



Environmental Services Group
Southern Region

Canyon Largo Unit #298 *A-3-24N 06W*
Meter Code 93590

Pit was excavated to 12 feet beneath ground surface. The headspace soil reading from the excavation bottom was 286 parts per million. Soil analytical were as follows; benzene - 5 mg/kg, total BTEX - 157 mg/kg, TPH - 11,100 mg/kg.

One soil boring was completed and no monitoring well was installed. Groundwater was encountered at 19.8 foot below ground surface. Soil boring analytical results were as follows; benzene - <5 mg/kg, total BTEX - 41.3 mg/kg, TPH - 13,100 mg/kg.

The pit was re-excavated to 21 feet beneath ground surface. No groundwater was encountered. A headspace soil reading was as follows: pit bottom- 19 ppm. Soil analytical were as follows; benzene - <0.5 mg/kg, total BTEX - 3 mg/kg, TPH - 10 mg/kg.

A RECON® survey was conducted and fourteen soil-gas samples were collected from the assumed downgradient side of the pit. The samples were collected and analyzed using a laboratory-grade gas chromatograph by Philip Environmental's RECON® system.

Denny S. Faust
BTEX constituents were detected in small amounts in some samples and not detected in other samples.

DEPUTY OIL & GAS INSPECTOR

FEB 06 97

Approved



FIELD PIT SITE ASSESSMENT FORM

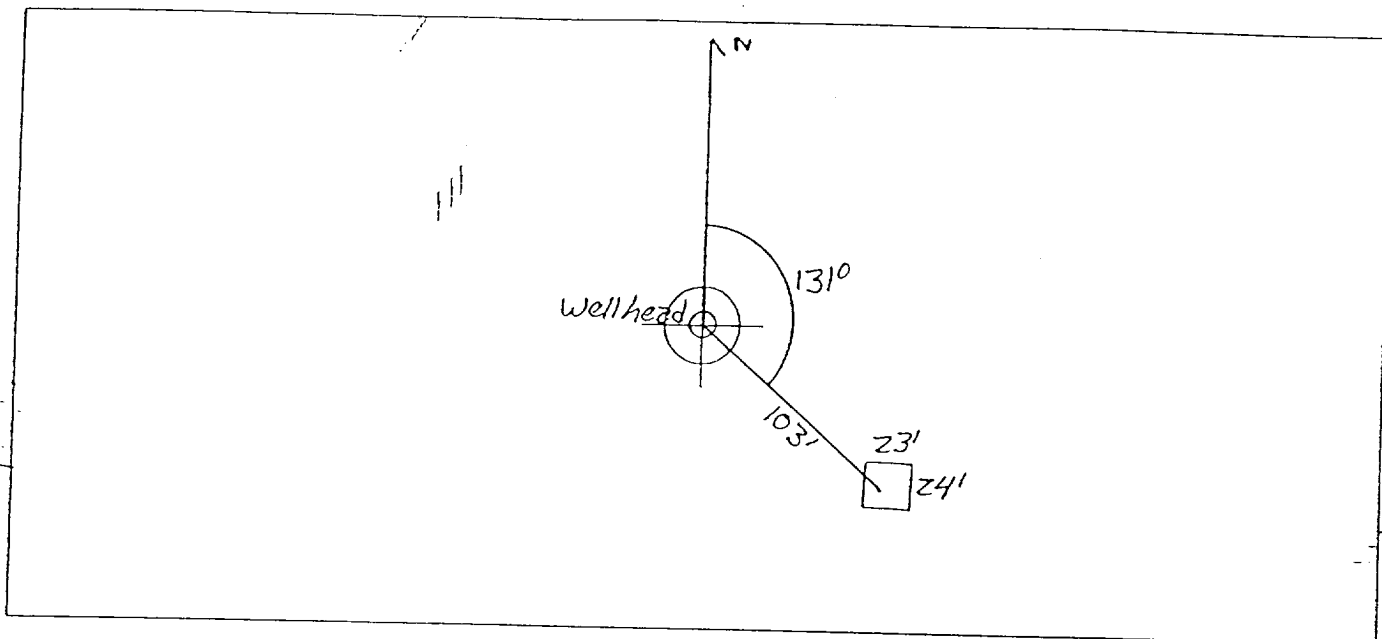
GENERAL	Meter: <u>93-590</u> Location: <u>Canyon Largo Unit #298</u> Operator #: <u>5997</u> Operator Name: <u>Metron Oil & Gas</u> P/L District: <u>Ballard</u> Coordinates: Letter: <u>A</u> Section <u>3</u> Township: <u>24</u> Range: <u>6</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____ Site Assessment Date: <u>07/07/94</u> Area: <u>07</u> Run: <u>72</u>
	NMOCD Zone: (From NMOCD Maps) Inside ☒ (1) Outside ☐ (2) Land Type: BLM ☒ (1) State ☐ (2) Fee ☐ (3) Indian _____ Depth to Groundwater Less Than 50 Feet (20 points) ☒ (1) 50 Ft to 99 Ft (10 points) ☐ (2) Greater Than 100 Ft (0 points) ☐ (3) Wellhead Protection Area : Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? ☐ (1) YES (20 points) ☒ (2) NO (0 points) Horizontal Distance to Surface Water Body Less Than 200 Ft (20 points) ☒ (1) 200 Ft to 1000 Ft (10 points) ☐ (2) Greater Than 1000 Ft (0 points) ☐ (3) Name of Surface Water Body <u>Largo Wash</u> (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds) Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only) ☐ (2) > 100' TOTAL HAZARD RANKING SCORE: <u>40</u> POINTS
REMARKS	Remarks : <u>Redline Book - Inside</u> <u>Vulnerable Zone - Inside</u> <u>Two pits on site, ^{location} pit has some liquid in it,</u> <u>Will close one pit.</u>

