

GW - 355

MONITORING REPORTS

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Oil Conservation Division

SUBSURFACE INVESTIGATION

**TRANSWESTERN
BELL LAKE PLANT
JAL, NEW MEXICO**

**BROWN AND CALDWELL
APRIL, 1994**

SUBSURFACE INVESTIGATION
TRANSWESTERN BELL LAKE PLANT
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CHAPTER 1

EXECUTIVE SUMMARY

Transwestern Pipeline Company (Transwestern) operated a sweetening plant located approximately 21 miles west of Jal, New Mexico. This facility is out of service. A preliminary investigation was conducted to investigate subsurface conditions and possible impact to soil and groundwater surrounding six on-site structures. These structures include four inactive pipeline liquid waste surface impoundments, one underground storage tank (UST) formerly containing triethylene glycol (TEG), and a septic system leach field.

Based upon data collected from Brown and Caldwell's site assessment activities, soils and groundwater in the vicinity of the surface impoundments located on the northeast sector of the site are impacted by petroleum hydrocarbons. Data collected during this investigation indicates an area of impacted soil and groundwater is located east and southeast of the surface impoundments. Soils located in the vicinity of the underground storage tank, east of the main plant building are impacted by petroleum hydrocarbons. No phase separated hydrocarbons were detected during the investigation.

Groundwater at the facility exists in an unconfined aquifer with static groundwater at approximately 90 feet below grade. Based on field measurements collected from the wells during this investigation, groundwater flow is to the southeast at a gradient of approximately 0.002 feet per foot.

CHAPTER 2

INTRODUCTION

Transwestern Pipeline Company (Transwestern) operated a natural gas sweetening facility located on the west side of County Road 21, approximately 21 miles west of Jal, New Mexico. The facility was taken out of service in 1985. Currently, dehydration is the only active process occurring on the site. Figure 2-1 is a project location map, identifying the subject property and surrounding vicinity. From October 5 through November 4, 1993, Brown and Caldwell conducted a preliminary subsurface investigation at the Bell Lake facility. Soil borings and groundwater monitor wells were installed in order to investigate subsurface conditions and possible impact to soil and groundwater surrounding six on-site areas where structures existed or former structures. These structures include:

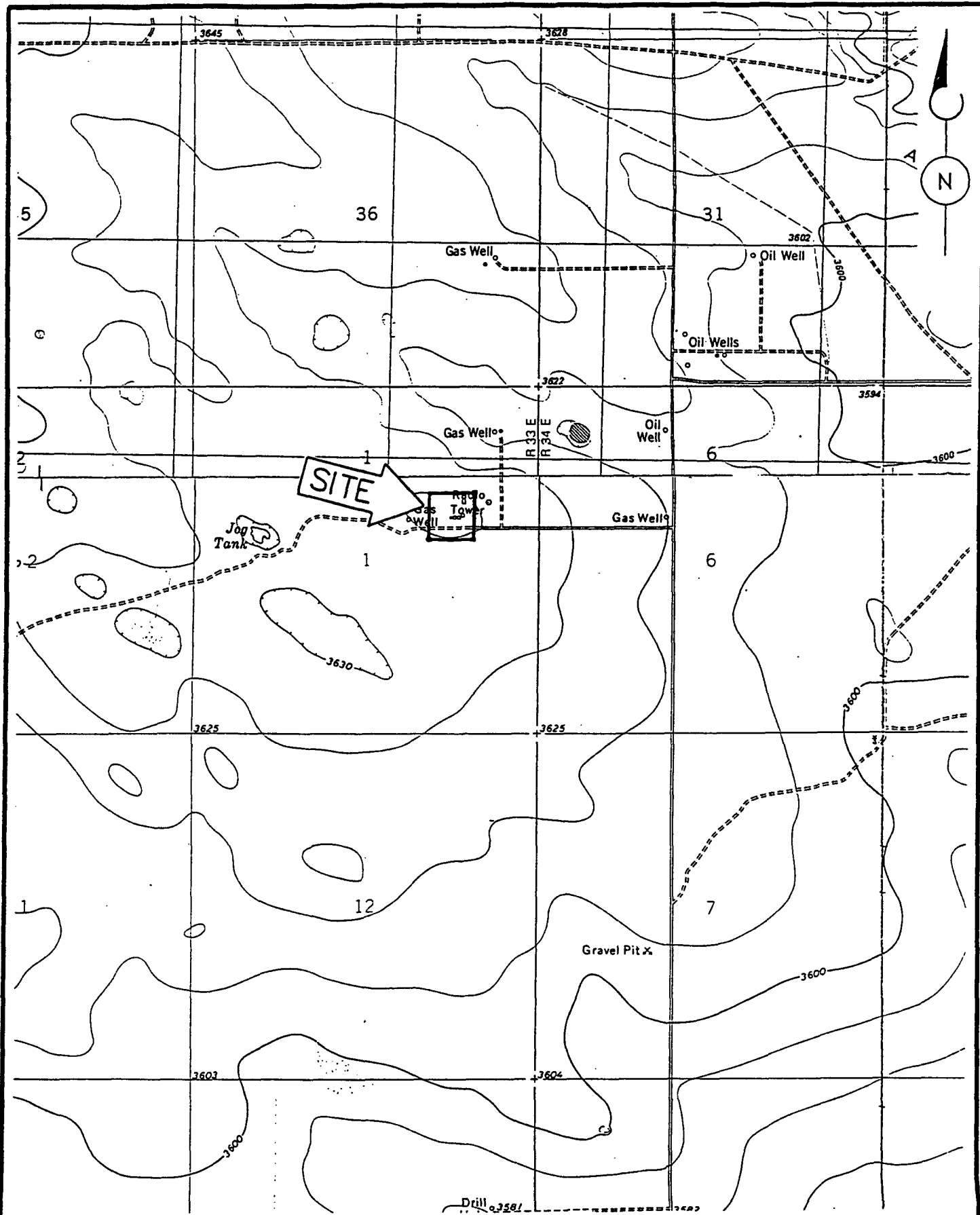
- one flare pit,
- two backfilled pipeline liquid waste and plant waste water surface impoundments,
- one concrete lined stormwater surface impoundment,
- one underground storage tank (UST) formerly containing triethylene glycol (TEG),
- and a septic system leach field.

Pipeline liquid waste was disposed of on-site in three unlined impoundments located on the northeast quarter of the site and one concrete lined impoundment located on the northwest quarter. Figure 2-2 is a site map depicting the Bell Lake facility and associated waste impoundments. At the time of the investigation, the unlined impoundments were backfilled to approximately six inches above grade and the concrete lined impoundment was filled to one foot above grade with concrete. The UST is located adjacent to the east side of the main plant facility. The septic system leach field is situated south of the site facility office building.

This chapter summarizes the installation of soil borings and groundwater monitor wells during the preliminary subsurface investigation.

Soil Borings and Monitor Well Installation

From October 5 through November 4, 1993 Brown and Caldwell completed eighteen soil borings, with three of the borings converted to groundwater monitor wells. The locations of soil borings and monitor wells are presented on Figure 2-2. Prior to drilling activities, buried utility and gas transmission lines were located and marked by Transwestern site representatives. Water



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BROWN AND CALDWELL

HOUSTON, TEXAS

SUBMITTED: SUSANNE RICHARD DATE: PROJECT MANAGER

APPROVED: BROWN AND CALDWELL DATE:

0 1000 2000

SCALE: 1" = 2000'

DRAWN BY: JON DATE 12/8

CHK'D BY: A.F. DATE

APPROVED: SR DATE

TITLE

SITE LOCATION MAP

CLIENT

TRANSWESTERN PIPELINE CO.

SITE

BELL LAKE COMPRESSOR STATION
JAL, NEW MEXICO

DATE

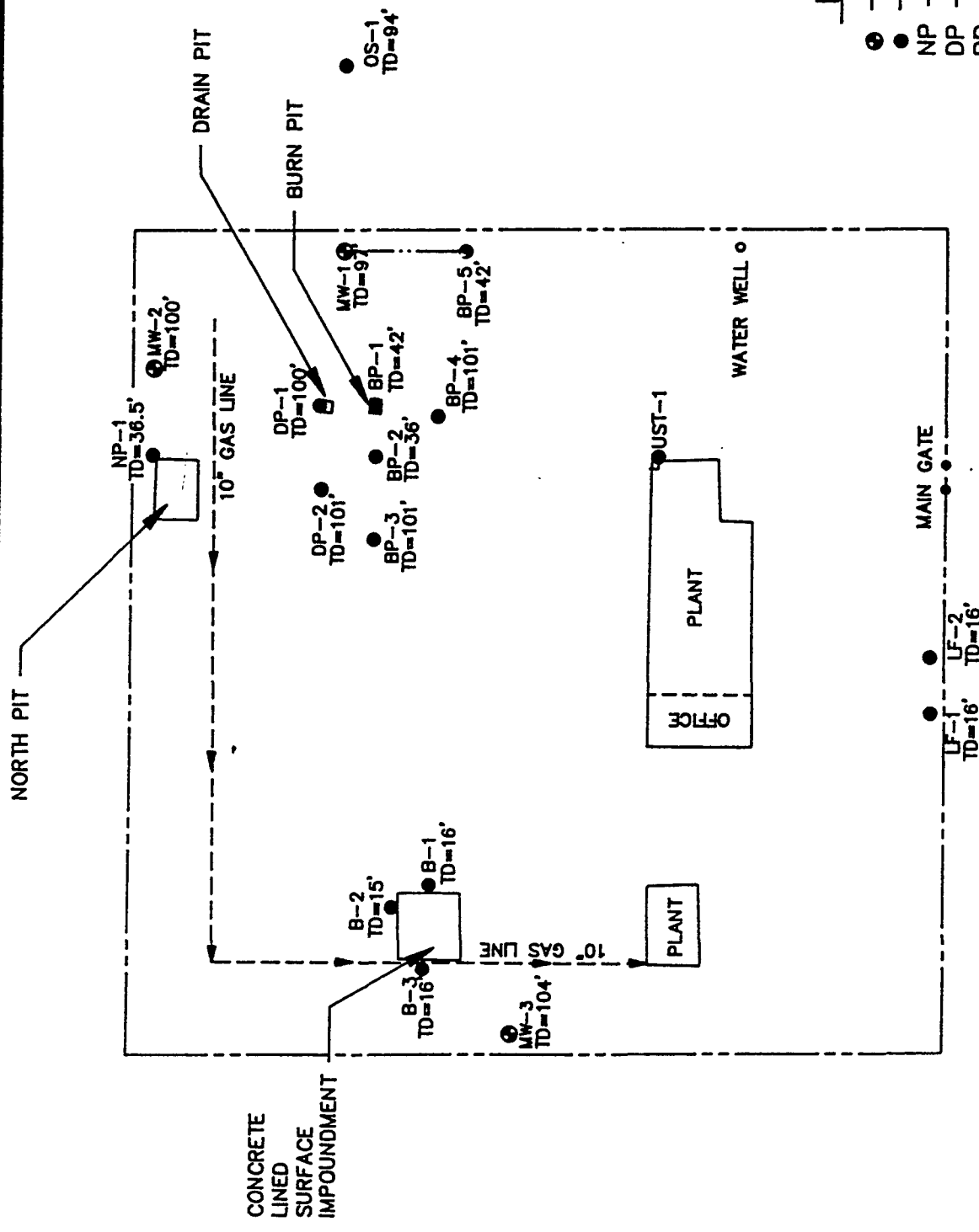
01/04/93

PROJECT NUMBER

7976-02

FIGURE NUMBER

2-1



LEGEND

- - MONITORING WELL
- - SOIL BORING
- NP - NORTH PIT
- DP - DRAIN PIT
- BP - BURN PIT
- OS - OFFSITE

BROWN AND CALDWELL HOUSTON, TEXAS SUBMITTED: ALAN J. FEAR PROJECT MANAGER APPROVED: BROWN AND CALDWELL		DATE: 12/9 DATE: 12/9		DATE: 12/09/93 PROJECT NUMBER: 7976-02 FIGURE NUMBER: 1	
TITLE: WELL AND BORING LOCATION MAP CLIENT: TRANSWESTERN PIPELINE COMPANY SITE LOCATION: BELL LAKE PLANT JAL, NEW MEXICO		SCALE: 1" = 100' DRAWN BY: JHD DATE: 11/9 CHKD BY: JLF DATE: 12/9 APPROVED: SAM DATE: 12/16		REV. BY DATE DESCRIPTION	

obtained from an on-site water supply well was used for decontamination of drilling equipment and for grouting the completed borings.

Drilling of soil borings was accomplished using nominal 9 and 12-inch outer diameter (O.D.) hollow-stem augers and also with nominal 3, 9 and 12-inch O.D. roller bits. Samples were collected from ground surface to total depth at five foot intervals using 2-foot-split-spoon samplers. Diagrammatic Boring Logs are included with this report as Appendix A.

Three of the eighteen borings drilled during BC's subsurface investigation were converted to permanent groundwater monitoring wells. Upon completion of sampling activities, the borings not converted to monitoring wells were grouted from total depth to ground surface using Portland cement/bentonite slurry.

The wells are constructed of four-inch-diameter PVC with 15 feet of 0.01-inch slot well screen. The well annulus was filled with a 16/30 silica sand, extending approximately two feet above the screened interval. The location of the sand pack was verified by field measurement. Approximately 2 feet of bentonite pellets were placed in the borehole and hydrated with potable water to form an annular seal. The remaining annular space was filled with a cement/bentonite grout mixture. The wells were completed to grade with locking well caps. A water tight manhole cover was set in concrete approximately two inches above grade at each location. Monitor Well Construction Logs are included with this report as Appendix B. Monitoring well locations are depicted in Figure 2-2.

Table 2-1, lists total depths for all borings installed at Bell Lake and summarizes those borings sampled for groundwater. Also listed is laboratory analyses and field screen data for submitted samples. Field screening of samples was conducted using a flame ionization detector (FID) and measured in parts per million (ppm).

The indurated sandstone layer encountered at 36 and 39 feet below ground surface in borings BP-1 and BP-5, respectively, prevented the continuation of drilling due to limitations of the drilling equipment. Early in the investigation it was established that if the soil samples collected above the indurated sandstone layer were impacted, as measured by the FID, the soil would be impacted to the groundwater. Boring BP-2 and NP-1 were stopped just into the indurated layer with the idea of drilling step out borings. Due to drilling equipment limitations encountered on-site, the decision was made not to step out to the north of the property or to drill another boring east of the property.

TABLE 2-1. SUMMARY OF DRILLING ACTIVITY

BORING NUMBER	TOTAL DEPTH	GROUNDWATER SAMPLED	INTERVAL SUBMITTED	FIELD SCREEN	LABORATORY ANALYSES
LF-1	16	NO	(4-6) (14-16)	1.5 ppm 1 ppm	8240, 8270, RCRA METALS
LF-2	16	NO	(9-11) (14-16)	1 ppm 0.5 ppm	8240, 8270, RCRA METALS
B-1	16	NO	(0-2) (14-16)	29 ppm 1 ppm	418.1, 8240, 8270
B-2	15	NO	(0-2) (13-15)	10 ppm 1 ppm	418.1, 8240, 8270
B-3	16	NO	(9-11) (14-16)	2 ppm 1 ppm	418.1, 8240, 8270
UST-1	51	NO	(5-7) (10-12) (49-51)	1000 ppm 1000 ppm 8 ppm	418.1, 8020
NP-1	36.5	NO	(14-16) (34-36)	1000 ppm 1000 ppm	418.1, 8240, 8270
MW-1	97	YES	(89-91) (94-96)	100 ppm 100 ppm	418.1, 8020, 8270 418.1, 8020
MW-2	100	YES	(89-91) (94-96)	160 ppm 100 ppm	418.1, 8240 8270
MW-3	104	YES	(89-91) (104-106)	0 ppm 0 ppm	418.1, 8240 8270
OS-1	94	YES	(9-11) (84-86)	20 ppm 01 ppm	418.1, 8240, 8270
DP-1	100	NO	(9-11) (95-97)	1000 ppm 180 ppm	418.1, 8020
DP-2	101	YES	(59-61) (84-86)	50 ppm 20 ppm	418.1, 8020
BP-1	42	NO	(04-06) (40-42)	1000 ppm 1000 ppm	418.1, 8240, 8270, 418.1
BP-2	36	NO	(29-31) (34-36)	1000 ppm 40 ppm	418.1, 8020
BP-3	101	YES	(39-41) (89-91)	50 ppm 38 ppm	418.1, 8020
BP-4	101	YES	(69-71) (89-91)	300 ppm 900 ppm	418.1, 8020
BP-5	42	NO	(29-31)	40 ppm	418.1, 8020

CHAPTER 3

SOIL ASSESSMENT

From October 5 through November 4, 1993, Brown and Caldwell conducted a preliminary subsurface investigation at the Transwestern Pipeline Company (Transwestern) Bell Lake Plant. The subsurface investigation included the installation of eighteen soil borings. This chapter summarizes the results of the soil assessment, placement of borings, analytical results and site stratigraphy.

Soil Borings

Soil boring locations are presented on Figure 2-2. Boring logs are included in Appendix A. The borings were completed using a truck mounted rotary drilling rig equipped with hollow-stem augers. Prior to commencement of drilling activities, and between each boring, the augers, pilot bit and other down hole equipment were steam cleaned. The sampling equipment used by Brown and Caldwell personnel was cleaned prior to and between each use by washing with a laboratory-grade detergent solution, rinsing with tap water, followed by a final rinse with distilled water. Upon completion of soil and groundwater sampling activities, the borings were grouted from total depth to ground surface with a Portland Cement/bentonite slurry.

Soil samples were continuously collected using 2-foot-long split-spoon samplers. Soil samples were logged by a Brown and Caldwell geologist and described on the basis of lithology, color, relative moisture content. Two soil samples from each boring were submitted for laboratory analysis. One sample was collected from the interval which appeared most highly impacted as determined by field screening. Field screening included scanning the recovered samples with a flame ionization detector (FID). In borings where groundwater was not encountered, the second sample was collected from the deepest recovered interval. When groundwater was encountered, the interval best representing the capillary fringe was submitted as the second sample.

Soil samples collected were split into two portions upon retrieval from the sampling tool. Half of the sample was placed in a labelled laboratory supplied jar and immediately placed on ice. The other half was placed in a plastic bag, where it was screened for volatile organic compounds (VOCs) using a FID. Table 2-1, lists field screen data obtained with an FID and measured in parts per million (ppm) for all laboratory submitted soil samples. At the conclusion of the sampling, the cooled samples were shipped via common carrier to Pace Analytical Laboratories in Houston, Texas. Delivery of the samples was documented using proper chain-of-custody procedures. Upon receipt by the laboratory, the samples were logged in and assigned

the report numbers shown on the analytical reports presented in Appendix C.

Placement of Soil Borings

Soil borings were installed in order to investigate subsurface conditions and possible impact to soil and groundwater surrounding six areas where on-site structures exist or formally existed. These structures include:

- one backfilled flare pit area,
- two backfilled pipeline liquid and plant wastewater surface impoundment,
- one concrete lined surface impoundment which held rain water only,
- one underground storage tank (UST), formerly containing triethylene glycol (TEG),
- and one septic system leach field.

Borings on the northeast quarter of the property were installed to investigate three backfilled areas labeled as Burn Pit, Drain Pit and North Pit on Figure 2-2. Field screening with a FID indicated these borings encountered potentially impacted soil and groundwater in and adjacent to the surface impoundment areas. Borings labeled as NP-1, DP-1 and 2, BP-2, 3, 4 and 5, OS-1, were drilled to delineate the vertical and horizontal extent of the potentially impacted areas. Field screening of a capillary fringe soil sample from Boring DP-1 indicated groundwater was potentially impacted at the Bell Lake facility. Monitor Wells MW-1 and MW-2 were positioned down slope from the impacted impoundment areas and monitor well MW-3 was positioned up slope.

Borings on the northwest quarter of the property were installed to investigate the concrete lined surface impoundment identified on Figure 2-2. Borings labelled as B-1 and B-2 were positioned down slope from the impoundment and boring B-3 was positioned in an up slope location. Field screening with a FID did not detect volatile organic compounds in the soil samples from these borings.

Boring UST-1 was drilled adjacent to the east side of the UST. Field screening with an FID indicated the boring encountered potentially impacted soil. Boring UST-1 was advanced to 51 feet, at which point the native soil from interval (49-51) was field screened with a FID and yielded a reading of 8 parts per million (ppm). The Transwestern site representative field tested the (49-51) sample interval and registered 13 ppm TPH.

Borings LF-1 and LF-2 were drilled to a total depth of 16 feet below ground surface, on the south property boundary, to investigate for possible releases associated with the on-site septic system. Site observations and review of area topographic maps indicated this sector of the site is down slope from the septic drainage leach field. Groundwater was not encountered in either of the borings. Field screening with a FID did not detect VOCs in the soil samples from these borings.

Soil Sampling Analysis

Selected soil samples were analyzed for total petroleum hydrocarbons (TPH), volatile and semi-volatile organics and benzene, toluene, ethyl benzene and total xylenes (BTEX), using EPA methods 418.1, 8240, 8270 and 8020, respectively. Samples submitted from the septic leach field area were additionally analyzed for eight total metals. Analytical laboratory reports are contained in Appendix C.

Soil samples obtained in the leach field area were analyzed for volatile and semi-volatile organics and eight total metals. Acetone was detected in each soil sample at concentrations ranging from 36 micrograms/kilogram ($\mu\text{g/kg}$) to 86 $\mu\text{g/kg}$. Arsenic, barium, chromium and lead were reported in each soil sample with concentrations above detection limits. The reported metal concentrations are listed in Table 3-1.

TABLE 3-1. SUMMARY OF LEACH FIELD ANALYTICAL RESULTS

LABORATORY ANALYSES	LF-1 (04-06)	LF-1 (14-16)	LF-2 (09-11)	LF-2 (14-16)
VOLATILES				
METHOD 8240				
Acetone	45 $\mu\text{g/kg}$	86 $\mu\text{g/kg}$	52 $\mu\text{g/kg}$	36 $\mu\text{g/kg}$
SEMI-VOLATILE METHOD 8270	None Detected	None Detected	None Detected	None Detected
METALS TOTAL				
Arsenic	3.5 mg/kg	2.2 mg/kg	1.6 mg/kg	.7 mg/kg
Barium	400 mg/kg	110 mg/kg	160 mg/kg	230 mg/kg
Cadmium	< 0.5 mg/kg	< 0.5 mg/kg	< 0.5 mg/kg	< 0.5 mg/kg
Chromium	3 mg/kg	3 mg/kg	3 mg/kg	4 mg/kg
Lead	7 mg/kg	5 mg/kg	5 mg/kg	6 mg/kg
Mercury	< 0.1 mg/kg	< 0.1 mg/kg	< 0.1 mg/kg	< 0.1 mg/kg
Selenium	< .3 mg/kg	< .3 mg/kg	< .3 mg/kg	< .3 mg/kg
Silver	< 1 mg/kg	< 1 mg/kg	< 1 mg/kg	< 1 mg/kg

Use or disclosure of data contained on this sheet is subject to the restriction specified at the beginning of this document.

Laboratory analytical results for all submitted soil samples are summarized in Table 3-2. Table 3-3 lists BTEX constituent concentrations for those soil samples analyzed with values above detection limits.

Soil samples obtained from borings B-1, B-2 and B-3 were analyzed for TPH and volatile and semi-volatile organics. TPH was reported at 11,000 milligrams per kilogram (mg/kg) in the surface interval from boring B-1. Acetone was detected in each sample submitted from the three borings, at concentrations ranging from 94 µg/kg to 230 µg/kg.

Three soil intervals from boring UST-1 were analyzed for TPH and BTEX. Soil samples collected from intervals 05-07 and 10-12 foot below ground level (BGL) reported TPH concentrations of 1000 mg/kg and 150 mg/kg, respectively. Total BTEX was reported at concentrations of 43,550 µg/kg and 1,180 µg/kg, respectively from those intervals.

Two soil intervals from boring NP-1 were analyzed for TPH and volatile and semi-volatile organics. TPH concentrations of 3,700 mg/kg and 3,500 mg/kg were detected in the soil samples collected from 14-16 and 34-36 foot BGL, respectively. Total xylenes were detected at concentrations of 4,800 µg/kg from the interval 14-16 foot BGL and 6,400 µg/kg from the interval 34-36 foot BGL. 2-Methylnapthalene was detected at concentrations of 370 µg/kg from the interval 14-16 foot BGL and 590 µg/kg from the interval 34-36 foot BGL.

Two soil intervals from boring MW-1 were analyzed for TPH, BTEX, and volatile and semi-volatile organics. The sample from the interval 89-91 foot BGL was analyzed as having a TPH concentration of 90 mg/kg. Two soil intervals from boring MW-2 were analyzed for TPH and volatile and semi-volatile organics. The sample from the interval 89-91 foot BGL was reported to have a TPH concentration of 30 mg/kg. Acetone was detected at concentrations of 1,700 µg/kg and 2-Butanone at concentrations of 85 µg/kg from the sample from the interval 94-96 foot BGL. Two soil intervals from boring MW-3 were analyzed for TPH and volatile and semi-volatile organics. Acetone was detected at concentrations of 49 µg/kg from the sample from the interval 89-91 foot BGL.

Two soil intervals from boring OS-1 were analyzed for TPH and volatiles and semi-volatile organics. The sample from the interval 09-11 BGL was reported to have a TPH concentration of 70 mg/kg.

Two soil intervals from boring BP-1 were analyzed for TPH and volatile and semi-volatile organics. The sample from the intervals 04-06 foot BGL and 40-42 foot BGL were reported to have TPH concentrations of 4,200 mg/kg and 2,900 mg/kg, respectively. The sample from

interval 04-06 foot BGL was detected to have toluene, ethylbenzene and total xylenes at concentrations of 9,300 $\mu\text{g/kg}$, 14,000 $\mu\text{g/kg}$ and 270,000 $\mu\text{g/kg}$, respectively.

Soil samples obtained from borings DP-1, DP-2 and BP-2 through BP-5 were analyzed for TPH and BTEX. TPH was detected in concentrations ranging from 30 to 7,100 mg/kg and BTEX was detected in concentrations ranging from 19 to 118,820 $\mu\text{g/kg}$.

TABLE 3-2
TPH CONCENTRATIONS IN SOIL SAMPLES
TRANSWESTERN - BELL LAKE PLANT
JAL, NEW MEXICO

BORING NUMBER	SAMPLE BY DEPTH (feet)	TPH (mg/kg)
B-1	0-02	11,000
	14-16	<20
B-2	0-02	70
	13-15	<20
B-3	09-11	30
	14-16	<20
UST-1	05-07	1,000
	10-12	150
	49-51	<20
NP-1	14-16	3,700
	34-36	3,500
MW-1	89-91	90
	94-96	<20
MW-2	89-91	30
	94-96	<20
MW-3	89-91	<20
	104-106	<20
OS-1	09-11	70
	84-86	<20
DP-1	09-11	7,100
	95-97	450
DP-2	59-61	<20
	84-86	30
BP-1	04-06	4,200
	40-42	2,900
BP-2	29-31	840
	34-36	50
BP-3	39-41	30
	89-91	<20
BP-4	69-71	720
	89-91	<20
BP-5	39-31	360

mg/kg = milligrams per kilograms.

TABLE 3-3
SUMMARY OF VOLATILE AND SEMI-VOLATILE ORGANICS CONCENTRATIONS
IN SOIL SAMPLES ANALYZED USING EPA METHOD 8240 AND 8270
TRANSWESTERN BELL LAKE PLANT
JAL, NEW MEXICO

BORING NUMBER	DEPTH (feet)	VOLATILES EPA 8240	µg/kg	SEMI-VOLATILES EPA 8270 (µg/kg)	µg/kg
B-1	(0-02)	Acetone Ethylbenzene Xylene(total)	89 9 15	BDL	
	(14-16)	Acetone	120	BDL	
B-2	(0-02)	Acetone	94	BDL	
	(13-15)	Acetone	140	BDL	
B-3	(09-11)	Acetone	140	BDL	
	(14-16)	Acetone	230	BDL	
NP-1	(14-16)	Xylene(total)	4800	2-Methyl-naphthalene 370	370
	(34-36)	Xylene(total)	6400	2-Methyl-naphthalene 590	590
MW-2	(89-91)	BDL		BDL	
	(94-96)	Acetone	1700	BDL	
		2-Butanone	85		
MW-3	(89-91)	Acetone	49	BDL	
	(104-106)	BDL		BDL	
OS-1	(09-11)	BDL		BDL	
	(84-86)	BDL		BDL	
BP-1	(04-06)	BDL		BDL	
	(40-42)	N A		N/A	

N/A - Not Analyzed

BDL - Concentrations below laboratory detection limits.

µg/kg - micrograms per kilograms

TABLE 3-4
BTEX CONCENTRATIONS IN SOIL SAMPLES
ANALYZED USING EPA METHOD 8020
TRANSWESTERN BELL LAKE PLANT
JAL, NEW MEXICO

BORING NUMBER	DEPTH (feet)	BENZENE ($\mu\text{g/kg}$)	TOLUENE ($\mu\text{g/kg}$)	ETHYLBENZENE ($\mu\text{g/kg}$)	TOTAL XYLENES ($\mu\text{g/kg}$)
UST-1	(05-07)	<125*	250	4,300	39,000
UST-1	(10-12)	<10*	<10*	<10*	1,180
DP-1	(09-11)	<210*	4,400	4,500	41,000
DP-1	(95-97)	<250*	520	48,000	63,300
BP-1	(04-06)	<7500*	9,300	14,000	270,000
BP-2	(29-31)	<50*	<50*	590	2,400
BP-2	(34-36)	<2	<2	8	11
BP-4	(69-71)	<10*	<10*	13	146
BP-4	(89-91)	<10*	<10*	15	226
BP-5	(29-31)	<5	12	<5	20

* The detection limits were elevated due to the dilution required because of the high concentration of target analytes.
 $\mu\text{g/kg}$ -micrograms per kilogram.

Site Stratigraphy

The site is situated in an area of recent Quaternary alluvial and terrace deposits. These surface soils are predominantly gravelly sands, which grade with depth into loosely consolidated sandstones and gravels. The New Mexico Bureau of Mines and Mineral Resources, 1982 Geological Map, indicates the underlying bedrock at the site are sandstones and gravels of the Santa Rosa sandstone.

The strata encountered to approximately 35 feet below grade consists of loosely consolidated sand and gravel. Below these surface layers and extending vertically for approximately 4 feet is a well consolidated sandstone. Borings were advanced through this hard layer with a roller bit. The strata encountered below the consolidated sandstone to total depth, is loosely consolidated sandstones and siltstones.

Based upon examination of soil samples, the aquifer bearing sandstones and gravels cover the site from the surface to approximately 100 feet below grade. A dense clay was encountered at total depth of 104 feet below ground level in boring MW-3. This clay is possibly the basal confining layer for the shallow unconfined aquifer encountered below the subject property.

CHAPTER 4

GROUNDWATER ASSESSMENT

This chapter summarizes the results of the groundwater assessment, placement of monitor wells, groundwater sampling, analytical results and site hydrogeology.

Groundwater Monitoring Well Placement and Measurement

Three of the eighteen borings installed during Brown and Caldwell's soil assessment were converted to permanent groundwater monitoring wells. Details on monitor well construction are contained in Chapter 2 and monitor well construction logs are contained in Appendix B.

The soil sample collected from the capillary fringe of boring DP-1 was field screened and indicated groundwater was potentially impacted at the Bell Lake facility. Three monitor wells were then installed to determine groundwater gradient at the facility. Monitor Wells MW-1 and MW-2 were positioned down slope (as indicated by a site topographic map) from the impacted surface impoundments area and monitor well MW-3 was positioned up slope (as indicated by topographic map). Monitoring well locations are depicted in Figure 2-2.

Depth to water and the presence or absence of free product was measured in each well. An electric oil-water interface probe was used for all water level measurements. Depth to water was measured relative to a surveyed elevation marked at the top of each well casing. Elevations are measured to an arbitrary benchmark set at 100 feet. Elevation data was recorded to the nearest 0.01 foot. Survey and groundwater measurement data are presented in Table 4-1.

TABLE 4-1. GROUNDWATER ELEVATION DATA

MONITOR WELL #	SURVEYED CASING	MEASURED WATER LEVEL	GROUNDWATER ELEVATION
MW-1	98.15	88.97	9.18
MW-2	97.46	88.02	9.44
MW-3	102.54	92.96	9.58

Groundwater Sampling

Groundwater samples for laboratory analysis were collected from monitor wells MW-1, MW-2, MW-3 and from borings OS-1, DP-2, BP-3 and BP-4. Groundwater monitoring wells were developed to remove fine sediments from the bottom of the well. Monitor well development was performed by manually bailing each well. Groundwater samples were obtained from the three monitoring wells after purging three well volumes from each well. The purged water was placed into one DOT type drum and stored on-site.

The equipment used for bailing each well and groundwater elevation measurement was cleaned prior to and between each use by washing with a laboratory grade detergent, rinsing with tap water followed by a final rinse with distilled water. Prior to sample collection from the three monitor wells, approximately three well volumes of water was removed from each well using a clean stainless steel bailer. Each well was allowed to recharge prior to collecting groundwater samples. Groundwater was sampled at static water level by lowering a clean stainless steel bailer into each well. Groundwater samples were obtained from the soil borings via lowering a stainless steel bailer inside the hollow stem augers.

The water sample was placed into labeled laboratory bottles and immediately placed on ice. At the conclusion of sampling, the cooled samples were shipped via common carrier to Pace Analytical Laboratories in Houston, Texas for analyses. Proper chain-of-custody procedures were followed to document delivery of the samples. Upon receipt, the laboratory logged in the samples and assigned each the sample numbers indicated on the laboratory reports contained in Appendix C.

Results of Groundwater Sample Analyses

A summary of analytical results for groundwater sampled from the six on-site and one off-site borings are listed in Table 4-2.

Groundwater samples from MW-2, MW-3 and OS-1 were analyzed for total petroleum hydrocarbons (TPH) and volatile and semi-volatile organic compounds. A groundwater sample collected from boring OS-1 detected TPH concentrations of 0.5 milligrams per liter (mg/L) and 2-Butanone at concentrations of 230 micrograms per liter ($\mu\text{g/L}$). Benzene, toluene and total xylenes were detected in groundwater from OS-1 at concentrations of 57 $\mu\text{g/L}$, 34 $\mu\text{g/L}$ and 26 $\mu\text{g/L}$, respectively. Acetone was detected in concentrations of 210 $\mu\text{g/L}$ in groundwater from MW-2 and 770 $\mu\text{g/L}$ in groundwater from OS-1. Di-n-butylphthalate was detected in concentrations of 330 $\mu\text{g/L}$ in groundwater from MW-2 and 4-Methylphenol was detected in

concentrations of 18 $\mu\text{g/L}$ in groundwater from OS-1.

Groundwater samples from MW-1, DP-2, BP-3 and BP-4 were analyzed for TPH and benzene, toluene, ethyl benzene and total xylenes (BTEX). TPH was detected in concentrations in the range of .4 to 3.4 mg/L. Benzene concentrations were reported in the range of 24 to 190 $\mu\text{g/L}$ and toluene concentrations were reported in the range of 29 to 360 $\mu\text{g/L}$.

TABLE 4-2. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
TRANSWESTERN-BELL LAKE PLANT
JAL, NEW MEXICO

Analyses	MW-1	MW-2	MW-3	OS-1	DP-2	BP-3	BP-4
Total Petroleum Hydrocarbons EPA Method 418.1 (mg/L)	0.4	< 0.2	< 0.2	0.5	1.6	3.0	3.4
Volatiles Organics EPA Method 8240 (µg/L)							
Acetone	N A	210	BDL	770	N A	N A	N A
2-Butanone	N A	BDL	BDL	230	N A	N A	N A
Benzene	N A	< 5	< 5	57	N A	N A	N A
Toluene	N A	< 5	< 5	34	N A	N A	N A
Ethyl-benzene	N A	< 5	< 5	< 5	N A	N A	N A
Total Xylenes	N A	< 5	< 5	26	N A	N A	N A
Semi-Volatile Organics EPA Method 8270 (µg/L)							
Di-n-butylphthalate	N A	BDL	330	BDL	N A	N A	N A
4-Methylphenol	N A	BDL	BDL	18	N A	N A	N A
Volatiles Organics EPA Method 8020 (µg/L)							
Benzene	24	N A	N A	N A	51	190	130
Toluene	29	N A	N A	N A	61	360	290
Ethyl-benzene	32	N A	N A	N A	10	< 10*	< 2
Total Xylenes	82	N A	N A	N A	17	410	600
Total Dissolved Solids (mg/L)	N A	9,200	1,500	10,000	N A	N A	N A

N A = not analyzed

BDL = below detection limits for all parameters analyzed

* =

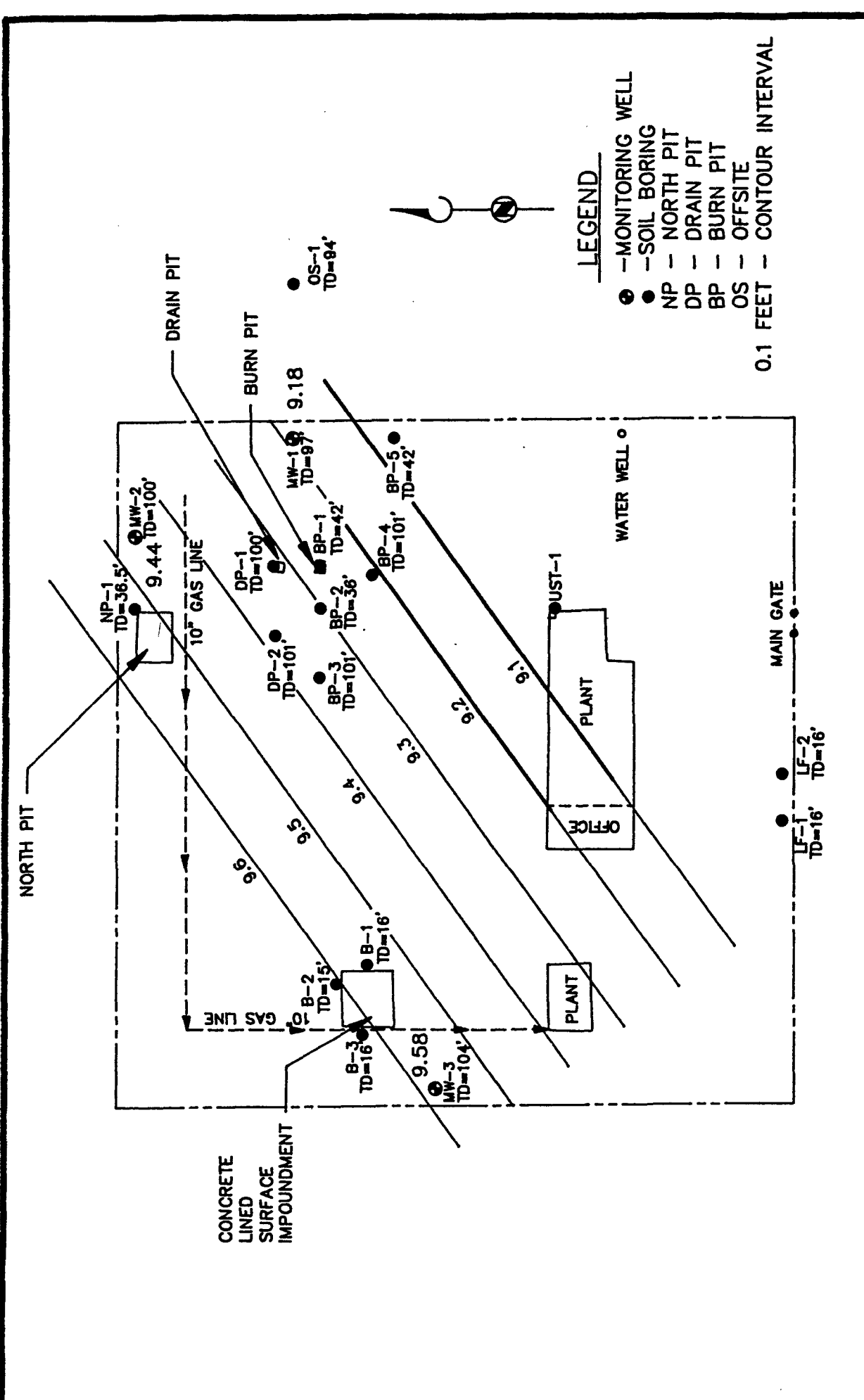
µg/L = micrograms per liter

mg/L = milligrams per liter

Local Hydrogeology

Based on groundwater levels collected during this investigation, groundwater flow is to the southeast at an average gradient of approximately 0.002 feet per foot. Table 4-1 lists groundwater elevation data obtained from the three monitor wells. Figure 4-1 is a contour map of the groundwater elevation at the Bell Lake facility.

