

### SITE DETAILS

Legals - Twn: 31

**Rng:** 13

g**:** 13

NMOCD Hazard Ranking: 20 Operator: MERIDIAN OIL INC

Sec: 01 Unit: E

Land Type: 4 - Fee

Pit Closure Date: 04/22/94

#### **RATIONALE FOR RISK-BASED CLOSURE:**

The above mentioned production pit was assessed and ranked according to the criteria in the New Mexico Conservation Division's Unlined Surface Impoundment Closure Guidelines.

The primary source, discharge to the pit, has been removed. There has been no discharge to the production pit for at least five years and the pit has been closed for at least three years.

The production pit has been remediated to the practical extent of the trackhoe or to the top of bedrock. Initial laboratory analysis has indicated that the soil remaining at the bottom of the excavation is above standards based on the hazard ranking score. Contaminated soil was removed and transported to an approved landfarm for disposal. The initial excavation was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching any residual hydrocarbons remaining in the soil. Therefore, further mobility of residual hydrocarbons is unlikely.

Since the soil samples from the initial excavation were above standards, a test boring was drilled and a sample was collected to evaluate the vertical extent of impact to soils. Test boring sample results indicated soils below standards beneath the original excavation.

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

- Discharge to the pit has not occurred in over five years and the pit has been closed for over three years.
- The bulk of the impacted soil was removed during the initial excavation.
- The excavation was backfilled with clean soil and graded to divert precipitation away from the excavation area.
- All source material has been removed from the ground surface, eliminating potential direct contact with livestock and the general public.
- Groundwater was not encountered in the initial excavation or test boring; therefore, impact to groundwater is unlikely.
- Soil samples collected beneath the initial excavation were below standards.
- No potential receptors are within 1,000 feet of the site.
- Residual hydrocarbons remaining in the soil at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

### FIELD PIT SITE ASSESSMENT FORM

GENERAL	Meter: 90056 Location: HANCOCK #/A  Operator #: 1787 Operator Name: MERIDIAN P/L District: Kutz  Coordinates: Letter: E Section Township: 31 Range: 13  Or Latitude Longitude ——  Pit Type: Dehydrator X Location Drip: Line Drip: Other:  Site Visit Date: 4.4.94 Run: 02 21
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) ☐ Name of Surface Water Body Mc Drimater Arrows (Surface Water Body: Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)  TOTAL HAZARD RANKING SCORE: ☐ POINTS
REMARKS	Remarks: THREE PITS ON LOCATION. WILL CLOSE ONLY ONE. PIT IS DRY.

<u> </u>	
	ORIGINAL PIT LOCATION
	Original Pit : a) Degrees from North <u>270°</u> Footage to Wellhead <u>89′</u> b) Degrees from North Footage to Dogleg
NO	Dogleg Namec) Length : Width : Depth :
CATI	c) Length : Width : Depth :
ORIGINAL PIT LOCATION	17' 89' WENTHE VO
	Remarks: STARTED THEING PICTURES AT 9:44 A.M.
	END DUMP
70	
REMARKS	
	Completed By:
	Port Champson 4.4.94
	Signature Date

# PHASE I EXCAVATION

## FIL ) PIT REMEDIATION/CLOS RE FORM

GENERAL	Meter: 40056 Location: Hancock*11  Coordinates: Letter: E Section I Township: 31 Range: 13  Or Latitude Longitude  Date Started: 4-22-94 Area: 02 Run: 21
FIELD OBSERVATIONS	Sample Number(s): VWZU VWZS VWZ6  Sample Depth: 8 Feet  Final PID Reading ZUY PID Reading Depth 8 Feet  Yes No  Groundwater Encountered (1) (1) (2) Approximate Depth Feet
CLOSURE	Soil Disposition:  Envirotech (1) (3) Tierra  Other Facility (2) Name:  Pit Closure Date: <u>U-22-94</u> Pit Closed By: <u>SET</u>
REMARKS	Remarks: N:t Rock: at 8' x assisted dig any further, No line Markers  Signature of Specialist: Vale Wilson  (SP3191) 04/07/94



