

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

*Risk  
defined  
plume*

Submit 1 copy to  
appropriate  
District Office  
and 1 copy to  
the Santa Fe Office

(Revised 3/9/94)

**PIT REMEDIATION AND CLOSURE REPORT**

Operator: Meridian Telephone: \_\_\_\_\_

Address: 30-039-07125

Facility Or: San Juan 28-6 Unit #24, Meter 71158

Well Name \_\_\_\_\_

Location: Unit or Qtr/Qtr Sec H Sec 10 T 27 R 06 County Rio Arriba

Pit Type: Separator \_\_\_\_\_ Dehydrator X Other \_\_\_\_\_

Land Type: BLM X, State \_\_\_\_\_, Fee \_\_\_\_\_ Other \_\_\_\_\_

Pit Location: Pit dimensions: length 16', width 15', depth 3'

(Attach diagram)

Reference: wellhead X, other \_\_\_\_\_

Footage from reference: 106'

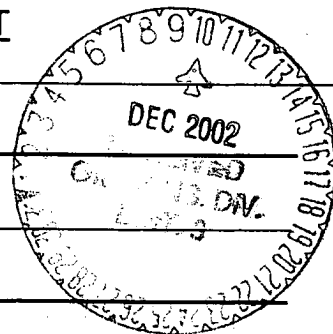
Direction from reference: 258 Degrees X East North \_\_\_\_\_  
of \_\_\_\_\_ West South \_\_\_\_\_

Depth To Ground Water	Less than 50 feet	(20 points)
(Vertical distance from	50 feet to 99 feet	(10 points)
contaminants to seasonal	Greater than 100 feet	( 0 points) <u>20</u>
high water elevation of		
ground water.)		

Wellhead Protection Area:	Yes (20 points)
(Less than 200 feet from a private	No ( 0 points) <u>0</u>
domestic water source, or; less than	
1000 feet from all other water sources.)	

Distance To Surface Water:	Less than 200 feet	(20 points)
(Horizontal distance to perennial	200 feet to 1000 feet	(10 points)
lakes, ponds, rivers, streams, creeks,	Greater than 1000 feet	( 0 points) <u>0</u>
irrigation canals and ditches.)		

RANKING SCORE (TOTAL POINTS): 20



Date Remediation Started: 03/20/95 Date completed: 03/20/95

Remediation Method: Excavation \_\_\_\_\_ Approx. cubic yards \_\_\_\_\_  
(Check all appropriate sections.) Landfarmed \_\_\_\_\_ Insitu Bioremediation \_\_\_\_\_  
Other Backfill Pit Without Excavation

Remediation Location: Onsite N/A Offsite N/A  
(i.e. landfarmed onsite,  
name and location of  
offsite facility)

General Description of Remedial Action: No line markers; dug a test hole to 12'. Sampled closed pit.

Ground Water Encountered: No X Yes \_\_\_\_\_ Depth \_\_\_\_\_

Final Pit:  
Closure Sampling:  
(if multiple samples,  
attach sample results  
and diagram of sample  
locations and depths)

Sample location Four walls and center of pit composite

Sample depth 12'

Sample Date 03/20/95 Sample time 13:10

Sample Results

Benzene(ppm) Not reported

Total BTEX(ppm) Not reported

Field headspace(ppm) 430

TPH 9980

Ground Water Sample: Yes \_\_\_\_\_ No X (If yes, attach sample results)