93590

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 131° Footage from Wellhead 103'
 b) Length : 23' Width : 24' Depth : 5'

ORIGINAL PIT LOCATION



REMARKS

Remarks :

Pictures @ 1401 (1-4, Roll 3)

Dump Truck

Notified Ballard Dist. of liquid in pit on 7/8/94

Completed By:

Sam Kelly

7/7/94

Phase I Excavation

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 93590 Location: Canyon Largo Unit #298

Coordinates: Letter: A Section 3 Township: 24 Range: 6

Or Latitude _____ Longitude _____

Date Started : 8/29/94 Run: 07 72

FIELD OBSERVATIONS

Sample Number(s): KD 244

Sample Depth: 12' Feet

Final PID Reading 286 ppm PID Reading Depth 12' Feet

Yes No

Groundwater Encountered ☐ ☒ Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation

☒ Approx. Cubic Yards 70

Onsite Bioremediation

☐

Backfill Pit Without Excavation

☐

Soil Disposition:

Envirotech

☒
☐

Tierra

Other Facility

☐

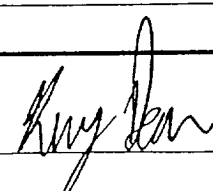
Name: _____

Pit Closure Date: 8/29/94

Pit Closed By: BEI

REMARKS

Remarks : EXCAVATED pit to 12', TOOK PID Sample, closed pit

Signature of Specialist: 



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD244	946029.00
MTR CODE SITE NAME:	93590.00	Canyon Largo Unit #298
SAMPLE DATE TIME (Hrs):	8/29/94	1640
PROJECT:	Phase I	
DATE OF TPH EXT. ANAL.:	8/30/94	8/30/94
DATE OF BTEX EXT. ANAL.:	8/31/94	9/7/94
TYPE DESCRIPTION:	VC	Brown sand & clay

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	5.0	MG/KG	20			
TOLUENE	17	MG/KG	20			
ETHYL BENZENE	15	MG/KG	20			
TOTAL XYLENES	120	MG/KG	20			
TOTAL BTEX	157	MG/KG				
TPH (418.1)	11,100	MG/KG			0.55	28
HEADSPACE PID	286	PPM				
PERCENT SOLIDS	86.4	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 112 % for this sample All QA/QC was acceptable.
Narrative:

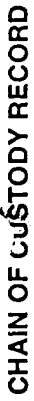
ATI formed analyses.

DF = Dilution Factor Used

Approved By:

Date:

7/18/96



White - Testing Laboratory Canary - EPNG Lab Pink - Field Sampler

Phase II Soil Boring

RECORD OF SUBSURFACE EXPLORATION

PHILIP ENVIRONMENTAL

70 Monroe Road
 ngton, New Mexico 87401
 (506) 326-2262 FAX (506) 326-2388

Borehole # BH-1
 Well # _____
 Page 1 of 1

Project Name EPNG PITS
 Project Number 14509 Phase 6000 77
 Project Location Canyon Largo Unit #298 93590

