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MONITORING REPORTS





Safety & Environmental

Solutions, Inc.

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ENVIRONMENTAL BUREAU OIL CONSERVATION DIVISION

Pro-Kem, Inc.



Lovington Yard Monitor Well Report Lea County, New Mexico

For Year Ending December 31, 1999

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

TABLE OF CONTENTS

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

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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 November1997 at the site (See Vicinity Map). The casing size in all wells is 2".

II. Work Performed

Beginning in January 1999, the three monitor wells were sampled quarterly, with no samples taken during the third quarter of 1999. 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, and BTEX. (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. (See Cumulative Depth to Water Table)

III. Summary

The analysis of the groundwater samples performed by Cardinal Laboratories indicate the presence of elevated levels of Carbon Tetrachloride in all wells throughout the test period, with the highest concentration found in the upgradient well, which may indicate an offsite source. (See Cumulative Well Data)

Depth to water measurements in the monitor wells indicate a prevailing southeasterly flow of water. The anomaly in depth to water on December 8, 1999, for Monitor Well #1 may be due to technician error. (See Depth to Water Site Plans)

IV. Figures and Appendices

Figures:

Vicinity Map Site Map Depth to Water Site Maps

Appendices:

Cumulative Depth to Water Table Cumulative Well Data Results Analytical Results

Pro-Kem, Inc. Lea County, New Mexico

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Figure 1 Vicinity Map



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Pro-Kem, Inc. Lea County, New Mexico

Figure 2 Site Map



Pro-Kem, Inc. Lea County, New Mexico

Figure 3 Depth to Water Maps







Pro-Kem, Inc. Lea County, New Mexico

Appendix A Cumulative Depth to Water Table

Monitor	Total Well	DTW	DTW	DTW
Well	Depth	, ¹ ,1/8/99	4/16/99	12/8/99
#1	73.36'	58.75'	58.20'	59.09'
#2	70.51'	58.49'	58.56'	58.31'
#3	71.44'	59.20'	59.22'	59.06'

ProKem, Inc. Cumulative Depth to Water Table

Pro-Kem, Inc. Lea County, New Mexico

Appendix B Cumulative Well Data Results

ProKem, Inc. Cumulative Well Data

Monitor Well #1

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Contaminant	WQCC Standard	Test Date 1/8/99	Test Date 4/16/99	Test Date 12/8/99
Chloride	250.0 ppm	56ppm	n/a	n/a
Carbon Tet.	0.002 ppm	.342ppm	.338ppm	.366ppm
Benzene	0.01 ppm	<.002ppm	<.002ppm	<.002ppm
Toluene	0.75 ppm	<.002ppm	<.002ppm	<.002ppm
E. Benzene	0.75 ppm	<.002ppm	<.002ppm	<.002ppm
Total Xylenes	0.62 ppm	<.006ppm	<.006ppm	<.006ppm
TPH	N/A	<1.0ppm	n/a	n/a

Monitor Well #2

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Contaminant	WQCC Standard	Test Date 1/8/99	Test Date 4/16/99	Test Date 12/8/99
			1 1 1	
Chloride	250.0 ppm	94ppm	n/a	n/a
Carbon Tet.	0.002 ppm	0.17ppm	0.15ppm	.008ppm
Benzene	0.01 ppm	<.002ppm	<.002ppm	<.002ppm
Toluene	0.75 ppm	<.002ppm	<.002ppm	<.002ppm
E. Benzene	0.75 ppm	<.002ppm	<.002ppm	<.002ppm
Total Xylenes	0.62 ppm	<.006ppm	<.006ppm	<.006ppm
TPH	N/A	1.47ppm	n/a	n/a

Monitor Well #3

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Contaminant	WQCC Standard	Test Date 1/8/99	Test Date 4/16/99	Test Date 12/8/99
Chloride	250.0 ppm	116ppm	n/a	n/a
Carbon Tet.	0.002 ppm	.111ppm	.109ppm	.353ppm
Benzene	0.01 ppm	<.002ppm	<.002ppm	<.002ppm
Toluene	0.75 ppm	<.002ppm	<.002ppm	<.002ppm
E. Benzene	0.75 ppm	<.002ppm	<.002ppm	<.002ppm
Total Xylenes	0.62 ppm	<.006ppm	<.006ppm	<.006ppm
TPH	N/A	<1.0ppm	n/a	n/a