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Date 1/8/03

Signature

Scott T. Pope

Printed Name  
and Title

Scott T. Pope  
Senior ENV. Scientist



## PIT CLOSURE REQUEST

San Juan 28-6 Unit #24  
Meter/Line ID - 71158

### SITE DETAILS

Legals - Twn: 27N

Rng: 06

Sec: 10

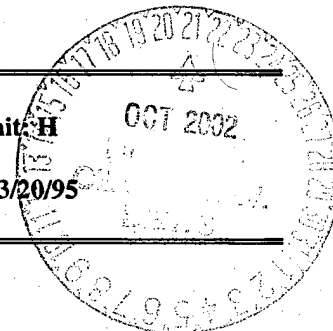
Unit: H

NMOCD Hazard Ranking: 20

Land Type: BLM

Operator: Meridian

Pit Closure Date: 03/20/95



### RATIONALE FOR RISK-BASED 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 (ft) below ground surface (bgs) and a soil sample was collected for field headspace analysis and laboratory analysis for TPH. Groundwater was not encountered in the test pit. Headspace analysis indicated an organic vapor content of 430 ppm; laboratory analysis indicated a TPH concentration of 9,980 mg/kg. The TPH concentration exceeded its recommended remediation level for the Hazard Ranking Score of 20.

No soil was disposed of offsite. The pit was backfilled with site soil, topped with clean soil from the surrounding berms, and graded in a manner to direct surface runoff away from the pit area.

A Phase II boring was completed with refusal at 36 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 35-36 ft bgs. Headspace analysis indicated an organic vapor content of 231 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of 2.42 mg/kg, and a TPH concentration of 23 mg/kg. The benzene, total BTEX, and TPH concentrations were below recommended remediation levels for the Hazard Ranking Score.

No Phase III activities were conducted.

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

- The primary source, discharge to the pit, has been removed for over seven years.
- The test pit was backfilled and the former pit area graded to direct surface runoff away from the former pit.
- The clean soil from the berms placed on top of the excavation would limit the potential for direct contact with hazardous constituents by livestock or the public; i.e., current direct contact exposure pathways are unlikely to be completed.
- Groundwater was not encountered in the soil boring to 36 ft bgs.
- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the site.
- Benzene, total BTEX, and TPH concentrations in the sample collected at the base of the Phase 2 soil boring at 36 bgs were below their respective OCD Hazard Ranking criteria.



## **PIT CLOSURE REQUEST**

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- TPH concentrations in the soil at 36 ft bgs were less than 1% of the concentration at 12 ft bgs; in contrast, the detection of 2.42 mg/kg of BTEX at the base of the soil boring is comparatively minor.

### **ATTACHMENTS**

Field Pit Assessment Form  
Revised Field Pit Assessment Form  
Field Pit Remediation/Closure Form  
Phase 2 Soil Boring Log  
Laboratory Analytical Results

# FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 71158 Location: San Juan 28-6 unit # 24  
 Operator #: \_\_\_\_\_ Operator Name: Meridian P/L District: Bloomfield  
 Coordinates: Letter: H Section 10 Township: 27 Range: 06  
 Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Pit Type: Dehydrator ☒ Location Drip: \_\_\_\_\_ Line Drip: \_\_\_\_\_ Other: \_\_\_\_\_  
 Site Assessment Date: 3/10/95 Area: 10 Run: 52

SITE ASSESSMENT

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 Cerro Canyon 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

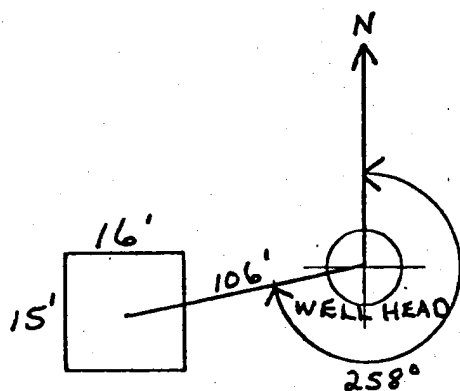
MARK

Remarks : Redline shows Inside Tape shows outside VZ  
2 pits on loc, 1 has Dehy in service, Old Dehy pit belongs

ORIGINAL PIT LOCATION

### ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 258° Footage from Wellhead 106'  
b) Length : 16' Width : 15' Depth : 3'



REMARKS

Remarks :

Photo's : 0955

Handwritten notes and remarks section with multiple horizontal lines for additional text.