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# FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT - Soil

S	<b>AMPLE</b>	IDEN?	ΓΙΕΙCA	TION

	SAMPLE	IDEN HEICA	ATION				_
	Field	ID		Lab ID			
SAMPLE NUMBER:	VW 2	4	945	5003		ı	
MTR CODE   SITE NAME:	90051	0		N/A			
SAMPLE DATE   TIME (Hrs):	4/22	194	10	<u> </u>			
SAMPLED BY:			N/A	^		50000	Tarked
DATE OF TPH EXT. ANAL.:	NIA	( ) > ,, , , , ,	71	14/94		Seealt	
DATE OF BTEX EXT. ANAL.:	5/6/9	4 DSIMAY	NI	<del>`}_</del>		10	`
TYPE   DESCRIPTION:	<u></u>	17 40	1011			l.	
REMARKS:	Re-ext	rad for	BTEX	at 0.	5g/6	20ml	_
		RESULTS	250 nl	4.75mlHz	0/2ml	s-161	
PARAMETER	RESULT	UNITS		QUALIFI			;
			DF	<u> </u>	M(g)	V(mi)	
BENZENE	2.42	MG/KG					
TOLUENE	5la, 2	MG/KG			<u> </u>		
ETHYL BENZENE	12.0	MG/KG					ı
リューフ + 54.7 TOTAL XYLENES	97.4	MG/KG	0.0312				
TOTAL BTEX	168.07	W/44 MG/KG	0.0178	5 Jus/16/94	.64	20	
TPH (418.1)	1530	MG/KG					
HEADSPACE PID	249	PPM					
PERCENT SOLIDS	82.0	%					
	- TPH is by EPA Method		PA Method 8020 – npie – All QA/C	C was accept	table.		
The Surrogate Recovery was at Narrative:	χ 7, Δ	- 70 IUI (IIIS Sdif	ipie Ali QA/C	1 1	,	١	
the E.do Dypliate	on this	Samply	Appears	to not	have	poen	
Objected Warpords.  DF = Dilution Factor Used ()							
	a late:		Date:	5/21/9	Ψ		
Approved By:	(IMMUL)		- Date.		1		



# FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT - Soil

### SAMPLE IDENTIFICATION

	Field ID	AWS 4/29/94 Lab ID
SAMPLE NUMBER:	VW.24	<del>9405003</del> 945003
MTR CODE   SITE NAME:	90056	NIA
SAMPLE DATE   TIME (Hrs):	4/22/94	1030
SAMPLED BY:	NIA	
DATE OF TPH EXT.   ANAL.:	4-28-94	4/28/94
DATE OF BTEX EXT.   ANAL.:	5/2/94	511
TYPE   DESCRIPTION:	VC	Grey Sand Clay

REMARKS:	

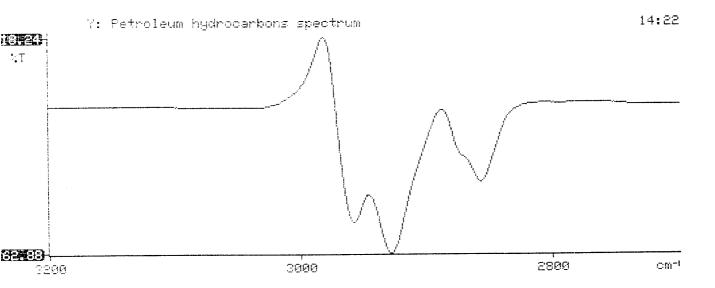
### **RESULTS**

PARAMETER	RESULT	UNITS	QUALIFIERS			
PANAIVIETEN	112001		DF	Q	M(g)	V(ml)
BENZENE		MG/KG				
TOLUENE		MG/KG				
ETHYL BENZENE		MG/KG		- <del> </del>		
TOTAL XYLENES		MG/KG				
TOTAL BTEX		MG/KG	16250		.64	20
TPH (418.1)	1536	MG/KG		,	2.04	28
HEADSPACE PID	249	PPM				
PERCENT SOLIDS	82.0	%				

