



Environmental Services Group
Southern Region

Canyon Largo Unit #302 *J-3-24W-06W*
Meter Code 93793

Pit was excavated to 12 feet beneath ground surface. The headspace soil reading from excavation bottom was 84 parts per million. Soil analytical were as follows: benzene - <0.5 mg/kg, total BTEX - 111 mg/kg, TPH - 20,400 mg/kg.

One soil boring was completed, no monitoring well was installed, and no soil sample was collected due to groundwater level less than 20 feet.

The pit was re-excavated to approximately 18 feet beneath ground surface. Soil analytical were as follows; benzene - <0.5 mg/kg, total BTEX - 4.5 mg/kg, TPH - 2,330 mg/kg. Groundwater was encountered during excavation and a groundwater sample was collected from the excavation. Laboratory results for the groundwater sample were as follows; benzene - 7.6 ppb, toluene - <2.5 ppb, ethylbenzene - 16.8 ppb, total xylenes - 124 ppb.

A RECON® survey was conducted and five groundwater samples were collected on 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. BTEX constituents were detected at levels below standards. Twelve soil-gas samples were collected and analyzed with BTEX constituents not detected.

Denny L. Faust
DEPUTY OIL & GAS INSPECTOR

FEB 06 97

Approved



FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 93-793 Location: Canyon Largo Unit #302
 Operator #: 5997 Operator Name: Merrion P/L District: Ballard
 Coordinates: Letter: J Section 3 Township: 24 Range: 6
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator _____ Location Drip: X Line Drip: _____ Other: _____
 Site Assessment Date: 07/13/94 Area: 07 Run: 42

SITE ASSESSMENT

NMOCD Zone:

(From NMOCD
Maps)

Inside
Outside

☒ (1)
☐ (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 Largo Wash

(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: 40 POINTS

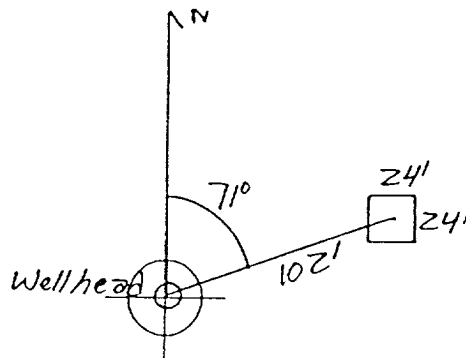
REMARKS

Remarks : Redline Book - Inside Vulnerable Zone - Inside
Three pits on site, location drip pit has liquid in it.
Will close one pit.

93793

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 71° Footage from Wellhead 102'
b) Length : 24' Width : 24' Depth : 3'



ORIGINAL PIT LOCATION

Remarks :

Pictures @ 13:21 (12-15, R0117)
End Dump

REMARKS

Completed By:

Samuel Kelly

7/13/94

Phase I Excavation

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 93793 Location: CANYON Largo Unit #302
 Coordinates: Letter: J Section 3 Township: 24 Range: 6
 Or Latitude _____ Longitude _____
 Date Started : 8-30-94 Run: 07 42

FIELD OBSERVATIONS

Sample Number(s): ~~KB12~~ KB212
 Sample Depth: 12' Feet
 Final PID Reading 084 PID Reading Depth 12' Feet
 Yes No
 Groundwater Encountered ☐ ☒ Approximate Depth _____ Feet

CLOSURE

Remediation Method :
 Excavation ☒ Approx. Cubic Yards 220
 Onsite Bioremediation ☐
 Backfill Pit Without Excavation ☐
 Soil Disposition:
 Envirotech ☒ Tierra ☐
 Other Facility ☐ Name: _____
 Pit Closure Date: 8-30-94 Pit Closed By: B.E.I.

REMARKS

Remarks : Some LHM markers Pit has A lot of water
& oil. dumped 2 loads To solidify Pit At 12' soil
gray looking. Pld closed Pit

Signature of Specialist: Kelly Padilla



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP212	946034
MTR CODE SITE NAME:	93793	Canyon Largo Unit #302
SAMPLE DATE TIME (Hrs):	08/30/94	0924
PROJECT:	Phase I	
DATE OF TPH EXT. ANAL.:	09/01/94	09/01/94
DATE OF BTEX EXT. ANAL.:	09/11/94	09/11/94
TYPE DESCRIPTION:	VC	Gray course sand

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.5	MG/KG	20			
TOLUENE	23	MG/KG	20			
ETHYL BENZENE	12	MG/KG	20			
TOTAL XYLENES	75	MG/KG	20			
TOTAL BTEX	111	MG/KG				
TPH (418.1)	20,400	MG/KG			0.50	28
HEADSPACE PID	84	PPM				
PERCENT SOLIDS	82.4	%				

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

The Surrogate Recovery was at 95 % for this sample All QA/QC was acceptable.

Narrative:

performed analysis.

DF = Dilution Factor Used

Approved By:

[Signature]

Date:

7/19/96

Phase II Soil Boring

RECORD OF SUBSURFACE EXPLORATION

Phillip Environmental Services Corp.