Elevation _____
 Borehole Location QA-S3-T24-R6
 GWL Depth 19.8' BGS
 Logged By CM CHANCE
 Drilled By CMC K Padilla F. Rivera
 Date/Time Started CM 8/14/95-1250
 Date/Time Completed 8/14/95-1330

Well Logged By CM Chance
 Personnel On-Site K Padilla, F. Rivera, D. Charlie
 Contractors On-Site _____
 Client Personnel On-Site _____
 Drilling Method 4 1/4" ID HSA
 Air Monitoring Method PID, CGI

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM BZ EH HS			Drilling Conditions & Blow Counts
0				Backfill to 12'						
15	1	15-17	6"	Br SAND, vf sand, loose, dry			0	27	459 616	-1257 hr
20	2	20-22	4"	BIK SAND, F-med sand, loose, saturated, odor			0	32	147 NA	-GW @ 19.8' -1700
25				TOB 22'						
30										
35										
40										

Comments: GW @ 19.8' BGS. CMC 78(15-17') sent to lab (BTEX, TPH). Sample
bagged & iced prior to containerization. BH grouted to surface.

Geologist Signature

CM Chance



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC78	947264
MTR CODE SITE NAME:	93590	Canyon Largo Unit #298
SAMPLE DATE TIME (Hrs):	08/17/95	1257
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:	08/21/95	08/21/95
DATE OF BTEX EXT. ANAL.:	08/18/95	08/29/95
TYPE DESCRIPTION:	VG	Light brown fine sand

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<5	MG/KG		D		
TOLUENE	<5	MG/KG		D		
ETHYL BENZENE	<5	MG/KG		D		
TOTAL XYLENES	41.3	MG/KG		D		
TOTAL BTEX	41.3	MG/KG		D		
TPH (418.1)	13,100	MG/KG			0.48	28
HEADSPACE PID	616	PPM				
PERCENT SOLIDS	93.8	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 91 % for this sample All QA/QC was acceptable.
Narrative: _____

DF = Dilution Factor Used

Approved By: John ZanderDate: 7/18/96

[illegible]

Phase III Excavation

FIELD PIT REMEDIATION/CLOSURE FORM/PHASE II

GENERAL

Meter: 93590 Location: Canyon Largo Unit #298
 Coordinates: Letter: A Section 03 Township: 24 Range: 06
 Or Latitude _____ Longitude _____
 Date Started : 10-25-95 Area: 07 Run: 72

FIELD OBSERVATIONS

Sample Number(s): 4P71
 Sample Depth: 21' Feet
 Final PID Reading 19 ppm PID Reading Depth 21' Feet
 Yes No
 Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth _____ Feet
 Final Dimensions: Length 38 Width 36 Depth 21

CLOSURE

Remediation Method :
 Excavation ☒ (1) Approx. Cubic Yards 730 ^{11/2/95}
 Onsite Bioremediation ☐ (2)
 Backfill Pit Without Excavation ☐ (3)
 Overburden Cubic Yards 100
 Soil Disposition:
 Envirotech ☒ (1) ☐ (3) Tierra
 Other Facility ☐ (2) Name: _____
 Pit Closure Date: 10-27-95 Pit Closed By: Philip Env.
Phase III

REMARKS

Remarks : Dug to 21' did not encounter water. Took PID
N-wall 0 ppm, S-wall 2 ppm, E-wall 2 ppm W-wall 2 ppm
Bot was 42 Comp. sample was 19 ppm.

Signature of Specialist: James F. Ferraro



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JP71	947700
MTR CODE SITE NAME:	93590	Canyon Largo Unit #298
SAMPLE DATE TIME (Hrs):	10/26/95	0930
PROJECT:	Phase III Excavation	
DATE OF TPH EXT. ANAL.:	10/31/95	10/27/95
DATE OF BTEX EXT. ANAL.:	10/27/95	10/27/95
TYPE DESCRIPTION:	VC	Brown sand & clay

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.5	MG/KG				
TOLUENE	<0.5	MG/KG				
ETHYL BENZENE	<0.5	MG/KG				
TOTAL XYLENES	<1.5	MG/KG				
TOTAL BTEX	<3	MG/KG				
TPH (418.1)	<10	MG/KG			2.04	28
HEADSPACE PID	19	PPM				
PERCENT SOLIDS	91.4	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 99 % for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Approved By: 