Pro-Kem, Inc. Lea County, New Mexico

Appendix C Analytical Results



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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: 01/08/99 Reporting Date: 01/11/99 Project Number: NOT GIVEN Project Name: PROKEM MONITOR WELLS Project Location: LOVINGTON PROKEM YARD Lab Number: H3987-1 Sample ID: MW #1 Analysis Date: 01/08/99 Sampling Date: 01/08/99 Sample Type: GROUNDWATER Sample Condition: COOL & INTACT Sample Received By: AH Analyzed By: BC

	Sample Result	Method			True Value
TCLP VOLATILES (ppm)	H3987-1	Blank	QC	%Recov.	QC
Benzene	<0 002	<0.002	0.084	84	0,100
Carbon Tetrachloride	0.342	<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
Dibromotiuoromethane	112				
Toluene-d8	108				
Bromofluorobenzene	107				

METHODS: EPA SW 846-8260

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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.



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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: H3987-2 Sample ID: MW #2 Analysis Date: 01/08/99 Sampling Date: 01/08/99 Sample Type: GROUNDWATER Sample Condition: COOL & INTACT Sample Received By: AH Analyzed By: BC

	Sample Result	Method			True Value
TCLP VOLATILES (ppm)	H3987-2	Blank	QC	%Recov.	QC
Benzene	<0.002	<0.002	0.084	84	0 100
Carbon Tetrachloride	0.017	< 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	91]			
Toluene-d8	96				
Bromofluorobenzene	95				

METHODS: EPA SW 846-8260

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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

	Sample Result	Method			True Value
TCLP VOLATILES (ppm)	H3987-3	Blank	QC	%Recov.	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

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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

	TPH	CI
LAB NUMBER SAMPLE ID	(ppm)	(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

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Date

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Address:		Company:			
City:	State: Zlp:	Attn:			
Phone #:		Address:			
Fax #:		City:			
Project #:	Project Owner:	State: Zip:			
Project Name: F	sekan Monital Walls	Phone #:		· · · · · · · · · · · · · · · · · · ·	
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ANALYTICAL RESULTS FOR SAFETY & ENVIRONMENTAL SOLUTIONS, INC. ATTN: DEE WHATLEY 701 E. CLINTON, SUITE 103 HOBBS, NM 88240 FAX TO:

Receiving Date: 04/16/99 Reporting Date: 04/17/99 Project Number: NOT GIVEN Project Name: PROKEM MONITOR WELLS Project Location: LOVINGTON, NM Lab Number: H4108-1 Sample ID: P1 Analysis Date: 04/16/99 Sampling Date: 04/16/99 Sample Type: GROUNDWATER Sample Condition: COOL & INTACT Sample Received By: GP Analyzed By: BC

	Sample Result	Method			True Value
VOLATILES (mg/L)	H4108-1	Blank	QC	%Recov.	QC
Benzene	<0.002	<0.002	0.111	111	0.100
Carbon Tetrachloride	0.338	<0.002	0.094	94	0,100
Toluene	< 0.002	<0.002	0.099	99	0.100
Ethylbenzene	< 0.002	<0.002	0.092	92	0.100
m,p-Xylene	< 0.004	<0.004	0.186	93	0.200
o-Xyiene	<0.002	<0.002	0.093	93	0.100

	% RECOVERY	
Dibromofluoromethane	100	
Toluene-d8	113	
Bromofluorobenzene.	112	

METHODS: EPA SW 846-8260, 1311

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Receiving Date: 04/16/99 Reporting Date: 04/17/99 Project Number: NOT GIVEN Project Name: PROKEM MONITOR WELLS Project Location: LOVINGTON, NM Lab Number: H4108-2 Sample ID: P2 Analysis Date: 04/16/99 Sampling Date: 04/16/99 Sample Type: GROUNDWATER Sample Condition: COOL & INTACT-Sample Received By: GP Analyzed By: BC

