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REPORTS

DATE:

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Chevron USA
Dynegy – Monument Site
Monitor Well Report
Lea County, New Mexico

December 29, 2000

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ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Prepared for:

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COPY

TABLE OF CONTENTS

I. Background

The subject property is located in Lea County approximately 5 miles southwest of Monument, New Mexico. Mr. James Cooper currently owns the surface rights of the property and the mineral rights are under lease to Chevron. The property has been the site of condensate/liquid product leaks from a pipeline previously operated by Warren Petroleum as well as an abandoned burn pit.

Safety & Environmental Solutions, Inc. (SESI) performed sampling and data collection on the six (6) ground water monitor wells at the site (See Vicinity Map). The casing size in all wells is 4".

II. Work Performed

A field technician with SESI arrived at the site on December 29, 2000. 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 development water was stored in a 400-gallon drum under the custody of Safety & Environmental Solutions, Inc. for disposal upon completion of analytical testing. 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. (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	TOP OF CASING ELEVATION	DEPTH TO WATER	GROUNDWATER POTENTIOMETRIC ELEVATION	TOTAL WELL DEPTH	FREE PRODUCT THICKNESS
MW – 1	12/29/00	3565.24'	37.67'	3527.57'	49.00'	0.00
MW – 2	12/29/00	3564.21'	36.78'	3527.43'	45.75'	0.00
MW – 3	12/29/00	3564.06'	36.61'	3527.45'	46.93'	0.00
MW – 4	12/29/00	3564.62'	37.05'	3527.57'	37.63'	0.00
MW – 5	12/29/00	3564.58'	36.92'	3527.66'	44.90'	0.00
MW – 6	12/29/00	3564.58'	37.17'	3527.41'	43.25'	0.00

III. Analytical Results

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

CONTA-MINANT	WQCC STANDARD	MW #1	MW #2	MW #3	MW #4	MW #5	MW #6
Chloride	250.0ppm	2691ppm	1346ppm	1346ppm	1760ppm	2691ppm	1449ppm
Fluoride	1.6ppm	1.04ppm	1.12ppm	1.05ppm	1.10ppm	1.05ppm	1.01ppm
Lead	0.05ppm	<0.05ppm	<0.05ppm	<0.05ppm	<0.05ppm	<0.05ppm	<0.05ppm
Manganese	0.2ppm	0.204ppm	0.315ppm	0.168ppm	0.416ppm	0.515ppm	0.129ppm
Silver	0.05ppm	0.092ppm	0.107ppm	0.114ppm	0.130ppm	0.144ppm	0.147ppm
Sulfate	600ppm	3293ppm	902ppm	866ppm	760ppm	4034ppm	720ppm
TDS	1000ppm	7350ppm	3968ppm	4078ppm	4758ppm	7628ppm	3512ppm
pH	> 6 & <9	7.44	7.35	7.14	7.32	7.21	7.42
TPH	N/A	<1.0ppm	<1.0ppm	<1.0ppm	<1.0ppm	<1.0ppm	<1.0ppm
Benzene	0.01ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm
Toluene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm
Ethyl Benzene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm
Total Xylenes	0.62ppm	<0.006ppm	<0.006ppm	<0.006ppm	<0.006ppm	<0.006ppm	<0.006ppm

SAMPLE ID	NA (MG/L)	CA (MG/L)	MG (MG/L)	K (MG/L)	CO_3 (MG/L)	HCO_3 (MG/L)
MW – 1	2390ppm	429ppm	302ppm	12.86ppm	0ppm	375ppm
MW – 2	1046ppm	197ppm	164ppm	6.85ppm	0ppm	750ppm
MW – 3	1033ppm	146ppm	226ppm	16.25ppm	0ppm	932ppm
MW – 4	1319ppm	197ppm	192ppm	30.88ppm	0ppm	1120ppm
MW – 5	2963ppm	296ppm	343ppm	21.95ppm	0ppm	768pm
MW – 6	922ppm	210ppm	148ppm	9.46ppm	0ppm	438ppm