Date: 7/18/96

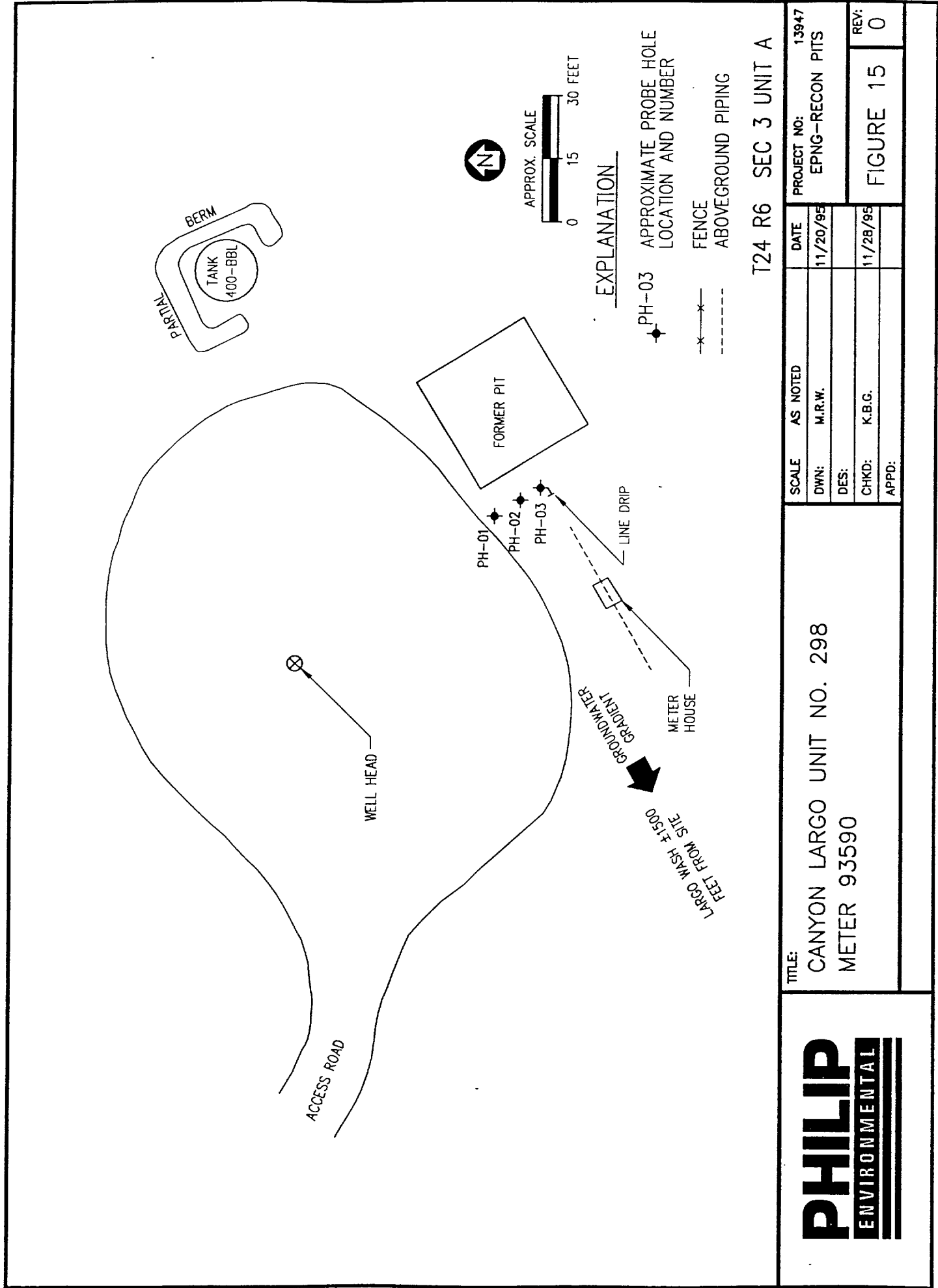


CHAIN OF CUSTODY RECORD

Page _____ of _____

White - Testing Laboratory	Canary - EPNG Lab	Pink - Field Sampler
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97	97	97
98	98	98
99	99	99
100	100	100