Completed By:

James J. Penner

Signature

3/10/95

Date

**REVISED**  
**FIELD PIT SITE ASSESSMENT FORM**

GENERAL

Meter: 71158 Location: San Juan 28-6 Unit #24  
 Operator #: \_\_\_\_\_ Operator Name: \_\_\_\_\_ P/L District: \_\_\_\_\_  
 Coordinates: Letter: H Section 10 Township: 27 Range: 6  
 Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Pit Type: Dehydrator \_\_\_\_\_ Location Drip: \_\_\_\_\_ Line Drip: \_\_\_\_\_ Other: \_\_\_\_\_  
 Site Assessment Date: 12/19/97 Area: \_\_\_\_\_ Run: \_\_\_\_\_

SITE ASSESSMENT

**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 \_\_\_\_\_  
 (Surface Water Body: Perennial Rivers, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)

Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only)  
☐ (2) > 100'

TOTAL HAZARD RANKING SCORE: 20 POINTS

REMARKS

Remarks : Site has been re-assessed, due to initial assessment including washes as a Surface Water Body. Depth to GW measured from center of Cereza Canyon.



## FIELD SERVICES LABORATORY

## ANALYTICAL REPORT

## PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

## SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP 455	9467-9
MTR CODE   SITE NAME:	71158	N/A
SAMPLE DATE   TIME (Hrs):	3-20-95	1310
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	3/23/95	3/23/95
DATE OF BTEX EXT.   ANAL.:	N/A	N/A
TYPE   DESCRIPTION:	VG	Dark Brown Fine sand

REMARKS:

## RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
TPH (418.1)	9980	MG/KG			0.46	28
HEADSPACE PID	430	PPM				
PERCENT SOLIDS	7.64	%				

-- TPH is by EPA Method 418.1 --

Narrative:

DF = Dilution Factor Used

Approved By: 

Date:

3-24-95



# FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 71158 Location: SAN JUAN 28-6 UNIT #24  
 Coordinates: Letter: H Section 10 Township: 27 Range: 06  
 Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Date Started : 3-20-95 Run: 10 52

FIELD OBSERVATIONS

Sample Number(s): KP455  
 Sample Depth: 12' Feet  
 Final PID Reading 430 PID Reading Depth 12' Feet  
 Yes No  
 Groundwater Encountered ☐ ☒ Approximate Depth \_\_\_\_\_ Feet

CLOSURE

Remediation Method :  
 Excavation ☐ Approx. Cubic Yards \_\_\_\_\_  
 Onsite Bioremediation ☐  
 Backfill Pit Without Excavation ☒  
 Soil Disposition:  
 Envirotech ☐ Tierra ☐  
 Other Facility ☐ Name: \_\_\_\_\_  
 Pit Closure Date: 3-20-95 Pit Closed By: B.E.I

REMARKS

Remarks : No Line markers. dug A Test hole To 12' soil dark Brown.  
sampled closed pit

Signature of Specialist: Kelly Padilla



## Page \_\_\_\_\_ of \_\_\_\_\_

המחיר הנמוך ביותר

# RECORD OF SUBSURFACE EXPLORATION

PHILIP SERVICES CORP.

4000 1st Street  
Farmington, New Mexico 87401  
(505) 326-2262 FAX (505) 326-2388

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

Project Number 19643 Phase 1001.77  
Project Name EPFS PITS >10  
Project Location SAN JUAN 28-6 # 24 7115B

Elevation \_\_\_\_\_  
Borehole Location LTR: H S: 10 T: 27 R: 6  
GWL Depth NA  
Drilled By K. PADILLA  
Well Logged By H. BRADBURY  
Date Started 9/21/98  
Date Completed 9/21/98