No free phase hydrocarbons were detected during the subsurface investigation conducted at the Bell lake facility.



BROWN AND CALDWELL HOUSTON, TEXAS		GROUNDWATER GRADIENT MAP		DATE: 12/09/93	
SUBMITTED: ALAN A. FEAR PROJECT MANAGER		CLIENT: TRANSWESTERN PIPELINE COMPANY		PROJECT NUMBER: 7976-02	
APPROVED: BROWN AND CALDWELL		SITE LOCATION: BELL LAKE PLANT JAL, NEW MEXICO		FIGURE NUMBER: 2	
REV.	DESCRIPTION	BY	DATE	CHK'D BY: JLF	DATE: 12/9
				APPROVED: SAM	DATE: 12/16

APPENDIX A
BORING LOGS

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7975-02

BORING NO. B-1

PROJECT NAME Bell Lake

TOTAL DEPTH 16.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
100/16	29		1			Dark brown sandy clay (SC)
			2			Dark brown sandy clay with gravel (GC)
150/16	10		3			
			4			Light brown silty sand (SM)
150/16	6		5			
			6			
150/16	2		7			
			8			
150/16	4		9			
			10			
150/16	5		11			
			12			Light tan silty sand (SM)
150/16	1		13			
			14			
150/16	1		15			
			16			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling FG

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. B-2

PROJECT NAME Bell Lake

TOTAL DEPTH 15.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPH)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
100/16	10		1			Brown silty clay sand (SC)
			2			Brown silty sand (SM)
150/16	3		3			
			4			Light tan silty sand with fine gravel (GC)
150/16	3		5			
			6			
150/16	1		7			
			8			Light reddish brown sand (SM)
150/16	2		9			
			10			Light tan to brown sand (SM)
150/16	2		11			
			12			
			13			
150/16	1		14			
			15			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Failing F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7978-02

BORING NO. B-3

PROJECT NAME Bell Lake

TOTAL DEPTH 16.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/6	1		1			Light brown silty clay sand (SC)
			2			
			3			
			4			
			5			
			6			
			7			
			8			
			9			Light brown silty clay sand with gravel (GC)
150/12	2		10			
			11			
			12			
			13			
			14			Light brown silty clay sand (SC)
150/12	1		15			
			16			

REMARKS:

Transwestern Bell Lake Facility, Jol, New Mexico
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. BP-1

PROJECT NAME Bell Lake

TOTAL DEPTH 42.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPH)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
150/12	1000		1			Black sand with gravel (GP)
			2			
			3			
			4			
			5			
			6			
			7			
			8			
150/4	1000		9			White silty clay sand with gravel (GP)
			10			
			11			
			12			
			13			
150/8	1000		14			Black sand with gravel (GP)
			15			
			16			
			17			
			18			
150/2	1000		19			
			20			
			21			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico BP - Burn Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. BP-1

PROJECT NAME Bell Lake

TOTAL DEPTH 42.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	BROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
150/4	500		21			
			22			
			23			
			24			
			25			
			26			
			27			
			28			
			29			
150/6	1000		30			
			31			
			32			
			33			
			34			
150/6	1000		35			
			36			Light brown consolidated sandstone - hard rock (SP)
			37			
			38			
			39			
			40			
			41			
			42			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico BP - Burn Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Pailing FS

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. BP-2

PROJECT NAME Bell Lake

TOTAL DEPTH 36.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPH)	BROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/6	2		1			Light brown gravel sand (GP)
			2			
			3			
			4			
			5			
			6			
			7			
			8			
			9			
100/6	0		10			
			11			
			12			
			13			
			14			
150/18	40		15			Light brown sand (SM)
			16			
			17			
			18			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico BP - Burn Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. BP-2

PROJECT NAME Bell Lake

TOTAL DEPTH 36.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
			18			
100/18	500		19			
			20			
			21			
			22			
			23			
			24			
100/12	180		25			Light brown sand with gravel (SM)
			26			
			27			
			28			
			29			
100/12	1000		30			
			31			
			32			
			33			Light brown consolidated sand (SM)
			34			
100/8	40		35			
			36			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico BP - Burn Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7975-02

BORING NO. BP-3

PROJECT NAME Bell Lake

TOTAL DEPTH 101.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/12	0		5			Light brown sand with gravel (SW)
			10			
			15			
50/12	3		20			Reddish brown sand with gravel (SW)
			25			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico BP - Burn Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. BP-3

PROJECT NAME Bell Lake

TOTAL DEPTH 101.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/12	8		30			
50/12	50		40			
50/12	20		50			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico BP - Burn Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling FG

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7975-02

BORING NO. BP-3

PROJECT NAME Bell Lake

TOTAL DEPTH 101.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPH)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/12	20		55			
			60			
			65			
50/12	15		70			
			75			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico BP - Burn Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Failing F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7978-02

BORING NO. BP-3

PROJECT NAME Bell Lake

TOTAL DEPTH 101.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/12	20		80			
50/12	22		85			Reddish brown sand with gravel, slightly moist (SW)
50/12	38		90			Reddish brown sand with gravel, moist (SW)
50/12	10		95			Reddish brown sand with gravel, saturated (SW)
50/12	6		100			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico BP - Burn Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7975-02

BORING NO. BP-4

PROJECT NAME Bell Lake

TOTAL DEPTH 101.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/12	2		5			Light brown sand with gravel (SW)
			10			
			15			
50/12	0.5		20			
			25			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico BP - Burn Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling FG

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. BP-4

PROJECT NAME Bell Lake

TOTAL DEPTH 101.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/12	2		5			Light brown sand with gravel (SW)
			10			
			15			
50/12	0.5		20			
			25			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico BP - Burn Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling FS

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7975-02

BORING NO. BP-4

PROJECT NAME Bell Lake

TOTAL DEPTH 101.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPH)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/12	0.5		30			
			35			Hard rock at 34 feet, approximately 3 feet thick
						Light brown sand with gravel (SW)
No Sample	2		40			Reddish-brown sand with gravel (SW)
			45			
						Red sand with gravel (SW)
75/12	6		50			

REMARKS: Transwestern Bell Lake Facility, Jel, New Mexico BP - Burn Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. BP-4

PROJECT NAME Bell Lake

TOTAL DEPTH 101.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
75/12	180		55			
			60			
			65			
75/12	300		70			
			75			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico BP - Burn Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling P6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. BP-5

PROJECT NAME Bell Lake

TOTAL DEPTH 42.0

BY A. Fear

DATE 11/15/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
No Recovery			1			No sample
			2			
			3			
			4			
			5			
			6			
			7			
			8			
			9			
50/16	3		10			Light brown sand with gravel (GC)
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
50/16	22		20			
			21			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico BP - Burn Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Failing FG

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. BP-4

PROJECT NAME Bell Lake

TOTAL DEPTH 101.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPH)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
75/12	50		80			
50/12	45		85			
50/12	900		90			
50/12	45		95			
50/12	25		100			

REMARKS: Transwestern Bell Lake Facility, Jel. New Mexico BP - Burn Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. BP-3

PROJECT NAME Bell Lake

TOTAL DEPTH 42.0

BY A. Fear

DATE 11/15/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
No Recovery			1			No sample
			2			
			3			
			4			
			5			
			6			
			7			
			8			
			9			
50/16	3		10			Light brown sand with gravel (GC)
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
50/16	22		19			
			20			
			21			

REMARKS: Transwestern Bell Lake Facility, Jel. New Mexico BP - Burn Pit
 Drilling Contractor: Leyne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. DP-1

PROJECT NAME Bell Lake

TOTAL DEPTH 100.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPH)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
100/6	1000		30			
100/6	1000		35			Light brown sand with gravel (SW)
100/6	1000		40			Gray/green sand with gravel (SW)
No Sample			45			Lost sample - changed to air rotary
			50			Brown sand with gravel (SW)
100/24	120					

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico DP - Drain Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Felling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. DP-1

PROJECT NAME Bell Lake

TOTAL DEPTH 100.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
100/24	900		55			
100/24	180		60			Brown sand (SW)
50/12	30		65			Red brown sand with gravel (SW) Moist at 91 feet Saturated at 95 feet
50/18	200		70			
50/18	30		75			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico DP - Drain Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Felling FS

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7978-02

BORING NO. DP-1

PROJECT NAME Bell Lake

TOTAL DEPTH 100.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/18	300		80			
100/18	300		85			
100/18	500		90			
100/18	180		95			
No Sample						No sample
			100			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico DP - Drain Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7978-02

BORING NO. DP-2

PROJECT NAME Bell Lake

TOTAL DEPTH 101.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLWS (COUNT/ INCHES)	FID (PPH)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/12	6		5			Light brown sandstone with gravel (SW)
50/12	1		10			
50/12	0.5		15			
50/12	3		20			Tan to light brown sandstone with gravel (SW)
50/12	1		25			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico DP - Drain Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Feiling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. DP-2

PROJECT NAME Bell Lake

TOTAL DEPTH 101.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/12	1		30			Reddish brown sandstone with gravel (SW)
No Sample	5		35			Hard consolidated rock - 2 feet thick
50/12	5		40			Red sandstone with gravel (SW)
50/12	20		45			
50/12	50		50			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico DP - Drain Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling FB

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. DP-2

PROJECT NAME Bell Lake

TOTAL DEPTH 101.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FSD (PPH)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/12	50		55			
50/12	50		60			
50/12	50		65			
50/12	50		70			
50/12	8		75			

REMARKS: Transwestern Bell Lake Facility, Jel. New Mexico DP - Drain Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Felling FG

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. DP-2

PROJECT NAME Bell Lake

TOTAL DEPTH 101.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/12	8		80			
50/16	20		85			Red sandstone with gravel - moist (SW)
50/12	6		90			
50/16	2		95			Red sandstone with gravel - saturated (SW)
50/16	2		100			

REMARKS: Transwestern Bell Lake Facility, Jel. New Mexico DP - Drain Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling FS

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7975-02

BORING NO. LF-1

PROJECT NAME Bell Lake

TOTAL DEPTH 16.0

BY A. Fehr

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
100/12	1.5		1			Light brown sand with gravel - silty (GM)
			2			
			3			
			4			
			5			
			6			
			7			
			8			
			9			
150/12	0		10			
			11			
			12			
			13			
			14			
150/12	1		15			
			16			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico LF - Leach Field
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. LF-2

PROJECT NAME Bell Lake

TOTAL DEPTH 21.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
100/12	1		1			Light brown sand - silty with gravel (GM)
			2			
			3			
			4			
			5			
			6			
			7			
			8			
			9			
125/18	1		10			
			11			
			12			
			13			
			14			
125/18	0.5		15			
			16			

REMARKS: Transwestern Bell Lake Facility, Jol. New Mexico LF - Leach Field
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. MW-1

PROJECT NAME Bell Lake

TOTAL DEPTH 87.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPH)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/6	3		5			Light brown sand with clay and gravel (GC)
75/10	0		10			Light brown sand with gravel (SW)
50/16	0		15			
50/5	0		20			
100/4	2		25			Reddish brown sand with gravel (SW)

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico MW-Monitoring Well
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. MW-1

PROJECT NAME Bell Lake

TOTAL DEPTH 97.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOKS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
100/8	3		30			
100/16	1		35			Light brown consolidated sand (SW)
100/12	40		40			
100/16	20		45			Red sand - silty with gravel (GC)
						Red sand with gravel (SW)
100/16	20		50			

REMARKS: Transwestern Bell Lake Facility, Jol, New Mexico MW-Monitoring Well
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling FB

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. MW-1

PROJECT NAME Bell Lake

TOTAL DEPTH 97.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
100/16	38		55			
100/16	180		60			
100/16	10		65			
100/16	2		70			
100/16	1.5		75			

REMARKS: Transwestern Bell Lake Facility, Jol, New Mexico MW-Monitoring Well
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling FB

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. MW-1

PROJECT NAME Bell Lake

TOTAL DEPTH 97.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPH)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
150/16	1.5		80			
150/16	50		85			Red sand with gravel - moist (SW)
150/16	100		90			Red sand with gravel - saturated (SW)
150/16	100		95			Green sand with gravel - saturated (SW)
100/12	100					
			100			

REMARKS: Transwestern Bell Lake Facility, Jol. New Mexico MW-Monitoring Well
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling FS

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7978-02

BORING NO. MW-2

PROJECT NAME Bell Lake

TOTAL DEPTH 100.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPH)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
100/16	1		5			Light brown sandstone with gravel (SW)
150/16	0		10			
150/16	1		15			
150/16	0		20			
150/16	0		25			

REMARKS: Transwestern Bell Lake Facility, Jnl. New Mexico MW-Monitoring Well
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. MW-2

PROJECT NAME Bell Lake

TOTAL DEPTH 100.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
150/16	0		30			
150/16	2		35			Light brown to red sandstone with gravel (SW)
150/16	0		40			Hard consolidated sandstone at 41 feet (SW)
No Sample						
150/16	1		45			Reddish brown sandstone with gravel (SW)
150/16	0		50			

REMARKS: Transwestern Bell Lake Facility, Jol, New Mexico MW-Monitoring Well
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Feiling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. MW-2

PROJECT NAME Bell Lake

TOTAL DEPTH 100.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
150/18	0		55			Red sandstone with gravel (SW)
150/18	0		60			
100/18	0		65			
50/18	0		70			
100/18	0		75			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico MW-Monitoring Well
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling FG

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. MW-2

PROJECT NAME Bell Lake

TOTAL DEPTH 100.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
100/18	0		80			
100/18	0.5		85			
150/24	160		90			Red sandstone with gravel - moist (SW)
150/24	100		95			Red sandstone with gravel - saturated (SW)
150/24	100		100			

REMARKS: Transwestern Bell Lake Facility. Jal. New Mexico MW-Monitoring Well
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling FG

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7975-02

BORING NO. MW-3

PROJECT NAME Bell Lake

TOTAL DEPTH 105.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/16	0		5			Light brown sand with gravel (SW)
50/16	0		10			
50/16	0		15			
50/16	0		20			
75/12	0		25			Red sandstone with gravel (SW)

REMARKS: Transwestern Bell Lake Facility, Jol, New Mexico MW-Monitoring Well
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F5

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7975-02

BORING NO. MW-3

PROJECT NAME Bell Lake

TOTAL DEPTH 105.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
75/12	0		30			
75/12	0		35			
75/12	0		40			
100/18	0		45			
100/18	0		50			

REMARKS: Transwestern Bell Lake Facility, Jol. New Mexico MW-Monitoring Well
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7975-02

BORING NO. MM-3

PROJECT NAME Bell Lake

TOTAL DEPTH 105.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
100/18	0		55			
100/18	0		60			
100/18	0		65			
100/18	0		70			
100/18	0		75			
100/18	0		80			

REMARKS: Transwestern Bell Lake Facility, Jel. New Mexico MM-Monitoring Well
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Failing F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. MN-3

PROJECT NAME Bell Lake

TOTAL DEPTH 106.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
100/18	0		85			
100/18	0		90			Red sandstone with gravel - moist (SW)
			95			Red sandstone with gravel - saturated (SW)
100/18	0		100			
100/18	0		105			Red clay (CL)

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico MN-Monitoring well
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling FG

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. NP-1

PROJECT NAME Bell Lake

TOTAL DEPTH 36.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLDWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/16	1000		19			
			20			
			21			
			22			
			23			
			24			
50/16	1000		25			
			26			
			27			
			28			
			29			
50/16	1000		30			
			31			
			32			
			33			
			34			
50/16	1000		35			
No Sample			36			
			37			

Hard consolidated sandstone (SW)

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico NP - North Pit
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Failing F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. 05-1

PROJECT NAME Bell Lake

TOTAL DEPTH 94.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/16	20		1			White/gray sandstone with gravel (SW)
			2			
			3			
			4			
			5			
			6			
			7			
			8			
			9			
			10			
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
50/16	24		20			
			21			
			22			
			23			
			24			

REMARKS: Transwestern Bell Lake Facility, Jol. New Mexico OS = Off Site
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling FB

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7975-02

BORING NO. OS-1

PROJECT NAME Bell Lake

TOTAL DEPTH 94.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPH)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
			24			
			25			
			26			
			27			
			28			
			29			
50/16	9		30			
			31			
			32			
			33			
			34			
			35			
			36			
			37			
			38			
			39			
75/16	6		40			Red sandstone with gravel (SW)
			41			
			42			
			43			
			44			
			45			
			46			
			47			
			48			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico OS - Off Site
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. OS-1

PROJECT NAME Bell Lake

TOTAL DEPTH 94.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
75/16	5		48			
			49			
			50			
			51			
			52			
			53			
			54			
			55			
			56			
			57			
			58			
			59			
75/16	5		60			
			61			
			62			
			63			
			64			
			65			
			66			
			67			
			68			
			69			
100/16	1		70			
			71			
			72			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico OS - Off Site
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Failing FG

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. 05-1

PROJECT NAME Bell Lake

TOTAL DEPTH 94.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
			72			
			73			
			74			
			75			
			76			
			77			
			78			
			79			
100/16	1		80			
			81			
			82			
			83			
			84			
100/16	1		85			Red sandstone with gravel - moist (SW)
			86			
			87			
			88			
			89			
100/16	1		90			
			91			Red sandstone with gravel - saturated (SW)
			92			
100/16	1		93			
			94			
			95			
			96			

REMARKS: Transwestern Bell Lake Facility, Jal. New Mexico OS - Off Site
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F6

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. UST-1

PROJECT NAME Bell Lake

TOTAL DEPTH 51.0

BY A. Fear

DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
50/12	1000		5			Gray/black gravel sand (GP)
50/12	1000		10			White to light gray silty sand (SM)
50/12	140					Light tan sand with gravel (SM)
50/12	400		15			Light brown sandstone (SW)
150/12	300					
150/12	200		20			
150/12	520					
150/12	220					
150/12	200		25			

REMARKS: Transwestern Bell Lake Facility, Jal, New Mexico
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling FB

LOG OF EXPLORATORY BORING

PROJECT NUMBER 7976-02

BORING NO. UST-1

PROJECT NAME Bell Lake

TOTAL DEPTH 51.0

BY A. Fear

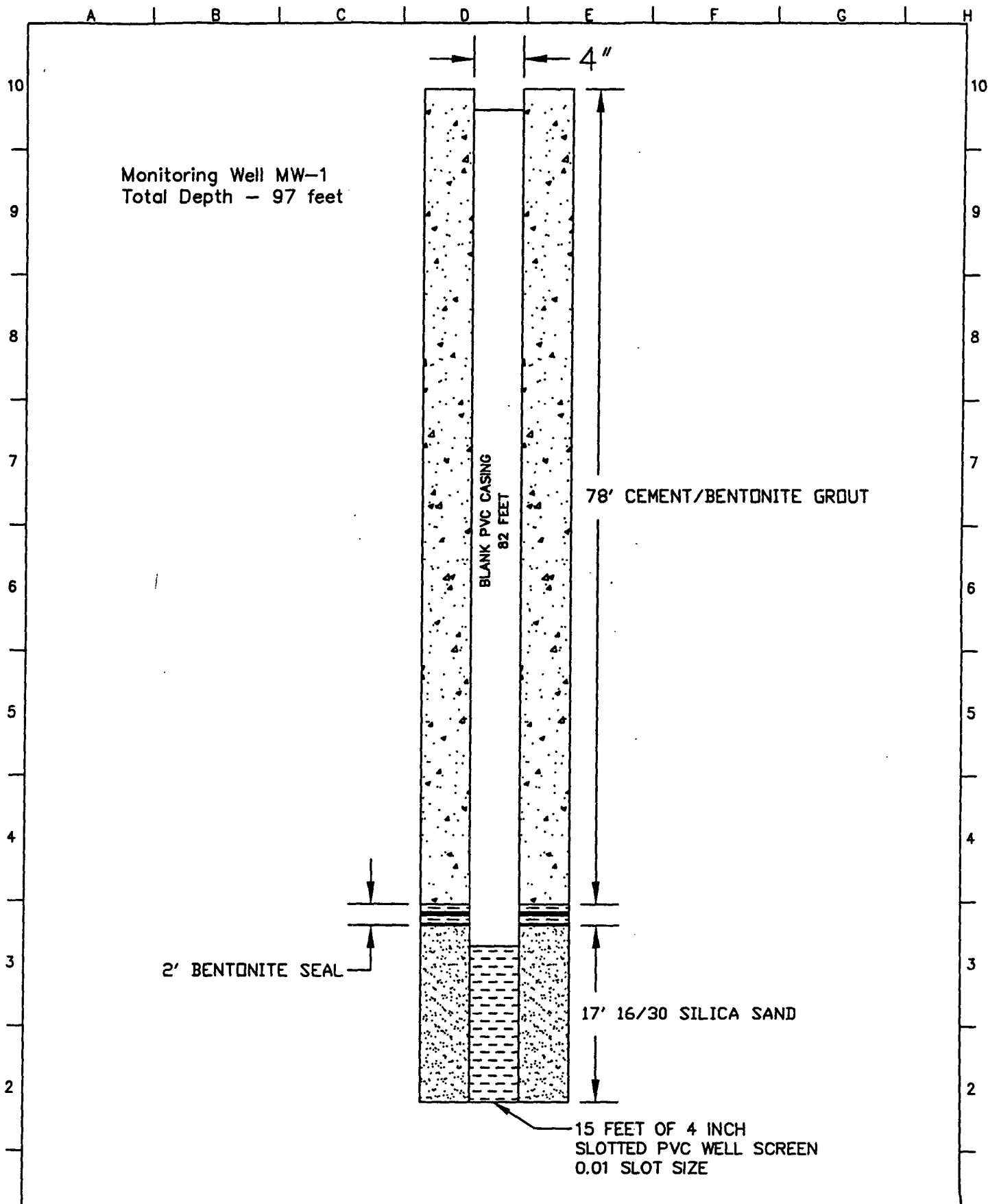
DATE 11/01/93

SURFACE ELEV. 0 FT

BLOWS (COUNT/ INCHES)	FID (PPM)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
150/12	100					
150/12	180					
			30			Light brown sand with clay (SM)
150/12	30					
150/12	70					
150/12	24		35			Light brown sand with yellow mottles (SM)
150/12	36					Light brown sand with gravel (SW)
150/12	3					
150/12	20		40			Red brown sand with gravel (SM)
150/12	46					
150/12	5		45			Red sand with gravel (GP)
150/12	8		50			

REMARKS: Transwestern Bell Lake Facility, Jol, New Mexico
 Drilling Contractor: Layne Environmental Driller: Wes Cowser
 Drilling Method: Hollow Stem Auger
 Drilling Equipment: Falling F6

APPENDIX B
MONITOR WELL CONSTRUCTION LOGS



Brown & Caldwell
Dallas-Houston, Texas

VERT. SCALE
1" = 12 FEET

DRAWN BY: JDN DATE 11/29
CHK'D BY: AEF DATE 11/29
APPROVED: SR DATE 11/29

TITLE
MONITORING WELL #1
WELL CONSTRUCTION DIAGRAM

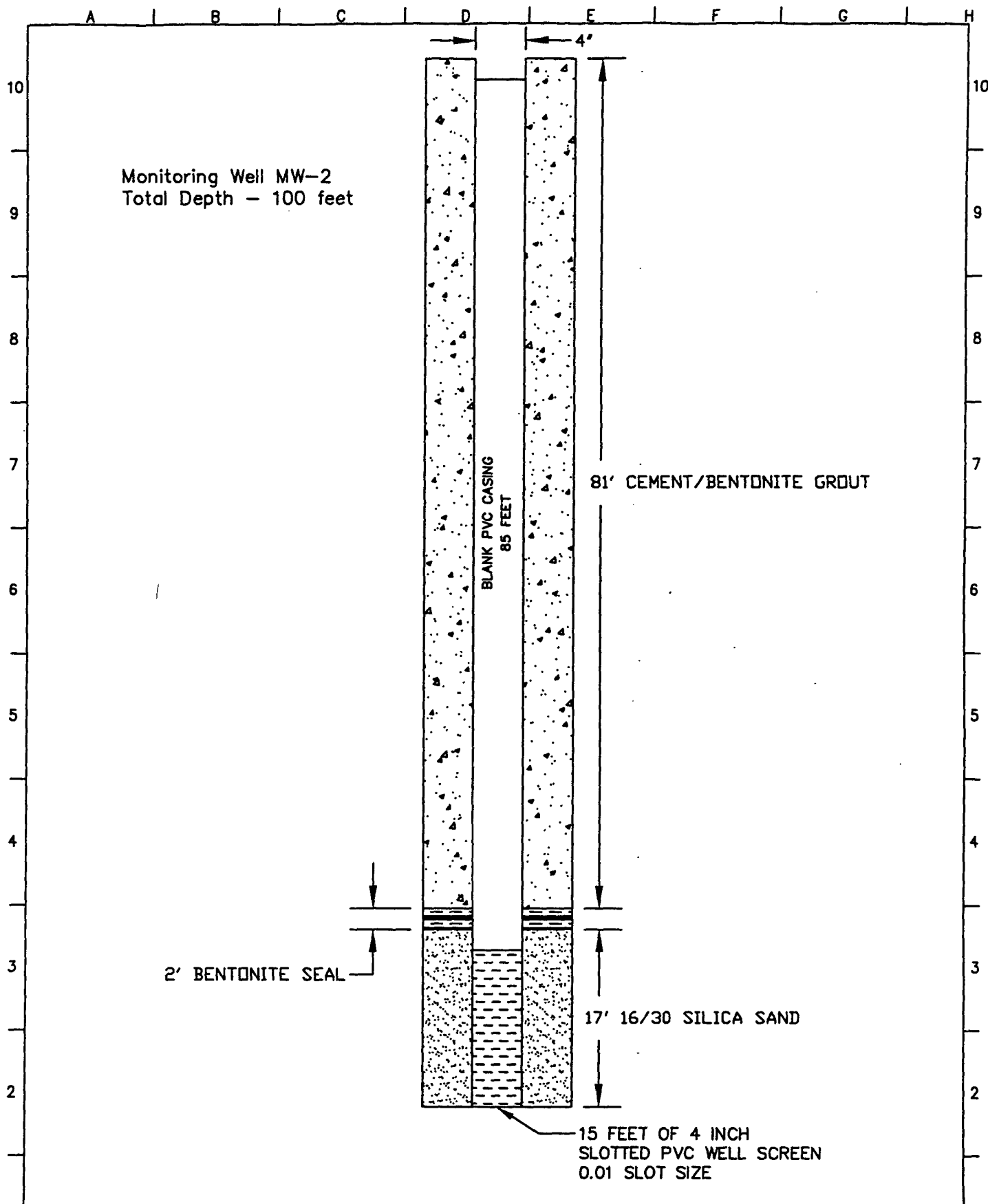
CLIENT
TRANSWESTERN

PROJECT
BELL LAKE FACILITY
JAL, NEW MEXICO

DATE
11/29/93

PROJECT NUMBER
7976-02

FIGURE NUMBER
1



Brown & Caldwell
Dallas-Houston, Texas

VERT. SCALE
1" = 12 FEET

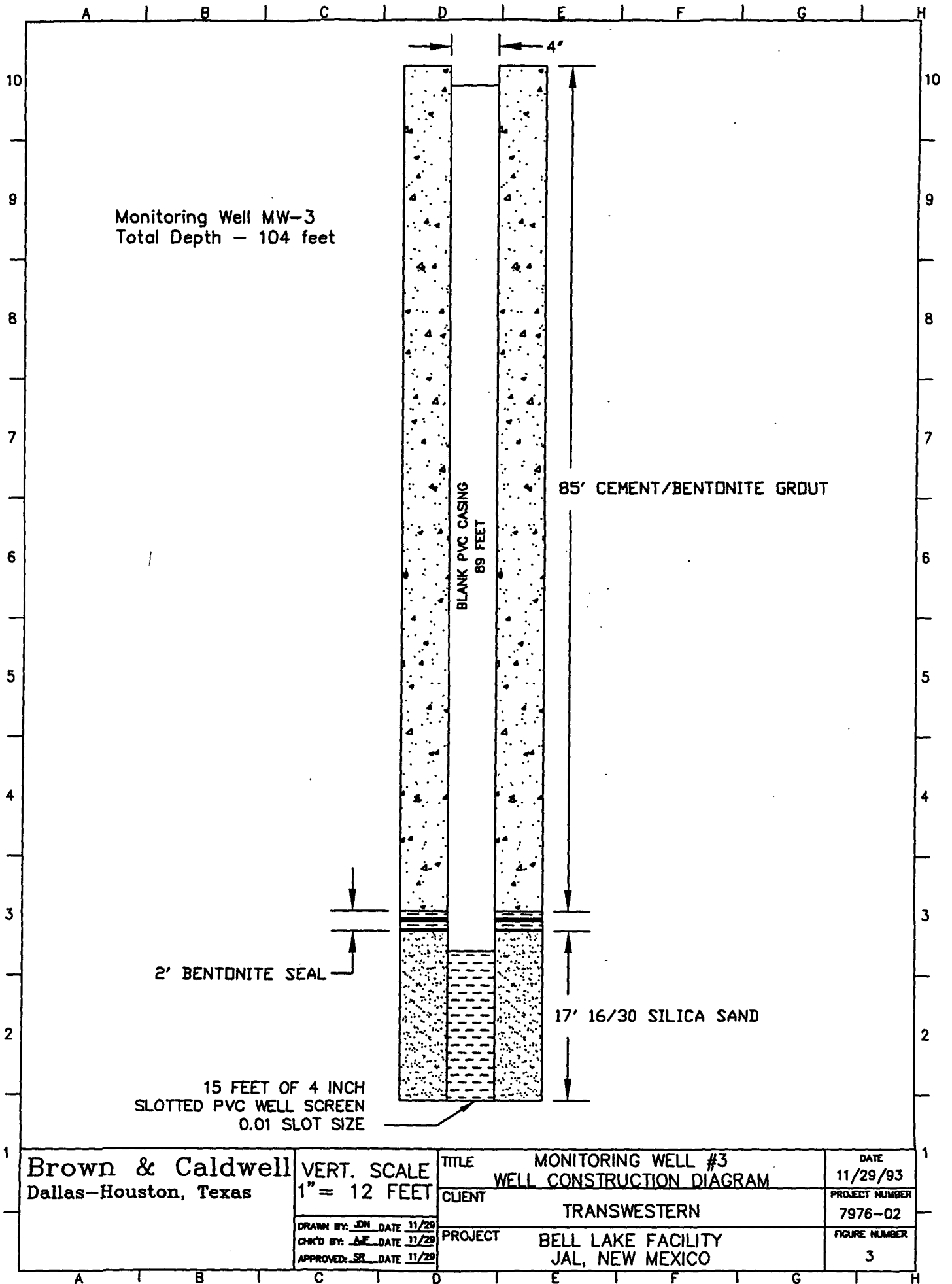
DRAWN BY: JON DATE 11/29
CHK'D BY: A.F. DATE 11/29
APPROVED: SR DATE 11/29

TITLE
MONITORING WELL #2
WELL CONSTRUCTION DIAGRAM

CLIENT
TRANSWESTERN

PROJECT
BELL LAKE FACILITY
JAL, NEW MEXICO

DATE
11/29/93
PROJECT NUMBER
7976-02
FIGURE NUMBER
2



APPENDIX C
LABORATORY ANALYTICAL REPORTS

REPORT OF LABORATORY ANALYSIS

November 09, 1993
Report No.: 00028500
Section A Page 6

LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: GRD WTR MW-1
LSG SAMPLE NO: H0256333
P.O. NO.: VERBAL

DATE SAMPLED: 24-OCT-93
DATE RECEIVED: 27-OCT-93
APPROVED BY: L Beyer

LN	TEST		DETERMINATION	RESULT	UNITS
	CODE				
4	I685	Petroleum Hydrocarbons		0.4	mg/L
5	G107W	BTEX Package			
		Benzene		24	ug/L
		Ethylbenzene		32	ug/L
		Toluene		29	ug/L
		m-Xylene		65 *	ug/L
		o-Xylene		17	ug/L
		p-Xylene		*	ug/L

COMMENTS: * The compounds m-Xylene and p-Xylene co-elute. The reported result is the sum of the two.

REPORT OF LABORATORY ANALYSIS

October 27, 1993
Report No.: 00028195
Section A Page 6

LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0001
PACE PROJECT: H07340001
PACE CLIENT: 620562

SAMPLE ID: SAND MW-1 89-91
LSG SAMPLE NO: H0254740
P.O. NO.: VERBAL

DATE SAMPLED: 13-OCT-93
DATE RECEIVED: 15-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
1	I685S	Petroleum Hydrocarbons	90	mg/kg
4	OSVICS	TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	< 330	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene	< 330	ug/kg

REPORT OF LABORATORY ANALYSIS

October 27, 1993
Report No.: 00028195
Section A Page 7

LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: SAND MW-1 89-91
LSG SAMPLE NO: H0254740

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzo(a)pyrene	< 330	ug/kg
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 330	ug/kg
		Benzoic acid	< 1,600	ug/kg
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg
6	G107S	BTEX Package		
		Benzene	< 2	ug/kg
		Ethylbenzene	< 2	ug/kg
		Toluene	< 2	ug/kg
		m-Xylene	< 2	ug/kg

REPORT OF LABORATORY ANALYSIS

October 27, 1993
Report No.: 00028195
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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: SAND MW-1 89-91
LSG SAMPLE NO: H0254740

TEST		DETERMINATION	RESULT	UNITS
LN	CODE			
		o-Xylene	< 2	ug/kg
		p-Xylene	< 2	ug/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

REPORT OF LABORATORY ANALYSIS

October 27, 1993

Report No.: 00028195

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0001
PACE PROJECT: H07340001
PACE CLIENT: 620562

SAMPLE ID: SAND MW-1 94-96
LSG SAMPLE NO: H0254741
P.O. NO.: VERBAL

DATE SAMPLED: 13-OCT-93
DATE RECEIVED: 15-OCT-93
APPROVED BY: L Beyer

LN	TEST		DETERMINATION	RESULT	UNITS
	CODE				
1	I685S	Petroleum Hydrocarbons		< 20	mg/kg
6	G107S	BTEX Package			
		Benzene		< 2	ug/kg
		Ethylbenzene		< 2	ug/kg
		Toluene		< 2	ug/kg
		m-Xylene		< 2	ug/kg
		o-Xylene		< 2	ug/kg
		p-Xylene		< 2	ug/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

REPORT OF LABORATORY ANALYSIS

November 05, 1993
Report No.: 00028414
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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: MW-2 GROUNDWATER
LSG SAMPLE NO: H0256041
P.O. NO.: VERBAL

DATE SAMPLED: 19-OCT-93
DATE RECEIVED: 23-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
3	I590	Solids, Dissolved at 180C	9,200	mg/L
4	I685	Petroleum Hydrocarbons	< 0.2	mg/L
5	OVTCW	TCL - Volatiles in Water		
		1,1,1-Trichloroethane	< 5	ug/L
		1,1,2,2-Tetrachloroethane	< 5	ug/L
		1,1,2-Trichloroethane	< 5	ug/L
		1,1-Dichloroethane	< 5	ug/L
		1,1-Dichloroethene	< 5	ug/L
		1,2-Dichloroethane	< 5	ug/L
		1,2-Dichloroethene (total)	< 5	ug/L
		1,2-Dichloropropane	< 5	ug/L
		2-Butanone	< 10	ug/L
		2-Hexanone	< 10	ug/L
		4-Methyl-2-pentanone	< 10	ug/L
		Acetone	210	ug/L
		Benzene	< 5	ug/L
		Bromodichloromethane	< 5	ug/L
		Bromoform	< 5	ug/L
		Bromomethane	< 10	ug/L
		Carbon disulfide	< 5	ug/L
		Carbon tetrachloride	< 5	ug/L
		Chlorobenzene	< 5	ug/L
		Chloroethane	< 10	ug/L
		Chloroform	< 5	ug/L
		Chloromethane	< 10	ug/L
		Dibromochloromethane	< 5	ug/L
		Ethylbenzene	< 5	ug/L
		Methylene chloride	< 5	ug/L
		Styrene	< 5	ug/L
		Tetrachloroethene	< 5	ug/L
		Toluene	< 5	ug/L
		Trichloroethene	< 5	ug/L
		Vinyl acetate	< 10	ug/L

REPORT OF LABORATORY ANALYSIS

November 05, 1993
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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: MW-2 GROUNDWATER
LSG SAMPLE NO: H0256041

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Vinyl chloride	< 10	ug/L
		Xylene(total)	< 5	ug/L
		cis-1,3-Dichloropropene	< 5	ug/L
		trans-1,3-Dichloropropene	< 5	ug/L
7	OSVTCW	TCL - Semi-volatile Extractables in Water		
		1,2,4-Trichlorobenzene	< 10	ug/L
		1,2-Dichlorobenzene	< 10	ug/L
		1,3-Dichlorobenzene	< 10	ug/L
		1,4-Dichlorobenzene	< 10	ug/L
		2,4,5-Trichlorophenol	< 20	ug/L
		2,4,6-Trichlorophenol	< 10	ug/L
		2,4-Dichlorophenol	< 10	ug/L
		2,4-Dimethylphenol	< 10	ug/L
		2,4-Dinitrophenol	< 50	ug/L
		2,4-Dinitrotoluene	< 10	ug/L
		2,6-Dinitrotoluene	< 10	ug/L
		2-Chloronaphthalene	< 10	ug/L
		2-Chlorophenol	< 10	ug/L
		2-Methylnaphthalene	< 10	ug/L
		2-Methylphenol	< 10	ug/L
		2-Nitroaniline	< 50	ug/L
		2-Nitrophenol	< 10	ug/L
		3,3'-Dichlorobenzidine	< 20	ug/L
		3-Nitroaniline	< 50	ug/L
		4,6-Dinitro-o-cresol	< 50	ug/L
		4-Bromophenylphenylether	< 10	ug/L
		4-Chloro-3-methylphenol	< 10	ug/L
		4-Chloroaniline	< 10	ug/L
		4-Chlorophenylphenylether	< 10	ug/L
		4-Methylphenol	< 10	ug/L
		4-Nitroaniline	< 50	ug/L
		4-Nitrophenol	< 50	ug/L
		Acenaphthene	< 10	ug/L
		Acenaphthylene	< 10	ug/L
		Anthracene	< 10	ug/L
		Benzo(a)anthracene	< 10	ug/L
		Benzo(a)pyrene	< 10	ug/L
		Benzo(b)fluoranthene	< 10	ug/L
		Benzo(g,h,i)perylene	< 10	ug/L

REPORT OF LABORATORY ANALYSIS

November 05, 1993
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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: MW-2 GROUNDWATER
LSG SAMPLE NO: H0256041

LN	TEST		DETERMINATION	RESULT	UNITS
	CODE				
		Benzo(k)fluoranthene		< 10	ug/L
		Benzoic acid		< 50	ug/L
		Benzyl alcohol		< 10	ug/L
		Butylbenzylphthalate		< 10	ug/L
		Chrysene		< 10	ug/L
		Di-n-butylphthalate		< 10	ug/L
		Di-n-octylphthalate		< 10	ug/L
		Dibenzo(a,h)anthracene		< 10	ug/L
		Dibenzofuran		< 10	ug/L
		Diethylphthalate		< 10	ug/L
		Dimethylphthalate		< 10	ug/L
		Fluoranthene		< 10	ug/L
		Fluorene		< 10	ug/L
		Hexachlorobenzene		< 10	ug/L
		Hexachlorobutadiene		< 10	ug/L
		Hexachlorocyclopentadiene		< 10	ug/L
		Hexachloroethane		< 10	ug/L
		Indeno(1,2,3-cd)pyrene		< 10	ug/L
		Isophorone		< 10	ug/L
		N-Nitroso-di-n-propylamine		< 10	ug/L
		N-Nitrosodiphenylamine		< 10	ug/L
		Naphthalene		< 10	ug/L
		Nitrobenzene		< 10	ug/L
		Pentachlorophenol		< 50	ug/L
		Phenanthrene		< 10	ug/L
		Phenol		< 10	ug/L
		Pyrene		< 10	ug/L
		bis(2-Chloroethoxy)methane		< 10	ug/L
		bis(2-Chloroethyl)ether		< 10	ug/L
		bis(2-Chloroisopropyl)ether		< 10	ug/L
		bis(2-Ethylhexyl)phthalate		< 10	ug/L

COMMENTS:

P A C E, I N C.

