

**1R - 173**

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# **REPORTS**

**DATE:**

**1999**

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**Safety & Environmental**

**Solutions, Inc.**

**KOCH PIPELINE CO., L.P.**

**Crouch Station**

**Lea County, New Mexico**

**Annual Report 1999**

**RECEIVED**

**APR 15 1999**

ENVIRONMENTAL BUREAU  
OIL CONSERVATION DIVISION

*Safety & Environmental Solutions, Inc.*

*703 E. Clinton Suite 103*

*Hobbs, New Mexico 88240*

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**Purpose**

The purpose of this report is to present a summary of site monitoring at the Crouch Station in Section 18 Township 18S Range 36E in Lea County, New Mexico for the past year. (See Vicinity Map)

**Background**

This report is the result of the requirement of the New Mexico Oil Conservation Division to report the results of the investigation to delineate the possibility of groundwater contamination at the Crouch Station site.

**Work Performed**

Three additional monitor wells were installed at the Crouch Station on May 1 and May 2, 1998, supplementing two monitor wells drilled initially in 1997 by Western Technologies. (See Monitor Well Site Plan)

Soil samples were collected during the drilling using a split spoon sampler driven into the undisturbed soil through the hollow stem auger used to drill the monitor wells. The samples were placed in proper containers with no headspace, preserved on ice and transported under chain of custody to the laboratory for analysis. The soil samples were analyzed for the Total Petroleum Hydrocarbon (TPH), and Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) content. The bottom hole sample in Monitor Well #4 was too wet for testing.

Test results of the soil samples are summarized below:

ANALYTES	MW # 3 20'	MW # 3 58'	MW #4 30'	MW #5 30'	MW # 5 57'-59'
Sample Date	4/30/98	4/30/98	5/1/98	5/1/98	5/1/98
TPH	<10	51700	75	65	19
<b>BTEX</b>					
Benzene	<0.002	0.057	<0.002	<0.002	<0.002
Toluene	<0.002	<0.002	<0.002	<0.002	<0.002
Ethyl Benzene	<0.002	<0.002	<0.002	<0.002	<0.002
Total Xylenes	<0.006	<0.006	<0.006	<0.006	<0.006

As noted by the red highlighting, the bottom hole soil sample in Monitor Well #3 was the only sample to exceed regulatory limits for TPH or BTEX, with elevated levels of both TPH and Benzene.

Once drilled, bailing 3 to 5 casing volumes of water prior to sample collection with a properly decontaminated bailer developed the monitor wells. The samples were placed in the appropriate container, preserved, and transported under chain of custody to the laboratory for analysis. The existing monitor wells were also developed and sampled at this time. Monitor Well #2, however, did not yield any samples because the well takes in excess of 24 hours to recharge after well development.

The ground water samples were analyzed for BTEX, Polynuclear Aromatic Hydrocarbons (PAH), New Mexico Water Quality Control Commission (WQCC) metals, Major Cations & Anions, and Total Dissolved Solids (TDS). SW - 846 protocols were followed for all sample collection to insure the integrity of the sample.

The following table presents the results of the initial analysis of the groundwater samples from monitor wells #1, #3, #4, and #5:

ANALYTES	MW # 1	MW # 3	MW #4	MW #5	WQCC Limits
<b>Sample Date</b>	4/30/98	5/1/98	5/1/98	5/1/98	
<b>Polynuclear Aromatic Hydrocarbons</b>					
Naphthalene	<0.001	<0.001	<0.001	<0.001	0.03
2-Methylnaphthalene	<0.002	<0.002	<0.002	<0.002	0.03
1-Methylnaphthalene	<0.002	<0.002	<0.002	<0.002	0.03
Acenaphthylene	<0.001	<0.001	<0.001	<0.001	
Acenaphthene	<0.001	<0.001	<0.001	<0.001	
Fluorene	<0.001	<0.001	<0.001	<0.001	
Phenanthrene	<0.001	<0.001	<0.001	<0.001	
Anthracene	<0.001	<0.001	<0.001	<0.001	
Fluoranthene	<0.001	<0.001	<0.001	<0.001	
Pyrene	<0.001	<0.001	<0.001	<0.001	
Benzo(a)anthracene	<0.001	<0.001	<0.001	<0.001	
Chrysene	<0.001	<0.001	<0.001	<0.001	
Benzo(b)fluoranthene	<0.001	<0.001	<0.001	<0.001	
Benzo(k)fluoranthene	<0.001	<0.001	<0.001	<0.001	
Benzo(a)pyrene	<0.0007	<0.0007	<0.0007	<0.0007	0.0007
Indeno(1,2,3-cd)pyrene	<0.001	<0.001	<0.001	<0.001	
Dibenzo(a,h)anthracene	<0.001	<0.001	<0.001	<0.001	
Benzo(g,h,i)perylene	<0.001	<0.001	<0.001	<0.001	
<b>Metals</b>					
As	<0.01	<0.01	<0.01	<0.01	0.1
Ag	<0.05	<0.05	<0.05	<0.05	0.05
Ba	1.12	1.37	1.72	2.10	1.0
Cr	<0.05	<0.05	<0.05	0.083	0.05
Pb	<0.05	<0.05	<0.05	<0.05	0.05
Hg	<0.002	<0.002	<0.002	<0.002	0.002
Se	<0.01	<0.01	<0.01	<0.01	0.05

ANALYTES	MW # 1	MW # 3	MW # 4	MW # 5	WQCC Limits
Sample Date	4/30/98	5/1/98	5/1/98	5/1/98	
<b>Major Cations &amp; Anion</b>					
Na	17	104	143	<1	
Ca	126	115	115	128	
Mg	20	81	42	63	
K	2.3	3.9	11.9	5.7	
Conductivity	1415	1245	1421	1257	
T-Alkalinity	225	420	168	140	
Cl <sup>-</sup>	66	66	89	59	250
SO <sub>4</sub>	113	398	507	349	600
CO <sub>3</sub>	0	0	0	0	
HCO <sub>3</sub>	275	420	168	171	
PH	6.68	7.15	7.57	7.67	
TDS	770	930	950	892	1000
<b>BTEX</b>					
Benzene	<0.002	<b>&lt;0.160</b>	<0.007	<0.002	
Toluene	<0.002	<0.002	<0.002	<0.002	
Ethyl Benzene	<0.002	<0.002	<0.002	<0.002	
Total Xylenes	<0.006	<0.006	<0.006	<0.006	

As noted by the red highlighting, all four monitor wells sampled exhibited elevated Barium levels slightly greater than the WQCC limit. In addition, The sample from Monitor Well # 5 also exhibited a Chromium level of .083ppm, which is greater than the WQCC limit.

Also noted by the red highlighting, the water sample from Monitor Well #3 shows 0.160 ppm Benzene. The New Mexico Water Quality Control Commission (WQCC) Benzene Standard for this type of groundwater is 0.010 ppm. The result for Monitor Well #3 may indicate that the groundwater entering the area underneath Crouch Station is already contaminated above the WQCC limit for Benzene. The sample from Monitor Well # 4 exhibited a slightly elevated Benzene level, however, this level is below WQCC limits for Benzene.

To verify the elevated Benzene levels in Monitor Wells #3 and #4, confirmation samples were taken on 5/6/98 and the results are as follows:

ANALYTES	MW # 3	MW # 4
Sample Date	5/6/98	5/6/98
<b>BTEX</b>		
Benzene	<b>&lt;1.201</b>	<0.005
Toluene	<0.001	<0.001
Ethyl Benzene	<0.001	<0.001
Total Xylenes	<0.003	<0.003

Monitor Well #3 exhibits Benzene at 120 times the WQCC limit. The fact that this sample contains such a high level of Benzene supports the observation that the contamination is entering the property from an up-gradient direction. Public records obtained from the New Mexico Oil Conservation Division from the existing Texas New Mexico Pipeline remediation confirm the direction of groundwater flow. (See Excerpts of KEI Subsurface Investigation Report for Texas-New Mexico Pipeline Company)

On February 12, 1999, semi-annual water sampling was performed on the monitor wells to verify the encountered contamination. Each well was developed and sampled, and the sample was tested for only those contaminants found at the initial testing.

Following is a summary of these results:

ANALYTES	MW # 1	MW # 3	MW #4	MW #5
Barium	<1.0	<1.0	<1.0	<1.0
Benzene	N/A	126ppm	N/A	N/A
Chromium	<0.05	<0.05	<0.05	<0.05

As noted by the red highlighting, only the Benzene levels in Monitor Well #3 is above the NMWQCC limits. A water table elevation study was performed at the Crouch Station site in conjunction with the sampling of the monitor wells. (See Water Table Elevation Map Crouch Station) Both the Barium and Chromium levels in all four monitor wells tested were below the NMWQCC limits.

#### Additional Work

Beginning in October 1997, Safety & Environmental Solutions, Inc. was contracted by Koch Oil Company to monitor the installed Soil Vapor Extraction Unit setup on a prior spill. The air emissions are sampled weekly with a MTIP Photovac PID for BTEX. A quarterly air sample is taken to a third party laboratory for confirmation using standard protocols, then a quarterly report is filed with the New Mexico Environment Department Air Quality Bureau. (See Quarterly Air Sampling Report) Condensate from the system is collected and disposed of at an approved NMOCD facility. (See Condensate Disposal Record)

#### Summary

The results of the analytical tests performed on soil and ground water samples obtained from the monitor well installations at the Crouch Station may be summarized as follows:

Highly contaminated soil (Benzene) was encountered at the depth of 58' in Monitor Well # 3.

Elevated levels of Benzene were also found in all of the up-gradient Monitor Well #3 ground water samples. No other monitor wells sampled exhibited Benzene in excess of the WQCC limits in the ground water samples.

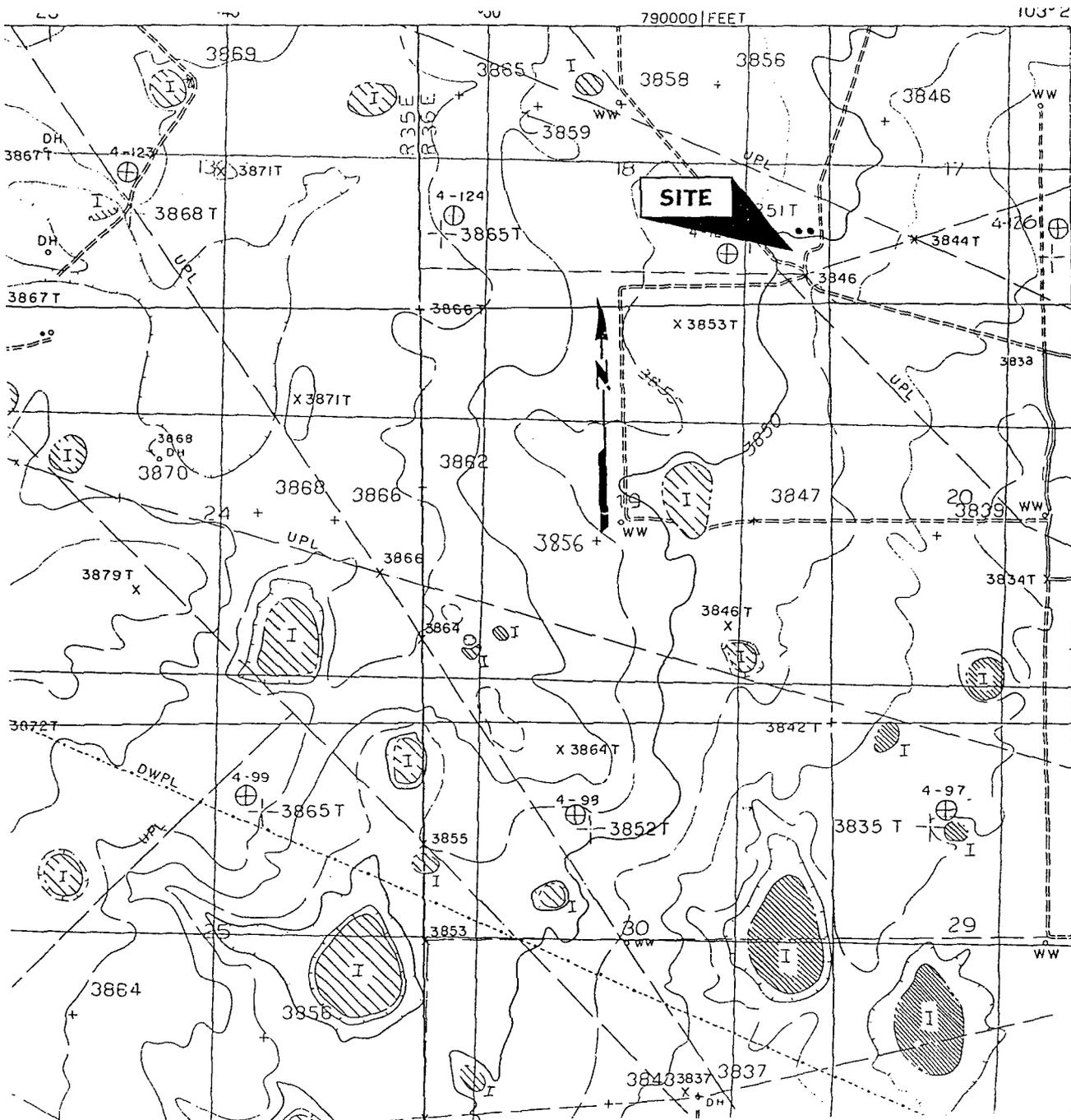
All wells sampled exhibited elevated levels of Barium in the initial ground water samples. However, the follow up semi-annual testing revealed no elevation in levels above the NMWQCC limit. Monitor Well #5, a down gradient well, also exhibited an elevated level of Chromium upon initial testing. Once again, the follow up testing revealed no elevated Chromium levels in any well above the NMWQCC limit.

The Benzene contamination has entered the property at the northwest property line in the water table that flows from the northwest to the southeast at a bearing of approximately 140°. This contamination is almost certainly the result of a source that is located clearly outside the property boundaries of the Crouch Station. The obvious suspected source of the contamination entering this area is the historical leak to the northwest of Crouch Station. This leak occurred approximately 10 years ago and is currently undergoing remediation by Texas New Mexico Pipeline Company and Southwestern Public Service. The most current report of sampling of the 18 monitor wells installed at that site indicate the contamination may have traveled past the most down-gradient well.

The Air Monitoring program has regularly shown that the Soil Vapor Extraction Unit is performing according to its specifications. The historical spill that this SVE unit is remediating is unrelated to the Monitor Well program.

