analyses and similar levels were detected in associated samples.

All levels of contamination in associated samples similar to blank contamination levels have been qualified as anomalous "U."

C-2.4 Comparability

Comparability is an expression of the confidence with which one data set can be compared to another. Comparability is achieved through the use of standard sampling procedures, analytical methods and units of measurement. Each Eastern Trenches sample was analyzed in accordance with the procedures outlined in the QAPjP. Laboratory reporting limits met the guidelines established in the QAPjP for those parameters not detected in Eastern Trenches samples.

C-2.5 Completeness

Completeness is defined as the percentage of valid data relative to the total number of analytes. The completeness goal for this program, as specified in the QAPjP, is ninety percent. For the Eastern Trenches, 98 percent of the data were completed.

Validation discrepancies identified during this monitoring event included problems with instrument calibrations, column agreement, surrogate recoveries, and chemical tracer recovery. Data associated with these anomalies have been flagged as estimated or rejected. Significant retention time shifts in the calibration and sample data for the pesticide/PCB analysis were noted.

The required holding times for each analytical method were met, with the exception of some nitrate (as N) analyses. Sample results associated with missed holding times were either qualified as estimated "J" in samples SSUT0044, SSUT0050, and SSUT0051. These samples required dilutions which were performed outside the method holding time. Ninety-eight percent of the data are valid. Out of a total of 3890 individual analytical results (both detected and nondetected), 3827 data results are deemed reliable for their intended purpose.

TABLE C-1
EASTERN TRENCHES
ANALYTICAL RESULTS FOR SOIL AUGUST 1996
TRIP BLANKS
LEHR ENVIRONMENTAL RESTORATION, DAVIS CALIFORNIA

ANALYTE	SAMPLE	TBUT0021	TBUT0022	TBUT0023	TBUT0025	TBLF0041
	LOCATION	TBUT0021	TBUT0022	TBUT0023	TBUT0025	TRIPBL2
UNITS	DATE	08/21/96	08/23/96	08/26/96	09/24/96	09/25/96
	DEPTH	0.0	0.0	0.0	0.0	0.0
	TYPE	TRIP BLANK				
1,1,1-TRICHLOROETHANE	ug/L	<10	<10	<10	<10	<10
1,1,2,2-TETRACHLOROETHANE	ug/L	<10	<10	<10	<10	<10
1,1,2-TRICHLOROETHANE	ug/L	<10	<10	<10	<10	<10
1,1-DICHLOROETHANE	ug/L	<10	<10	<10	<10	<10
1,1-DICHLOROETHENE	ug/L	<10	<10	<10	<10	<10
1,2-DICHLOROETHANE	ug/L	<10	<10	<10	<10	<10
1,2-DICHLOROETHENE (TOTAL)	ug/L	<10	<10	<10	<10	<10
1,2-DICHLOROPROPANE	ug/L	<10	<10	<10	<10	<10
2-BUTANONE	ug/L	<10	<10	<10	<10	<10
2-HEXANONE	ug/L	<10	<10	<10	<10	<10
4-METHYL-2-PENTANONE	ug/L	<10	<10	<10	<10	<10
ACETONE	ug/L	<10	<10	<10	JB Uz	<10
BENZENE	ug/L	<10	<10	<10	<10	JB
BROMODICHLOROMETHANE	ug/L	<10	<10	<10	<10	<10
BROMOFORM	ug/L	<10	<10	<10	<10	<10
BROMOMETHANE	ug/L	<10	<10	<10	<10	<10
CARBON DISULFIDE	ug/L	<10	<10	<10	<10	<10
CARBON TETRACHLORIDE	ug/L	<10	<10	<10	<10	<10
CHLOROBENZENE	ug/L	<10	<10	<10	<10	<10
CHLOROETHANE	ug/L	<10	<10	<10	<10	<10
CHLOROFORM	ug/L	<10	<10	<10	<10	<10
CHLOROMETHANE	ug/L	<10	<10	<10	<10	<10
DIBROMOCHLOROMETHANE	ug/L	<10	<10	<10	<10	<10
ETHYL BENZENE	ug/L	<10	<10	<10	<10	<10
METHYLENE CHLORIDE	ug/L	<10	<10	<10	<10	<10
STYRENE	ug/L	<10	<10	<10	<10	<10
TETRACHLOROETHENE	ug/L	<10	<10	<10	<10	<10
TOLUENE	ug/L	<10	<10	<10	<10	<10
TRICHLOROETHENE	ug/L	<10	<10	<10	<10	<10
VINYL CHLORIDE	ug/L	<10	<10	<10	<10	<10
XYLENES (TOTAL)	ug/L	<10	<10	<10	<10	<10
CIS-1,3-DICHLOROPROPENE	ug/L	<10	<10	<10	<10	<10
TRANS-1,3-DICHLOROPROPENE	ug/L	<10	<10	<10	<10	<10