900 Gemini

Houston, TX 77058

Phone: (713) 488-1810

FAX: (713) 488-4661

TO: AL FEAR

COMPANY: BROWN AND CALDWELL

FROM: B Nayo

PHONE: (713) 488-1810

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Report No :
Section A Page 1

LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NH 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO. 0734 0005
PACE PROJECT: H07340005
PACE CLIENT: 620562

SAMPLE ID: SAND NW-2 89-91'
LSG SAMPLE NO: H0254887
P.O. NO.: VERBAL

DATE SAMPLED: 15-OCT-93
DATE RECEIVED: 19-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNIT
1	16855	Petroleum Hydrocarbons	30	ug/kg
2	OVICS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	5	ug/kg
		1,1,2,2-Tetrachloroethane	5	ug/kg
		1,1,2-Trichloroethane	5	ug/kg
		1,1-Dichloroethane	5	ug/kg
		1,1-Dichloroethene	5	ug/kg
		1,2-Dichloroethane	5	ug/kg
		1,2-Dichloroethene (total)	5	ug/kg
		1,2-Dichloropropane	5	ug/kg
		2-Butanone	10	ug/kg
		2-Hexanone	10	ug/kg
		4-Methyl-2-pentanone	10	ug/kg
		Acetone	10	ug/kg
		Benzene	5	ug/kg
		Bromodichloroethane	5	ug/kg
		Bromoform	5	ug/kg
		Bromoethane	10	ug/kg
		Carbon disulfide	5	ug/kg
		Carbon tetrachloride	5	ug/kg
		Chlorobenzene	5	ug/kg
		Chloroethane	10	ug/kg
		Chloroform	5	ug/kg
		Chloroethane	10	ug/kg
		Dibromochloroethane	5	ug/kg
		Ethylbenzene	5	ug/kg
		Methylene chloride	5	ug/kg
		Styrene	5	ug/kg
		Tetrachloroethene	5	ug/kg
		Toluene	5	ug/kg

REPORT OF LABORATORY ANALYSIS

October 29, 1993
Report No.: 00028263
Section A Page 1

LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0005
PACE PROJECT: H07340005
PACE CLIENT: 620562

SAMPLE ID: SAND MW-2 89-91'
LSG SAMPLE NO: H0254887
P.O. NO.: VERBAL

DATE SAMPLED: 15-OCT-93
DATE RECEIVED: 19-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNIT
1	I685S	Petroleum Hydrocarbons	30	mg/kg
2	OVICS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	< 5	ug/kg
		1,1,2,2,-Tetrachloroethane	< 5	ug/kg
		1,1,2-Trichloroethane	< 5	ug/kg
		1,1-Dichloroethane	< 5	ug/kg
		1,1-Dichloroethene	< 5	ug/kg
		1,2-Dichloroethane	< 5	ug/kg
		1,2-Dichloroethene (total)	< 5	ug/kg
		1,2-Dichloropropane	< 5	ug/kg
		2-Butanone	< 10	ug/kg
		2-Hexanone	< 10	ug/kg
		4-Methyl-2-pentanone	< 10	ug/kg
		Acetone	< 10	ug/kg
		Benzene	< 5	ug/kg
		Bromodichloromethane	< 5	ug/kg
		Bromoform	< 5	ug/kg
		Bromomethane	< 10	ug/kg
		Carbon disulfide	< 5	ug/kg
		Carbon tetrachloride	< 5	ug/kg
		Chlorobenzene	< 5	ug/kg
		Chloroethane	< 10	ug/kg
		Chloroform	< 5	ug/kg
		Chloromethane	< 10	ug/kg
		Dibromochloromethane	< 5	ug/kg
		Ethylbenzene	< 5	ug/kg
		Methylene chloride	< 5	ug/kg
		Styrene	< 5	ug/kg
		Tetrachloroethene	< 5	ug/kg
		Toluene	< 5	ug/kg

REPORT OF LABORATORY ANALYSIS

October 29, 1993
Report No.: 00028263
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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: SAND MW-2 89-91'
LSG SAMPLE NO: H0254887

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 330	ug/kg
		Benzoic acid	< 1,600	ug/kg
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg

COMMENTS:

REPORT OF LABORATORY ANALYSIS

October 29, 1993
Report No.: 00028263
Section A Page 2

LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: SAND MW-2 89-91'
LSG SAMPLE NO: H0254887

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Trichloroethene	< 5	ug/kg
		Vinyl acetate	< 10	ug/kg
		Vinyl chloride	< 10	ug/kg
		Xylene(total)	< 5	ug/kg
		cis-1,3-Dichloropropene	< 5	ug/kg
		trans-1,3-Dichloropropene	< 5	ug/kg
4	OSVTCS	TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	< 330	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene	< 330	ug/kg
		Benzo(a)pyrene	< 330	ug/kg

REPORT OF LABORATORY ANALYSIS

October 29, 1993
Report No.: 00028263
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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0005
PACE PROJECT: H07340005
PACE CLIENT: 620562

SAMPLE ID: SAND MW-2 94-92'
LSG SAMPLE NO: H0254888
P.O. NO.: VERBAL

DATE SAMPLED: 15-OCT-93
DATE RECEIVED: 19-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
1	I685S	Petroleum Hydrocarbons	< 20	mg/kg
2	OVTCS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	< 5	ug/kg
		1,1,2,2,-Tetrachloroethane	< 5	ug/kg
		1,1,2-Trichloroethane	< 5	ug/kg
		1,1-Dichloroethane	< 5	ug/kg
		1,1-Dichloroethene	< 5	ug/kg
		1,2-Dichloroethane	< 5	ug/kg
		1,2-Dichloroethene (total)	< 5	ug/kg
		1,2-Dichloropropane	< 5	ug/kg
		2-Butanone	85	ug/kg
		2-Hexanone	< 10	ug/kg
		4-Methyl-2-pentanone	< 10	ug/kg
		Acetone	1,700	ug/kg
		Benzene	< 5	ug/kg
		Bromodichloromethane	< 5	ug/kg
		Bromoform	< 5	ug/kg
		Bromomethane	< 10	ug/kg
		Carbon disulfide	< 5	ug/kg
		Carbon tetrachloride	< 5	ug/kg
		Chlorobenzene	< 5	ug/kg
		Chloroethane	< 10	ug/kg
		Chloroform	< 5	ug/kg
		Chloromethane	< 10	ug/kg
		Dibromochloromethane	< 5	ug/kg
		Ethylbenzene	< 5	ug/kg
		Methylene chloride	< 5	ug/kg
		Styrene	< 5	ug/kg
		Tetrachloroethene	< 5	ug/kg
		Toluene	< 5	ug/kg
		Trichloroethene	< 5	ug/kg
		Vinyl acetate	< 10	ug/kg
		Vinyl chloride	< 10	ug/kg

REPORT OF LABORATORY ANALYSIS

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: SAND MW-2 94-92'
LSG SAMPLE NO: H0254888

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Xylene(total)	< 5	ug/kg
		cis-1,3-Dichloropropene	< 5	ug/kg
		trans-1,3-Dichloropropene	< 5	ug/kg
4	OSVTCS	TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	< 330	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene	< 330	ug/kg
		Benzo(a)pyrene	< 330	ug/kg
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 330	ug/kg

REPORT OF LABORATORY ANALYSIS

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Section B Page 1

QUALITY CONTROL REPORT SUPPLEMENTAL INFORMATION

SAMPLE PREPARATION					SAMPLE ANALYSIS				
TEST	LN	BATCH	LR-METHOD	DATE/TIME	ANALYST	LR-METHOD	DATE/TIME	ANALYST	ANLS BATCH INSTRUMENT

SAMPLE ID: SAND MW-2 89-91'

LSG SAMPLE NO: H0254887

1	1685S	34966	19-3550			02-418.1	25-OCT-93	900	Lin	0	302WAT
2	OVTCS	35098	NA			19-8240	27-OCT-93	1745	E M	35098	GCMSQ
4	OSVTCS	34827	19-3550	20-OCT-93 0800	MLN	19-8270	25-OCT-93	1651	A P	34587	GCMST

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: SAND MW-2 94-92'

LSG SAMPLE NO: H0254888

1	1685S	34966	19-3550			02-418.1	25-OCT-93	900	Lin	0	302WAT
2	OVTCS	35098	NA			19-8240	27-OCT-93	1903	E M	35098	GCMSQ
4	OSVTCS	34827	19-3550	20-OCT-93 0800	MLN	19-8270	25-OCT-93	1733	A P	34587	GCMST

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: SAND MW-2 94-92'
LSG SAMPLE NO: H0254888

TEST LN	CODE	DETERMINATION	RESULT	UNITS
		Benzoic acid	< 1,600	ug/kg
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg

COMMENTS:

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QUALITY CONTROL REPORT SURROGATE STANDARD RECOVERY

TEST LN	SURROGATE CODE COMPOUND	PERCENT RECOVERY	ACCEPTANCE LIMITS	REF LN
SAMPLE ID: SAND MW-2 89-91' LSG SAMPLE NO: H0254887				
3	\$VOAS GC/MS Volatiles Surrogates			2
	1,2-Dichloroethane-d4	80	-	
	4-Bromofluorobenzene	92	-	
	Toluene-d8	103	-	
5	\$BNAS GC/MS BNA Surrogates			4
	2,4,6-Tribromophenol	85	-	
	2-Fluorobiphenyl	81	-	
	2-Fluorophenol	98	-	
	Nitrobenzene-d5	85	-	
	Phenol-d5	90	-	
	p-Terphenyl-d14	105	-	
SAMPLE ID: SAND/MW-2 94-92' LSG SAMPLE NO: H0254888				
3	\$VOAS GC/MS Volatiles Surrogates			2
	1,2-Dichloroethane-d4	91	-	
	4-Bromofluorobenzene	87	-	
	Toluene-d8	91	-	
5	\$BNAS GC/MS BNA Surrogates			4
	2,4,6-Tribromophenol	82	-	
	2-Fluorobiphenyl	80	-	
	2-Fluorophenol	97	-	
	Nitrobenzene-d5	80	-	
	Phenol-d5	89	-	
	p-Terphenyl-d14	98	-	



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QUALITY CONTROL REPORT LABORATORY CONTROL SAMPLE RECOVERY

TEST CODE DETERMINATION	PERCENT RECOVERY	ACCEPTANCE LIMITS
BATCH: 34966 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0256749
1685S Petroleum Hydrocarbons	104.0	-
BATCH: 35098 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0256958
OVTCS TCL - Volatiles in Soil		
1,1-Dichloroethene	92	-
Benzene	87	-
Chlorobenzene	96	-
Toluene	94	-
Trichloroethene	105	-

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QUALITY CONTROL REPORT METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
BATCH: 34827 SAMPLE ID: Method Blank		LSG SAMPLE NO: H0256525	
OSVTCS	TCL - Semi-volatile Extractables in Soil		
	1,2,4-Trichlorobenzene	< 330	ug/kg
	1,2-Dichlorobenzene	< 330	ug/kg
	1,3-Dichlorobenzene	< 330	ug/kg
	1,4-Dichlorobenzene	< 330	ug/kg
	2,4,5-Trichlorophenol	< 660	ug/kg
	2,4,6-Trichlorophenol	< 330	ug/kg
	2,4-Dichlorophenol	< 330	ug/kg
	2,4-Dimethylphenol	< 330	ug/kg
	2,4-Dinitrophenol	< 1,600	ug/kg
	2,4-Dinitrotoluene	< 330	ug/kg
	2,6-Dinitrotoluene	< 330	ug/kg
	2-Chloronaphthalene	< 330	ug/kg
	2-Chlorophenol	< 330	ug/kg
	2-Methylnaphthalene	< 330	ug/kg
	2-Methylphenol	< 330	ug/kg
	2-Nitroaniline	< 1,600	ug/kg
	2-Nitrophenol	< 330	ug/kg
	3,3'-Dichlorobenzidine	< 660	ug/kg
	3-Nitroaniline	< 1,600	ug/kg
	4,6-Dinitro-o-cresol	< 1,600	ug/kg
	4-Bromophenylphenylether	< 330	ug/kg
	4-Chloro-3-methylphenol	< 330	ug/kg
	4-Chloroaniline	< 330	ug/kg
	4-Chlorophenylphenylether	< 330	ug/kg
	4-Methylphenol	< 330	ug/kg
	4-Nitroaniline	< 1,600	ug/kg
	4-Nitrophenol	< 1,600	ug/kg
	Acenaphthene	< 330	ug/kg
	Acenaphthylene	< 330	ug/kg
	Anthracene	< 330	ug/kg
	Benzo(a)anthracene	< 330	ug/kg
	Benzo(a)pyrene	< 330	ug/kg
	Benzo(b)fluoranthene	< 330	ug/kg
	Benzo(g,h,i)perylene	< 330	ug/kg
	Benzo(k)fluoranthene	< 330	ug/kg
	Benzoic acid	< 1,600	ug/kg
	Benzyl alcohol	< 330	ug/kg
	Butylbenzylphthalate	< 330	ug/kg
	Chrysene	< 330	ug/kg

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL REPORT METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
	Di-n-butylphthalate	< 330	ug/kg
	Di-n-octylphthalate	< 330	ug/kg
	Dibenzo(a,h)anthracene	< 330	ug/kg
	Dibenzofuran	< 330	ug/kg
	Diethylphthalate	< 330	ug/kg
	Dimethylphthalate	< 330	ug/kg
	Fluoranthene	< 330	ug/kg
	Fluorene	< 330	ug/kg
	Hexachlorobenzene	< 330	ug/kg
	Hexachlorobutadiene	< 330	ug/kg
	Hexachlorocyclopentadiene	< 330	ug/kg
	Hexachloroethane	< 330	ug/kg
	Indeno(1,2,3-cd)pyrene	< 330	ug/kg
	Isophorone	< 330	ug/kg
	N-Nitrosodi-n-propylamine	< 330	ug/kg
	N-Nitrosodiphenylamine	< 330	ug/kg
	Naphthalene	< 330	ug/kg
	Nitrobenzene	< 330	ug/kg
	Pentachlorophenol	< 1,600	ug/kg
	Phenanthrene	< 330	ug/kg
	Phenol	< 330	ug/kg
	Pyrene	< 330	ug/kg
	bis(2-Chloroethoxy)methane	< 330	ug/kg
	bis(2-Chloroethyl)ether	< 330	ug/kg
	bis(2-Chloroisopropyl)ether	< 330	ug/kg
	bis(2-Ethylhexyl)phthalate	< 330	ug/kg
BATCH: 34966	SAMPLE ID: Method Blank	LSG SAMPLE NO: 40256750	
	1685S Petroleum Hydrocarbons	< 20	mg/kg
BATCH: 35098	SAMPLE ID: Method Blank	LSG SAMPLE NO: 40256959	
OVTCS	TCL - Volatiles in Soil		
	1,1,1-Trichloroethane	< 5	ug/kg
	1,1,2,2,-Tetrachloroethane	< 5	ug/kg
	1,1,2-Trichloroethane	< 5	ug/kg
	1,1-Dichloroethane	< 5	ug/kg
	1,1-Dichloroethene	< 5	ug/kg
	1,2-Dichloroethane	< 5	ug/kg
	1,2-Dichloroethene (total)	< 5	ug/kg
	1,2-Dichloropropane	< 5	ug/kg
	2-Butanone	< 10	ug/kg
	2-Hexanone	< 10	ug/kg

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Section E Page 3

QUALITY CONTROL REPORT METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
	4-Methyl-2-pentanone	< 10	ug/kg
	Acetone	< 10	ug/kg
	Benzene	< 5	ug/kg
	Bromodichloromethane	< 5	ug/kg
	Bromoform	< 5	ug/kg
	Bromomethane	< 10	ug/kg
	Carbon disulfide	< 5	ug/kg
	Carbon tetrachloride	< 5	ug/kg
	Chlorobenzene	< 5	ug/kg
	Chloroethane	< 10	ug/kg
	Chloroform	< 5	ug/kg
	Chloromethane	< 10	ug/kg
	Dibromochloromethane	< 5	ug/kg
	Ethylbenzene	< 5	ug/kg
	Methylene chloride	< 5	ug/kg
	Styrene	< 5	ug/kg
	Tetrachloroethene	< 5	ug/kg
	Toluene	< 5	ug/kg
	Trichloroethene	< 5	ug/kg
	Vinyl acetate	< 10	ug/kg
	Vinyl chloride	< 10	ug/kg
	Xylene(total)	< 5	ug/kg
	cis-1,3-Dichloropropene	< 5	ug/kg
	trans-1,3-Dichloropropene	< 5	ug/kg

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Section F Page 1

QUALITY CONTROL REPORT DUPLICATE AND MATRIX SPIKE DATA

PREP BATCH: 34966

LSG SAMPLE NO: H0254765

TEST	DETERMINATION	ORIGINAL RESULT	DUPLICATE RESULT	UNITS	RANGE / RPD	UNITS	MS RESULT	MS % RCVRY
1685S	Petroleum Hydrocarbons	19,000	17,000	mg/kg	11.1	mg/kg	18,000	*

* The concentration of the analyte prevented accurate determination of the matrix spike recovery.

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Section H Page 1

QUALITY CONTROL REPORT MATRIX SPIKE AND MATRIX SPIKE DUPLICATE DATA

PREP BATCH: 35098

LSG SAMPLE NO: H0254887

<u>TEST</u>	<u>DETERMINATION</u>	<u>MS RESULT</u>	<u>MSD RESULT</u>	<u>UNITS</u>	<u>RPD</u>	<u>MS PCT RECOVERY</u>	<u>MSD PCT RECOVERY</u>
OVTCS	1,1-Dichloroethene	44.2	43.6	ug/kg	1.27	88	87
OVTCS	Benzene	47.2	48.0	ug/kg	1.67	94	96
OVTCS	Chlorobenzene	49.1	50.0	ug/kg	1.91	98	100
OVTCS	Toluene	47.2	41.4	ug/kg	13.1	94	83
OVTCS	Trichloroethene	54.3	55.1	ug/kg	1.33	109	110

ANLS BATCH: 34587

LSG SAMPLE NO: H0254266

<u>TEST</u>	<u>DETERMINATION</u>	<u>MS RESULT</u>	<u>MSD RESULT</u>	<u>UNITS</u>	<u>RPD</u>	<u>MS PCT RECOVERY</u>	<u>MSD PCT RECOVERY</u>
OSVTCS	1,2,4-Trichlorobenzene	2360	2430	ug/kg	2.88	72	73
OSVTCS	1,4-Dichlorobenzene	2360	2440	ug/kg	3.54	71	74
OSVTCS	2,4-Dinitrotoluene	2650	2750	ug/kg	3.95	80	83
OSVTCS	2-Chlorophenol	4750	4920	ug/kg	3.47	72	75
OSVTCS	4-Chloro-3-methylphenol	5130	5210	ug/kg	1.66	78	79
OSVTCS	4-Nitrophenol	6150	6400	ug/kg	3.92	93	97
OSVTCS	Acenaphthene	2240	2300	ug/kg	2.78	68	70
OSVTCS	N-Nitrosodi-n-propylamine	2140	2180	ug/kg	1.90	65	66
OSVTCS	Pentachlorophenol	5380	5460	ug/kg	1.49	82	82
OSVTCS	Phenol	4400	4600	ug/kg	4.31	67	69
OSVTCS	Pyrene	2090	2270	ug/kg	8.26	63	69

Client Transwestern

Address _____

Phone _____

Sampled By (PRINT) Alan J. Fear

Date Sampled 10/15/93

Sampler Signature Alan J. Fear

Date 10/15/93

w/ Brown & Caldwell
at (713)-759-0999 for Billing Info.
128100
CHAIN-OF-CUSTODY RECORD
Analytical Request

Report To: Susanne Richard

Pace Client No. _____

Bill To: Transwestern

Pace Project Manager _____

P.O. # / Billing Reference _____

Pace Project No. _____

Project Name / No. Beil Lake

*Requested Due Date: _____

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PAGE NO.	NO. OF CONTAINERS				ANALYSES REQUEST	REMARKS
					UNPRESERVED	H ₂ SO ₄	HNO ₃	VOA		
1	sand mw-2 (89-91)	1020	SS.		22				X X X	
2	sand mw-2 (94-96)	1050	SS.		22				X X X	
3										
4										
5										
6										
7										
8										

COOLER NOS.	BALLERS	SHIPMENT METHOD	RETURNED / DATE	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
					Alan J. Fear	Susanne Richard / Pace	10/19/93	10:10
Additional Comments analytical results in file								
#47254837-88								

REPORT OF LABORATORY ANALYSIS

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Section A Page 1

LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: MW-3 GROUNDWATER
LSG SAMPLE NO: H0256040
P.O. NO.: VERBAL

DATE SAMPLED: 20-OCT-93
DATE RECEIVED: 23-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNIT
3	1590	Solids, Dissolved at 180C	1,500	mg/L
4	1685	Petroleum Hydrocarbons	< 0.2	mg/L
5	OVTCW	TCL - Volatiles in Water		
		1,1,1-Trichloroethane	< 5	ug/L
		1,1,2,2-Tetrachloroethane	< 5	ug/L
		1,1,2-Trichloroethane	< 5	ug/L
		1,1-Dichloroethane	< 5	ug/L
		1,1-Dichloroethene	< 5	ug/L
		1,2-Dichloroethane	< 5	ug/L
		1,2-Dichloroethene (total)	< 5	ug/L
		1,2-Dichloropropane	< 5	ug/L
		2-Butanone	< 10	ug/L
		2-Hexanone	< 10	ug/L
		4-Methyl-2-pentanone	< 10	ug/L
		Acetone	< 10	ug/L
		Benzene	< 5	ug/L
		Bromodichloromethane	< 5	ug/L
		Bromoform	< 5	ug/L
		Bromomethane	< 10	ug/L
		Carbon disulfide	< 5	ug/L
		Carbon tetrachloride	< 5	ug/L
		Chlorobenzene	< 5	ug/L
		Chloroethane	< 10	ug/L
		Chloroform	< 5	ug/L
		Chloromethane	< 10	ug/L
		Dibromochloromethane	< 5	ug/L
		Ethylbenzene	< 5	ug/L
		Methylene chloride	< 5	ug/L
		Styrene	< 5	ug/L
		Tetrachloroethene	< 5	ug/L

REPORT OF LABORATORY ANALYSIS

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Section A Page 2

LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: MW-3 GROUNDWATER
LSG SAMPLE NO: H0256040

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Toluene	< 5	ug/L
		Trichloroethene	< 5	ug/L
		Vinyl acetate	< 10	ug/L
		Vinyl chloride	< 10	ug/L
		Xylene(total)	< 5	ug/L
		cis-1,3-Dichloropropene	< 5	ug/L
		trans-1,3-Dichloropropene	< 5	ug/L
7	OSVTCW	TCL - Semi-volatile Extractables in Water		
		1,2,4-Trichlorobenzene	< 10	ug/L
		1,2-Dichlorobenzene	< 10	ug/L
		1,3-Dichlorobenzene	< 10	ug/L
		1,4-Dichlorobenzene	< 10	ug/L
		2,4,5-Trichlorophenol	< 20	ug/L
		2,4,6-Trichlorophenol	< 10	ug/L
		2,4-Dichlorophenol	< 10	ug/L
		2,4-Dimethylphenol	< 10	ug/L
		2,4-Dinitrophenol	< 50	ug/L
		2,4-Dinitrotoluene	< 10	ug/L
		2,6-Dinitrotoluene	< 10	ug/L
		2-Chloronaphthalene	< 10	ug/L
		2-Chlorophenol	< 10	ug/L
		2-Methylnaphthalene	< 10	ug/L
		2-Methylphenol	< 10	ug/L
		2-Nitroaniline	< 50	ug/L
		2-Nitrophenol	< 10	ug/L
		3,3'-Dichlorobenzidine	< 20	ug/L
		3-Nitroaniline	< 50	ug/L
		4,6-Dinitro-o-cresol	< 50	ug/L
		4-Bromophenylphenylether	< 10	ug/L
		4-Chloro-3-methylphenol	< 10	ug/L
		4-Chloroaniline	< 10	ug/L
		4-Chlorophenylphenylether	< 10	ug/L
		4-Methylphenol	< 10	ug/L
		4-Nitroaniline	< 50	ug/L
		4-Nitrophenol	< 50	ug/L
		Acenaphthene	< 10	ug/L
		Acenaphthylene	< 10	ug/L
		Anthracene	< 10	ug/L
		Benzo(a)anthracene	< 10	ug/L

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Section A Page 3

LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: MW-3 GROUNDWATER
LSG SAMPLE NO: H0256040

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzo(a)pyrene	< 10	ug/L
		Benzo(b)fluoranthene	< 10	ug/L
		Benzo(g,h,i)perylene	< 10	ug/L
		Benzo(k)fluoranthene	< 10	ug/L
		Benzoic acid	< 50	ug/L
		Benzyl alcohol	< 10	ug/L
		Butylbenzylphthalate	< 10	ug/L
		Chrysene	< 10	ug/L
		Di-n-butylphthalate	330	ug/L
		Di-n-octylphthalate	< 10	ug/L
		Dibenzo(a,h)anthracene	< 10	ug/L
		Dibenzofuran	< 10	ug/L
		Diethylphthalate	< 10	ug/L
		Dimethylphthalate	< 10	ug/L
		Fluoranthene	< 10	ug/L
		Fluorene	< 10	ug/L
		Hexachlorobenzene	< 10	ug/L
		Hexachlorobutadiene	< 10	ug/L
		Hexachlorocyclopentadiene	< 10	ug/L
		Hexachloroethane	< 10	ug/L
		Indeno(1,2,3-cd)pyrene	< 10	ug/L
		Isophorone	< 10	ug/L
		N-Nitroso-di-n-propylamine	< 10	ug/L
		N-Nitrosodiphenylamine	< 10	ug/L
		Naphthalene	< 10	ug/L
		Nitrobenzene	< 10	ug/L
		Pentachlorophenol	< 50	ug/L
		Phenanthrene	< 10	ug/L
		Phenol	< 10	ug/L
		Pyrene	< 10	ug/L
		bis(2-Chloroethoxy)methane	< 10	ug/L
		bis(2-Chloroethyl)ether	< 10	ug/L
		bis(2-Chloroisopropyl)ether	< 10	ug/L
		bis(2-Ethylhexyl)phthalate	< 10	ug/L

COMMENTS:

REPORT OF LABORATORY ANALYSIS

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Section A Page 10

LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: MW-3 (89-91') SAND
LSG SAMPLE NO: H0256043
P.O. NO.: VERBAL

DATE SAMPLED: 19-OCT-93
DATE RECEIVED: 23-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
16	I685S	Petroleum Hydrocarbons	< 20	mg/kg
17	OVTCS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	< 5	ug/kg
		1,1,2,2,-Tetrachloroethane	< 5	ug/kg
		1,1,2-Trichloroethane	< 5	ug/kg
		1,1-Dichloroethane	< 5	ug/kg
		1,1-Dichloroethene	< 5	ug/kg
		1,2-Dichloroethane	< 5	ug/kg
		1,2-Dichloroethene (total)	< 5	ug/kg
		1,2-Dichloropropane	< 5	ug/kg
		2-Butanone	< 10	ug/kg
		2-Hexanone	< 10	ug/kg
		4-Methyl-2-pentanone	< 10	ug/kg
		Acetone	49	ug/kg
		Benzene	< 5	ug/kg
		Bromodichloromethane	< 5	ug/kg
		Bromoform	< 5	ug/kg
		Bromomethane	< 10	ug/kg
		Carbon disulfide	< 5	ug/kg
		Carbon tetrachloride	< 5	ug/kg
		Chlorobenzene	< 5	ug/kg
		Chloroethane	< 10	ug/kg
		Chloroform	< 5	ug/kg
		Chloromethane	< 10	ug/kg
		Dibromochloromethane	< 5	ug/kg
		Ethylbenzene	< 5	ug/kg
		Methylene chloride	< 5	ug/kg
		Styrene	< 5	ug/kg
		Tetrachloroethene	< 5	ug/kg
		Toluene	< 5	ug/kg
		Trichloroethene	< 5	ug/kg
		Vinyl acetate	< 10	ug/kg
		Vinyl chloride	< 10	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: MW-3 (89-91') SAND
LSG SAMPLE NO: H0256043

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Xylene(total)	< 5	ug/kg
		cis-1,3-Dichloropropene	< 5	ug/kg
		trans-1,3-Dichloropropene	< 5	ug/kg
19	OSVTC5	TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	< 330	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene	< 330	ug/kg
		Benzo(a)pyrene	< 330	ug/kg
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 330	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: MW-3 (89-91') SAND
LSG SAMPLE NO: H0256043

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzoic acid	< 1,600	ug/kg
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: MW-3 (104-106') SAND
LSG SAMPLE NO: H0256044
P.O. NO.: VERBAL

DATE SAMPLED: 19-OCT-93
DATE RECEIVED: 23-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
16	I685S	Petroleum Hydrocarbons	< 20	mg/kg
17	OVTCS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	< 5	ug/kg
		1,1,2,2,-Tetrachloroethane	< 5	ug/kg
		1,1,2-Trichloroethane	< 5	ug/kg
		1,1-Dichloroethane	< 5	ug/kg
		1,1-Dichloroethene	< 5	ug/kg
		1,2-Dichloroethane	< 5	ug/kg
		1,2-Dichloroethene (total)	< 5	ug/kg
		1,2-Dichloropropane	< 5	ug/kg
		2-Butanone	< 10	ug/kg
		2-Hexanone	< 10	ug/kg
		4-Methyl-2-pentanone	< 10	ug/kg
		Acetone	< 10	ug/kg
		Benzene	< 5	ug/kg
		Bromodichloromethane	< 5	ug/kg
		Bromoform	< 5	ug/kg
		Bromomethane	< 10	ug/kg
		Carbon disulfide	< 5	ug/kg
		Carbon tetrachloride	< 5	ug/kg
		Chlorobenzene	< 5	ug/kg
		Chloroethane	< 10	ug/kg
		Chloroform	< 5	ug/kg
		Chloromethane	< 10	ug/kg
		Dibromochloromethane	< 5	ug/kg
		Ethylbenzene	< 5	ug/kg
		Methylene chloride	< 5	ug/kg
		Styrene	< 5	ug/kg
		Tetrachloroethene	< 5	ug/kg
		Toluene	< 5	ug/kg
		Trichloroethene	< 5	ug/kg
		Vinyl acetate	< 10	ug/kg
		Vinyl chloride	< 10	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: MW-3 (104-106') SAND
LSG SAMPLE NO: H0256044

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Xylene(total)	< 5	ug/kg
		cis-1,3-Dichloropropene	< 5	ug/kg
		trans-1,3-Dichloropropene	< 5	ug/kg
19	OSVTCS	TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	< 330	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene	< 330	ug/kg
		Benzo(a)pyrene	< 330	ug/kg
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 330	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: MW-3 (104-106') SAND
LSG SAMPLE NO: H0256044

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzoic acid	< 1,600	ug/kg
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: OS-1 GROUNDWATER
LSG SAMPLE NO: H0256042
P.O. NO.: VERBAL

DATE SAMPLED: 21-OCT-93
DATE RECEIVED: 23-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
3	1590	Solids, Dissolved at 180C	10,000	mg/L
4	1685	Petroleum Hydrocarbons	0.5	mg/L
5	OVTCW	TCL - Volatiles in Water		
		1,1,1-Trichloroethane	< 5	ug/L
		1,1,2,2-Tetrachloroethane	< 5	ug/L
		1,1,2-Trichloroethane	< 5	ug/L
		1,1-Dichloroethane	< 5	ug/L
		1,1-Dichloroethene	< 5	ug/L
		1,2-Dichloroethane	< 5	ug/L
		1,2-Dichloroethene (total)	< 5	ug/L
		1,2-Dichloropropane	< 5	ug/L
		2-Butanone	230	ug/L
		2-Hexanone	< 10	ug/L
		4-Methyl-2-pentanone	< 10	ug/L
		Acetone	770	ug/L
		Benzene	57	ug/L
		Bromodichloromethane	< 5	ug/L
		Bromoform	< 5	ug/L
		Bromomethane	< 10	ug/L
		Carbon disulfide	< 5	ug/L
		Carbon tetrachloride	< 5	ug/L
		Chlorobenzene	< 5	ug/L
		Chloroethane	< 10	ug/L
		Chloroform	< 5	ug/L
		Chloromethane	< 10	ug/L
		Dibromochloromethane	< 5	ug/L
		Ethylbenzene	< 5	ug/L
		Methylene chloride	< 5	ug/L
		Styrene	< 5	ug/L
		Tetrachloroethene	< 5	ug/L
		Toluene	34	ug/L
		Trichloroethene	< 5	ug/L
		Vinyl acetate	< 10	ug/L

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: OS-1 GROUNDWATER
LSG SAMPLE NO: H0256042

LN	TEST CODE	DETERMINATION	RESULT	UNITS
7	OSVTCW	Vinyl chloride	< 10	ug/L
		Xylene(total)	26	ug/L
		cis-1,3-Dichloropropene	< 5	ug/L
		trans-1,3-Dichloropropene	< 5	ug/L
		TCL - Semi-volatile Extractables in Water		
		1,2,4-Trichlorobenzene	< 10	ug/L
		1,2-Dichlorobenzene	< 10	ug/L
		1,3-Dichlorobenzene	< 10	ug/L
		1,4-Dichlorobenzene	< 10	ug/L
		2,4,5-Trichlorophenol	< 20	ug/L
		2,4,6-Trichlorophenol	< 10	ug/L
		2,4-Dichlorophenol	< 10	ug/L
		2,4-Dimethylphenol	< 10	ug/L
		2,4-Dinitrophenol	< 50	ug/L
		2,4-Dinitrotoluene	< 10	ug/L
		2,6-Dinitrotoluene	< 10	ug/L
		2-Chloronaphthalene	< 10	ug/L
		2-Chlorophenol	< 10	ug/L
		2-Methylnaphthalene	< 10	ug/L
		2-Methylphenol	< 10	ug/L
		2-Nitroaniline	< 50	ug/L
		2-Nitrophenol	< 10	ug/L
		3,3'-Dichlorobenzidine	< 20	ug/L
		3-Nitroaniline	< 50	ug/L
		4,6-Dinitro-o-cresol	< 50	ug/L
		4-Bromophenylphenylether	< 10	ug/L
		4-Chloro-3-methylphenol	< 10	ug/L
		4-Chloroaniline	< 10	ug/L
		4-Chlorophenylphenylether	< 10	ug/L
		4-Methylphenol	18	ug/L
		4-Nitroaniline	< 50	ug/L
		4-Nitrophenol	< 50	ug/L
		Acenaphthene	< 10	ug/L
		Acenaphthylene	< 10	ug/L
		Anthracene	< 10	ug/L
		Benzo(a)anthracene	< 10	ug/L
		Benzo(a)pyrene	< 10	ug/L
		Benzo(b)fluoranthene	< 10	ug/L
		Benzo(g,h,i)perylene	< 10	ug/L

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: OS-1 GROUNDWATER
LSG SAMPLE NO: H0256042

TEST		DETERMINATION	RESULT	UNITS
LN	CODE			
		Benzo(k)fluoranthene	< 10	ug/L
		Benzoic acid	< 50	ug/L
		Benzyl alcohol	< 10	ug/L
		Butylbenzylphthalate	< 10	ug/L
		Chrysene	< 10	ug/L
		Di-n-butylphthalate	< 10	ug/L
		Di-n-octylphthalate	< 10	ug/L
		Dibenzo(a,h)anthracene	< 10	ug/L
		Dibenzofuran	< 10	ug/L
		Diethylphthalate	< 10	ug/L
		Dimethylphthalate	< 10	ug/L
		Fluoranthene	< 10	ug/L
		Fluorene	< 10	ug/L
		Hexachlorobenzene	< 10	ug/L
		Hexachlorobutadiene	< 10	ug/L
		Hexachlorocyclopentadiene	< 10	ug/L
		Hexachloroethane	< 10	ug/L
		Indeno(1,2,3-cd)pyrene	< 10	ug/L
		Isophorone	< 10	ug/L
		N-Nitroso-di-n-propylamine	< 10	ug/L
		N-Nitrosodiphenylamine	< 10	ug/L
		Naphthalene	< 10	ug/L
		Nitrobenzene	< 10	ug/L
		Pentachlorophenol	< 50	ug/L
		Phenanthrene	< 10	ug/L
		Phenol	< 10	ug/L
		Pyrene	< 10	ug/L
		bis(2-Chloroethoxy)methane	< 10	ug/L
		bis(2-Chloroethyl)ether	< 10	ug/L
		bis(2-Chloroisopropyl)ether	< 10	ug/L
		bis(2-Ethylhexyl)phthalate	< 10	ug/L

COMMENTS:

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

SAMPLE ID: OS-1 (9-11') SAND
LSG SAMPLE NO: H0256045
P.O. NO.: VERBAL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

DATE SAMPLED: 21-OCT-93
DATE RECEIVED: 23-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
16	I685S	Petroleum Hydrocarbons	70	mg/kg
17	OVTCS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	< 5	ug/kg
		1,1,2,2,-Tetrachloroethane	< 5	ug/kg
		1,1,2-Trichloroethane	< 5	ug/kg
		1,1-Dichloroethane	< 5	ug/kg
		1,1-Dichloroethene	< 5	ug/kg
		1,2-Dichloroethane	< 5	ug/kg
		1,2-Dichloroethene (total)	< 5	ug/kg
		1,2-Dichloropropane	< 5	ug/kg
		2-Butanone	< 10	ug/kg
		2-Hexanone	< 10	ug/kg
		4-Methyl-2-pentanone	< 10	ug/kg
		Acetone	< 10	ug/kg
		Benzene	< 5	ug/kg
		Bromodichloromethane	< 5	ug/kg
		Bromoform	< 5	ug/kg
		Bromomethane	< 10	ug/kg
		Carbon disulfide	< 5	ug/kg
		Carbon tetrachloride	< 5	ug/kg
		Chlorobenzene	< 5	ug/kg
		Chloroethane	< 10	ug/kg
		Chloroform	< 5	ug/kg
		Chloromethane	< 10	ug/kg
		Dibromochloromethane	< 5	ug/kg
		Ethylbenzene	< 5	ug/kg
		Methylene chloride	< 5	ug/kg
		Styrene	< 5	ug/kg
		Tetrachloroethene	< 5	ug/kg
		Toluene	< 5	ug/kg
		Trichloroethene	< 5	ug/kg
		Vinyl acetate	< 10	ug/kg
		Vinyl chloride	< 10	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: OS-1 (9-11') SAND
LSG SAMPLE NO: H0256045

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Xylene(total)	< 5	ug/kg
		cis-1,3-Dichloropropene	< 5	ug/kg
		trans-1,3-Dichloropropene	< 5	ug/kg
19	OSVTC	TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	< 330	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene	< 330	ug/kg
		Benzo(a)pyrene	< 330	ug/kg
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 330	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: OS-1 (9-11') SAND
LSG SAMPLE NO: H0256045

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzoic acid	< 1,600	ug/kg
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.



