BROWN AND CALDWELL

June 28, 1994

Mr. Larry Campbell
Transwestern Pipeline Company
P.O. Box 1717
Roswell, New Mexico 88202-1717

19-1388

Subject: Preliminary Subsurface Investigation of Two Leach Fields
Transwestern Pipeline Company Compressor Station No. 9
Roswell, New Mexico

Dear Ms. Kunkel:

Brown and Caldwell is pleased to submit this letter report to Transwestern Pipeline Company (Transwestern) summarizing results of the preliminary subsurface investigation of two leach fields conducted at the Transwestern Compressor Station No. 9. Field work for the investigation occurred on April 14, 1994.

Introduction

Brown and Caldwell conducted a preliminary subsurface investigation at the Transwestern Compressor Station No. 9 in Roswell, New Mexico, to assess potential impact to the subsurface due to possible releases from two leach fields. In accordance with the scope of work, two soil borings were drilled within or adjacent to each leach field.

The Transwestern Compressor Station No. 9 is located in Chaves County approximately seven miles north of Roswell, New Mexico. A site location map is included as Figure 1. The Transwestern Pipeline Company regional office is also operated at the facility. Two office buildings, a shipping warehouse, and maintenance building are also located at the facility. The leach fields are located near the southern fenceline of the site. Cooling water from the compressor station was discharged into the leach field system.

This report was prepared in accordance with the standards of the environmental consulting industry at the time it was prepared. It should not be relied upon by parties other than those for whom it was prepared, and then only to the extent of the scope of work which was authorized. This report does not guarantee that no additional environmental contamination beyond that described in this report exists at the site.

1415 Louisiana, Suite 2500, Houston, TX 77002 (713) 759-0999 Fax (713) 759-0952

Field Activities

Four soil borings were drilled at the Transwestern Compressor Station No. 9. Two soil borings were drilled near each leach field. The soil boring positions were chosen and cleared of underground utilities and pipelines by Transwestern personnel. A site map showing the approximate location of the soil borings is included as Figure 2.

Drilling was accomplished using a nominal 6 7/8-inch outer diameter hollow-stem auger. Each soil boring was continuously sampled, using a 2-foot split spoon sampler and a 5-foot continuous core sampler, from the ground surface to the total depth of the boring.

Soil samples were field screened for volatile organic compounds (VOCs) using a flame ionization detector (FID). Soil samples were screened by placing a portion of each sample in a plastic bag and the rest of the sample in a laboratory cleaned glass sample jar. The sample jars were labeled and placed in an ice chest. The plastic bags were allowed to set at outdoor temperature for several minutes then the headspace in the bags was screened with the FID for VOCs.

No subsurface VOC impact was indicated by visual inspection or FID measurements of the soil samples collected from the borings. According to the scope of work, if no VOCs were detected by field screening methods, the soil borings were to be terminated at a depth of 10 feet. However, because the recovery in the caliche layer encountered in each soil boring was very low, each boring was advanced to a depth of at least 11 feet to obtain adequate sample volumes for field screening and laboratory analyses. Two soil samples from each boring were submitted for laboratory analysis. The boring logs are provided in the the Appendices.

Upon the completion of soil sampling activities, the borings were grouted with a Portland cement/bentonite slurry from total depth to ground surface.

Water from the Roswell municipal water supply was used for cleaning of drilling tools and equipment and grouting.

Geology

The Transwestern Compressor Station No. 9 is situated atop a layer of caliche. With increasing depth, the caliche grades into a clayey sand. A well sorted gravel was encountered in boring RL-4 at a depth of approximately 9 feet. This gravel is believed to be a part of one of the leach fields.

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

Analytical Results

In soil boring RL-1, soil samples collected at the 4 to 9 foot interval and the 11 to 14 foot interval were submitted for laboratory analysis. The soil sample from the 4 to 9 foot interval (sample RL-1-1) was mistakenly identified as RL-1-2 on the chain of custody. In borings RL-2, RL-3 and RL-4, soil samples collected from the 4 to 9 foot interval and the 9 to 11 foot interval were submitted for laboratory analysis. Each soil sample submitted was analyzed for volatile and semivolatile organics, and metals using the toxicity characteristic leaching procedure (TCLP). Analytical results from the borings drilled during this investigation are presented in Table 1. Laboratory analytical reports are contained in the Appendices. Laboratory analytical reports indicate that each TCLP analyte was either below the laboratory detection for that constituent or below the toxicity characteristic concentration, listed in 40 CFR 261.24 Table 1, with the exception of methylene chloride. Methylene chloride was detected at a concentration of 0.1 milligrams per liter (mg/L) in the soil sample collected from a depth of 9 to 11 feet in boring RL-4. This reported concentration of methylene chloride is twice the laboratory detection limit; however, there is no regulatory limit for this constituent in 40 CFR 261.24 Table 1.

If you have any questions regarding this information, contact me at (713) 759-0999.

Very truly yours,

BROWN AND CALDWELL

Susanne Richard

Susanne Richard, REM, REP
Project Manager

SR:lms

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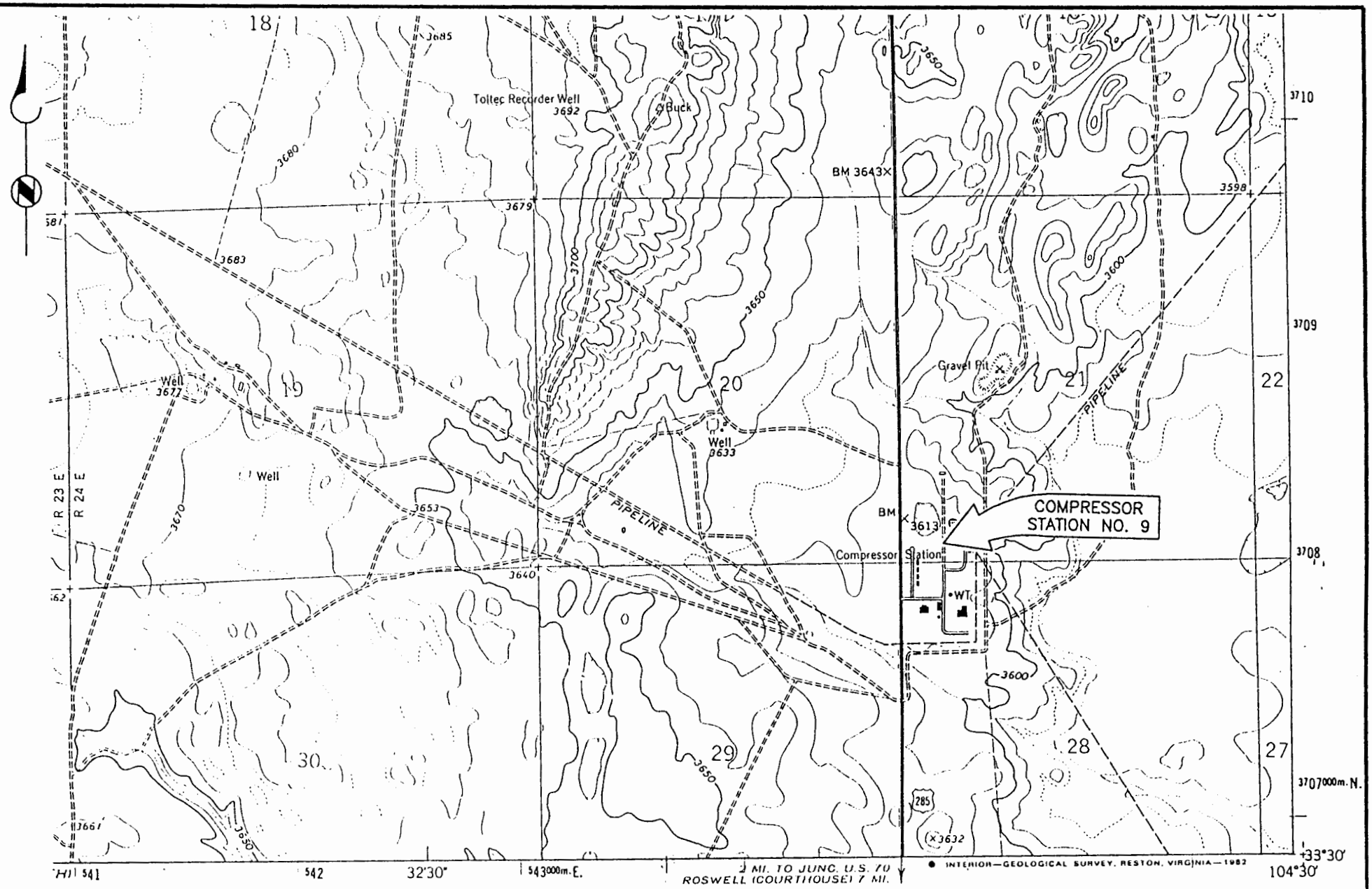
PRELIMINARY SUBSURFACE INVESTIGATION OF TWO LEACH FIELDS