### **Maps and Figures**

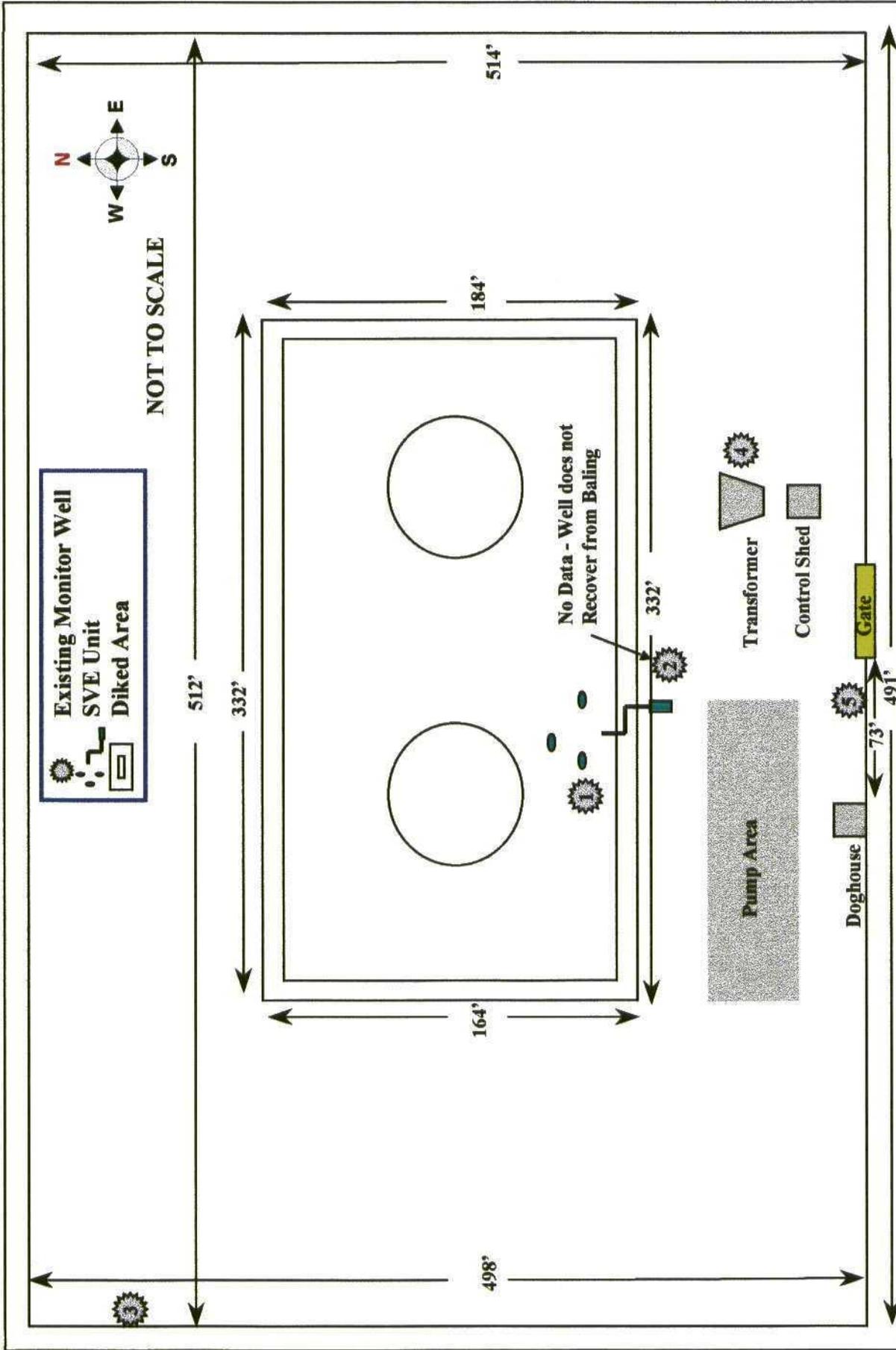
- Vicinity Map
- Monitor Well Site Plan
- John West Engineering Company Elevations and Ties Plat
- KEI Ground Water Contour Map May 1, 1997
- Water Table Elevation Map Crouch Station February 12, 1999
- Excerpts of KEI Subsurface Investigation Report for Texas-New Mexico Pipeline
- Analytical Results for Soil and Water Samples
- Quarterly Air Sampling Reports
- Disposal Records for Condensate



Koch Pipeline Co., L.P.

**Crouch Station  
Vicinity Map**

*Safety & Environmental  
Solutions, Inc.  
Hobbs, NM*



Safety & Environmental Solutions,  
Hobbs, New Mexico

**Monitor Well  
Site Plan**

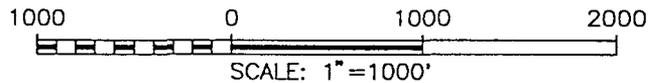
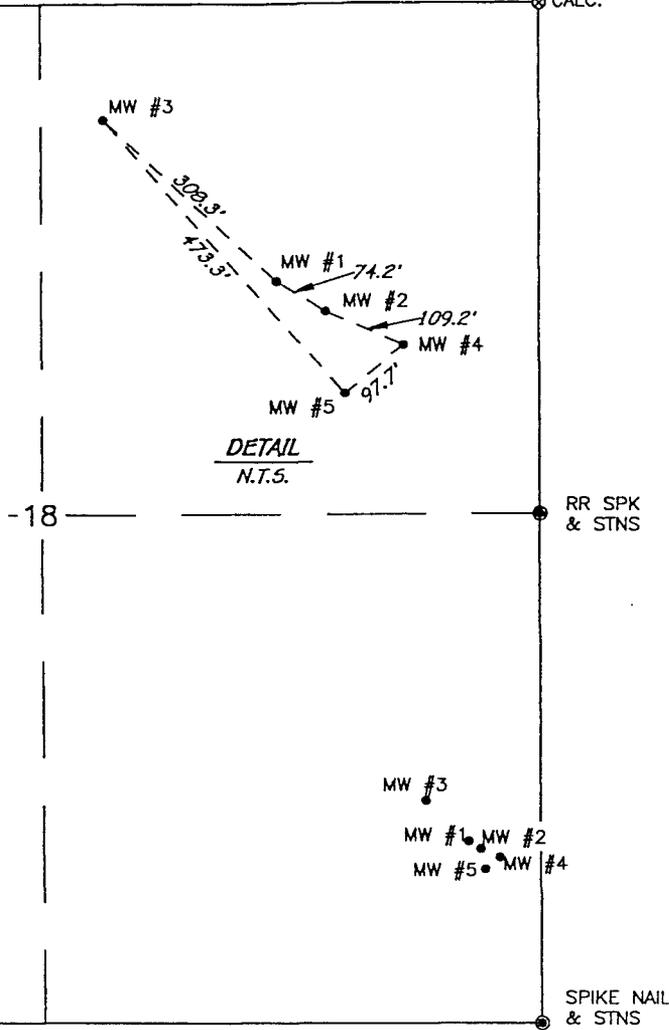
Koch Pipeline Co., L.P.

SECTION 18, TOWNSHIP 18 SOUTH, RANGE 36 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO.

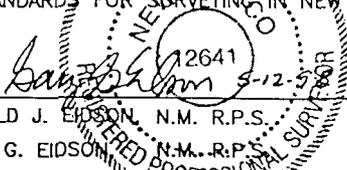
SPIKE NAIL & STNS

NEW MEXICO.  
CALC.

WELL NO.	LOCATION IN SECTION	NORTH SIDE ELEVATIONS (NAVD 29)
MW #1	944' FSL 378' FEL	3850.200 GROUND 3850.305 CONC. SLAB 3851.091 TOP PVC 3851.844 TOP CASING
MW #2	905' FSL 315' FEL	3849.167 GROUND 3849.765 CONC. SLAB 3849.479 TOP PVC
MW #3	1153' FSL 604' FEL	3851.132 GROUND 3851.929 CONC. SLAB 3853.895 TOP PVC
MW #4	862' FSL 215' FEL	3849.587 GROUND 3849.788 CONC. SLAB 3852.024 TOP PVC
MW #5	800' FSL 291' FEL	3848.899 GROUND 3849.121 CONC. SLAB 3851.506 TOP PVC



I HEREBY CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAN MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.



RONALD J. EIDSON, N.M. R.P.S. No. 3239  
GARY G. EIDSON, N.M. R.P.S. No. 12641

JOHN W. WEST ENGINEERING COMPANY  
CONSULTING ENGINEERS & SURVEYORS - HOBBS, NEW MEXICO

**SAFETY & ENVIRONMENTAL SOLUTIONS INC.**

LOCATE MONITOR WELLS AT KOCH PIPELINE CO., L.P.  
CROUCH STATION LOCATED IN SECTION 18, TOWNSHIP  
18 SOUTH, RANGE 36 EAST, N.M.P.M., LEA COUNTY,  
NEW MEXICO.

Survey Date: 5/7/98	Sheet 1 of 1 Sheets
W.O. Number: 98-11-0724	Drawn By: J. L. Presley
Date: 5/11/98	DISK: JLP#200 SES0724

Approximate Scale: 1"=100'

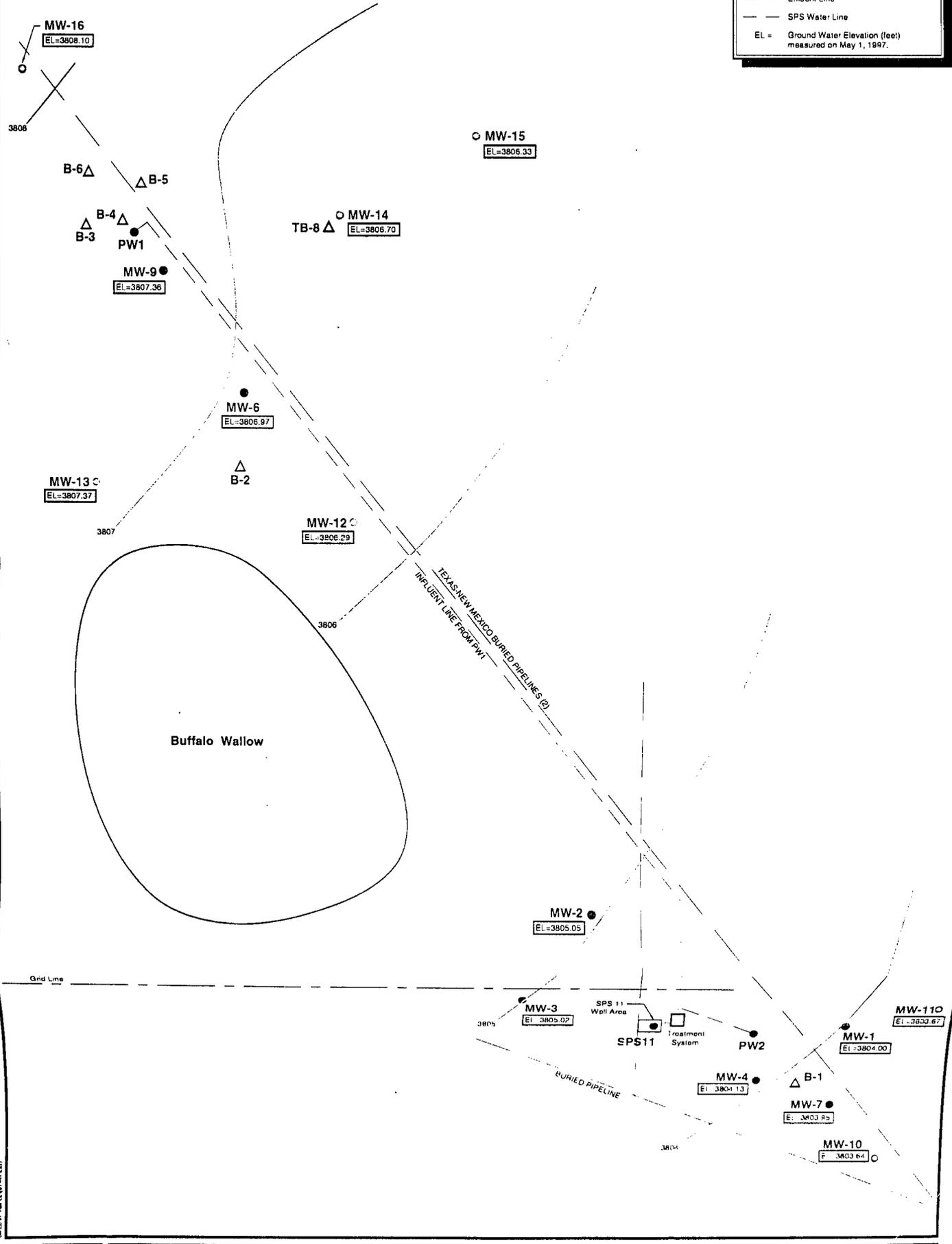
NOTE: Adjacent properties are not to scale.

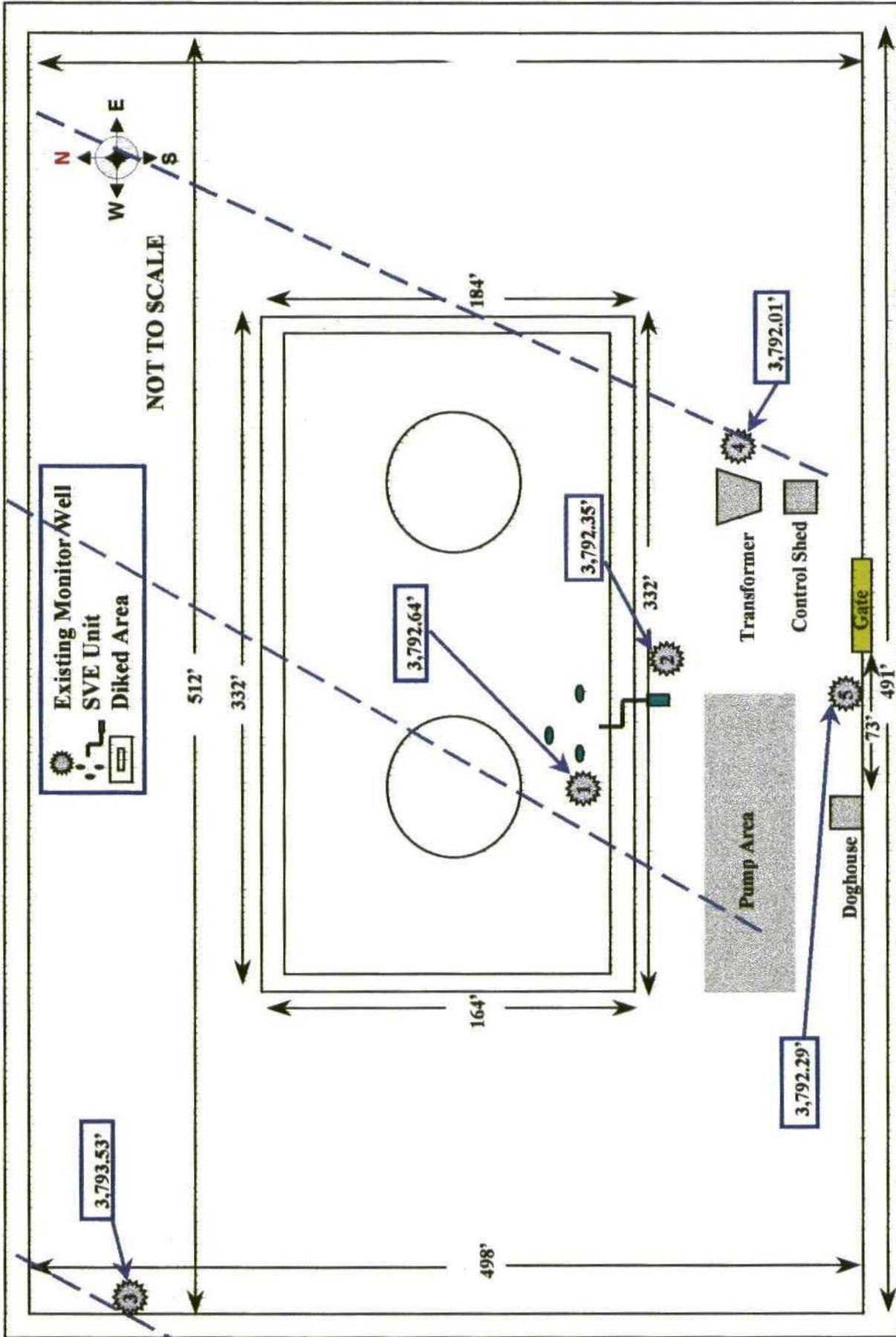
Apparent direction of ground water flow.