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

The Surrogate Recovery was at Narrative:	% for this sample	All QA/QC was acceptable.	
DF = Dilution Factor Used			
Approved By:		Date:	

Test Method for Oll and Grease and Petroleum Hydrocarbons in Water and Soil Perkin-Elmer Model 1600 FT-IR Analysis Report 24/04/28 14:22 Sample identification 945003 Initial mass of sample, g 0.040 Volume of sample after extraction, ml 28.000 Petroleum hydrocarbons, ppm 1533.376 Net absorbance of hydrocarbons (2930 cm-1)



Ext Vol = 20 ne = .024Sample Mass = 0.64 g al INJ = 250 pl 945003 1/20

FACTOR=,03125

John Lambdin Type : Sample

File: BETX\_\_06.DO1

Run : 01

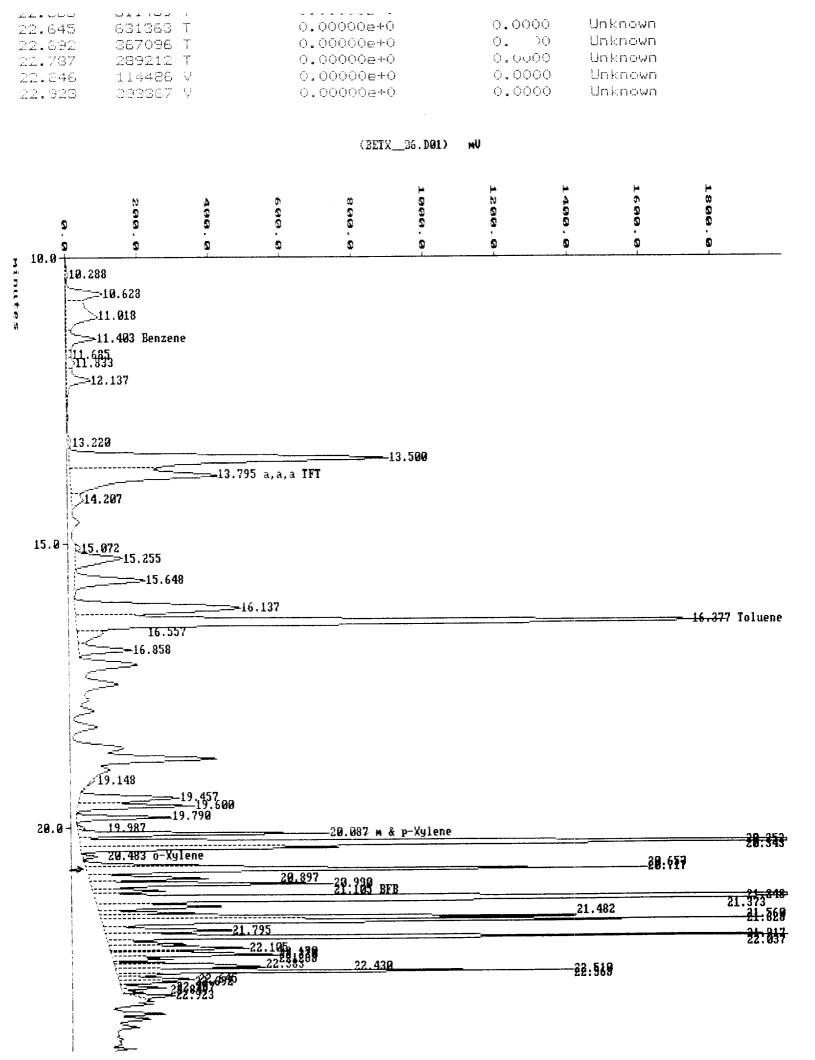
Path : C:\CHROM

 Collection: 09:39:03 May 14 1994
 Meth(A): BETX
 C 08:36:42 May 14 1994
 C 08:36:42 May 14 1994