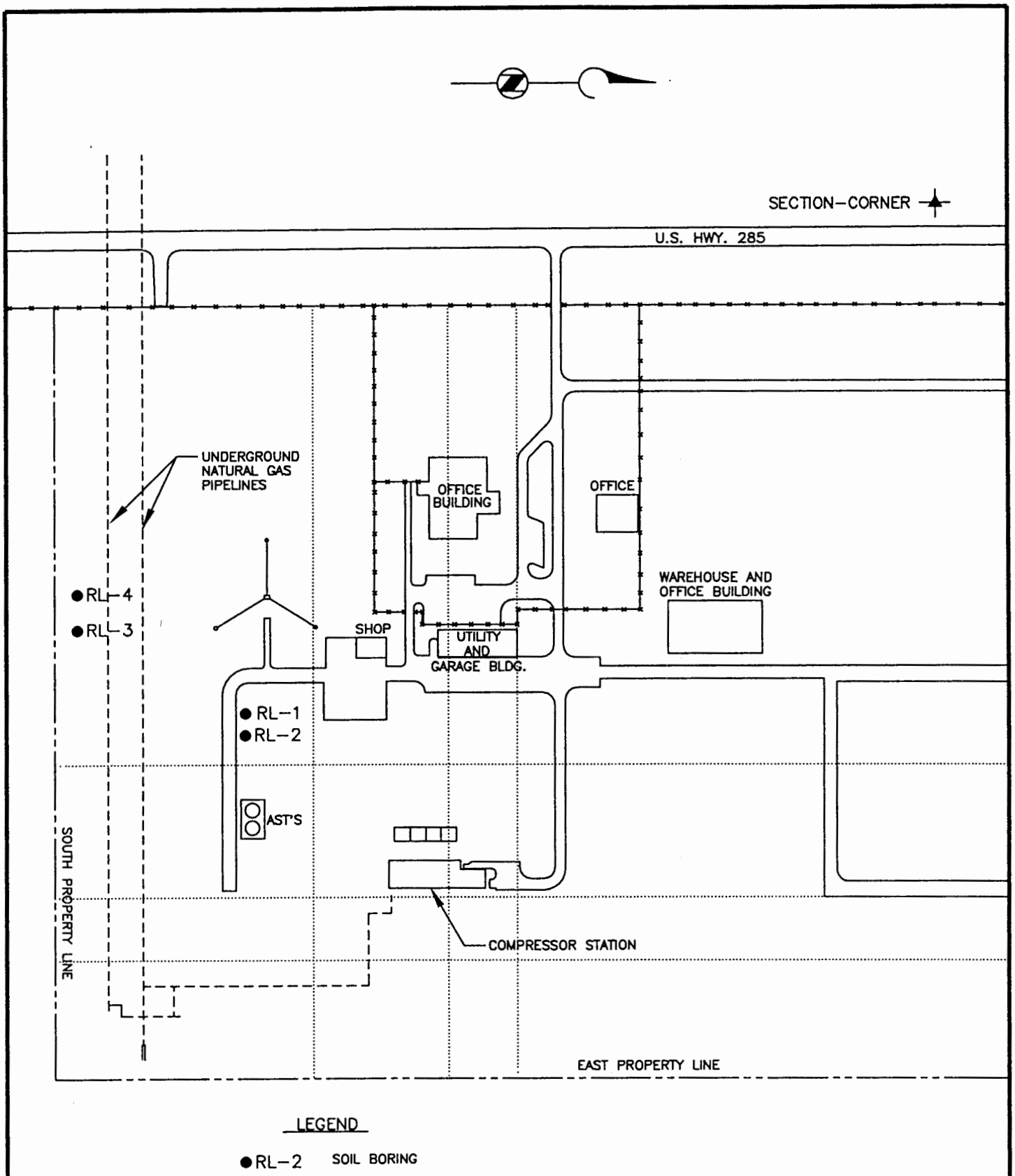
TRANSWESTERN PIPELINE COMPANY
COMPRESSOR STATION NO. 9

ROSWELL, NEW MEXICO
June 28, 1994

FIGURES



BROWN AND CALDWELL HOUSTON, TEXAS SUBMITTED: SUSANNE RICHARD DATE: PROJECT MANAGER APPROVED: ROBERT JENNINGS, P.E. DATE:	REFERENCE USGS MAP 7.5 MINUTE SERIES PANTHER HILL QUADRANGLE NEW MEXICO	0 1000 2000 SCALE: 1" = 2000' DRAWN BY: DHD DATE 5/19 CHK'D BY: JC DATE 5/19 APPROVED: SR DATE	TITLE SITE LOCATION MAP CLIENT TRANSWESTERN PIPELINE COMPANY SITE LOCATION COMPRESSOR STATION NO. 9 ROSWELL, NEW MEXICO	DATE 5/19/94 PROJECT NUMBER 1388.01 FIGURE NUMBER 1



BROWN AND CALDWELL HOUSTON, TEXAS SUBMITTED: PROJECT MANAGER DATE: APPROVED: BROWN AND CALDWELL DATE:	0 100 200 SCALE: 1" = 200' DRAWN BY: DHD DATE 4/29 CHK'D BY: JC DATE 4/29 APPROVED: DATE	TITLE SITE PLAN CLIENT TRANSWESTERN PIPELINE COMPANY SITE LOCATION STATION NO. 9, ROSWELL, NM	DATE 4/29/94 PROJECT NUMBER 1388.01 FIGURE NUMBER 2

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TABLE 1

TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP) METALS

Transwestern Pipeline Station No. 9
Roswell, New Mexico

ANALYTE	SAMPLE IDENTIFICATION NUMBER (depth of sample below ground surface)							
TCLP METALS (mg/L)	RL-1-1 (4 - 9)	RL-1-3 (11 - 14)	RL-2-3 (4 - 9)	RL-2-4 (9 - 11)	RL-3-3 (4 - 9)	RL-3-4 (9 - 11)	RL-4-3 (4 - 9)	RL-4-4 (9 - 11)
Mercury	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Arsenic	< 0.28	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Barium	0.99	0.99	0.98	1.4	1.4	1.9	0.83	0.70
Cadmium	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Chromium	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Lead	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Selenium	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Silver	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03

mg/L = milligrams per liter

TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP) SEMIVOLATILE ORGANICS

Transwestern Pipeline Station No. 9
Roswell, New Mexico

ANALYTE	SAMPLE IDENTIFICATION NUMBER (depth of sample below ground surface)							
TCLP SEMIVOLATILE ORGANICS (mg/L)	RL-1-1 (4 - 9)	RL-1-3 (11 - 14)	RL-2-3 (4 - 9)	RL-2-4 (9 - 11)	RL-3-3 (4 - 9)	RL-3-4 (9 - 11)	RL-4-3 (4 - 9)	RL-4-4 (9 - 11)
1,4-Dichlorobenzene	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
2,4-Dinitrotoluene	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Hexachlorobenzene	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Hexachlorobutadiene	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Hexachloroethane	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Total Cresols	< 0.150	< 0.150	< 0.150	< 0.150	< 0.150	< 0.150	< 0.150	< 0.150
Nitrobenzene	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Pentachlorophenol	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Pyridine	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
2,4,5-Trichlorophenol	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
2,4,6-Trichlorophenol	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050

mg/L = milligrams per liter

TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP) VOLATILE ORGANICS

Transwestern Pipeline Station No. 9
Roswell, New Mexico

ANALYTE	SAMPLE INDENTIFICATION NUMBER (depth of sample below ground surface)							
TCLP VOLATILE ORGANICS (mg/L)	RL-1-1 (4 - 9)	RL-1-3 (11 - 14)	RL-2-3 (4 - 9)	RL-2-4 (9 - 11)	RL-3-3 (4 - 9)	RL-3-4 (9 - 11)	RL-4-3 (4 - 9)	RL-4-4 (9 - 11)
Benzene	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Carbon Tetrachloride	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Chlorobenzene	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Chloroform	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
1,2-Dichloroethane	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
1,1-Dichloroethene	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Methyl ethyl ketone	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.062	0.074	< 0.05
Tetrachloroethylene	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Trichloroethene	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Vinyl Chloride	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Methylene Chloride	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.1
1,1,1-Trichloroethane	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
1,2-Dichlorobenzene	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Total Xylenes	< 0.075	< 0.075	< 0.075	< 0.075	< 0.075	< 0.075	< 0.075	< 0.075
Acetone	< 0.05	0.12	< 0.05	0.14	< 0.05	0.051	< 0.05	< 0.05
Ethylbenzene	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Methyl isobutyl ketone	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Toluene	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Carbon disulfide	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Freon-113	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Trichlorofluoromethane	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Ethyl acetate	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Ethyl Ether	non-detect	non-detect	non-detect	non-detect	non-detect	non-detect	non-detect	non-detect
Isobutanol	non-detect	non-detect	non-detect	non-detect	non-detect	non-detect	non-detect	non-detect
n-Butanol	non-detect	non-detect	non-detect	non-detect	non-detect	non-detect	non-detect	non-detect
2-Ethoxy ethanol	non-detect	non-detect	non-detect	non-detect	non-detect	non-detect	non-detect	non-detect
Cyclohexane	non-detect	non-detect	non-detect	non-detect	non-detect	non-detect	non-detect	non-detect

mg/L = milligrams per liter

Note: "Non-detect" denotes that a library search was performed by Terra Laboratories, Ltd. to quantify the indicated constituent and none was detected..

APPENDICES

BORING LOGS
LABORATORY ANALYTICAL REPORTS

BORING LOGS

BROWN AND CALDWELL
HOUSTON, TEXAS

BORING LOG

PROJECT NAME: COMPRESSOR STATION NO. 9 PROJECT NUMBER: 1388-01 SHEET 1 OF 1

SOIL BORING IDENTIFICATION: RL-1

Boring Location	ROSWELL, NM	Elevation and Datum:	
Drilling Contractor:	POOL ENVIRONMENTAL DRILLING	Date Started: 4-14-94	Date Finished: 4-14-94
Drilling Equipment:	HOLLOW STEM AUGER	Completed Depth (feet) 14.0	Water Depth: (feet) N/A
Sampling Method:	Core Sampler ☒ Shelby Tube ☐ Split Spoon ☒		
Drilling Fluid:			
Backfill Material:			
Logged By: J. COOPER	Checked By:		

Depth (feet)	USC Soil Type	Description	Lithology	Blow Count/ Penetration	Sample No.	FID Readings	Remarks
	CL	CLAY – brown with abundant silt and some gravel					unconsolidated, dry: No sample
		CALICHE – tan to pink with sand and abundant gravel					
5					1	2.0	unconsolidated to semiconsolidated; dry to slightly moist
10					2	3.0	
					3	1.0	
15		T.D. boring at 14.0 feet					
20							
25							
30							

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BROWN AND CALDWELL
HOUSTON, TEXAS

BORING LOG

PROJECT NAME: COMPRESSOR STATION NO. 9 PROJECT NUMBER: 1388-01 SHEET 1 OF 1

SOIL BORING IDENTIFICATION: RL-2

Boring Location	ROSWELL, NM	Elevation and Datum:	N/A
Drilling Contractor:	POOL ENVIRONMENTAL DRILLING	Date Started: 4-14-94	Date Finished: 4-14-94
Drilling Equipment:	HOLLOW STEM AUGER	Completed Depth (feet) 11.0	Water Depth: (feet) N/A
Sampling Method:	Core Sampler ☒ Shelby Tube ☐ Split Spoon ☒		
Drilling Fluid:			
Backfill Material:			
Logged By: J. COOPER	Checked By:		

Depth (feet)	USC Soil Type	Description	Lithology	Blow Count/ Penetration	Sample No.	FID Readings	Remarks
	CL	CLAY – brown with silt and sand; some gravel			1	1.0	Unconsolidated; dry
		CALICHE – tan to pink; abundant sand and gravel			2	2.0	Unconsolidated to semiconsolidated; dry to slightly moist
5					3	2.0	
10					4	3.0	
		T.D. at 11.0 feet					
15							
20							
25							
30							

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BROWN AND CALDWELL
HOUSTON, TEXAS

BORING LOG

PROJECT NAME: COMPRESSOR STATION NO. 9 PROJECT NUMBER: 1388-01 SHEET 1 OF 1

SOIL BORING IDENTIFICATION: RL-3

Boring Location	ROSWELL, NM	Elevation and Datum:	
Drilling Contractor:	POOL ENVIRONMENTAL DRILLING	Date Started: 4-14-94	Date Finished: 4-14-94
Drilling Equipment:	HOLLOW STEM AUGER	Completed Depth (feet) 11.0	Water Depth: (feet) N/A
Sampling Method:	Core Sampler ☒ Shelby Tube ☐ Split Spoon ☒		
Drilling Fluid:			
Backfill Material:			
Logged By: J. COOPER	Checked By:		

