

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
1220 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
bedrock
deferral
extent of
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 Oil Inc Telephone

Address: 30-045-20045

Facility Or: San Juan 28-6 #106, Meter 75671

Well Name

Location: Unit or Qtr/Qtr Sec G Sec 13 T 28 R 6 County Rio Arriba

Pit Type: Separator Dehydrator X Other

Land Type: BLM , State , Fee X Other

Pit Location: Pit dimensions: length 23', width 20', depth 3'

(Attach diagram)

Reference: wellhead X, other

Footage from reference: 58'

Direction from reference: 271 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>0</u>
high water elevation of		
ground water.)		

Wellhead Protection Area:	Yes (20 points)
(Less than 200 feet from a private	No (0 points) <u>20</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: 03/31/95 Date completed: 03/31/95

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: Excavated test hole to 5', hit sandstone, stopped excavation. Took PID sample, 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 5'

Sample Date _____ Sample time _____

Sample Results

Benzene(ppm) Not reported

Total BTEX(ppm) Not reported

Field headspace(ppm) Not reported

TPH Not reported

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 #106
Meter/Line ID 75671

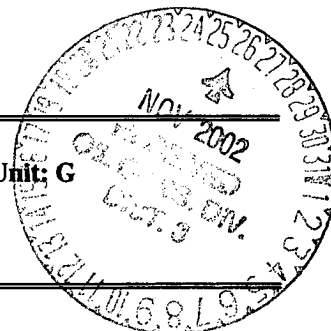
SITE DETAILS

Legals - Twn: 28N
NMOCD Hazard Ranking: 20
Operator: Meridian Oil Inc.

Rng: 6W

Sec: 13
Land Type: Fee
Pit Closure Date: 3/31/95

Unit: G



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 5 feet (ft) below ground surface (bgs) where sandstone was encountered and a soil sample was collected for field headspace analysis. Groundwater was not encountered in the test pit. Headspace analysis indicated an organic vapor content of 410 ppm. No soil samples were collected for laboratory analysis. The headspace analysis measurement exceeded recommended remediation levels 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. The site is approximately 900 feet from an unnamed spring.

A Phase II boring was completed to refusal at 20.5 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 20-20.5 ft bgs. Headspace analysis indicated an organic vapor content of 21 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of <3 mg/kg, and a TPH concentration of 17 mg/kg. The benzene, TPH, and BTEX 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.
- While there is a spring 900 ft from the pit, groundwater was not encountered in the soil boring at 20 ft bgs; local geologic features indicate the depth to groundwater is greater than 100 ft bgs.
- Benzene, TPH, and BTEX were all below recommended remediation levels for the Hazard Ranking Score.
- Bedrock refusal was encountered at 5 feet bgs making further excavation impractical.



PIT CLOSURE REQUEST

- Residual hydrocarbons in the soil will likely degrade by natural attenuation with minimal risk to the environment.

ATTACHMENTS

Field Pit Assessment Form

Revised Field Pit Assessment Form

Field Pit Remediation/Closure Form

Phase II Soil Boring Log

Laboratory Analytical Results

REVISED FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 75671 Location: San Juan 28-6 #106
 Operator #: _____ Operator Name: Burlington Resource P/L District: _____
 Coordinates: Letter: G Section 13 Township: 28 Range: 6
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator X Location Drip: _____ Line Drip: _____ Other: _____
 Site Assessment Date: 5/4/98 Area: _____ Run: _____

SITE ASSESSMENT

NMOCD Zone:

(From NMOCD
Maps)

Inside

Outside

Land Type:

☐ (1)

☒ (2)

BLM

State

Fee

Indian

☐ (1)

☐ (2)

☒ (3)

Depth to Groundwater

Less Than 50 Feet (20 points)

50 Ft to 99 Ft (10 points)

Greater Than 100 Ft (0 points)

☐ (1)

☐ (2)

☒ (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?

Spring

☒ (1) YES (20 points)

☐ (2) 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)

☐ (1)

☐ (2)

☒ (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. Site is <1000' From Spring.