00 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole #

Well #

Page

BH-1

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Project Name

Project Number

Project Location

EPNG Pits

14509

Phase

Canyon Largo Unit #302

Well Logged By

Personnel On-Site

Contractors On-Site

Client Personnel On-Site

S.Kelly

R. Padilla, F. Rivera, D. Charley

Drilling Method

Air Monitoring Method

4 1/4" ID HSA

CGI, PID

Elevation

Borehole Location

GWL Depth

Logged By

Drilled By

Date/Time Started

Date/Time Completed

T24, RG, S.3, J

S.Kelly

8/11/95, 1100

8/11/95, 1205

93793

Depth (feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
							BZ	BH	S	
0				Backfill						
5				to 12'						
10										
15		15-16.5		SAND, black, fine to med. loose, wet, trace silt		15.5				Hit water at approx 14'
20				SAA, but brown						12.1' is water level after 15 min.
25				TOB- 16.5'						
30										
35										
40										

Comments:

No sample taken due to high water table. BH grouted to surface.

Phase III Excavation

FIELD PIT REMEDIATION/CLOSURE FORM/PHASE III

88

Meter: 93793 Location: Canyon Largo Unit # 302

Coordinates: Letter: 4 Section 03 Township: 24 Range: 06

Or Latitude _____ Longitude _____

Date Started : 10-27-95 Area: 07 Run: 42

Sample Number(s): 4P74 4P75

Sample Depth: 18 Feet

Final PID Reading 901 ppm PID Reading Depth 18 Feet
Yes No

Groundwater Encountered ☒ (1) ☐ (2) Approximate Depth 13 Feet

Final Dimensions: Length 48 Width 41 Depth 18

Remediation Method :

Excavation ☒ (1) Approx. Cubic Yards 688 LT 11/2/95

Onsite Bioremediation ☐ (2)

Backfill Pit Without Excavation ☐ (3)

Overburden Cubic Yards _____

Soil Disposition:

Envirotech ☒ (1) ☐ (3) Tierra

Other Facility ☐ (2) Name: _____

Pit Closure Date: 10-30-95

Pit Closed By: Philip Env.

Phase III

Remarks : Dug to 13 ft, encountered groundwater, notified
OCD in town, also Santa Fe. Dug to 18' to end pit size, but
due to stuff off pit ended up being 13 ft deep. Took
PID samples N-wall 9 ppm, S wall 2 ppm, E wall 0 ppm, over

Signature of Specialist: James J. Brown

**FIELD SERVICES LABORATORY****ANALYTICAL REPORT****PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone****SAMPLE IDENTIFICATION**

	Field ID	Lab ID
SAMPLE NUMBER:	JP75	947705
MTR CODE SITE NAME:	93793	Canyon Largo Unit #302
SAMPLE DATE TIME (Hrs):	10/30/95	1300
PROJECT:	Phase III Excavation	
DATE OF TPH EXT. ANAL.:	10/31/95	10/29/95
DATE OF BTEX EXT. ANAL.:	10/31/95	10/31/95
TYPE DESCRIPTION:	VG	Fine brown sand

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	0.8	MG/KG				
TOTAL XYLENES	3.7	MG/KG				
TOTAL BTEX	4.5	MG/KG				
TPH (418.1)	2330	MG/KG			1.98	28
HEADSPACE PID	901	PPM				
PERCENT SOLIDS	93.2	%				

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

The Surrogate Recovery was at 100 % for this sample All QA/QC was acceptable.
Narrative: _____

DF = Dilution Factor Used

Approved By: John LaddDate: 7/19/96

[illegible]



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Water

SAMPLE IDENTIFICATION

SAMPLE NUMBER:

947704

FIELD ID:

JP74

MTR CODE:

93793

SAMPLE DATE:

10/30/95

SAMPLE TYPE:

W

SITE NAME:

Canyon Largo Unit #302

PROJECT:

Phase III Excavation

DATE OF BTEX ANALYSIS:

11/02/95

FIELD COMMENTS:

EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT	QUALIFIER	WQCC LIMIT PPB
TDS - TOTAL DISSOLVED SOLIDS (PPM)	Not Required		None
BENZENE (PPB)	7.6		10
TOLUENE (PPB)	<2.5		740
ETHYL BENZENE (PPB)	16.8		750
TOTAL XYLENES (PPB)	124		620
SURROGATE % RECOVERY	106	Allowed Range 80 to 120 %	

NOTES:

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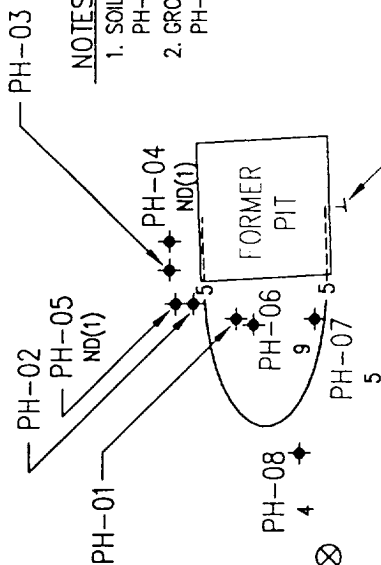
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White - Testing Laboratory Canary - EPNG Lab Pink - Field Sampler

