

GW - 202

**MONITORING
REPORTS**

DATE:

1999



**Safety & Environmental
Solutions, Inc.**

Pro-Kem, Inc.

COPY

**Lovington Yard
Monitor Well Report
Lea County, New Mexico**

January 12, 1999

RECEIVED

JUL 26 1999

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

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

TABLE OF CONTENTS

I. Background.....	2
II. Work Performed	2
III. Analytical Results	2
IV. Figures and Appendices.....	3

I. Background

The subject property is located in south Lovington, Lea County, New Mexico adjacent to NM Highway 18 in Section 15, T16S, R36E. Safety & Environmental Solutions, Inc. (SESI) performed sampling and data collection on the three (3) ground water monitor wells previously installed in November 1997 at the site (See Vicinity Map). The casing size in all wells is 2".

II. Work Performed

On January 8, 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 for the contaminants Carbon Tetrachloride, TPH, BTEX and Chlorides. (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. A summary of this data follows:

ID	Date	Depth to Water	Total Well Depth	Free Product Thickness
MW - 1	1/8/99	58.75'	73.36'	0.00
MW - 2	1/8/99	58.49'	70.51'	0.00
MW - 3	1/8/99	59.20'	71.44'	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
Carbon Tet.	0.002 ppm	.342ppm	.017ppm	.111ppm
Chlorides	250.0 ppm	56ppm	94ppm	116ppm
Benzene	0.01 ppm	<.002ppm	<.002ppm	<.002ppm
Toluene	0.75 ppm	<.002ppm	<.002ppm	<.002ppm
Ethyl Benzene	0.75 ppm	<.002ppm	<.002ppm	<.002ppm
Total Xylenes	0.62 ppm	<.006ppm	<.006ppm	<.006ppm
TPH	N/A	<1.0ppm	1.47ppm	<1.0ppm

IV. Figures and Appendices

Figures:

Vicinity Map

Appendices:

Analytical Results

Figure 1
Vicinity Map

16 S
16 S

3648

57°30'

3647

ARTSIA 62 MI.
MALJAMAR 23 MI.