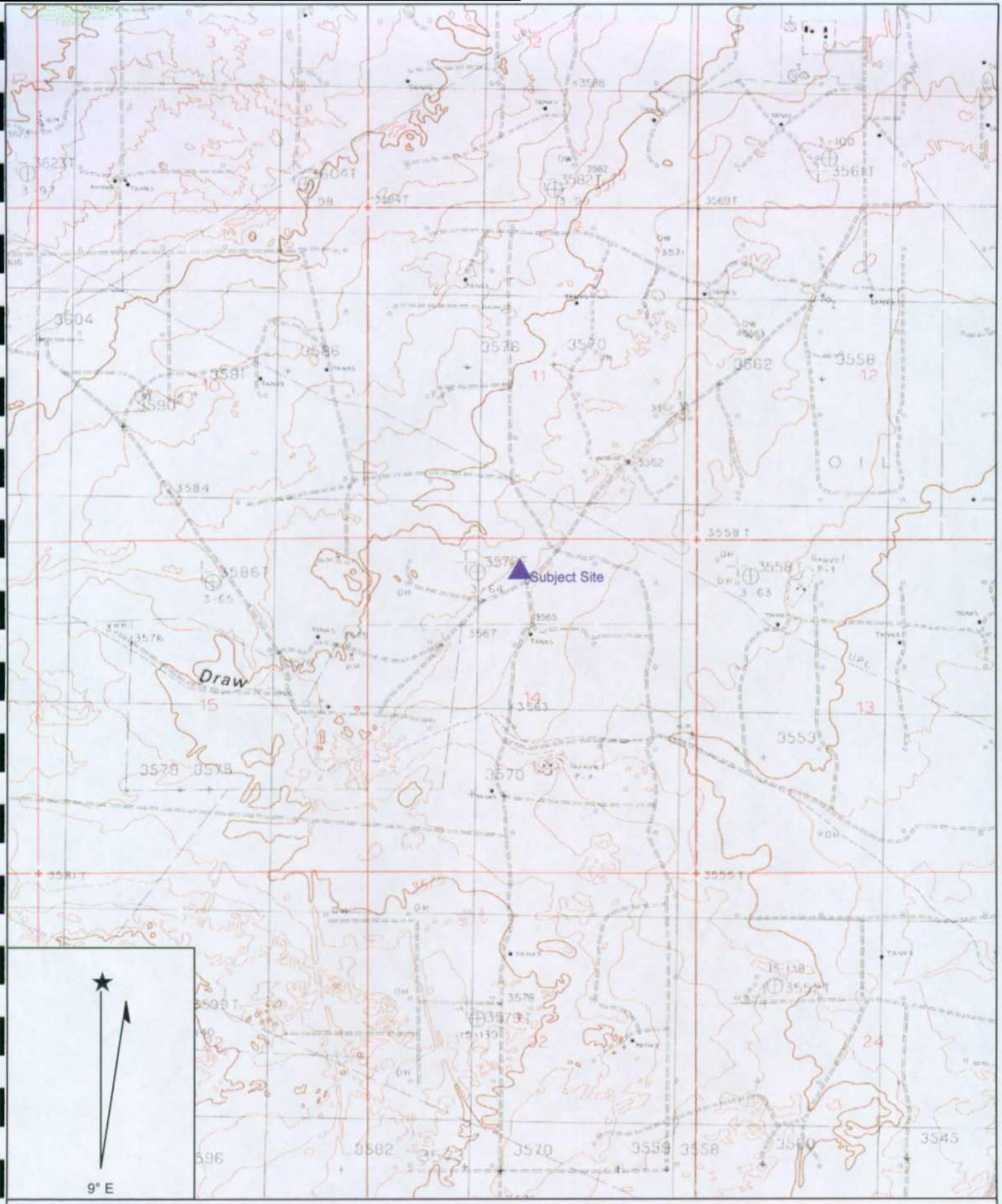
*Red exceeds WQCC Standards

IV. Figures and Appendices

Figures:
Vicinity Map
Potentiometric Map

Appendices:
Cumulative Well Water Quality Data
Analytical Results
Water Analysis Validation

Figure 1
Vicinity Map



Name: MONUMENT SOUTH
Date: 1/30/2001
Scale: 1 inch equals 2000 feet

Location: 032° 34' 39.7" N 103° 19' 34.2" W
Caption: Chevron USA
Dynegy Monitor Wells
Vicinity Map