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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: OS-1 (84-86') SAND
LSG SAMPLE NO: H0256046
P.O. NO.: VERBAL

DATE SAMPLED: 21-OCT-93
DATE RECEIVED: 23-OCT-93
APPROVED BY: L Beyer

TEST		DETERMINATION	RESULT	UNITS
LN	CODE			
16	I685S	Petroleum Hydrocarbons	< 20	mg/kg
17	OVTCS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	< 5	ug/kg
		1,1,2,2,-Tetrachloroethane	< 5	ug/kg
		1,1,2-Trichloroethane	< 5	ug/kg
		1,1-Dichloroethane	< 5	ug/kg
		1,1-Dichloroethene	< 5	ug/kg
		1,2-Dichloroethane	< 5	ug/kg
		1,2-Dichloroethene (total)	< 5	ug/kg
		1,2-Dichloropropane	< 5	ug/kg
		2-Butanone	< 10	ug/kg
		2-Hexanone	< 10	ug/kg
		4-Methyl-2-pentanone	< 10	ug/kg
		Acetone	< 10	ug/kg
		Benzene	< 5	ug/kg
		Bromodichloromethane	< 5	ug/kg
		Bromoform	< 5	ug/kg
		Bromomethane	< 10	ug/kg
		Carbon disulfide	< 5	ug/kg
		Carbon tetrachloride	< 5	ug/kg
		Chlorobenzene	< 5	ug/kg
		Chloroethane	< 10	ug/kg
		Chloroform	< 5	ug/kg
		Chloromethane	< 10	ug/kg
		Dibromochloromethane	< 5	ug/kg
		Ethylbenzene	< 5	ug/kg
		Methylene chloride	< 5	ug/kg
		Styrene	< 5	ug/kg
		Tetrachloroethene	< 5	ug/kg
		Toluene	< 5	ug/kg
		Trichloroethene	< 5	ug/kg
		Vinyl acetate	< 10	ug/kg
		Vinyl chloride	< 10	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: OS-1 (84-86') SAND
LSG SAMPLE NO: H0256046

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Xylene(total)	< 5	ug/kg
		cis-1,3-Dichloropropene	< 5	ug/kg
		trans-1,3-Dichloropropene	< 5	ug/kg
19	OSVTCS	TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	< 330	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene	< 330	ug/kg
		Benzo(a)pyrene	< 330	ug/kg
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 330	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: OS-1 (84-86') SAND
LSG SAMPLE NO: H0256046

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzoic acid	< 1,600	ug/kg
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

SAMPLE ID: NP-1 (14-16') SAND
LSG SAMPLE NO: H0256047
P.O. NO.: VERBAL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

DATE SAMPLED: 20-OCT-93
DATE RECEIVED: 23-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
16	I685S	Petroleum Hydrocarbons	3,700	mg/kg
17	OVTCS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	< 620 *	ug/kg
		1,1,2,2,-Tetrachloroethane	< 620	ug/kg
		1,1,2-Trichloroethane	< 620	ug/kg
		1,1-Dichloroethane	< 620	ug/kg
		1,1-Dichloroethene	< 620	ug/kg
		1,2-Dichloroethane	< 620	ug/kg
		1,2-Dichloroethene (total)	< 620	ug/kg
		1,2-Dichloropropane	< 620	ug/kg
		2-Butanone	< 1,200	ug/kg
		2-Hexanone	< 1,200	ug/kg
		4-Methyl-2-pentanone	< 1,200	ug/kg
		Acetone	< 1,200	ug/kg
		Benzene	< 620	ug/kg
		Bromodichloromethane	< 620	ug/kg
		Bromoform	< 620	ug/kg
		Bromomethane	< 1,200	ug/kg
		Carbon disulfide	< 620	ug/kg
		Carbon tetrachloride	< 620	ug/kg
		Chlorobenzene	< 620	ug/kg
		Chloroethane	< 1,200	ug/kg
		Chloroform	< 620	ug/kg
		Chloromethane	< 1,200	ug/kg
		Dibromochloromethane	< 620	ug/kg
		Ethylbenzene	< 620	ug/kg
		Methylene chloride	< 620	ug/kg
		Styrene	< 620	ug/kg
		Tetrachloroethene	< 620	ug/kg
		Toluene	< 620	ug/kg
		Trichloroethene	< 620	ug/kg
		Vinyl acetate	< 620	ug/kg
		Vinyl chloride	< 620	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: NP-1 (14-16') SAND
LSG SAMPLE NO: H0256047

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Xylene(total)	4,800	ug/kg
		cis-1,3-Dichloropropene	< 620	ug/kg
		trans-1,3-Dichloropropene	< 620	ug/kg
19	OSVTCS	TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	370	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene	< 330	ug/kg
		Benzo(a)pyrene	< 330	ug/kg
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 330	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: NP-1 (14-16') SAND
LSG SAMPLE NO: H0256047

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzoic acid	< 1,600	ug/kg
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

* The detection limits were elevated due to the dilution required because of the high concentration of non-target analytes.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

SAMPLE ID: NP-1 (36') SAND
LSG SAMPLE NO: H0256048
P.O. NO.: VERBAL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

DATE SAMPLED: 20-OCT-93
DATE RECEIVED: 23-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
16	I685S	Petroleum Hydrocarbons	3,500	mg/kg
17	OVTCS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	< 620 *	ug/kg
		1,1,2,2,-Tetrachloroethane	< 620	ug/kg
		1,1,2-Trichloroethane	< 620	ug/kg
		1,1-Dichloroethane	< 620	ug/kg
		1,1-Dichloroethene	< 620	ug/kg
		1,2-Dichloroethane	< 620	ug/kg
		1,2-Dichloroethene (total)	< 620	ug/kg
		1,2-Dichloropropane	< 620	ug/kg
		2-Butanone	< 1,200	ug/kg
		2-Hexanone	< 1,200	ug/kg
		4-Methyl-2-pentanone	< 1,200	ug/kg
		Acetone	< 1,200	ug/kg
		Benzene	< 620	ug/kg
		Bromodichloromethane	< 620	ug/kg
		Bromoform	< 620	ug/kg
		Bromomethane	< 1,200	ug/kg
		Carbon disulfide	< 620	ug/kg
		Carbon tetrachloride	< 620	ug/kg
		Chlorobenzene	< 620	ug/kg
		Chloroethane	< 1,200	ug/kg
		Chloroform	< 620	ug/kg
		Chloromethane	< 1,200	ug/kg
		Dibromochloromethane	< 620	ug/kg
		Ethylbenzene	< 620	ug/kg
		Methylene chloride	< 620	ug/kg
		Styrene	< 620	ug/kg
		Tetrachloroethene	< 620	ug/kg
		Toluene	< 620	ug/kg
		Trichloroethene	< 620	ug/kg
		Vinyl acetate	< 1,200	ug/kg
		Vinyl chloride	< 1,200	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: NP-1 (36') SAND
LSG SAMPLE NO: H0256048

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Xylene(total)	6,400	ug/kg
		cis-1,3-Dichloropropene	< 620	ug/kg
		trans-1,3-Dichloropropene	< 620	ug/kg
19	OSVTCS	TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	590	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene	< 330	ug/kg
		Benzo(a)pyrene	< 330	ug/kg
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 330	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: NP-1 (36') SAND
LSG SAMPLE NO: H0256048

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzoic acid	< 1,600	ug/kg
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

* The detection limits were elevated due to the dilution required because of the high concentration of non-target analytes.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

SAMPLE ID: BELL LAKE UST-1-0507
LSG SAMPLE NO: H0254254
P.O. NO.: VERBAL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

DATE SAMPLED: 05-OCT-93
DATE RECEIVED: 08-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
5	G107S	BTEX Package		
		Benzene	< 125 *	ug/kg
		Ethylbenzene	4,300	ug/kg
		Toluene	250	ug/kg
		m-Xylene	30,000 **	ug/kg
		o-Xylene	9,000	ug/kg
		p-Xylene	**	ug/kg
7	I685S	Petroleum Hydrocarbons	1,000	mg/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.
* The detection limit was elevated due to the dilution required because of the high concentration of non-target and target analytes.
** The compounds m-Xylene and p-Xylene co-elute. The reported result is the sum of the two.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: BELL LAKE UST-1-1012
LSG SAMPLE NO: H0254255
P.O. NO.: VERBAL

DATE SAMPLED: 05-OCT-93
DATE RECEIVED: 08-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
5	G107S	BTEX Package		
		Benzene	< 10 *	ug/kg
		Ethylbenzene	< 10	ug/kg
		Toluene	< 10	ug/kg
		m-Xylene	280	ug/kg
		o-Xylene	640	ug/kg
		p-Xylene	260	ug/kg
7	I685S	Petroleum Hydrocarbons	150	mg/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

* The detection limits were elevated due to the dilution required because of the high concentration of non-target analytes.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: BELL LAKE UST-1-4951
LSG SAMPLE NO: H0254256
P.O. NO.: VERBAL

DATE SAMPLED: 06-OCT-93
DATE RECEIVED: 08-OCT-93
APPROVED BY: L Beyer

LN	TEST		DETERMINATION	RESULT	UNITS
	CODE				
5	G107S	BTEX Package			
		Benzene		< 2	ug/kg
		Ethylbenzene		< 2	ug/kg
		Toluene		< 2	ug/kg
		m-Xylene		< 2	ug/kg
		o-Xylene		< 2	ug/kg
		p-Xylene		< 2	ug/kg
7	1685S	Petroleum Hydrocarbons		< 20	mg/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

SAMPLE ID: BELL LAKE LEACH FIELD LF-1-0406
LSG SAMPLE NO: H0254257
P.O. NO.: VERBAL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

DATE SAMPLED: 06-OCT-93
DATE RECEIVED: 08-OCT-93
APPROVED BY: L Beyer

LN	TEST		DETERMINATION	RESULT	UNITS
	CODE				
1	OVTCS	TCL - Volatiles in Soil			
		1,1,1-Trichloroethane	< 5	ug/kg	
		1,1,2,2-Tetrachloroethane	< 5	ug/kg	
		1,1,2-Trichloroethane	< 5	ug/kg	
		1,1-Dichloroethane	< 5	ug/kg	
		1,1-Dichloroethene	< 5	ug/kg	
		1,2-Dichloroethane	< 5	ug/kg	
		1,2-Dichloroethene (total)	< 5	ug/kg	
		1,2-Dichloropropane	< 5	ug/kg	
		2-Butanone	< 10	ug/kg	
		2-Hexanone	< 10	ug/kg	
		4-Methyl-2-pentanone	< 10	ug/kg	
		Acetone	45	ug/kg	
		Benzene	< 5	ug/kg	
		Bromodichloromethane	< 5	ug/kg	
		Bromoform	< 5	ug/kg	
		Bromomethane	< 10	ug/kg	
		Carbon disulfide	< 5	ug/kg	
		Carbon tetrachloride	< 5	ug/kg	
		Chlorobenzene	< 5	ug/kg	
		Chloroethane	< 10	ug/kg	
		Chloroform	< 5	ug/kg	
		Chloromethane	< 10	ug/kg	
		Dibromochloromethane	< 5	ug/kg	
		Ethylbenzene	< 5	ug/kg	
		Methylene chloride	< 5	ug/kg	
		Styrene	< 5	ug/kg	
		Tetrachloroethene	< 5	ug/kg	
		Toluene	< 5	ug/kg	
		Trichloroethene	< 5	ug/kg	
		Vinyl acetate	< 10	ug/kg	
		Vinyl chloride	< 10	ug/kg	
		Xylene(total)	< 5	ug/kg	

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE LEACH FIELD LF-1-0406
LSG SAMPLE NO: H0254257

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		cis-1,3-Dichloropropene	< 5	ug/kg
		trans-1,3-Dichloropropene	< 5	ug/kg
3	OSVTCS	TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	< 330	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene	< 330	ug/kg
		Benzo(a)pyrene	< 330	ug/kg
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 330	ug/kg
		Benzoic acid	< 1,600	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE LEACH FIELD LF-1-D406
LSG SAMPLE NO: H0254257

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg
8	AASS	Arsenic, Total (As)	3.5	mg/kg
9	ABAS	Barium, Total (Ba)	400	mg/kg
10	ACDS	Cadmium, Total (Cd)	< 0.5	mg/kg
11	ACRS	Chromium, Total (Cr)	3	mg/kg
12	APBS	Lead, Total (Pb)	7	mg/kg
13	AHGS	Mercury, Total (Hg)	< 0.1	mg/kg
14	ASES	Selenium, Total (Se)	< 0.3	mg/kg
15	AAGS	Silver, Total (Ag)	< 1	mg/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE LEACH FIELD LF-1-0406
LSG SAMPLE NO: H0254257

TEST		DETERMINATION	RESULT	UNITS
LN	CODE			

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: BELL LAKE LEACH FIELD LF-1-1416
LSG SAMPLE NO: H0254258
P.O. NO.: VERBAL

DATE SAMPLED: 06-OCT-93
DATE RECEIVED: 08-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
1	OVTCS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	< 5	ug/kg
		1,1,2,2-Tetrachloroethane	< 5	ug/kg
		1,1,2-Trichloroethane	< 5	ug/kg
		1,1-Dichloroethane	< 5	ug/kg
		1,1-Dichloroethene	< 5	ug/kg
		1,2-Dichloroethane	< 5	ug/kg
		1,2-Dichloroethene (total)	< 5	ug/kg
		1,2-Dichloropropane	< 5	ug/kg
		2-Butanone	< 10	ug/kg
		2-Hexanone	< 10	ug/kg
		4-Methyl-2-pentanone	< 10	ug/kg
		Acetone	80	ug/kg
		Benzene	< 5	ug/kg
		Bromodichloromethane	< 5	ug/kg
		Bromoform	< 5	ug/kg
		Bromomethane	< 10	ug/kg
		Carbon disulfide	< 5	ug/kg
		Carbon tetrachloride	< 5	ug/kg
		Chlorobenzene	< 5	ug/kg
		Chloroethane	< 10	ug/kg
		Chloroform	< 5	ug/kg
		Chloromethane	< 10	ug/kg
		Dibromochloromethane	< 5	ug/kg
		Ethylbenzene	< 5	ug/kg
		Methylene chloride	< 5	ug/kg
		Styrene	< 5	ug/kg
		Tetrachloroethene	< 5	ug/kg
		Toluene	< 5	ug/kg
		Trichloroethene	< 5	ug/kg
		Vinyl acetate	< 10	ug/kg
		Vinyl chloride	< 10	ug/kg
		Xylene(total)	< 5	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE LEACH FIELD LF-1-1416
LSG SAMPLE NO: H0254258

LN	TEST CODE	DETERMINATION	RESULT	UNITS
3	OSVTCS	cis-1,3-Dichloropropene	< 5	ug/kg
		trans-1,3-Dichloropropene	< 5	ug/kg
		TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	< 330	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene	< 330	ug/kg
		Benzo(a)pyrene	< 330	ug/kg
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 330	ug/kg
		Benzoic acid	< 1,600	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE LEACH FIELD LF-1-1416
LSG SAMPLE NO: H0254258

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg
8	AASS	Arsenic, Total (As)	2.2	mg/kg
9	ABAS	Barium, Total (Ba)	110	mg/kg
10	ACDS	Cadmium, Total (Cd)	< 0.5	mg/kg
11	ACRS	Chromium, Total (Cr)	3	mg/kg
12	APBS	Lead, Total (Pb)	5	mg/kg
13	AHGS	Mercury, Total (Hg)	< 0.1	mg/kg
14	ASES	Selenium, Total (Se)	< 0.3	mg/kg
15	AAGS	Silver, Total (Ag)	< 1	mg/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE LEACH FIELD LF-1-1416
LSG SAMPLE NO: H0254258

TEST		DETERMINATION	RESULT	UNITS
LN	CODE			

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: BELL LAKE LEACH FIELD LF-2-0911
LSG SAMPLE NO: H0254259
P.O. NO.: VERBAL

DATE SAMPLED: 06-OCT-93
DATE RECEIVED: 08-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
1	OVTCS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	< 5	ug/kg
		1,1,2,2-Tetrachloroethane	< 5	ug/kg
		1,1,2-Trichloroethane	< 5	ug/kg
		1,1-Dichloroethane	< 5	ug/kg
		1,1-Dichloroethene	< 5	ug/kg
		1,2-Dichloroethane	< 5	ug/kg
		1,2-Dichloroethene (total)	< 5	ug/kg
		1,2-Dichloropropane	< 5	ug/kg
		2-Butanone	< 10	ug/kg
		2-Hexanone	< 10	ug/kg
		4-Methyl-2-pentanone	< 10	ug/kg
		Acetone	52	ug/kg
		Benzene	< 5	ug/kg
		Bromodichloromethane	< 5	ug/kg
		Bromoform	< 5	ug/kg
		Bromomethane	< 10	ug/kg
		Carbon disulfide	< 5	ug/kg
		Carbon tetrachloride	< 5	ug/kg
		Chlorobenzene	< 5	ug/kg
		Chloroethane	< 10	ug/kg
		Chloroform	< 5	ug/kg
		Chloromethane	< 10	ug/kg
		Dibromochloromethane	< 5	ug/kg
		Ethylbenzene	< 5	ug/kg
		Methylene chloride	< 5	ug/kg
		Styrene	< 5	ug/kg
		Tetrachloroethene	< 5	ug/kg
		Toluene	< 5	ug/kg
		Trichloroethene	< 5	ug/kg
		Vinyl acetate	< 10	ug/kg
		Vinyl chloride	< 10	ug/kg
		Xylene(total)	< 5	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE LEACH FIELD LF-2-0911
LSG SAMPLE NO: H0254259

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		cis-1,3-Dichloropropene	< 5	ug/kg
		trans-1,3-Dichloropropene	< 5	ug/kg
3	OSVTCS	TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	< 330	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene	< 330	ug/kg
		Benzo(a)pyrene	< 330	ug/kg
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 330	ug/kg
		Benzoic acid	< 1,600	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE LEACH FIELD LF-2-0911
LSG SAMPLE NO: H0254259

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg
8	AASS	Arsenic, Total (As)	1.6	mg/kg
9	ABAS	Barium, Total (Ba)	160	mg/kg
10	ACDS	Cadmium, Total (Cd)	< 0.5	mg/kg
11	ACRS	Chromium, Total (Cr)	3	mg/kg
12	APBS	Lead, Total (Pb)	5	mg/kg
13	AHGS	Mercury, Total (Hg)	< 0.1	mg/kg
14	ASES	Selenium, Total (Se)	< 0.3	mg/kg
15	AAGS	Silver, Total (Ag)	< 1	mg/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE LEACH FIELD LF-2-0911
LSG SAMPLE NO: H0254259

TEST		DETERMINATION	RESULT	UNITS
LN	CODE			

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: BELL LAKE LEACH FIELD LF-2-1416
LSG SAMPLE NO: H0254260
P.O. NO.: VERBAL

DATE SAMPLED: 06-OCT-93
DATE RECEIVED: 08-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
1	OVTCS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	< 5	ug/kg
		1,1,2,2-Tetrachloroethane	< 5	ug/kg
		1,1,2-Trichloroethane	< 5	ug/kg
		1,1-Dichloroethane	< 5	ug/kg
		1,1-Dichloroethene	< 5	ug/kg
		1,2-Dichloroethane	< 5	ug/kg
		1,2-Dichloroethene (total)	< 5	ug/kg
		1,2-Dichloropropane	< 5	ug/kg
		2-Butanone	< 10	ug/kg
		2-Hexanone	< 10	ug/kg
		4-Methyl-2-pentanone	< 10	ug/kg
		Acetone	36	ug/kg
		Benzene	< 5	ug/kg
		Bromodichloromethane	< 5	ug/kg
		Bromoform	< 5	ug/kg
		Bromomethane	< 10	ug/kg
		Carbon disulfide	< 5	ug/kg
		Carbon tetrachloride	< 5	ug/kg
		Chlorobenzene	< 5	ug/kg
		Chloroethane	< 10	ug/kg
		Chloroform	< 5	ug/kg
		Chloromethane	< 10	ug/kg
		Dibromochloromethane	< 5	ug/kg
		Ethylbenzene	< 5	ug/kg
		Methylene chloride	< 5	ug/kg
		Styrene	< 5	ug/kg
		Tetrachloroethene	< 5	ug/kg
		Toluene	< 5	ug/kg
		Trichloroethene	< 5	ug/kg
		Vinyl acetate	< 10	ug/kg
		Vinyl chloride	< 10	ug/kg
		Xylene(total)	< 5	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE LEACH FIELD LF-2-1416
LSG SAMPLE NO: H0254260

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		cis-1,3-Dichloropropene	< 5	ug/kg
		trans-1,3-Dichloropropene	< 5	ug/kg
3	OSVTC5	TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	< 330	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene.	< 330	ug/kg
		Benzo(a)pyrene	< 330	ug/kg
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 330	ug/kg
		Benzoic acid	< 1,600	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE LEACH FIELD LF-2-1416
LSG SAMPLE NO: H0254260

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg
8	AASS	Arsenic, Total (As)	0.7	mg/kg
9	ABAS	Barium, Total (Ba)	230	mg/kg
10	ACDS	Cadmium, Total (Cd)	< 0.5	mg/kg
11	ACRS	Chromium, Total (Cr)	4	mg/kg
12	APBS	Lead, Total (Pb)	6	mg/kg
13	AHGS	Mercury, Total (Hg)	< 0.1	mg/kg
14	ASES	Selenium, Total (Se)	< 0.3	mg/kg
15	AAGS	Silver, Total (Ag)	< 1	mg/kg



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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE LEACH FIELD LF-2-1416
LSG SAMPLE NO: H0254260

TEST		DETERMINATION	RESULT	UNITS
LN	CODE			

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: BELL LAKE SAND BORING 1-0002
LSG SAMPLE NO: H0254261
P.O. NO.: VERBAL

DATE SAMPLED: 05-OCT-93
DATE RECEIVED: 08-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
1	OVTCS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	< 5	ug/kg
		1,1,2,2,-Tetrachloroethane	< 5	ug/kg
		1,1,2-Trichloroethane	< 5	ug/kg
		1,1-Dichloroethane	< 5	ug/kg
		1,1-Dichloroethene	< 5	ug/kg
		1,2-Dichloroethane	< 5	ug/kg
		1,2-Dichloroethene (total)	< 5	ug/kg
		1,2-Dichloropropane	< 5	ug/kg
		2-Butanone	< 10	ug/kg
		2-Hexanone	< 10	ug/kg
		4-Methyl-2-pentanone	< 10	ug/kg
		Acetone	89	ug/kg
		Benzene	< 5	ug/kg
		Bromodichloromethane	< 5	ug/kg
		Bromoform	< 5	ug/kg
		Bromomethane	< 10	ug/kg
		Carbon disulfide	< 5	ug/kg
		Carbon tetrachloride	< 5	ug/kg
		Chlorobenzene	< 5	ug/kg
		Chloroethane	< 10	ug/kg
		Chloroform	< 5	ug/kg
		Chloromethane	< 10	ug/kg
		Dibromochloromethane	< 5	ug/kg
		Ethylbenzene	9	ug/kg
		Methylene chloride	< 5	ug/kg
		Styrene	< 5	ug/kg
		Tetrachloroethene	< 5	ug/kg
		Toluene	< 5	ug/kg
		Trichloroethene	< 5	ug/kg
		Vinyl acetate	< 10	ug/kg
		Vinyl chloride	< 10	ug/kg
		Xylene(total)	15	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE SAND BORING 1-0002
LSG SAMPLE NO: H0254261

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		cis-1,3-Dichloropropene	< 5	ug/kg
		trans-1,3-Dichloropropene	< 5	ug/kg
3	OSVTCS	TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	< 330	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene	< 330	ug/kg
		Benzo(a)pyrene	< 330	ug/kg
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 330	ug/kg
		Benzoic acid	< 1,600	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE SAND BORING 1-0002
LSG SAMPLE NO: H0254261

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg
7	1685S	Petroleum Hydrocarbons	11,000	mg/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: BELL LAKE SAND BORING 1-1416
LSG SAMPLE NO: H0254262
P.O. NO.: VERBAL

DATE SAMPLED: 05-OCT-93
DATE RECEIVED: 08-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
1	OVTCS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	< 5	ug/kg
		1,1,2,2-Tetrachloroethane	< 5	ug/kg
		1,1,2-Trichloroethane	< 5	ug/kg
		1,1-Dichloroethane	< 5	ug/kg
		1,1-Dichloroethene	< 5	ug/kg
		1,2-Dichloroethane	< 5	ug/kg
		1,2-Dichloroethene (total)	< 5	ug/kg
		1,2-Dichloropropane	< 5	ug/kg
		2-Butanone	< 10	ug/kg
		2-Hexanone	< 10	ug/kg
		4-Methyl-2-pentanone	< 10	ug/kg
		Acetone	120	ug/kg
		Benzene	< 5	ug/kg
		Bromodichloromethane	< 5	ug/kg
		Bromoform	< 5	ug/kg
		Bromomethane	< 10	ug/kg
		Carbon disulfide	< 5	ug/kg
		Carbon tetrachloride	< 5	ug/kg
		Chlorobenzene	< 5	ug/kg
		Chloroethane	< 10	ug/kg
		Chloroform	< 5	ug/kg
		Chloromethane	< 10	ug/kg
		Dibromochloromethane	< 5	ug/kg
		Ethylbenzene	< 5	ug/kg
		Methylene chloride	< 5	ug/kg
		Styrene	< 5	ug/kg
		Tetrachloroethene	< 5	ug/kg
		Toluene	< 5	ug/kg
		Trichloroethene	< 5	ug/kg
		Vinyl acetate	< 10	ug/kg
		Vinyl chloride	< 10	ug/kg
		Xylene(total)	< 5	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE SAND BORING 1-1416
LSG SAMPLE NO: H0254262

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		cis-1,3-Dichloropropene	< 5	ug/kg
		trans-1,3-Dichloropropene	< 5	ug/kg
3	OSVTCS	TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	< 330	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene	< 330	ug/kg
		Benzo(a)pyrene	< 330	ug/kg
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 330	ug/kg
		Benzoic acid	< 1,600	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE SAND BORING 1-1416
LSG SAMPLE NO: H0254262

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg
7	1685S	Petroleum Hydrocarbons	< 20	mg/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: BELL LAKE SAND BORING 2-0002
LSG SAMPLE NO: H0254263
P.O. NO.: VERBAL

DATE SAMPLED: 05-OCT-93
DATE RECEIVED: 08-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
1	OVTCS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	< 5	ug/kg
		1,1,2,2,-Tetrachloroethane	< 5	ug/kg
		1,1,2-Trichloroethane	< 5	ug/kg
		1,1-Dichloroethane	< 5	ug/kg
		1,1-Dichloroethene	< 5	ug/kg
		1,2-Dichloroethane	< 5	ug/kg
		1,2-Dichloroethene (total)	< 5	ug/kg
		1,2-Dichloropropane	< 5	ug/kg
		2-Butanone	< 10	ug/kg
		2-Hexanone	< 10	ug/kg
		4-Methyl-2-pentanone	< 10	ug/kg
		Acetone	94	ug/kg
		Benzene	< 5	ug/kg
		Bromodichloromethane	< 5	ug/kg
		Bromoform	< 5	ug/kg
		Bromomethane	< 10	ug/kg
		Carbon disulfide	< 5	ug/kg
		Carbon tetrachloride	< 5	ug/kg
		Chlorobenzene	< 5	ug/kg
		Chloroethane	< 10	ug/kg
		Chloroform	< 5	ug/kg
		Chloromethane	< 10	ug/kg
		Dibromochloromethane	< 5	ug/kg
		Ethylbenzene	< 5	ug/kg
		Methylene chloride	< 5	ug/kg
		Styrene	< 5	ug/kg
		Tetrachloroethene	< 5	ug/kg
		Toluene	< 5	ug/kg
		Trichloroethene	< 5	ug/kg
		Vinyl acetate	< 10	ug/kg
		Vinyl chloride	< 10	ug/kg
		Xylene(total)	< 5	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE SAND BORING 2-0002
LSG SAMPLE NO: H0254263

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		cis-1,3-Dichloropropene	< 5	ug/kg
		trans-1,3-Dichloropropene	< 5	ug/kg
3	OSVTCS	TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	< 330	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene	< 330	ug/kg
		Benzo(a)pyrene	< 330	ug/kg
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 330	ug/kg
		Benzoic acid	< 1,600	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE SAND BORING 2-0002
LSG SAMPLE NO: H0254263

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg
7	1685S	Petroleum Hydrocarbons	70	mg/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: BELL LAKE SAND BORING 2-1315
LSG SAMPLE NO: H0254264
P.O. NO.: VERBAL

DATE SAMPLED: 05-OCT-93
DATE RECEIVED: 08-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
1	OVTCS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	< 5	ug/kg
		1,1,2,2,-Tetrachloroethane	< 5	ug/kg
		1,1,2-Trichloroethane	< 5	ug/kg
		1,1-Dichloroethane	< 5	ug/kg
		1,1-Dichloroethene	< 5	ug/kg
		1,2-Dichloroethane	< 5	ug/kg
		1,2-Dichloroethene (total)	< 5	ug/kg
		1,2-Dichloropropane	< 5	ug/kg
		2-Butanone	< 10	ug/kg
		2-Hexanone	< 10	ug/kg
		4-Methyl-2-pentanone	< 10	ug/kg
		Acetone	140	ug/kg
		Benzene	< 5	ug/kg
		Bromodichloromethane	< 5	ug/kg
		Bromoform	< 5	ug/kg
		Bromomethane	< 10	ug/kg
		Carbon disulfide	< 5	ug/kg
		Carbon tetrachloride	< 5	ug/kg
		Chlorobenzene	< 5	ug/kg
		Chloroethane	< 10	ug/kg
		Chloroform	< 5	ug/kg
		Chloromethane	< 10	ug/kg
		Dibromochloromethane	< 5	ug/kg
		Ethylbenzene	< 5	ug/kg
		Methylene chloride	< 5	ug/kg
		Styrene	< 5	ug/kg
		Tetrachloroethene	< 5	ug/kg
		Toluene	< 5	ug/kg
		Trichloroethene	< 5	ug/kg
		Vinyl acetate	< 10	ug/kg
		Vinyl chloride	< 10	ug/kg
		Xylene(total)	< 5	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE SAND BORING 2-1315
LSG SAMPLE NO: H0254264

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		cis-1,3-Dichloropropene	< 5	ug/kg
		trans-1,3-Dichloropropene	< 5	ug/kg
3	OSVTCS	TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	< 330	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene	< 330	ug/kg
		Benzo(a)pyrene	< 330	ug/kg
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 1,600	ug/kg
		Benzoic acid	< 330	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE SAND BORING 2-1315
LSG SAMPLE NO: H0254264

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg
7	1685S	Petroleum Hydrocarbons	< 20	mg/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: BELL LAKE SAND BORING 3-0911
LSG SAMPLE NO: H0254265
P.O. NO.: VERBAL

DATE SAMPLED: 05-OCT-93
DATE RECEIVED: 08-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
1	OVTCS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	< 5	ug/kg
		1,1,2,2,-Tetrachloroethane	< 5	ug/kg
		1,1,2-Trichloroethane	< 5	ug/kg
		1,1-Dichloroethane	< 5	ug/kg
		1,1-Dichloroethene	< 5	ug/kg
		1,2-Dichloroethane	< 5	ug/kg
		1,2-Dichloroethene (total)	< 5	ug/kg
		1,2-Dichloropropane	< 5	ug/kg
		2-Butanone	< 10	ug/kg
		2-Hexanone	< 10	ug/kg
		4-Methyl-2-pentanone	< 10	ug/kg
		Acetone	140	ug/kg
		Benzene	< 5	ug/kg
		Bromodichloromethane	< 5	ug/kg
		Bromoform	< 5	ug/kg
		Bromomethane	< 10	ug/kg
		Carbon disulfide	< 5	ug/kg
		Carbon tetrachloride	< 5	ug/kg
		Chlorobenzene	< 5	ug/kg
		Chloroethane	< 10	ug/kg
		Chloroform	< 5	ug/kg
		Chloromethane	< 10	ug/kg
		Dibromochloromethane	< 5	ug/kg
		Ethylbenzene	< 5	ug/kg
		Methylene chloride	< 5	ug/kg
		Styrene	< 5	ug/kg
		Tetrachloroethene	< 5	ug/kg
		Toluene	< 5	ug/kg
		Trichloroethene	< 5	ug/kg
		Vinyl acetate	< 10	ug/kg
		Vinyl chloride	< 10	ug/kg
		Xylene(total)	< 5	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE SAND BORING 3-0911
LSG SAMPLE NO: H0254265

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		cis-1,3-Dichloropropene	< 5	ug/kg
		trans-1,3-Dichloropropene	< 5	ug/kg
3	OSVTC5	TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	< 330	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene	< 330	ug/kg
		Benzo(a)pyrene	< 330	ug/kg
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 330	ug/kg
		Benzoic acid	< 1,600	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE SAND BORING 3-0911
LSG SAMPLE NO: H0254265

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg
7	I685S	Petroleum Hydrocarbons	30	mg/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: BELL LAKE SAND BORING 3-1416
LSG SAMPLE NO: H0254266
P.O. NO.: VERBAL

DATE SAMPLED: 05-OCT-93
DATE RECEIVED: 08-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
1	OVTCS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	< 5	ug/kg
		1,1,2,2-Tetrachloroethane	< 5	ug/kg
		1,1,2-Trichloroethane	< 5	ug/kg
		1,1-Dichloroethane	< 5	ug/kg
		1,1-Dichloroethene	< 5	ug/kg
		1,2-Dichloroethane	< 5	ug/kg
		1,2-Dichloroethene (total)	< 5	ug/kg
		1,2-Dichloropropane	< 5	ug/kg
		2-Butanone	< 10	ug/kg
		2-Hexanone	< 10	ug/kg
		4-Methyl-2-pentanone	< 10	ug/kg
		Acetone	230	ug/kg
		Benzene	< 5	ug/kg
		Bromodichloromethane	< 5	ug/kg
		Bromoform	< 5	ug/kg
		Bromomethane	< 10	ug/kg
		Carbon disulfide	< 5	ug/kg
		Carbon tetrachloride	< 5	ug/kg
		Chlorobenzene	< 5	ug/kg
		Chloroethane	< 10	ug/kg
		Chloroform	< 5	ug/kg
		Chloromethane	< 10	ug/kg
		Dibromochloromethane	< 5	ug/kg
		Ethylbenzene	< 5	ug/kg
		Methylene chloride	< 5	ug/kg
		Styrene	< 5	ug/kg
		Tetrachloroethene	< 5	ug/kg
		Toluene	< 5	ug/kg
		Trichloroethene	< 5	ug/kg
		Vinyl acetate	< 10	ug/kg
		Vinyl chloride	< 10	ug/kg
		Xylene(total)	< 5	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE SAND BORING 3-1416
LSG SAMPLE NO: H0254266

LN	TEST CODE	DETERMINATION	RESULT	UNITS
3	OSVTCS	cis-1,3-Dichloropropene	< 5	ug/kg
		trans-1,3-Dichloropropene	< 5	ug/kg
		TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 330	ug/kg
		1,2-Dichlorobenzene	< 330	ug/kg
		1,3-Dichlorobenzene	< 330	ug/kg
		1,4-Dichlorobenzene	< 330	ug/kg
		2,4,5-Trichlorophenol	< 660	ug/kg
		2,4,6-Trichlorophenol	< 330	ug/kg
		2,4-Dichlorophenol	< 330	ug/kg
		2,4-Dimethylphenol	< 330	ug/kg
		2,4-Dinitrophenol	< 1,600	ug/kg
		2,4-Dinitrotoluene	< 330	ug/kg
		2,6-Dinitrotoluene	< 330	ug/kg
		2-Chloronaphthalene	< 330	ug/kg
		2-Chlorophenol	< 330	ug/kg
		2-Methylnaphthalene	< 330	ug/kg
		2-Methylphenol	< 330	ug/kg
		2-Nitroaniline	< 1,600	ug/kg
		2-Nitrophenol	< 330	ug/kg
		3,3'-Dichlorobenzidine	< 660	ug/kg
		3-Nitroaniline	< 1,600	ug/kg
		4,6-Dinitro-o-cresol	< 1,600	ug/kg
		4-Bromophenylphenylether	< 330	ug/kg
		4-Chloro-3-methylphenol	< 330	ug/kg
		4-Chloroaniline	< 330	ug/kg
		4-Chlorophenylphenylether	< 330	ug/kg
		4-Methylphenol	< 330	ug/kg
		4-Nitroaniline	< 1,600	ug/kg
		4-Nitrophenol	< 1,600	ug/kg
		Acenaphthene	< 330	ug/kg
		Acenaphthylene	< 330	ug/kg
		Anthracene	< 330	ug/kg
		Benzo(a)anthracene	< 330	ug/kg
		Benzo(a)pyrene	< 330	ug/kg
		Benzo(b)fluoranthene	< 330	ug/kg
		Benzo(g,h,i)perylene	< 330	ug/kg
		Benzo(k)fluoranthene	< 330	ug/kg
		Benzoic acid	< 1,600	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE SAND BORING 3-1416
LSG SAMPLE NO: H0254266

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzyl alcohol	< 330	ug/kg
		Butylbenzylphthalate	< 330	ug/kg
		Chrysene	< 330	ug/kg
		Di-n-butylphthalate	< 330	ug/kg
		Di-n-octylphthalate	< 330	ug/kg
		Dibenzo(a,h)anthracene	< 330	ug/kg
		Dibenzofuran	< 330	ug/kg
		Diethylphthalate	< 330	ug/kg
		Dimethylphthalate	< 330	ug/kg
		Fluoranthene	< 330	ug/kg
		Fluorene	< 330	ug/kg
		Hexachlorobenzene	< 330	ug/kg
		Hexachlorobutadiene	< 330	ug/kg
		Hexachlorocyclopentadiene	< 330	ug/kg
		Hexachloroethane	< 330	ug/kg
		Indeno(1,2,3-cd)pyrene	< 330	ug/kg
		Isophorone	< 330	ug/kg
		N-Nitrosodi-n-propylamine	< 330	ug/kg
		N-Nitrosodiphenylamine	< 330	ug/kg
		Naphthalene	< 330	ug/kg
		Nitrobenzene	< 330	ug/kg
		Pentachlorophenol	< 1,600	ug/kg
		Phenanthrene	< 330	ug/kg
		Phenol	< 330	ug/kg
		Pyrene	< 330	ug/kg
		bis(2-Chloroethoxy)methane	< 330	ug/kg
		bis(2-Chloroethyl)ether	< 330	ug/kg
		bis(2-Chloroisopropyl)ether	< 330	ug/kg
		bis(2-Ethylhexyl)phthalate	< 330	ug/kg
7	1685S	Petroleum Hydrocarbons	< 20	mg/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

SAMPLE ID: SAND DP-1 9-11
LSG SAMPLE NO: H0254736
P.O. NO.: VERBAL

LSG CLIENT NO: 0734 0001
PACE PROJECT: H07340001
PACE CLIENT: 620562

DATE SAMPLED: 08-OCT-93
DATE RECEIVED: 15-OCT-93
APPROVED BY: L Beyer

TEST		DETERMINATION	RESULT	UNITS
LN	CODE			
1	1685S	Petroleum Hydrocarbons	7,100	mg/kg
6	G107S	BTEX Package		
		Benzene	< 210 **	ug/kg
		Ethylbenzene	4,500	ug/kg
		Toluene	4,400	ug/kg
		m-Xylene	29,000 *	ug/kg
		o-Xylene	12,000	ug/kg
		p-Xylene	*	ug/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

* The compounds m-Xylene and p-Xylene co-elute. The reported result is the sum of the two.