RECON®



PHILIP

RECON SAMPLE ANALYSIS

DATA SUMMARY TABLE

Project: 13947

Sample I.D.	Probe Hole Number	Depth (feet)	Benzene (ug/L)	Toluene (ug/L)	Ethyl benzene (ug/L)	m+p-Xylene (ug/L)	o-Xylene (ug/L)	Comments
STD-1111	N/A	N/A	232	232	232	232	232	Calibration Standard
Blank-40	N/A	N/A	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	QC - System Blank
Blank-41	N/A	N/A	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	QC - Probe Rod Blank
C-LARGO304-01	PH-01	3	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO304-02	PH-01	6	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO304-03	PH-01	9	ND(1)	ND(1)	ND(1)	2	ND(1)	Soil-gas
C-LARGO304-04	PH-01	12	ND(1)	ND(1)	ND(1)	<1	ND(1)	Soil-gas
C-LARGO304-05	PH-02	3	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO304-06	PH-02	6	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO304-07	PH-02	9	ND(1)	1	<1	7	2	Soil-gas
C-LARGO304-08	PH-02	12	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO304-09	PH-03	3	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO304-10	PH-03	6	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO304-11	PH-03	9	ND(1)	<1	ND(1)	4	1	Soil-gas
C-LARGO304-12	PH-03	12	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO298-01	PH-01	3	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO298-02	PH-01	6	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO298-03	PH-01	9	ND(1)	<1	<1	7	2	Soil-gas
C-LARGO298-04	PH-01	12	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO298-05	PH-02	3	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO298-06	PH-02	6	ND(1)	ND(1)	ND(1)	1	ND(1)	Soil-gas
C-LARGO298-07	PH-02	9	ND(1)	ND(1)	ND(1)	1	ND(1)	Soil-gas
C-LARGO298-08	PH-02	12	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO298-08-D	N/A	N/A	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	QC - Duplicate
Blank-42	N/A	N/A	342	298	278	279	282	QC - System Blank
QCRT-14	N/A	N/A	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	QC - Retention Times
C-LARGO298-09	PH-03	3	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO298-10	PH-03	6	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas

D = duplicate analysis.

QC = quality control.

ug/L = micrograms of compound detected per liter of soil vapor analyzed.

ND = not detected at the lower quantifiable limit indicated in parenthesis.

NA = not applicable.

QA Review:

Paul Anderson/KBQ

Review Date:

1-31-96 CK 2/13/96

RECON SAMPLE ANALYSIS DATA SUMMARY TABLE Project: 13947

Sample I.D.	Probe Hole Number	Depth (feet)	Benzene (ug/L)	Toluene (ug/L)	Ethyl benzene (ug/L)	m+p-Xylene (ug/L)	o-Xylene (ug/L)	Comments
C-LARGO298-11	PH-03	9	ND(1)	2	3	1	2	Soil-gas
C-LARGO298-12	PH-03	12	ND(1)	<1	2-ND(1)	<1-ND(1)	<1-ND(1)	Soil-gas
C-LARGO298-12-D	PH-03	12	ND(1)	<1	ND(1)	ND(1)	ND(1)	QC - Duplicate
Blank-43	N/A	N/A	ND(1)	<1-ND(1)	ND(1)	ND(1)	ND(1)	QC - System Blank
QCRT-15	N/A	N/A	261	203	184	184	184	QC - Retention Times
Blank-44	N/A	N/A	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	QC - System Blank
STD-1113	N/A	N/A	232	232	232	232	232	Calibration Standard
Blank-45	N/A	N/A	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	QC - System Blank
Blank-46	N/A	N/A	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	QC - Probe Rod Blank
C-LARGO302-01	PH-01	3	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO302-02	PH-01	6	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO302-03	PH-01	9	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO302-04	PH-01	12	ND(1)	ND(1)	ND(1)	<1	ND(1)	Soil-gas
C-LARGO302-05	PH-02	3	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO302-06	PH-02	6	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO302-07	PH-02	9	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO302-08	PH-02	12	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO302-09	PH-03	3	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO302-10	PH-03	6	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO302-11	PH-03	9	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO302-12	PH-03	12	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
C-LARGO302-12-D	PH-03	12	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas
Blank-47	N/A	N/A	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	QC - Duplicate
QCRT-16	N/A	N/A	232	232	232	232	232	QC - System Blank
LATERAL2C1-01	PH-01	3	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	QC - Retention Times
QCRT-17	N/A	N/A	232	232	232	232	232	Soil-gas
LATERAL2C1-02	PH-01	6	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	QC - Retention Times
LATERAL2C1-03	PH-01	9	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Soil-gas

D = duplicate analysis.

QC = quality control.

ug/L = micrograms of compound detected per liter of soil or groundwater vapor analyzed.

ND = not detected at the lower quantifiable limit indicated in parenthesis.

NA = not applicable.

QA Review:

Paul Anderson

Review Date:

1-31-96 RK 2/13/96