### Southern Union #1 Meter/Line ID - 72774

#### SITE DETAILS

Legals - Twn: 29N

Operator: Elliot Oil

NMOCD Hazard Ranking: 0

Rng: 13W Sec: 3

Land Type: FEE

Pit Closure Date: 05/10/94

Unit: B



#### RATIONALE FOR CLOSURE

The pit noted above was assessed and ranked according to the criteria in the New Mexico Oil Conservation Division's (NMOCD) Unlined Surface Impoundment Closure Guidelines.

A test pit was excavated to 12 feet and a soil sample was collected for field headspace analysis and laboratory analysis for TPH. Groundwater was not encountered in the test pit. The pit was backfilled and graded in a manner to direct surface runoff away from the pit area. Headspace analysis indicated an organic vapor content of 293 ppm; laboratory analysis indicated a TPH concentration of 14,900 mg/kg. The site was rejected for closure by the OCD on September 30, 1997.

A Phase II Excavation was conducted on January 19, 1999. The pit was excavated to 21 feet and a soil sample was collected for field headspace analysis and laboratory analysis for benzene, total BTEX, and TPH. Groundwater was not encountered in the pit. Approximately 627 cubic yards of excavated material was removed for landfarming and sent to an OCD approved centralized site. The pit was sprayed with fertilizer, backfilled and graded in a manner to direct surface runoff away from the pit area. Depth to bedrock was calculated at 27 feet below ground surface according to professional survey data included with this report. Headspace analysis indicated an organic vapor content of 7.8 ppm; laboratory analysis indicated a benzene concentration of <0.025 mg/kg, a total BTEX concentration of <1.0 mg/kg, and a TPH concentration of <20 mg/kg.

El Paso Field Services Company (EPFS) requests closure of the above mentioned production pit location for the following reasons:

- The primary source, discharge to the pit, has been removed for almost six years.
- The test pit was backfilled and the former pit area graded to direct surface runoff away from the former pit.
- Groundwater was not encountered in the test excavation. In addition, the estimated depth to groundwater is greater than 100 feet; therefore, impact to groundwater is unlikely.
- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of
- Residual hydrocarbons in the soil will degrade naturally with minimal risk to the environment.
- Based on the Hazard Ranking Score, benzene, BTEX, and TPH concentrations were below required remediation levels.
- Excavated material has been removed from the pit eliminating potential direct contact with livestock or the public.

## FIELD PIT SITE ASSESSMELL FORM

GENERAL	Meter: 72774 Location: Southern UNION #1  Operator #: 1960 Operator Name: ELLIOT OIL P/L District: KUTZ  Coordinates: Letter: B Section 3 Township: 29 Range: 13  Or Latitude Longitude Pit Type: Dehydrator X Location Drip: Line Drip: Other:  Site Visit Date: 3:23.94 Run: 02 22
SITE ASSESSMENT	NMOCD Zone: Inside Land Type: BLM ☐ (From NMOCD Vulnerable State ☐ Maps) Zone ☐ Fee ☐ Outside ☐ Indian ☐  Depth to Groundwater Less Than 50 Feet (20 points) ☐ 50 Ft to 99 Ft (10 points) ☐ Greater Than 100 Ft (0 points) ☐ 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? ☐ YES (20 points) ☐ NO (0 points)  Horizontal Distance to Surface Water Body Less Than 200 Ft (20 points) ☐ 200 Ft to 1000 Ft (10 points) ☐ Greater Than 1000 Ft (0 points) ☐ Greater Than 1000 Ft (0 points) ☐ (Surface Water Body ————————————————————————————————————
REMARKS	Remarks: ONLY PIT ON LOCATION. LOCATION IS FENCED OFF IN A HOUSING SUBDIUISION. LITTLE PARK NEXT TO LOCATION. PIT IS 0164.