** The detection limit was elevated due to the dilution required because of the high concentration of target analytes.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

SAMPLE ID: SAND PP-1 95-97
LSG SAMPLE NO: H0254737
P.O. NO.: VERBAL

LSG CLIENT NO: 0734 0001
PACE PROJECT: H07340001
PACE CLIENT: 620562

DATE SAMPLED: 10-OCT-93
DATE RECEIVED: 15-OCT-93
APPROVED BY: L Beyer

LN	TEST		DETERMINATION	RESULT	UNITS
	CODE				
1	I685S	Petroleum Hydrocarbons		450	mg/kg
6	G107S	BTEX Package			
		Benzene		< 250 **	ug/kg
		Ethylbenzene		48,000	ug/kg
		Toluene		520	ug/kg
		m-Xylene		61,000 *	ug/kg
		o-Xylene		2,300	ug/kg
		p-Xylene		*	ug/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

* The compounds m-Xylene and p-Xylene co-elute. The reported result is the sum of the two.

** The detection limit was elevated due to the dilution required because of the high concentration of target analytes.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: SAND DP-2 (59-61')
LSG SAMPLE NO: H0256328
P.O. NO.: VERBAL

DATE SAMPLED: 22-OCT-93
DATE RECEIVED: 27-OCT-93
APPROVED BY: L Beyer

TEST		DETERMINATION	RESULT	UNIT
LN	CODE			
7	1685S	Petroleum Hydrocarbons	< 20	mg/kg
8	G107S	BTEX Package		
		Benzene	< 2	ug/kg
		Ethylbenzene	< 2	ug/kg
		Toluene	< 2	ug/kg
		m-Xylene	< 2	ug/kg
		o-Xylene	< 2	ug/kg
		p-Xylene	< 2	ug/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

REPORT OF LABORATORY ANALYSIS

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: SAND DP-2 (84-86')
LSG SAMPLE NO: H0256329
P.O. NO.: VERBAL

DATE SAMPLED: 23-OCT-93
DATE RECEIVED: 27-OCT-93
APPROVED BY: L Beyer

LN	TEST		DETERMINATION	RESULT	UNITS
	CODE				
7	I685S	Petroleum Hydrocarbons		30	mg/kg
8	G107S	BTEX Package			
		Benzene		< 2	ug/kg
		Ethylbenzene		< 2	ug/kg
		Toluene		< 2	ug/kg
		m-Xylene		< 2	ug/kg
		o-Xylene		< 2	ug/kg
		p-Xylene		< 2	ug/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: GRD WTR DP-2
LSG SAMPLE NO: H0256332
P.O. NO.: VERBAL

DATE SAMPLED: 23-OCT-93
DATE RECEIVED: 27-OCT-93
APPROVED BY: L Beyer

LN	TEST		DETERMINATION	RESULT	UNITS
	CODE				
4	1685	Petroleum Hydrocarbons		1.6	mg/L
5	G107W	BTEX Package			
		Benzene		51	ug/L
		Ethylbenzene		10	ug/L
		Toluene		61	ug/L
		m-Xylene		8	ug/L
		o-Xylene		3	ug/L
		p-Xylene		6	ug/L

COMMENTS:

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: BELL LAKE BURN PIT BP-1-0406
LSG SAMPLE NO: H0253353
P.O. NO.: VERBAL

DATE SAMPLED: 06-OCT-93
DATE RECEIVED: 08-OCT-93
APPROVED BY: L Beyer

TEST		DETERMINATION	RESULT	UNIT
LN	CODE			
1	DVTCS	TCL - Volatiles in Soil		
		1,1,1-Trichloroethane	< 7,500 *	ug/kg
		1,1,2,2,-Tetrachloroethane	< 7,500	ug/kg
		1,1,2-Trichloroethane	< 7,500	ug/kg
		1,1-Dichloroethane	< 7,500	ug/kg
		1,1-Dichloroethene	< 7,500	ug/kg
		1,2-Dichloroethane	< 7,500	ug/kg
		1,2-Dichloroethene (total)	< 7,500	ug/kg
		1,2-Dichloropropane	< 7,500	ug/kg
		2-Butanone	< 15,000	ug/kg
		2-Hexanone	< 15,000	ug/kg
		4-Methyl-2-pentanone	< 15,000	ug/kg
		Acetone	< 15,000	ug/kg
		Benzene	< 7,500	ug/kg
		Bromodichloromethane	< 7,500	ug/kg
		Bromoform	< 7,500	ug/kg
		Bromomethane	< 15,000	ug/kg
		Carbon disulfide	< 7,500	ug/kg
		Carbon tetrachloride	< 7,500	ug/kg
		Chlorobenzene	< 7,500	ug/kg
		Chloroethane	< 15,000	ug/kg
		Chloroform	< 7,500	ug/kg
		Chloromethane	< 15,000	ug/kg
		Dibromochloromethane	< 7,500	ug/kg
		Ethylbenzene	14,000	ug/kg
		Methylene chloride	< 7,500	ug/kg
		Styrene	< 7,500	ug/kg
		Tetrachloroethene	< 7,500	ug/kg
		Toluene	9,300	ug/kg
		Trichloroethene	< 7,500	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE BURN PIT BP-1-0406
LSG SAMPLE NO: H0253353

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Vinyl acetate	< 15,000	ug/kg
		Vinyl chloride	< 15,000	ug/kg
		Xylene(total)	270,000	ug/kg
		cis-1,3-Dichloropropene	< 7,500	ug/kg
		trans-1,3-Dichloropropene	< 7,500	ug/kg
3	OSVTCS	TCL - Semi-volatile Extractables in Soil		
		1,2,4-Trichlorobenzene	< 6,600 *	ug/kg
		1,2-Dichlorobenzene	< 6,600	ug/kg
		1,3-Dichlorobenzene	< 6,600	ug/kg
		1,4-Dichlorobenzene	< 6,600	ug/kg
		2,4,5-Trichlorophenol	< 13,000	ug/kg
		2,4,6-Trichlorophenol	< 6,600	ug/kg
		2,4-Dichlorophenol	< 6,600	ug/kg
		2,4-Dimethylphenol	< 6,600	ug/kg
		2,4-Dinitrophenol	< 33,000	ug/kg
		2,4-Dinitrotoluene	< 6,600	ug/kg
		2,6-Dinitrotoluene	< 6,600	ug/kg
		2-Chloronaphthalene	< 6,600	ug/kg
		2-Chlorophenol	< 6,600	ug/kg
		2-Methylnaphthalene	< 6,600	ug/kg
		2-Methylphenol	< 6,600	ug/kg
		2-Nitroaniline	< 33,000	ug/kg
		2-Nitrophenol	< 6,600	ug/kg
		3,3'-Dichlorobenzidine	< 13,000	ug/kg
		3-Nitroaniline	< 33,000	ug/kg
		4,6-Dinitro-o-cresol	< 33,000	ug/kg
		4-Bromophenylphenylether	< 6,600	ug/kg
		4-Chloro-3-methylphenol	< 6,600	ug/kg
		4-Chloroaniline	< 6,600	ug/kg
		4-Chlorophenylphenylether	< 6,600	ug/kg
		4-Methylphenol	< 6,600	ug/kg
		4-Nitroaniline	< 33,000	ug/kg
		4-Nitrophenol	< 33,000	ug/kg
		Acenaphthene	< 6,600	ug/kg
		Acenaphthylene	< 6,600	ug/kg
		Anthracene	< 6,600	ug/kg
		Benzo(a)anthracene	< 6,600	ug/kg
		Benzo(a)pyrene	< 6,600	ug/kg
		Benzo(b)fluoranthene	< 6,600	ug/kg

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE BURN PIT BP-1-0406
LSG SAMPLE NO: H0253353

LN	TEST CODE	DETERMINATION	RESULT	UNITS
		Benzo(g,h,i)perylene	< 6,600	ug/kg
		Benzo(k)fluoranthene	< 6,600	ug/kg
		Benzoic acid	< 33,000	ug/kg
		Benzyl alcohol	< 6,600	ug/kg
		Butylbenzylphthalate	< 6,600	ug/kg
		Chrysene	< 6,600	ug/kg
		Di-n-butylphthalate	< 6,600	ug/kg
		Di-n-octylphthalate	< 6,600	ug/kg
		Dibenzo(a,h)anthracene	< 6,600	ug/kg
		Dibenzofuran	< 6,600	ug/kg
		Diethylphthalate	< 6,600	ug/kg
		Dimethylphthalate	< 6,600	ug/kg
		Fluoranthene	< 6,600	ug/kg
		Fluorene	< 6,600	ug/kg
		Hexachlorobenzene	< 6,600	ug/kg
		Hexachlorobutadiene	< 6,600	ug/kg
		Hexachlorocyclopentadiene	< 6,600	ug/kg
		Hexachloroethane	< 6,600	ug/kg
		Indeno(1,2,3-cd)pyrene	< 6,600	ug/kg
		Isophorone	< 6,600	ug/kg
		N-Nitrosodi-n-propylamine	< 6,600	ug/kg
		N-Nitrosodiphenylamine	< 6,600	ug/kg
		Naphthalene	< 6,600	ug/kg
		Nitrobenzene	< 6,600	ug/kg
		Pentachlorophenol	< 33,000	ug/kg
		Phenanthrene	< 6,600	ug/kg
		Phenol	< 6,600	ug/kg
		Pyrene	< 6,600	ug/kg
		bis(2-Chloroethoxy)methane	< 6,600	ug/kg
		bis(2-Chloroethyl)ether	< 6,600	ug/kg
		bis(2-Chloroisopropyl)ether	< 6,600	ug/kg
		bis(2-Ethylhexyl)phthalate	< 6,600	ug/kg
7	1685S	Petroleum Hydrocarbons	4,200	mg/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

* The detection limits were elevated due to the dilution required because of the high concentration of non-target analytes.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
SAMPLE ID: BELL LAKE BURN PIT BP-1-0406
LSG SAMPLE NO: H0253353

COMMENTS:

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Section A Page 1

LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0001
PACE PROJECT: H07340001
PACE CLIENT: 620562

SAMPLE ID: SAND BP-1 40-42
LSG SAMPLE NO: H0254735
P.O. NO.: VERBAL

DATE SAMPLED: 07-OCT-93
DATE RECEIVED: 15-OCT-93
APPROVED BY: L Beyer

TEST		DETERMINATION	RESULT	UNIT
LN	CODE			
1	I685S	Petroleum Hydrocarbons	2,900	mg/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0001
PACE PROJECT: H07340001
PACE CLIENT: 620562

SAMPLE ID: SAND BP-2 29-31
LSG SAMPLE NO: H0254738
P.O. NO.: VERBAL

DATE SAMPLED: 09-OCT-93
DATE RECEIVED: 15-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
1	1685S	Petroleum Hydrocarbons	840	mg/kg
6	G107S	BTEX Package		
		Benzene	< 50 *	ug/kg
		Ethylbenzene	590	ug/kg
		Toluene	< 50	ug/kg
		m-Xylene	1,400 **	ug/kg
		o-Xylene	1,000	ug/kg
		p-Xylene	**	ug/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

* The detection limits were elevated due to the dilution required because of the high concentration of non-target and target analytes.

** The compounds m-Xylene and p-Xylene co-elute. The reported result is the sum of the two.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0001
PACE PROJECT: H07340001
PACE CLIENT: 620562

SAMPLE ID: SAND BP-2 34-36
LSG SAMPLE NO: H0254739
P.O. NO.: VERBAL

DATE SAMPLED: 11-OCT-93
DATE RECEIVED: 15-OCT-93
APPROVED BY: L Beyer

LN	TEST		DETERMINATION	RESULT	UNITS
	CODE				
1	I685S	Petroleum Hydrocarbons		50	mg/kg
6	G107S	BTEX Package			
		Benzene		< 2	ug/kg
		Ethylbenzene		8	ug/kg
		Toluene		< 2	ug/kg
		m-Xylene		3 *	ug/kg
		o-Xylene		8	ug/kg
		p-Xylene		*	ug/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

* The compounds m-Xylene and p-Xylene co-elute. The reported result is the sum of the two.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

SAMPLE ID: SAND BP-3 (39-41')
LSG SAMPLE NO: H0256330
P.O. NO.: VERBAL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

DATE SAMPLED: 25-OCT-93
DATE RECEIVED: 27-OCT-93
APPROVED BY: L Beyer

LN	TEST		DETERMINATION	RESULT	UNITS
	CODE				
7	I685S	Petroleum Hydrocarbons		30	mg/kg
8	G107S	BTEX Package			
		Benzene		< 2	ug/kg
		Ethylbenzene		< 2	ug/kg
		Toluene		< 2	ug/kg
		m-Xylene		< 2	ug/kg
		o-Xylene		< 2	ug/kg
		p-Xylene		< 2	ug/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

REPORT OF LABORATORY ANALYSIS

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

SAMPLE ID: SAND BP-3 (89-91')
LSG SAMPLE NO: H0256331
P.O. NO.: VERBAL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

DATE SAMPLED: 25-OCT-93
DATE RECEIVED: 27-OCT-93
APPROVED BY: L Beyer

LN	TEST		DETERMINATION	RESULT	UNITS
	CODE				
7	I685S	Petroleum Hydrocarbons	< 20	mg/kg	
8	G107S	BTEX Package			
		Benzene	< 2	ug/kg	
		Ethylbenzene	< 2	ug/kg	
		Toluene	< 2	ug/kg	
		m-Xylene	< 2	ug/kg	
		o-Xylene	< 2	ug/kg	
		p-Xylene	< 2	ug/kg	

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

REPORT OF LABORATORY ANALYSIS

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

SAMPLE ID: GRD WTR BP-3
LSG SAMPLE NO: H0256334
P.O. NO.: VERBAL

DATE SAMPLED: 25-OCT-93
DATE RECEIVED: 27-OCT-93
APPROVED BY: L Beyer

LN	TEST CODE	DETERMINATION	RESULT	UNITS
4	I685	Petroleum Hydrocarbons	3:0	mg/L
5	G107W	BTEX Package		
		Benzene	190	ug/L
		Ethylbenzene	< 10 *	ug/L
		Toluene	360	ug/L
		m-Xylene	170 **	ug/L
		o-Xylene	240	ug/L
		p-Xylene	**	ug/L

COMMENTS: * The detection limit was elevated due to the dilution required because of the high concentration of target analytes.
** The compounds m-Xylene and p-Xylene co-elute. The reported result is the sum of the two.

REPORT OF LABORATORY ANALYSIS

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Report No.: 00028656
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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

SAMPLE ID: GROUND WATER BP-4
LSG SAMPLE NO: H0257198
P.O. NO.: VERBAL

LSG CLIENT NO: 0734 0001
PACE PROJECT: H07340001
PACE CLIENT: 620562

DATE SAMPLED: 28-OCT-93
DATE RECEIVED: 30-OCT-93
APPROVED BY: L Beyer

TEST		DETERMINATION	RESULT	UNIT
LN	CODE			
1	G107W	BTEX Package		
		Benzene	130	ug/L
		Ethylbenzene	< 2	ug/L
		Toluene	290	ug/L
		m-Xylene	400 *	ug/L
		o-Xylene	200	ug/L
		p-Xylene	*	ug/L
3	1685	Petroleum Hydrocarbons	3.4	mg/L

COMMENTS: * The compounds m-Xylene and p-Xylene co-elute. The reported result is the sum of the two.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

LSG CLIENT NO: 0734 0001
PACE PROJECT: H07340001
PACE CLIENT: 620562

SAMPLE ID: SAND BP-4 (69-71')
LSG SAMPLE NO: H0257199
P.O. NO.: VERBAL

DATE SAMPLED: 26-OCT-93
DATE RECEIVED: 30-OCT-93
APPROVED BY: L Beyer

TEST		DETERMINATION	RESULT	UNITS
LN	CODE			
1	G107S	BTEX Package		
		Benzene	< 10	ug/kg
		Ethylbenzene	13	ug/kg
		Toluene	< 10	ug/kg
		m-Xylene	68	ug/kg
		o-Xylene	30	ug/kg
		p-Xylene	48	ug/kg
3	1685S	Petroleum Hydrocarbons	720	mg/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

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LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

SAMPLE ID: SAND BP-4 (89-91')
LSG SAMPLE NO: H0257200
P.O. NO.: VERBAL

LSG CLIENT NO: 0734 0001
PACE PROJECT: H07340001
PACE CLIENT: 620562

DATE SAMPLED: 28-OCT-93
DATE RECEIVED: 30-OCT-93
APPROVED BY: R Mayo

LN	TEST		DETERMINATION	RESULT	UNITS
	CODE				
1	G107S	BTEX Package			
		Benzene		< 10	ug/kg
		Ethylbenzene		15	ug/kg
		Toluene		< 10	ug/kg
		m-Xylene		110 *	ug/kg
		o-Xylene		52	ug/kg
		p-Xylene		64	ug/kg
3	I685S	Petroleum Hydrocarbons		< 20	mg/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.
* The compounds m-Xylene and Chlorobenzene co-elute. The reported result is the sum of the two.

REPORT OF LABORATORY ANALYSIS

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Section B Page 1

QUALITY CONTROL REPORT SUPPLEMENTAL INFORMATION

TEST			SAMPLE PREPARATION			SAMPLE ANALYSIS		
LN	CODE	BATCH	LR-METHOD	DATE/TIME	ANALYST	LR-METHOD	DATE/TIME	ANALYST
								BATCH INSTRUMENT

SAMPLE ID: GROUND WATER BP-4

LSG SAMPLE NO: H0257198

1	G107W	35540	NA			05-602	09-NOV-93	2022 S B	35089	3618GC
3	I685	35420	02-418.1			02-418.1	08-NOV-93	800 Lin	0	302WAT

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 05 EPA-40 CFR 136, October 26, 1984.

SAMPLE ID: SAND BP-4 (69-71')

LSG SAMPLE NO: H0257199

1	G107S	35418	NA			19-8020	04-NOV-93	2005 C H	35333	3678GC
3	I685S	35348	19-3550			02-418.1	03-NOV-93	2100 Lin	0	302WAT

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: SAND BP-4 (89-91')

LSG SAMPLE NO: H0257200

1	G107S	35649	NA			19-8020	11-NOV-93	1641 G F	35333	3677GC
3	I685S	35348	19-3550			02-418.1	03-NOV-93	2100 Lin	0	302WAT

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL REPORT SURROGATE STANDARD RECOVERY

TEST LN	SURROGATE CODE COMPOUND	PERCENT RECOVERY	ACCEPTANCE LIMITS	REF LN
SAMPLE ID: GROUND WATER BP-4				
LSG SAMPLE NO: H0257198				
2	\$VARW GC Volatile Aromatics Surrogate alpha,alpha,alpha-Trifluorotoluene	98	-	1
SAMPLE ID: SAND BP-4 (69-71')				
LSG SAMPLE NO: H0257199				
2	\$VARS GC Volatile Aromatics Surrogate alpha,alpha,alpha-Trifluorotoluene	79	-	1
SAMPLE ID: SAND BP-4 (89-91')				
LSG SAMPLE NO: H0257200				
2	\$VARS GC Volatile Aromatics Surrogate alpha,alpha,alpha-Trifluorotoluene	165 *	-	1
* The surrogate was out of range due to matrix interferences which was confirmed by re-analysis.				

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QUALITY CONTROL REPORT LABORATORY CONTROL SAMPLE RECOVERY

TEST CODE DETERMINATION	PERCENT RECOVERY	ACCEPTANCE LIMITS
BATCH: 35348 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0258357
1685S Petroleum Hydrocarbons	96.5	-
BATCH: 35418 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0258475
G107S BTEX Package		
Benzene	92	-
Ethylbenzene	100	-
Toluene	93	-
m-Xylene	88	-
o-Xylene	92	-
p-Xylene	85	-
BATCH: 35420 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0258479
1685 Petroleum Hydrocarbons	96	-
BATCH: 35540 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0259668
G107W BTEX Package		
Benzene	89	-
Ethylbenzene	78	-
Toluene	80	-
m-Xylene	80	-
o-Xylene	84	-
p-Xylene	*	-
* The compounds m-Xylene and p-Xylene co-elute. The reported result is the sum of the two.		
BATCH: 35649 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0259850
G107S BTEX Package		
Benzene	98	-
Ethylbenzene	110	-
Toluene	102	-
m-Xylene	114	-
o-Xylene	116	-
p-Xylene	110	-

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QUALITY CONTROL REPORT METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
BATCH: 35348	SAMPLE ID: Method Blank	LSG SAMPLE NO: H0258358	
1685S	Petroleum Hydrocarbons	< 20	mg/kg
BATCH: 35418	SAMPLE ID: Method Blank	LSG SAMPLE NO: H0258476	
G107S	BTEX Package		
	Benzene	< 10	ug/kg
	Ethylbenzene	< 10	ug/kg
	Toluene	< 10	ug/kg
	m-Xylene	< 10	ug/kg
	o-Xylene	< 10	ug/kg
	p-Xylene	< 10	ug/kg
BATCH: 35420	SAMPLE ID: Method Blank	LSG SAMPLE NO: H0258480	
1685	Petroleum Hydrocarbons	< 0.2	mg/L
BATCH: 35540	SAMPLE ID: Method Blank	LSG SAMPLE NO: H0259669	
G107W	BTEX Package		
	Benzene	< 2	ug/L
	Ethylbenzene	< 2	ug/L
	Toluene	< 2	ug/L
	m-Xylene	< 2	ug/L
	o-Xylene	< 2	ug/L
	p-Xylene	< 2	ug/L
BATCH: 35649	SAMPLE ID: Method Blank	LSG SAMPLE NO: H0259851	
G107S	BTEX Package		
	Benzene	< 10	ug/kg
	Ethylbenzene	< 10	ug/kg
	Toluene	< 10	ug/kg
	Xylene (Total)	< 30	ug/kg
	m-Xylene	< 10	ug/kg
	o-Xylene	< 10	ug/kg
	p-Xylene	< 10	ug/kg

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QUALITY CONTROL REPORT
DUPLICATE AND MATRIX SPIKE DATA

PREP BATCH: 35348

LSG SAMPLE NO: H0257199

<u>TEST</u>	<u>DETERMINATION</u>	<u>ORIGINAL RESULT</u>	<u>DUPLICATE RESULT</u>	<u>UNITS</u>	<u>RANGE / RPD</u>	<u>UNITS</u>	<u>MS RESULT</u>	<u>MS % RCVRY</u>
I685S	Petroleum Hydrocarbons	720	860	mg/kg	17.7	mg/kg	1,000	86.5

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QUALITY CONTROL REPORT
MATRIX SPIKE AND MATRIX SPIKE DUPLICATE DATA

ANLS BATCH: 35089

LSG SAMPLE NO: H0256193

TEST	DETERMINATION	MS	MSD	UNITS	RPD	MS PCT	MSD PCT
		RESULT	RESULT			RECOVERY	RECOVERY
G107W	Benzene	16.2	16.3	ug/L	0.615	81	82
G107W	Ethylbenzene	16.8	16.8	ug/L	0.000	84	84
G107W	Toluene	16.2	16.2	ug/L	0.000	81	81
G107W	m-Xylene	34.6 *	34.6 *	ug/L	0.000	86	86
G107W	o-Xylene	16.3	16.4	ug/L	0.611	82	82
G107W	p-Xylene	16.5	16.6	ug/L	0.604	82	83

* The compounds m-Xylene and Chlorobenzene co-elute. The reported result is the sum of the two.

* The compounds m-Xylene and Chlorobenzene co-elute. The reported result is the sum of the two.

ANLS BATCH: 35333

LSG SAMPLE NO: H0257235

TEST	DETERMINATION	MS	MSD	UNITS	RPD	MS PCT	MSD PCT
		RESULT	RESULT			RECOVERY	RECOVERY
G107S	Benzene	15.9	16.5	ug/kg	3.70	80	83
G107S	Ethylbenzene	15.3	15.8	ug/kg	3.22	77	79
G107S	Toluene	15.6	15.6	ug/kg	3.26	76	78
G107S	m-Xylene	28.8 *	30.0 *	ug/kg	4.08	72	75
G107S	o-Xylene	14.4	14.7	ug/kg	2.06	72	74
G107S	p-Xylene	1349	14.0	ug/kg	4.38	67	70

* The compounds m-Xylene and Chlorobenzene co-elute. The reported result is the sum of the two.

REPORT OF LABORATORY ANALYSIS

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Section A Page 1

LABORATORY ANALYSIS REPORT

CLIENT NAME: TRANSWESTERN PIPELINE COMPANY
ADDRESS: P.O. BOX 1717
ROSWELL, NM 88202-1717
ATTENTION: LARRY CAMPBELL

SAMPLE ID: BURN PIT - 5 (29-31')
LSG SAMPLE NO: H0258763
P.O. NO.: VERBAL

LSG CLIENT NO: 0734 0002
PACE PROJECT: H07340002
PACE CLIENT: 620562

DATE SAMPLED: 02-NOV-93
DATE RECEIVED: 10-NOV-93
APPROVED BY: L Beyer

TEST		DETERMINATION	RESULT	UNIT
LN	CODE			
1	1685S	Petroleum Hydrocarbons	360	mg/kg
4	OVAROS	Volatile Aromatics		
		Benzene	< 5	ug/kg
		Ethylbenzene	< 5	ug/kg
		Toluene	12	ug/kg
		m-Xylene	20 *	ug/kg
		o-Xylene	< 5	ug/kg
		p-Xylene	*	ug/kg

COMMENTS: Results are reported on an "as received" basis without correction for percent moisture unless previously specified.

* The compounds m-Xylene and p-Xylene co-elute. The reported result is the sum of the two.

RECEIVED
RECEIVED
NOV 29 1993
BC-HCC

Contact Susanne Richard
w/ Brown & Caldwell @ (713) 759-0999
for Billing Instructions.

158-43

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client Transwestern
Address _____
Phone _____

Report To: Susanne Richard
Bill To: _____
P.O. # / Billing Reference _____
Project Name / No. Bell Lake (1) & WT-1

Pace Client No. _____
Pace Project Manager _____
Pace Project No. _____
*Requested Due Date: _____

Sampled By (PRINT): Alan J. Fear 11/2-11/8-93
Sampler Signature Alan J. Fear Date Sampled _____

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES					ANALYSES REQUEST	REMARKS
						UNPRESERVED	H ₂ SO ₄	HNO ₃	VOA - HCL			
1	Soil Burn Pit-5 (29-31)	1648	Sand		2 2						XX	Bell Lake Facility
2	Soil Boring-1 (42-46)	1625	Sand		2 2						XX	WT-1 Facility
3	grd wtr Boring-1	920	wtr.		3 0 1 2						XX	
4	Soil Boring-1 (51-56)	1700	Sand		2 2						XX	
5	Soil Boring-2 (5-10)	1010	Sand		2 2						XX	
6	Soil Boring-2 (60-65)	1525	Sand		2 2						XX	
7	grd wtr Boring-2	1545	wtr.		3 0 1 2						XX	
8	Soil Boring-3 (20-30)	1200	Sand		2 2						XX	

COOLER NOS.	BAILERS	SHIPMENT OUT DATE	METHOD RETURNED DATE	ITEM NUMBER	RELINQUISHED BY	AFFILIATION	ACCEPTED BY	AFFILIATION	DATE	TIME
					<u>Alan J. Fear</u>	<u>11/5/93</u>	<u>James J. Oda</u>	<u>IPACE</u>	<u>11/10/93</u>	
Additional Comments										

Contract 2-11-12
w/Brown & Caldwell @ (713)-759-0999
for Billing Instructions.

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client: Transwestern

Report To: Susanne Richard

Pace Client No. _____

Address: _____

Bill To: _____

Pace Project Manager _____

City: _____

P.O. # / Billing Reference _____

Pace Project No. _____

State: _____

Project Name / No. WT-1 Carlsbad, N.M. Requested Due Date: _____

Prepared By (PRINT): Alan J. Fear 11/2 - 11/8/93
Sampler Signature: Alan J. Fear Date Sampled: _____

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PAGE NO.	NO. OF CONTAINERS	PRESERVATIVES					ANALYSES REQUESTED	REMARKS
						UNPRESERVED	H ₂ SO ₄	HNO ₃	VOA - HCl			
1	Soil Boring-3 (47-57)	135	Sand		22						XX	WT-1 Facility
2	grd. wtr. Boring-3	135	wtr.		301	2					XX	
3	Soil Boring-4 (19-21)	145	Sand		22						XX	
4	Soil Boring-4 (47-57)	165	Sand		22						XX	
5	grd. wtr. Boring-4	170	wtr.		301	2					XX	
6	Soil Boring-5 (20-30)	1028	Sand		22						XX	
7	Soil Boring-5 (52-59)	135	grd.		22						XX	
8	grd. wtr. Boring-5	1530-8000	grd.		301	2					XX	

COOLER NOS.	BAILERS	SHIPMENT OUT DATE	METHOD RETURNED DATE	ITEM NUMBER	RELINQUISHED BY	AFFILIATION	ACCEPTED BY	AFFILIATION	DATE	TIME
					Alan J. Fear	11/9/93				

Additional Comments

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QUALITY CONTROL REPORT SUPPLEMENTAL INFORMATION

SAMPLE PREPARATION						SAMPLE ANALYSIS			
TEST	LR-					LR-	ANLS		
LN CODE BATCH	METHOD	DATE/TIME	ANALYST			METHOD	DATE/TIME	ANALYST	BATCH INSTRUMENT

SAMPLE ID: MW-3 GROUNDWATER

LSG SAMPLE NO: H0256040

3	1590	35076	NA			02-160.1	25-OCT-93	1635 S S	0	005WAT
4	1685	35054	02-418.1			02-418.1	26-OCT-93	2330 M N	0	302WAT
5	OVTWCW	35188	NA			19-8240	29-OCT-93	1939 E M	35284	GCMST
7	OSVTCW	34979	19-3520	25-OCT-93	0630 MLN	19-8270	27-OCT-93	1137 A P	34948	GCMST

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: MW-2 GROUNDWATER

LSG SAMPLE NO: H0256041

3	1590	35076	NA			02-160.1	25-OCT-93	1635 S S	0	005WAT
4	1685	35054	02-418.1			02-418.1	26-OCT-93	2330 M N	0	302WAT
5	OVTWCW	35188	NA			19-8240	29-OCT-93	2007 E M	35284	GCMST
7	OSVTCW	34979	19-3520	25-OCT-93	0630 MLN	19-8270	26-OCT-93	2012 A P	34948	GCMST

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: OS-1 GROUNDWATER

LSG SAMPLE NO: H0256042

3	1590	35076	NA			02-160.1	25-OCT-93	1635 S S	0	005WAT
4	1685	35054	02-418.1			02-418.1	26-OCT-93	2330 M N	0	302WAT
5	OVTWCW	35283	NA			19-8240	02-NOV-93	1354 E M	35284	GCMST
7	OSVTCW	34979	19-3520	25-OCT-93	0630 MLN	19-8270	26-OCT-93	2053 A P	34948	GCMST
7	OSVTCW	34979	19-3520	25-OCT-93	0630 MLN	19-8270	26-OCT-93	2053 A P	34948	GCMST

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986



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QUALITY CONTROL REPORT SUPPLEMENTAL INFORMATION

----- SAMPLE PREPARATION -----						----- SAMPLE ANALYSIS -----			
TEST		LR-		LR-		ANLS			
LN	CODE	BATCH	METHOD	DATE/TIME	ANALYST	METHOD	DATE/TIME	ANALYST	BATCH INSTRUMENT

SAMPLE ID: MW-3 (89-91') SAND

LSG SAMPLE NO: H0256043

16	I685S	35206	19-3550			02-418.1	01-NOV-93 800 J J		35206 302WAT
17	OVTCS	35098	NA			19-8240	27-OCT-93 2231 E M		35098 GCMSQ
19	OSVTCS	34980	19-3550	26-OCT-93 0700 MLN		19-8270	27-OCT-93 1438 A P		34587 GCMST
19	OSVTCS	34980	19-3550	26-OCT-93 0700 MLN		19-8270	27-OCT-93 1438 A P		34587 GCMST

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: MW-3 (104-106') SAND

LSG SAMPLE NO: H0256044

16	I685S	35206	19-3550			02-418.1	01-NOV-93 800 J J		35206 302WAT
17	OVTCS	35098	NA			19-8240	27-OCT-93 2257 E M		35098 GCMSQ
19	OSVTCS	34980	19-3550	26-OCT-93 0700 MLN		19-8270	27-OCT-93 1519 A P		34587 GCMST

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: OS-1 (9-11') SAND

LSG SAMPLE NO: H0256045

16	I685S	35206	19-3550			02-418.1	01-NOV-93 800 J J		35206 302WAT
17	OVTCS	35098	NA			19-8240	27-OCT-93 2323 E M		35098 GCMSQ
19	OSVTCS	34980	19-3550	26-OCT-93 0700 MLN		19-8270	27-OCT-93 1601 A P		34587 GCMST

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

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QUALITY CONTROL REPORT SUPPLEMENTAL INFORMATION

SAMPLE PREPARATION					SAMPLE ANALYSIS				
TEST	LR-				LR-			ANLS	
LN	CODE	BATCH	METHOD	DATE/TIME	ANALYST	METHOD	DATE/TIME	ANALYST	BATCH INSTRUMENT

SAMPLE ID: OS-1 (84-86') SAND

LSG SAMPLE NO: H0256046

16	1685S	35206	19-3550			02-418.1	01-NOV-93 800	J J	35206 302WAT
17	OVTCS	35141	NA			19-8240	28-OCT-93 1636	E M	35098 GCMSQ
19	OSVTCS	34980	19-3550	26-OCT-93 0700	MLN	19-8270	28-OCT-93 1030	A P	34587 GCMST

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: NP-1 (14-16') SAND

LSG SAMPLE NO: H0256047

16	1685S	35206	19-3550			02-418.1	01-NOV-93 800	J J	35206 302WAT
17	OVTCS	35141	NA			19-8240	28-OCT-93 1704	E M	35098 GCMSQ
19	OSVTCS	34980	19-3550	26-OCT-93 0700	MLN	19-8270	29-OCT-93 1329	A P	34587 GCMST

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: NP-1 (36') SAND

LSG SAMPLE NO: H0256048

16	1685S	35206	19-3550			02-418.1	01-NOV-93 800	J J	35206 302WAT
17	OVTCS	35141	NA			19-8240	28-OCT-93 1731	E M	35098 GCMSQ
19	OSVTCS	34980	19-3550	26-OCT-93 0700	MLN	19-8270	29-OCT-93 1411	A P	34587 GCMST

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

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QUALITY CONTROL REPORT SURROGATE STANDARD RECOVERY

TEST LN	SURROGATE CODE COMPOUND	PERCENT RECOVERY	ACCEPTANCE LIMITS	REF LN
SAMPLE ID: MW-3 GROUNDWATER LSG SAMPLE NO: H0256040				
6	\$VOAW GC/MS Volatiles Surrogates			5
	1,2-Dichloroethane-d4	100	-	
	4-Bromofluorobenzene	109	-	
	Toluene-d8	98	-	
8	\$BNAW GC/MS BNA Surrogates			7
	2,4,6-Tribromophenol	89	-	
	2-Fluorobiphenyl	71	-	
	2-Fluorophenol	46	-	
	Nitrobenzene-d5	87	-	
	Phenol-d5	29	-	
	p-Terphenyl-d14	92	-	
SAMPLE ID: MW-2/GROUNDWATER LSG SAMPLE NO: H0256041				
6	\$VOAW GC/MS Volatiles Surrogates			5
	1,2-Dichloroethane-d4	98	-	
	4-Bromofluorobenzene	107	-	
	Toluene-d8	97	-	
8	\$BNAW GC/MS BNA Surrogates			7
	2,4,6-Tribromophenol	75	-	
	2-Fluorobiphenyl	75	-	
	2-Fluorophenol	46	-	
	Nitrobenzene-d5	71	-	
	Phenol-d5	27	-	
	p-Terphenyl-d14	84	-	
SAMPLE ID: OS-1 GROUNDWATER LSG SAMPLE NO: H0256042				
6	\$VOAW GC/MS Volatiles Surrogates			5
	1,2-Dichloroethane-d4	99	-	
	4-Bromofluorobenzene	146 *	-	
	Toluene-d8	97	-	
* The surrogate was out of range due to matrix interferences which was confirmed by re-analysis.				
8	\$BNAW GC/MS BNA Surrogates			7
	2,4,6-Tribromophenol	74	-	
	2-Fluorobiphenyl	77	-	
	2-Fluorophenol	44	-	
	Nitrobenzene-d5	68	-	
	Phenol-d5	28	-	
	p-Terphenyl-d14	86	-	