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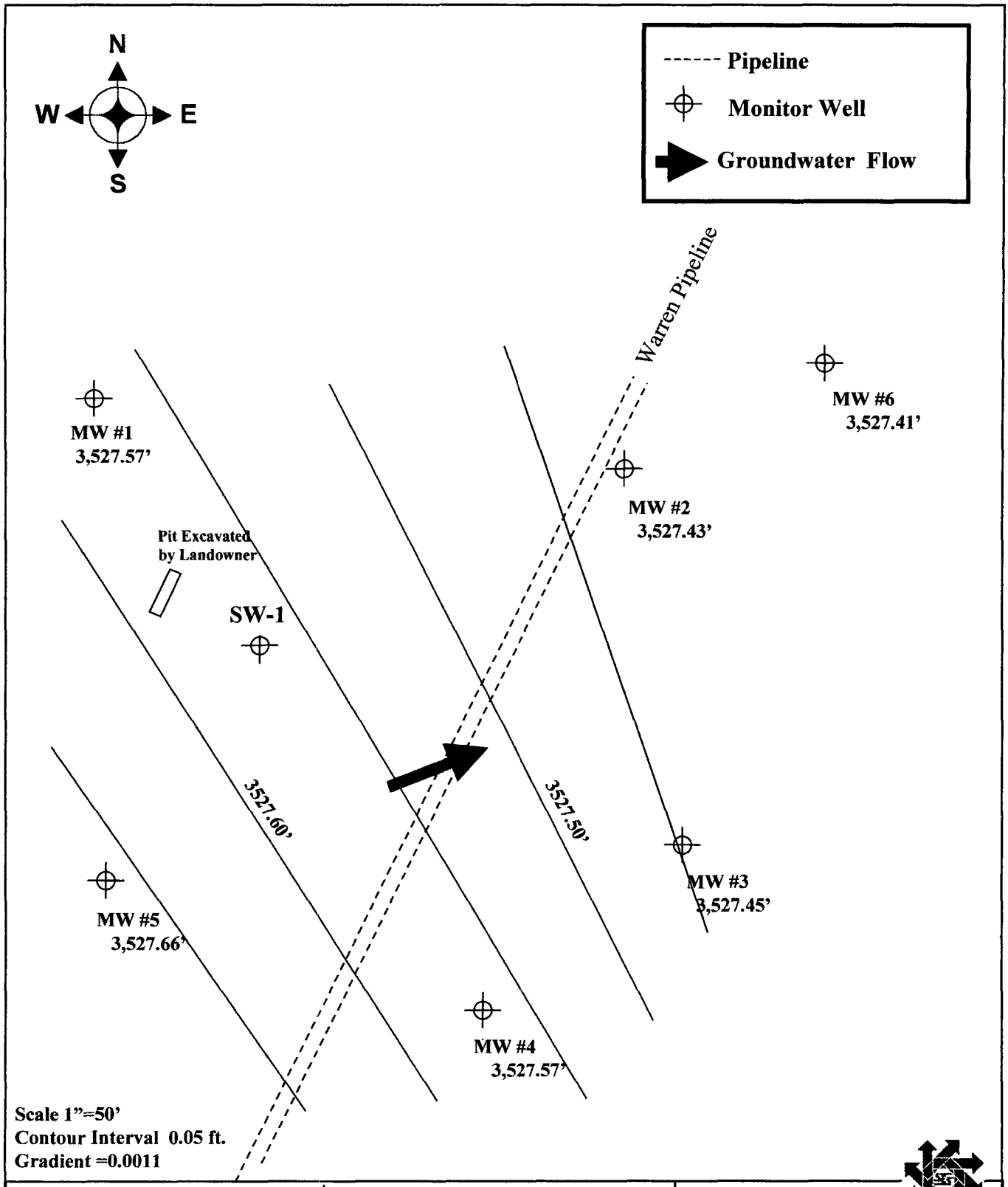
Figure 2
Potentiometric Map



Chevron USA	**Potentiometric Map** **Dynegy Monument Site** **December 29, 2000**	**Safety & Environmental Solutions, Inc.**