<i>2</i> *	ORIGINAL PIT LOCATION
	Original Pit : a) Degrees from North <u>211°</u> Footage to Wellhead <u>43′</u> b) Degrees from North Footage to Dogleg
LOCATION	Dogleg Name c) Length :
ORIGINAL PIT LO	
	15' 15'
	Remarks:
	STARTED TAKING PICTURES AT 9:51 A.M. END DUMP
REMARKS	
REM/	
	Completed By:
	Signature 3.23.94 Date

# FIEI PIT REMEDIATION/CLOST : FORM

GENERAL	Meter: 72774 Location: Southern Un. on #/  Coordinates: Letter: 3 Section 3 Township: 29 Range: 13  Or Latitude Longitude  Date Started: \$\frac{1}{2} \frac{5}{10} \frac{94}{94} \text{ Area: 02 Run: 22}
FIELD OBSERVATIONS	Sample Number(s): \( \frac{V\psi_45}{V\psi_5} \)  Sample Depth: \( \frac{12}{293} \)  Feet  Final PID Reading \( \frac{293}{12} \)  Feet  Yes No  Groundwater Encountered \( \begin{array}{c} (1) \overline{\text{Y}} (2) \)  Approximate Depth \( \frac{12}{2} \)  Feet
CLOSURE	Remediation Method:  Excavation
	Envirotech (1) (3) Tierra  Other Facility (2) Name:  Pit Closure Date: 5-10-94 Pit Closed By: BEZ
REMARKS	Remarks: Pit had a little Parafin on top, Knocked in one brim + solidified good.  No line Mallers other hun Elifaso's
	Signature of Specialist: Vale Wilson (SP3191) 04/07/94

Northing, Easting, Elevation, Location 502,101873.2414,116020.4362,5644.7773,GPS 27 501,97724.7213,116097.5956,5601.3748,GPS 40 500,76216.0828,107750.9084,5785.3710,PARK BLUFF 1,96751.4043,119723.3676,5612.4371,GS EDGE OF PIT 2,96726.7413,119720.0210,5611.9972,GS EDGE OF PIT 3,96727.4672,119695.7648,5612.5593,GS EDGE OF PIT 4,96727.8128,119677.7576,5612.4526,GS EDGE OF PIT 5,96751.2788,119676.2497,5612.6888,GS EDGE OF PIT 6,96772.6836,119675.6295,5612.8986,GS EDGE OF PIT 7,96773.6104,119695.0671,5613.0859,GS EDGE OF PIT 8,96771.4221,119719.3513,5612.8295,GS EDGE OF PIT 9,96750.2445,119695.6948,5612.7361,GS CENTER OF PIT 12,96854.9608,120481.9273,5585.8184,EAST CANYON BED ROCK 13,96701.1066,119756.9844,5610.4631,SE FENCE CORNER 14,96850.0116,119756.8121,5615.6925,NE FENCE CORNER 15,96849.9789,119657.9890,5616.1679,NW FENCE CORNER 16,96701.3606,119658.5641,5613.8476,SW FENCE CORNER 506,97622.9300,121886.9700,5724.4400,GPS 41 507,97751.1872,121216.0953,5649.2208,NE 03-30-13 COR



# FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT - Soil

# SAMPLE IDENTIFICATION

	Field	ID		Lab ID					
SAMPLE NUMBER:	٧ω٠	45	945	113					
MTR CODE   SITE NAME:			N/A						
SAMPLE DATE   TIME (Hrs):	5-10	. 94							
SAMPLED BY:		N							
DATE OF TPH EXT.   ANAL.:	٥.	5-12-94	5 - 1	2.94					
DATE OF BTEX EXT.   ANAL.:		AIA	0 10 12						
TYPE   DESCRIPTION:	V.C	3	Brown	Sanc	1				
REMARKS:									
	1	RESULTS							
	T		<del></del>	<del></del>					
PARAMETER	RESULT	UNITS		QUALIF					
			DF	Q	M(g)	V(ml)			
BENZENE		MG/KG							
TOLUENE		MG/KG							
ETHYL BENZENE		MG/KG							
TOTAL XYLENES		MG/KG							
TOTAL BTEX	1/4	MG/KG				20			
TPH (418.1) 14,900	14,94-0 AND	gy MG/KG			,53	24			
HEADSPACE PID	293	PPM							