**LEGEND**

- Monitoring Well installed by KEI on March 11-13 and 19-20, 1997.
- △ Soil Boring advanced by KEI on March 17-20, 1997.
- Existing Monitoring Well Location
- △ Soil Boring advanced by Texaco Research & Development
- Buried Pipelines
- Influent Line
- Effluent Line
- SPS Water Line

EL = Ground Water Elevation (feet) measured on May 1, 1997.





NOT TO SCALE

Existing Monitor Well  
SVE Unit  
Diked Area

Safety & Environmental Solutions,  
Hobbs, New Mexico

Monitor Well Groundwater  
Elevation 2-12-99

Koch Pipeline Co., L.P.

## CONCLUSIONS

The following conclusions are based on field and laboratory data:

- The standard New Mexico Oil Conservation Division (OCD) levels for soils at the site are:

Total Petroleum Hydrocarbons (TPH)	100 mg/kg
Benzene	10 mg/kg
Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX)	50 mg/kg

- Soil samples obtained from soil borings B-3 through B-6 and monitoring wells MW-10, MW-11, MW-12, MW-14, and MW-16 indicated TPH, benzene, and BTEX concentrations above closure standards.
- Ground water samples obtained from monitoring wells MW-1, MW-7, MW-9, MW-10, MW-11, MW-14, and MW-16 indicated benzene concentrations above the New Mexico Water Quality Control Commission (NMWQCC) drinking water standard for benzene.

TABLE I

SUMMARY OF LABORATORY RESULTS - SOIL  
TEXAS - NEW MEXICO PIPE LINE COMPANY  
TNMPL SPS-11  
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	SAMPLE DATE	DEPTH (feet)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYLBENZENE (mg/kg)	XYLENES (mg/kg)	TOTAL BTEX (mg/kg)	TPH (mg/kg)
B-1	03/20/97	0 - 1	0.222	10.991	18.776	32.826	62.815	3,710
B-1	03/20/97	10 - 11	0.198	0.151	ND	0.113	0.462	20
B-1	03/20/97	40 - 41	10.758	85.292	75.323	108.244	279.617	3,720
B-1	03/20/97	53 - 54	ND	8.441	17.652	28.752	54.845	9,400
B-2	03/17/97	0	ND	ND	ND	0.237	0.237	ND
B-2	03/17/97	5	ND	ND	ND	ND	ND	10
B-2	03/17/97	30	ND	ND	ND	ND	ND	ND
B-2	03/17/97	55	ND	ND	ND	ND	ND	10
B-3	03/17/97	0	ND	ND	ND	ND	ND	1,220
B-3	03/17/97	10	ND	ND	ND	0.214	0.214	70
B-3	03/17/97	40	ND	7.219	16.764	29.543	53.526	3,900
B-4	03/18/97	5	0.927	7.593	55.077	98.756	162.353	12,100
B-4	03/18/97	30	0.337	0.485	0.639	13.435	14.896	2,200
B-4	03/18/97	50	1.594	11.293	11.954	21.815	46.656	5,800
B-5	03/19/97	10	0.316	ND	8.727	16.076	25.119	3,230
B-5	03/19/97	30	0.17	ND	ND	0.14	0.31	70
B-5	03/19/97	51	1.942	20.447	22.087	34.083	78.559	2,210
B-6	03/18/97	0	1.278	15.924	55.441	93.772	166.415	5,300
B-6	03/18/97	10	ND	0.123	0.163	0.49	0.776	250
B-6	03/18/97	50	0.878	50.806	40.788	59.522	151.994	5,680
MW-10	03/21/97	0 - 1	ND	ND	ND	0.154	0.154	1,750
MW-10	03/21/97	20 - 21	ND	ND	ND	0.415	0.415	20
MW-10	03/21/97	40 - 41	ND	ND	0.196	1.4	1.596	4,030
MW-10	03/21/97	55 - 56	ND	ND	ND	ND	ND	ND
MW-11	03/11/97	20	ND	ND	ND	ND	ND	10
MW-11	03/11/97	40	ND	ND	ND	ND	ND	150
MW-11	03/11/97	55	ND	ND	ND	ND	ND	10
MW-12	03/20/97	0 - 1	0.104	0.136	ND	0.861	1.101	20
MW-12	03/20/97	40 - 41	0.143	ND	ND	0.943	1.086	1,820
MW-12	03/20/97	50 - 51	0.158	ND	ND	0.161	0.319	50
MW-12	03/20/97	66 - 67	0.106	ND	ND	0.179	0.285	ND
MW-13	03/12/97	20	ND	ND	ND	ND	ND	10
MW-13	03/12/97	50	ND	ND	ND	ND	ND	ND
MW-13	03/12/97	55	ND	ND	ND	0.144	0.144	ND
MW-14	03/13/97	1	ND	ND	ND	ND	ND	800
MW-14	03/12/97	10	ND	ND	ND	ND	ND	ND
MW-14	03/12/97	50	0.2	1.402	11.461	24.03	37.093	2,570
MW-14	03/13/97	55	ND	ND	0.182	0.561	0.743	1,020
MW-15	03/13/97	20	ND	ND	ND	ND	ND	ND
MW-15	03/13/97	50	ND	ND	ND	ND	ND	ND
MW-15	03/13/97	55	ND	ND	ND	ND	ND	ND
MW-16	03/19/97	0 - 1	ND	ND	ND	ND	ND	60
MW-16	03/19/97	20	ND	4.056	14.763	34.137	52.956	6,400
MW-16	03/19/97	30	22.853	99.739	72.631	109.15	304.373	6,000
MW-16	03/19/97	50	ND	0.644	1.169	2.784	4.597	540

Appendix A

Appendix B

TABLE II  
(continued)

SUMMARY OF LABORATORY RESULTS - GROUND WATER  
TEXAS - NEW MEXICO PIPE LINE COMPANY  
SPS-11  
LEA COUNTY, NEW MEXICO

MONITORING WELL	SAMPLE DATE	BENZENE (mg/l)	TOLUENE (mg/l)	ETHYLBENZENE (mg/l)	XYLENES (mg/l)	BTEX (mg/l)
MW-16	05/01/97	0.101	0.090	0.015	0.012	0.218
PW-1	10/15/96	0.007	ND	ND	ND	0.007
PW-2	05/07/92	0.048	0.054	0.022	0.024	0.148
PW-2	10/15/96	ND	0.001	0.001	0.013	0.015

Appendix A

Appendix B

TABLE III

SUMMARY OF GROUND WATER MONITORING  
 TEXAS - NEW MEXICO PIPE LINE COMPANY  
 SPS-11  
 LEA COUNTY, NEW MEXICO

Appendix A

Appendix B

WELL NO.	DATE MEASURED	PVC ELEVATION (feet)	DEPTH: TO WATER (feet)	GROUND WATER ELEVATION		PSH THICKNESS (feet)
				Actual	Corrected	
MW-1	05/06/92	3,859.20	55.37	3803.83	—	—
	07/13/92	3,859.20	55.93	3803.27	—	—
	05/01/97	3,859.20	55.20	3804.00	—	—
MW-2	05/06/92	3,860.90	56.06	3804.84	—	—
	07/13/92	3,860.90	56.43	3804.47	—	—
	05/01/97	3,860.90	55.85	3805.05	—	—
MW-3	05/06/92	3,861.30	56.48	3804.82	—	—
	07/13/92	3,861.30	56.86	3804.44	—	—
	05/01/97	3,861.30	56.28	3805.02	—	—
MW-4	05/06/92	3,859.40	55.36	3804.04	—	—
	07/13/92	3,859.40	55.83	3803.57	—	—
	05/01/97	3,859.40	55.27	3804.13	—	—
MW-5	07/13/92	Unknown	26.48	—	—	—
MW-6	05/06/92	3,862.70	55.78	3806.92	—	—
	07/13/92	3,862.70	56.23	3806.47	—	—
	05/01/97	3,862.70	55.73	3806.97	—	—
MW-7	05/06/92	3,859.40	55.65	3803.75	—	—
	07/13/92	3,859.40	56.15	3803.25	—	—
	05/01/97	3,859.40	55.45	3803.95	—	—
MW-9	05/06/92	3,862.10	54.69	3807.41	—	—
	07/13/92	3,862.10	55.18	3806.92	—	—
	05/01/97	3,862.10	54.74	3807.36	—	—
MW-10	05/01/97	3,860.60	56.96	3803.64	—	—
MW-11	05/01/97	3,860.10	56.43	3803.67	—	—
MW-12	05/01/97	3,863.20	56.91	3806.29	—	—
MW-13	05/01/97	3,862.60	55.23	3807.37	—	—
MW-14	05/01/97	3,863.10	56.40	3806.70	—	—
MW-15	05/01/97	3,861.90	55.57	3806.33	—	—
MW-16	05/01/97	3,863.40	55.30	3808.10	—	—



**ARDINAL**  
LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.  
ATTN: DEE WHATLEY  
703 E. CLINTON, SUITE 103  
HOBBS, NM 88240  
FAX TO:

Receiving Date: 04/30 & 05/01/98  
Reporting Date: 05/02/98  
Project Owner: KOCH OIL  
Project Name: KOCH KROUCH ST. MW  
Project Location: KROUCH STATION

Sampling Date: SEE BELOW  
Sample Type: GROUNDWATER  
Sample Condition: COOL, INTACT  
Sample Received By: GP  
Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		05/01/98	05/01/98	05/01/98	05/01/98
H3616-1	EXISTING MW INSIDE BERM (04/030/98)	<0.002	<0.002	<0.002	<0.006
H3616-4	MW #3 (05/01/98)	0.160	<0.002	<0.002	<0.006
H3616-5	MW #4	0.007	<0.002	<0.002	<0.006
H3616-6	MW #5	<0.002	<0.002	<0.002	<0.006
Quality Control		0.108	0.104	0.104	0.315
True Value QC		0.100	0.100	0.100	0.300
% Accuracy		108	104	104	105
Relative Percent Difference		1.8	0	1.1	0.7

METHOD: EPA SW 846-8020

*Dwight J. Cooke*  
\_\_\_\_\_  
Chemist

5/12/98  
\_\_\_\_\_  
Date



PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
 SAFETY & ENVIRONMENTAL SOLUTIONS, INC.  
 ATTN: DEE WHATLEY  
 703 E. CLINTON, SUITE 103  
 HOBBS, NM 88240  
 FAX TO:

Receiving Date: 04/30 & 05/01/98  
 Reporting Date: 05/02/98  
 Project Owner: KOCH OIL  
 Project Name: KOCH KROUCH ST. MW  
 Project Location: KROUCH STATION

Sampling Date: SEE BELOW  
 Sample Type: SOIL  
 Sample Condition: COOL, INTACT  
 Sample Received By: GP  
 Analyzed By: BC

LAB NUMBER	SAMPLE ID	TPH (mg/Kg)	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE:		05/02/98	05/01/98	05/01/98	05/01/98	05/01/98
H3616-2	MW #3 20' (04/30/98)	<10	<0.002	<0.002	<0.002	<0.006
H3616-3	MW #3 58'	51700	0.057	<0.002	<0.002	<0.006
H3616-5A	MW #4 30' (05/01/98)	75	<0.002	<0.002	<0.002	<0.006
H3616-6A	MW #5 30'	65	<0.002	<0.002	<0.002	<0.006
H3616-6B	MW #5 57'-59'	19	<0.002	<0.002	<0.002	<0.006
Quality Control		186	0.108	0.104	0.104	0.315
True Value QC		200	0.100	0.100	0.100	0.300
% Recovery		93.2	108	104	104	105
Relative Percent Difference		1.9	1.8	0	1.1	0.7

METHODS: TRPHC - EPA 600/7-79-020, 418.1; BTEX - EPA SW-846-8020

  
 Burgess J. A. Cooke, Ph. D.

5/2/98  
 Date

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ANALYTICAL RESULTS FOR  
 SAFETY & ENVIRONMENTAL SOLUTIONS, INC.  
 ATTN: DEE WHATLEY  
 703 E. CLINTON, SUITE 103  
 HOBBS, NM 88240  
 FAX TO:

Receiving Date: 04/30/98  
 Reporting Date: 05/02/98  
 Project Owner: KOCH OIL  
 Project Name: KOCH KROUCH ST. MW  
 Project Location: KROUCH STATION  
 Lab Number: H3616-1  
 Sample ID: EXISTING MW INSIDE BERM

Analysis Date: 05/01/98  
 Sampling Date: 04/30/98  
 Sample Type: GROUNDWATER  
 Sample Condition: COOL, INTACT  
 Sample Received By: GP  
 Analyzed By: BC

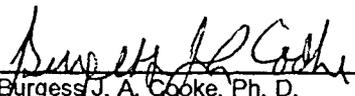
POLYNUCLEAR AROMATIC  
 HYDROCARBONS - 625 (mg/L)

	Sample Result	Method	True Value		
	H3616-1	Blank	QC	% Recov.	QC
1 Naphthalene	<0.001	<0.001	0.042	84	0.050
2 2-Methylnaphthalene	<0.002	<0.002	0.046	92	0.050
3 1-Methylnaphthalene	<0.002	<0.002	NR	NR	NR
4 Acenaphthylene	<0.001	<0.001	0.048	96	0.050
5 Acenaphthene	<0.001	<0.001	0.048	96	0.050
6 Fluorene	<0.001	<0.001	0.048	96	0.050
7 Phenanthrene	<0.001	<0.001	0.052	104	0.050
8 Anthracene	<0.001	<0.001	0.048	96	0.050
9 Fluoranthene	<0.001	<0.001	0.049	98	0.050
10 Pyrene	<0.001	<0.001	0.046	92	0.050
11 Benzo(a)anthracene	<0.001	<0.001	0.046	92	0.050
12 Chrysene	<0.001	<0.001	0.046	92	0.050
13 Benzo(b)fluoranthene	<0.001	<0.001	0.044	88	0.050
14 Benzo(k)fluoranthene	<0.001	<0.001	0.046	92	0.050
15 Benzo(a)pyrene	<0.0007	<0.0007	0.045	90	0.050
16 Indeno(1,2,3-cd)pyrene	<0.001	<0.001	0.042	84	0.050
17 Dibenzo(a,h)anthracene	<0.001	<0.001	0.048	96	0.050
18 Benzo(g,h,i)perylene	<0.001	<0.001	0.044	88	0.050

% Recovery

19 Nitrobenzene-d5	49
20 2-Fluorobiphenyl	66
21 Terphenyl-d14	76

METHODS: EPA 625

  
 Burgess J. A. Cooke, Ph. D.