Appendix A
Cumulative Well Water Quality Data

Chevron Dynegy -Monument Cumulative Well Data

Monitor Well #1

CONTAMINANT	WQCC STANDARD	INITIAL TEST 4/08/99	TEST DATE 9/23/99	TEST DATE 12/09/99
Arsenic	0.1ppm	<0.1ppm	N/a	N/a
Barium	1.0ppm	<1.0ppm	N/a	N/a
Cadmium	0.01ppm	<0.01ppm	N/a	N/a
Chloride	250.0ppm	2291ppm	1839ppm	3130ppm
Chromium	0.05ppm	<0.05ppm	N/a	N/a
Copper	1.0ppm	<1.0ppm	N/a	N/a
Cyanide	0.2ppm	<0.02ppm	N/a	N/a
Fluoride	1.6ppm	2.04ppm	1.76ppm	4.01ppm
Iron	1.0ppm	<1.0ppm	N/a	N/a
Lead	0.05ppm	.261ppm	0.34ppm	<0.05ppm
Manganese	0.2ppm	<0.20ppm	0.24ppm	<0.20ppm
Mercury	0.002ppm	<0.002ppm	N/a	N/a
Nitrate	10.0ppm	0.22ppm	N/a	N/a
Phenols	0.005ppm	<0.005ppm	N/a	N/a
Selenium	0.05ppm	<0.05ppm	N/a	N/a
Silver	0.05ppm	0.067ppm	<0.05ppm	<0.05ppm
Sulfate	600ppm	1837ppm	2628ppm	390ppm
Zinc	10.0ppm	<1.0ppm	N/a	N/a
TDS	1000.0ppm	6910ppm	7740ppm	8130ppm
pH	> 6 & <9	7.74	7.36	7.25
PAH	0.03ppm	<0.005ppm	N/a	N/a
PCBs	0.001ppm	<0.001ppm	N/a	N/a
Benzene	0.01ppm	<0.002ppm	<0.002ppm	<0.002ppm
Toluene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm
Ethyl Benzene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm
Total Xylenes	0.62ppm	<0.006ppm	<0.006ppm	<0.006ppm
TPH	N/a	N/a	<1.0ppm	1.58ppm
Sodium	N/a	N/a	1767ppm	1558ppm
Calcium	N/a	N/a	440ppm	316ppm
Magnesium	N/a	N/a	284ppm	199ppm
Potassium	N/a	N/a	17.01ppm	30ppm
Conductivity	N/a	N/a	1929ppm	11170ppm
T-Alkalinity	N/a	N/a	224ppm	N/a
CO_3	N/a	N/a	0ppm	0ppm
HCO_3	N/a	N/a	273ppm	288ppm

Monitor Well #1 (Continued)

CONTAMINANT	WQCC STANDARD	TEST DATE 3/25/00	TEST DATE 6/14/00	TEST DATE 9/28/00	TEST DATE 12/29/00
Arsenic	0.1ppm	N/a	N/a	N/a	N/a
Barium	1.0ppm	N/a	N/a	N/a	N/a
Cadmium	0.01ppm	N/a	N/a	N/a	N/a
Chloride	250.0ppm	2433ppm	2405ppm	2765ppm	2691ppm
Chromium	0.05ppm	N/a	N/a	N/a	N/a
Copper	1.0ppm	N/a	N/a	N/a	N/a
Cyanide	0.2ppm	N/a	N/a	N/a	N/a
Fluoride	1.6ppm	1.90ppm	1.97ppm	2.15ppm	1.04ppm
Iron	1.0ppm	N/a	N/a	N/a	N/a
Lead	0.05ppm	0.597ppm	<0.05ppm	0.509ppm	<0.05ppm
Manganese	0.2ppm	<0.2ppm	<0.2ppm	<0.2ppm	0.204ppm
Mercury	0.002ppm	N/a	N/a	N/a	N/a
Nitrate	10.0ppm	N/a	N/a	N/a	N/a
Phenols	0.005ppm	N/a	N/a	N/a	N/a
Selenium	0.05ppm	N/a	N/a	N/a	N/a
Silver	0.05ppm	0.051ppm	0.302ppm	0.05ppm	0.092ppm
Sulfate	600ppm	2899ppm	2773ppm	3437ppm	3293ppm
Zinc	10.0ppm	N/a	N/a	N/a	N/a
TDS	1000.0ppm	9212	8876ppm	8854ppm	7350ppm
pH	> 6 & <9	7.26	7.55	7.33	7.44
PAH	0.03ppm	N/a	N/a	N/a	N/a
PCBs	0.001ppm	N/a	N/a	N/a	N/a
Benzene	0.01ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm
Toluene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm
Ethyl Benzene	0.75ppm	<0.002ppm	0.002ppm	<0.002ppm	<0.002ppm
Total Xylenes	0.62ppm	<0.006ppm	<0.006ppm	<0.006ppm	<0.006ppm
TPH	N/a	<1.0	1.39	<1.0	<1.0
Sodium	N/a	2065ppm	1643ppm	2750ppm	2390ppm
Calcium	N/a	445ppm	525ppm	332ppm	429ppm
Magnesium	N/a	417ppm	334ppm	248ppm	302ppm
Potassium	N/a	11.6ppm	8.01ppm	4.95ppm	12.86ppm
Conductivity	N/a	11.46ppm	11170ppm	10809ppm	10507ppm
T-Alkalinity	N/a	232ppm	244ppm	295ppm	308ppm
CO_3	N/a	0ppm	0ppm	0ppm	0ppm
HCO_3	N/a	282ppm	298ppm	360ppm	375ppm