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

PERGENT SOLIDS

The Surrogate Recovery was at Narrative:	% for this sample	All QA/QC was acceptable.	
DE Dilusion Factor Used			
DF = Dilution Factor Used	^	c uday	

4	PROJECT NUMBER	PROJECT NAME	NAME DSLITE	PROJECT NAME Pit Closure Project # 24324		SH		REQUESTED ANALYSIS		CONT^ACT LABORATORY P. O. NUMBER
ြတ်	SAMPLERS: (Signature)	┥		DATE:		INE	_	-		
		. (		5 10 gy		ATNO ATNO	IGMA: IGYT IGYT IGYT		#	
1	LABID DATE	TIME	MATRIX	SAMPLE NUMBER		OE C	41 443	178 1 A93	2 هر ک	REMARKS
고 ()	14 5113 5/10/44	5/10/qy 850	1:05	VW 45		7 1/6	× 5,		940	
<u>Z</u>	74 SIM 5/10/94	_ [	50.1	VW 46	•	1 16	<u>×</u>		14.1	
¥.	5115 5/0/44 1015 SO.1	4 1015	50.	じがサフ		7	X		Ì	
<u>À</u> S	5/16 S/16/91	5/6/44 1020 soi	150.	UNUS		T T	X			
H	5117 5/10/94/130 Soil	41130	50:	VW 49			× 5/		42	
74	5118 Sloky 1230	4 1230	50.	VW50		7 1/6	X		43	
7	5119 5/10/4	5/10/441310	50,7	11W51		7 16	X		44	
<u>*</u>	5170 5/1d	5/94/1355 50.	50,	UW52	,	7 7	16		45	
17/52	5121 Sloku	4 1505	50.1	VW53		7	<u> </u>		46	
<u>2</u> A31	5122 5/10/hy	0091	50.1	1w54		1 16			77	
かり	-									
5										
1	RELINQUISHED BY: (Signature)	(Signature)		DATE/TIME, 34° (RECEIVED BY: (Signature)	BY: (Signa	(oun)	326	RELINQUISHED BY: (Signature)	(Signature) 340/	DATE/TIME 34 P/ RECEIVED BY: (Signature)
<b>ک</b>	Vale Wildow	Z		۵	I K	- )	K	June 1	· Par	5/2/84 445
<b>Œ</b>	RELINQUISHED BY:	(Signature)	ĺ	DATE/TIME RECÉIVED	RECĔIVED BY: (Signature)	ture)		RELINOUISHED BY: (Signature)	r. (Signature)	DATE/TIME RECEIVED OF LABORATORY BY: (Signature)
<u>. 1</u>										Marker.
<u> </u>	REQUESTED TURNAROUND TIME  ROUTINE  ROUTINE  ROUSH	NAROUND TIME:		SAMPLE R	SAMPLE RECEIPT REMARKS	MARKS			RESULTS & INVOICES TO:	FIELD SERVICES LABORATORY
<u>,</u>										P. O. BOX 4990
	BILL NO.:			CHARGE CODE	CODE				505-599-2144	
i										سمارات مرابع والمرابع

Mish Tarthar I change Canno FRAIC I ah Bink . Field Cannolar

Ft.1 OR 0565A (Rev. 03-94)

METER #: 9274 72774 WELL NAME: SOUTHERNUNION#1

OPERATOR: ELLIOTT PRODUCTION

Randy Ellerige 320-4969 327-9267

RE: NOTIFICATION FROM DENNY FOUST (OCD) at approximately 1500A1 4/25/94 OF CROSS CONTAMINATION OF EXCAVATION DUE TO A PREVIOUSLY CLOSED EPFS DEHY PIT