Depth (feet)	USC Soil Type	Description	Lithology	Blow Count/ Penetration	Sample No.	FID Readings	Remarks
	CL	SANDY CLAY – brown to tan with silt and gravel			1	1.0	Unconsolidated; dry
		CALICHE – tan to pink; abundant sand and gravel			2	1.0	Unconsolidated to semiconsolidated; dry to slightly moist
5					3	2.0	
10					4	4.0	
		T.D. at 11.0 feet					
15							
20							
25							
30							

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BROWN AND CALDWELL
HOUSTON, TEXAS

BORING LOG

PROJECT NAME: COMPRESSOR STATION NO. 9 PROJECT NUMBER: 1388-01 SHEET 1 OF 1

SOIL BORING IDENTIFICATION: RL-4

Boring Location	ROSWELL, NM	Elevation and Datum:	
Drilling Contractor:	POOL ENVIRONMENTAL DRILLING	Date Started: 4-14-94	Date Finished: 4-14-94
Drilling Equipment:	HOLLOW STEM AUGER	Completed Depth (feet) 11.0	Water Depth: (feet) N/A
Sampling Method:	Core Sampler ☒ Shelby Tube ☐ Split Spoon ☒		
Drilling Fluid:			
Backfill Material:			
Logged By: J. COOPER	Checked By:		

Depth (feet)	USC Soil Type	Description	Lithology	Blow Count/ Penetration	Sample No.	FID Readings	Remarks
	CL	SANDY CLAY – brown to tan; silty with some gravel			1	1.0	Unconsolidated; dry
		CALICHE – tan to pink; silt and sand with some gravel			2	4.0	Unconsolidated to semiconsolidated; dry to slightly moist
5		– twigs and other organics			3	3.0	
10	GW	GRAVEL – small well sorted, with silt and sand			4	3.0	Dry to slightly moist
		T.D. at 11.0 feet					
15							
20							
25							
30							

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LABORATORY ANALYTICAL REPORTS

2525 SOUTH SHORE BLVD, SUITE 100
LEAGUE CITY, TX 77573
713/334-5052 FAX 713/334-3116

LAB ANALYSIS REPORT

ort Date: MAY 2 1994 Page # 1

ansWestern Pipeline - Roswell Reviewed by:TG

O. Box 1717 Customer#: 325
oswell , NM 88202 Job Number:

tn: Campbell, Larry Date Collected:04/14/94

ample Number: 94002412 Time Collected:1040
oject Name:
mple ID: RL-1-1 GRAB Date Received: 04/18/94

Test Code	Analyte	Result	Units	Method	Analyst
HE'D	Zero Headspace Extract. (D/T)	04/21 1900	init.	6-1311	PS
VOA'D	TCLP Volatiles (Date/Time)	04/27 0956	init.	6-8260	MSB
8260L	Benzene, Leach.	< 0.025	mg/L	6-8260	MSB
etClL	Carbon tetrachloride,Leach.	< 0.025	mg/L	6-8260	MSB
CBZL	Chlorobenzene, Leach.	< 0.025	mg/L	6-8260	MSB
lFormL	Chloroform, Leach.	< 0.025	mg/L	6-8260	MSB
ClEtaL	1,2-Dichloroethane, Leach.	< 0.025	mg/L	6-8260	MSB
ClEteL	1,1-Dichloroethene, Leach.	< 0.05	mg/L	6-8260	MSB
EKL	Methyl ethyl ketone, Leach.	< 0.05	mg/L	6-8260	MSB
tClEtL	Tetrachloroethylene,Leach.	< 0.025	mg/L	6-8260	MSB
lEtheL	Trichloroethene, Leach.	< 0.025	mg/L	6-8260	MSB
ClL	Vinyl Chloride, Leach.	< 0.05	mg/L	6-8260	MSB
BrFMetL	dBrFMethane(surr)	96.	%	86-118	MSB
ld8Lsu	Toluene-d8 (surr)	97.	%	86-110	MSB
FBLsur	4-BFB (surr)	93.	%	86-115	MSB
BTL'D	TCLP Bottle Extraction	04/20 1730	init.	6-1311	PS
SVX'D	Base/neut/acid Extraction(D/T)	04/26 1500	init.	6-3510	AM
V'D	TCLP Semivolatiles (D/T)	04/27 1740	init.	6-8270	SA
dClBZL	1,4-Dichlorobenzene, Leach.	< 0.050	mg/L	6-8270	SA
24dNitTL	2,4-Dinitrotoluene, Leachable	< 0.050	mg/L	6-8270	SA

Rec 5/2/94
Larry D Allen

TERRA LABORATORIES, LTD.
2525 SOUTH SHORE BLVD, SUITE 100
LEAGUE CITY, TX 77573
713/334-5052 FAX 713/334-3116

LAB ANALYSIS REPORT

port Date: MAY 2 1994 Page # 2

answestern Pipeline - Roswell Reviewed by:TG

.O. Box 1717 Customer#: 325
swell , NM 88202 Job Number:

ttn: Campbell, Larry Date Collected:04/14/94

mple Number: 94002412 Time Collected:1040
oject Name:
ample ID: RL-1-1 GRAB Date Received: 04/18/94

est Code	Analyte	Result	Units	Method	Analyst
lexClBzL	Hexachlorobenzene, Leachable	< 0.050	mg/L	6-8270	SA
ClButL	Hexachlorobutadiene, Leachable	< 0.050	mg/L	6-8270	SA
xClEtL	Hexachloroethane, Leachable	< 0.050	mg/L	6-8270	SA
resolTL	Total Cresols, Leachable	< 0.150	mg/L	6-8270	TG
itroBzL	Nitrobenzene, Leachable	< 0.050	mg/L	6-8270	SA
tClPhL	Pentachlorophenol, Leachable	< 0.050	mg/L	6-8270	SA
ridinL	Pyridine, Leach.	< 0.050	mg/L	6-8270	SA
245tClPL	2,4,5-Trichlorophenol,Leachable	< 0.050	mg/L	6-8270	SA
6tClPL	2,4,6-Trichlorophenol,Leachable	< 0.050	mg/L	6-8270	SA
Phenl L	2Fluorophenol(surr)	29.	%	6-8270	SA
henld6L	Phenol-d6 (surr)	15.	%	6-8270	SA
itBzd5L	Nitrobenzene-d5 (surr)	73.	%	6-8270	SA
biPhnL	2Fluorobiphenyl (surr)	100.	%	6-8270	SA
iBrPhL	2,4,6Tribromophenol (surr)	72.	%	6-8270	SA
TMETX'D	TCLP Bottle Extract. (D/T)	04/20 1730	init.	6-1311	PS
ERCL'D	Mercury Analysis (D/T)	04/22 1300	init.	6-7470	TM
CVAA1	Mercury, Leachable	< 0.001	mg/L	6-7470	TM
MiWL'D	Acid Digestion(Date/Time)	04/21 1200	init.	6-3015	BW
ICP'L'D	ICP Analysis (Date/Time)	04/29 1245	init.	6-6010	BW
sICP1	Arsenic, Leachable	< 0.28	mg/L	6-6010	BW

RW 5/2/94
Larry Dillon

TERRA LABORATORIES, LTD.
2525 SOUTH SHORE BLVD, SUITE 100
LEAGUE CITY, TX 77573
713/334-5052 FAX 713/334-3116

LAB ANALYSIS REPORT

port Date: MAY 2 1994 Page # 3

answestern Pipeline - Roswell Reviewed by:TG

.O. Box 1717 Customer#: 325
swell , NM 88202 Job Number:

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ample ID: RL-1-1 GRAB Date Received: 04/18/94

est Code	Analyte	Result	Units	Method	Analyst
BaICP1	Barium, Leachable	.99	mg/L	6-6010	BW
dICP1	Cadmium,Leachable	< 0.03	mg/L	6-6010	BW
rICP1	Chromium, Leachable	< 0.03	mg/L	6-6010	BW
PbICP1	Lead, Leachable	< 0.03	mg/L	6-6010	BW
eICP1	Selenium, Leachable	< 0.28	mg/L	6-6010	BW
gICP1	Silver, Leachable	< 0.03	mg/L	6-6010	BW
ClMeanL	Methylene chloride, Leach.	< 0.05	mg/L	6-8260	MSB
11tClEL	1,1,1-TriClEthane,Leach.	< 0.025	mg/L	6-8260	MSB
dClBzL	1,2-Dichlorobenzene, Leach.	< 0.025	mg/L	6-8260	MSB
LTLL	Total Xylenes,Leachable	< 0.075	mg/L	6-8260	TG
cetoneL	Acetone, Leach.	< 0.05	mg/L	6-8260	MSB
BZL	Ethylbenzene,Leach.	< 0.025	mg/L	6-8260	MSB
BKL	Methyl isobutyl ketone,Leach.	< 0.025	mg/L	6-8260	MSB
luenL	Toluene,Leach.	< 0.025	mg/L	6-8260	MSB
dSulfL	Carbon disulfide, Leach.	< 0.025	mg/L	6-8260	MSB
on113L	Freon-113, Leach.	< 0.05	mg/L	6-8260	MSB
ClFMeaL	Trichlorofluoromethane,Leach.	< 0.05	mg/L	6-8260	MSB
tAcetL	Ethyl acetate,Leach.	< 0.025	mg/L	6-8260	MSB
LISR'D	Volatile Organic Scan	04/27 0956	init	6-8260	MSB

OMMENTS:

Rev 5/2/94
Larry D. Campbell

OOTNOTES: MI - Surrogate recovery is not reportable due to matrix interferences
Dilution - Minimum dilution required to allow acceptable quantitation
ppm = mg/L(Liquid), mg/kg(Solid) ppb = ug/L(Liquid), ug/kg(Soil)
init = date & time initiated BRL = Below Reporting Limit

reparation and Analysis Method References:

1. ASTM: American Society for Testing and Materials, 1984.
2. EPA-600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 1978 (revised 1983).
3. EPA-600/4-82-057, Methods for Organic Chemical Analysis of Municipal & Industrial Wastewater, 1982.
4. HACH: Test Methods, accepted by EPA in November, 1983.
5. SM: Standard Methods for the Examination of Water and Wastewater, 17th edition.
6. SW: SW-846, Test Methods for Evaluation of Solid Waste, Third edition.