5/12/98  
 Date

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PHONE (505) 393-2328 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
 SAFETY & ENVIRONMENTAL SOLUTIONS, INC.  
 ATTN: DEE WHATLEY  
 703 E. CLINTON, SUITE 103  
 HOBBS, NM 88240  
 FAX TO:

Receiving Date: 05/01/98  
 Reporting Date: 05/02/98  
 Project Owner: KOCH OIL  
 Project Name: KOCH KROUCH ST. MW  
 Project Location: KROUCH STATION  
 Lab Number: H3616-4  
 Sample ID: MW #3

Analysis Date: 05/01/98  
 Sampling Date: 05/01/98  
 Sample Type: GROUNDWATER  
 Sample Condition: COOL, INTACT  
 Sample Received By: GP  
 Analyzed By: BC

POLYNUCLEAR AROMATIC  
 HYDROCARBONS - 625 (mg/L)

	Sample Result H3616-4	Method Blank	True Value		
			QC	% Recov.	QC
1 Naphthalene	<0.001	<0.001	0.042	84	0.050
2 2-Methylnaphthalene	<0.002	<0.002	0.046	92	0.050
3 1-Methylnaphthalene	<0.002	<0.002	NR	NR	NR
4 Acenaphthylene	<0.001	<0.001	0.048	96	0.050
5 Acenaphthene	<0.001	<0.001	0.048	96	0.050
6 Fluorene	<0.001	<0.001	0.048	96	0.050
7 Phenanthrene	<0.001	<0.001	0.052	104	0.050
8 Anthracene	<0.001	<0.001	0.048	96	0.050
9 Fluoranthene	<0.001	<0.001	0.049	98	0.050
10 Pyrene	<0.001	<0.001	0.046	92	0.050
11 Benzo(a)anthracene	<0.001	<0.001	0.046	92	0.050
12 Chrysene	<0.001	<0.001	0.046	92	0.050
13 Benzo(b)fluoranthene	<0.001	<0.001	0.044	88	0.050
14 Benzo(k)fluoranthene	<0.001	<0.001	0.046	92	0.050
15 Benzo(a)pyrene	<0.0007	<0.0007	0.045	90	0.050
16 Indeno(1,2,3-cd)pyrene	<0.001	<0.001	0.042	84	0.050
17 Dibenzo(a,h)anthracene	<0.001	<0.001	0.048	96	0.050
18 Benzo(g,h,i)perylene	<0.001	<0.001	0.044	88	0.050

% Recovery

19 Nitrobenzene-d5	70
20 2-Fluorobiphenyl	90
21 Terphenyl-d14	118

METHODS: EPA 625

  
 Burgess J. A. Cooke, Ph. D.

5/12/98  
 Date

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PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
 SAFETY & ENVIRONMENTAL SOLUTIONS, INC.  
 ATTN: DEE WHATLEY  
 703 E. CLINTON, SUITE 103  
 HOBBS, NM 88240  
 FAX TO:

Receiving Date: 05/01/98  
 Reporting Date: 05/02/98  
 Project Owner: KOCH OIL  
 Project Name: KOCH KROUCH ST. MW  
 Project Location: KROUCH STATION  
 Lab Number: H3616-5  
 Sample ID: MW #4

Analysis Date: 05/01/98  
 Sampling Date: 05/01/98  
 Sample Type: GROUNDWATER  
 Sample Condition: COOL, INTACT  
 Sample Received By: GP  
 Analyzed By: BC

POLYNUCLEAR AROMATIC  
 HYDROCARBONS - 625 (mg/L)

	Sample Result H3616-5	Method Blank	True Value		
			QC	% Recov.	QC
1 Naphthalene	<0.001	<0.001	0.042	84	0.050
2 2-Methylnaphthalene	<0.002	<0.002	0.046	92	0.050
3 1-Methylnaphthalene	<0.002	<0.002	NR	NR	NR
4 Acenaphthylene	<0.001	<0.001	0.048	96	0.050
5 Acenaphthene	<0.001	<0.001	0.048	96	0.050
6 Fluorene	<0.001	<0.001	0.048	96	0.050
7 Phenanthrene	<0.001	<0.001	0.052	104	0.050
8 Anthracene	<0.001	<0.001	0.048	96	0.050
9 Fluoranthene	<0.001	<0.001	0.049	98	0.050
10 Pyrene	<0.001	<0.001	0.046	92	0.050
11 Benzo(a)anthracene	<0.001	<0.001	0.046	92	0.050
12 Chrysene	<0.001	<0.001	0.046	92	0.050
13 Benzo(b)fluoranthene	<0.001	<0.001	0.044	88	0.050
14 Benzo(k)fluoranthene	<0.001	<0.001	0.046	92	0.050
15 Benzo(a)pyrene	<0.0007	<0.0007	0.045	90	0.050
16 Indeno(1,2,3-cd)pyrene	<0.001	<0.001	0.042	84	0.050
17 Dibenzo(a,h,)anthracene	<0.001	<0.001	0.048	96	0.050
18 Benzo(g,h,i)perylene	<0.001	<0.001	0.044	88	0.050

% Recovery

19 Nitrobenzene-d5	56
20 2-Fluorobiphenyl	52
21 Terphenyl-d14	79

METHODS: EPA 625

  
 Burgess J. A. Cooke, Ph. D.

5/2/98  
 Date

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PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
 SAFETY & ENVIRONMENTAL SOLUTIONS, INC.  
 ATTN: DEE WHATLEY  
 703 E. CLINTON, SUITE 103  
 HOBBS, NM 88240  
 FAX TO:

Receiving Date: 05/01/98  
 Reporting Date: 05/02/98  
 Project Owner: KOCH OIL  
 Project Name: KOCH KROUCH ST. MW  
 Project Location: KROUCH STATION  
 Lab Number: H3616-6  
 Sample ID: MW #5

Analysis Date: 05/01/98  
 Sampling Date: 05/01/98  
 Sample Type: GROUNDWATER  
 Sample Condition: COOL, INTACT  
 Sample Received By: GP  
 Analyzed By: BC

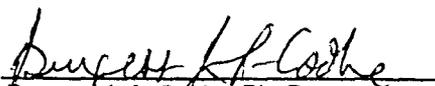
POLYNUCLEAR AROMATIC  
 HYDROCARBONS - 625 (mg/L)

	Sample Result H3616-6	Method Blank	QC	% Recov.	True Value QC
1 Naphthalene	<0.001	<0.001	0.042	84	0.050
2 2-Methylnaphthalene	<0.002	<0.002	0.046	92	0.050
3 1-Methylnaphthalene	<0.002	<0.002	NR	NR	NR
4 Acenaphthylene	<0.001	<0.001	0.048	96	0.050
5 Acenaphthene	<0.001	<0.001	0.048	96	0.050
6 Fluorene	<0.001	<0.001	0.048	96	0.050
7 Phenanthrene	<0.001	<0.001	0.052	104	0.050
8 Anthracene	<0.001	<0.001	0.048	96	0.050
9 Fluoranthene	<0.001	<0.001	0.049	98	0.050
10 Pyrene	<0.001	<0.001	0.046	92	0.050
11 Benzo(a)anthracene	<0.001	<0.001	0.046	92	0.050
12 Chrysene	<0.001	<0.001	0.046	92	0.050
13 Benzo(b)fluoranthene	<0.001	<0.001	0.044	88	0.050
14 Benzo(k)fluoranthene	<0.001	<0.001	0.046	92	0.050
15 Benzo(a)pyrene	<0.0007	<0.0007	0.045	90	0.050
16 Indeno(1,2,3-cd)pyrene	<0.001	<0.001	0.042	84	0.050
17 Dibenzo(a,h)anthracene	<0.001	<0.001	0.048	96	0.050
18 Benzo(g,h,i)perylene	<0.001	<0.001	0.044	88	0.050

% Recovery

19 Nitrobenzene-d5	54
20 2-Fluorobiphenyl	68
21 Terphenyl-d14	77

METHODS: EPA 625

  
 Burgess J. A. Cooke, Ph. D.

5/7/98  
 Date



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PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
 SAFETY & ENVIRONMENTAL SOLUTIONS, INC.  
 ATTN: DEE WHATLEY  
 703 E. CLINTON, SUITE 103  
 HOBBS, NM 88240  
 FAX TO:

Receiving Date: 04/30/98\* & 05/01/98\*\*  
 Reporting Date: 05/04/98  
 Project Owner: KOCH OIL  
 Project Name: KOCH KROUCH ST. MW  
 Project Location: KROUCH STATION

Sampling Date: 04/30/98\* & 05/01/98\*\*  
 Sample Type: GROUNDWATER  
 Sample Condition: COOL, INTACT  
 Sample Received By: GP  
 Analyzed By: JC/BC

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (µmhos/cm)	T-Alkalinity (mgCaCO <sub>3</sub> /L)
ANALYSIS DATE:		05/04/98	05/02/98	05/02/98	05/02/98	05/02/98	05/02/98
H3616-1*	EXISTING MW INSIDE BERM	17	126	20	2.3	1415	225
H3616-4**	MW #3	104	115	81	3.9	1245	420
H3616-5**	MW #4	143	115	42	11.9	1421	168
H3616-6**	MW #5	<1	128	63	5.7	1257	140
Quality Control		NR	48	53	NR	1445	NR
True Value QC		NR	50	50	NR	1413	NR
% Accuracy		NR	96	106	NR	102	NR
Relative Percent Difference		NR	6.2	6.0	NR	0.3	NR
METHODS:		SM3500-Ca D		3500-Mg E	8049	120.1	310.1

LAB NUMBER	SAMPLE ID	Cl <sup>-</sup> (mg/L)	SO <sub>4</sub> (mg/L)	CO <sub>3</sub> (mg/L)	HCO <sub>3</sub> (mg/L)	pH (s.u.)	TDS (mg/L)	
ANALYSIS DATE:		05/02/98	05/02/98	05/02/98	05/02/98	05/02/98	05/02/98	
H3616-1*	EXISTING MW INSIDE BERM	66	113	0	275	6.68	770	
H3616-4**	MW #3	66	398	0	420	7.15	930	
H3616-5**	MW #4	89	507	0	168	7.57	950	
H3616-6**	MW #5	59	349	0	171	7.67	892	
Quality Control		1500	48.9	124	221	7.02	NR	
True Value QC		1360	50.0	112	259	7.00	NR	
% Accuracy		110	97.8	110	85.4	100	NR	
Relative Percent Difference		10.8	2.6	-	-	0.3		
METHODS:		SM4500-Cl-B		375.4	310.1	310.1	150.1	160.1

SM=Std. Methods

Chemist

5-4-98  
 Date

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ANALYTICAL RESULTS FOR  
 SAFETY & ENVIRONMENTAL SOLUTIONS, INC.  
 ATTN: DEE WHATLEY  
 703 E. CLINTON, SUITE 103  
 HOBBS, NM 88240  
 FAX TO:

Receiving Date: 04/30/98\* & 05/01/98\*\*  
 Reporting Date: 05/04/98  
 Project Owner: KOCH OIL  
 Project Name: KOCH KROUCH ST. MW  
 Project Location: KROUCH STATION

Sampling Date: 04/30/98\* & 05/01/98\*\*  
 Sample Type: GROUNDWATER  
 Sample Condition: COOL, INTACT  
 Sample Received By: GP  
 Analyzed By: GP/JC

RCRA METALS

LAB NUMBER SAMPLE ID	As ppm	Ag ppm	Ba ppm	Cd ppm	Cr ppm	Pb ppm	Hg ppm	Se ppm
ANALYSIS DATE:	05/04/98	05/02/98	05/02/98	05/02/98	05/02/98	05/02/98	05/02/98	05/04/98
H3616-1* EXISTING MW INSIDE BERM	<0.01	<0.05	1.12	<0.01	<0.05	<0.05	<0.002	<0.01
H3616-4** MW #3	<0.01	<0.05	1.37	<0.01	<0.05	<0.05	<0.002	<0.01
H3616-5** MW #4	<0.01	<0.05	1.72	<0.01	<0.05	<0.05	<0.002	<0.01
H3616-6** MW #5	<0.01	<0.05	2.10	<0.01	0.083	<0.05	<0.002	<0.01
Quality Control	0.480	1.058	19.78	1.013	5.151	5.045	0.0179	0.485
True Value QC	0.500	1.000	20.00	1.000	5.000	5.000	0.0200	0.500
% Recovery	96.0	106	98.9	101	103	101	89.5	97.0
Relative Percent Difference	1.1	0.1	0.9	0.8	1.4	1.6	5.0	1.0
METHODS: EPA 600/4-79-020	206.2	272.1	208.1	213.1	218.1	239.1	245.1	270.2