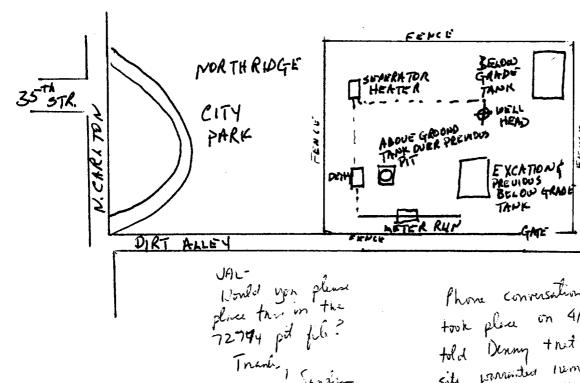
BO ELLIDTT PRODUCTION WAS REMOVING A BE-LOW GRADE TANK UNDE BLD GUIDANCE, MR. FOUST FEELS AS IF CROSS CONTAMINATION WAS ENCOUNTERED DUE TO APREVIOUSLY CLOSED EPES PIT.

THE EPFS PIT HAD BEEN ASSESSED AS OUTSIDE" THE OLD VULNERABLE AREA WITH A HAZARD RANKING OF DO.

THE WELL LOCATION IS BOUND ON (3) SIDES BY A CITY PAR!

AND (1) SIDE BY AN "ALLEY"

THE L'OCATION IS LOCATED ON TOP OF AKNOLL AND DOWN-GRADIENT COULD INDICATE FITHER A EAST OR WEST FLOW, Son spoke w/R. Elicolese (opentar) on 4/25/96. He indicated that they were remidiating N beauting with mosocialis a/population in the area.



IST DELIVERY 1960 EST. CU.YDS. REMOVED BY ELLIOTT = 300+ Cu.yds. those conversation is Denny Fond of NMC. EPFS took place on 4/26/96 @ 23 pm. EPFS took place on 4/26/96 @ 23 pm. EPFS took place on 4/26/96 @ 23 pm. EPFS took place on the did not feel the site some of the took to the site of the took of the took of the situation of the le was informing as a series of the took of the situation of the situation of the time. Situation of this time. Situation of this time. Situation of this time.

# FIELD 'IT REMEDIATION/CLOSUF FORM/Dwase IN

GENERAL	Meter: 72774 Location: Southern Union # 1  Coordinates: Letter: B Section 3 Township: 29 Range: 13  Or Latitude Longitude  Date Started: 1-19-99 Area: 02 Run: 22
FIELD OBSERVATIONS	Sample Number(s): PRA-12 PRA-13  Sample Depth: 21 Feet  Final PID Reading 19 16 ppm PID Reading Depth 21 Feet  Yes No  Groundwater Encountered (1) (2) Approximate Depth Feet  Final Dimensions length 40 width 25 Depth 21
CLOSURE	Remediation Method:  Excavation  Onsite Bioremediation  Backfill Pit Without Excavation  Soil Disposition:  Envirotech  Other Facility  Pit Closure Date:  1-21-99
REMARKS	Remarks: Backfill pit after spraing.
	Signature of Specialist: Child