REPORT OF LABORATORY ANALYSIS

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Report No.: 00028414
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QUALITY CONTROL REPORT SURROGATE STANDARD RECOVERY

TEST LN	SURROGATE CODE COMPOUND	PERCENT RECOVERY	ACCEPTANCE LIMITS	REF LN
SAMPLE ID: MW-3 (89-91') SAND LSG SAMPLE NO: H0256043				
18	\$VOAS GC/MS Volatiles Surrogates			17
	1,2-Dichloroethane-d4	88	-	
	4-Bromofluorobenzene	95	-	
	Toluene-d8	95	-	
20	\$BNAS GC/MS BNA Surrogates			19
	2,4,6-Tribromophenol	76	-	
	2-Fluorobiphenyl	77	-	
	2-Fluorophenol	99	-	
	Nitrobenzene-d5	82	-	
	Phenol-d5	90	-	
	p-Terphenyl-d14	85	-	
SAMPLE ID: MW-3 (104-106') SAND LSG SAMPLE NO: H0256044				
18	\$VOAS GC/MS Volatiles Surrogates			17
	1,2-Dichloroethane-d4	94	-	
	4-Bromofluorobenzene	84	-	
	Toluene-d8	94	-	
20	\$BNAS GC/MS BNA Surrogates			19
	2,4,6-Tribromophenol	83	-	
	2-Fluorobiphenyl	81	-	
	2-Fluorophenol	101	-	
	Nitrobenzene-d5	86	-	
	Phenol-d5	93	-	
	p-Terphenyl-d14	98	-	
SAMPLE ID: OS-1 (9-11') SAND LSG SAMPLE NO: H0256045				
18	\$VOAS GC/MS Volatiles Surrogates			17
	1,2-Dichloroethane-d4	92	-	
	4-Bromofluorobenzene	95	-	
	Toluene-d8	103	-	
20	\$BNAS GC/MS BNA Surrogates			19
	2,4,6-Tribromophenol	63	-	
	2-Fluorobiphenyl	72	-	
	2-Fluorophenol	90	-	
	Nitrobenzene-d5	70	-	
	Phenol-d5	83	-	
	p-Terphenyl-d14	96	-	
SAMPLE ID: OS-1 (84-86') SAND LSG SAMPLE NO: H0256046				

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QUALITY CONTROL REPORT SURROGATE STANDARD RECOVERY

LN	TEST CODE	SURROGATE COMPOUND	PERCENT RECOVERY	ACCEPTANCE LIMITS	REF LN
18	\$VOAS	GC/MS Volatiles Surrogates			17
		1,2-Dichloroethane-d4	94	-	
		4-Bromofluorobenzene	95	-	
		Toluene-d8	93	-	
20	\$BNAS	GC/MS BNA Surrogates			19
		2,4,6-Tribromophenol	96	-	
		2-Fluorobiphenyl	86	-	
		2-Fluorophenol	117	-	
		Nitrobenzene-d5	92	-	
		Phenol-d5	108	-	
		p-Terphenyl-d14	102	-	
SAMPLE ID: NP-1 (14-16') SAND LSG SAMPLE NO: H0256047					
18	\$VOAS	GC/MS Volatiles Surrogates			17
		1,2-Dichloroethane-d4	74	-	
		4-Bromofluorobenzene	121	-	
		Toluene-d8	67 *	-	
* The surrogates were out of range due to matrix interferences which was confirmed by re-analysis.					
20	\$BNAS	GC/MS BNA Surrogates			19
		2,4,6-Tribromophenol	50	-	
		2-Fluorobiphenyl	58	-	
		2-Fluorophenol	41	-	
		Nitrobenzene-d5	49	-	
		Phenol-d5	52	-	
		p-Terphenyl-d14	90	-	
SAMPLE ID: NP-1 (36') SAND LSG SAMPLE NO: H0256048					
18	\$VOAS	GC/MS Volatiles Surrogates			17
		1,2-Dichloroethane-d4	75	-	
		4-Bromofluorobenzene	123 *	-	
		Toluene-d8	61 *	-	
* The surrogates were out of range due to matrix interferences which was confirmed by re-analysis.					
20	\$BNAS	GC/MS BNA Surrogates			19
		2,4,6-Tribromophenol	47	-	
		2-Fluorobiphenyl	60	-	
		2-Fluorophenol	45	-	
		Nitrobenzene-d5	53	-	
		Phenol-d5	57	-	
		p-Terphenyl-d14	87	-	

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QUALITY CONTROL REPORT LABORATORY CONTROL SAMPLE RECOVERY

TEST CODE DETERMINATION	PERCENT RECOVERY	ACCEPTANCE LIMITS
BATCH: 35054 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0256886
1685 Petroleum Hydrocarbons	107.0	-
BATCH: 35098 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0256958
OVTCS TCL - Volatiles in Soil		
1,1-Dichloroethene	92	-
Benzene	87	-
Chlorobenzene	96	-
Toluene	94	-
Trichloroethene	105	-
BATCH: 35141 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0258021
OVTCS TCL - Volatiles in Soil		
1,1-Dichloroethene	68	-
Benzene	95	-
Chlorobenzene	102	-
Toluene	106	-
Trichloroethene	106	-
BATCH: 35188 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0258099
OVTGW TCL - Volatiles in Water		
1,1-Dichloroethene	108	-
Benzene	105	-
Chlorobenzene	112	-
Toluene	107	-
Trichloroethene	106	-
BATCH: 35206 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0258135
1685S Petroleum Hydrocarbons	107.0	-
BATCH: 35283 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0258242
OVTGW TCL - Volatiles in Water		
1,1-Dichloroethene	99	-
Benzene	96	-
Chlorobenzene	104	-

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QUALITY CONTROL REPORT
LABORATORY CONTROL SAMPLE RECOVERY

TEST CODE	DETERMINATION	PERCENT RECOVERY	ACCEPTANCE LIMITS
	Toluene	102	-
	Trichloroethene	106	-

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QUALITY CONTROL REPORT METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
BATCH: 34979 SAMPLE ID: Method Blank		LSG SAMPLE NO: H0256765	
OSVTCW	TCL - Semi-volatile Extractables in Water		
	1,2,4-Trichlorobenzene	< 10	ug/L
	1,2-Dichlorobenzene	< 10	ug/L
	1,3-Dichlorobenzene	< 10	ug/L
	1,4-Dichlorobenzene	< 10	ug/L
	2,4,5-Trichlorophenol	< 20	ug/L
	2,4,6-Trichlorophenol	< 10	ug/L
	2,4-Dichlorophenol	< 10	ug/L
	2,4-Dimethylphenol	< 10	ug/L
	2,4-Dinitrophenol	< 50	ug/L
	2,4-Dinitrotoluene	< 10	ug/L
	2,6-Dinitrotoluene	< 10	ug/L
	2-Chloronaphthalene	< 10	ug/L
	2-Chlorophenol	< 10	ug/L
	2-Methylnaphthalene	< 10	ug/L
	2-Methylphenol	< 10	ug/L
	2-Nitroaniline	< 50	ug/L
	2-Nitrophenol	< 10	ug/L
	3,3'-Dichlorobenzidine	< 20	ug/L
	3-Nitroaniline	< 50	ug/L
	4,6-Dinitro-o-cresol	< 50	ug/L
	4-Bromophenylphenylether	< 10	ug/L
	4-Chloro-3-methylphenol	< 10	ug/L
	4-Chloroaniline	< 10	ug/L
	4-Chlorophenylphenylether	< 10	ug/L
	4-Methylphenol	< 10	ug/L
	4-Nitroaniline	< 50	ug/L
	4-Nitrophenol	< 50	ug/L
	Acenaphthene	< 10	ug/L
	Acenaphthylene	< 10	ug/L
	Anthracene	< 10	ug/L
	Benzo(a)anthracene	< 10	ug/L
	Benzo(a)pyrene	< 10	ug/L
	Benzo(b)fluoranthene	< 10	ug/L
	Benzo(g,h,i)perylene	< 10	ug/L
	Benzo(k)fluoranthene	< 10	ug/L
	Benzoic acid	< 50	ug/L
	Benzyl alcohol	< 10	ug/L
	Butylbenzylphthalate	< 10	ug/L
	Chrysene	< 10	ug/L

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QUALITY CONTROL REPORT METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
	Di-n-butylphthalate	< 10	ug/L
	Di-n-octylphthalate	< 10	ug/L
	Dibenzo(a,h)anthracene	< 10	ug/L
	Dibenzofuran	< 10	ug/L
	Diethylphthalate	< 10	ug/L
	Dimethylphthalate	< 10	ug/L
	Fluoranthene	< 10	ug/L
	Fluorene	< 10	ug/L
	Hexachlorobenzene	< 10	ug/L
	Hexachlorobutadiene	< 10	ug/L
	Hexachlorocyclopentadiene	< 10	ug/L
	Hexachloroethane	< 10	ug/L
	Indeno(1,2,3-cd)pyrene	< 10	ug/L
	Isophorone	< 10	ug/L
	N-Nitroso-di-n-propylamine	< 10	ug/L
	N-Nitrosodiphenylamine	< 10	ug/L
	Naphthalene	< 10	ug/L
	Nitrobenzene	< 10	ug/L
	Pentachlorophenol	< 50	ug/L
	Phenanthrene	< 10	ug/L
	Phenol	< 10	ug/L
	Pyrene	< 10	ug/L
	bis(2-Chloroethoxy)methane	< 10	ug/L
	bis(2-Chloroethyl)ether	< 10	ug/L
	bis(2-Chloroisopropyl)ether	< 10	ug/L
	bis(2-Ethylhexyl)phthalate	< 10	ug/L
BATCH: 34980	SAMPLE ID: Method Blank	LSG SAMPLE NO: H0256766	
OSVTCS	TCL - Semi-volatile Extractables in Soil		
	4,6-Dinitro-o-cresol	< 1,600	ug/kg
	4-Bromophenylphenylether	< 330	ug/kg
	4-Chloro-3-methylphenol	< 330	ug/kg
	4-Chloroaniline	< 330	ug/kg
	4-Chlorophenylphenylether	< 330	ug/kg
	4-Methylphenol	< 330	ug/kg
	4-Nitroaniline	< 1,600	ug/kg
	4-Nitrophenol	< 1,600	ug/kg
	Acenaphthene	< 330	ug/kg
	Acenaphthylene	< 330	ug/kg
	Anthracene	< 330	ug/kg
	Benzo(a)anthracene	< 330	ug/kg
	Benzo(a)pyrene	< 330	ug/kg
	Benzo(b)fluoranthene	< 330	ug/kg

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QUALITY CONTROL REPORT
METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
	Benzo(g,h,i)perylene	< 330	ug/kg
	Benzo(k)fluoranthene	< 330	ug/kg
	Benzoic acid	< 1,600	ug/kg
	Benzyl alcohol	< 330	ug/kg
	Butylbenzylphthalate	< 330	ug/kg
	Chrysene	< 330	ug/kg
	Di-n-butylphthalate	< 330	ug/kg
	Di-n-octylphthalate	< 330	ug/kg
	Dibenzo(a,h)anthracene	< 330	ug/kg
	Dibenzofuran	< 330	ug/kg
	Diethylphthalate	< 330	ug/kg
	Dimethylphthalate	< 330	ug/kg
	Fluoranthene	< 330	ug/kg
	Fluorene	< 330	ug/kg
	Hexachlorobenzene	< 330	ug/kg
	Hexachlorobutadiene	< 330	ug/kg
	Hexachlorocyclopentadiene	< 330	ug/kg
	Hexachloroethane	< 330	ug/kg
	Indeno(1,2,3-cd)pyrene	< 330	ug/kg
	Isophorone	< 330	ug/kg
	N-Nitrosodi-n-propylamine	< 330	ug/kg
	N-Nitrosodiphenylamine	< 330	ug/kg
	Naphthalene	< 330	ug/kg
	Nitrobenzene	< 330	ug/kg
	Pentachlorophenol	< 1,600	ug/kg
	Phenanthrene	< 330	ug/kg
	Phenol	< 330	ug/kg
	Pyrene	< 330	ug/kg
	bis(2-Chloroethoxy)methane	< 330	ug/kg
	bis(2-Chloroethyl)ether	< 330	ug/kg
	bis(2-Chloroisopropyl)ether	< 330	ug/kg
	bis(2-Ethylhexyl)phthalate	< 330	ug/kg
	1,2,4-Trichlorobenzene	< 330	ug/kg
	1,2-Dichlorobenzene	< 330	ug/kg
	1,3-Dichlorobenzene	< 330	ug/kg
	1,4-Dichlorobenzene	< 330	ug/kg
	2,4,5-Trichlorophenol	< 660	ug/kg
	2,4,6-Trichlorophenol	< 330	ug/kg
	2,4-Dichlorophenol	< 330	ug/kg
	2,4-Dimethylphenol	< 330	ug/kg
	2,4-Dinitrophenol	< 1,600	ug/kg
	2,4-Dinitrotoluene	< 330	ug/kg
	2,6-Dinitrotoluene	< 330	ug/kg
	2-Chloronaphthalene	< 330	ug/kg

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QUALITY CONTROL REPORT METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
	2-Chlorophenol	< 330	ug/kg
	2-Methylnaphthalene	< 330	ug/kg
	2-Methylphenol	< 330	ug/kg
	2-Nitroaniline	< 1,600	ug/kg
	2-Nitrophenol	< 330	ug/kg
	3,3'-Dichlorobenzidine	< 660	ug/kg
	3-Nitroaniline	< 1,600	ug/kg
BATCH: 35054	SAMPLE ID: Method Blank	LSG SAMPLE NO: H0256887	
	I685 Petroleum Hydrocarbons	< 0.2	mg/L
BATCH: 35076	SAMPLE ID: Method Blank	LSG SAMPLE NO: H0256922	
	I590 Solids, Dissolved at 180C	< 20	mg/L
BATCH: 35098	SAMPLE ID: Method Blank	LSG SAMPLE NO: H0256959	
OVTCS	TCL - Volatiles in Soil		
	1,1,1-Trichloroethane	< 5	ug/kg
	1,1,2,2,-Tetrachloroethane	< 5	ug/kg
	1,1,2-Trichloroethane	< 5	ug/kg
	1,1-Dichloroethane	< 5	ug/kg
	1,1-Dichloroethene	< 5	ug/kg
	1,2-Dichloroethane	< 5	ug/kg
	1,2-Dichloroethene (total)	< 5	ug/kg
	1,2-Dichloropropane	< 5	ug/kg
	2-Butanone	< 10	ug/kg
	2-Hexanone	< 10	ug/kg
	4-Methyl-2-pentanone	< 10	ug/kg
	Acetone	< 10	ug/kg
	Benzene	< 5	ug/kg
	Bromodichloromethane	< 5	ug/kg
	Bromoform	< 5	ug/kg
	Bromomethane	< 10	ug/kg
	Carbon disulfide	< 5	ug/kg
	Carbon tetrachloride	< 5	ug/kg
	Chlorobenzene	< 5	ug/kg
	Chloroethane	< 10	ug/kg
	Chloroform	< 5	ug/kg
	Chloromethane	< 10	ug/kg
	Dibromochloromethane	< 5	ug/kg
	Ethylbenzene	< 5	ug/kg
	Methylene chloride	< 5	ug/kg

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QUALITY CONTROL REPORT METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
	Styrene	< 5	ug/kg
	Tetrachloroethene	< 5	ug/kg
	Toluene	< 5	ug/kg
	Trichloroethene	< 5	ug/kg
	Vinyl acetate	< 10	ug/kg
	Vinyl chloride	< 10	ug/kg
	Xylene(total)	< 5	ug/kg
	cis-1,3-Dichloropropene	< 5	ug/kg
	trans-1,3-Dichloropropene	< 5	ug/kg
BATCH: 35141 SAMPLE ID: Method Blank LSG SAMPLE NO: H0258022			
OVTCS	TCL - Volatiles in Soil		
	1,1,1-Trichloroethane	< 5	ug/kg
	1,1,2,2,-Tetrachloroethane	< 5	ug/kg
	1,1,2-Trichloroethane	< 5	ug/kg
	1,1-Dichloroethane	< 5	ug/kg
	1,1-Dichloroethene	< 5	ug/kg
	1,2-Dichloroethane	< 5	ug/kg
	1,2-Dichloroethene (total)	< 5	ug/kg
	1,2-Dichloropropane	< 5	ug/kg
	2-Butanone	< 10	ug/kg
	2-Hexanone	< 10	ug/kg
	4-Methyl-2-pentanone	< 10	ug/kg
	Acetone	< 10	ug/kg
	Benzene	< 5	ug/kg
	Bromodichloromethane	< 5	ug/kg
	Bromoform	< 5	ug/kg
	Bromomethane	< 10	ug/kg
	Carbon disulfide	< 5	ug/kg
	Carbon tetrachloride	< 5	ug/kg
	Chlorobenzene	< 5	ug/kg
	Chloroethane	< 10	ug/kg
	Chloroform	< 5	ug/kg
	Chloromethane	< 10	ug/kg
	Dibromochloromethane	< 5	ug/kg
	Ethylbenzene	< 5	ug/kg
	Methylene chloride	< 5	ug/kg
	Styrene	< 5	ug/kg
	Tetrachloroethene	< 5	ug/kg
	Toluene	< 5	ug/kg
	Trichloroethene	< 5	ug/kg
	Vinyl acetate	< 10	ug/kg
	Vinyl chloride	< 10	ug/kg

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QUALITY CONTROL REPORT METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
	Xylene(total)	< 5	ug/kg
	cis-1,3-Dichloropropene	< 5	ug/kg
	trans-1,3-Dichloropropene	< 5	ug/kg
BATCH: 35188 SAMPLE ID: Method Blank LSG SAMPLE NO: H0258100			
OVTW	TCL - Volatiles in Water		
	1,1,1-Trichloroethane	< 5	ug/L
	1,1,2,2-Tetrachloroethane	< 5	ug/L
	1,1,2-Trichloroethane	< 5	ug/L
	1,1-Dichloroethane	< 5	ug/L
	1,1-Dichloroethene	< 5	ug/L
	1,2-Dichloroethane	< 5	ug/L
	1,2-Dichloroethene (total)	< 5	ug/L
	1,2-Dichloropropane	< 5	ug/L
	2-Butanone	< 10	ug/L
	2-Hexanone	< 10	ug/L
	4-Methyl-2-pentanone	< 10	ug/L
	Acetone	< 10	ug/L
	Benzene	< 5	ug/L
	Bromodichloromethane	< 5	ug/L
	Bromoform	< 5	ug/L
	Bromomethane	< 10	ug/L
	Carbon disulfide	< 5	ug/L
	Carbon tetrachloride	< 5	ug/L
	Chlorobenzene	< 5	ug/L
	Chloroethane	< 10	ug/L
	Chloroform	< 5	ug/L
	Chloromethane	< 10	ug/L
	Dibromochloromethane	< 5	ug/L
	Ethylbenzene	< 5	ug/L
	Methylene chloride	< 5	ug/L
	Styrene	< 5	ug/L
	Tetrachloroethene	< 5	ug/L
	Toluene	< 5	ug/L
	Trichloroethene	< 5	ug/L
	Vinyl acetate	< 10	ug/L
	Vinyl chloride	< 10	ug/L
	Xylene(total)	< 5	ug/L
	cis-1,3-Dichloropropene	< 5	ug/L
	trans-1,3-Dichloropropene	< 5	ug/L

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QUALITY CONTROL REPORT METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
BATCH: 35206	SAMPLE ID: Method Blank	LSG SAMPLE NO: H0258136	
I685S	Petroleum Hydrocarbons	< 20	mg/kg
BATCH: 35283	SAMPLE ID: Method Blank	LSG SAMPLE NO: H0258243	
OVTGW	TCL - Volatiles in Water		
	1,1,1-Trichloroethane	< 5	ug/L
	1,1,2,2-Tetrachloroethane	< 5	ug/L
	1,1,2-Trichloroethane	< 5	ug/L
	1,1-Dichloroethane	< 5	ug/L
	1,1-Dichloroethene	< 5	ug/L
	1,2-Dichloroethane	< 5	ug/L
	1,2-Dichloroethene (total)	< 5	ug/L
	1,2-Dichloropropane	< 5	ug/L
	2-Butanone	< 10	ug/L
	2-Hexanone	< 10	ug/L
	4-Methyl-2-pentanone	< 10	ug/L
	Acetone	< 10	ug/L
	Benzene	< 5	ug/L
	Bromodichloromethane	< 5	ug/L
	Bromoform	< 5	ug/L
	Bromomethane	< 10	ug/L
	Carbon disulfide	< 5	ug/L
	Carbon tetrachloride	< 5	ug/L
	Chlorobenzene	< 5	ug/L
	Chloroethane	< 10	ug/L
	Chloroform	< 5	ug/L
	Chloromethane	< 10	ug/L
	Dibromochloromethane	< 5	ug/L
	Ethylbenzene	< 5	ug/L
	Methylene chloride	< 5	ug/L
	Styrene	< 5	ug/L
	Tetrachloroethene	< 5	ug/L
	Toluene	< 5	ug/L
	Trichloroethene	< 5	ug/L
	Vinyl acetate	< 10	ug/L
	Vinyl chloride	< 10	ug/L
	Xylene(total)	< 5	ug/L
	cis-1,3-Dichloropropene	< 5	ug/L
	trans-1,3-Dichloropropene	< 5	ug/L

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QUALITY CONTROL REPORT DUPLICATE AND MATRIX SPIKE DATA

PREP BATCH: 35076

LSG SAMPLE NO: H0256041

TEST	DETERMINATION	ORIGINAL RESULT	Duplicate RESULT	UNITS	RANGE / RPD	UNITS	MS RESULT	MS % RCVRY
1590	Solids, Dissolved at 180C	9,200	9,200	mg/L	0.00	mg/L		

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QUALITY CONTROL REPORT MATRIX SPIKE AND MATRIX SPIKE DUPLICATE DATA

ANLS BATCH: 34587

LSG SAMPLE NO: H0254266

TEST	DETERMINATION	MS RESULT	MSD RESULT	UNITS	RPD	MS PCT RECOVERY	MSD PCT RECOVERY
OSVTCS	1,2,4-Trichlorobenzene	2360	2430	ug/kg	2.88	72	73
OSVTCS	1,4-Dichlorobenzene	2360	2440	ug/kg	3.54	71	74
OSVTCS	2,4-Dinitrotoluene	2650	2750	ug/kg	3.85	80	83
OSVTCS	2-Chlorophenol	4750	4920	ug/kg	3.47	72	75
OSVTCS	4-Chloro-3-methylphenol	5130	5210	ug/kg	1.66	78	79
OSVTCS	4-Nitrophenol	6150	6400	ug/kg	3.92	93	97
OSVTCS	Acenaphthene	2240	2300	ug/kg	2.78	68	70
OSVTCS	N-Nitrosodi-n-propylamine	2140	2180	ug/kg	1.90	65	66
OSVTCS	Pentachlorophenol	5380	5460	ug/kg	1.49	82	83
OSVTCS	Phenol	4400	4600	ug/kg	4.31	67	69
OSVTCS	Pyrene	2090	2270	ug/kg	8.26	63	69

ANLS BATCH: 34948

LSG SAMPLE NO: H0255768

TEST	DETERMINATION	MS RESULT	MSD RESULT	UNITS	RPD	MS PCT RECOVERY	MSD PCT RECOVERY
OSVTCW	1,2,4-Trichlorobenzene	44.6	54.3	ug/L	19.5	45	54
OSVTCW	1,4-Dichlorobenzene	46.5	54.9	ug/L	16.5	47	55
OSVTCW	2,4-Dinitrotoluene	70.5	82.8	ug/L	16.1	70	83
OSVTCW	2-Chlorophenol	97.0	132	ug/L	30.4	22	66
OSVTCW	4-Nitrophenol	44.0	62.0	ug/L	33.8	22	31
OSVTCW	Acenaphthene	56.7	69.4	ug/L	20.1	57	69
OSVTCW	N-Nitrosodi-n-propylamine	38.9	50.6	ug/L	26.1	39	51
OSVTCW	Pentachlorophenol	191	208	ug/L	8.55	96	104
OSVTCW	Phenol	30.4	43.5	ug/L	35.4	15	22
OSVTCW	Pyrene	91.0	89.6	ug/L	1.48	91	90
OSVTCW	p-Chloro-m-cresol	161	164	ug/L	2.00	81	82

ANLS BATCH: 35098

LSG SAMPLE NO: H0254887

TEST	DETERMINATION	MS RESULT	MSD RESULT	UNITS	RPD	MS PCT RECOVERY	MSD PCT RECOVERY
OVTCS	1,1-Dichloroethene	44.2	43.6	ug/kg	1.27	88	87
OVTCS	Benzene	47.2	48.0	ug/kg	1.67	94	96
OVTCS	Chlorobenzene	49.1	50.0	ug/kg	1.91	98	100
OVTCS	Toluene	47.2	41.4	ug/kg	13.1	94	83



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QUALITY CONTROL REPORT
MATRIX SPIKE AND MATRIX SPIKE DUPLICATE DATA

ANLS BATCH: 35098

LSG SAMPLE NO: H0254887

<u>TEST</u>	<u>DETERMINATION</u>	<u>MS</u> <u>RESULT</u>	<u>MSD</u> <u>RESULT</u>	<u>UNITS</u>	<u>RPD</u>	<u>MS PCT</u> <u>RECOVERY</u>	<u>MSD PCT</u> <u>RECOVERY</u>
OVTCS	Trichloroethene	54.3	55.1	ug/kg	1.33	109	110

ANLS BATCH: 35284

LSG SAMPLE NO: H0256123

<u>TEST</u>	<u>DETERMINATION</u>	<u>MS</u> <u>RESULT</u>	<u>MSD</u> <u>RESULT</u>	<u>UNITS</u>	<u>RPD</u>	<u>MS PCT</u> <u>RECOVERY</u>	<u>MSD PCT</u> <u>RECOVERY</u>
OVTWC	1,1-Dichloroethene	46.5	50.8	ug/L	8.94	93	102
OVTWC	Benzene	49.2	51.4	ug/L	4.26	98	103
OVTWC	Chlorobenzene	50.3	52.6	ug/L	4.42	101	105
OVTWC	Toluene	53.0	49.5	ug/L	6.89	106	99
OVTWC	Trichloroethene	47.9	49.4	ug/L	3.08	96	99

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QUALITY CONTROL REPORT SUPPLEMENTAL INFORMATION

----- SAMPLE PREPARATION -----						----- SAMPLE ANALYSIS -----			
TEST		LR-		LR-		ANLS			
LN	CODE	BATCH	METHOD	DATE/TIME	ANALYST	METHOD	DATE/TIME	ANALYST	BATCH INSTRUMENT

SAMPLE ID: SAND DP-2 (59-61')

LSG SAMPLE NO: H0256328

7	I685S	35348	19-3550			02-418.1	03-NOV-93	2100 Lin	0	302WAT
8	G107S	35166	NA			19-8020	31-OCT-93	521 S B	35166	3678GC

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: SAND DP-2 (84-86')

LSG SAMPLE NO: H0256329

7	I685S	35348	19-3550			02-418.1	03-NOV-93	2100 Lin	0	302WAT
8	G107S	35166	NA			19-8020	31-OCT-93	557 S B	35166	3678GC

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: SAND BP-3 (39-41')

LSG SAMPLE NO: H0256330

7	I685S	35409	19-3550			02-418.1	07-NOV-93	1015 Lin	35409	302WAT
8	G107S	35166	NA			19-8020	31-OCT-93	633 S B	35166	3678GC

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: SAND BP-3 (89-91')

LSG SAMPLE NO: H0256331

7	I685S	35348	19-3550			02-418.1	03-NOV-93	2100 Lin	0	302WAT
8	G107S	35166	NA			19-8020	31-OCT-93	708 S B	35166	3678GC

LR Method Literature Reference

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QUALITY CONTROL REPORT SUPPLEMENTAL INFORMATION

----- SAMPLE PREPARATION -----										----- SAMPLE ANALYSIS -----			
TEST		LR-				LR-		ANLS					
LN	CODE	BATCH	METHOD	DATE/TIME	ANALYST	METHOD	DATE/TIME	ANALYST	BATCH	INSTRUMENT			

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: GRD WTR DP-2

LSG SAMPLE NO: H0256332

4	1685	35291	02-418.1	02-418.1	03-NOV-93	900	D P	0	302WAT
5	G107W	35196	NA	05-602	30-OCT-93	603	S B	35089	3618GC

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 05 EPA-40 CFR 136, October 26, 1984.

SAMPLE ID: GRD WTR MW-1

LSG SAMPLE NO: H0256333

4	1685	35291	02-418.1	02-418.1	03-NOV-93	900	D P	0	302WAT
5	G107W	35330	NA	05-602	02-NOV-93	1213	S B	35089	3618GC

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 05 EPA-40 CFR 136, October 26, 1984.

SAMPLE ID: GRD WTR BP-3

LSG SAMPLE NO: H0256334

4	1685	35291	02-418.1	02-418.1	03-NOV-93	900	D P	0	302WAT
5	G107W	35196	NA	05-602	30-OCT-93	500	S B	35089	3618GC

LR Method Literature Reference



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QUALITY CONTROL REPORT SUPPLEMENTAL INFORMATION

----- SAMPLE PREPARATION -----					----- SAMPLE ANALYSIS -----					
TEST		LR-			LR-		ANLS			
LN	CODE	BATCH	METHOD	DATE/TIME	ANALYST	METHOD	DATE/TIME	ANALYST	BATCH	INSTRUMENT

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 05 EPA-40 CFR 136, October 26, 1984.

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QUALITY CONTROL REPORT SURROGATE STANDARD RECOVERY

TEST LN	SURROGATE CODE COMPOUND	PERCENT RECOVERY	ACCEPTANCE LIMITS	REF LN
SAMPLE ID: SAND DP-2 (59-61')		LSG SAMPLE NO: H0256328		
9	\$VARS GC Volatile Aromatics Surrogate alpha,alpha,alpha-Trifluorotoluene	80	-	8
SAMPLE ID: SAND DP-2 (84-86')		LSG SAMPLE NO: H0256329		
9	\$VARS GC Volatile Aromatics Surrogate alpha,alpha,alpha-Trifluorotoluene	75	-	8
SAMPLE ID: SAND BP-3 (39-41')		LSG SAMPLE NO: H0256330		
9	\$VARS GC Volatile Aromatics Surrogate alpha,alpha,alpha-Trifluorotoluene	71	-	8
SAMPLE ID: SAND BP-3 (89-91')		LSG SAMPLE NO: H0256331		
9	\$VARS GC Volatile Aromatics Surrogate alpha,alpha,alpha-Trifluorotoluene	80	-	8
SAMPLE ID: GRD WTR DP-2		LSG SAMPLE NO: H0256332		
6	\$VARW GC Volatile Aromatics Surrogate alpha,alpha,alpha-Trifluorotoluene	125	-	5
SAMPLE ID: GRD WTR MW-1		LSG SAMPLE NO: H0256333		
6	\$VARW GC Volatile Aromatics Surrogate alpha,alpha,alpha-Trifluorotoluene	121	-	5
SAMPLE ID: GRD WTR BP-3		LSG SAMPLE NO: H0256334		
6	\$VARW GC Volatile Aromatics Surrogate alpha,alpha,alpha-Trifluorotoluene	128 *	-	5

* The surrogate was out of range due to matrix interferences which was confirmed by re-analysis.



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QUALITY CONTROL REPORT LABORATORY CONTROL SAMPLE RECOVERY

TEST CODE DETERMINATION	PERCENT RECOVERY	ACCEPTANCE LIMITS
BATCH: 35166 SAMPLE ID: Lab Control Sample LSG SAMPLE NO: H0258066		
G107S BTEX Package		
Benzene	91	-
Ethylbenzene	101	-
Toluene	96	-
m-Xylene	82	-
o-Xylene	82	-
p-Xylene	94	-
BATCH: 35196 SAMPLE ID: Lab Control Sample LSG SAMPLE NO: H0258115		
G107W BTEX Package		
Benzene	93	-
Ethylbenzene	82	-
Toluene	84	-
m-Xylene	84 *	-
o-Xylene	90	-
p-Xylene	*	-
* The compounds m-Xylene and p-Xylene co-elute. The reported result is the sum of the two.		
BATCH: 35291 SAMPLE ID: Lab Control Sample LSG SAMPLE NO: H0258256		
I685 Petroleum Hydrocarbons	82.0	-
BATCH: 35330 SAMPLE ID: Lab Control Sample LSG SAMPLE NO: H0258323		
G107W BTEX Package		
Benzene	96	-
Ethylbenzene	86	-
Toluene	88	-
m-Xylene	88 *	-
o-Xylene	92	-
p-Xylene	*	-
* The compounds m-Xylene and p-Xylene co-elute. The reported result is the sum of the two.		



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QUALITY CONTROL REPORT
LABORATORY CONTROL SAMPLE RECOVERY

TEST CODE DETERMINATION	PERCENT RECOVERY	ACCEPTANCE LIMITS
BATCH: 35348 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0258357
I685S Petroleum Hydrocarbons	96.5	-
BATCH: 35409 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0258457
I685S Petroleum Hydrocarbons	111	-

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QUALITY CONTROL REPORT METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
BATCH: 35166 SAMPLE ID: Method Blank		LSG SAMPLE NO: H0258067	
G107S	BTEX Package		
	Benzene	< 1	ug/kg
	Ethylbenzene	4 *	ug/kg
	Toluene	9 *	ug/kg
	m-Xylene	7 *	ug/kg
	o-Xylene	2 *	ug/kg
	p-Xylene	3 *	ug/kg
* Analytes of interest were present in the Method Blank. All samples associated with this Method Blank that contained analytes of interest will be re-analyzed.			
BATCH: 35196 SAMPLE ID: Method Blank		LSG SAMPLE NO: H0258116	
G107W	BTEX Package		
	Benzene	< 2	ug/L
	Ethylbenzene	< 2	ug/L
	Toluene	< 2	ug/L
	m-Xylene	< 2	ug/L
	o-Xylene	< 2	ug/L
	p-Xylene	< 2	ug/L
BATCH: 35291 SAMPLE ID: Method Blank		LSG SAMPLE NO: H0258257	
I685	Petroleum Hydrocarbons	< 0.2	mg/L
BATCH: 35330 SAMPLE ID: Method Blank		LSG SAMPLE NO: H0258324	
G107W	BTEX Package		
	Benzene	< 2	ug/L
	Ethylbenzene	< 2	ug/L
	Toluene	< 2	ug/L
	m-Xylene	< 2	ug/L
	o-Xylene	< 2	ug/L
	p-Xylene	< 2	ug/L
BATCH: 35348 SAMPLE ID: Method Blank		LSG SAMPLE NO: H0258358	
I685S	Petroleum Hydrocarbons	< 20	mg/kg



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QUALITY CONTROL REPORT
METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
BATCH: 35409	SAMPLE ID: Method Blank	LSG SAMPLE NO:	H0258458
1685S	Petroleum Hydrocarbons	< 20	mg/kg



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QUALITY CONTROL REPORT
DUPLICATE AND MATRIX SPIKE DATA

PREP BATCH: 35348

LSG SAMPLE NO: H0256328

<u>TEST</u>	<u>DETERMINATION</u>	<u>ORIGINAL</u> <u>RESULT</u>	<u>DUPLICATE</u> <u>RESULT</u>	<u>UNITS</u>	<u>RANGE /</u> <u>RPD</u>	<u>UNITS</u>	<u>MS</u> <u>RESULT</u>	<u>MS %</u> <u>RCVRY</u>
1685S	Petroleum Hydrocarbons	< 20	< 20	mg/kg	---	mg/kg	300	92.6

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QUALITY CONTROL REPORT MATRIX SPIKE AND MATRIX SPIKE DUPLICATE DATA

PREP BATCH: 35166

LSG SAMPLE NO: H0256331

TEST	DETERMINATION	MS RESULT	MSD RESULT	UNITS	RPD	MS PCT RECOVERY	MSD PCT RECOVERY
G107S	Benzene	15.0	15.1	ug/kg	6.64	75	76
G107S	Ethylbenzene	15.7	16.5	ug/kg	4.97	78	82
G107S	Toluene	15.1	15.7	ug/kg	3.90	76	78
G107S	m-Xylene	11.4	12.1	ug/kg	5.95	57 *	60 *
G107S	o-Xylene	12.7	13.6	ug/kg	6.84	64 *	68
G107S	p-Xylene	12.9	13.7	ug/kg	6.02	64 *	68

* Recovery of the spike indicates the presence of a matrix interference.
This should be considered in evaluating the data.

ANLS BATCH: 35089

LSG SAMPLE NO: H0256193

TEST	DETERMINATION	MS RESULT	MSD RESULT	UNITS	RPD	MS PCT RECOVERY	MSD PCT RECOVERY
G107W	Benzene	16.2	16.3	ug/L	0.615	81	82
G107W	Ethylbenzene	16.8	16.8	ug/L	0.000	84	84
G107W	Toluene	16.2	16.2	ug/L	0.000	81	81
G107W	m-Xylene	34.6 *	34.6 *	ug/L	0.000	86	86
G107W	o-Xylene	16.3	16.4	ug/L	0.611	82	82
G107W	p-Xylene	16.5	16.6	ug/L	0.604	82	83

* The compounds m-Xylene and Chlorobenzene co-elute. The reported result is the sum of the two.

* The compounds m-Xylene and Chlorobenzene co-elute. The reported result is the sum of the two.