5349 1 V
ILOVINGTON 1:62 5001

3645

3644

5

8

17

4

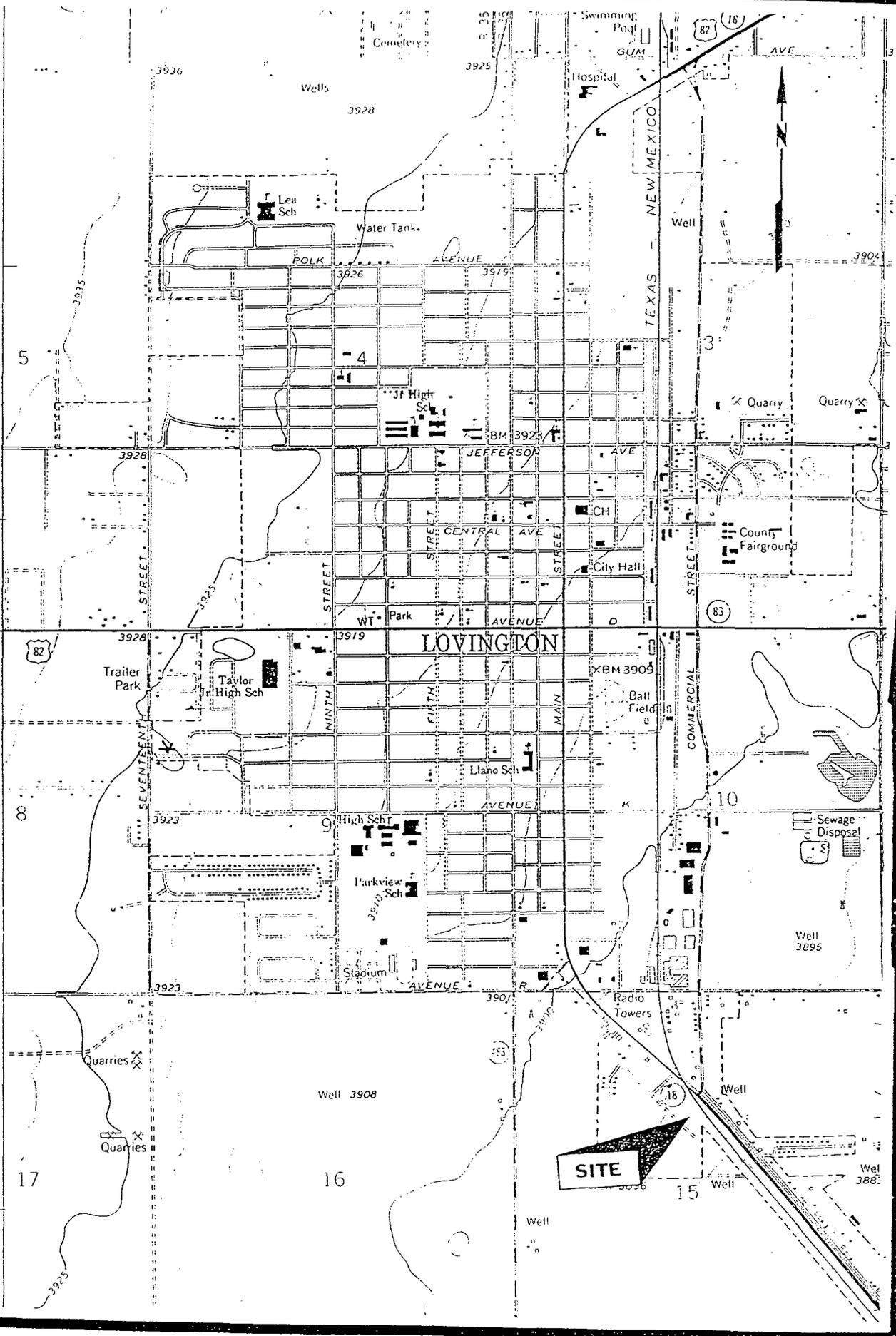
LOVINGTON

16

3

10

15



SITE

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: 01/08/99
 Reporting Date: 01/11/99
 Project Number: NOT GIVEN
 Project Name: PROKEM MONITOR WELLS
 Project Location: LOVINGTON PROKEM YARD
 Lab Number: H3987-3
 Sample ID: MW #3

Analysis Date: 01/08/99
 Sampling Date: 01/08/99
 Sample Type: GROUNDWATER
 Sample Condition: COOL & INTACT
 Sample Received By: AH
 Analyzed By: BC

TCLP VOLATILES (ppm)	Sample Result H3987-3	Method Blank	QC	%Recov.	True Value QC
Benzene	0.002	<0.002	0.084	84	0.100
Carbon Tetrachloride	0.111	<0.002	0.084	84	0.100
Toluene	<0.002	<0.002	0.085	85	0.100
Ethylbenzene	<0.002	<0.002	0.084	84	0.100
m,p-Xylene	<0.004	<0.004	0.168	84	0.200
o-Xylene	<0.002	<0.002	0.089	89	0.100
Dibromofluoromethane	108				
Toluene-d8	108				
Bromofluorobenzene	103				

METHODS: EPA SW 846-8260

Burgess A. Cooke
 Burgess A. Cooke, Ph. D.

1/11/99

 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:

Receiving Date: 01/08/99
Reporting Date: 01/11/99
Project Number: NOT GIVEN
Project Name: PROKEM MONITOR WELLS
Project Location: LOVINGTON PROKEM YARD

Sampling Date: 01/08/99
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: AH/BC

LAB NUMBER	SAMPLE ID	TPH (ppm)	Cl (ppm)
ANALYSIS DATE:		01/08/99	01/08/99
H3987-1	MW #1	<1.0	56
H3987-2	MW #2	1.47	94
H3987-3	MW #3	<1.0	116
Quality Control		254	1257
True Value QC		240	1319
% Recovery		106	95
Relative Percent Difference		2.4	3.5
METHODS: EPA 600/4-79-02		418.1	325.3

Burgess D. Cooke
Chemist

1/11/99
Date

H3987-1.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.