CONTRACT LABORATORY P. O. NUMBER		REMARKS MAPE COLD #	Sother Chien Al 72774	Chion# 1								DATE/TIME RECEIVED BY: (Signature)	DATETIME RECEIVED OF LABORATGRY BY: (Signature)	- Kg 10945	FIELD SERVICES LABORATORY	EL PASO NATURAL GAS COMPANY P. O. BOX 4990	
	ENCE	# SEONI									(				RESULTS & INVOICÉS TØ		505-599-2144
REQUESTED ANALYSIS	0	الماره الماره	9161	<i>s.</i> <sub>7</sub>								(Signature)	AGUNQUISHED BY (Signature)				
REQUESTE	ala	8AJ									,	RELINQUISHED BY (Signature)	NOUISHED B		_		
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	SAMPLE TYPE PH 1.814		\$\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	V6							7	X	3		1	•	
<u> </u>	MUN JA		<u>&gt;</u>	7					_			ture)	gnature)		MARKS		
	1 22 99	FIELD ID	PRB-12	DRA-13								RECEIVED BY (Signa	RECEIVED BY: (Spinal		COULTWINE		CHARGE CODE
roject	B	MATRIX	1:00	1;95								1010 11/24	DATE/TIME				
Sure P	Archole	TIME	<b>2</b>	1523		_				_		لر	3				
PROJECT NAME Pit Closure Project	7	DATE	THE THE	776	<u>*</u>							nature)	nature)		SH SH		
	SAMPLERS-(STONATURE)	LABID	810056	610065								RELINQUISHED BY: (Signature)	RELINQUISHED BY: (Signature)		D ROUTINE D RUSH	CARRIER CO.	BILL NO.:



# FIELD SERVICES LABORATORY **ANALYTICAL REPORT** PIT CLOSURE PROJECT

## SAMPLE IDENTIFICATION

	Field ID	Lab ID		
SAMPLE NUMBER:	PRA-12	990018		
MTR CODE   SITE NAME:	72774	Southern Union #1		
SAMPLE DATE   TIME (Hrs):	1/21/99	1530		
PROJECT:	Phase II Excavation			
DATE OF TPH EXT.   ANAL.:	1/29/99	1/29/99		
DATE OF BTEX EXT.   ANAL.:	1/29/99	2/1/99		
TYPE   DESCRIPTION:	VG	SOIL		

Field Remarks: Bottom Composite

### **RESULTS**

PARAMETER	RESULT	UNITS :		QUALIFIERS				
			, /DF	Q I	M(g)	·V(ml)		
BENZENE	0.08	MG/KG	1					
TOLUENE	0.59	MG/KG	1					
ETHYL BENZENE	1.1	MG/KG	1					
TOTAL XYLENES	10	MG/KG	1					
TOTAL BTEX	12	MG/KG						
TPH (MOD.8015)	710	MG/KG	1					
HEADSPACE PID	1916	PPM						
PERCENT SOLIDS	NA	%						

	TPH is by EPA Metho	d 8015 and BIEX is by EPA Met	lod 8021 Modified	
The Surrogate Recovery was at	171	% for this sample	All QA/QC was acceptable.	
Narrative:				
ample analyzed by Pinnical Labora	tories, Albuquer	que, NM.		
arripio ariary 200 2)				
DF = Dilution Factor Used	٨			
Approved By:	Larbon.		Date: 2-4-95	
9				



# FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

# SAMPLE IDENTIFICATION

	Field ID	Lab ID			
SAMPLE NUMBER:	PRA-13	990019			
MTR CODE   SITE NAME:	72774	Southern Union #1			
SAMPLE DATE   TIME (Hrs):	1/21/99	1523			
PROJECT:	Phase II Excavation				
DATE OF TPH EXT.   ANAL.:	1/29/99	1/29/99			
DATE OF BTEX EXT.   ANAL.:	1/29/99	1/29/99			
TYPE   DESCRIPTION:	VG	SOIL			
		والمرابع			

Field Remarks: Wall Sample

#### **RESULTS**

PARAMETER	RESULT:	UNITS		QUALIFIE		
en en la companya de la companya de La companya de la co			* i ! DF	Q	M(g)	V(ml)
BENZENE	<0.025	MG/KG	1			
TOLUENE	< 0.025	MG/KG	1			
ETHYL BENZENE	< 0.025	MG/KG	1		· · · · · · · · · · · · · · · · · · ·	
TOTAL XYLENES	< 0.025	MG/KG	11			
TOTAL BTEX	<1.0	MG/KG				
TPH (MOD.8015)	<20	MG/KG	1			
HEADSPACE PID	7.8	PPM				
PERCENT SOLIDS	NA	%	*	*		

The Surrogate Recovery was at 117 % for this sample All QA/QC was acceptable.