*John J. Carmody*  
 John J. Carmody, Chemist

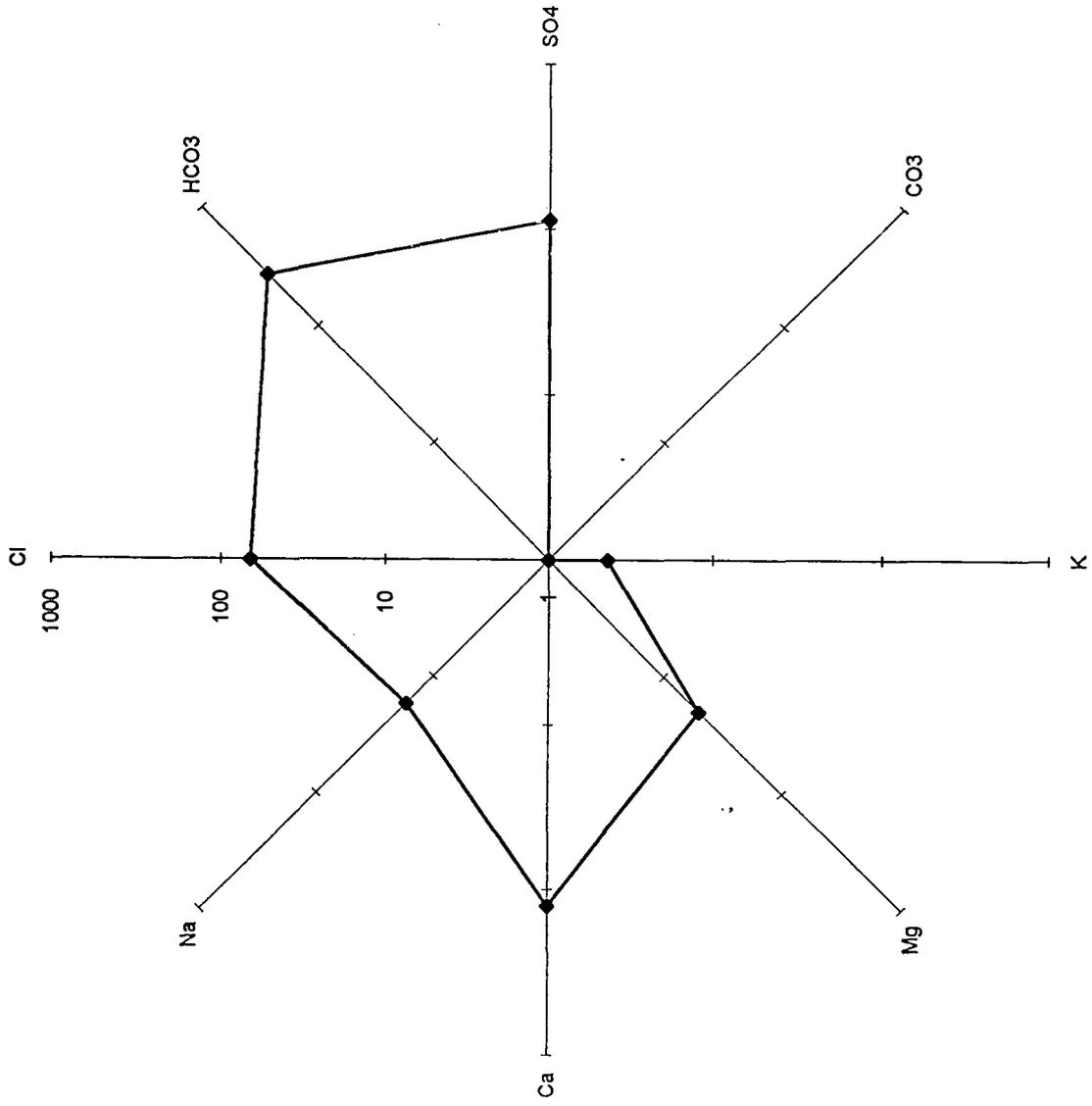
5-4-98  
 Date

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Radar Plot

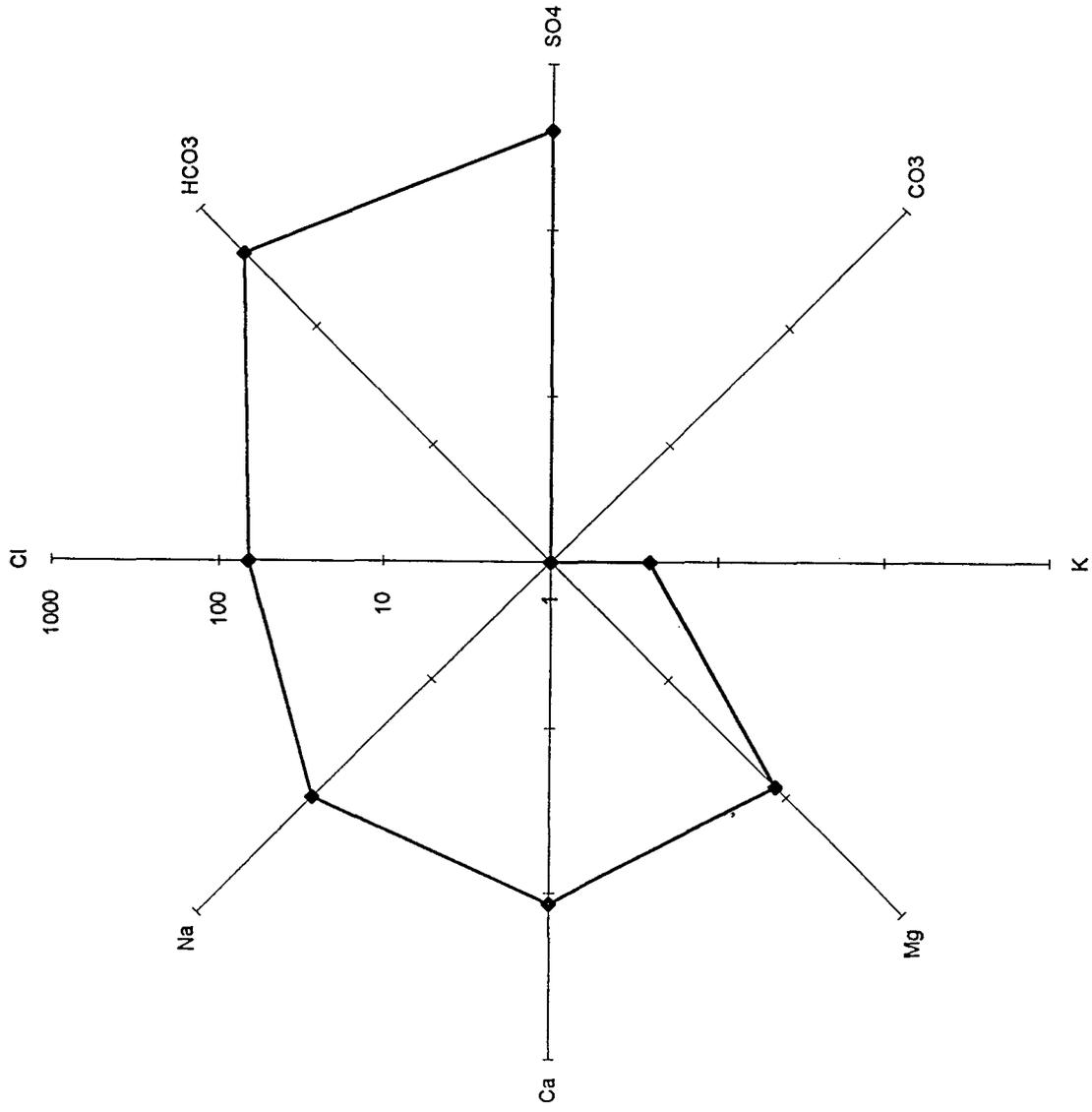
Existing MW inside berm



Cardinal Labs

Radar Plot

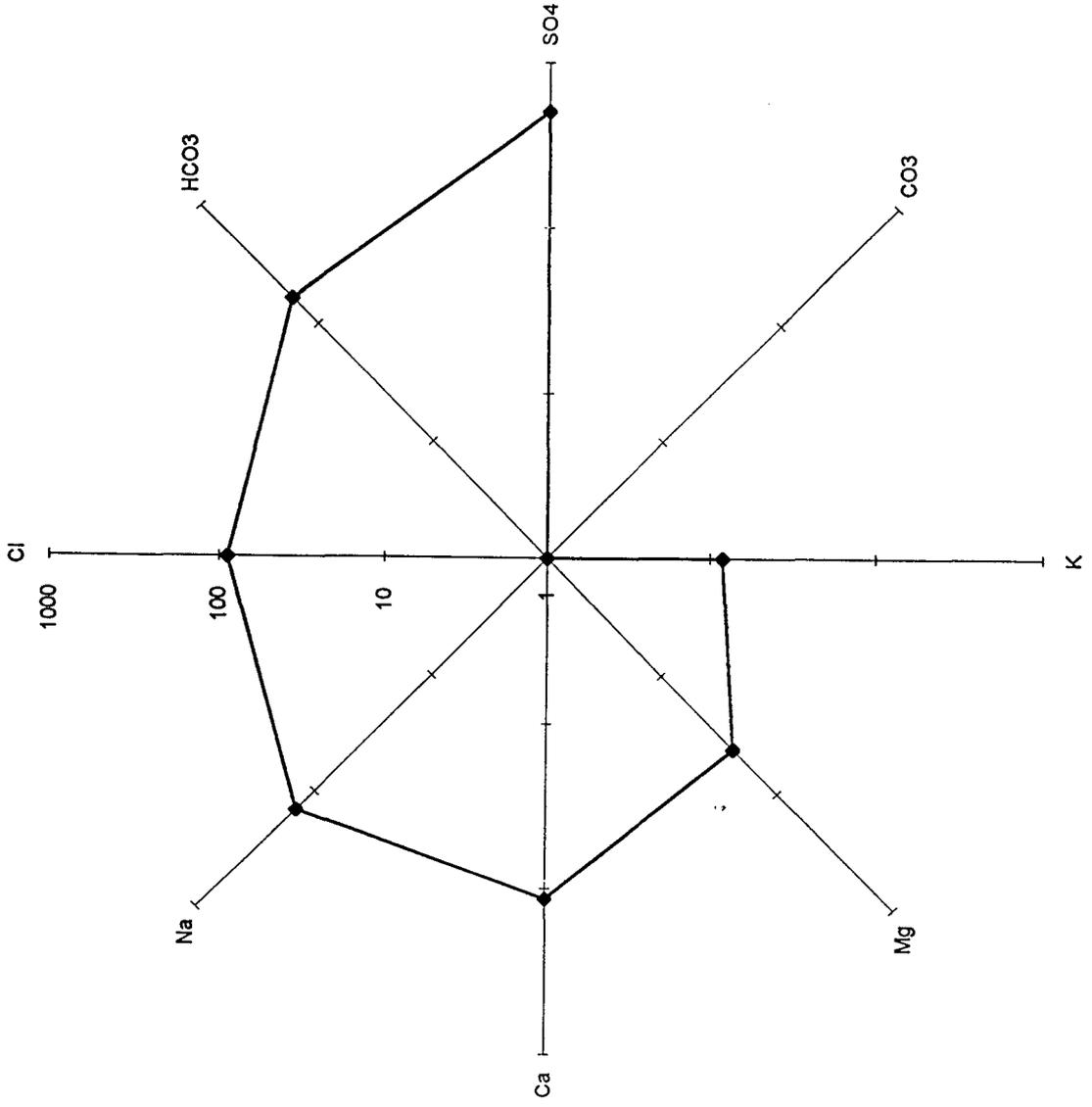
MW #3



Cardinal Labs

Radar Plot

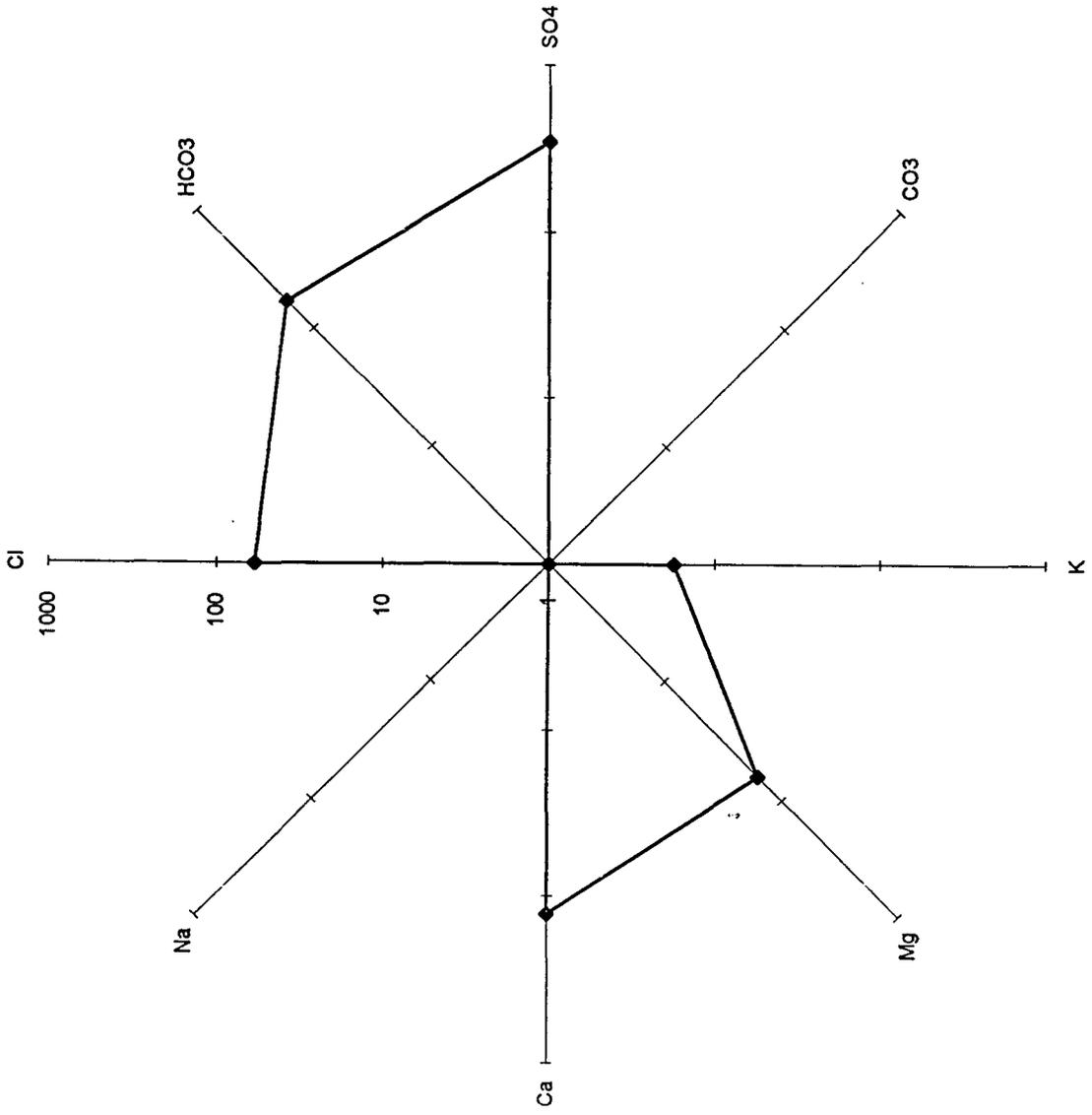
MW #4



Cardinal Labs

Radar Plot

MW #5



Cardinal Labs



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PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.  
ATTN: DEE WHATLEY  
703 E. CLINTON, SUITE 103  
HOBBS, NM 88240  
FAX TO: (505) 393-4388

Receiving Date: 02/12/99  
Reporting Date: 02/17/99  
Project Number: NOT GIVEN  
Project Name: KOCH OIL MONITOR WELL  
Project Location: KROUCH STATION

Analysis Date: 02/15/99  
Sampling Date: 02/12/99  
Sample Type: GROUNDWATER  
Sample Condition: COOL & INTACT  
Sample Received By: AH  
Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/l)
H4019-2	M.W. #3	126
Quality Control		0.090
True Value QC		0.100
% Accuracy		90.2
Relative Percent Difference		3.1

METHOD: EPA SW 846-8260

Burgess R. Coche  
Chemist

2/17/99  
Date

PLEASE NOTE: **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



**ARDINAL  
LABORATORIES**

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.  
ATTN: DEE WHATLEY  
703 E. CLINTON, SUITE 103  
HOBBS, NM 88240  
FAX TO: (505) 393-4388

Receiving Date: 02/12/99  
Reporting Date: 02/24/99  
Project Number: NOT GIVEN  
Project Name: KOCH OIL MONITOR WELL  
Project Location: KROUCH STATION

Sampling Date: 02/12/99  
Sample Type: GROUNDWATER  
Sample Condition: COOL & INTACT  
Sample Received By: AH  
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Ba (mg/L)	Cr (mg/L)
ANALYSIS DATE:		02/16/99	02/17/99
H4019-1	M.W. #1	<1	<0.05
H4019-2	M.W. #3	<1	<0.05
H4019-3	M.W. #4	<1	<0.05
H4019-4	M.W. #5	<1	<0.05
Quality Control		17.58	0.990
True Value QC		20.00	1.000
% Recovery		88	99
Relative Percent Difference		3.03	0.4
METHODS: EPA 600/4-79-020		208.1	218.1

Burget A. Cash  
Chemist

2/24/99  
Date



# Safety & Environmental Solutions, Inc.

703 E. Clinton, Suite 103, Hobbs, New Mexico 88240  
(505)397-0510

Project Name:

ESI

Phone #:

FAX #:

Company Name & Address:

Project #:

Project Name:

Kroch Station

Project Location:

Kroch station

Sampler Signature:

*[Signature]*

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX			PRESERVATIVE METHOD				SAMPLING		
				WATER	SOIL	AIR	SLUDGE	OTHER	HCL	HNO3	ICE	NONE	OTHER
136162	M.W.# 3 20'	1		✓					✓			4-30-98	1:04
496163	M.W.# 3 58'	1		✓					✓				
136164	M.W.# 3	4		✓					✓				

RECEIVED BY:		DATE:	TIME:	REMARKS:
<i>[Signature]</i>		4-30-98		
Received by:		Date:	Time:	ANALYSIS REQUEST
Received by:		Date:	Time:	
Received by:		Date:	Time:	