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QUALITY CONTROL REPORT SUPPLEMENTAL INFORMATION

----- SAMPLE PREPARATION -----						----- SAMPLE ANALYSIS -----			
TEST		LR-		LR-		ANLS			
LN	CODE	BATCH	METHOD	DATE/TIME	ANALYST	METHOD	DATE/TIME	ANALYST	BATCH INSTRUMENT

SAMPLE ID: BELL LAKE BURN PIT BP-1-0406

LSG SAMPLE NO: H0253353

1	OVTCS	34467	NA			19-8240	08-OCT-93	1347 J P	33866 GCMSR
3	OSVTCS	34461	19-3550	08-OCT-93	1200 MLN	19-8270	08-OCT-93	1543 M H	33597 GCMSR
7	I685S	34530	19-3550			02-418.1	11-OCT-93	800 D P	0 302WAT

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: BELL LAKE UST-1-0507

LSG SAMPLE NO: H0254254

5	G107S	34818	NA			19-8020	18-OCT-93	1850 R K	34735 7287GC
7	I685S	34819	19-3550			02-418.1	16-OCT-93	700 S S	0 302WAT

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: BELL LAKE UST-1-1012

LSG SAMPLE NO: H0254255

5	G107S	34818	NA			19-8020	18-OCT-93	2039 Dan	34735 7287GC
7	I685S	34819	19-3550			02-418.1	16-OCT-93	700 S S	0 302WAT

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: BELL LAKE UST-1-4951

LSG SAMPLE NO: H0254256

5	G107S	34737	NA			19-8020	16-OCT-93	2227 Dan	34517 3678GC
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QUALITY CONTROL REPORT SUPPLEMENTAL INFORMATION

SAMPLE PREPARATION						SAMPLE ANALYSIS			
TEST	LR-					LR-	ANLS		
LN CODE BATCH	METHOD	DATE/TIME	ANALYST			METHOD	DATE/TIME	ANALYST	BATCH INSTRUMENT
7 1685S 34819	19-3550					02-418.1	20-OCT-93 1000 S S	0	302WAT

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: BELL LAKE LEACH FIELD LF-1-0406

LSG SAMPLE NO: H0254257

1 OVTCS 34768 NA	19-8240 18-OCT-93 120 E M	0	GCMSQ
3 OSVTCS 34587 19-3550 13-OCT-93 0800 RDQ	19-8270 14-OCT-93 2120 M H	34503	GCMSQ
8 AASS 34614 19-3050 13-OCT-93 1400 SAO	19-7060 19-OCT-93 521 G B	0	305MET
9 ABAS 34613 19-3050 13-OCT-93 1400 SAO	19-6010 14-OCT-93 1229 J R	0	400MET
10 ACDS 34613 19-3050	19-6010 14-OCT-93 945 J R	0	400MET
11 ACRS 34613 19-3050	19-6010 14-OCT-93 1229 J R	0	400MET
12 APBS 34613 19-3050	19-6010 14-OCT-93 1229 J R	0	400MET
13 AHGS 34636 NA	19-7471 13-OCT-93 1430 G R	0	124WAT
14 ASES 34614 19-3050	19-7740 19-OCT-93 932 G B	0	405MET
15 AAGS 34614 19-3050	19-7760 15-OCT-93 938 G B	0	300MET

LR Method Literature Reference

- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: BELL LAKE LEACH FIELD LF-1-1416

LSG SAMPLE NO: H0254258

1 OVTCS 34768 NA	19-8240 18-OCT-93 148 E M	0	GCMSQ
3 OSVTCS 34587 19-3550 13-OCT-93 0800 RDQ	19-8270 14-OCT-93 2201 M H	34503	GCMSQ
8 AASS 34614 19-3050 13-OCT-93 1400 SAO	19-7060 19-OCT-93 521 G B	0	305MET
9 ABAS 34613 19-3050 13-OCT-93 1400 SAO	19-6010 14-OCT-93 1229 J R	0	400MET
10 ACDS 34613 19-3050	19-6010 14-OCT-93 945 J R	0	400MET
11 ACRS 34613 19-3050	19-6010 14-OCT-93 1229 J R	0	400MET
12 APBS 34613 19-3050	19-6010 14-OCT-93 1229 J R	0	400MET
13 AHGS 34636 NA	19-7471 13-OCT-93 1430 G R	0	124WAT
14 ASES 34614 19-3050	19-7740 19-OCT-93 932 G B	0	405MET
15 AAGS 34614 19-3050	19-7760 15-OCT-93 938 G B	0	300MET

LR Method Literature Reference

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QUALITY CONTROL REPORT SUPPLEMENTAL INFORMATION

----- SAMPLE PREPARATION -----						----- SAMPLE ANALYSIS -----			
TEST		LR-		LR-		ANLS			
LN	CODE	BATCH	METHOD	DATE/TIME	ANALYST	METHOD	DATE/TIME	ANALYST	BATCH INSTRUMENT

LR Method Literature Reference

19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: BELL LAKE LEACH FIELD LF-2-0911

LSG SAMPLE NO: H0254259

1	OVTCS	34768	NA			19-8240	18-OCT-93 215 E M	0	GCMSQ
3	OSVTCS	34587	19-3550	13-OCT-93 0800	RDQ	19-8270	14-OCT-93 2243 M H	34503	GCMSQ
8	AASS	34614	19-3050	13-OCT-93 1400	SAO	19-7060	19-OCT-93 521 G B	0	305MET
9	ABAS	34613	19-3050	13-OCT-93 1400	SAO	19-6010	14-OCT-93 1229 J R	0	400MET
10	ACDS	34613	19-3050			19-6010	14-OCT-93 945 J R	0	400MET
11	ACRS	34613	19-3050			19-6010	14-OCT-93 1229 J R	0	400MET
12	APBS	34613	19-3050			19-6010	14-OCT-93 1229 J R	0	400MET
13	AHGS	34636	NA			19-7471	13-OCT-93 1430 G R	0	124WAT
14	ASES	34614	19-3050			19-7740	19-OCT-93 932 G B	0	405MET
15	AAGS	34614	19-3050			19-7760	15-OCT-93 938 G B	0	300MET

LR Method Literature Reference

19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: BELL LAKE LEACH FIELD LF-2-1416

LSG SAMPLE NO: H0254260

1	OVTCS	34768	NA			19-8240	18-OCT-93 244 E M	0	GCMSQ
3	OSVTCS	34587	19-3550	13-OCT-93 0800	RDQ	19-8270	14-OCT-93 2324 M H	34503	GCMSQ
8	AASS	34614	19-3050	13-OCT-93 1400	SAO	19-7060	19-OCT-93 521 G B	0	305MET
9	ABAS	34613	19-3050	13-OCT-93 1400	SAO	19-6010	14-OCT-93 1229 J R	0	400MET
10	ACDS	34613	19-3050			19-6010	14-OCT-93 945 J R	0	400MET
11	ACRS	34613	19-3050			19-6010	14-OCT-93 1229 J R	0	400MET
12	APBS	34613	19-3050			19-6010	14-OCT-93 1229 J R	0	400MET
13	AHGS	34636	NA			19-7471	13-OCT-93 1430 G R	0	124WAT
14	ASES	34614	19-3050			19-7740	19-OCT-93 932 G B	0	405MET
15	AAGS	34614	19-3050			19-7760	15-OCT-93 938 G B	0	300MET

LR Method Literature Reference

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QUALITY CONTROL REPORT SUPPLEMENTAL INFORMATION

SAMPLE PREPARATION					SAMPLE ANALYSIS				
TEST	LR-				LR-	ANLS			
LN CODE BATCH	METHOD	DATE/TIME	ANALYST		METHOD	DATE/TIME	ANALYST	BATCH	INSTRUMENT

LR Method Literature Reference

19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: BELL LAKE SAND BORING 1-0002

LSG SAMPLE NO: H0254261

1	OVTCS	34804	NA		19-8240	18-OCT-93	1548 E M	34768	GCMSQ
3	OSVTCS	34587	19-3550	13-OCT-93 0800 RDQ	19-8270	15-OCT-93	435 A P	34503	GCMST
7	1685S	34819	19-3550		02-418.1	16-OCT-93	700 S S	0	302WAT

LR Method Literature Reference

02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.

19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: BELL LAKE SAND BORING 1-1416

LSG SAMPLE NO: H0254262

1	OVTCS	34770	NA		19-8240	17-OCT-93	1514 E M	34768	GCMSQ
3	OSVTCS	34587	19-3550	13-OCT-93 0800 RDQ	19-8270	15-OCT-93	517 A P	34503	GCMST
7	1685S	34819	19-3550		02-418.1	16-OCT-93	700 S S	0	302WAT

LR Method Literature Reference

02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.

19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: BELL LAKE SAND BORING 2-0002

LSG SAMPLE NO: H0254263

1	OVTCS	34770	NA		19-8240	17-OCT-93	1543 E M	34768	GCMSQ
3	OSVTCS	34587	19-3550	13-OCT-93 0800 RDQ	19-8270	15-OCT-93	558 A P	34503	GCMST
7	1685S	34819	19-3550		02-418.1	16-OCT-93	700 S S	0	302WAT

LR Method Literature Reference

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QUALITY CONTROL REPORT SUPPLEMENTAL INFORMATION

----- SAMPLE PREPARATION -----						----- SAMPLE ANALYSIS -----			
TEST	LR-					LR-			ANLS
LN CODE BATCH	METHOD	DATE/TIME	ANALYST	METHOD	DATE/TIME	ANALYST	BATCH	INSTRUMENT	

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: BELL LAKE SAND BORING 2-1315

LSG SAMPLE NO: H0254264

1	OVTCS	34770	NA		19-8240	17-OCT-93	1707 E M	34769	GCMSQ
3	OSVTCS	34587	19-3550	13-OCT-93 0800 RDQ	19-8270	15-OCT-93	640 A P	34587	GCMST
7	I685S	34819	19-3550		02-418.1	16-OCT-93	700 S S	0	302WAT

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: BELL LAKE SAND BORING 3-0911

LSG SAMPLE NO: H0254265

1	OVTCS	34770	NA		19-8240	17-OCT-93	1734 E M	34769	GCMSQ
3	OSVTCS	34587	19-3550	13-OCT-93 0800 RDQ	19-8270	15-OCT-93	721 A P	34587	GCMST
7	I685S	34819	19-3550		02-418.1	16-OCT-93	700 S S	0	302WAT

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: BELL LAKE SAND BORING 3-1416

LSG SAMPLE NO: H0254266

1	OVTCS	34770	NA		19-8240	17-OCT-93	1803 E M	34769	GCMSQ
3	OSVTCS	34587	19-3550	13-OCT-93 0800 RDQ	19-8270	15-OCT-93	803 A P	34587	GCMST
3	OSVTCS	34587	19-3550	13-OCT-93 0800 RDQ	19-8270	15-OCT-93	803 A P	34587	GCMST
7	I685S	34819	19-3550		02-418.1	16-OCT-93	700 S S	0	302WAT

LR Method Literature Reference

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QUALITY CONTROL REPORT SUPPLEMENTAL INFORMATION

----- SAMPLE PREPARATION -----						----- SAMPLE ANALYSIS -----			
TEST		LR-				LR-		ANLS	
LN	CODE	BATCH	METHOD	DATE/TIME	ANALYST	METHOD	DATE/TIME	ANALYST	BATCH INSTRUMENT

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

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QUALITY CONTROL REPORT SURROGATE STANDARD RECOVERY

TEST LN	SURROGATE CODE COMPOUND	PERCENT RECOVERY	ACCEPTANCE LIMITS	REF LN
SAMPLE ID: BELL LAKE BURN PIT BP-1-0406				
LSG SAMPLE NO: H0253353				
2	\$VOAS GC/MS Volatiles Surrogates			1
	1,2-Dichloroethane-d4	*	-	
	4-Bromofluorobenzene	*	-	
	Toluene-d8	*	-	
* The surrogates were not recovered due to the dilution required because of the high analyte concentration.				
4	\$BNAS GC/MS BNA Surrogates			3
	2,4,6-Tribromophenol	39	-	
	2-Fluorobiphenyl	76	-	
	2-Fluorophenol	61	-	
	Nitrobenzene-d5	78	-	
	Phenol-d5	71	-	
	p-Terphenyl-d14	82	-	
SAMPLE ID: BELL LAKE UST-1-0507				
LSG SAMPLE NO: H0254254				
6	\$VARS GC Volatile Aromatics Surrogate			5
	alpha,alpha,alpha-Trifluorotoluene	107	-	
SAMPLE ID: BELL LAKE UST-1-1012				
LSG SAMPLE NO: H0254255				
6	\$VARS GC Volatile Aromatics Surrogate			5
	alpha,alpha,alpha-Trifluorotoluene	109	-	
SAMPLE ID: BELL LAKE UST-1-4951				
LSG SAMPLE NO: H0254256				
6	\$VARS GC Volatile Aromatics Surrogate			5
	alpha,alpha,alpha-Trifluorotoluene	96	-	
SAMPLE ID: BELL LAKE LEACH FIELD LF-1-0406				
LSG SAMPLE NO: H0254257				
2	\$VOAS GC/MS Volatiles Surrogates			1
	1,2-Dichloroethane-d4	93	-	
	4-Bromofluorobenzene	88	-	
	Toluene-d8	101	-	
4	\$BNAS GC/MS BNA Surrogates			3
	2,4,6-Tribromophenol	100	-	
	2-Fluorobiphenyl	82	-	
	2-Fluorophenol	78	-	
	Nitrobenzene-d5	76	-	
	Phenol-d5	89	-	
	p-Terphenyl-d14	108	-	

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QUALITY CONTROL REPORT SURROGATE STANDARD RECOVERY

TEST LN	SURROGATE CODE COMPOUND	PERCENT RECOVERY	ACCEPTANCE LIMITS	REF LN
SAMPLE ID: BELL LAKE LEACH FIELD LF-1-1416		LSG SAMPLE NO: H0254258		
2	\$VOAS GC/MS Volatiles Surrogates			1
	1,2-Dichloroethane-d4	100	-	
	4-Bromofluorobenzene	93	-	
	Toluene-d8	93	-	
4	\$BNAS GC/MS BNA Surrogates			3
	2,4,6-Tribromophenol	86	-	
	2-Fluorobiphenyl	75	-	
	2-Fluorophenol	69	-	
	Nitrobenzene-d5	70	-	
	Phenol-d5	81	-	
	p-Terphenyl-d14	93	-	
SAMPLE ID: BELL LAKE LEACH FIELD LF-2-0911		LSG SAMPLE NO: H0254259		
2	\$VOAS GC/MS Volatiles Surrogates			1
	1,2-Dichloroethane-d4	98	-	
	4-Bromofluorobenzene	92	-	
	Toluene-d8	91	-	
4	\$BNAS GC/MS BNA Surrogates			3
	2,4,6-Tribromophenol	97	-	
	2-Fluorobiphenyl	82	-	
	2-Fluorophenol	79	-	
	Nitrobenzene-d5	79	-	
	Phenol-d5	92	-	
	p-Terphenyl-d14	105	-	
SAMPLE ID: BELL LAKE LEACH FIELD LF-2-1416		LSG SAMPLE NO: H0254260		
2	\$VOAS GC/MS Volatiles Surrogates			1
	1,2-Dichloroethane-d4	103	-	
	4-Bromofluorobenzene	95	-	
	Toluene-d8	95	-	
4	\$BNAS GC/MS BNA Surrogates			3
	2,4,6-Tribromophenol	89	-	
	2-Fluorobiphenyl	81	-	
	2-Fluorophenol	73	-	
	Nitrobenzene-d5	78	-	
	Phenol-d5	89	-	
	p-Terphenyl-d14	106	-	
SAMPLE ID: BELL LAKE SAND BORING 1-0002		LSG SAMPLE NO: H0254261		

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QUALITY CONTROL REPORT SURROGATE STANDARD RECOVERY

TEST LN	SURROGATE CODE COMPOUND	PERCENT RECOVERY	ACCEPTANCE LIMITS	REF LN
2	\$VOAS GC/MS Volatiles Surrogates			1
	1,2-Dichloroethane-d4	96	-	
	4-Bromofluorobenzene	95	-	
	Toluene-d8	151 *	-	
* The surrogate was out of range due to matrix interferences which was confirmed by re-analysis.				
4	\$BNAS GC/MS BNA Surrogates			3
	2,4,6-Tribromophenol	68	-	
	2-Fluorobiphenyl	68	-	
	2-Fluorophenol	73	-	
	Nitrobenzene-d5	72	-	
	Phenol-d5	73	-	
	p-Terphenyl-d14	69	-	
SAMPLE ID: BELL LAKE SAND BORING 1-1416				
LSG SAMPLE NO: H0254262				
2	\$VOAS GC/MS Volatiles Surrogates			1
	1,2-Dichloroethane-d4	97	-	
	4-Bromofluorobenzene	97	-	
	Toluene-d8	102	-	
4	\$BNAS GC/MS BNA Surrogates			3
	p-Terphenyl-d14	69	-	
	2,4,6-Tribromophenol	73	-	
	2-Fluorobiphenyl	61	-	
	2-Fluorophenol	72	-	
	Nitrobenzene-d5	72	-	
	Phenol-d5	74	-	
SAMPLE ID: BELL LAKE SAND BORING 2-0002				
LSG SAMPLE NO: H0254263				
2	\$VOAS GC/MS Volatiles Surrogates			1
	1,2-Dichloroethane-d4	101	-	
	4-Bromofluorobenzene	103	-	
	Toluene-d8	112	-	
4	\$BNAS GC/MS BNA Surrogates			3
	2,4,6-Tribromophenol	71	-	
	2-Fluorobiphenyl	65	-	
	2-Fluorophenol	75	-	
	Nitrobenzene-d5	75	-	
	Phenol-d5	76	-	
	p-Terphenyl-d14	70	-	

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QUALITY CONTROL REPORT SURROGATE STANDARD RECOVERY

TEST LN	SURROGATE CODE COMPOUND	PERCENT RECOVERY	ACCEPTANCE LIMITS	REF LN
SAMPLE ID: BELL LAKE SAND BORING 2-1315				
LSG SAMPLE NO: H0254264				
2	\$VOAS GC/MS Volatiles Surrogates			1
	1,2-Dichloroethane-d4	103	-	
	4-Bromofluorobenzene	110	-	
	Toluene-d8	114	-	
4	\$BNAS GC/MS BNA Surrogates			3
	2,4,6-Tribromophenol	68	-	
	2-Fluorobiphenyl	62	-	
	2-Fluorophenol	72	-	
	Nitrobenzene-d5	74	-	
	Phenol-d5	75	-	
	p-Terphenyl-d14	69	-	
SAMPLE ID: BELL/LAKE SAND BORING 3-0911				
LSG SAMPLE NO: H0254265				
2	\$VOAS GC/MS Volatiles Surrogates			1
	1,2-Dichloroethane-d4	105	-	
	4-Bromofluorobenzene	97	-	
	Toluene-d8	113	-	
4	\$BNAS GC/MS BNA Surrogates			3
	2,4,6-Tribromophenol	71	-	
	2-Fluorobiphenyl	64	-	
	2-Fluorophenol	74	-	
	Nitrobenzene-d5	74	-	
	Phenol-d5	76	-	
	p-Terphenyl-d14	69	-	
SAMPLE ID: BELL LAKE SAND BORING 3-1416				
LSG SAMPLE NO: H0254266				
2	\$VOAS GC/MS Volatiles Surrogates			1
	1,2-Dichloroethane-d4	110	-	
	4-Bromofluorobenzene	102	-	
	Toluene-d8	107	-	
4	\$BNAS GC/MS BNA Surrogates			3
	2,4,6-Tribromophenol	70	-	
	2-Fluorobiphenyl	63	-	
	2-Fluorophenol	74	-	
	Nitrobenzene-d5	73	-	
	Phenol-d5	75	-	
	p-Terphenyl-d14	69	-	

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QUALITY CONTROL REPORT LABORATORY CONTROL SAMPLE RECOVERY

TEST CODE DETERMINATION	PERCENT RECOVERY	ACCEPTANCE LIMITS
BATCH: 34467 SAMPLE ID: Lab Control Sample LSG SAMPLE NO: H0254954		
OVTCS TCL - Volatiles in Soil		
1,1-Dichloroethene	94	-
Benzene	100	-
Chlorobenzene	90	-
Toluene	95	-
Trichloroethene	88	-
BATCH: 34530 SAMPLE ID: Lab Control Sample LSG SAMPLE NO: H0255055		
1685S Petroleum Hydrocarbons	92.0	-
BATCH: 34587 SAMPLE ID: Lab Control Sample LSG SAMPLE NO: H0255142		
OSVTC TCL - Semi-volatile Extractables in Soil		
1,2,4-Trichlorobenzene	88	-
1,4-Dichlorobenzene	86	-
2,4-Dinitrotoluene	81	-
2-Chlorophenol	83	-
4-Chloro-3-methylphenol	94	-
4-Nitrophenol	98	-
Acenaphthene	83	-
N-Nitrosodi-n-propylamine	78	-
Pentachlorophenol	108	-
Phenol	82	-
Pyrene	87	-
BATCH: 34613 SAMPLE ID: Lab Control Sample LSG SAMPLE NO: H0255191		
ABAS Barium, Total (Ba)	89.5	-
ACDS Cadmium, Total (Cd)	88.9	-
ACRS Chromium, Total (Cr)	84.2	-
APBS Lead, Total (Pb)	87.0	-
BATCH: 34614 SAMPLE ID: Lab Control Sample LSG SAMPLE NO: H0255193		
AAGS Silver, Total (Ag)	90.0	-
AASS Arsenic, Total (As)	104.5	-
ASES Selenium, Total (Se)	89.6	-

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QUALITY CONTROL REPORT LABORATORY CONTROL SAMPLE RECOVERY

TEST CODE DETERMINATION	PERCENT RECOVERY	ACCEPTANCE LIMITS
BATCH: 34636 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0255229
AHGS Mercury, Total (Hg)	100.0	-
BATCH: 34737 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0255382
G107S BTEX Package		
Benzene	90	-
Ethylbenzene	92	-
Toluene	90	-
m-Xylene	89	-
o-Xylene	93	-
p-Xylene	90	-
BATCH: 34768 /SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0255422
OVTCS TCL - Volatiles in Soil		
1,1-Dichloroethene	70	-
Benzene	80	-
Chlorobenzene	101	-
Toluene	93	-
Trichloroethene	92	-
BATCH: 34770 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0255426
OVTCS TCL - Volatiles in Soil		
1,1-Dichloroethene	85	-
Benzene	89	-
Chlorobenzene	94	-
Toluene	96	-
Trichloroethylene	85	-
BATCH: 34804 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0255484
OVTCS TCL - Volatiles in Soil		
1,1-Dichloroethene	92	-
Benzene	94	-
Chlorobenzene	115	-
Toluene	115	-
Trichloroethene	105	-

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QUALITY CONTROL REPORT
LABORATORY CONTROL SAMPLE RECOVERY

TEST CODE DETERMINATION		PERCENT RECOVERY	ACCEPTANCE LIMITS
BATCH: 34818 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0255508	
G107S BTEX Package			
Benzene		111	-
Ethylbenzene		90	-
Toluene		100	-
m-Xylene		87 *	-
o-Xylene		88	-
p-Xylene		*	-
* The compounds m-Xylene and p-Xylene co-elute. The reported result is the sum of the two.			
BATCH: 34819 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0255510	
1685S Petroleum Hydrocarbons		104.6	-

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QUALITY CONTROL REPORT METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
BATCH: 34461 SAMPLE ID: Method Blank		LSG SAMPLE NO: H0254945	
OSVTCS	TCL - Semi-volatile Extractables in Soil		
	1,2,4-Trichlorobenzene	< 330	ug/kg
	1,2-Dichlorobenzene	< 330	ug/kg
	1,3-Dichlorobenzene	< 330	ug/kg
	1,4-Dichlorobenzene	< 330	ug/kg
	2,4,5-Trichlorophenol	< 660	ug/kg
	2,4,6-Trichlorophenol	< 330	ug/kg
	2,4-Dichlorophenol	< 330	ug/kg
	2,4-Dimethylphenol	< 330	ug/kg
	2,4-Dinitrophenol	< 1,600	ug/kg
	2,4-Dinitrotoluene	< 330	ug/kg
	2,6-Dinitrotoluene	< 330	ug/kg
	2-Chloronaphthalene	< 330	ug/kg
	2-Chlorophenol	< 330	ug/kg
	2-Methylnaphthalene	< 330	ug/kg
	2-Methylphenol	< 330	ug/kg
	2-Nitroaniline	< 1,600	ug/kg
	2-Nitrophenol	< 330	ug/kg
	3,3'-Dichlorobenzidine	< 660	ug/kg
	3-Nitroaniline	< 1,600	ug/kg
	4,6-Dinitro-o-cresol	< 1,600	ug/kg
	4-Bromophenylphenylether	< 330	ug/kg
	4-Chloro-3-methylphenol	< 330	ug/kg
	4-Chloroaniline	< 330	ug/kg
	4-Chlorophenylphenylether	< 330	ug/kg
	4-Methylphenol	< 330	ug/kg
	4-Nitroaniline	< 1,600	ug/kg
	4-Nitrophenol	< 1,600	ug/kg
	Acenaphthene	< 330	ug/kg
	Acenaphthylene	< 330	ug/kg
	Anthracene	< 330	ug/kg
	Benzo(a)anthracene	< 330	ug/kg
	Benzo(a)pyrene	< 330	ug/kg
	Benzo(b)fluoranthene	< 330	ug/kg
	Benzo(g,h,i)perylene	< 330	ug/kg
	Benzo(k)fluoranthene	< 330	ug/kg
	Benzoic acid	< 1,600	ug/kg
	Benzyl alcohol	< 330	ug/kg
	Butylbenzylphthalate	< 330	ug/kg
	Chrysene	< 330	ug/kg

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QUALITY CONTROL REPORT METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
	Di-n-butylphthalate	< 330	ug/kg
	Di-n-octylphthalate	< 330	ug/kg
	Dibenzo(a,h)anthracene	< 330	ug/kg
	Dibenzofuran	< 330	ug/kg
	Diethylphthalate	< 330	ug/kg
	Dimethylphthalate	< 330	ug/kg
	Fluoranthene	< 330	ug/kg
	Fluorene	< 330	ug/kg
	Hexachlorobenzene	< 330	ug/kg
	Hexachlorobutadiene	< 330	ug/kg
	Hexachlorocyclopentadiene	< 330	ug/kg
	Hexachloroethane	< 330	ug/kg
	Indeno(1,2,3-cd)pyrene	< 330	ug/kg
	Isophorone	< 330	ug/kg
	N-Nitrosodi-n-propylamine	< 330	ug/kg
	N-Nitrosodiphenylamine	< 330	ug/kg
	Naphthalene	< 330	ug/kg
	Nitrobenzene	< 330	ug/kg
	Pentachlorophenol	< 1,600	ug/kg
	Phenanthrene	< 330	ug/kg
	Phenol	< 330	ug/kg
	Pyrene	< 330	ug/kg
	bis(2-Chloroethoxy)methane	< 330	ug/kg
	bis(2-Chloroethyl)ether	< 330	ug/kg
	bis(2-Chloroisopropyl)ether	< 330	ug/kg
	bis(2-Ethylhexyl)phthalate	< 330	ug/kg

BATCH: 34467 SAMPLE ID: Method Blank

LSG SAMPLE NO: H0254955

OVTCS	TCL - Volatiles in Soil		
	1,1,1-Trichloroethane	< 5	ug/kg
	1,1,2,2,-Tetrachloroethane	< 5	ug/kg
	1,1,2-Trichloroethane	< 5	ug/kg
	1,1-Dichloroethane	< 5	ug/kg
	1,1-Dichloroethene	< 5	ug/kg
	1,2-Dichloroethane	< 5	ug/kg
	1,2-Dichloroethene (total)	< 5	ug/kg
	1,2-Dichloropropane	< 5	ug/kg
	2-Butanone	< 10	ug/kg
	2-Hexanone	< 10	ug/kg
	4-Methyl-2-pentanone	< 10	ug/kg
	Acetone	< 10	ug/kg
	Benzene	< 5	ug/kg
	Bromodichloromethane	< 5	ug/kg

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TEST CODE	Determination	RESULT	UNITS
	Bromoform	< 5	ug/kg
	Bromomethane	< 10	ug/kg
	Carbon disulfide	< 5	ug/kg
	Carbon tetrachloride	< 5	ug/kg
	Chlorobenzene	< 5	ug/kg
	Chloroethane	< 10	ug/kg
	Chloroform	< 5	ug/kg
	Chloromethane	< 10	ug/kg
	Dibromochloromethane	< 5	ug/kg
	Ethylbenzene	< 5	ug/kg
	Methylene chloride	< 5	ug/kg
	Styrene	< 5	ug/kg
	Tetrachloroethene	< 5	ug/kg
	Toluene	< 5	ug/kg
	Trichloroethene	< 5	ug/kg
	Vinyl acetate	< 10	ug/kg
	Vinyl chloride	< 10	ug/kg
	Xylene(total)	< 5	ug/kg
	cis-1,3-Dichloropropene	< 5	ug/kg
	trans-1,3-Dichloropropene	< 5	ug/kg
BATCH: 34530	SAMPLE ID: Method Blank	LSG SAMPLE NO: H0255056	
	1685S Petroleum Hydrocarbons	< 20	mg/kg
BATCH: 34587	SAMPLE ID: Method Blank	LSG SAMPLE NO: H0255143	
OSVTCS	TCL - Semi-volatile Extractables in Soil		
	1,2,4-Trichlorobenzene	< 330	ug/kg
	1,2-Dichlorobenzene	< 330	ug/kg
	1,3-Dichlorobenzene	< 330	ug/kg
	1,4-Dichlorobenzene	< 330	ug/kg
	2,4,5-Trichlorophenol	< 660	ug/kg
	2,4,6-Trichlorophenol	< 330	ug/kg
	2,4-Dichlorophenol	< 330	ug/kg
	2,4-Dimethylphenol	< 330	ug/kg
	2,4-Dinitrophenol	< 1,600	ug/kg
	2,4-Dinitrotoluene	< 330	ug/kg
	2,6-Dinitrotoluene	< 330	ug/kg
	2-Chloronaphthalene	< 330	ug/kg
	2-Chlorophenol	< 330	ug/kg
	2-Methylnaphthalene	< 330	ug/kg
	2-Methylphenol	< 330	ug/kg
	2-Nitroaniline	< 1,600	ug/kg

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QUALITY CONTROL REPORT METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
	2-Nitrophenol	< 330	ug/kg
	3,3'-Dichlorobenzidine	< 660	ug/kg
	3-Nitroaniline	< 1,600	ug/kg
	4,6-Dinitro-o-cresol	< 1,600	ug/kg
	4-Bromophenylphenylether	< 330	ug/kg
	4-Chloro-3-methylphenol	< 330	ug/kg
	4-Chloroaniline	< 330	ug/kg
	4-Chlorophenylphenylether	< 330	ug/kg
	4-Methylphenol	< 330	ug/kg
	4-Nitroaniline	< 1,600	ug/kg
	4-Nitrophenol	< 1,600	ug/kg
	Acenaphthene	< 330	ug/kg
	Acenaphthylene	< 330	ug/kg
	Anthracene	< 330	ug/kg
	Benzo(a)anthracene	< 330	ug/kg
	Benzo(a)pyrene	< 330	ug/kg
	Benzo(b)fluoranthene	< 330	ug/kg
	Benzo(g,h,i)perylene	< 330	ug/kg
	Benzo(k)fluoranthene	< 330	ug/kg
	Benzoic acid	< 1,600	ug/kg
	Benzyl alcohol	< 330	ug/kg
	Butylbenzylphthalate	< 330	ug/kg
	Chrysene	< 330	ug/kg
	Di-n-butylphthalate	< 330	ug/kg
	Di-n-octylphthalate	< 330	ug/kg
	Dibenzo(a,h)anthracene	< 330	ug/kg
	Dibenzofuran	< 330	ug/kg
	Diethylphthalate	< 330	ug/kg
	Dimethylphthalate	< 330	ug/kg
	Fluoranthene	< 330	ug/kg
	Fluorene	< 330	ug/kg
	Hexachlorobenzene	< 330	ug/kg
	Hexachlorobutadiene	< 330	ug/kg
	Hexachlorocyclopentadiene	< 330	ug/kg
	Hexachloroethane	< 330	ug/kg
	Indeno(1,2,3-cd)pyrene	< 330	ug/kg
	Isophorone	< 330	ug/kg
	N-Nitrosodi-n-propylamine	< 330	ug/kg
	N-Nitrosodiphenylamine	< 330	ug/kg
	Naphthalene	< 330	ug/kg
	Nitrobenzene	< 330	ug/kg
	Pentachlorophenol	< 1,600	ug/kg
	Phenanthrene	< 330	ug/kg
	Phenol	< 330	ug/kg

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QUALITY CONTROL REPORT
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TEST CODE	Determination	RESULT	UNITS
	Pyrene	< 330	ug/kg
	bis(2-Chloroethoxy)methane	< 330	ug/kg
	bis(2-Chloroethyl)ether	< 330	ug/kg
	bis(2-Chloroisopropyl)ether	< 330	ug/kg
	bis(2-Ethylhexyl)phthalate	< 330	ug/kg
BATCH: 34613 SAMPLE ID: Method Blank		LSG SAMPLE NO: H0255192	
ABAS	Barium, Total (Ba)	< 10	mg/kg
ACDS	Cadmium, Total (Cd)	< 0.5	mg/kg
ACRS	Chromium, Total (Cr)	< 1	mg/kg
APBS	Lead, Total (Pb)	< 5	mg/kg
BATCH: 34614 SAMPLE ID: Method Blank		LSG SAMPLE NO: H0255194	
AAGS	Silver, Total (Ag)	< 1	mg/kg
AASS	Arsenic, Total (As)	< 0.3	mg/kg
ASES	Selenium, Total (Se)	< 0.3	mg/kg
BATCH: 34636 SAMPLE ID: Method Blank		LSG SAMPLE NO: H0255230	
AHGS	Mercury, Total (Hg)	< 0.1	mg/kg
BATCH: 34737 SAMPLE ID: Method Blank		LSG SAMPLE NO: H0255383	
G107S	BTEX Package		
	Benzene	< 0.002	mg/kg
	Ethylbenzene	< 0.002	mg/kg
	Toluene	< 0.002	mg/kg
	m-Xylene	< 0.002	mg/kg
	o-Xylene	< 0.002	mg/kg
	p-Xylene	< 0.002	mg/kg
BATCH: 34768 SAMPLE ID: Method Blank		LSG SAMPLE NO: H0255423	
OVTCS	TCL - Volatiles in Soil		
	1,1,1,2-Tetrachloroethane	< 10	ug/kg
	1,1,1-Trichloroethane	< 5	ug/kg
	1,1,2,2-Tetrachloroethane	< 5	ug/kg
	1,1,2-Trichloroethane	< 5	ug/kg
	1,1-Dichloroethane	< 5	ug/kg
	1,1-Dichloroethene	< 5	ug/kg
	1,2-Dichloroethane	< 5	ug/kg
	1,2-Dichloroethene (total)	< 5	ug/kg

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QUALITY CONTROL REPORT METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
	1,2-Dichloropropane	< 5	ug/kg
	1,4-Dioxane	< 500	ug/kg
	2-Butanone	< 10	ug/kg
	2-Hexanone	< 10	ug/kg
	4-Methyl-2-pentanone	< 10	ug/kg
	Acetone	< 10	ug/kg
	Benzene	< 5	ug/kg
	Bromodichloromethane	< 5	ug/kg
	Bromoform	< 5	ug/kg
	Bromomethane	< 10	ug/kg
	Carbon disulfide	< 5	ug/kg
	Carbon tetrachloride	< 5	ug/kg
	Chlorobenzene	< 5	ug/kg
	Chlorodibromomethane	< 5	ug/kg
	Chloroethane	< 10	ug/kg
	Chloroform	< 5	ug/kg
	Chloromethane	< 10	ug/kg
	Dibromochloromethane	< 5	ug/kg
	Dichlorodifluoromethane	< 20	ug/kg
	Dichloromethane	< 5	ug/kg
	Ethylbenzene	< 5	ug/kg
	Methyl ethyl ketone	< 10	ug/kg
	Methylene chloride	< 5	ug/kg
	Styrene	< 5	ug/kg
	Tetrachloroethene	< 5	ug/kg
	Toluene	< 5	ug/kg
	Tribromomethane	< 5	ug/kg
	Trichloroethene	< 5	ug/kg
	Trichlorofluoromethane	< 5	ug/kg
	Vinyl acetate	< 10	ug/kg
	Vinyl chloride	< 10	ug/kg
	Xylene (total)	< 5	ug/kg
	Xylene(total)	< 5	ug/kg
	cis-1,3-Dichloropropene	< 5	ug/kg
	trans-1,3-Dichloropropene	< 5	ug/kg

BATCH: 34770 SAMPLE ID: Method Blank

LSG SAMPLE NO: H0255427

OVTCS	TCL - Volatiles in Soil		
	1,1,1,2-Tetrachloroethane	< 10	ug/kg
	1,1,1-Trichloroethane	< 5	ug/kg
	1,1,2,2-Tetrachloroethane	< 5	ug/kg
	1,1,2-Trichloroethane	< 5	ug/kg
	1,1-Dichloroethane	< 5	ug/kg

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QUALITY CONTROL REPORT METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
	1,1-Dichloroethene	< 5	ug/kg
	1,2-Dichloroethane	< 5	ug/kg
	1,2-Dichloroethene (total)	< 5	ug/kg
	1,2-Dichloropropane	< 5	ug/kg
	1,4-Dioxane	< 500	ug/kg
	2-Butanone	< 10	ug/kg
	2-Hexanone	< 10	ug/kg
	4-Methyl-2-pentanone	< 10	ug/kg
	Acetone	< 10	ug/kg
	Benzene	< 5	ug/kg
	Bromodichloromethane	< 5	ug/kg
	Bromoform	< 5	ug/kg
	Bromomethane	< 10	ug/kg
	Carbon disulfide	< 5	ug/kg
	Carbon tetrachloride	< 5	ug/kg
	Chlorobenzene	< 5	ug/kg
	Chlorodibromomethane	< 5	ug/kg
	Chloroethane	< 10	ug/kg
	Chloroform	< 5	ug/kg
	Chloromethane	< 10	ug/kg
	Dibromochloromethane	< 5	ug/kg
	Dichlorodifluoromethane	< 20	ug/kg
	Dichloromethane	< 5	ug/kg
	Ethylbenzene	< 5	ug/kg
	Methyl ethyl ketone	< 10	ug/kg
	Methylene chloride	< 5	ug/kg
	Styrene	< 5	ug/kg
	Tetrachloroethene	< 5	ug/kg
	Toluene	< 5	ug/kg
	Tribromomethane	< 5	ug/kg
	Trichloroethene	< 5	ug/kg
	Trichlorofluoromethane	< 5	ug/kg
	Vinyl acetate	< 10	ug/kg
	Vinyl chloride	< 10	ug/kg
	Xylene (total)	< 5	ug/kg
	cis-1,3-Dichloropropene	< 5	ug/kg
	trans-1,3-Dichloropropene	< 5	ug/kg
BATCH: 34804 SAMPLE ID: Method Blank			
		LSG SAMPLE NO: H0255485	
OVTCS	TCL - Volatiles in Soil		
	1,1,1,2-Tetrachloroethane	< 10	ug/kg
	1,1,1-Trichloroethane	< 5	ug/kg
	1,1,2,2,-Tetrachloroethane	< 5	ug/kg

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QUALITY CONTROL REPORT METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
	1,1,2-Trichloroethane	< 5	ug/kg
	1,1-Dichloroethane	< 5	ug/kg
	1,1-Dichloroethene	< 5	ug/kg
	1,2-Dichloroethane	< 5	ug/kg
	1,2-Dichloroethene (total)	< 5	ug/kg
	1,2-Dichloropropane	< 5	ug/kg
	1,4-Dioxane	< 500	ug/kg
	2-Butanone	< 10	ug/kg
	2-Chloroethylvinylether	< 10	ug/kg
	2-Hexanone	< 10	ug/kg
	4-Methyl-2-pentanone	< 10	ug/kg
	Acetone	< 10	ug/kg
	Benzene	< 5	ug/kg
	Bromodichloromethane	< 5	ug/kg
	Bromoform	< 5	ug/kg
	Bromomethane	< 10	ug/kg
	Carbon disulfide	< 5	ug/kg
	Carbon tetrachloride	< 5	ug/kg
	Chlorobenzene	< 5	ug/kg
	Chlorodibromomethane	< 5	ug/kg
	Chloroethane	< 10	ug/kg
	Chloroform	< 5	ug/kg
	Chloromethane	< 10	ug/kg
	Dibromochloromethane	< 5	ug/kg
	Dichlorodifluoromethane	< 20	ug/kg
	Dichloromethane	< 5	ug/kg
	Ethylbenzene	< 5	ug/kg
	Methyl ethyl ketone	< 10	ug/kg
	Methylene chloride	< 5	ug/kg
	Styrene	< 5	ug/kg
	Tetrachloroethene	< 5	ug/kg
	Toluene	< 5	ug/kg
	Tribromomethane	< 5	ug/kg
	Trichloroethene	< 5	ug/kg
	Trichlorofluoromethane	< 5	ug/kg
	Vinyl acetate	< 10	ug/kg
	Vinyl chloride	< 10	ug/kg
	Xylene (total)	< 5	ug/kg
	cis-1,3-Dichloropropene	< 5	ug/kg
	trans-1,3-Dichloropropene	< 5	ug/kg

BATCH: 34818 SAMPLE ID: Method Blank

LSG SAMPLE NO: H0255509

G107S BTEX Package

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QUALITY CONTROL REPORT
METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
	Benzene	< 2	ug/kg
	Ethylbenzene	< 2	ug/kg
	Toluene	< 2	ug/kg
	m-Xylene	< 2	ug/kg
	o-Xylene	< 2	ug/kg
	p-Xylene	< 2	ug/kg
BATCH: 34819	SAMPLE ID: Method Blank	LSG SAMPLE NO: H0255511	
1685S	Petroleum Hydrocarbons	< 20	mg/kg

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QUALITY CONTROL REPORT DUPLICATE AND MATRIX SPIKE DATA

PREP BATCH: 34819

LSG SAMPLE NO: H0254255

TEST	DETERMINATION	ORIGINAL RESULT	DUPLICATE RESULT	UNITS	RANGE / RPD	UNITS	MS RESULT	MS % RCVRY
1685S	Petroleum Hydrocarbons	150	190	mg/kg	23.5	mg/kg	550	110.0

PREP BATCH: 34613

LSG SAMPLE NO: H0254257

TEST	DETERMINATION	ORIGINAL RESULT	DUPLICATE RESULT	UNITS	RANGE / RPD	UNITS	MS RESULT	MS % RCVRY
ABAS	Barium, Total (Ba)	400	410	mg/kg	2.5	mg/kg	470 *	35.0
* Recovery of the spike indicates the presence of a matrix interference. This should be considered in evaluating the data.								
ACDS	Cadmium, Total (Cd)	< 0.5	0.8	mg/kg	---	mg/kg	4.5	90.0
ACRS	Chromium, Total (Cr)	3	3	mg/kg	0.0	mg/kg	23	100.0
APBS	Lead, Total (Pb)	7	8	mg/kg	1	mg/kg	51	88.0

PREP BATCH: 34614

LSG SAMPLE NO: H0254257

TEST	DETERMINATION	ORIGINAL RESULT	DUPLICATE RESULT	UNITS	RANGE / RPD	UNITS	MS RESULT	MS % RCVRY
AASS	Arsenic, Total (As)	3.5	3.6	mg/kg	2.9	mg/kg	5.2	85.0
ASES	Selenium, Total (Se)	< 0.3	< 0.3	mg/kg	---	mg/kg	0.9 *	45.0
* Recovery of the spike indicates the presence of a matrix interference. This should be considered in evaluating the data.								
AAGS	Silver, Total (Ag)	< 1	< 1	mg/kg	---	mg/kg	19	95.0

PREP BATCH: 34636

LSG SAMPLE NO: H0254257

TEST	DETERMINATION	ORIGINAL RESULT	DUPLICATE RESULT	UNITS	RANGE / RPD	UNITS	MS RESULT	MS % RCVRY
AHGS	Mercury, Total (Hg)	< 0.1	< 0.1	mg/kg	---	mg/kg	0.9	90.0

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QUALITY CONTROL REPORT DUPLICATE AND MATRIX SPIKE DATA

PREP BATCH: 34819

LSG SAMPLE NO: H0254261

TEST	DETERMINATION	ORIGINAL RESULT	DUPLICATE RESULT	UNITS	RANGE / RPD	UNITS	MS RESULT	MS % RCVRY
I685S	Petroleum Hydrocarbons	11,000	10,000	mg/kg	9.57	mg/kg	13,000	*

* The concentration of the analyte prevented accurate determination of the matrix spike recovery.