Sample Amt : 1.00000e+0 Dilution: 2.00000e+1

### EXTERNAL STANDARD ( AREA )

				XTERNAL STAN	IDARD (	( AREA )		
ET	Area	BO	ExpRT	RF		ug/L	Name	
10.288 10.628 11.018	46891 915939 1576868	T		0.00000e+0 0.00000e+0 0.00000e+0		0.0000 0.0000 0.0000	Unknown Unknown Unknown	2.
11.403	685982 92400 190409	T	11.400	5.63368e-6 0.00000e+0	3,86	77.2922 0.0000 0.0000	Benzene <b>X</b> Unknown Unknown	2.42
12.126 12.220 13.220	630961 75316 8555124	T		0.00000e+0 0.00000e+0		0.0000 0.0000 0.0000	Unknown Unknown Unknown	
13.795 14.207 15.072	4908732 332919 69873	T	13.795	6.17972e-5 0.00000e+0	303.3	6066.9209 0.0000 0.0000	R a,a,a TFT Unknown Unknown	
15.255 15.648 16.137	1225767 16-4415 4841027	Ť		0.00000e+0 0.00000e+0 0.00000e+0		0.0000 0.0000 0.0000	Unknown Unknown Unknown	
16.377 16.557 16.858	11956149 612842 956151	Ţ	16.293	7.52260e-6 0.00000e+0 0.00000e+0	४९.९५	1798.8254 0.0000 0.0000	Toluene Unknown Unknown	
19.148 15.457 19.600	52137 1766471 1477713	1		0.00000e+0 0.00000e+0 0.00000e+0		0.0000 0.0000 0.0000	Unknown Unknown Unknown	
19.790	1018804 86493		<del>(10.017</del>	0.000000@+0 <del>-3.27!76g-6</del> 0.00000@+0			Unknown	ene X20=384.
20.087 20.252 20.343	2324030 21272016 2185178	-T	) <del>30.053</del>	-3.20931a-6 0.00000e+0 0.00000e+0	> 68.268	0.000 0.000 0.000	Unknown 4	
20.483 20.657	122368 1349041 5149790	V T	) <del>29,532</del>	0.00000e+0 0.00000e+0	87.4450		o-XyleneX Unknown Unknown	(20 = 1748,9
20.717 20.897 20.990	1305880 2234552	T	-77.41 .0.1 <u>27.47</u>	0.00000e+0 0.00000e+0	_ <del></del>	0.0000 0.0000 3 <del>30.9714</del>	Unknown Unknown BFB	D 1690.7
21.105 21.248 21.373 21.482	586837 32034716 1545877 686693	. T— T		<del>- 2.63884e-6</del> 0.00000e+0 0.00000e+0 0.00000e+0		0.0000	Unknown Unknown Unknown	
21.560 21.628 21.795	3819357 6062505 1233166	T ; T		0.00000e+0 0.00000e+0 0.00000e+0		0.0000	Unknown Unknown Unknown	h
21.916 22.037 22.105	5149074 839098 1292971	- T		0.00000e+0 0.00000e+0 0.00000e+0		0.0000 0.0000 0.0000	Unknown Unknown Unknown	Wendler
22.170 22.220 22.288	617245 1257693 464803	; T } T		0.00000e+0 0.00000e+0 0.00000e+0		0.0000 0.0000 0.0000	Unknown d Unknown Unknown	5/14/94
22.3 <b>83</b> 22.430	641687 1199987			0.00000e+0 0.0000e+0		0.0000	Unknown Unknown	



John Lambdin 945003 File: BETX\_06.D02 Type : Sample Run : 01

Path : C:\CHROM

Collection: 09:29:02 May 14 1994 Meth(B): BETX [ 08:36:41 May 14 1994 ] Integration: 09:39:03 May 14 1994 Meth(B): BETX [ 08:36:41 May 14 1994 ] Report : 10:05:35 May 14 1994 Meth(B): BETX [ 08:36:41 May 14 1994 ]