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LAB ANALYSIS REPORT

port Date: MAY 2 1994 Page # 1

answestern Pipeline - Roswell Reviewed by:TG

O. Box 1717 Customer#: 325
oswell , NM 88202 Job Number:

tn: Campbell, Larry Date Collected:04/14/94

ample Number: 94002413 Time Collected:1110
oject Name:
mple ID: RL-1-3 GRAB Date Received: 04/18/94

est Code	Analyte	Result	Units	Method	Analyst
ZHE'D	Zero Headspace Extract. (D/T)	04/21 1900	init.	6-1311	PS
VOA'D	TCLP Volatiles (Date/Time)	04/27 1020	init.	6-8260	MSB
8260L	Benzene, Leach.	< 0.025	mg/L	6-8260	MSB
etClL	Carbon tetrachloride,Leach.	< 0.025	mg/L	6-8260	MSB
LBZL	Chlorobenzene, Leach.	< 0.025	mg/L	6-8260	MSB
FormL	Chloroform, Leach.	< 0.025	mg/L	6-8260	MSB
ClEtaL	1,2-Dichloroethane, Leach.	< 0.025	mg/L	6-8260	MSB
dClEteL	1,1-Dichloroethene, Leach.	< 0.05	mg/L	6-8260	MSB
EKL	Methyl ethyl ketone, Leach.	< 0.05	mg/L	6-8260	MSB
tClEtL	Tetrachloroethylene,Leach.	< 0.025	mg/L	6-8260	MSB
ClEtheL	Trichloroethene, Leach.	< 0.025	mg/L	6-8260	MSB
nClL	Vinyl Chloride, Leach.	< 0.05	mg/L	6-8260	MSB
BrFMetL	dBrFMethane(surr)	92.	%	86-118	MSB
ld8Lsu	Toluene-d8 (surr)	99.	%	86-110	MSB
BFBLsur	4-BFB (surr)	99.	%	86-115	MSB
BTL'D	TCLP Bottle Extraction	04/20 1730	init.	6-1311	PS
SVX'D	Base/neut/acid Extraction(D/T)	04/26 1500	init.	6-3510	AM
SV'D	TCLP Semivolatiles (D/T)	04/27 1812	init.	6-8270	SA
4dClBZL	1,4-Dichlorobenzene, Leach.	< 0.050	mg/L	6-8270	SA
4dNitTL	2,4-Dinitrotoluene, Leachable	< 0.050	mg/L	6-8270	SA

RW 5/2/94

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LAB ANALYSIS REPORT

port Date: MAY 2 1994 Page # 2

answestern Pipeline - Roswell Reviewed by:TG

.O. Box 1717 Customer#: 325
swell , NM 88202 Job Number:

ttn: Campbell, Larry Date Collected:04/14/94

mple Number: 94002413 Time Collected:1110
roject Name:
ample ID: RL-1-3 GRAB Date Received: 04/18/94

est Code	Analyte	Result	Units	Method	Analyst
laxClBzL	Hexachlorobenzene, Leachable	< 0.050	mg/L	6-8270	SA
ClButL	Hexachlorobutadiene, Leachable	< 0.050	mg/L	6-8270	SA
xClEtL	Hexachloroethane, Leachable	< 0.050	mg/L	6-8270	SA
resolTL	Total Cresols, Leachable	< 0.150	mg/L	6-8270	TG
troBzL	Nitrobenzene, Leachable	< 0.050	mg/L	6-8270	SA
tClPhL	Pentachlorophenol, Leachable	< 0.050	mg/L	6-8270	SA
yridinL	Pyridine, Leach.	< 0.050	mg/L	6-8270	SA
45tClPL	2,4,5-Trichlorophenol,Leachable	< 0.050	mg/L	6-8270	SA
6tClPL	2,4,6-Trichlorophenol,Leachable	< 0.050	mg/L	6-8270	SA
Phenl1L	2Fluorophenol(surr)	77.	%	6-8270	SA
henld6L	Phenol-d6 (surr)	39.	%	6-8270	SA
itBzd5L	Nitrobenzene-d5 (surr)	96.	%	6-8270	SA
biPhnL	2Fluorobiphenyl (surr)	101.	%	6-8270	SA
riBrPhL	2,4,6Tribromophenol (surr)	98.	%	6-8270	SA
METX'D	TCLP Bottle Extract. (D/T)	04/20 1730	init.	6-1311	PS
RCL'D	Mercury Analysis (D/T)	04/22 1300	init.	6-7470	TM
CVAA1	Mercury, Leachable	< 0.001	mg/L	6-7470	TM
MiWL'D	Acid Digestion(Date/Time)	04/21 1200	init.	6-3015	BW
CP'L'D	ICP Analysis (Date/Time)	04/29 1245	init.	6-6010	BW
AsICP1	Arsenic, Leachable	< 0.28	mg/L	6-6010	BW

RW 5/2/94

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LAB ANALYSIS REPORT

port Date: MAY 2 1994 Page # 3

answestern Pipeline - Roswell Reviewed by:TG

.O. Box 1717 Customer#: 325
swell , NM 88202 Job Number:

ttn: Campbell, Larry Date Collected:04/14/94

mple Number: 94002413 Time Collected:1110
roject Name:
ample ID: RL-1-3 GRAB Date Received: 04/18/94

est Code	Analyte	Result	Units	Method	Analyst
BaICP1	Barium, Leachable	.99	mg/L	6-6010	BW
dICP1	Cadmium,Leachable	< 0.03	mg/L	6-6010	BW
rICP1	Chromium, Leachable	< 0.03	mg/L	6-6010	BW
PbICP1	Lead, Leachable	< 0.03	mg/L	6-6010	BW
SeICP1	Selenium, Leachable	< 0.28	mg/L	6-6010	BW
gICP1	Silver, Leachable	< 0.03	mg/L	6-6010	BW
ClMeanL	Methylene chloride, Leach.	< 0.05	mg/L	6-8260	MSB
11tClEL	1,1,1-TriClEthane,Leach.	< 0.025	mg/L	6-8260	MSB
dClBzL	1,2-Dichlorobenzene, Leach.	< 0.025	mg/L	6-8260	MSB
LTLL	Total Xylenes,Leachable	< 0.075	mg/L	6-8260	TG
cetoneL	Acetone, Leach.	.12	mg/L	6-8260	MSB
TBZL	Ethylbenzene,Leach.	< 0.025	mg/L	6-8260	MSB
BKL	Methyl isobutyl ketone,Leach.	< 0.025	mg/L	6-8260	MSB
luenL	Toluene,Leach.	< 0.025	mg/L	6-8260	MSB
dSulfL	Carbon disulfide, Leach.	< 0.025	mg/L	6-8260	MSB
on113L	Freon-113, Leach.	< 0.05	mg/L	6-8260	MSB
lFMeaL	Trichlorofluoromethane,Leach.	< 0.05	mg/L	6-8260	MSB
tAcetL	Ethyl acetate,Leach.	< 0.025	mg/L	6-8260	MSB
/LISR'D	Volatile Organic Scan	04/27 1020	init	6-8260	MSB

OMMENTS:

Rev 5/2/94
Larry Campbell

OOTNOTES: MI - Surrogate recovery is not reportable due to matrix interferences
Dilution - Minimum dilution required to allow acceptable quantitation
ppm = mg/L(Liquid), mg/kg(Solid) ppb = ug/L(Liquid), ug/kg(Soil)
init = date & time initiated BRL = Below Reporting Limit

Preparation and Analysis Method References:

1. ASTM: American Society for Testing and Materials, 1984.
2. EPA-600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 1978 (revised 1983).
3. EPA-600/4-82-057, Methods for Organic Chemical Analysis of Municipal & Industrial Wastewater, 1982.
4. HACH: Test Methods, accepted by EPA in November, 1983.
5. SM: Standard Methods for the Examination of Water and Wastewater, 17th edition.
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LAB ANALYSIS REPORT

Report Date: MAY 2 1994 Page # 1

Transwestern Pipeline - Roswell Reviewed by:TG

P.O. Box 1717 Customer#: 325
Roswell , NM 88202 Job Number:

Attn: Campbell, Larry Date Collected:04/14/94

Sample Number: 94002414 Time Collected:1235
Project Name:
Sample ID: RL-2-3 GRAB Date Received: 04/18/94

Test Code	Analyte	Result	Units	Method	Analyst
ZHE'D	Zero Headspace Extract. (D/T)	04/12 1900	init.	6-1311	PS
VOA'D	TCLP Volatiles (Date/Time)	04/27 1152	init.	6-8260	MSB
8260L	Benzene, Leach.	< 0.025	mg/L	6-8260	MSB
CtCl1L	Carbon tetrachloride,Leach.	< 0.025	mg/L	6-8260	MSB
LBZL	Chlorobenzene, Leach.	< 0.025	mg/L	6-8260	MSB
ChFormL	Chloroform, Leach.	< 0.025	mg/L	6-8260	MSB
12dClEtaL	1,2-Dichloroethane, Leach.	< 0.025	mg/L	6-8260	MSB
11dClEteL	1,1-Dichloroethene, Leach.	< 0.05	mg/L	6-8260	MSB
MEKL	Methyl ethyl ketone, Leach.	< 0.05	mg/L	6-8260	MSB
tClEtL	Tetrachloroethylene,Leach.	< 0.025	mg/L	6-8260	MSB
1lEtheL	Trichloroethene, Leach.	< 0.025	mg/L	6-8260	MSB
VnClL	Vinyl Chloride, Leach.	< 0.05	mg/L	6-8260	MSB
dBrFMetL	dBrFMethane(surr)	98.	%	86-118	MSB
Tld8Lsu	Toluene-d8 (surr)	100.	%	86-110	MSB
4BFBLsur	4-BFB (surr)	96.	%	86-115	MSB
TCBTL'D	TCLP Bottle Extraction	04/20 1730	init.	6-1311	PS
TCVX'D	Base/neut/acid Extraction(D/T)	04/26 1500	init.	6-3510	AM
TCV'D	TCLP Semivolatiles (D/T)	04/27 1942	init.	6-8270	SA
14dClBZL	1,4-Dichlorobenzene, Leach.	< 0.050	mg/L	6-8270	SA
24dNitTL	2,4-Dinitrotoluene, Leachable	< 0.050	mg/L	6-8270	SA