RECON®

LARGO WASH

GROUNDWATER
GRADIENT
LARGO WASH ±500
FEET FROM SITE



NOTES:

1. SOIL-GAS COLLECTED FROM PROBE HOLES PH-01, PH-02 & PH-03.
2. GROUNDWATER COLLECTED FROM PROBE HOLES PH-04, PH-05, PH-06, PH-07 & PH-08.



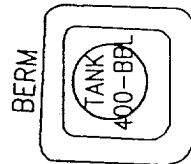
APPROX. SCALE

0 20 40 FEET

LINE HEATER

SUMP

PRODUCTION
PIT



PARTIAL
BERM

EXPLANATION

- PH-03 APPROXIMATE PROBE HOLE LOCATION AND NUMBER
- PH-08 PROBE HOLE LOCATION AND BENZENE CONCENTRATION IN MICROGRAMS PER LITER, (ug/L)
- 5 BENZENE CONCENTRATION, (ug/L)
- 5 CONTOUR, (DASHED WHERE INFERRED)
- 5 WASH
- 5 FENCE
- 5 ABOVEGROUND PIPING

T24 R6 SEC 3 UNIT J

TITLE:		SCALE	AS NOTED	DATE	PROJECT NO:	13947
CANYON LARGO UNIT NO. 302		DWN:	M.R.W.	11/20/95	EPNG-RECON PITS	
METER 93793		DES:				
		CHKD:	K.B.G.	11/28/95		
		APPD:				
		FIGURE 16			REV: 0	

PHILIP
ENVIRONMENTAL

PHILIP

RECONSTRUCTION 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
Blank-68	N/A	N/A	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	QC - System Blank
STD-1121	N/A	N/A	232	232	232	232	232	Calibration Standard
Blank-69	N/A	N/A	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	QC - System Blank
Blank-70	N/A	N/A	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	QC - Probe Rod Blank
TRUJILLO1PC-12	PH-12	4	ND(1)	<1	9	ND(1)	3	Groundwater
TRUJILLO1PC-13	PH-13	4	ND(1)	ND(1)	<1	ND(1)	ND(1)	Groundwater
TRUJILLO1PC-14	PH-14	8	ND(1)	<1	ND(1)	3	3	Groundwater
TRUJILLO1PC-15	PH-15	8	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Groundwater
C-LARGO302-13	PH-04	21-24	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Groundwater
C-LARGO302-14	PH-05	21-24	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	Groundwater
C-LARGO302-15	PH-06	21-24	9	6	88	16	42	Groundwater
C-LARGO302-16	PH-07	21-24	5	2	15	2	5	Groundwater
C-LARGO302-17	PH-08	21-24	4	15	18	21	55	Groundwater
C-LARGO302-17-D	PH-08	21-24	4	17	20	25	68	QC - Duplicate
Blank-71	N/A	N/A	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	QC - System Blank
QCRT-26	N/A	N/A	227	206	203	204	206	QC - Retention Times
Blank-72	N/A	N/A	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	QC - System Blank
STD-1129	N/A	N/A	232	232	232	232	232	Calibration Standard
Blank-73	N/A	N/A	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	QC - System Blank
Blank-74	N/A	N/A	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	QC - Probe Rod Blank
K31 LINEDRIP-01	PH-01	21-24	ND(1)	3	<1	2	<1	Groundwater
K31 LINEDRIP-02	PH-02	21-24	ND(1)	<1	<1	<1	<1	Groundwater
K31 LINEDRIP-03	PH-03	21-24	145	298	38	105	77	Groundwater
K31 LINEDRIP-03MS	PH-03	21-24	300	490	168	249	249	QC - Matrix Spike
C-LARGO304-13	PH-04	18-21	13	2	27	9	ND(1)	Groundwater
C-LARGO304-13MS	PH-05	18-21	79	67	84	64	50	QC - Matrix Spike
C-LARGO304-14	PH-05	18-21	8	17	17	63	49	Groundwater
C-LARGO304-15	PH-06	18-21	ND(1)	ND(1)	5	ND(1)	ND(1)	Groundwater

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.

N/A = not applicable.

MS = matrix spike.

QA Review:

Paul Anderson

Review Date:

1-31-94 *AK* 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)	ND(1)	ND(1)	Soil-gas
C-LARGO302-05	PH-02	3	ND(1)	ND(1)	ND(1)	<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.

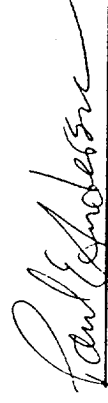
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QA Review:



Review Date:

1-31-96 RK 2/13/96