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

ANALYSIS REQUEST

TCLP Metals Ag As Ba Cd Cr Pb Hg Se	✓
TCLP Metals Ag As Ba Cd Cr Pb Hg Se	✓
TCLP Volatiles	✓
TCLP Semi Volatiles	✓
TDS	✓
RCI	✓
WACC Metals	✓
PAH	✓
Cations Anions	✓

# Safety & Environmental Solutions, Inc.

703 E. Clinton, Suite 103, Hobbs, New Mexico 88240  
(505)397-0510

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:

*SEI*

Phone #:

FAX #:

Company Name & Address:

Project #:

Project Name:

Project Location:

*Kroch Station MW*  
Sampler Signature: *[Signature]*

*Koch Kroch Station*

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING			
				WATER	SOIL	AIR	SLUDGE	OTHER	HCL	HNO3	ICE	NONE	OTHER	DATE	TIME
<i>3616-4</i>	<i>M.W. #3</i>	<i>1</i>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>						<i>5-1-98</i>	<i>2:30</i>
<i>3616-50</i>	<i>M.W. #4</i>	<i>1</i>	<i>30'</i>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>							
<i>3616-5</i>	<i>M.W. #4</i>	<i>3</i>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>							
<i>[Signature]</i>															

BTEX 8020/5030  
TPH 418.1  
TCLP Metals Ag As Ba Cd Cr Pb Hg Se  
Total Metals Ag As Ba Cd Cr Pb Hg Se  
TCLP Volatiles  
TCLP Semi Volatiles  
TDS  
RCI

Requested by:

*[Signature]*

Time:

*5-1-98 2:53 pm*

Received by:

*Scott Vidham*

Requested by:

*[Signature]*

Time:

*5-1-98 3:34 pm*

Received by:

*[Signature]*

REMARKS

Requested by:

*5/1/98-3:30*

Received by Laboratory:  
*[Signature]*





# CARDINAL LABORATORIES, INC.

2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240  
(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:		BILITO PO #:	
Project Manager:		Company:	
Address:		Attn:	
City:		Address:	
Phone #:		City:	
Fax #:		State:	
Project #:		Zip:	
Project Name:		Phone #:	
Project Location:		Fax #:	
FOR LAB USE ONLY			
LAB I.D.	Sample I.D.	(C)RAB OR (C)OMP.	# CONTAINERS
H 3616-2	-3	-4	MATRIX
			GROUNDWATER
			WASTEWATER
			SLUDGE
			SOIL
			OL
			OTHER:
			ACID:
			ICE / COOL
			OTHER:
			PRES.
			SAMPLING
			DATE
			TIME

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Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished By: *[Signature]* Date: 08/20/98 Time: 5:00

Received By: *[Signature]* Date: \_\_\_\_\_ Time: \_\_\_\_\_

Delivered By: (Circle One) Other *[Signature]* Checked By: \_\_\_\_\_ (Initials)

Sampler - UPS - Bus - Other *[Signature]*

Sample Condition Cool Intact  Yes  No  Yes  No

Phone Result:  Yes  No Additional Fax #: \_\_\_\_\_

Fax Result:  Yes  No

REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 915-673-7020.





# CARDINAL LABORATORIES, INC.

2111 Beechwood, Abilene, TX 79803 101 East Marland, Hobbs, NM 88240  
(915) 673-7001 Fax (915) 673-7020 (505) 393-2328 Fax (505) 393-2476

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <u>SEF</u>		BILL TO		PO #:	
Project Manager:		Company:			
Address:		Attn:			
City:		Address:			
Phone #:		City:			
Fax #:		State:		Zip:	
Project #:		Phone #:			
Project Name: <u>Koch Cough Station</u>		Fax #:			
Project Location:					
FOR LAB USE ONLY		MATRIX		PRES.	
LAB I.D.		GROUNDWATER		ICE / COOL	
Sample I.D.		WASTEWATER		ACID:	
113616-60		SOIL		OTHER:	
Soil # 1-30		SLUDGE		DATE	
Soil # 2-57.59		OIL		TIME	
Station -		SAMPLING			
		# CONTAINERS			
		(G)RAB OR (C)OMP.			

PLEASE NOTE: Liability and Damages, Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Sampler Relinquished:		Received By:	
Date:	Time:	Date:	Time:
Relinquished By: <u>[Signature]</u>		Received By: (Lab Staff) <u>[Signature]</u>	
Delivered By: (Circle One)		CHECKED BY: (Initials)	
Sampler - UPS - Bus - Other:		Sample Condition	
		Cool Intact	
		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
		Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Phone Result <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Fax Result <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Additional Fax #:	
REMARKS:			

† Cardinal cannot accept verbal changes. Please fax written changes to 915-673-7020.

# Safety & Environmental Solutions, Inc.

703 E. Clinton, Suite 103, Hobbs, New Mexico 88240  
(505)397-0510

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: *Man. to Koch Krosch Station Wells*

Project Location: *Krosch Station*

Sampler Signature: *D. U. H.*

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX						PRESERVATIVE METHOD				SAMPLING		
				WATER	SOIL	AIR	SLUDGE	OTHER	HCL	HNO3	ICE	NONE	OTHER	DATE	TIME	
H3681	M.W. #3	2		<input checked="" type="checkbox"/>											5-6-98	8:00AM
-> M.W. #4		2		<input checked="" type="checkbox"/>											5-6-98	8:00AM

TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
BTEX 8020/5030						

Requested by: *Doe Whately* Date: *5-6-98* Time: *8:00AM* Received by: \_\_\_\_\_

Requested by: *Keith Wiedley* Date: *5-6-98* Time: *9:00AM* Received by: *Burke R. Cook*

Requested by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_

REMARKS



# CARDINAL LABORATORIES, INC.

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## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <u>SESE</u>		BILL TO PO #:	
Project Manager: <u>Dec Whately</u>		Company:	
Address: <u>703 E. Clinton Suite 103</u>		Attn:	
City: <u>Hobbs</u> State: <u>NM</u> Zip: <u>88240</u>		Address:	
Phone #: <u>397-0510</u>		City:	
Fax #: <u>393-4389</u>		State:	
Project #: _____		Phone #:	
Project Name: <u>Koch Oil Monitor-Well</u>		Fax #:	
Project Location: <u>Kroetch Station</u>		Project Owner:	

FOR LAB USE ONLY	LAB I.D.	Sample I.D.	MATRIX						PRES.			DATE	TIME	
			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID:	ICE / COOL	OTHER:			
	H4D19-1	M.W. #1	✓							✓			2-12-99	12:00pm
	-2	M.W. #3	✓							✓			2-12-99	
	-3	M.W. #4	✓							✓			2-12-99	
	-4	M.W. #5	✓							✓			2-12-99	

(G)RAB OR (C)OMP. # CONTAINERS 1 3 1 1		WASTEWATER SOIL OIL SLUDGE OTHER:		ACID: ICE / COOL OTHER:		SAMPLING	
---	--	---	--	-------------------------------	--	----------	--

Barium	✓
Benzene	✓
Chromium	✓

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Phone Result:  Yes  No Additional Fax #: \_\_\_\_\_  
 Fax Result:  Yes  No  
 REMARKS:

Date: 2-12-99 Time: 12:00pm  
 Relinquished By: [Signature]  
 Received By: (Lab/Staff) [Signature]  
 Date: 2/12/99 Time: 12:00  
 Sample Condition:  Cool  Intact  
 Yes  No  
 Checked By: (Initials) [Signature]  
 Delivered By: (Circle One)  
 Sampler - UPS - Bus - Other:

† Cardinal cannot accept verbal changes. Please fax written changes to 915-673-7020.



**Safety & Environmental**

**Solutions, Inc.**

**KOCH PIPELINE CO., L.P.  
Crouch Station**

**COPY**

**COPY**

**Quarterly Report  
January 1999  
Air Monitoring Program  
Lea County, New Mexico**

*Safety & Environmental Solutions, Inc.  
703 E. Clinton Suite 103*

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### **Purpose**

The purpose of this project is to monitor the air quality from the SVE unit at the Crouch Station in Section 18 Township 18S Range 36E in Lea County, New Mexico and provide quarterly reports of the findings.

### **Background**

Koch Pipeline, Co., L.P., had previously installed a SVE Unit at the Crouch Station, as required by the New Mexico Oil Conservation Division. Safety and Environmental Solutions was contracted to monitor the air quality of the SVE unit beginning in October 1997 and to report the findings on a quarterly basis.

### **Method**

A Photovac MicroTIP Photo Ionization Detector is used for air sampling at the SVE Unit for BTEX detection, following the SOP delineated by the manufacturer. The procedure for sampling is as follows:

- The PID sets its zero point using Zero Grade Gas, which is placed, in a SKC Tedlar sample bag. After setting zero point, the concentration of the isobutylene Span Gas, 100ppm, is entered into the PID and the PID is then calibrated with the Span Gas which is placed in a new SKC Tedlar sample bag that has been purged with Span Gas prior to sampling.
- Three samples of air from the SVE Unit are collected in the SKC Tedlar sample bags, then tested using the MicroTIP PID. The first result is thrown out, to accommodate any purging, and the next two samples are recorded. (See Sampling Log)

Sampling was done on a weekly basis at the SVE Unit, following the same protocol for each test.

### **Observations**

The readings have stayed in the 100-350ppm range, with the highest reading on December 3, 1998, at 347ppm. Two weeks later the reading taken on December 17, 1998, showed the lowest readings at 97.8 & 101ppm respectively. (See Air Sampling Report) They have stayed in the above mentioned range through January 19, 1999, the end of the sampling for this quarter. The flow rate for the system is currently 23scfm.

On January 19, 1999, an air sample was collected using the correct SOPs and taken to Cardinal Laboratories for third party analysis and confirmation of our results. Our results on that date ranged from 212ppm to 217ppm. The following table represents the results of the air sample:

ANALYTES	AIR SAMPLE
Sample Date	1/19/99
BTEX	
Benzene	<2.0
Toluene	12.0
Ethyl Benzene	13.8
Total Xylenes	17.8

These results are reported in parts per million (ppm).

**Figures**

Air Sampling Report  
Sampling Log  
Laboratory Test Results  
Chain of Custody

# Safety & Environmental Solutions, Inc.

## Koch Operations Group Crouch Station Quarterly Air Sampling Report

Detector Type: Photoionization

Tester Brand: Microtip

Tester Model: MP 100

Serial Number: NA890005

Manufacture Date: 8/97

Monitor is calibrated with 100ppm Isobutylene prior to testing on each sampling date.

Date Sampled	Time Sampled	1 <sup>st</sup> Sample Results	2 <sup>nd</sup> Sample Results
10-31-98	1433	276ppm	300ppm
11-07-98	1635	301ppm	326ppm
11-14-98	1626	299ppm	310ppm
11-19-98	1345	200ppm	216ppm
11-26-98	1423	222ppm	236ppm
12-03-98	1347	322ppm	347ppm
12-10-98	1123	198ppm	216ppm
12-17-98	0900	97.8ppm	101ppm
12-23-98	0857	111ppm	119ppm
12-30-98	0953	198ppm	202ppm
01-04-99	1217	206ppm	206ppm
01-06-99	1121	188ppm	184ppm
01-13-99	1423	194ppm	199ppm
01-19-99	0736	212ppm	217ppm





**ARDINAL**  
LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.  
ATTN: BETH ALDRICH  
703 E. CLINTON, SUITE 103  
HOBBS, NM 88240  
FAX TO:

Receiving Date: 01/19/99  
Reporting Date: 01/20/99  
Project Owner: KOCH OIL  
Project Name: NOT GIVEN  
Project Location: CROUCH STATION

Sampling Date: 01/19/99  
Sample Type: AIR BAG  
Sample Condition: COOL & INTACT  
Sample Received By: BC  
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/M <sup>3</sup> )	TOLUENE (mg/M <sup>3</sup> )	ETHYL BENZENE (mg/M <sup>3</sup> )	TOTAL XYLENES (mg/M <sup>3</sup> )
ANALYSIS DATE		01/19/99	01/19/99	01/19/99	01/19/99
H3998-1	AIR	<2.0	12.0	13.8	17.8
Quality Control		88.8	98.7	97.4	294
True Value QC		100	100	100	300
% Recovery		89	99	97	98
Relative Percent Difference		7.9	5.1	4.1	1.4

METHOD: EPA SW- 846 8260

Bryan R. Cooke  
Chemist

1/20/99  
Date





**Safety & Environmental**

**Solutions, Inc.**

**COPY**

**KOCH PIPELINE CO., L.P.  
Crouch Station**

**Quarterly Report  
Air Monitoring Program  
Lea County, New Mexico**

*Safety & Environmental Solutions, Inc.  
703 E. Clinton Suite 103  
Hobbs, New Mexico 88240  
(505) 397-0510*

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### **Purpose**

The purpose of this project is to monitor the air quality from the SVE unit at the Crouch Station in Section 18 Township 18S Range 36E in Lea County, New Mexico and provide quarterly reports of the findings.

### **Background**

Koch Pipeline, Co., L.P., had previously installed a SVE Unit at the Crouch Station, as required by the New Mexico Oil Conservation Division. Safety and Environmental Solutions was contracted to monitor the air quality of the SVE unit beginning in October 1997 and to report the findings on a quarterly basis.

### **Method**

A Photovac MicroTIP Photo Ionization Detector is used for air sampling at the SVE Unit for BTEX detection, following the SOP delineated by the manufacturer. The procedure for sampling is as follows:

- The PID sets its zero point using Zero Grade Gas, which is placed, in a SKC Tedlar sample bag. After setting zero point, the concentration of the isobutylene Span Gas, 100ppm, is entered into the PID and the PID is then calibrated with the Span Gas which is placed in a new SKC Tedlar sample bag that has been purged with Span Gas prior to sampling.
- Three samples of air from the SVE Unit are collected in the SKC Tedlar sample bags, then tested using the MicroTIP PID. The first result is thrown out, to accommodate any purging, and the next two samples are recorded. (See Sampling Log)

Sampling was done on a weekly basis at the SVE Unit, following the same protocol for each test.

### **Observations**

The readings have stayed in the 200ppm range, with the highest reading on September 11, 1998, at 283ppm. The next reading, taken on September 18, 1998, showed the lowest readings at 127 & 136ppm. (See Air Sampling Report) They have stayed in the 200ppm range through October 23, 1998, the end of the sampling for this quarter.

On October 16, 1998, an air sample was collected using the correct SOPs and taken to Cardinal Laboratories for third party analysis confirmation of our results. Our results on that date ranged from 213ppm to 215ppm. The following table presents the results of the air sample:

ANALYTES	AIR SAMPLE
Sample Date	10/16/98
BTEX	
Benzene	0.419
Toluene	4.12
Ethyl Benzene	3.39
Total Xylenes	4.51

**Figures**

- Air Sampling Report
- Sampling Log
- Laboratory Test Results
- Chain of Custody

# Safety & Environmental Solutions, Inc.

---

## Koch Operations Group Crouch Station Quarterly Air Sampling Report

**Detector Type:** Photoionization

**Tester Brand:** Microtip

**Tester Model:** MP 100

**Serial Number:** NA890005

**Manufacture Date:** 8/97

Monitor is calibrated with 100ppm Isobutylene prior to testing on each sampling date.