Rev 5/2/94
Larry D Campbell

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LAB ANALYSIS REPORT

port Date: MAY 2 1994 Page # 2

answestern Pipeline - Roswell Reviewed by:TG

.O. Box 1717 Customer#: 325
swell , NM 88202 Job Number:

ttn: Campbell, Larry Date Collected:04/14/94

mple Number: 94002414 Time Collected:1235
oject Name:
ample ID: RL-2-3 GRAB Date Received: 04/18/94

est Code	Analyte	Result	Units	Method	Analyst
lexClBzL	Hexachlorobenzene, Leachable	< 0.050	mg/L	6-8270	SA
ClButL	Hexachlorobutadiene, Leachable	< 0.050	mg/L	6-8270	SA
xClEtL	Hexachloroethane, Leachable	< 0.050	mg/L	6-8270	SA
resolTL	Total Cresols, Leachable	< 0.150	mg/L	6-8270	TG
itroBzL	Nitrobenzene, Leachable	< 0.050	mg/L	6-8270	SA
tClPhL	Pentachlorophenol, Leachable	< 0.050	mg/L	6-8270	SA
ridinL	Pyridine, Leach.	< 0.050	mg/L	6-8270	SA
245tClPL	2,4,5-Trichlorophenol,Leachable	< 0.050	mg/L	6-8270	SA
246tClPL	2,4,6-Trichlorophenol,Leachable	< 0.050	mg/L	6-8270	SA
Phenl1L	2Fluorophenol(surr)	78.	%	6-8270	SA
Henld6L	Phenol-d6 (surr)	35.	%	6-8270	SA
itBzd5L	Nitrobenzene-d5 (surr)	83.	%	6-8270	SA
biPhnL	2Fluorobiphenyl (surr)	96.	%	6-8270	SA
iBrPhL	2,4,6Tribromophenol (surr)	103.	%	6-8270	SA
TMETX'D	TCLP Bottle Extract. (D/T)	04/20 1730	init.	6-1311	PS
MERCL'D	Mercury Analysis (D/T)	04/22 1300	init.	6-7470	TM
CVAA1	Mercury, Leachable	< 0.001	mg/L	6-7470	TM
MiWL'D	Acid Digestion(Date/Time)	04/21 1200	init.	6-3015	BW
ICP'L'D	ICP Analysis (Date/Time)	04/29 1245	init.	6-6010	BW
AsICP1	Arsenic, Leachable	< 0.28	mg/L	6-6010	BW

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LAB ANALYSIS REPORT

port Date: MAY 2 1994 Page # 3

answestern Pipeline - Roswell Reviewed by:TG

.O. Box 1717 Customer#: 325
swell , NM 88202 Job Number:

ttn: Campbell, Larry Date Collected:04/14/94

mple Number: 94002414 Time Collected:1235
oject Name:
ample ID: RL-2-3 GRAB Date Received: 04/18/94

est Code	Analyte	Result	Units	Method	Analyst
BaICPl	Barium, Leachable	.98	mg/L	6-6010	BW
dICPl	Cadmium,Leachable	< 0.03	mg/L	6-6010	BW
rICPl	Chromium, Leachable	< 0.03	mg/L	6-6010	BW
PbICPl	Lead, Leachable	< 0.03	mg/L	6-6010	BW
SeICPl	Selenium, Leachable	< 0.28	mg/L	6-6010	BW
gICPl	Silver, Leachable	< 0.03	mg/L	6-6010	BW
lMeanL	Methylene chloride, Leach.	< 0.05	mg/L	6-8260	MSB
11tClEL	1,1,1-TriClEthane,Leach.	< 0.025	mg/L	6-8260	MSB
dClBzL	1,2-Dichlorobenzene, Leach.	< 0.025	mg/L	6-8260	MSB
LTLL	Total Xylenes,Leachable	< 0.075	mg/L	6-8260	TG
cetoneL	Acetone, Leach.	< 0.05	mg/L	6-8260	MSB
TBZL	Ethylbenzene,Leach.	< 0.025	mg/L	6-8260	MSB
BKL	Methyl isobutyl ketone,Leach.	< 0.025	mg/L	6-8260	MSB
luenL	Toluene,Leach.	< 0.025	mg/L	6-8260	MSB
dSulfL	Carbon disulfide, Leach.	< 0.025	mg/L	6-8260	MSB
on113L	Freon-113, Leach.	< 0.05	mg/L	6-8260	MSB
lFMeaL	Trichlorofluoromethane,Leach.	< 0.05	mg/L	6-8260	MSB
AcetL	Ethyl acetate,Leach.	< 0.025	mg/L	6-8260	MSB
/LISR'D	Volatile Organic Scan	04/27 1152	init	6-8260	MSB

OMMENTS:

Rev 5/2/94

OOTNOTES: MI - Surrogate recovery is not reportable due to matrix interferences
Dilution - Minimum dilution required to allow acceptable quantitation
ppm = mg/L(Liquid), mg/kg(Solid) ppb = ug/L(Liquid), ug/kg(Soil)
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1. ASTM: American Society for Testing and Materials, 1984.
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3. EPA-600/4-82-057, Methods for Organic Chemical Analysis of Municipal & Industrial Wastewater, 1982.
4. HACH: Test Methods, accepted by EPA in November, 1983.
5. SM: Standard Methods for the Examination of Water and Wastewater, 17th edition.
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LAB ANALYSIS REPORT

:port Date: MAY 2 1994 Page # 1

:ranswestern Pipeline - Roswell Reviewed by:TG

:O. Box 1717 Customer#: 325
:oswell , NM 88202 Job Number:

:tn: Campbell, Larry Date Collected:04/14/94

:ample Number: 94002415 Time Collected:1245
:oject Name:
:mple ID: RL-2-4 GRAB Date Received: 04/18/94

Test Code	Analyte	Result	Units	Method	Analyst
ZHE'D	Zero Headspace Extract. (D/T)	04/21 1900	init.	6-1311	PS
VOA'D	TCLP Volatiles (Date/Time)	04/27 1216	init.	6-8260	MSB
:8260L	Benzene, Leach.	< 0.025	mg/L	6-8260	MSB
etCIL	Carbon tetrachloride,Leach.	< 0.025	mg/L	6-8260	MSB
:LBZL	Chlorobenzene, Leach.	< 0.025	mg/L	6-8260	MSB
:lFormL	Chloroform, Leach.	< 0.025	mg/L	6-8260	MSB
lC1EtaL	1,2-Dichloroethane, Leach.	< 0.025	mg/L	6-8260	MSB
dC1EtaL	1,1-Dichloroethene, Leach.	< 0.05	mg/L	6-8260	MSB
IEKL	Methyl ethyl ketone, Leach.	< 0.05	mg/L	6-8260	MSB
tC1EtL	Tetrachloroethylene,Leach.	< 0.025	mg/L	6-8260	MSB
:1EtheL	Trichloroethene, Leach.	< 0.025	mg/L	6-8260	MSB
/nC1L	Vinyl Chloride, Leach.	< 0.05	mg/L	6-8260	MSB
lBrFMetL	dBrFMethane(surr)	96.	%	86-118	MSB
;1d8Lsu	Toluene-d8 (surr)	98.	%	86-110	MSB
3FBLsur	4-BFB (surr)	94.	%	86-115	MSB
TBTL'D	TCLP Bottle Extraction	04/20 1730	init.	6-1311	PS
SVX'D	Base/neut/acid Extraction(D/T)	04/26 1500	init.	6-3510	AM
3V'D	TCLP Semivolatiles (D/T)	04/27 2008	init.	6-8270	SA
14dC1BZL	1,4-Dichlorobenzene, Leach.	< 0.050	mg/L	6-8270	SA
24dNitTL	2,4-Dinitrotoluene, Leachable	< 0.050	mg/L	6-8270	SA

5/2/94
Larry Campbell

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LAB ANALYSIS REPORT

port Date: MAY 2 1994 Page # 2

answestern Pipeline - Roswell Reviewed by:TG

.O. Box 1717 Customer#: 325
swell , NM 88202 Job Number:

ttn: Campbell, Larry Date Collected:04/14/94

mple Number: 94002415 Time Collected:1245
oject Name:
ample ID: RL-2-4 GRAB Date Received: 04/18/94

Test Code	Analyte	Result	Units	Method	Analyst
exClBzL	Hexachlorobenzene, Leachable	< 0.050	mg/L	6-8270	SA
ClButL	Hexachlorobutadiene, Leachable	< 0.050	mg/L	6-8270	SA
xClEtL	Hexachloroethane, Leachable	< 0.050	mg/L	6-8270	SA
resolTL	Total Cresols, Leachable	< 0.150	mg/L	6-8270	TG
itroBzL	Nitrobenzene, Leachable	< 0.050	mg/L	6-8270	SA
tClPhL	Pentachlorophenol, Leachable	< 0.050	mg/L	6-8270	SA
yridinL	Pyridine, Leach.	< 0.050	mg/L	6-8270	SA
45tClPL	2,4,5-Trichlorophenol,Leachable	< 0.050	mg/L	6-8270	SA
46tClPL	2,4,6-Trichlorophenol,Leachable	< 0.050	mg/L	6-8270	SA
FPhenlL	2Fluorophenol(surr)	23.	%	6-8270	SA
henld6L	Phenol-d6 (surr)	17.	%	6-8270	SA
itBzd5L	Nitrobenzene-d5 (surr)	52.	%	6-8270	SA
FbiPhnL	2Fluorobiphenyl (surr)	55.	%	6-8270	SA
riBrPhL	2,4,6Tribromophenol (surr)	82.	%	6-8270	SA
METX'D	TCLP Bottle Extract. (D/T)	04/20 1730	init.	6-1311	PS
ERCL'D	Mercury Analysis (D/T)	04/22 1300	init.	6-7470	TM
gCVAA1	Mercury, Leachable	< 0.001	mg/L	6-7470	TM
MiWL'D	Acid Digestion(Date/Time)	04/21 1200	init.	6-3015	BW
ICP'L'D	ICP Analysis (Date/Time)	04/29 1245	init.	6-6010	BW
AsICP1	Arsenic, Leachable	< 0.28	mg/L	6-6010	BW

5/2/94

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LAB ANALYSIS REPORT

port Date: MAY 2 1994 Page # 3

answestern Pipeline - Roswell Reviewed by:TG

.O. Box 1717 Customer#: 325
aswell , NM 88202 Job Number:

ttn: Campbell, Larry Date Collected:04/14/94

mple Number: 94002415 Time Collected:1245
oject Name:
ample ID: RL-2-4 GRAB Date Received: 04/18/94

est Code	Analyte	Result	Units	Method	Analyst
BaICP1	Barium, Leachable	1.4	mg/L	6-6010	BW
CdICP1	Cadmium,Leachable	< 0.03	mg/L	6-6010	BW
rICP1	Chromium, Leachable	< 0.03	mg/L	6-6010	BW
bICP1	Lead, Leachable	< 0.03	mg/L	6-6010	BW
SeICP1	Selenium, Leachable	< 0.28	mg/L	6-6010	BW
gICP1	Silver, Leachable	< 0.03	mg/L	6-6010	BW
lMeanL	Methylene chloride, Leach.	< 0.05	mg/L	6-8260	MSB
11tClEL	1,1,1-TriClEthane,Leach.	< 0.025	mg/L	6-8260	MSB
2dClBzL	1,2-Dichlorobenzene, Leach.	< 0.025	mg/L	6-8260	MSB
LTLL	Total Xylenes,Leachable	< 0.075	mg/L	6-8260	TG
etoneL	Acetone, Leach.	.14	mg/L	6-8260	MSB
TBZL	Ethylbenzene,Leach.	< 0.025	mg/L	6-8260	MSB
BKL	Methyl isobutyl ketone,Leach.	< 0.025	mg/L	6-8260	MSB
luenL	Toluene,Leach.	< 0.025	mg/L	6-8260	MSB
dSulfL	Carbon disulfide, Leach.	< 0.025	mg/L	6-8260	MSB
ron113L	Freon-113, Leach.	< 0.05	mg/L	6-8260	MSB
lFMeaL	Trichlorofluoromethane,Leach.	< 0.05	mg/L	6-8260	MSB
AcetL	Ethyl acetate,Leach.	< 0.025	mg/L	6-8260	MSB
LISR'D	Volatile Organic Scan	04/27 1216	init	6-8260	MSB

OMMENTS:

Rev 5/2/94
Terry Dillon

OOTNOTES: MI - Surrogate recovery is not reportable due to matrix interferences
Dilution - Minimum dilution required to allow acceptable quantitation
ppm = mg/L(Liquid), mg/kg(Solid) ppb = ug/L(Liquid), ug/kg(Soil)
init = date & time initiated BRL = Below Reporting Limit

reparation and Analysis Method References:

1. ASTM: American Society for Testing and Materials, 1984.
2. EPA-600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 1978 (revised 1983).
3. EPA-600/4-82-057, Methods for Organic Chemical Analysis of Municipal & Industrial Wastewater, 1982.
4. HACH: Test Methods, accepted by EPA in November, 1983.
5. SM: Standard Methods for the Examination of Water and Wastewater, 17th edition.
6. SW: SW-846, Test Methods for Evaluation of Solid Waste, Third edition.