Drilling Method 4 1/4 ID HSA  
Air Monitoring Method PID

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 BH S/MS			Drilling Conditions & Blow Counts
0										BZ=Breathing Zone BH=Borehole S/MS=Sample/Headspace
5										
10				EXCAVATION SAMPLE collected at 12'						
15	1	15-17	24	DK GR SANDY CLAY. FINE SAND, low plastic, soft, dry			0	0	270 359	1016 hrs
20	2	20-22	12	DK BR SILTSTONE, hard cementation, dry			0	0	7 159	1027 hrs
25	3	25-26	6	LT BR SANDSTONE. FINE SAND, MOD CEMENTED, dry			0	9	4 239	1037 hrs hand drilling
30	4	30-31		LT BR SANDSTONE, FINE SAND, MOD CEMENTED, dry			0	54	10 4	1056 hrs
35	5	35-36	12	LT GR SANDSTONE. FINE SAND, MOD CEMENTED, dry			0	4	6 231	1112 hrs
40				TOB 36'						

Comments:

HAB44 35-36' SENT to lab for TPH. BTEX AUGER REFUSAL  
at 35' GW NOT ENCOUNTERED  
BH GROUTED TO SURFACE

Geologist Signature

H. Bradbury



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

**SAMPLE IDENTIFICATION**

	Field ID	Lab ID
SAMPLE NUMBER:	HAB44	980668
MTR CODE   SITE NAME:	71158	San Juan 28-6 #24
SAMPLE DATE   TIME (Hrs):	9/21/98	1112
PROJECT:	Phase II Drilling	
DATE OF TPH EXT.   ANAL.:	9/25/98	9/26/98
DATE OF BTEX EXT.   ANAL.:	9/23/98	9/24/98
TYPE   DESCRIPTION:	VG	SOIL

Field Remarks: 35-36'

**RESULTS**

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.5	MG/KG				
TOLUENE	0.97	MG/KG				
ETHYL BENZENE	<0.5	MG/KG				
TOTAL XYLENES	1.45	MG/KG				
TOTAL BTEX	2.42	MG/KG				
TPH (MOD.8015)	23	MG/KG				
HEADSPACE PID	231	PPM				
PERCENT SOLIDS	90.9	%				

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

The Surrogate Recovery was at 91.9 % for this sample All QA/QC was acceptable.  
ative:

DF = Dilution Factor Used

Approved By:

*John Lumbardi*

Date:

10/20/98

# GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)  
CLIENT : EL PASO FIELD SERVICES  
PROJECT # : (none)  
PROJECT NAME : PHASE II DRILLING

PINNACLE I.D.: 809063

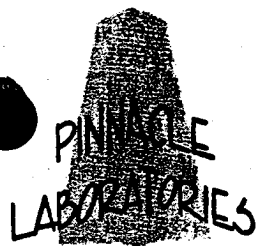
SAMPLE		MATRIX	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	980660	NON-AQ	9/16/98	9/25/98	10/7/98	1
02	980661	NON-AQ	9/16/98	9/25/98	10/7/98	1
03	980662	NON-AQ	9/16/98	9/25/98	10/7/98	1

PARAMETER	DET. LIMIT	UNITS	01	02	03
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10	< 10
FUEL HYDROCARBONS, C10-C22	5.0	MG/KG	< 5.0	< 5.0	< 5.0
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	< 5.0	< 5.0	< 5.0

CALCULATED SUM:

SURROGATE:  
O-TERPHENYL (%) 89 92 96  
SURROGATE LIMITS ( 66 - 151 )

CHEMIST NOTES:  
N/A



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

### GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)  
CLIENT : EL PASO FIELD SERVICES  
PROJECT # : (none)  
PROJECT NAME : PHASE II DRILLING