	Sample Result	Method		True Value		
VOLATILES (mg/L)	H4108-2	Blank	Blank QC		QC	
Benzene	<0.002	<0.002	0.111	111	0.100	
Carbon Tetrachloride	0.015	<0.002	0.094	94	0.100	
Toluene	<0.002	< 0.002	0.099	99	0.100	
Ethylbenzene	<0.002	< 0.002	0.092	92	0.100	
m,p-Xylene	<0.004	<0.004	0.186	83	0.200	
o-Xylene	<0.002	<0.002	0.093	93	0.100	

	% RECOVERY	
Dibromofluoromethane	91	
Toluene-d8	105	
Bromofluorobenzene	104	

METHODS: EPA SW 846-8260, 1311

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Receiving Date: 04/16/99 Reporting Date: 04/17/99 Project Number: NOT GIVEN Project Name: PROKEM MONITOR WELLS Project Location: LOVINGTON, NM Lab Number: H4108-3 Sample ID: P3 Analysis Date: 04/16/99 Sampling Date: 04/16/99 Sample Type: GROUNDWATER Sample Condition: COOL & INTACT Sample Received By: GP Analyzed By: BC

	Samole Result	Method		•	True Value	
VOLATILES (mg/L)	H4108-3	Blank	Blank QC		QC	
Dentone	0.004	<0.002	0.111	111	0.100	
Carbon Tetrachlorida	0,109	<0.002	0.094	94	0.100	
	<0.002	<0.002	0.099	99	0.100	
The dear to a	<0.002	<0.002	0.092	92	0.100	
	<0.004	<0.004	0.186	93	0.200	
	<0.002	<0.002	0.093	93	0.100	
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	% RECOVERY
Dibromofluoromethane	102
Toluene-d8	97
Bromofluorobenzene	105

METHODS: EPA SW 846-8260, 1311

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

Receiving Date: 12/08/99 Reporting Date: 12/10/99 Project Number: NOT GIVEN Project Name: PROKEM INC. Project Location: LOVINGTON Lab Number: H4497-1 Sample ID: MW #1 Analysis Date: 12/09/99 Sampling Date: 12/08/99 Sample Type: GROUNDWATER Sample Condition: COOL & INTACT Sample Received By: AH Analyzed By: BC

	Sample Result	Method			True Value
VOLATILES (mg/L)	H4497-1	Blank	QC	%Recov.	QC
Benzene	<0.002	<0.002	0.097	97	0.100
Carbon Tetrachloride	0.366	< 0.002	0.112	112	0.100
Toluene	< 0.002	< 0.002	0.100	100	0.100
m,p-Xylene	< 0.004	< 0.004	0.212	106	0.200
o-Xylene	< 0.002	<0.002	0.104	104	0.100

	% RECOVERY	
Dibromofluoromethane	94	
Toluene-d8	104	
Bromofluorobenzene	110	

METHODS: EPA SW 846-8260

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> Analysis Date: 12/09/99 Sampling Date: 12/08/99 Sample Type: GROUNDWATER Sample Condition: COOL & INTACT Sample Received By: AH Analyzed By: BC

Receiving Date: 12/08/99 Reporting Date: 12/10/99 Project Number: NOT GIVEN Project Name: PROKEM INC. Project Location: LOVINGTON Lab Number: H4497-2 Sample ID: MW #2

	Sample Result	Method			True Value
VOLATILES (mg/L)	H4497-2	Blank	QC	%Recov.	QC
Benzene	<0.002	<0.002	0.097	97	0.100
Carbon Tetrachloride	0.008	<0.002	0.112	112	0.100
Toluene	<0.002	< 0.002	0.100	100	0.100
m,p-Xylene	< 0.004	< 0.004	0.212	106	0.200
o-Xylene	< 0.002	<0.002	0.104	104	0.100

	% RECOVERY	
Dibromofluoromethane	100	
Toluene-d8	110	
Bromofluorobenzene	112	

METHODS: EPA SW 846-8260

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12/10/99 Date

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Receiving Date: 12/08/99 Reporting Date: 12/10/99 Project Number: NOT GIVEN Project Name: PROKEM INC. Project Location: LOVINGTON Lab Number: H4497-3 Sample ID: MW #3 Analysis Date: 12/09/99 Sampling Date: 12/08/99 Sample Type: GROUNDWATER Sample Condition: COOL & INTACT Sample Received By: AH Analyzed By: BC