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LAB ANALYSIS REPORT

port Date: MAY 2 1994 Page # 1

answestern Pipeline - Roswell Reviewed by:TG

.O. Box 1717 Customer#: 325
oswell , NM 88202 Job Number:

tn: Campbell, Larry Date Collected:04/14/94

mple Number: 94002416 Time Collected:1425
oject Name:
mple ID: RL-3-3 GRAB Date Received: 04/18/94

est Code	Analyte	Result	Units	Method	Analyst
ZHE'D	Zero Headspace Extract. (D/T)	04/21 1900	init.	6-1311	PS
VOA'D	TCLP Volatiles (Date/Time)	04/27 1556	init.	6-8260	MSB
8260L	Benzene, Leach.	< 0.025	mg/L	6-8260	MSB
etCIL	Carbon tetrachloride,Leach.	< 0.025	mg/L	6-8260	MSB
LBZL	Chlorobenzene, Leach.	< 0.025	mg/L	6-8260	MSB
FormL	Chloroform, Leach.	< 0.025	mg/L	6-8260	MSB
CIEtaL	1,2-Dichloroethane, Leach.	< 0.025	mg/L	6-8260	MSB
dCIEteL	1,1-Dichloroethene, Leach.	< 0.05	mg/L	6-8260	MSB
EKL	Methyl ethyl ketone, Leach.	< 0.05	mg/L	6-8260	MSB
tCIEtL	Tetrachloroethylene,Leach.	< 0.025	mg/L	6-8260	MSB
CIEtheL	Trichloroethene, Leach.	< 0.025	mg/L	6-8260	MSB
nCIL	Vinyl Chloride, Leach.	< 0.05	mg/L	6-8260	MSB
BrFMetL	dBrFMethane(surr)	88.	%	86-118	MSB
ld8Lsu	Toluene-d8 (surr)	100.	%	86-110	MSB
BFBLsur	4-BFB (surr)	90.	%	86-115	MSB
BTL'D	TCLP Bottle Extraction	04/20 1730	init.	6-1311	PS
SVX'D	Base/neut/acid Extraction(D/T)	04/26 1500	init.	6-3510	AM
SV'D	TCLP Semivolatiles (D/T)	04/27 2040	init.	6-8270	SA
4dCIBZL	1,4-Dichlorobenzene, Leach.	< 0.050	mg/L	6-8270	SA
4dNitTL	2,4-Dinitrotoluene, Leachable	< 0.050	mg/L	6-8270	SA

Rev 5/2/94
Larry Dallman

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LAB ANALYSIS REPORT

port Date: MAY 2 1994 Page # 2

answestern Pipeline - Roswell Reviewed by:TG

.O. Box 1717 Customer#: 325
swell , NM 88202 Job Number:

ttn: Campbell, Larry Date Collected:04/14/94

mple Number: 94002416 Time Collected:1425
oject Name:
ample ID: RL-3-3 GRAB Date Received: 04/18/94

Test Code	Analyte	Result	Units	Method	Analyst
lexClBzL	Hexachlorobenzene, Leachable	< 0.050	mg/L	6-8270	SA
.ClButL	Hexachlorobutadiene, Leachable	< 0.050	mg/L	6-8270	SA
xClEtL	Hexachloroethane, Leachable	< 0.050	mg/L	6-8270	SA
resolTL	Total Cresols, Leachable	< 0.150	mg/L	6-8270	TG
itroBzL	Nitrobenzene, Leachable	< 0.050	mg/L	6-8270	SA
ntClPhL	Pentachlorophenol, Leachable	< 0.050	mg/L	6-8270	SA
yridinL	Pyridine, Leach.	< 0.050	mg/L	6-8270	SA
245tClPL	2,4,5-Trichlorophenol,Leachable	< 0.050	mg/L	6-8270	SA
46tClPL	2,4,6-Trichlorophenol,Leachable	< 0.050	mg/L	6-8270	SA
2PhenlL	2Fluorophenol(surr)	50.	%	6-8270	SA
henld6L	Phenol-d6 (surr)	44.	%	6-8270	SA
itBzd5L	Nitrobenzene-d5 (surr)	58.	%	6-8270	SA
biPhnL	2Fluorobiphenyl (surr)	57.	%	6-8270	SA
riBrPhL	2,4,6Tribromophenol (surr)	88.	%	6-8270	SA
TMETX'D	TCLP Bottle Extract. (D/T)	04/20 1730	init.	6-1311	PS
ERCL'D	Mercury Analysis (D/T)	04/22 1300	init.	6-7470	TM
gCVAAl	Mercury, Leachable	< 0.001	mg/L	6-7470	TM
MiWL'D	Acid Digestion(Date/Time)	04/21 1200	init.	6-3015	BW
ICP'L'D	ICP Analysis (Date/Time)	04/29 1245	init.	6-6010	BW
AsICPl	Arsenic, Leachable	< 0.28	mg/L	6-6010	BW

RW 5/2/94
Larry Wilson

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LAB ANALYSIS REPORT

eport Date: MAY 2 1994 Page # 3

answestern Pipeline - Roswell Reviewed by:TG

.O. Box 1717 Customer#: 325
swell , NM 88202 Job Number:

ttn: Campbell, Larry Date Collected:04/14/94

mple Number: 94002416 Time Collected:1425
roject Name:
ample ID: RL-3-3 GRAB Date Received: 04/18/94

est Code	Analyte	Result	Units	Method	Analyst
BaICP1	Barium, Leachable	1.4	mg/L	6-6010	BW
dICP1	Cadmium,Leachable	< 0.03	mg/L	6-6010	BW
rICP1	Chromium, Leachable	< 0.03	mg/L	6-6010	BW
PbICP1	Lead, Leachable	< 0.03	mg/L	6-6010	BW
eICP1	Selenium, Leachable	< 0.28	mg/L	6-6010	BW
gICP1	Silver, Leachable	< 0.03	mg/L	6-6010	BW
ClMeanL	Methylene chloride, Leach.	< 0.05	mg/L	6-8260	MSB
11tClEL	1,1,1-TriClEthane,Leach.	< 0.025	mg/L	6-8260	MSB
dClBzL	1,2-Dichlorobenzene, Leach.	< 0.025	mg/L	6-8260	MSB
LTLL	Total Xylenes,Leachable	< 0.075	mg/L	6-8260	TG
cetoneL	Acetone, Leach.	< 0.05	mg/L	6-8260	MSB
TBZL	Ethylbenzene,Leach.	< 0.025	mg/L	6-8260	MSB
IBKL	Methyl isobutyl ketone,Leach.	< 0.025	mg/L	6-8260	MSB
oluenL	Toluene,Leach.	< 0.025	mg/L	6-8260	MSB
dSulfL	Carbon disulfide, Leach.	< 0.025	mg/L	6-8260	MSB
ron113L	Freon-113, Leach.	< 0.05	mg/L	6-8260	MSB
ClFMeaL	Trichlorofluoromethane,Leach.	< 0.05	mg/L	6-8260	MSB
tAcetL	Ethyl acetate,Leach.	< 0.025	mg/L	6-8260	MSB
/LISR'D	Volatile Organic Scan	04/27 1556	init	6-8260	MSB

OMMENTS:

Rec'd 5/2/94
Larry Dillman

OOTNOTES: MI - Surrogate recovery is not reportable due to matrix interferences
Dilution - Minimum dilution required to allow acceptable quantitation
ppm = mg/L(Liquid), mg/kg(Solid) ppb = ug/L(Liquid), ug/kg(Soil)
init = date & time initiated BRL = Below Reporting Limit

Preparation and Analysis Method References:

1. ASTM: American Society for Testing and Materials, 1984.
2. EPA-600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 1978 (revised 1983).
3. EPA-600/4-82-057, Methods for Organic Chemical Analysis of Municipal & Industrial Wastewater, 1982.
4. HACH: Test Methods, accepted by EPA in November, 1983.
5. SM: Standard Methods for the Examination of Water and Wastewater, 17th edition.
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LAB ANALYSIS REPORT

port Date: MAY 2 1994 Page # 1

answestern Pipeline - Roswell Reviewed by:TG

.O. Box 1717 Customer#: 325
oswell , NM 88202 Job Number:

tn: Campbell, Larry Date Collected:04/14/94

mple Number: 94002417 Time Collected:1430
oject Name:
ample ID: RL-3-4 GRAB Date Received: 04/18/94

est Code	Analyte	Result	Units	Method	Analyst
ZHE'D	Zero Headspace Extract. (D/T)	04/21 1900	init.	6-1311	PS
VOA'D	TCLP Volatiles (Date/Time)	04/27 1618	init.	6-8260	MSB
8260L	Benzene, Leach.	< 0.025	mg/L	6-8260	MSB
TetClL	Carbon tetrachloride,Leach.	< 0.025	mg/L	6-8260	MSB
LBZL	Chlorobenzene, Leach.	< 0.025	mg/L	6-8260	MSB
lFormL	Chloroform, Leach.	< 0.025	mg/L	6-8260	MSB
dClEtaL	1,2-Dichloroethane, Leach.	< 0.025	mg/L	6-8260	MSB
dClEteL	1,1-Dichloroethene, Leach.	< 0.05	mg/L	6-8260	MSB
EKL	Methyl ethyl ketone, Leach.	.062	mg/L	6-8260	MSB
etClEtL	Tetrachloroethylene,Leach.	< 0.025	mg/L	6-8260	MSB
ClEtheL	Trichloroethene, Leach.	< 0.025	mg/L	6-8260	MSB
nClL	Vinyl Chloride, Leach.	< 0.05	mg/L	6-8260	MSB
BrFMetL	dBrFMethane(surr)	94.	%	86-118	MSB
old8Lsu	Toluene-d8 (surr)	98.	%	86-110	MSB
BFBLsur	4-BFB (surr)	91.	%	86-115	MSB
BTL'D	TCLP Bottle Extraction	04/20 1730	init.	6-1311	PS
SVX'D	Base/neut/acid Extraction(D/T)	04/26 1500	init.	6-3510	AM
SV'D	TCLP Semivolatiles (D/T)	04/27 2113	init.	6-8270	SA
4dClBZL	1,4-Dichlorobenzene, Leach.	< 0.050	mg/L	6-8270	SA
4dNitTL	2,4-Dinitrotoluene, Leachable	< 0.050	mg/L	6-8270	SA