REVISED
FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 75671 Location: San Juan 28-6 #106
 Operator #: _____ Operator Name: _____ P/L District: _____
 Coordinates: Letter: G Section: 13 Township: 28 Range: 6
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator _____ Location Drip: _____ Line Drip: _____ Other: _____
 Site Assessment Date: 4/1/98 Area: _____ Run: _____

SITE ASSESSMENT

NMOCD Zone:

(From NMOCD

Maps)

Inside

Outside

Land Type:

☐ (1)

☒ (2)

BLM

State

Fee

Indian

☐ (1)

☐ (2)

☒ (3)

Depth to Groundwater

Less Than 50 Feet (20 points)

50 Ft to 99 Ft (10 points)

Greater Than 100 Ft (0 points)

☐ (1)

☐ (2)

☒ (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?

Spring

☒ (1) YES (20 points)

☐ (2) 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)

☐ (1)

☐ (2)

☒ (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. Site is ~900' to an unnamed Spring

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 75671 Location: Sandwich 28-6 #106
 Operator #: _____ Operator Name: Meridian P/L District: Bloomfield
 Coordinates: Letter: G Section 13 Township: 28 Range: 06
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator ☒ Location Drip: _____ Line Drip: _____ Other: _____
 Site Assessment Date: 3/8/95 Area: 10 Run: 91

SITE ASSESSMENT

NMOCD Zone:

(From NMOCD
Maps)

Inside

Outside

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 Spring

(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'

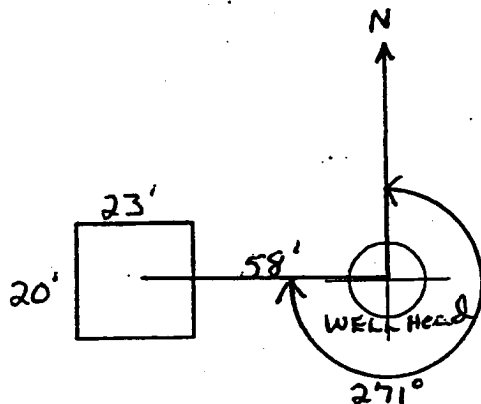
TOTAL HAZARD RANKING SCORE: 40 POINTS

REMARKS

Remarks : Redline shows outside Topo shows outside VZ
4 pits on site 3 with Dehydrator service 1 Belongs to

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 271° Footage from Wellhead 58'
b) Length : 23' Width : 20' Depth : 3'



Remarks :

Photos: 1358

Completed By:

James H. Pense
Signature

3/8/95
Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 75671 Location: SAN JUAN 28-6 #106
 Coordinates: Letter: G Section 13 Township: 28 Range: 6
 Or Latitude _____ Longitude _____
 Date Started : 3/31/95 Run: 10 91

FIELD OBSERVATIONS

Sample Number(s): KD 403
 Sample Depth: 5' Feet
 Final PID Reading 410 ppm PID Reading Depth 5' Feet
 Yes No
 Groundwater Encountered ☐ ☒ Approximate Depth _____ Feet

CLOSURE

Remediation Method :
 Excavation ☐ Approx. Cubic Yards 0
 Onsite Bioremediation ☐
 Backfill Pit Without Excavation ☒
 Soil Disposition:
 Envirotech ☐ Tierra ☐
 Other Facility ☐ Name: _____
 Pit Closure Date: 3/31/95 Pit Closed By: BFE

REMARKS

Remarks : Excavated test hole to 5', Hit Sandstone, stopped
Excavation, took PID sample, closed pit

Signature of Specialist: [Signature]

CHAIN OF CUSTODY RECORD

El Paso
Natural Gas Company

PROJECT NUMBER		PROJECT NAME		DATE		FIELD ID		TOTAL NUMBERS OF CONTAINERS		SAMPLE TYPE		REQUESTED ANALYSIS				SEQUENCE #		REMARKS			
24324		Pit Closure Project		3/31/95																	
LAB ID		DATE		TIME		MATRIX															
46768		3/31/95		0935		Soil		1		VG		TPH EPA 418.1				364					
46769		3/31/95		1030		Soil		1		VG		BTEX EPA 8020				365					
46770		3/31/95		1220		Soil		1		VG		LAB PID				366					
46771		3/31/95		1310		Soil		1		VG						367					

RECEIVED BY: (Signature) *Henry Danner* DATE/TIME 3/31/95 1510

RECEIVED BY: (Signature) *Henry Danner* DATE/TIME 3/31/95 1510

RECEIVED BY: (Signature) *Henry Danner* DATE/TIME 3/31/95 1510

RECEIVED BY: (Signature) *Henry Danner* DATE/TIME 3/31/95 1510

FIELD SERVICES LABORATORY
EL PASO NATURAL GAS COMPANY
P.O. BOX 4990
FARMINGTON, NEW MEXICO 87499

505-599-2144 FAX: 505-599-2261

RECORD OF SUBSURFACE EXPLORATION

SLIP SERVICES CORP.