Sample Amt : 1.00000e+0 Dilution: 2.00000e+1

### EXTERNAL STANDARD ( AREA )

RT	Area 30	ExpRT	RF	ug/L	Name
10.610	450172 T		0.00000e+0	0.000	Unknown
10.785	110664 T		0.00000e+0	0.0000	Unknown
11.025	502831 T		0.00000e+0	0.000	Unknown
11.407	31082 T		0.00000@+0	0,000	Unknown
11.537	119742 T	11.521	1.61705e-4	3 <b>87.2596</b>	Benzene
11.087	109280 T		0.00000e+0	0.0000	Unknown
11.619	91528 T		0.00000e+0	0.000	Unknown
12.140	786267		0.00000e+0	0,000	Unknown
10.511	1018145 T		0.00000e+0	0,000	Unknown
13.770	607815 T		0.00000e+0	0,000	Unknown
2020	Table of Proof the ton	14,070	0.00000e+0		a,a,a TFT
14.226	52978		0.00000e+0	0.0000	Unknown
15.255	501046 T		(),()()()()();+()	0.000	Unknown
15.646	358564 V		O.000000e+0	0.000	Unknown
18.140	362372 T		0.000000+0	0.000	Unknown
16.377	483168 T	16.470	2.022779-4	1954.6750	Toluene
16.860	679412 T		0.00000e+0	0.000	Unknown
17.105	81298 V		0.00000e+0	0.000	Unknown
19.443	132070 T		0.00000e+0	0.000	Unknown
19.602	293230 V		O.00000e+0	0.0000	Unknown
19.791	171210 V		0.00000e+0	0.0000	Unknown
20.088	73633 T	20.127	1.76802e-4	260.3715	Ethylbenzene
20.253	662518 T	20.290	2.12471e-4	2815.7422	m & p−Xylene
20.350	498677 T		0.00000e+0	0.000	Unknown
20.660	97385 T		0.00000e+0	0.000	Unknown
20.718	216738 T	20.748	2.03522e-4	882.2232	o-Xylene
20.901	104175 T		0.00000e+0	0.000	Unknown
20.993	131607 T		0.00000e+0	0.000	Unknown
21.245	964025 T		0.00000e+0	0.000	Unknown
21.368	91271 T	21.348	-1.33452e-5	-24.3607	BFB
21.561	111830 T		0.00000e+0	0.0000	Unknown
21.655	364563 T		0.00000e+0	0.0000	Unknown
21.802	48987 T		O.00000e+0	0.0000	Unknown
21.918	169411 T		0.00000e+0	0.0000	Unknown
22.038	34023 T		0.00000e+0	0.0000	Unknown
22.105	49487 T		0.00000e+0	0.0000	Unknown
22.221	119720 T		0.00000e+0	0.000	Unknown
22.290	39538 T		0.00000e+0	0.0000	Unknown
22.433	319 <b>3</b> 9 T		0.00000e+0	0.0000	Unknown
22.512	507541 T		0.00000e+0	0.000	Unknown

(BETX\_\_06.D02) MV

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# PHASE II

### RECORD OF SUBSURFACE EXPLORATION

### PHILIP ENVIRONMENTAL

4000 Monroe Road

Farmington, New Mexico 87401 (605) 326-2262 FAX (605) 326-2388

Elevation **Borehole Location** GWL Depth Logged By Jeff W. Kindley Drilled By 09/21/95 0920 Date/Time Started 1005 Date/Time Completed 0912195

Borehole #	BH-1
Well #	
Page 1	of 1

**EPNG Pits** Project Name 6000.77 14509 Phase Project Number 90056 Project Location Hancock #1A

Jeff W. Kindley Well Logged By Personnel On-Site Contractors On-Site Client Personnel On-Site

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

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Monitor nits: PPI BH_	-	Driffing Conditions & Blow Counts
0				Backfill material to 12 feet  CL, BR CLAY, dry, hard, low plasticity, odor (hydroranium)  S.A.A  Boring terminated at 22 feet.				35/1 %	A935