	Sample Result	Method			True Value
VOLATILES (mg/L)	H4497-3	Blank	QC	%Recov.	QC
Benzene	<0.002	<0.002	0.097	97	0.100
Carbon Tetrachloride	0.353	< 0.002	0.112	112	0.100
Toluene	< 0.002	< 0.002	0.100	100	0.100
m,p-Xylene	< 0.004	< 0.004	0.212	106	0.200
o-Xylene	<0.002	<0.002	0.104	104	0.100

	% RECOVERY	
Dibromofluoromethane	106	
Toluene-d8	108	
Bromofluorobenzene	111	

METHODS: EPA SW 846-8260

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

Receiving Date: 12/08/99 Reporting Date: 12/09/99 Project Number: NOT GIVEN Project Name: PROKEM INC. Project Location: LOVINGTON Sampling Date: 12/08/99 Sample Type: GROUNDWATER Sample Condition: COOL & INTACT Sample Received By: AH Analyzed By: AH

	Na	Ca	Mg	K	Conductivity	T-Alkalinity
LAB NUMBER SAMPLE ID	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(u mhos/cm)	(mgCaCO ₃ /L)
ANALYSIS DATE:	12/09/99	12/08/99	12/08/99	12/08/99	12/08/99	12/08/99
H4497-1 MW #1	86	77	19	2.84	1040	292
H4497-2 MW #2	108	51	16	4.62	932	276
H4497-3 MW #3	102	89	29	3.17	857	316
Quality Control	NR	48	49	4.96	1443	NR
True Value QC	NR	50	50	5.00	1413	NR
% Accuracy	NR	96	98	99	102	NR
Relative Percent Difference	NR	6.3	5.1	0	0.4	NR
METHODS:	SM	3500-Ca-D	3500-Mg E	8049	120.1	310.1

	CIT	SO₄	CO3	HCO ₃	pН	TDS
	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(s.u.)	(mg/L)
ANALYSIS DATE:	12/08/99	12/08/99	12/08/99	12/08/99	12/08/99	12/08/99
H4497-1 MW #1	97	32	0	356	7.16	671
H4497-2 MW #2	73	52	0	337	7.17	595
H4497-3 MW #3	146	43	0	386	5.94	787
Quality Control	978	50.06	112	221	7.03	NR
True Value QC	1000	50.00	124	259	7.00	NR
% Accuracy	98	100	90	85	100	NR
	2.2	5.2	-	-	0.1	NR
METHODS:	SM4500-CI-B	375.4	310.1	310.1	150.1	160.1

Gayle A/Potter, Chemist

______ Date

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Company Name: CH	(915) 673-7001 Fax (9	15) 873-7020	(505) 393	-2326 Fa	x (sus) 393	-24/6			ANALY	SIS REC	UEST			Γ
Project Manager:			S.	MIII) PO #:									
Address: 703 E.	CLINTON, #103		Ů	mpany:	SAME				·					·
city: HOBBS	State: NM ZIp:	88240	Att	ï										
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Project #:	Project Owner:		Sta	ite:	Zlp:		7	<u>.</u> 			· .			
Project Name:	Porken Inc.		ча	one #:				ų	<u>.</u>					
Project Location:	Louingfor		Fa	¢#:				1						
FOR LAB USE ONLY		LAM	XIX	PRES.	SAMPLIN	0	<u>Z</u>	5					<u> </u>	
LABI.D.	Sample I.D.	(G)RAB OR (C)OMP. P CONTRINERS ROUNDWATER MASTEWATER SOIL	DTHER : SLUDGE ML	DTHER : CE / COOL ACID:	DATE	TIME	XZIE	NOILHD						
11-79444	MW #1) 	X	12-8-99	11:00 Am	X	X						
	MW #2			X	1 1 1 1	1.2/5 Am	X V V	Ķ						
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Pro-Kem, Inc. Monitor Well Report Lea County, New Mexico

Section 15, T16S, R36E Lea County, New Mexico

May 10, 2000



prepared for:

Pro-Kem, Inc. P.O. Box 1506 Lovington, New Mexico 88260

By:

Safety & Environmental Solutions, Inc. 703 E. Clinton, Suite 103 Hobbs, New Mexico 88240

RECEIVED

MAY 2 4 2000

ENVIRONMENTAL BUREAU OIL CONSERVATION DIVISION

TABLE OF CONTENTS

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I. Background	2
II.Work Performed	2
III. Analytical Results	3
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 November1997 at the site (See Vicinity Map). The casing size in all wells is 2".