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C

TABLE C-2
EASTERN TRENCHES
EQUIPMENT BLANK ANALYTICAL RESULTS
SOUTH CAMPUS DISPOSAL SITE, DAVIS CALIFORNIA

		SAMPLE LOCATION	EBUT0019 SBL00040	EBUT0020 SBL00043
		DATE	09/24/96	09/25/96
		DEPTH	0.0	0.0
		TYPE	RINSATE	RINSATE
ANALYTE	UNITS			
VOLATILE ORGANICS				
1,1,1-TRICHLOROETHANE	ug/L	<10		<10
1,1,2,2-TETRACHLOROETHANE	ug/L	<10		<10
1,1,2-TRICHLOROETHANE	ug/L	<10		<10
1,1-DICHLOROETHANE	ug/L	<10		<10
1,1-DICHLOROETHENE	ug/L	<10		<10
1,2-DICHLOROETHANE	ug/L	<10		<10
1,2-DICHLOROETHENE (TOTAL)	ug/L	<10		<10
1,2-DICHLOROPROPANE	ug/L	<10		<10
2-BUTANONE	ug/L	<10		<10
2-HEXANONE	ug/L	<10		<10
4-METHYL-2-PENTANONE	ug/L	<10		<10
ACETONE	ug/L	<10	JB Uz	<10 JB
BENZENE	ug/L	<10		<10
BROMODICHLOROMETHANE	ug/L	<10		<10
BROMOFORM	ug/L	<10		<10
BROMOMETHANE	ug/L	<10		<10
CARBON DISULFIDE	ug/L	<10		<10
CARBON TETRACHLORIDE	ug/L	<10		<10
CHLOROENZENE	ug/L	<10		<10
CHLOROETHANE	ug/L	<10		<10
CHLOROFORM	ug/L	<10		<10
CHLOROMETHANE	ug/L	<10		<10
DIBROMOCHLOROMETHANE	ug/L	<10		<10
ETHYL BENZENE	ug/L	<10		<10
METHYLENE CHLORIDE	ug/L	<10		<10
STYRENE	ug/L	<10		<10
TETRACHLOROETHENE	ug/L	<10		<10
TOLUENE	ug/L	<10		<10
TRICHLOROETHENE	ug/L	<10		<10
VINYL CHLORIDE	ug/L	<10		<10
XYLENES (TOTAL)	ug/L	<10		<10
CIS-1,3-DICHLOROPROPENE	ug/L	<10		<10
TRANS-1,3-DICHLOROPROPENE	ug/L	<10		<10
METALS				
ANTIMONY	mg/L	<0.003		<0.003
ARSENIC	mg/L	<0.003		<0.003
BARIUM	mg/L	<0.008		<0.008
BERYLLIUM	mg/L	<0.001		<0.001
CADMIUM	mg/L	<0.003		<0.003
CHROMIUM	mg/L	<0.006		<0.006
CHROMIUM, HEXAVALENT (+6)	mg/L	<0.003		<0.003
COBALT	mg/L	<0.004		<0.004
COPPER	mg/L	<0.006		<0.006
LEAD	mg/L	<0.002		<0.002
MERCURY	mg/L	<0.0002		<0.0002
MOLYBDENUM	mg/L	<0.01		<0.01
NICKEL	mg/L	<0.012		<0.012
SELENIUM	mg/L	<0.004		<0.004
SILVER	mg/L	<0.006		<0.006
THALLIUM	mg/L	<0.006		<0.006
VANADIUM	mg/L	<0.006		<0.006
ZINC	mg/L	<0.02	B* U p,d	<0.003
GENERAL CHEMICALS				
NITRATE-N	mg/L	<0.1	B	<0.1 B ,d

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C

**TABLE C-2
EASTERN TRENCHES
EQUIPMENT BLANK ANALYTICAL RESULTS
SOUTH CAMPUS DISPOSAL SITE, DAVIS CALIFORNIA**

ANALYTE	SAMPLE	EBUT0019	EBUT0020
	LOCATION	SBL00040	SBL00043
UNITS	DATE	09/24/96	09/25/96
	DEPTH	0.0	0.0
	TYPE	RINSATE	RINSATE
RADIONUCLIDES		MDA	MDA
ACTINIUM-228	pCi/L	--	-3.7±9.7 18.
BISMUTH-212	pCi/L	--	2.±20. 27.
BISMUTH-214	pCi/L	--	3.4±6.7 11.
CARBON-14	pCi/L	--	18±55. 96.
CESIUM-137	pCi/L	--	-0.7±1.5 4.3
COBALT-60	pCi/L	--	0.7±1.9 3.3
GROSS ALPHA	pCi/L	--	0.06±0.53 1.1
GROSS BETA	pCi/L	--	0.9±1.2 2.0
LEAD-210	pCi/L	--	180±380 500
LEAD-212	pCi/L	--	1.6±5.6 8.4
LEAD-214	pCi/L	--	4.6±6.3 9.7
POTASSIUM-40	pCi/L	--	-18.±33. 58.
RADIUM-223	pCi/L	--	-24±15. 83.
RADIUM-226	pCi/L	--	0.00±0.15 0.37
RADIUM-226(GAMMA)	pCi/L	--	7.±65. 98.
SR-89,90	pCi/L	--	0.06±0.37 0.65
THALLIUM-208	pCi/L	--	0.8±3.2 4.8
THORIUM-234	pCi/L	--	29.±61. 200
TRITIUM	pCi/L	--	30±110 200
URANIUM-235(GAMMA)	pCi/L	--	7±19. 27.