PINNACLE I.D.: 809063

SAMPLE		MATRIX	DATE	DATE	DATE	DIL. FACTOR
ID. #	CLIENT I.D.		SAMPLED	EXTRACTED	ANALYZED	
04	980663	NON-AQ	9/16/98	9/25/98	9/26/98	1
05	980664	NON-AQ	9/16/98	9/25/98	9/26/98	1
06	980665	NON-AQ	9/18/98	9/25/98	9/26/98	1
PARAMETER		DET. LIMIT	UNITS	04	05	06
FUEL HYDROCARBONS, C6-C10		10	MG/KG	< 10	< 10	84
FUEL HYDROCARBONS, C10-C22		5.0	MG/KG	< 5.0	< 5.0	< 5.0
FUEL HYDROCARBONS, C22-C36		5.0	MG/KG	< 5.0	< 5.0	< 5.0
CALCULATED SUM:						84

SURROGATE:  
O-TERPHENYL (%)  
SURROGATE LIMITS (66 - 151)

123 138 119

CHEMIST NOTES:  
N/A

PINNACLE  
LABORATORIES

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

# GAS CHROMATOGRAPHY RESULTS

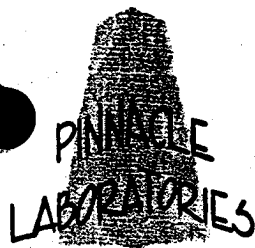
TEST : EPA 8015 MODIFIED (DIRECT INJECT)  
CLIENT : EL PASO FIELD SERVICES  
PROJECT # : (none)  
PROJECT NAME : PHASE II DRILLING

PINNACLE I.D.: 809063

SAMPLE		MATRIX	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		SAMPLED	EXTRACTED	ANALYZED	FACTOR
07	980666	NON-AQ	9/18/98	9/25/98	9/26/98	1
08	980667	NON-AQ	9/18/98	9/25/98	9/26/98	1
09	980668	NON-AQ	9/21/98	9/25/98	9/26/98	1
PARAMETER		DET. LIMIT	UNITS	07	08	09
FUEL HYDROCARBONS, C6-C10		10	MG/KG	< 10	12	23
FUEL HYDROCARBONS, C10-C22		5.0	MG/KG	< 5.0	< 5.0	< 5.0
FUEL HYDROCARBONS, C22-C36		5.0	MG/KG	< 5.0	< 5.0	< 5.0
CALCULATED SUM:					12	23

SURROGATE:  
O-TERPHENYL (%) 113 117 96  
SURROGATE LIMITS ( 66 - 151 )

CHEMIST NOTES:  
N/A



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

GAS CHROMATOGRAPHY RESULTS  
REAGENT BLANK

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 809063
BLANK I.D.	: 092598	DATE EXTRACTED	: 9/25/98
CLIENT	: EL PASO FIELD SERVICES	DATE ANALYZED	: 9/25/98
PROJECT #	: (none)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: PHASE II DRILLING		

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: TERPHENYL (%) 126  
SURROGATE LIMITS ( 80 - 151 )

CHEMIST NOTES:  
N/A



## BTEX SOIL SAMPLE WORKSHEET

File	:	980668	Date Printed	:	9/25/98
Soil Mass (g)	:	5.29	Multiplier (L/g)	:	0.00095
Extraction vol. (mL)	:	10	CAL FACTOR (Analytical):	:	200
Shot Volume (uL)	:	50	CAL FACTOR (Report):	:	0.18904

		DILUTION FACTOR:	1	Det. Limit
Benzene (ug/L)	: <0.5	Benzene (mg/Kg):	#VALUE!	0.473
Toluene (ug/L)	: 5.11	Toluene (mg/Kg):	0.966	0.473
Ethylbenzene (ug/L)	: <0.5	Ethylbenzene (mg/Kg):	#VALUE!	0.473
p & m-xylene (ug/L)	: 6.73	p & m-xylene (mg/Kg):	1.273	0.945
o-xylene (ug/L)	: 0.96	o-xylene (mg/Kg):	0.181	0.473
		Total xylenes (mg/Kg):	1.454	1.418
		Total BTEX (mg/Kg):	#VALUE!	

[illegible]