II. Work Performed

On February 22, 2000 SESI environmental technician Sergio Contreras Jr. 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, and BTEX. (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 groundwater potentiometric and gradient map was prepared using the measured depth to water day and previously surveyed top of casing elevations. A summary of this data follows:

ID	Date	Top of Casing Elevation	Depth to Water	Potentiometric Elevation	Total Well Depth	Free Product Thickness
MW – 1	2/22/00	3895.67'	59.15'	3836.54'	73.36'	0.00
MW – 2	2/22/00	3894.33'	58.38'	3835.95'	70.51'	0.00
MW – 3	2/22/00	3894.13'	59.12'	3835.01'	71.44'	0.00

III. Analytical Results

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

Contaminant	WQCC	MW	MW	MW
•	Standard	#1	#2	#3
Carbon Tet.	0.01 ppm	0.589ppm	0.354ppm	0.007ppm
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

IV. Figures and Appendices

Figures: Vicinity Map Potentiometric Map

Appendices:

Cumulative Well Water Quality Data Results Analytical Results

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Pro-Kem, Inc. Lea County, New Mexico

Figure 1 Vicinity Map



Figure 2 Potentiometric Map



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Pro-Kem, Inc. Lea County, New Mexico

Appendix A Cumulative Well Water Quality Data Results

ProKem, Inc. Cumulative Well Data

Monitor Well #1

Contaminant	WQCC Standard	Test Date 1/8/99	Test Date 4/16/99	Test Date 12/8/99
Chloride	250.0 ppm	56ppm	n/a	n/a
Carbon Tet.	0.002 ppm	.342ppm	.338ppm	.366ppm
Benzene	0.01 ppm	<.002ppm	<.002ppm	<.002ppm
Toluene	0.75 ppm	<.002ppm	<.002ppm	<.002ppm
E. Benzene	0.75 ppm	<.002ppm	<.002ppm	<.002ppm
Total Xylenes	0.62 ppm	<.006ppm	<.006ppm	<.006ppm
TPH	N/A	<1.0ppm	n/a	n/a

Contaminant	WQCC Standard	Test Date 2/22/00	Test Date	Test Date
Chloride	250.0 ppm	N/a		
Carbon Tet.	0.002 ppm	.589ppm		
Benzene	0.01 ppm	<.002ppm		
Toluene	0.75 ppm	<.002ppm		
E. Benzene	0.75 ppm	<.002ppm		
Total Xylenes	0.62 ppm	<.006ppm		
TPH	N/A	N/a		

Monitor Well #2

Contaminant	WQCC Standard	Test Date 1/8/99	Test Date 4/16/99	Test Date 12/8/99
Chloride	250.0 ppm	94ppm	n/a	n/a
Carbon Tet.	0.002 ppm	0.17ppm	0.15ppm	.008ppm
Benzene	0.01 ppm	<.002ppm	<.002ppm	<.002ppm
Toluene	0.75 ppm	<.002ppm	<.002ppm	<.002ppm
E. Benzene	0.75 ppm	<.002ppm	<.002ppm	<.002ppm
Total Xylenes	0.62 ppm	<.006ppm	<.006ppm	<.006ppm
TPH	N/A	1.47ppm	n/a	n/a

Contaminant	WQCC Standard	Test Date 2/22/00	Test Date	Test Date
Chloride	250.0 ppm	N/a		
Carbon Tet.	0.002 ppm	.354ppm		
Benzene	0.01 ppm	<.002ppm		
Toluene	0.75 ppm	<.002ppm		
E. Benzene	0.75 ppm	<.002ppm		
Total Xylenes	0.62 ppm	<.006ppm		
TPH	N/A	N/a		

Monitor Well #3

Contaminant	WQCC Standard	Test Date 1/8/99	Test Date 4/16/99	Test Date 12/8/99
Chloride	250.0 ppm	116ppm	n/a	n/a
Carbon Tet.	0.002 ppm	.111ppm	.109ppm	.353ppm
Benzene	0.01 ppm	<.002ppm	<.002ppm	<.002ppm
Toluene	0.75 ppm	<.002ppm	<.002ppm	<.002ppm
E. Benzene	0.75 ppm	<.002ppm	<.002ppm	<.002ppm
Total Xylenes	0.62 ppm	<.006ppm	<.006ppm	<.006ppm
TPH	N/A	<1.0ppm	n/a	n/a