100 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

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

Project Number 19007 Phase 1001.77
Project Name EPFS WELLHEAD PITS
Project Location San Juan 28-6 #106 757
75671

Elevation _____
Borehole Location LTR: G S:13 T:28 R:6
GWL Depth NA
Drilled By K. PADILLA
Well Logged By C. CHANCE
Date Started 5/4/98
Date Completed 5/4/98

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			Drilling Conditions & Blow Counts
							BZ	BH	757	
0										
5	1	5-7	1h	DK Gry weathered SANDSTONE, f-mixed sand, trxtln, poorly cemented			0	0	$\frac{194}{279}$	1424 hp
10	2	10-10.5	4	AA			0	0	$\frac{65}{276}$	1402 hp 508C/6"
15	3	15-15.5	3	DK Gry weathered SANDSTONE, f-sand, mod xrtln, mod cemented			0	53	$\frac{3}{5}$	1440 hp 508C/4"
20	4	20-20.5	3	AA			0	8	$\frac{2}{21}$	1450 hp 508C/4"
				TDB 20.5						
25										
30										
35										
40										

Comments:

Site is <1000' from spring. Pit was backfilled w/o excavation. CM (383 (20-20.5))
Sent to lab for BTEX, TPH 2015. No GW encountered. BH grouted to surface

Geologist Signature

Cory Chance



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC383	980337
MTR CODE SITE NAME:	75671	San Juan 28-6 #106
SAMPLE DATE TIME (Hrs):	5/4/98	1453
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:		
DATE OF BTEX EXT. ANAL.:	5/7/98	5/7/98
TYPE DESCRIPTION:	VG	SOIL

Field Remarks: 20-20.5'

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 (MOD.8015)	17	MG/KG				
HEADSPACE PID	21	PPM				
PERCENT SOLIDS	93.9	%				

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

Surrogate Recovery was at 103 % for this sample All QA/QC was acceptable.
ative:

DF = Dilution Factor Used

Approved By:

W. L. Ford

Date:

6/2/98

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
 CLIENT : EL PASO FIELD SERVICES
 PROJECT # : (none)
 PROJECT NAME : PHASE II DRILLING
 AEN I.D.: 805329

PROJECT #		: PHASE II DRILLING				
PROJECT NAME			DATE	DATE	DATE	DIL.
SAMPLE		MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
ID. #	CLIENT I.D.					
04	980334	NON-AQ	4/30/98	5/12/98	5/14/98	1
05	980335	NON-AQ	5/1/98	5/12/98	5/14/98	1
06	980336	NON-AQ	5/4/98	5/12/98	5/14/98	1
PARAMETER	DET. LIMIT	UNITS	04	05	06	
FUEL HYDROCARBONS, C6-C10	10	MG/KG	< 10	< 10	< 10	
FUEL HYDROCARBONS, C10-C22	5.0	MG/KG	< 5.0	< 5.0	8.5	
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	< 5.0	< 5.0	< 5.0	
CALCULATED SUM:					8.5	
SURROGATE:						
O-TERPHENYL (%)			123	138	148	
SURROGATE LIMITS			(66 - 151)			

CHEMIST NOTES:
 N/A

GAS CHROMATOGRAPHY RESULTS

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

AEN I.D.: 805329

SAMPLE		MATRIX	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		SAMPLED	EXTRACTED	ANALYZED	FACTOR
07	980337	NON-AQ	5/4/98	5/12/98	5/14/98	1
08	980353	NON-AQ	5/6/98	5/12/98	5/14/98	1
09	980354	NON-AQ	5/5/98	5/12/98	5/19/98	20
PARAMETER		DET. LIMIT	UNITS	07	08	09
FUEL HYDROCARBONS, C6-C10		10	MG/KG	< 10	< 10	13000
FUEL HYDROCARBONS, C10-C22		5.0	MG/KG	17	< 5.0	600
FUEL HYDROCARBONS, C22-C36		5.0	MG/KG	< 5.0	< 5.0	< 100
CALCULATED SUM:				17.0		13600
SURROGATE:						
O-TERPHENYL (%)				142	130	N/A *
SURROGATE LIMITS		(66 - 151)				

CHEMIST NOTES:

* - DUE TO NECESSARY SAMPLE DILUTION, SURROGATE RECOVERY NOT OBTAINABLE

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: John Lambdin
 COMPANY: EI Paso Field Services
 ADDRESS: 770 W. Navajo
FARMINGTON, NM 87401
 PHONE: (505) 599-2144
(505) 599-2261
 FAX: _____
 BILL TO: Above
 COMPANY: _____
 ADDRESS: _____

980330	4/29/98	1050	Soil
980331	4/29/98	1540	
980333	4/30/98	1320	
980334	4/30/98	1602	
980335	5/1/98	1337	
980336	5/4/98	1203	
980337	5/4/98	1453	
980353	5/6/98	1437	
980354	5/5/98	1540	✓

Petroleum Hydrocarbons (418.1) TRPH	
(MOD.8015) Diesel/Direct/Inject	
(M8015) Gas/Purge & Trap	
Gasoline/BTEX & MTBE (M8015/8020)	
BTXE/MTBE (8020)	
BTEX & Chlorinated Aromatics (602/8020)	
BTEX/MTBE/EDC & EDB (8020/8010/Short)	
Chlorinated Hydrocarbons (601/8010)	
504 EDB <input type="checkbox"/> / DBCP <input type="checkbox"/>	
Polynuclear Aromatics (610/8310)	
Volatile Organics (624/8240) GC/MS	
Volatile Organics (8260) GC/MS	
Pesticides/PCB (608/8080)	
Herbicides (615/8150)	
Base/Neutral/Acid Compounds GC/MS (625/8270)	
General Chemistry:	
Priority Pollutant Metals (13)	
Target Analyte List Metals (23)	
RCRA Metals (8)	
RCRA Metals by TCLP (Method 1311)	
Metals:	

PROJ. NO.: _____
 PROJ. NAME: Phase II Drilling
 P.O. NO.: 0
 SHIPPED VIA: Fed-X
 COMMENTS: ☐ FIXED FEE ☐

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒

Signature: Marken Hopper Time: 1240
 Printed Name: Marken Hopper Date: 5/7/98

Company: EPES

Signature: _____ Time: _____

Printed Name: _____ Date: _____

Company: _____

BTEX SOIL SAMPLE WORKSHEET

File	:	980336	Date Printed	:	5/8/98
Soil Mass (g)	:	5.30	Multiplier (L/g)	:	0.00094
Extraction vol. (mL)	:	10	CAL FACTOR (Analytical):		200
Shot Volume (uL)	:	50	CAL FACTOR (Report):		0.18868

		DILUTION FACTOR:	1	Det. Limit
Benzene (ug/L)	:	<0.5	Benzene (mg/Kg): #VALUE!	0.472
Toluene (ug/L)	:	<0.5	Toluene (mg/Kg): #VALUE!	0.472
Ethylbenzene (ug/L)	:	<0.5	Ethylbenzene (mg/Kg): #VALUE!	0.472
p & m-xylene (ug/L)	:	<1.0	p & m-xylene (mg/Kg): #VALUE!	0.943
o-xylene (ug/L)	:	<0.5	o-xylene (mg/Kg): #VALUE!	0.472
			Total xylenes (mg/Kg): #VALUE!	1.415
			Total BTEX (mg/Kg): #VALUE!	

BTEX SOIL SAMPLE WORKSHEET

File : 980337
Soil Mass (g) : 5.12
Extraction vol. (mL) : 10
Shot Volume (uL) : 50

Date Printed : 5/8/98
Multiplier (L/g) : 0.00098
CAL FACTOR (Analytical): 200
CAL FACTOR (Report): 0.19531

Benzene (ug/L) : <0.5
Toluene (ug/L) : <0.5
Ethylbenzene (ug/L) : <0.5
p & m-xylene (ug/L) : <1.0
o-xylene (ug/L) : <0.5

DILUTION FACTOR:	1	Det. Limit
Benzene (mg/Kg):	#VALUE!	0.488
Toluene (mg/Kg):	#VALUE!	0.488
Ethylbenzene (mg/Kg):	#VALUE!	0.488
p & m-xylene (mg/Kg):	#VALUE!	0.977
o-xylene (mg/Kg):	#VALUE!	0.488
Total xylenes (mg/Kg):	#VALUE!	1.465
Total BTEX (mg/Kg):	#VALUE!	



6.5-98 thru
6.8-98 anal.

Page _____ of _____

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