Monitor Well #2

CONTAMINANT	WQCC STANDARD	INITIAL TEST 4/08/99	TEST DATE 9/23/99	TEST DATE 12/09/99
Arsenic	0.1ppm	<0.1ppm	N/a	N/a
Barium	1.0ppm	<1.0ppm	N/a	N/a
Cadmium	0.01ppm	<0.01ppm	N/a	N/a
Chloride	250.0ppm	1395ppm	934ppm	1520ppm
Chromium	0.05ppm	<0.05ppm	N/a	N/a
Copper	1.0ppm	<1.0ppm	N/a	N/a
Cyanide	0.2ppm	<0.02ppm	N/a	N/a
Fluoride	1.6ppm	2.01ppm	1.85ppm	4.04ppm
Iron	1.0ppm	<1.0ppm	N/a	N/a
Lead	0.05ppm	.195ppm	0.21ppm	<0.05ppm
Manganese	0.2ppm	0.225ppm	0.48ppm	.310ppm
Mercury	0.002ppm	<0.002ppm	N/a	N/a
Nitrate	10.0ppm	0.20ppm	N/a	N/a
Phenols	0.005ppm	<0.005ppm	N/a	N/a
Selenium	0.05ppm	<0.05ppm	N/a	N/a
Silver	0.05ppm	0.060ppm	<0.05ppm	<0.05ppm
Sulfate	600ppm	508ppm	874ppm	157ppm
Zinc	10.0ppm	<1.0ppm	N/a	N/a
TDS	1000.0ppm	4060ppm	7740ppm	3540ppm
PH	> 6 & <9	7.60	7.38	7.23
PAH	0.03ppm	<0.005ppm	N/a	N/a
PCBs	0.001ppm	<0.001ppm	N/a	N/a
Benzene	0.01ppm	<0.002ppm	<0.002ppm	<0.002ppm
Toluene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm
Ethyl Benzene	0.75ppm	<0.002ppm	<0.002ppm	0.004ppm
Total Xylenes	0.62ppm	<0.006ppm	<0.006ppm	<0.006ppm
TPH	N/a	N/a	10.3ppm	5.17ppm
Sodium	N/a	N/a	934ppm	927ppm
Calcium	N/a	N/a	200ppm	154ppm
Magnesium	N/a	N/a	160ppm	92ppm
Potassium	N/a	N/a	10.99ppm	20ppm
Conductivity	N/a	N/a	1881ppm	6170ppm
T-Alkalinity	N/a	N/a	508ppm	N/a
CO_3	N/a	N/a	0ppm	0ppm
HCO_3	N/a	N/a	620ppm	610ppm

Monitor Well #2 (Continued)