BTEX Comments: Geologist Signature



# FIELD SERVICES LABORATORY ANALYTICAL REPORT

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

### SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JWK78	94 7517
MTR CODE   SITE NAME:	90056	Hancock #IA
SAMPLE DATE TIME (Hrs):	09-21-95	0935
PROJECT:	Phase II Drilling	
DATE OF TPH EXT.   ANAL.:	9-72-95	
DATE OF BTEX EXT.   ANAL.:	9/22/95	9/25/95
TYPE   DESCRIPTION:	VG	Light brown said & Sand Stone
		1
Field Remarks:		

### RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS				
PARAWELL	ta di va jitu		DF	Q	M(g)	V(ml)	
BENZENE	4 0.5	MG/KG					
TOLUENE	₹ 0.5	MG/KG					
ETHYL BENZENE	40.5	MG/KG					
TOTAL XYLENES	< 1.5	MG/KG					
TOTAL BTEX	43	MG/KG					
TPH (418.1)	30,1	MG/KG			2.11	28	
HEADSPACE PID	0	PPM					
PERCENT SOLIDS	88.2	%					

PERCENT SOLIDS	1010		
The Surrogate Recovery was at Narrative:	TPH is by EPA Method 4	Method 8020 All QA/QC was accept	able.
DF = Dilution Factor Used Approved By:	). J.	 Date:9-a	29-95

```
Test Method for
     311 and Grease and Petroleum Hydrocarbons
                                               *
                in Water and Soil
          Perkin-Elmer Model 1600 FT-IR
                 Analysis Report
95/09/22 14:50
  Sample identification
 947517
  Initial mass of sample, g
  Volume of sample after extraction, ml
 28,000
  Petroleum hydrocarbons, ppm
 30.090
t Net absorbance of hydrocarbons (2930 cm-1)
 (\bigcirc \ _{a} \ \bigcirc \ \underline{\uparrow} \ \angle_{T}^{t}
                                                             14:50
         Y: Petroleum hydrocarbons spectrum
```

3000

3299

2800

 $cm^{-1}$ 

### **BTEX SOIL SAMPLE WORKSHEET**

File	:	947517	Date Printed	:	9/26/95
Soil Mass	(g) :	4.99	Multiplier (L/g)	:	0.00100
Extraction vol.	(mL):	10	DF (Analytical)	:	200
<b>Shot Volume</b>	(uL) :	50	DF (Report)	:	0.20040

					Det. Limit
Benzene	(ug/L) :	0.18	Benzene (mg/Kg):	0.036	0.501
Toluene	(ug/L) :	0.33	Toluene (mg/Kg):	0.066	0.501
Ethylbenzene	(ug/L) :	0.12	Ethylbenzene (mg/Kg):	0.024	0.501
p & m-xylene	(ug/L) :	0.84	p & m-xylene (mg/Kg):	0.168	1.002
o-xylene	(ug/L) :	0.25	o-xylene (mg/Kg):	0.050	0.501
,	, ,		Total xylenes (mg/Kg):	0.218	1.503
			Total BTEX (mg/Kg):	0.345	
o-xylene	(ug/L) .	0.20	Total xylenes (mg/Kg):	0.218	1.503

### EL PASO NATURAL GAS EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\092595-0.012 Method : C:\LABQUEST\METHODS\9000.MET

Sample ID : 947517,4.99G,50U Acquired : Sep 25, 1995 18:40:01 Printed : Sep 25, 1995 19:10:24

User : MARLON

#### Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)	
BENZENE	8.123	66142	0.1768	
a,a,a-TFT	10.483	8928343	102.0548	
TOLUENE	12.903	119395	0.3281	
ETHYLBENZENE	17.253	40804	0.1212	
M,P-XYLENES	17.633	338241	0.8431	
O-XYLENE	18.820	82985	0.2534	
BFB	19.880	53374992	97.9212	