RW 5/2/94
Larry Campbell

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LAB ANALYSIS REPORT

port Date: MAY 2 1994 Page # 2

answestern Pipeline - Roswell Reviewed by:TG

.O. Box 1717 Customer#: 325
swell , NM 88202 Job Number:

ttn: Campbell, Larry Date Collected:04/14/94

mple Number: 94002417 Time Collected:1430
oject Name:
ample ID: RL-3-4 GRAB Date Received: 04/18/94

Test Code	Analyte	Result	Units	Method	Analyst
lexClBzL	Hexachlorobenzene, Leachable	< 0.050	mg/L	6-8270	SA
ClButL	Hexachlorobutadiene, Leachable	< 0.050	mg/L	6-8270	SA
xClEtL	Hexachloroethane, Leachable	< 0.050	mg/L	6-8270	SA
resolTL	Total Cresols, Leachable	< 0.150	mg/L	6-8270	TG
itroBzL	Nitrobenzene, Leachable	< 0.050	mg/L	6-8270	SA
tClPhL	Pentachlorophenol, Leachable	< 0.050	mg/L	6-8270	SA
yridinL	Pyridine, Leach.	< 0.050	mg/L	6-8270	SA
245tClPL	2,4,5-Trichlorophenol,Leachable	< 0.050	mg/L	6-8270	SA
46tClPL	2,4,6-Trichlorophenol,Leachable	< 0.050	mg/L	6-8270	SA
FPhenlL	2Fluorophenol(surr)	79.	%	6-8270	SA
henld6L	Phenol-d6 (surr)	39.	%	6-8270	SA
itBzd5L	Nitrobenzene-d5 (surr)	71.	%	6-8270	SA
FbiPhnL	2Fluorobiphenyl (surr)	61.	%	6-8270	SA
riBrPhL	2,4,6Tribromophenol (surr)	94.	%	6-8270	SA
TMETX'D	TCLP Bottle Extract. (D/T)	04/20 1730	init.	6-1311	PS
MERCL'D	Mercury Analysis (D/T)	04/22 1300	init.	6-7470	TM
gCVAA1	Mercury, Leachable	< 0.001	mg/L	6-7470	TM
MiWL'D	Acid Digestion(Date/Time)	04/21 1200	init.	6-3015	BW
ICP'L'D	ICP Analysis (Date/Time)	04/29 1245	init.	6-6010	BW
AsICPl	Arsenic, Leachable	< 0.28	mg/L	6-6010	BW

TW 5/2/94
Terry Dillon

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LAB ANALYSIS REPORT

port Date: MAY 2 1994 Page # 3

answestern Pipeline - Roswell Reviewed by:TG

.O. Box 1717 Customer#: 325
swell , NM 88202 Job Number:

ttn: Campbell, Larry Date Collected:04/14/94

mple Number: 94002417 Time Collected:1430
oject Name:
ample ID: RL-3-4 GRAB Date Received: 04/18/94

Test Code	Analyte	Result	Units	Method	Analyst
BaICP1	Barium, Leachable	1.9	mg/L	6-6010	BW
CdICP1	Cadmium,Leachable	< 0.03	mg/L	6-6010	BW
CrICP1	Chromium, Leachable	< 0.03	mg/L	6-6010	BW
PbICP1	Lead, Leachable	< 0.03	mg/L	6-6010	BW
SeICP1	Selenium, Leachable	< 0.28	mg/L	6-6010	BW
AgICP1	Silver, Leachable	< 0.03	mg/L	6-6010	BW
ClMeanL	Methylene chloride, Leach.	< 0.05	mg/L	6-8260	MSB
111tClEL	1,1,1-TriClEthane,Leach.	< 0.025	mg/L	6-8260	MSB
2dClBzL	1,2-Dichlorobenzene, Leach.	< 0.025	mg/L	6-8260	MSB
XLTLL	Total Xylenes,Leachable	< 0.075	mg/L	6-8260	TG
AcetoneL	Acetone, Leach.	.051	mg/L	6-8260	MSB
ETBZL	Ethylbenzene,Leach.	< 0.025	mg/L	6-8260	MSB
IBKL	Methyl isobutyl ketone,Leach.	< 0.025	mg/L	6-8260	MSB
ToluenL	Toluene,Leach.	< 0.025	mg/L	6-8260	MSB
CdSulfL	Carbon disulfide, Leach.	< 0.025	mg/L	6-8260	MSB
Freon113L	Freon-113, Leach.	< 0.05	mg/L	6-8260	MSB
ClFMeaL	Trichlorofluoromethane,Leach.	< 0.05	mg/L	6-8260	MSB
EtAcetL	Ethyl acetate,Leach.	< 0.025	mg/L	6-8260	MSB
VLISR'D	Volatile Organic Scan	04/27 1618	init	6-8260	MSB

COMMENTS:

Rev 5/2/94
Larry Campbell

FOOTNOTES: MI - Surrogate recovery is not reportable due to matrix interferences
Dilution - Minimum dilution required to allow acceptable quantitation
ppm = mg/L(Liquid), mg/kg(Solid) ppb = ug/L(Liquid), ug/kg(Soil)
init = date & time initiated BRL = Below Reporting Limit

Preparation and Analysis Method References:

1. ASTM: American Society for Testing and Materials, 1984.
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3. EPA-600/4-82-057, Methods for Organic Chemical Analysis of Municipal & Industrial Wastewater, 1982.
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LAB ANALYSIS REPORT

Report Date: MAY 2 1994 Page # 1

Panswestern Pipeline - Roswell Reviewed by:TG

P.O. Box 1717 Customer#: 325
Roswell , NM 88202 Job Number:

Attn: Campbell, Larry Date Collected:04/14/94

Sample Number: 94002418 Time Collected:1550
Project Name:
Sample ID: RL-4-3 GRAB Date Received: 04/18/94

Test Code	Analyte	Result	Units	Method	Analyst
HE'D	Zero Headspace Extract. (D/T)	04/21 1900	init.	6-1311	PS
VOA'D	TCLP Volatiles (Date/Time)	04/27 1642	init.	6-8260	MSB
8260L	Benzene, Leach.	< 0.025	mg/L	6-8260	MSB
etClL	Carbon tetrachloride,Leach.	< 0.025	mg/L	6-8260	MSB
LBZL	Chlorobenzene, Leach.	< 0.025	mg/L	6-8260	MSB
lFormL	Chloroform, Leach.	< 0.025	mg/L	6-8260	MSB
lClEtaL	1,2-Dichloroethane, Leach.	< 0.025	mg/L	6-8260	MSB
lClEteL	1,1-Dichloroethene, Leach.	< 0.05	mg/L	6-8260	MSB
EKL	Methyl ethyl ketone, Leach.	.074	mg/L	6-8260	MSB
tClEtL	Tetrachloroethylene,Leach.	< 0.025	mg/L	6-8260	MSB
lEtheL	Trichloroethene, Leach.	< 0.025	mg/L	6-8260	MSB
ClL	Vinyl Chloride, Leach.	< 0.05	mg/L	6-8260	MSB
lBrFMetL	dBrFMethane(surr)	94.	%	86-118	MSB
ld8Lsu	Toluene-d8 (surr)	98.	%	86-110	MSB
BFBLsur	4-BFB (surr)	88.	%	86-115	MSB
BTL'D	TCLP Bottle Extraction	04/20 1730	init.	6-1311	PS
SVX'D	Base/neut/acid Extraction(D/T)	04/26 1500	init.	6-3510	AM
SV'D	TCLP Semivolatiles (D/T)	04/28 1709	init.	6-8270	SA
4dClBZL	1,4-Dichlorobenzene, Leach.	< 0.050	mg/L	6-8270	SA
24dNitTL	2,4-Dinitrotoluene, Leachable	< 0.050	mg/L	6-8270	SA

Rev 5/2/94
Larry Campbell

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LAB ANALYSIS REPORT

port Date: MAY 2 1994 Page # 2

answestern Pipeline - Roswell Reviewed by:TG

.O. Box 1717 Customer#: 325
swell , NM 98202 Job Number:

ttn: Campbell, Larry Date Collected:04/14/94

mple Number: 94002418 Time Collected:1550
oject Name:
ample ID: RL-4-3 GRAB Date Received: 04/18/94

Test Code	Analyte	Result	Units	Method	Analyst
HexClBzL	Hexachlorobenzene, Leachable	< 0.050	mg/L	6-8270	SA
ClButL	Hexachlorobutadiene, Leachable	< 0.050	mg/L	6-8270	SA
xClEtL	Hexachloroethane, Leachable	< 0.050	mg/L	6-8270	SA
resolTL	Total Cresols, Leachable	< 0.150	mg/L	6-8270	TG
itroBzL	Nitrobenzene, Leachable	< 0.050	mg/L	6-8270	SA
tClPhL	Pentachlorophenol, Leachable	< 0.050	mg/L	6-8270	SA
yridinL	Pyridine, Leach.	< 0.050	mg/L	6-8270	SA
245tClPL	2,4,5-Trichlorophenol,Leachable	< 0.050	mg/L	6-8270	SA
46tClPL	2,4,6-Trichlorophenol,Leachable	< 0.050	mg/L	6-8270	SA
FPhenlL	2Fluorophenol(surr)	MI	%	6-8270	TG
henld6L	Phenol-d6 (surr)	13.	%	6-8270	SA
itBzd5L	Nitrobenzene-d5 (surr)	67.	%	6-8270	SA
FbiPhnL	2Fluorobiphenyl (surr)	63.	%	6-8270	SA
rlBrPhL	2,4,6Tribromophenol (surr)	14.	%	6-8270	SA
TMETX'D	TCLP Bottle Extract. (D/T)	04/20 1730	init.	6-1311	PS
ERCL'D	Mercury Analysis (D/T)	04/22 1300	init.	6-7470	TM
gCVAAl	Mercury, Leachable	< 0.001	mg/L	6-7470	TM
UMiWL'D	Acid Digestion(Date/Time)	04/21 1200	init.	6-3015	BW
ICP'L'D	ICP Analysis (Date/Time)	04/29 1245	init.	6-6010	BW
AsICPl	Arsenic, Leachable	< 0.28	mg/L	6-6010	BW