Contaminant	WQCC Standard	Test Date 2/22/00	Test Date	Test Date
Chloride	250.0 ppm	N/a		
Carbon Tet.	0.002 ppm	.007ppm		
Benzene	0.01 ppm	<.002ppm		
Toluene	0.75 ppm	<.002ppm		
E. Benzene	0.75 ppm	<.002ppm		
Total Xylenes	0.62 ppm	<.006ppm		
TPH	N/A	N/a		

Pro-Kem, Inc. Lea County, New Mexico

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Appendix B Analytical Results



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

Receiving Date: 02/22/00 Reporting Date: 02/23/00 Project Number: NOT GIVEN Project Name: PROKEM BAILING Project Location: PROKEM MONITOR WELLS Lab Number: H4663-1 Sample ID: MW #1

Analysis Date: 02/23/00 Sampling Date: 02/22/00 Sample Type: GROUNDWATER Sample Condition: COOL & INTACT Sample Received By: BC Analyzed By: BC

	Sample Result	Method			True Value
VOLATILES (mg/L)		Blank	QC	%Recov.	QC
Benzene	<0.002	<0.002	0.101	101	0.100
Carbon Tetrachloride	0.589	<0.002	0.101	101	0.100
Toluene	< 0.002	< 0.002	0.096	96	0.100
Ethylbenzene	< 0.002	< 0.002	0.104	104	0.100
m,p-Xylene	< 0.004	< 0.004	0.208	104	0.200
o-Xylene	<0.002	<0.002	0.105	105	0.100

	% RECOVERY	
Dibromofluoromethane	106	
Toluene-d8	99	
Bromofluorobenzene	106	

METHODS: EPA SW-846 8260

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Receiving Date: 02/22/00 Reporting Date: 02/23/00 Project Number: NOT GIVEN Project Name: PROKEM BAILING Project Location: PROKEM MONITOR WELLS Lab Number: H4663-2 Sample ID: MW #2 Analysis Date: 02/23/00 Sampling Date: 02/22/00 Sample Type: GROUNDWATER Sample Condition: COOL & INTACT Sample Received By: BC Analyzed By: BC

	Sample Result	Method	True Value		
VOLATILES (mg/L)		Blank	QC	%Recov.	QC
Benzene	<0.002	<0.002	0.101	101	0.100
Carbon Tetrachloride	0.354	< 0.002	0.101	101	0.100
Toluene	< 0.002	<0.002	0.096	96	0.100
Ethylbenzene	< 0.002	<0.002	0.104	104	0.100
m,p-Xylene	< 0.004	< 0.004	0.208	104	0.200
o-Xylene	<0.002	<0.002	0.105	105	0.100

	% RECOVERY	
Dibromofluoromethane	99	
Toluene-d8	95	
Bromofluorobenzene	99	

METHODS: EPA SW-846 8260

Date

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Receiving Date: 02/22/00 Reporting Date: 02/23/00 Project Number: NOT GIVEN Project Name: PROKEM BAILING Project Location: PROKEM MONITOR WELLS Lab Number: H4663-3 Sample ID: MW #3 Analysis Date: 02/23/00 Sampling Date: 02/22/00 Sample Type: GROUNDWATER Sample Condition: COOL & INTACT Sample Received By: BC Analyzed By: BC

	Sample Result	Method	True Value		
VOLATILES (mg/L)		Blank	QC	%Recov.	QC
Benzene	<0.002	<0.002	0.101	101	0.100
Carbon Tetrachloride	0.007	< 0.002	0.101	101	0.100
Toluene	< 0.002	< 0.002	0.096	96	0.100
Ethylbenzene	< 0.002	<0.002	0.104	104	0.100
m,p-Xylene	< 0.004	< 0.004	0.208	104	0.200
o-Xylene	<0.002	<0.002	0.105	105	0.100

	% RECOVERY	
Dibromofluoromethane	94	
Toluene-d8	104	
Bromofluorobenzene	108	

METHODS: EPA SW-846 8260

Date

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