PREP BATCH: 34530

LSG SAMPLE NO: H0253141

TEST	DETERMINATION	ORIGINAL RESULT	DUPLICATE RESULT	UNITS	RANGE / RPD	UNITS	MS RESULT	MS % RCVRY
I685S	Petroleum Hydrocarbons	< 20	< 20	mg/kg	---	mg/kg	300	91.8

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QUALITY CONTROL REPORT MATRIX SPIKE AND MATRIX SPIKE DUPLICATE DATA

PREP BATCH: 34587

LSG SAMPLE NO: H0254266

TEST	DETERMINATION	MS RESULT	MSD RESULT	UNITS	RPD	MS PCT RECOVERY	MSD PCT RECOVERY
OSVTCS	1,2,4-Trichlorobenzene	2360	2430	ug/kg	2.88	72	73
OSVTCS	1,4-Dichlorobenzene	2360	2440	ug/kg	3.54	71	74
OSVTCS	2,4-Dinitrotoluene	2650	2750	ug/kg	3.85	80	83
OSVTCS	2-Chlorophenol	4750	4920	ug/kg	3.47	72	75
OSVTCS	4-Chloro-3-methylphenol	5130	5210	ug/kg	1.66	78	79
OSVTCS	4-Nitrophenol	6150	6400	ug/kg	3.92	93	97
OSVTCS	Acenaphthene	2240	2300	ug/kg	2.78	68	70
OSVTCS	N-Nitrosodi-n-propylamine	2140	2180	ug/kg	1.90	65	66
OSVTCS	Pentachlorophenol	5380	5460	ug/kg	1.49	82	83
OSVTCS	Phenol	4400	4600	ug/kg	4.31	67	69
OSVTCS	Pyrene	2090	2270	ug/kg	8.26	63	69

ANLS BATCH: 33597

LSG SAMPLE NO: H0248940

TEST	DETERMINATION	MS RESULT	MSD RESULT	UNITS	RPD	MS PCT RECOVERY	MSD PCT RECOVERY
OSVTCS	1,2,4-Trichlorobenzene	3190	3200	ug/kg	0.219	97	97
OSVTCS	1,4-Dichlorobenzene	2980	3050	ug/kg	2.33	90	92
OSVTCS	2,4-Dinitrotoluene	2840	2820	ug/kg	0.778	86	85
OSVTCS	2-Chlorophenol	4800	4850	ug/kg	1.14	73	73
OSVTCS	4-Chloro-3-methylphenol	5380	5390	ug/kg	0.092	82	82
OSVTCS	4-Nitrophenol	6060	5880	ug/kg	3.06	92	89
OSVTCS	Acenaphthene	2830	2870	ug/kg	1.68	86	87
OSVTCS	N-Nitrosodi-n-propylamine	2600	2640	ug/kg	1.64	79	80
OSVTCS	Pentachlorophenol	10300	10000	ug/kg	2.73	156	152
OSVTCS	Phenol	4590	4590	ug/kg	0.174	70	69
OSVTCS	Pyrene	3870	3820	ug/kg	1.25	117	116

ANLS BATCH: 33866

LSG SAMPLE NO: H0250049

TEST	DETERMINATION	MS RESULT	MSD RESULT	UNITS	RPD	MS PCT RECOVERY	MSD PCT RECOVERY
OVTCS	1,1-Dichloroethene	52.3	50.3	mg/kg	3.80	105	101
OVTCS	Benzene	57.0	54.7	mg/kg	4.18	114	109
OVTCS	Chlorobenzene	52.5	51.8	mg/kg	1.24	105	104
OVTCS	Toluene	58.1	56.3	mg/kg	3.20	116	113

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QUALITY CONTROL REPORT MATRIX SPIKE AND MATRIX SPIKE DUPLICATE DATA

ANLS BATCH: 33866

LSG SAMPLE NO: H0250049

TEST	DETERMINATION	MS RESULT	MSD RESULT	UNITS	RPD	MS PCT RECOVERY	MSD PCT RECOVERY
OSVTCS	Trichloroethene	50.4	50.8	mg/kg	0.627	101	102

ANLS BATCH: 34503

LSG SAMPLE NO: H0253972

TEST	DETERMINATION	MS RESULT	MSD RESULT	UNITS	RPD	MS PCT RECOVERY	MSD PCT RECOVERY
OSVTCS	1,2,4-Trichlorobenzene	2780	2380	ug/kg	3.75	84	81
OSVTCS	1,4-Dichlorobenzene	2850	2780	ug/kg	2.70	86	84
OSVTCS	2-Chlorophenol	5360	5430	ug/kg	1.26	81	82
OSVTCS	4-Nitrophenol	5720	6070	ug/kg	5.93	87	92
OSVTCS	Acenaphthene	2790	2820	ug/kg	1.00	84	85
OSVTCS	N-Nitrosodi-n-propylamine	2470	2500	ug/kg	1.23	75	76
OSVTCS	Pentachlorophenol	7170	6950	ug/kg	4.57	109	104
OSVTCS	Phenol	4660	4720	ug/kg	1.41	71	72
OSVTCS	Pyrene	2920	2810	ug/kg	3.87	88	85
OSVTCS	p-Chloro-m-cresol	6030	5930	ug/kg	1.71	91	90

ANLS BATCH: 34517

LSG SAMPLE NO: H0253063

TEST	DETERMINATION	MS RESULT	MSD RESULT	UNITS	RPD	MS PCT RECOVERY	MSD PCT RECOVERY
G107S	Benzene	4.90	5.35	ug/kg	10.7	25 *	27 *
G107S	Ethylbenzene	2.17	2.42	ug/kg	10.9	11 *	12 *
G107S	Toluene	3.50	4.06	ug/kg	14.8	18 *	20 *
G107S	m-Xylene	1.19	1.42	ug/kg	17.6	6 *	7 *
G107S	o-Xylene	2.37	2.50	ug/kg	5.33	12 *	13 *
G107S	p-Xylene	2.06	2.59	ug/kg	22.8	10 *	13 *

* Recovery of the spike indicates the presence of a matrix interference.
This should be considered in evaluating the data.

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QUALITY CONTROL REPORT SUPPLEMENTAL INFORMATION

TEST				SAMPLE PREPARATION			SAMPLE ANALYSIS			
LN	CODE	BATCH	LR-METHOD	DATE/TIME	ANALYST	LR-METHOD	DATE/TIME	ANALYST	BATCH	INSTRUMENT

SAMPLE ID: SAND BP-1 40-42

LSG SAMPLE NO: H0254735

1	I685S	34784	19-3550			02-418.1	16-OCT-93	700	S S	0	302WAT
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LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: SAND DP-1 9-11

LSG SAMPLE NO: H0254736

1	I685S	34819	19-3550			02-418.1	16-OCT-93	700	S S	0	302WAT
6	G107S	34868	NA			19-8020	20-OCT-93	949	R K	34868	7287GC

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: SAND PP-1 95-97

LSG SAMPLE NO: H0254737

1	I685S	34819	19-3550			02-418.1	16-OCT-93	700	S S	0	302WAT
6	G107S	34868	NA			19-8020	20-OCT-93	1036	R K	34868	7287GC

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: SAND BP-2 29-31

LSG SAMPLE NO: H0254738

1	I685S	34819	19-3550			02-418.1	16-OCT-93	700	S S	0	302WAT
6	G107S	34868	NA			19-8020	20-OCT-93	903	R K	34868	7287GC

LR Method Literature Reference

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QUALITY CONTROL REPORT MATRIX SPIKE AND MATRIX SPIKE DUPLICATE DATA

ANLS BATCH: 34735

LSG SAMPLE NO: H0254076

TEST	DETERMINATION	MS RESULT	MSD RESULT	UNITS	RPD	MS PCT RECOVERY	MSD PCT RECOVERY
G107S	Benzene	13.1	12.9	ug/kg	1.54	66	65
G107S	Ethylbenzene	8.74	8.98	ug/kg	2.71	44 *	45 *
G107S	Toluene	12.1	12.1	ug/kg	0.000	61 *	61 *
G107S	m-Xylene	16.4 **	17.1 **	ug/kg	4.18	41 *	43 *
G107S	o-Xylene	8.43	8.84	ug/kg	4.75	42 *	43 *
G107S	p-Xylene	**	**	ug/kg	4.18	41 *	43 *

* Recovery of the spike indicates the presence of a matrix interference.
This should be considered in evaluating the data.

** The compounds m-Xylene and p-Xylene co-elute. The reported result is the sum of the two.

ANLS BATCH: 34768

LSG SAMPLE NO: H0253974

TEST	DETERMINATION	MS RESULT	MSD RESULT	UNITS	RPD	MS PCT RECOVERY	MSD PCT RECOVERY
OVTCS	1,1-Dichloroethene	50.9	49.0	ug/kg	3.85	102	98
OVTCS	Benzene	57.8	54.3	ug/kg	6.27	116	109
OVTCS	Chlorobenzene	49.7	47.2	ug/kg	5.30	99	94
OVTCS	Toluene	50.8	51.4	ug/kg	1.06	102	103
OVTCS	Trichloroethene	50.1	45.8	ug/kg	9.00	100	92

ANLS BATCH: 34769

LSG SAMPLE NO: H0254393

TEST	DETERMINATION	MS RESULT	MSD RESULT	UNITS	RPD	MS PCT RECOVERY	MSD PCT RECOVERY
OVTCS	1,1-Dichloroethene	52.8	52.2	ug/kg	1.16	106	104
OVTCS	Benzene	54.4	54.2	ug/kg	0.208	109	108
OVTCS	Chlorobenzene	54.3	53.4	ug/kg	1.61	109	107
OVTCS	Toluene	55.6	53.3	ug/kg	4.33	111	107
OVTCS	Trichloroethene	51.9	50.3	ug/kg	3.28	106	101

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QUALITY CONTROL REPORT SUPPLEMENTAL INFORMATION

SAMPLE PREPARATION						SAMPLE ANALYSIS			
TEST	LR-					LR-	ANLS		
LN CODE BATCH	METHOD	DATE/TIME	ANALYST	METHOD	DATE/TIME	ANALYST	BATCH	INSTRUMENT	

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: SAND BP-2 34-36

LSG SAMPLE NO: H0254739

1	1685S	34819	19-3550	02-418.1	16-OCT-93	700	S S	0	302WAT
6	G107S	34868	NA	19-8020	20-OCT-93	556	R K	34868	7287GC

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: SAND MW-1 89-91

LSG SAMPLE NO: H0254740

1	1685S	34783	19-3550	02-418.1	16-OCT-93	700	S S	0	302WAT
4	OSVTCS	34745	19-3550	18-OCT-93	0800	MLN			
6	G107S	34868	NA	19-8270	24-OCT-93	2007	A P	34587	GCMST
				19-8020	20-OCT-93	643	R K	34868	7287GC

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

SAMPLE ID: SAND MW-1 94-96

LSG SAMPLE NO: H0254741

1	1685S	34783	19-3550	02-418.1	16-OCT-93	700	S S	0	302WAT
6	G107S	34868	NA	19-8020	20-OCT-93	729	R K	34868	7287GC

LR Method Literature Reference

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QUALITY CONTROL REPORT
SUPPLEMENTAL INFORMATION

----- SAMPLE PREPARATION -----					----- SAMPLE ANALYSIS -----			
TEST	LR-				LR-	ANLS		
LN	CODE	BATCH	METHOD	DATE/TIME	ANALYST	METHOD	DATE/TIME	ANALYST BATCH INSTRUMENT

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

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QUALITY CONTROL REPORT SURROGATE STANDARD RECOVERY

TEST LN	SURROGATE CODE COMPOUND	PERCENT RECOVERY	ACCEPTANCE LIMITS	REF LN
SAMPLE ID: SAND DP-1 9-11				
LSG SAMPLE NO: H0254736				
7	\$VARS GC Volatile Aromatics Surrogate alpha,alpha,alpha-Trifluorotoluene	223 *	-	6
* The surrogate was out of range due to matrix interferences.				
SAMPLE ID: SAND PP-1 95-97				
LSG SAMPLE NO: H0254737				
7	\$VARS GC Volatile Aromatics Surrogate alpha,alpha,alpha-Trifluorotoluene	137 *	-	6
* The surrogate was out of range due to matrix interferences.				
SAMPLE ID: SAND BP-2 29-31				
LSG SAMPLE NO: H0254738				
7	\$VARS GC Volatile Aromatics Surrogate alpha,alpha,alpha-Trifluorotoluene	110	-	6
SAMPLE ID: SAND BP-2 34-36				
LSG SAMPLE NO: H0254739				
7	\$VARS GC Volatile Aromatics Surrogate alpha,alpha,alpha-Trifluorotoluene	100	-	6
SAMPLE ID: SAND MW-1 89-91				
LSG SAMPLE NO: H0254740				
5	\$BNAS GC/MS BNA Surrogates 2,4,6-Tribromophenol	86	-	4
	2-Fluorobiphenyl	84	-	
	2-Fluorophenol	88	-	
	Nitrobenzene-d5	80	-	
	Phenol-d5	87	-	
	p-Terphenyl-d14	98	-	
7	\$VARS GC Volatile Aromatics Surrogate alpha,alpha,alpha-Trifluorotoluene	98	-	6
SAMPLE ID: SAND MW-1 94-96				
LSG SAMPLE NO: H0254741				
7	\$VARS GC Volatile Aromatics Surrogate alpha,alpha,alpha-Trifluorotoluene	100	-	6

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QUALITY CONTROL REPORT LABORATORY CONTROL SAMPLE RECOVERY

TEST CODE DETERMINATION	PERCENT RECOVERY	ACCEPTANCE LIMITS
BATCH: 34783 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0255448
1685S Petroleum Hydrocarbons	101.4	-
BATCH: 34784 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0255450
1685S Petroleum Hydrocarbons	94.9	-
BATCH: 34819 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0255510
1685S Petroleum Hydrocarbons	104.6	-
BATCH: 34868 SAMPLE ID: Lab Control Sample		LSG SAMPLE NO: H0256594
G107S BTEX Package		
Benzene	101	-
Ethylbenzene	96	-
Toluene	106	-
m-Xylene	99 *	-
o-Xylene	100	-
p-Xylene	*	-

* The compounds m-Xylene and p-Xylene co-elute. The reported result is the sum of the two.

REPORT OF LABORATORY ANALYSIS

October 27, 1993
Report No.: 00028195
Section E Page 2

QUALITY CONTROL REPORT METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
	2,4-Dichlorophenol	< 330	ug/kg
	2,4-Dimethylphenol	< 330	ug/kg
	2,4-Dinitrophenol	< 1,600	ug/kg
	2,4-Dinitrotoluene	< 330	ug/kg
	2,6-Dinitrotoluene	< 330	ug/kg
	2-Chloronaphthalene	< 330	ug/kg
	2-Chlorophenol	< 330	ug/kg
	2-Methylnaphthalene	< 330	ug/kg
	2-Methylphenol	< 330	ug/kg
	2-Nitroaniline	< 1,600	ug/kg
	2-Nitrophenol	< 330	ug/kg
	3,3'-Dichlorobenzidine	< 660	ug/kg
	3-Nitroaniline	< 1,600	ug/kg
	4,6-Dinitro-o-cresol	< 1,600	ug/kg
	4-Bromophenylphenylether	< 330	ug/kg
	4-Chloro-3-methylphenol	< 330	ug/kg
	4-Chloroaniline	< 330	ug/kg
	4-Chlorophenylphenylether	< 330	ug/kg
	4-Methylphenol	< 330	ug/kg
	4-Nitroaniline	< 1,600	ug/kg
	4-Nitrophenol	< 1,600	ug/kg
	Acenaphthene	< 330	ug/kg
	Acenaphthylene	< 330	ug/kg
	Anthracene	< 330	ug/kg
	Benzo(a)anthracene	< 330	ug/kg
	Benzo(a)pyrene	< 330	ug/kg
BATCH: 34783	SAMPLE ID: Method Blank	LSG SAMPLE NO: H0255449	
	1685S Petroleum Hydrocarbons	< 20	mg/kg
BATCH: 34784	SAMPLE ID: Method Blank	LSG SAMPLE NO: H0255451	
	1685S Petroleum Hydrocarbons	< 20	mg/kg
BATCH: 34819	SAMPLE ID: Method Blank	LSG SAMPLE NO: H0255511	
	1685S Petroleum Hydrocarbons	< 20	mg/kg
BATCH: 34868	SAMPLE ID: Method Blank	LSG SAMPLE NO: H0256595	
	G107S BTEX Package		
	Benzene	< 2	ug/kg
	Ethylbenzene	< 2	ug/kg

REPORT OF LABORATORY ANALYSIS

October 27, 1993
Report No.: 00028195
Section E Page 3

QUALITY CONTROL REPORT
METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
	Toluene	< 2	ug/kg
	m-Xylene	< 2	ug/kg
	o-Xylene	< 2	ug/kg
	p-Xylene	< 2	ug/kg

REPORT OF LABORATORY ANALYSIS

October 27, 1993
Report No.: 00028195
Section F Page 1

QUALITY CONTROL REPORT DUPLICATE AND MATRIX SPIKE DATA

PREP BATCH: 34783

LSG SAMPLE NO: H0254759

TEST	DETERMINATION	ORIGINAL RESULT	DUPLICATE RESULT	UNITS	RANGE / RPD	UNITS	MS RESULT	MS % RCVRY
I685S	Petroleum Hydrocarbons	20,000	19,000	mg/kg	5.1	mg/kg	16,000	*

* The concentration of the analyte prevented accurate determination of the matrix spike recovery.

PREP BATCH: 34784

LSG SAMPLE NO: H0254668

TEST	DETERMINATION	ORIGINAL RESULT	DUPLICATE RESULT	UNITS	RANGE / RPD	UNITS	MS RESULT	MS % RCVRY
I685S	Petroleum Hydrocarbons	< 20	< 20	mg/kg	---	mg/kg	330	100.9

PREP BATCH: 34819

LSG SAMPLE NO: H0254255

TEST	DETERMINATION	ORIGINAL RESULT	DUPLICATE RESULT	UNITS	RANGE / RPD	UNITS	MS RESULT	MS % RCVRY
I685S	Petroleum Hydrocarbons	150	190	mg/kg	23.5	mg/kg	550	110.0

REPORT OF LABORATORY ANALYSIS

October 27, 1993
Report No.: 00028195
Section H Page 1

QUALITY CONTROL REPORT MATRIX SPIKE AND MATRIX SPIKE DUPLICATE DATA

ANLS BATCH: 34587

LSG SAMPLE NO: H0254266

TEST	DETERMINATION	MS RESULT	MSD RESULT	UNITS	RPD	MS PCT RECOVERY	MSD PCT RECOVERY
OSVTCS	1,2,4-Trichlorobenzene	2360	2430	ug/kg	2.88	72	73
OSVTCS	1,4-Dichlorobenzene	2360	2440	ug/kg	3.54	71	74
OSVTCS	2,4-Dinitrotoluene	2650	2750	ug/kg	3.85	80	83
OSVTCS	2-Chlorophenol	4750	4920	ug/kg	3.47	72	75
OSVTCS	4-Chloro-3-methylphenol	5130	5210	ug/kg	1.66	78	79
OSVTCS	4-Nitrophenol	6150	6400	ug/kg	3.92	93	97
OSVTCS	Acenaphthene	2240	2300	ug/kg	2.78	68	70
OSVTCS	N-Nitrosodi-n-propylamine	2140	2180	ug/kg	1.90	65	66
OSVTCS	Pentachlorophenol	5380	5460	ug/kg	1.49	82	83
OSVTCS	Phenol	4400	4600	ug/kg	4.31	67	69
OSVTCS	Pyrene	2090	2270	ug/kg	8.26	63	69

ANLS BATCH: 34868

LSG SAMPLE NO: H0254699

TEST	DETERMINATION	MS RESULT	MSD RESULT	UNITS	RPD	MS PCT RECOVERY	MSD PCT RECOVERY
G107S	Benzene	18.6	19.2	ug/kg	3.17	93	96
G107S	Ethylbenzene	18.0	18.4	ug/kg	2.20	90	92
G107S	Toluene	18.4	18.9	ug/kg	2.19	92	94
G107S	m-Xylene	34.9 *	35.8 *	ug/kg	2.54	87	90
G107S	o-Xylene	17.6	18.2	ug/kg	3.35	88	91
G107S	p-Xylene	*	*	ug/kg	2.54	87	90

* The compounds m-Xylene and p-Xylene co-elute. The reported result is the sum of the two.

REPORT OF LABORATORY ANALYSIS

November 24, 1993
Report No.: 00028885
Section B Page 1

QUALITY CONTROL REPORT SUPPLEMENTAL INFORMATION

----- SAMPLE PREPARATION -----					----- SAMPLE ANALYSIS -----			
TEST	PREP	LR-			LR-		ANLS	
LN	CODE	BATCH	METHOD	DATE/TIME	ANALYST	METHOD	DATE/TIME	ANALYST BATCH INSTRUMENT

SAMPLE ID: BURN PIT - 5 (29-31')

LSG SAMPLE NO: H0258763

1 1685S 35865 19-3550
4 OVAROS 35673 NA

02-418.1 18-NOV-93 1300 R M 35865 302WAT
19-8240 12-NOV-93 1755 EHM 35480 GCMSQ

LR Method Literature Reference

- 02 EPA-Methods for Chemical Analysis of Water & Wastes, 1984.
- 19 EPA-Test Methods for Evaluating Solid Waste, 3rd ed, Nov. 1986

REPORT OF LABORATORY ANALYSIS

November 24, 1993
Report No.: 00028885
Section C Page 1

QUALITY CONTROL REPORT
SURROGATE STANDARD RECOVERY

TEST SURROGATE		PERCENT RECOVERY	ACCEPTANCE LIMITS	REF LN
LN	CODE COMPOUND			
SAMPLE ID: BURN PIT - 5 (29-31')				
LSG SAMPLE NO: H0258763				
5	\$VOAS GC/MS Volatiles Surrogates			4
	1,2-Dichloroethane-d4	105	-	
	4-Bromofluorobenzene	101	-	
	Toluene-d8	104	-	

REPORT OF LABORATORY ANALYSIS

November 24, 1993
Report No.: 00028885
Section D Page 1

QUALITY CONTROL REPORT
LABORATORY CONTROL SAMPLE RECOVERY

TEST CODE DETERMINATION	PERCENT RECOVERY	ACCEPTANCE LIMITS
BATCH: 35673 SAMPLE ID: Lab Control Sample LSG SAMPLE NO: H0259875		
OVARO Volatile Aromatics		
1,1-Dichloroethene	100	-
Benzene	98	-
Chlorobenzene	101	-
Toluene	98	-
Trichloroethene	101	-
BATCH: 35865 SAMPLE ID: Lab Control Sample LSG SAMPLE NO: H0261179		
1685S Petroleum Hydrocarbons	91	-

REPORT OF LABORATORY ANALYSIS

November 24, 1993
Report No.: 00028885
Section E Page 1

QUALITY CONTROL REPORT
METHOD BLANK DATA

TEST CODE	Determination	RESULT	UNITS
BATCH: 35673 SAMPLE ID: Method Blank		LSG SAMPLE NO: H0259876	
OVAROS	Volatile Aromatics		
	Benzene	< 5	ug/kg
	Ethlybenzene	< 5	ug/kg
	Toluene	< 5	ug/kg
	m-Xylene	< 5	ug/kg
	o-Xylene	< 5	ug/kg
	p-Xylene	< 5	ug/kg
BATCH: 35865 SAMPLE ID: Method Blank		LSG SAMPLE NO: H0261180	
1685S	Petroleum Hydrocarbons	< 20	mg/kg

REPORT OF LABORATORY ANALYSIS

November 24, 1993
Report No.: 00028885
Section F Page 1

QUALITY CONTROL REPORT
DUPLICATE AND MATRIX SPIKE DATA

PREP BATCH: 35865

LSG SAMPLE NO: H0258750

TEST	DETERMINATION	ORIGINAL RESULT	DUPLICATE RESULT	UNITS	RANGE / RPD	UNITS	MS RESULT	MS % RCVRY
1685S	Petroleum Hydrocarbons	< 20	< 20	mg/kg	---	mg/kg	270	82

REPORT OF LABORATORY ANALYSIS

November 24, 1993
Report No.: 00028885
Section H Page 1

QUALITY CONTROL REPORT
MATRIX SPIKE AND MATRIX SPIKE DUPLICATE DATA

ANLS BATCH: 35480

LSG SAMPLE NO: H0257242

<u>TEST</u>	<u>DETERMINATION</u>	<u>MS</u> <u>RESULT</u>	<u>MSD</u> <u>RESULT</u>	<u>UNITS</u>	<u>RPD</u>	<u>MS PCT</u> <u>RECOVERY</u>	<u>MSD PCT</u> <u>RECOVERY</u>
OVAROS	1,1-Dichloroethene	45.9	45.0	ug/kg	1.98	92	90
OVAROS	Benzene	54.5	55.7	ug/kg	2.19	109	111
OVAROS	Chlorobenzene	46.3	48.1	ug/kg	3.74	93	96
OVAROS	Toluene	45.1	47.7	ug/kg	5.59	90	95
OVAROS	Trichloroethene	51.0	50.5	ug/kg	0.981	102	101

128100

Copy to S. Richmond (Brown & Caldwell)

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client TRANSWESTERN
Address PO Box 1717
ROSWELL, NM 88202-1717
Phone (505) 625-8022

Report To: LARRY CAMPBELL
Bill To: Same
P.O. # / Billing Reference E-5200-E
Project Name / No. BELL LAKE PLANT

Pace Client No. _____
Pace Project Manager _____
Pace Project No. _____
*Requested Due Date: _____

Sampled By (PRINT): <u>ALAN FEAR</u>					Date Sampled: <u>10-5-93</u>		NO. OF CONTAINERS		PRESERVATIVES		ANALYSES REQUEST		REMARKS					
ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PAGE NO.	UNPRESERVED	H ₂ SO ₄	HNO ₃	VOA	ICE	8240	8270	TPH						
1	BELL LAKE SAND BORING 1-0002	1205	SOIL		2	2							25 ppm FID					
2	BELL LAKE SAND BORING 1-1416	1340	SOIL		2	2												
3	BELL LAKE SAND BORING 2-0002	1358	SOIL		2	2												
4	BELL LAKE SAND BORING 2-1315	1435	SOIL		2	2												
5	BELL LAKE SAND BORING 3-0911	1530	SOIL		2	2												
6	BELL LAKE SAND BORING 3-1416	1540	SOIL		2	2												
7	BELL LAKE LIMEFILL LF-1 0406		SOIL															
8			SOIL															
COOLER NOS.					BAILERS		SHIPMENT METHOD		ITEM NUMBER		RELINQUISHED BY / AFFILIATION		ACCEPTED BY / AFFILIATION		DATE		TIME	
											Alan J. Fear 10/7/93		Sampled by Alan J. Fear		10/8/93		9:15	

Additional Comments

Ice 10.0°C

SEE REVERSE SIDE FOR INSTRUCTIONS

128100

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client TRANSWESTERN
Address PO Box 1717
ROSWELL, NM 88202-1717
Phone (505) 625-8022

Report To: LARA CAMPBELL / SUSANNE RICHARD
Bill To: L. CAMPBELL
P.O. # / Billing Reference E5200-E
Project Name / No. BELL LAKE

Pace Client No. _____
Pace Project Manager _____
Pace Project No. _____
*Requested Due Date: _____

Impiled By (PRINT): ALAN FEAR
Impiler Signature Alan J. Fear Date Sampled 10/5/93 - 10/6/93

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PAGE NO.	NO. OF CONTAINERS	PRESERVATIVES				ANALYSES REQUEST	REMARKS
						UNPRESERVED	H ₂ SO ₄	HNO ₃	VOA		
1	BELL LAKE UST-1 - 0507	10/5/93	1649		2	2					
2	BELL LAKE UST-1 - 1012	10/5	1652		2	2					
3	BELL LAKE UST-1 - 4951	10/6	1156		2	2					
4	BELL LAKE LIMEFIELD LF-1 - 0406	10/6	1241		2	2					
5	" " LIMEFIELD LF-1 - 1416	10/6	1300		2	2					
6	" " " " LF-2 - 0911	10/6	1341		2	2					
7	" " " " LF-2 - 1416	10/6	1350		2	2					
8	" " BURN PIT BP-1 - 0406	10/6	1435		2	2					

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT / DATE	RETURNED / DATE	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
					Alan J. Fear 10/7/93	Susanne Richard	10/8	9:15

Additional Comments

See 10,0°C

SEE REVERSE SIDE FOR INSTRUCTIONS



Contact Susanne Richard for

Billing address (713)-664-8222 hm
work (713)-759-0999

128100

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client Transwestern - Bell Lake

Report To: Susanne Richard ^{Brown &}
C/dnoll

Pace Client No. _____

Address _____

Bill To: Transwestern

Pace Project Manager _____

P.O. # / Billing Reference _____

Pace Project No. _____

Phone _____

Project Name / No. Bell Lake

*Requested Due Date: _____

Sampled By (PRINT): Alan J. Fear

Sampler Signature Alan J. Fear

Date Sampled

10/7/93 - 10/13/93

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PAGE NO.	NO. OF CONTAINERS	PRESERVATIVES				ANALYSES REQUEST										REMARKS
						UNPRESERVED	H ₂ SO ₄	HNO ₃	VOA											
1	Sand BP-1 40-42	1310	SS	8oz	1	1														
2	Sand DP-1 9-11	1134	SS		2	2														
3	Sand DP-1 95-97	843	SS		2	2														
4	Sand BP-2 29-31	1245	SS		2	2														
5	Sand BP-2 34-36	1257	SS		2	2														
6	Sand MW-1 89-91	1110	SS		2	2														
7	Sand MW-1 94-96	1145	SS		2	2														
8																				

COOLER NOS.	BAILERS	SHIPMENT METHOD	OUT / DATE	RETURNED / DATE	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
						<u>Alan J. Fear / Consultant</u>	<u>P. Knight / Pace</u>	<u>10/15/93</u>	<u>9:30</u>
Additional Comments									
<u>ice, seals intact 13°C</u>									
<u>#2541735-741</u>									

SEE REVERSE SIDE FOR INSTRUCTIONS



Contact: Susanne Richard
w/Brown & Caldwell
at (713)-759-0999 for Billing Info.

128100

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client: Transwestern
Address: _____
Phone: _____

Report To: Susanne Richard
Bill To: Transwestern
P.O. # / Billing Reference: _____
Project Name / No. Bell Lake

Pace Client No. _____
Pace Project Manager _____
Pace Project No. _____
Requested Due Date: _____

Sampled By (PRINT): Alan J. Fear 10/15/93
Sampler Signature: Alan J. Fear Date Sampled: 10/15/93

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PAGE NO.	NO. OF CONTAINERS	PRESERVATIVES				ANALYSES REQUEST										REMARKS
						UNPRESERVED	H ₂ SO ₄	HNO ₃	VOA											
1	Sand MW-2 (84-91)	1000	SS		2	2				X	X	X								
2	Sand MW-2 (94-96)	1050	SS		2	2				X	X	X								
3																				
4																				
5																				
6																				
7																				
8																				

COOLER NOS.	BAILERS	SHIPMENT METHOD		ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
		OUT / DATE	RETURNED / DATE		<u>Alan J. Fear</u>	<u>R. Kuchta / Pace</u>	<u>10/19/93</u>	<u>10:10</u>

Additional Comments:
custody seal intact
ice 13°C

Contact Susanne Richard at 713-610-1145 and
Coldwell in Houston for instructions.

158263

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client: Transwestern Bell Lake

Report To: Susanne Richard

Pace Client No.

Address

Bill To:

Pace Project Manager

P.O. # / Billing Reference

Pace Project No.

Phone

Project Name / No.

*Requested Due Date:

Sampled By (PRINT):

Alan J. Fear

Sampler Signature

Alan J. Fear

Date Sampled

10-22-93/10-25-93

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES				ANALYSES REQUEST							REMARKS
						UNPRESERVED	H ₂ SO ₄	HNO ₃	VOA								
1	Sand DP-2 (59-61')	1620	SS		2	2				TPH	X	X	X				
2	Sand DP-2 (84-86)	955	SS		2	2				8240	X	X	X				
3	Sand BP-3 (39-41)	1300	SS							8270	X	X	X				
4	Sand BP-3 (89-91)	1535	SS								X	X	X				
5	grd wtr DP-2	1130	wtr		4	1	1		2		X	X	X				
6	grd wtr MW-1	1900	wtr		4	1	1		2		X	X	X				
7	grd wtr BP-3	1645	wtr		4	1	1		2		X	X	X				
8																	

COOLER NOS.	BAILERS	SHIPMENT METHOD		ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
		OUT / DATE	RETURNED / DATE		Alan J. Fear	James A. Richard / PACE	10/27	1145
Additional Comments					Case 5.0°C 11250328-334			

for billing instructions.
(713) 759-0999

158203

CHAIN-OF-CUSTODY RECORD
Analytical Request

ent Transwestern
Address Bell Lake Facility
one _____

Report To: Susanne Richard
Bill To: _____
P.O. # / Billing Reference _____
Project Name / No. _____

Pace Client No. _____
Pace Project Manager _____
Pace Project No. _____
*Requested Due Date: _____

Sampled By (PRINT): Alan J. Fear
Sampler Signature Alan J. Fear Date Sampled 10-26-93/10-28-93

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES				ANALYSES REQUEST	REMARKS
						UNPRESERVED	H ₂ SO ₄	HNO ₃	VOA		
1	grd water BP-4	1840	wtr		3	0	1		2	XX	
2	Sand BP-4 (69-71)	1720	Sand		2	2				XX	
3	Sand BP-4 (89-91)	1750	Sand		2	2				XX	
4											
5											
6											
7											
8											

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT / DATE	RETURNED / DATE	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
					<u>Alan J. Fear</u>	<u>Jennifer Adams / PACE</u>	<u>10/30</u>	<u>1000</u>
Additional Comments					<u>H257198-200</u>			