5/2/94

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LAB ANALYSIS REPORT

port Date: MAY 2 1994 Page # 3

answestern Pipeline - Roswell Reviewed by:TG

.O. Box 1717 Customer#: 325
swell , NM 88202 Job Number:

ttn: Campbell, Larry Date Collected:04/14/94

mple Number: 94002418 Time Collected:1550
roject Name:
ample ID: RL-4-3 GRAB Date Received: 04/18/94

Test Code	Analyte	Result	Units	Method	Analyst
BaICP1	Barium, Leachable	.83	mg/L	6-6010	BW
dICP1	Cadmium,Leachable	< 0.03	mg/L	6-6010	BW
rICP1	Chromium, Leachable	< 0.03	mg/L	6-6010	BW
PbICP1	Lead, Leachable	< 0.03	mg/L	6-6010	BW
SeICP1	Selenium, Leachable	< 0.28	mg/L	6-6010	BW
gICP1	Silver, Leachable	< 0.03	mg/L	6-6010	BW
2ClMeanL	Methylene chloride, Leach.	< 0.05	mg/L	6-8260	MSB
111tClEL	1,1,1-TriClEthane,Leach.	< 0.025	mg/L	6-8260	MSB
2dClBzL	1,2-Dichlorobenzene, Leach.	< 0.025	mg/L	6-8260	MSB
YLTLL	Total Xylenes,Leachable	< 0.075	mg/L	6-8260	TG
AcetoneL	Acetone, Leach.	< 0.05	mg/L	6-8260	MSB
ETBZL	Ethylbenzene,Leach.	< 0.025	mg/L	6-8260	MSB
IBKL	Methyl isobutyl ketone,Leach.	< 0.025	mg/L	6-8260	MSB
oluenL	Toluene,Leach.	< 0.025	mg/L	6-8260	MSB
CdSulfL	Carbon disulfide, Leach.	< 0.025	mg/L	6-8260	MSB
ron113L	Freon-113, Leach.	< 0.05	mg/L	6-8260	MSB
ClFMeaL	Trichlorofluoromethane,Leach.	< 0.05	mg/L	6-8260	MSB
EtAcetL	Ethyl acetate,Leach.	< 0.025	mg/L	6-8260	MSB
VLISR'D	Volatile Organic Scan	04/27 1642	init	6-8260	MSB

COMMENTS:

5/2/94
Larry Dollinger

FOOTNOTES: MI - Surrogate recovery is not reportable due to matrix interferences
Dilution - Minimum dilution required to allow acceptable quantitation
ppm = mg/L(Liquid), mg/kg(Solid) ppb = ug/L(Liquid), ug/kg(Soil)
init = date & time initiated BRL = Below Reporting Limit

Preparation and Analysis Method References:

1. ASTM: American Society for Testing and Materials, 1984.
2. EPA-600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 1978 (revised 1983).
3. EPA-600/4-82-057, Methods for Organic Chemical Analysis of Municipal & Industrial Wastewater, 1982.
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2525 SOUTH SHORE BLVD, SUITE 100
LEAGUE CITY, TX 77573
713/334-5052 FAX 713/334-3116

LAB ANALYSIS REPORT

Report Date: MAY 2 1994 Page # 1

Transwestern Pipeline - Roswell Reviewed by:TG

P.O. Box 1717 Customer#: 325
Roswell , NM 88202 Job Number:

Attn: Campbell, Larry Date Collected:04/14/94

Sample Number: 94002419 Time Collected:1600
Project Name:
Sample ID: RL-4-4 GRAB Date Received: 04/18/94

Test Code	Analyte	Result	Units	Method	Analyst
ZHE'D	Zero Headspace Extract. (D/T)	04/25 1900	init.	6-1311	PS
VOA'D	TCLP Volatiles (Date/Time)	04/27 1707	init.	6-8260	MSB
8260L	Benzene, Leach.	< 0.025	mg/L	6-8260	MSB
etClL	Carbon tetrachloride,Leach.	< 0.025	mg/L	6-8260	MSB
ClBZL	Chlorobenzene, Leach.	< 0.025	mg/L	6-8260	MSB
ClFormL	Chloroform, Leach.	< 0.025	mg/L	6-8260	MSB
1ClEtaL	1,2-Dichloroethane, Leach.	< 0.025	mg/L	6-8260	MSB
dClEteL	1,1-Dichloroethene, Leach.	< 0.05	mg/L	6-8260	MSB
MEKL	Methyl ethyl ketone, Leach.	< 0.05	mg/L	6-8260	MSB
etClEtL	Tetrachloroethylene,Leach.	< 0.025	mg/L	6-8260	MSB
ClEtheL	Trichloroethene, Leach.	< 0.025	mg/L	6-8260	MSB
nClL	Vinyl Chloride, Leach.	< 0.05	mg/L	6-8260	MSB
dBrFMetL	dBrFMethane(surr)	94.	%	86-118	MSB
ld8Lsu	Toluene-d8 (surr)	98.	%	86-110	MSB
BFBLsur	4-BFB (surr)	88.	%	86-115	MSB
TBTL'D	TCLP Bottle Extraction	04/21 1900	init.	6-1311	PS
SVX'D	Base/neut/acid Extraction(D/T)	04/26 1500	init.	6-3510	RR
SV'D	TCLP Semivolatiles (D/T)	04/28 1740	init.	6-8270	SA
4dClBZL	1,4-Dichlorobenzene, Leach.	< 0.050	mg/L	6-8270	SA
24dNitTL	2,4-Dinitrotoluene, Leachable	< 0.050	mg/L	6-8270	SA

Rev 5/2/94
Larry Campbell

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LEAGUE CITY, TX 77573
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LAB ANALYSIS REPORT

port Date: MAY 2 1994 Page # 2

answestern Pipeline - Roswell Reviewed by:TG

.O. Box 1717 Customer#: 325
swell , NM 88202 Job Number:

ttn: Campbell, Larry Date Collected:04/14/94

mple Number: 94002419 Time Collected:1600
roject Name:
ample ID: RL-4-4 GRAB Date Received: 04/18/94

est Code	Analyte	Result	Units	Method	Analyst
exClBzL	Hexachlorobenzene, Leachable	< 0.050	mg/L	6-8270	SA
ClButL	Hexachlorobutadiene, Leachable	< 0.050	mg/L	6-8270	SA
xClEtL	Hexachloroethane, Leachable	< 0.050	mg/L	6-8270	SA
resolTL	Total Cresols, Leachable	< 0.150	mg/L	6-8270	TG
itroBzL	Nitrobenzene, Leachable	< 0.050	mg/L	6-8270	SA
tClPhL	Pentachlorophenol, Leachable	< 0.050	mg/L	6-8270	SA
yridinL	Pyridine, Leach.	< 0.050	mg/L	6-8270	SA
45tClPL	2,4,5-Trichlorophenol,Leachable	< 0.050	mg/L	6-8270	SA
6tClPL	2,4,6-Trichlorophenol,Leachable	< 0.050	mg/L	6-8270	SA
Phenl L	2Fluorophenol(surr)	31.	%	6-8270	SA
henld6L	Phenol-d6 (surr)	34.	%	6-8270	SA
itBzd5L	Nitrobenzene-d5 (surr)	73.	%	6-8270	SA
biPhnL	2Fluorobiphenyl (surr)	67.	%	6-8270	SA
riBrPhL	2,4,6Tribromophenol (surr)	82.	%	6-8270	SA
TMETX'D	TCLP Bottle Extract. (D/T)	04/21 1900	init.	6-1311	PS
ERCL'D	Mercury Analysis (D/T)	04/22 1300	init.	6-7470	TM
gCVAA1	Mercury, Leachable	< 0.001	mg/L	6-7470	TM
DMiWL'D	Acid Digestion(Date/Time)	04/21 1200	init.	6-3015	BW
ICP'L'D	ICP Analysis (Date/Time)	04/29 1245	init.	6-6010	BW
AsICP1	Arsenic, Leachable	< 0.28	mg/L	6-6010	BW

Rec 5/2/94
Larry Dolle

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LAB ANALYSIS REPORT

eport Date: MAY 2 1994 Page # 3

answestern Pipeline - Roswell Reviewed by:TG

.O. Box 1717 Customer#: 325
swell , NM 88202 Job Number:

ttn: Campbell, Larry Date Collected:04/14/94

mple Number: 94002419 Time Collected:1600
roject Name:
ample ID: RL-4-4 GRAB Date Received: 04/18/94

est Code	Analyte	Result	Units	Method	Analyst
BaICP1	Barium, Leachable	.70	mg/L	6-6010	BW
dICP1	Cadmium,Leachable	< 0.03	mg/L	6-6010	BW
rICP1	Chromium, Leachable	< 0.03	mg/L	6-6010	BW
PbICP1	Lead, Leachable	< 0.03	mg/L	6-6010	BW
eICP1	Selenium, Leachable	< 0.28	mg/L	6-6010	BW
gICP1	Silver, Leachable	< 0.03	mg/L	6-6010	BW
ClMeanL	Methylene chloride, Leach.	.10	mg/L	6-8260	MSB
11tClEL	1,1,1-TriClEthane,Leach.	< 0.025	mg/L	6-8260	MSB
dClBzL	1,2-Dichlorobenzene, Leach.	< 0.025	mg/L	6-8260	MSB
LTLL	Total Xylenes,Leachable	< 0.075	mg/L	6-8260	TG
AcetoneL	Acetone, Leach.	< 0.05	mg/L	6-8260	MSB
BZL	Ethylbenzene,Leach.	< 0.025	mg/L	6-8260	MSB
IBKL	Methyl isobutyl ketone,Leach.	< 0.025	mg/L	6-8260	MSB
oluenL	Toluene,Leach.	< 0.025	mg/L	6-8260	MSB
CdSulfL	Carbon disulfide, Leach.	< 0.025	mg/L	6-8260	MSB
on113L	Freon-113, Leach.	< 0.05	mg/L	6-8260	MSB
ClFMeaL	Trichlorofluoromethane,Leach.	< 0.05	mg/L	6-8260	MSB
EtAcetL	Ethyl acetate,Leach.	< 0.025	mg/L	6-8260	MSB
VLISR'D	Volatile Organic Scan	04/27 1707	init	6-8260	MSB

OMMENTS:

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Dilution - Minimum dilution required to allow acceptable quantitation
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