Narrative:

/ample analyzed by Pinnical Laboratories, Albuquerque, NM.

DF = Dilution Factor Used

Approved By: John Landow Date: 2-4-99





2709-I) Pan American Freeway NE Albuquerque, New Mexico 87107 Phone (505) 344-3777 Fax (505) 344-4413

Pinnacle Lab ID number February 02, 1999

901074

**EL PASO FIELD SERVICES** 770 WEST NAVAJO

FARMINGTON,

NM

87401

**Project Name** 

PHASE II EXCAVATION

**Project Number** 

(none)

Attention:

JOHN LAMBDIN

Pinnacle Laboratories, Inc. Inc., (ADHS License No. AZ0592), received a 1/26/99 On request to analyze non-aq samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

Kimberly D. McNeill Project Manager

MR: mt

Enclosure

H. Mitchell Rubenstein, Ph. D. Jeviewed + Approved

General Manager





CLIENT	: EL PASO FIELD SERVICES	PINNACLE ID	: 901074
PROJECT #	: (none)	DATE RECEIVED	: 1/26/99
PROJECT NAME	: PHASE II EXCAVATION	REPORT DATE	: 2/2/99
PIN			DATE
ID.#	CLIENT DESCRIPTION	MATRIX	COLLECTED
01	990018	NON-AQ	1/21/99
02	990019	NON-AQ	1/21/99

Printed: 2/2/99; 3:01 PM Confidential File: 901074.XLS; COVEREP





#### GAS CHROMATOGRAPHY RESULTS

TEST

: EPA 8021 MODIFIED

CLIENT

: EL PASO FIELD SERVICES

PINNACLE I.D.: 901074

PROJECT#

: (none)

PROJECT NAME

: PHASE II EXCAVATION

PROJECTI	4/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	. 1 1 // (0 4 // 12 / (0 /					
SAMPLE				DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	990018		NON-AQ	1/21/99	1/29/99	2/1/99	1
02	990019		NON-AQ	1/21/99	1/29/99	1/29/99	1
PARAMETE		DET. LIMIT		UNITS	990018	990019	
BENZENE	···	0.025		MG/KG	0.080	< 0.025	
TOLUENE		0.025		MG/KG	0.59	< 0.025	
ETHYLBEN	IZFNF	0.025		MG/KG	1.1	< 0.025	
TOTAL XYL		0.025		MG/KG	10	< 0.025	
SURROGAT BROMOFLU SURROGAT	JOROBENZENE	(%) ( 65 - 120 )			171 *	117	

**CHEMIST NOTES:** 

<sup>\*=</sup> HIGH SURROGATE RECOVERY DUE TO MATRIX INTERFERENCE.





#### GAS CHROMATOGRAPHY RESULTS REAGENT BLANK

TEST BLANK I. D. : EPA 8021 MODIFIED

PINNACLE I.D.

: 901074

CLIENT

: 012999 : EL PASO FIELD SERVICES DATE EXTRACTED DATE ANALYZED

1/29/99 : 1/29/99

PROJECT#

: (none)

SAMPLE MATRIX

: NON-AQ

**PARAMETER** 

**PROJECT NAME** 

: PHASE II EXCAVATION

< 0.025

BENZENE **TOLUENE**  MG/KG MG/KG

UNITS

< 0.025

**ETHYLBENZENE** 

MG/KG MG/KG < 0.025

**TOTAL XYLENES** 

< 0.025

SURROGATE:

ROMOFLUOROBENZENE (%)

(80 - 120)

JRROGATE LIMITS: **CHEMIST NOTES:** 

N/A

113





#### GAS CHROMATOGRAPHY QUALITY CONTROL **MSMSD**

**TEST** 

: EPA 8021 MODIFIED

MSMSD#

: 012999

CLIENT PROJECT # : EL PASO FIELD SERVICES

: (none)

PROJECT NAME

: PHASE II EXCAVATION

PINNACLE I.D.

