

1R - 173

REPORTS

DATE:

9/20/1999



**Safety & Environmental
Solutions, Inc.**

Koch Pipeline Company, L.P.

**Crouch Station
Monitor Well Report
Lea County, New Mexico**

September 20, 1999

RECEIVED

SEP 23 1999

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

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

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I. Background

The purpose of this report is to present analytical results from ground water samples collected for compliance with NMOCD requirements on the monitor wells at Koch Pipeline Company's Crouch Station located in Section 18 Township 18S Range 36E in Lea County, New Mexico (See Vicinity Map).

Safety & Environmental Solutions, Inc. (SESI) performed sampling and data collection on the five (5) ground water monitor wells previously installed by SESI in 1998 and Western Technologies in 1997. The casing size in all wells is 2".

II. Work Performed

On August 31, 1999, SESI environmental technician W. Dee Whatley arrived at the site. Ground water samples were taken from each well after a hand bailer was used to develop the wells. Three to five casing volumes of water were removed from each well until pH and temperature of the water were stabilized. The samples were obtained and placed in appropriate containers, preserved and transported under chain of custody to Cardinal Laboratories of Hobbs, New Mexico for analysis of the contaminants identified in the initial sampling of April 1998. (See Analytical Data)

In addition to the sampling, SESI also measured the depth to the top of the water table and the total depth of each well. The depth to the top of ground water was measured using a Solinst water level indicator. The total depth of each well was measured in order to compute the proper casing volumes. This information will be included in the annual report due each April for the Crouch Station.

A summary of this data follows:

ID	Date	Depth to Water	Total Well Depth	Free Product Thickness
MW - 1	8/31/99	58.10'	63.51'	0.00
MW - 2	8/31/99	56.76'	61.21'	0.00
MW - 3	8/31/99	59.82'	67.95'	0.00
MW - 4	8/31/99	59.79'	64.62'	0.00
MW - 5	8/31/99	59.00'	67.25'	0.00

III. Analytical Results

The analysis of the groundwater samples performed by Cardinal Laboratories are summarized as follows:

Contaminant	WQCC Standard	MW #1	MW #2	MW #3	MW #4	MW #5
Barium	1.00 ppm	5.179ppm	3.748ppm	6.095ppm	6.974ppm	5.285ppm
Benzene	0.01 ppm	N/A	N/A	0.628 ppm	N/A	N/A
Chromium	0.05 ppm	<0.05ppm	<0.05ppm	<0.05ppm	<0.05ppm	<0.05ppm

IV. Figures and Appendices

Figures:

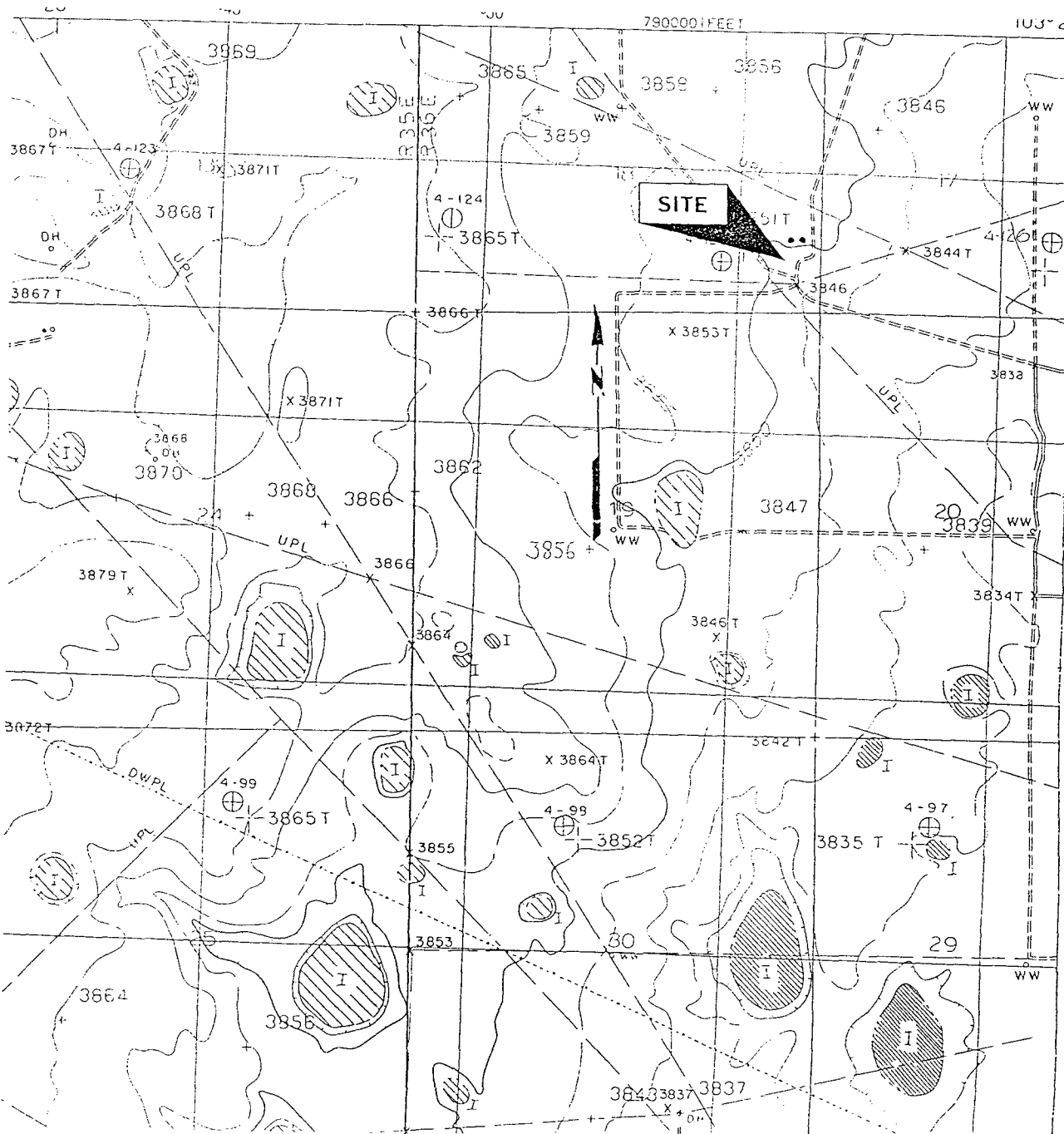
Vicinity Map

Potentiometric Map

Appendices:

Analytical Results

Figure 1
Vicinity Map

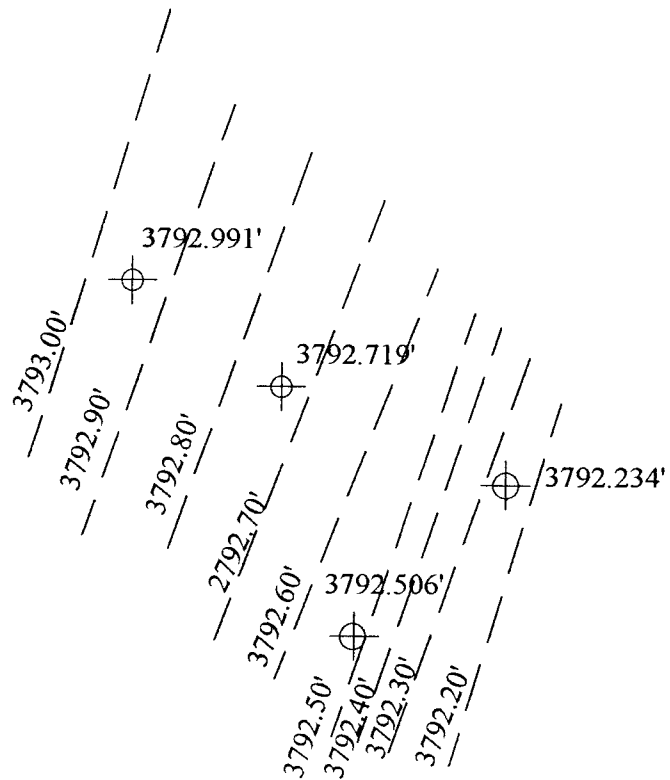
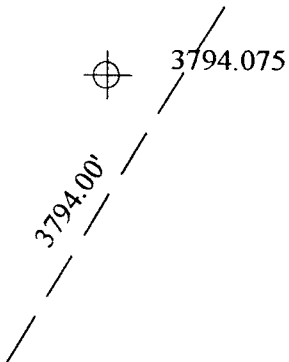
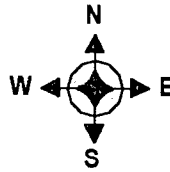


Koch Pipeline Co., L.P.