<b>Date Sampled</b>	<b>Time Sampled</b>	<b>1<sup>st</sup> Sample Results</b>	<b>2<sup>nd</sup> Sample Results</b>
7-29-98	1132	267ppm	269ppm
8-05-98	0712	243ppm	246ppm
8-16-98	1540	219ppm	221ppm
8-22-98	1730	241ppm	243ppm
8-29-98	1516	199ppm	236ppm
9-05-98	1651	206ppm	206ppm
9-11-98	1058	275ppm	283ppm
9-18-98	1148	127ppm	136ppm
9-25-98	1428	142ppm	144ppm
10-02-98	0924	220ppm	222ppm
10-08-98	0748	219ppm	229ppm
10-16-98	0835	213ppm	215ppm
10-23-98	1433	176ppm	184ppm

5/6/98	295 ppm	279 ppm	8:00 AM
5/8/98	302 ppm	307 ppm	3:00 PM
5-12-98	266 ppm	223 ppm	1:51 PM
<del>5-13-98</del>	<del>266 ppm</del>	<del>223 ppm</del>	<del>1:51 PM</del>
5-15-98	211 ppm	218 ppm	6:45 PM
5-18-98	246 ppm	252 ppm	2:27 PM
5-22-98	223 ppm	226 ppm	7:49 AM
5-29-98	274 ppm	282 ppm	8:16 AM
6-1-98	300 ppm	291 ppm	9:44 AM
6-11-98	211 ppm	215 ppm	8:30 AM
6-19-98	255 ppm	263 ppm	7:11 AM
6-26-98	297 ppm	294 ppm	10:29 AM
6-30-98	294 ppm	301 ppm	2:29 PM
7-7-98	287 ppm	291 ppm	10:47 AM
7-14-98	254 ppm	262 ppm	9:36 AM
7-22-98	228 ppm	234 ppm	2:18 PM
7-29-98	267 ppm	269 ppm	11:32 AM
8-5-98	243 ppm	246 ppm	7:12 AM
8-16-98	219 ppm	221 ppm	3:40 PM
8-27-98	241 ppm	243 ppm	5:20 PM
8-29-98	199 ppm	236 ppm	3:16 PM
9-5-98	206 ppm	206 ppm	4:51 PM
9-11-98	275 ppm	283 ppm	10:58 AM
9-18-98	127 ppm	136 ppm	11:48 AM
9-25-98	142 ppm	144 ppm	2:28 PM
10-2-98	<del>200</del> 220 ppm	222 ppm	9:24 AM
10-8-98	219 ppm	229 ppm	7:48 AM
10-16-98	213 ppm	215 ppm	8:55 AM
10-23-98	176 ppm	184 ppm	2:33 PM <sup>20 gal</sup> <sub>monitors bbl</sub>

Koch Operations Group

**Koch Pipeline  
Crouch Station  
Copy of Sampling Log**

Safety & Environmental  
Solutions, Inc.  
Hobbs, NM



PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
 SAFETY & ENVIRONMENTAL SOLUTIONS, INC.  
 ATTN: BETH ALDRICH  
 703 E. CLINTON SUITE 103  
 HOBBS, NM 88240  
 FAX TO:

Receiving Date: 10/16/98  
 Reporting Date: 10/19/98  
 Project Number: NOT GIVEN  
 Project Name: AIR MONITOR  
 Project Location: CROUCH STATION

Sampling Date: 10/16/98  
 Sample Type: AIR BAG  
 Sample Condition: INTACT  
 Sample Received By: JS  
 Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/M <sup>3</sup> )	TOLUENE (mg/M <sup>3</sup> )	ETHYL BENZENE (mg/M <sup>3</sup> )	TOTAL XYLENES (mg/M <sup>3</sup> )
ANALYSIS DATE		10/16/98	10/16/98	10/16/98	10/16/98
H3885-1	AIR SAMPLE	0.419	4.12	3.39	4.51
Quality Control		90.2	103	101	303
True Value QC		100	100	100	300
% Recovery		90.2	103	101	101
Relative Percent Difference		7.7	11.4	10.3	8.5

METHOD: EPA SW 846-8260

*Burton J. Coche*  
 Chemist

*10/19/98*  
 Date

H3885-1.XLS

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



# CARDINAL LABORATORIES, INC.

2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240  
(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <u>SOKEL &amp; KENNEDY</u>		BILL TO		PO #:	
Project Manager: <u>BETH A. DRETTCH</u>		Company: <u>AM</u>			
Address: <u>703 E. CITTATION ST. STE 102</u>		Attn: <u>BEAM</u>			
City: <u>MOBBS</u>		State: <u>NM</u>		Zip: _____	
Phone #: <u>(505) 397-0510</u>		City: _____			
Fax #: _____		State: _____			
Project #: _____		Phone #: _____			
Project Name: <u>AIR MONITOR</u>		Fax #: _____			
Project Location: <u>CROUGH STATION</u>		Matrix:		PRES. SAMPLING	
FOR LAB USE ONLY		GROUNDWATER			
LAB I.D. <u>Sample I.D.</u>		WASTEWATER			
H 3785-1		SLUDGE			
AIR SAMPLE		OIL			
AIR SAMPLE		SOIL			
		CONTAINERS			
		(GRAB OR C)OMP.			
		ACID: <input checked="" type="checkbox"/>		DATE TIME	
		ICE / COOL: <input checked="" type="checkbox"/>		10-16-98 8:35 AM	
		OTHER: <input checked="" type="checkbox"/>			
		OTHER: _____			

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Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished: <u>M. Keith Ward</u>	Date: <u>10-16-98</u>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No
Relinquished By: <u>M. Keith Ward</u>	Time: <u>10:00 AM</u>	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No
Delivered By: (Circle One) <u>M. Keith Ward</u>	Date: <u>10-16-98</u>	Additional Fax #: _____
Sampler - UPS - Bus - Other: _____	Time: <u>10:00 AM</u>	REMARKS:
	Sample Condition: <input checked="" type="checkbox"/> Intact <input type="checkbox"/> No	
	Checked By: (Initials) <u>JK</u>	

† Cardinal cannot accept verbal changes. Please fax written changes to 915-673-7020.



**Safety & Environmental**

**Solutions, Inc.**

**COPY**

**KOCH PIPELINE CO., L.P.  
Crouch Station**

**Quarterly Report  
Air Monitoring Program  
Lea County, New Mexico,**

*Safety & Environmental Solutions, Inc.  
703 E. Clinton Suite 103  
Hobbs, New Mexico 88240  
(505) 397-0510*

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## **Purpose**

The purpose of this project is to monitor the air quality from the SVE unit at the Crouch Station in Section 18 Township 18S Range 36E in Lea County, New Mexico and provide quarterly reports of the findings.

## **Background**

Koch Pipeline, Co., L.P., had previously installed a SVE Unit at the Crouch Station, as required by the New Mexico Oil Conservation Division. Safety and Environmental Solutions was contracted to monitor the air quality of the SVE unit beginning in October 1997 and to report the findings on a quarterly basis.

## **Method**

A Photovac MicroTIP Photo Ionization Detector is used for air sampling at the SVE Unit for BTEX detection, following the SOP delineated by the manufacturer. The procedure for sampling is as follows:

- The PID sets its zero point using Zero Grade Gas, which is placed, in a SKC Tedlar sample bag. After setting zero point, the concentration of the isobutylene Span Gas, 100ppm, is entered into the PID and the PID is then calibrated with the Span Gas which is placed in a new SKC Tedlar sample bag that has been purged with Span Gas prior to sampling.
- Three samples of air from the SVE Unit are collected in the SKC Tedlar sample bags, then tested using the MicroTIP PID. The first result is thrown out, to accommodate any purging, and the next two samples are recorded. (See Sampling Log)

Sampling was done twice weekly basis at the SVE Unit, following the same protocol for each test until June 1, 1998, when Koch personnel requested that we only sample once per week.

## **Observations**

The readings stayed in the 3000ppm range and peaked on May 1, 1998 at 4000ppm. The next reading, taken on May 6, 1998, showed the readings in the 300ppm range once again. (See Air Sampling Report) They have stayed in that range through July 22, 1998, the end of the sampling for this quarter.

On July 7, 1998, an air sample was collected using the correct SOPs and taken to Cardinal Laboratories for third party analysis confirmation of our results. Our results on that date ranged from 287ppm to 291ppm. The following table presents the results of the air sample:

<b>ANALYTES</b>	<b>AIR SAMPLE</b>
Sample Date	7/07/98
<b>BTEX</b>	
Benzene	24.6
Toluene	132
Ethyl Benzene	93.0
M, P - Xylene	86.3
O - Xylene	32.0

**Figures**

- Air Sampling Report
- Sampling Log
- Laboratory Test Results
- Chain of Custody

# Safety & Environmental Solutions, Inc.

---

## Koch Operations Group Crouch Station Quarterly Air Sampling Report

**Detector Type:** Photoionization

**Tester Brand:** Microtip

**Tester Model:** MP 100

**Serial Number:** NA890005

**Manufacture Date:** 8/97

Monitor is calibrated with 100ppm Isobutylene prior to testing on each sampling date.

Date Sampled	Time Sampled	1 <sup>st</sup> Sample Results	2 <sup>nd</sup> Sample Results
4-21-98	1323	2993ppm	3045ppm
4-24-98	1430	2926ppm	2990ppm
4-29-98	1105	2561ppm	2785ppm
5-01-98	1235	4019ppm	4044ppm
5-06-98	0800	295ppm	299ppm
5-08-98	1500	302ppm	307ppm
5-12-98	1351	266ppm	223ppm
5-15-98	1845	211ppm	218ppm
5-18-98	1427	246ppm	252ppm
5-22-98	0749	223ppm	226ppm
5-29-98	0816	274ppm	282ppm
6-01-98	0944	300ppm	300ppm
6-11-98	0830	211ppm	215ppm
6-19-98	0911	255ppm	263ppm
6-26-98	1029	297ppm	294ppm
6-30-98	1429	294ppm	301ppm
7-07-98	1047	287ppm	291ppm
7-14-98	0936	254ppm	262ppm
7-22-98	1132	267ppm	269ppm

4-21-98	2993 ppm	3045 ppm	1:23 pm
4-24-98	2926 ppm	2990 ppm	9:30 pm
4-29-98	2561 ppm	2785 ppm	11:05 AM
5-1-98	4019 ppm	4044 ppm	12:35 pm

5/6/98	295 ppm	299 ppm	8:00 AM
5/8/98	302 ppm	307 ppm	3:00 pm
5-12-98	266 ppm	223 ppm	1:51 pm
<del>5-15-98</del>	<del>211 ppm</del>	<del>218 ppm</del>	<del>6:45 pm</del>
5-15-98	211 ppm	218 ppm	6:45 pm
5-18-98	246 ppm	252 ppm	2:27 pm
5-22-98	223 ppm	226 ppm	7:49 AM
5-29-98	274 ppm	282 ppm	8:16 AM
6-1-98	300 ppm	302 ppm	9:44 AM
6-11-98	211 ppm	215 ppm	8:30 AM
6-19-98	255 ppm	263 ppm	9:11 AM
6-26-98	297 ppm	294 ppm	10:29 AM
6-30-98	294 ppm	301 ppm	2:29 pm
7-7-98	287 ppm	291 ppm	10:47 AM
7-14-98	254 ppm	262 ppm	9:36 AM
7-20-98	228 ppm	234 ppm	2:18 pm
7-29-98	267 ppm	269 ppm	11:32 AM

Koch Operations Group

Koch Pipeline  
Crouch Station  
Copy of Sampling Log

Safety & Environmental  
Solutions, Inc.  
Hobbs, NM



# ARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.  
ATTN: DEE WHATLEY/SCOTT WINDHAM  
703 E. CLINTON, SUITE 103  
HOBBS, NM 88240  
FAX TO: (505) 393-4388

Receiving Date: 07/07/98  
Reporting Date: 07/09/98  
Project Number: 2  
Project Owner: KOCH OIL CO.  
Project Name: KOCH OIL COMPANY CROUCH  
Project Location: CROUCH STATION  
Sample ID: NOT GIVEN  
Lab Number: H3718-1  
Modified Reporting Date: 07/27/98

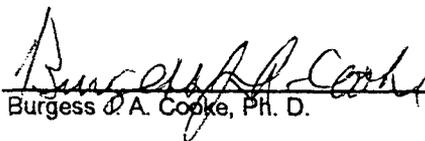
Analysis Date: 07/07/98  
Sampling Date: 07/07/98  
Sample Type: GAS (TEDLAR BAG)  
Sample Condition: INTACT  
Sample Received By: AH  
Analyzed By: BC

VOLATILES - 8260 (mg/M <sup>3</sup> )		Sample Result	Method	True Value		
		H3718-1	Blank	QC	%Recov.	QC
1	Benzene	24.6	<2.0	91.0	91	100
2	Toluene	132	<2.0	96.3	96	100
3	Ethylbenzene	93.0	<2.0	96.9	97	100
4	m, p - Xylene	86.3	<2.0	194	97	200
5	o-Xylene	32.0	<2.0	96.5	97	100

% Recovery

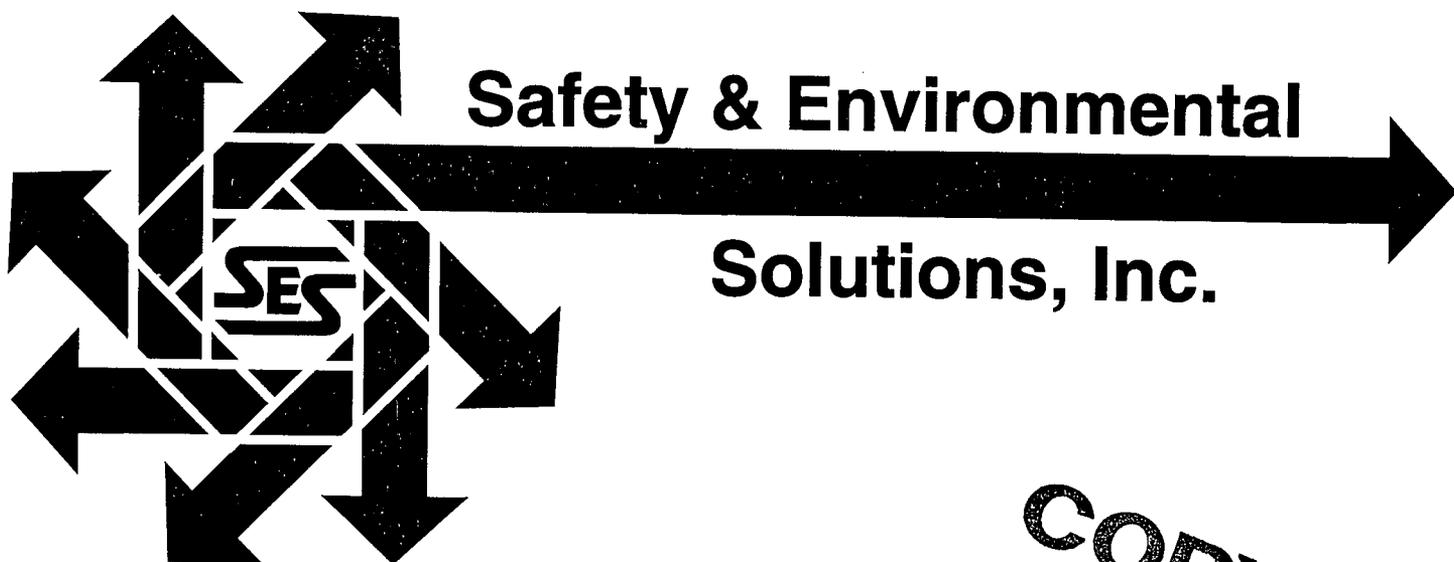
6	Dibromofluoromethane	89
7	Toluene-DB	98
8	4-Bromofluorobenzene	104

METHODS: EPA SW-846-8260.