DATE ANALYZED

SAMPLE MATRIX

901074

DATE EXTRACTED

1/29/99 2/1/99

NON-AQ

MG/KG

110000110000				UNITS			: MG/KG		
PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	1.13	113	1.09	109	4	( 68 - 120 )	20
TOLUENE	<0.025	1.00	1.13	113	1.13	113	0	(64 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.16	116	1.18	118	2	(49 - 127)	20
TOTAL XYLENES	<0.025	3.00	3.16	105	3.20	107	1	(58 - 120)	20

CHEMIST NOTES: N/A

(Spike Sample Result - Sample Result)

% Recovery =

Spike Concentration

(Sample Result - Duplicate Result)

RPD (Relative Percent Difference) =

----- X 100

Average Result





#### GAS CHROMATOGRAPHY RESULTS

TEST

: EPA 8015 MODIFIED (DIRECT INJECT)

CLIENT

: EL PASO FIELD SERVICES

PINNACLE I.D.: 901074

PROJECT#

: (none)

PROJECT NAME

: PHASE II EXCAVATION

1110000	10.00						
SAMPLE			-	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	990018		NON-AQ	1/21/99	1/29/99	1/29/99	1
02	990019		NON-AQ	1/21/99	1/29/99	1/29/99	1
PARAME	TER	DET. LIMIT	UN	ITS	990018	990019	
	DROCARBONS, C6-C10	10	MG	/KG	200	< 10	
	DROCARBONS, C10-C22	5.0	MG	/KG	380	< 5.0	
	DROCARBONS, C22-C36	5.0	MG	/KG	130	< 5.0	
	ATED SUM:				710		
SURROG		( 66 - 151 )			117	115	

CHEMIST NOTES:

N/A





# GAS CHROMATOGRAPHY RESULTS REAGENT BLANK

TEST

: EPA 8015 MODIFIED (DIRECT INJECT)

BLANK I.D.

: 012999

PINNACLE I.D.

: 901074

CLIENT

: EL PASO FIELD SERVICES

DATE EXTRACTED

: 1/29/99

PROJECT#

: (none)

DATE ANALYZED

: 1/29/99

PROJECT NAME

: PHASE II EXCAVATION

SAMPLE MATRIX

: NON-AQ

PARAMETER	UNITS		
FUEL HYDROCARBONS, C6-C10	MG/KG	< 10	
FUEL HYDROCARBONS, C10-C22	MG/KG	< 5.0	
FUEL HYDROCARBONS, C22-C36	MG/KG	< 5.0	
SURROGATE: O-TERPHENYL (%)		115	

JURROGATE LIMITS

(80 - 151)

**CHEMIST NOTES:** 

N/A





## GAS CHROMATOGRAPHY QUALITY CONTROL

MSMSD

EST SMSD # : EPA 8015 MODIFIED (DIRECT INJECT)

LIENT

: 901074-02 : EL PASO FIELD SERVICES

ROJECT #
ROJECT NAME

: (none)

: PHASE II EXCAVATION

PINNACLE I.D.

: 901074 : 1/29/99

DATE EXTRACTED
DATE ANALYZED

1/29/99

SAMPLE MATRIX UNITS

NON-AQ MG/KG

	SAMPLE	CONC	SPIKED	%	DUP	DUP		REC	RPD
ARAMETER	RESULT	SPIKE	SAMPLE	REC	SPIKE	% REC	RPD	LIMITS	LIMITS
IEI HYDROCARRONS	<5.0	100	84	84	82	82	2	( 56 - 148 )	20

HEMIST NOTES:

Δ .

(Spike Sample Result - Sample Result)

Recovery =

\_\_\_\_\_ X 100

Spike Concentration

(Sample Result - Duplicate Result)

PD (Relative Percent Difference) =

----- X 100

Average Result

DISTRIBUTION: Whi

'EN, Canary - Originator