A key to data qualifier flags is presented in front of Table 2. A more detailed explanation of data qualifier flags is presented in Appendix C.

APPENDIX D
TRITIUM SCREENING RESULTS

Soil Tritium Worksheet

Soil Moisture Determination

Soil ID _____

- | | | | |
|---|---|---|----|
| 1. Measure out approximately 5 g of soil. Determine the mass: | A | <input style="width: 100%;" type="text"/> | g |
| 2. Dry soil for 5 minutes in microwave and record dry mass: | B | <input style="width: 100%;" type="text"/> | g |
| 3. Determine soil moisture mass: subtract A - B, and record as mL:
(for water, 1g - 1mL) | C | <input style="width: 100%;" type="text"/> | mL |
| 4. Determine soil moisture fraction: $C/A =$ | D | <input style="width: 100%;" type="text"/> | |

Soil Tritium Determination

- | | | | |
|--|---|---|-------|
| 1. Measure out approximately 3g of soil and determine net mass: | E | <input style="width: 100%;" type="text"/> | g |
| 2. Determine soil moisture content of sample: $E \times D =$ | F | <input style="width: 100%;" type="text"/> | mL |
| 3. Add 20 mL of deionized water to tube. Record how many mLs were added. | G | <input style="width: 100%;" type="text"/> | mL |
| 4. Cap tube and shake well until soil is suspended into water. Let soil/mixture sit for 15 minutes, shaking occasionally to keep soil suspended. | | | |
| 5. Centrifuge tube at 3,000 rpm for 10 minutes at room temperature on Sorvel R2-6000. | | | |
| 6. Pipet 10 mL of the separated water into another LSC vial that contains 10 mL LSC cocktail. | H | <input style="width: 100%;" type="text"/> | mL |
| 7. Count for 60 one-minute counts along with a background vial. | | | |
| 8. Determine net sample "dpm" value from the LSC data sheet:
$dmp1_{sample} - dmp1_{Bkg} =$ | I | <input style="width: 100%;" type="text"/> | dpm |
| 9. Change to pCi: $(/ 2.2) =$ | J | <input style="width: 100%;" type="text"/> | pCi |
| 10. Calculate amount of soil moisture sample in LSC vial:
$F \times (H / (F + G)) =$ | K | <input style="width: 100%;" type="text"/> | mL |
| 11. Calculate pCi/L in the soil sample: $(J / K) \times 1,000 =$ | L | <input style="width: 100%;" type="text"/> | pCi/L |
| 12. Calculate pCi/g in the soil sample:
$(L \times F) / E \times 1,000 =$ | | <input style="width: 100%;" type="text"/> | pCi/g |

Table D
Soil Tritium LSC Log

Item ID	Item Description	cpm	dpm	Corrected pCi/L	Corrected pCi/g
TRL45 Bkg	Background vial	3.45	10.61	n/a	n/a
TRL45-1	Trench sample	5.87	25.81	40,510	2.99
TRL45-2	Trench sample	6.27	27.21	48,205	2.46
TRL45-3	Trench sample	6.40	30.46	37,763	4.11
TRL45-4	Trench sample	7.30	31.30	51,497	2.03
TRL45-5	Trench sample	6.25	25.35	29,666	1.86
TRL45-6	Trench sample	5.07	24.07	18,265	2.42
TRL46 Bkg	Background vial	2.75	5.18	n/a	n/a
TRL46-1	Trench sample	3.45	11.99	14,702	1.22
TRL46-2	Trench sample	4.17	15.49	*	*
TRL46-3	Trench sample	3.32	10.08	*	*
TRL46-4	Trench sample	4.22	14.17	23,513	2.39
TRL46-5	Trench sample	3.95	14.24	12,467	2.54
TRL47 Bkg	Background vial	2.72	5.06	n/a	n/a
TRL47-1	Trench sample	3.92	16.79	22,026	1.40
TRL47-2	Trench sample	3.07	9.25	*	*
TRL47-3	Trench sample	3.18	9.08	*	*
TRL47-4	Trench sample	5.07	19.02	20,628	1.66
TRL47-5	Trench sample	3.63	16.04	13,586	1.90
TRL47-6	Trench sample	5.25	18.54	16,277	1.94
TRL48 Bkg	Background vial	3.38	9.42	n/a	n/a
TRL48-1	Trench sample	4.72	27.46	36,009	2.62
TRL48-2A	Trench sample	4.25	30.95	14,843	3.60
TRL48-2AO	Trench sample	1.6	0	*	*
TRL48-2B	Trench sample	2.85	8.04	*	*
TRL48-2BO	Trench sample	7.03	71.31	101,821	14.32
TRL48-3	Trench sample	3.82	15.8	4,423	0.76
TRL48-4	Trench sample	5.23	26.93	25,825	2.83
TRL48-5	Trench sample	6.15	27.08	22,086	2.81

* Results less than background or too low to yield quantation.