  
Burgess A. Cooke, Ph. D.

7/27/98  
Date





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**KOCH PIPELINE CO., L.P.  
Crouch Station**

**Quarterly Report  
Air Monitoring Program  
Lea County, New Mexico**

*Safety & Environmental Solutions, Inc.  
703 E. Clinton Suite 103  
Hobbs, New Mexico 88240  
(505) 397-0510*

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### **Purpose**

The purpose of this project is to monitor the air quality from the SVE unit at the Crouch Station in Section 18 Township 18S Range 36E in Lea County, New Mexico and provide quarterly reports of the findings.

### **Background**

Koch Pipeline, Co., L.P., had previously installed a SVE Unit at the Crouch Station, as required by the New Mexico Oil Conservation Division. Safety and Environmental Solutions was contracted to monitor the air quality of the SVE unit beginning in October 1997 and to report the findings on a quarterly basis.

### **Method**

A Photovac MicroTIP Photo Ionization Detector is used for air sampling at the SVE Unit for BTEX detection, following the SOP delineated by the manufacturer. The procedure for sampling is as follows:

- The PID sets its zero point using Zero Grade Gas which is placed in a SKC Tedlar sample bag. After setting zero point, the concentration of the isobutylene Span Gas, 100ppm, is entered into the PID and the PID is then calibrated with the Span Gas which is placed in a new SKC Tedlar sample bag that has been purged with Span Gas prior to sampling.
- Three samples of air from the SVE Unit are collected in the SKC Tedlar sample bags, then tested using the MicroTIP PID. The first result is thrown out, to accommodate any purging, and the next two samples are recorded. (See Sampling Log)

Sampling is done on twice weekly basis at the SVE Unit, following the same protocol for each test.

### **Results**

The sampling has produced test results in the around the 200ppm range until early March 1998. On February 24, 1998, the Condensate that is produced was disposed of through proper channels (See attached Disposal records). On March 10, 1998, the readings jumped to the 600ppm range, still under the 1000ppm limit.

Beginning on March 10, 1998, however, the readings began to rise, surpassing the 1000ppm limit on March 31, 1998, and remaining above the limit through the April 17, 1998 reading for the quarter. (See Air Sampling Report) On April 3, 1998, some minor maintenance was performed on the top of the evaporator. The rise in the amount of contaminant that has been observed

during this quarter could be the result of an increase in soil temperature due to the changing seasons and the evaporative nature of the contaminant as well as the maintenance problem with the top of the evaporator.

**Figures**

**Air Sampling Report**

**Sampling Log**

**Disposal Records for Produced Condensate**

# Safety & Environmental Solutions, Inc.

## Koch Operations Group Crouch Station Quarterly Air Sampling Report

**Detector Type:** Photoionization

**Tester Brand:** Microtip

**Tester Model:** MP 100

**Serial Number:** NA890005

**Manufacture Date:** 8/97

Monitor is calibrated with 100ppm Isobutylene prior to testing on each sampling date.

Date Sampled	Time Sampled	1 <sup>st</sup> Sample Results	2 <sup>nd</sup> Sample Results
01-24-98	0830	113ppm	96ppm
01-27-98	1015	96ppm	83ppm
01-30-98	1500	95ppm	62ppm
02-03-98	0950	74ppm	77ppm
02-06-98	1400	63.6ppm	67.2ppm
02-11-98	1400	58.4ppm	60.3ppm
02-13-98	1000	61.3ppm	65.7ppm
02-17-98	1300	100ppm	111ppm
02-20-98	1500	188ppm	191ppm
02-24-98	1300	191ppm	194ppm*
02-27-98	1230	181ppm	183ppm
03-02-98	1503	181ppm	183ppm
03-06-98	1130	166ppm	167ppm
03-10-98	1110	609ppm	610ppm
03-13-98	1020	500ppm	504ppm
03-17-98	0732	538ppm	548ppm
03-20-98	0846	448ppm	456ppm
03-25-98	0706	783ppm	801ppm
03-27-98	1502	790ppm	825ppm
03-31-98	1404	1106ppm	1162ppm
04-03-98	1349	1433ppm	1443ppm
04-07-98	0817	1244ppm	1275ppm
04-10-98	0914	1628ppm	1632ppm
04-14-98	1339	1604ppm	1624ppm
04-17-98	1400	2083ppm	2096ppm

\* Water from SVE unit disposed of through proper channels. (See Disposal Forms)

1/30/98	3:00 PM	95 ppm	62 ppm
2-3-98	4:50 AM	74 ppm	77 ppm
2-6-98	2:00 PM	63.6 ppm	67.2 ppm
2-11-98	2:40 PM	58.7 ppm	60.3 ppm
2-13-98	10:00 PM	61.3 ppm	65.7 ppm
2-17-98	1:00 PM	100 ppm	111 ppm
2-20-98	3:00 PM	188 ppm	191 ppm
2-24-98	1:00 PM	191 ppm	194 ppm
2-27-98	12:30 PM	91 ppm	183 ppm
3-2-98	3:03 PM	181 ppm	183 ppm
3-6-98	11:30	166 ppm	167 ppm
3-10-98	11:10	609 ppm	610 ppm
3-13-98	10:20	500 ppm	504 ppm
3-17-98	7:32 AM	538 ppm	548 ppm
3-20-98	4:46 AM	445 ppm	456 ppm
3-25-98	7:06 AM	763 ppm	801 ppm
3-27-98	5:02 PM	790 ppm	825 ppm
3-31-98	2:04 PM	1106 ppm	1162 ppm
4-3-98	1:49 PM	1433 ppm	1443 ppm
4-7-98	8:17 AM	1244 ppm	1275 ppm
4-10-98	9:14 AM	1628 ppm	1632 ppm
4-14-98	1:34 PM	1604 ppm	1624 ppm
4-17-98	2:03 PM	2083 ppm	2096 ppm
4-21-98	2:49 PM	3045 ppm	1:23 PM
4-24-98	2:26 PM	2990 ppm	2:30 PM

Dispose of Water

NO WATER TO DISPOSE

5:25 PM  
TOP OF EVAPORATOR

Koch Operations Group

Koch Pipeline  
Crouch Station  
Copy of Sampling Log

Safety & Environmental  
Solutions, Inc.  
Hobbs, NM

# Sundance Services, Inc.

P.O. Box 1737 ★ Eunice, NM 88231  
(505) 394-2511

112 10565

LEASE OPERATOR/SHIPPER/COMPANY: *Krook Operations Group*

LEASE NAME: *Krook Station*

TRANSPORTER COMPANY: *SESI*

TIME: *2:50 AM* (PM)

DATE: *2-24-98*

VEHICLE NO.: *1*

DRIVER NO.:

CHARGE TO: *SESI*

## TYPE OF MATERIAL

- Production Water
- Tank Bottoms
- Other Material:

- Drilling Fluids
- Contaminated soil
- BS&W Content: \_\_\_\_\_

- Completion Fluids
- C-117 No.: \_\_\_\_\_

Description: *Exempt water 3 Drums (rinse)*

VOLUME OF MATERIAL  BBLs. \_\_\_\_\_ :  YARD \_\_\_\_\_ :  *Drums*

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001, et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

*THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.*

DRIVER: *[Signature]*  
(SIGNATURE)

FACILITY REPRESENTATIVE: *[Signature]*  
(SIGNATURE)

TRANSPORTER'S MANIFEST

MANIFEST# 1

Koch

SHIPPING FACILITY NAME & ADDRESS:

Koch Operations Group  
Wichita Kansas  
Attn: Dana Mourning

LOCATION OF MATERIAL:

Krouck Station

TRANSPORTER NAME & ADDRESS:

SESI  
703 E. Clinton St. 103  
Hobbs, NM 88240

DESCRIPTION OF WASTE:

Exempt Water

QUANTITY:

3 drums

Facility Contact:

Beth Aldred  
for SESI/Koch

Date:

2-24-98

Signature of Contact:

Beth Aldred

NAME OF TRANSPORTER: (Driver)

Date:

2-24-98

Signature of Driver:

D. Whatley

W. Dee Whatley  
DISPOSAL SITE:

Date:

SUNDANCE SERVICES, INC.  
PARABO FACILITY  
P.O. BOX 1737  
EUNICE, NM 88231

Signature of Representative



**Safety & Environmental**

**Solutions, Inc.**

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**KOCH PIPELINE CO., L.P.**  
**Crouch Station**

**Quarterly Report**  
**Air Monitoring Program**  
**Lea County, New Mexico**

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*(505) 397-0510*

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## **Purpose**

The purpose of this project is to monitor the air quality from the SVE unit at the Crouch Station in Section 18 Township 18S Range 36E in Lea County, New Mexico and provide quarterly reports of the findings.

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- The PID sets its zero point using Zero Grade Gas which is placed in a SKC Kevlar sample bag. After setting zero point, the concentration of the isobutylene Span Gas, 100ppm, is entered into the PID and the PID is then calibrated with the Span Gas which is placed in a new SKC sample bag that has been purged with Span Gas prior to sampling.
- Three samples of air from the SVE Unit are collected in the Kevlar sample bags, then tested using the MicroTIP PID. The first result is thrown out, to accommodate any purging, and the next two samples are recorded. (See Sampling Log)

Sampling is done on twice weekly basis at the SVE Unit, following the same protocol for each test.

## **Results**

The sampling has produced test results in the single digit to just under 400ppm range, under the allowable 1000ppm limit. (See Air Sampling Report) No significant amount of contaminant has been observed during this quarter.

## **Figures**

**Air Sampling Report  
Sampling Log**

# Safety & Environmental Solutions, Inc.

## Koch Operations Group Crouch Station Quarterly Air Sampling Report

**Detector Type:** Photoionization  
**Tester Brand:** Microtip  
**Tester Model:** MP 100  
**Serial Number:** NA890005  
**Manufacture Date:** 8/97

OPY

Monitor is calibrated with 100ppm Isobutylene prior to testing on each sampling date.

Date Sampled	Time Sampled	1 <sup>st</sup> Sample Results	2 <sup>nd</sup> Sample Results
10-17-97	1400	388ppm	397ppm
10-29-97	1045	299ppm	315ppm
11-04-97	1415	356ppm	361ppm
11-06-97	0830	232ppm	260ppm
11-11-97	1300	296ppm	305ppm
11-14-97	1100	269ppm	270ppm
11-18-97	1640	287ppm	289ppm
11-21-97	1303	257ppm	262ppm
11-25-97	1203	194ppm	207ppm
12-02-97	0810	202ppm	213ppm
12-05-97	0915	187ppm	196ppm
12-09-97	1020	178ppm	208ppm
12-12-97	1330	153ppm	165ppm
12-16-97	0645	183ppm	197ppm
12-19-97	1427	97ppm	91ppm
12-23-97	1050	54ppm	51ppm
12-26-97	1700	91ppm	103ppm
12-28-97	1700	142ppm	159ppm
12-30-97	1310	3.7ppm	3ppm
01-02-98	1350	176ppm	164ppm
01-06-98	1620	188ppm	193ppm
01-10-98	0900	214ppm	193ppm
01-13-98	1755	190ppm	133ppm
01-16-98	0800	176ppm	182ppm
01-19-98	0735	183ppm	205ppm

703 E. Clinton, Suite 103  
Phone (505) 397-0510

Hobbs, New Mexico 88240  
Fax (505) 393-4388

# COPY

DATE	TIME	Sample #1	Sample #2	Flow	MW#1 TOW	MW#2 TOW	MW#3 TOW
10-17-97	2:09pm	388ppm	397ppm				
10-29-97	10:45	299ppm	315ppm				
11-4-97	2:15PM	356PPM	361PPM				
11-6-97	8:30am	232ppm	260ppm				
11-11-97	1:00PM	296PPM	305PPM				
11-14-97	11:00am	269ppm	270ppm				
11-18-97	4:40pm	287PPM	289PPM				
11-21-97	1:03pm	257ppm	262ppm				
11-25-97	2:23pm	194ppm	207ppm				
12-2-97	6:10AM	202PPM	213PPM				
12/5/97	9:15AM	187PPM	196PPM				
12/9/97	10:30AM	178PPM	206PPM				
12/12/97	130PM	153PPM	165PPM				
12/16/97	6:45AM	183PPM	197PPM				
12/19/97	2:27PM	97PPM	91PPM				
12/23/97	10:50AM	54PPM	51PPM				
12/26/97	5:00PM	91PPM	103PPM				
12/28/97	5:00PM	143PPM	159PPM				
12/30/97	11:00AM	37PPM	30PPM				
1-2-98	1:50pm	176ppm	164ppm				
1-6-98	4:20AM	188PPM	193PPM				
1-10-98	7:00AM	214PPM	193PPM				
1-13-98	5:55PM	190PPM	133PPM				
1-16-98	8:00AM	176PPM	182PPM				
1-20-98	7:35AM	183PPM	205PPM				

Koch Operations Group

**Koch Pipeline  
Crouch Station  
Copy of Sampling Log**

*Safety & Environmental  
Solutions, Inc.  
Hobbs, NM*

# Sundance Services, Inc.

P.O. Box 1737 ★ Eunice, NM 88231  
(505) 394-2511

NE 10565

LEASE OPERATOR/SHIPPER/COMPANY: *Kent Operations Group*

LEASE NAME: *Kenach Station*

TRANSPORTER COMPANY: *SESI*

TIME: *2:50 AM* (PM)

DATE: *2-24-98*

VEHICLE NO.: *1*

DRIVER NO.:

CHARGE TO: *SESI*

## TYPE OF MATERIAL

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Production Water           | <input type="checkbox"/> Drilling Fluids     | <input type="checkbox"/> Completion Fluids |
| <input type="checkbox"/> Tank Bottoms               | <input type="checkbox"/> Contaminated soil   | <input type="checkbox"/> C-117 No.: _____  |
| <input checked="" type="checkbox"/> Other Material: | <input type="checkbox"/> BS&W Content: _____ |  |

Description: *Exempt water 3 Drums (rinse)*

VOLUME OF MATERIAL  BBLs. \_\_\_\_\_ :  YARD \_\_\_\_\_ : *3 Drums*

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HERewith IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001, et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

*THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.*

DRIVER: *[Signature]*  
(SIGNATURE)

FACILITY REPRESENTATIVE: *[Signature]*  
(SIGNATURE)

TRANSPORTER'S MANIFEST

MANIFEST# 1

Koch

SHIPPING FACILITY NAME & ADDRESS:

Koch Operations Group  
Wichita Kansas  
Attn: Dana Mourning

LOCATION OF MATERIAL:

Krouck Station

TRANSPORTER NAME & ADDRESS:

SESI  
703 E. Clinton St. 103  
Hobbs, NM 88240

DESCRIPTION OF WASTE:

Exempt Water

QUANTITY:

3 drums

Facility Contact:

Beth Aldred  
for SESI/Koch

Date:

2-24-98

Signature of Contact:

Beth Aldred

NAME OF TRANSPORTER: (Driver)

Date:

2-24-98

Signature of Driver:

Dana Mourning

W. Dee Whatley  
DISPOSAL SITE:

Date:

SUNDANCE SERVICES, INC.  
PARABO FACILITY  
P.O. BOX 1737  
EUNICE, NM 88231

Signature of Representative