Crouch Station Vicinity Map

Safety & Environmental
Solutions, Inc.
Hobbs, NM

Figure 2
Potentiometric Map



Koch Pipeline Company, L.P.
Potentiometric Surface Map

Crouch Station
Section 18, T18S, R 36E
Lea County, New Mexico

August 31, 1999

Scale: 1" = 100'

Appendix A

Analytical Results



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: 08/31/99
Reporting Date: 08/31/99
Project Owner: KOCH OIL
Project Name: CROUCH STATION MW
Project Location: CROUCH STATION
Sample ID: MW #3
Lab Number: H4311-3

Analysis Date: 08/31/99
Sampling Date: 08/31/99
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC

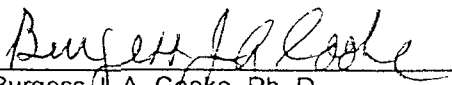
	Sample Result	Method	True Value		
BENZENE (mg/L)	H4311-3	Blank	QC %Recov.	QC	

Benzene	0.628	<0.002	0.093	93	0.100
---------	-------	--------	-------	----	-------

% RECOVERY

Dibromofluoromethane	112
Toluene - d8	101
Bromofluorobenzene	104

METHODS: EPA SW-846 8260


Burgess A. Cooke, Ph. D.

8/31/99
Date



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

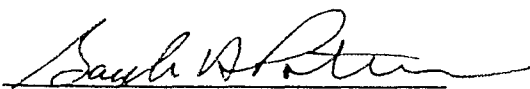
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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

Receiving Date: 08/31/99
Reporting Date: 09/01/99
Project Owner: KOCH OIL
Project Name: CROUCH STATION MW
Project Location: CROUCH STATION

Sampling Date: 08/31/99
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Ba (mg/L)	Cr (mg/L)
ANALYSIS DATE:		09/01/99	09/01/99
H4311-1	MW #1	5.179	<0.05
H4311-2	MW #2	3.748	<0.05
H4311-3	MW #3	6.095	<0.05
H4311-4	MW #4	6.974	<0.05
H4311-5	MW #5	5.285	<0.05
Quality Control		24.36	4.880
True Value QC		25.00	5.000
% Recovery		97.4	97.6
Relative Percent Difference		3.7	1.7
METHODS: EPA 600/4-79-020		208.1	218.1


Chemist

09/01/99
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, 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

Page _____ of _____

Company Name: SEST		BILL TO		PO #:		ANALYSIS REQUEST									
Project Manager: Dec. 4/85		Company:													
Address: 703 E. Clinton Suite 103		Attn:													
City: Jefferson State: VA Zip: 22204		Address:													
Phone #: 397-0510		City:													
Fax #: 393-4384		State:													
Project #: 		Phone #:													
Project Name: Crouch Station		Fax #:													
Project Location: Crouch Station															

LAB I.D.	Sample I.D.	FOR LAB USE ONLY					PRES.			DATE	TIME	SAMPLING
		# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	SLUDGE	OTHER:	ACID:	ICE / COOL			
14311-1	MW#1	6	1	1	1	1	1	1	1	8-31-99	8:45AM	Barium
14311-2	MW#2	6	1	1	1	1	1	1	1			Chrom. air
14311-3	MW#3	6	3	1	1	1	1	1	1			Benzene
14311-4	MW#4	6	1	1	1	1	1	1	1			
14311-5	MW#5	6	3	1	1	1	1	1	1			

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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: Dec 1/85		Received By: (Lab Staff)	
Relinquished By: Dec 1/85		Received By: Dec 1/85	
Delivered By: (Circle One)		Checked By: Dec 1/85	
Sampler - UPS - Bus - Other:		Initials: Dec 1/85	

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