CONTAMINANT	WQCC STANDARD	INITIAL TEST 3/25/00	TEST DATE 6/14/00	TEST DATE 9/28/00	TEST DATE 12/29/00
Arsenic	0.1ppm	N/a	N/a	N/a	N/a
Barium	1.0ppm	N/a	N/a	N/a	N/a
Cadmium	0.01ppm	N/a	N/a	N/a	N/a
Chloride	250.0ppm	1216ppm	1296ppm	1240ppm	1346ppm
Chromium	0.05ppm	N/a	N/a	N/a	N/a
Copper	1.0ppm	N/a	N/a	N/a	N/a
Cyanide	0.2ppm	N/a	N/a	N/a	N/a
Fluoride	1.6ppm	1.87	1.93	2.24ppm	1.12ppm
Iron	1.0ppm	N/a	N/a	N/a	N/a
Lead	0.05ppm	0.580ppm	<0.05ppm	0.305ppm	<0.05ppm
Manganese	0.2ppm	0.324ppm	0.320ppm	0.284ppm	0.315ppm
Mercury	0.002ppm	N/a	N/a	N/a	N/a
Nitrate	10.0ppm	N/a	N/a	N/a	N/a
Phenols	0.005ppm	N/a	N/a	N/a	N/a
Selenium	0.05ppm	N/a	N/a	N/a	N/a
Silver	0.05ppm	<0.05ppm	0.198ppm	0.05ppm	0.107ppm
Sulfate	600ppm	1180ppm	948ppm	788ppm	902ppm
Zinc	10.0ppm	N/a	N/a	N/a	N/a
TDS	1000.0ppm	3898ppm	3988ppm	3822ppm	3968ppm
pH	> 6 & <9	7.18	7.41	7.33	7.35
PAH	0.03ppm	N/a	N/a	N/a	N/a
PCBs	0.001ppm	N/a	N/a	N/a	N/a
Benzene	0.01ppm	<0.002	<0.002ppm	<0.002ppm	<0.002ppm
Toluene	0.75ppm	<0.002	<0.002ppm	<0.002ppm	<0.002ppm
Ethyl Benzene	0.75ppm	<0.002	0.002ppm	<0.002ppm	<0.002ppm
Total Xylenes	0.62ppm	<0.006	<0.006ppm	<0.006ppm	<0.006ppm
TPH	N/a	2.36	<1.0	1.72	<1.0
Sodium	N/a	N/a	N/a	1000ppm	1046ppm
Calcium	N/a	186ppm	208ppm	294ppm	197ppm
Magnesium	N/a	152ppm	157ppm	107ppm	164ppm
Potassium	N/a	6.8	2.46	5.05ppm	6.85ppm
Conductivity	N/a	5770ppm	5757ppm	5447ppm	6283ppm
T-Alkalinity	N/a	552ppm	588ppm	726ppm	615ppm
CO_3	N/a	0ppm	0ppm	0ppm	0ppm
HCO_3	N/a	673ppm	717ppm	885ppm	750ppm

Monitor Well #3

CONTAMINANT	WQCC STANDARD	INITIAL TEST 4/08/99	TEST DATE 9/23/99	TEST DATE 12/09/99
Arsenic	0.1ppm	<0.1ppm	N/a	N/a
Barium	1.0ppm	<1.0ppm	N/a	N/a
Cadmium	0.01ppm	<0.01ppm	N/a	N/a
Chloride	250.0ppm	948ppm	1095ppm	1414ppm
Chromium	0.05ppm	<0.05ppm	N/a	N/a
Copper	1.0ppm	<1.0ppm	N/a	N/a
Cyanide	0.2ppm	<0.02ppm	N/a	N/a
Fluoride	1.6ppm	2.12ppm	1.74ppm	4.03ppm
Iron	1.0ppm	<1.0ppm	N/a	N/a
Lead	0.05ppm	.242ppm	0.18ppm	<0.05ppm
Manganese	0.2ppm	<0.20ppm	0.24ppm	<0.20ppm
Mercury	0.002ppm	<0.002ppm	N/a	N/a
Nitrate	10.0ppm	0.20ppm	N/a	N/a
Phenols	0.005ppm	<0.005ppm	N/a	N/a
Selenium	0.05ppm	<0.05ppm	N/a	N/a
Silver	0.05ppm	0.053ppm	<0.05ppm	<0.05ppm
Sulfate	600ppm	505ppm	971ppm	186ppm
Zinc	10.0ppm	<1.0ppm	N/a	N/a
TDS	1000.0ppm	3700ppm	3930ppm	3610ppm
PH	> 6 & <9	7.32	7.23	7.22
PAH	0.03ppm	<0.005ppm	N/a	N/a
PCBs	0.001ppm	<0.001ppm	N/a	N/a
Benzene	0.01ppm	<0.002ppm	<0.002ppm	<0.002ppm
Toluene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm
Ethyl Benzene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm
Total Xylenes	0.62ppm	<0.006ppm	<0.006ppm	<0.006ppm
TPH	N/a	N/a	2.52ppm	<1.0ppm
Sodium	N/a	N/a	827ppm	881ppm
Calcium	N/a	N/a	96ppm	95ppm
Magnesium	N/a	N/a	272ppm	149ppm
Potassium	N/a	N/a	11.85ppm	24ppm
Conductivity	N/a	N/a	1850ppm	1850ppm
T-Alkalinity	N/a	N/a	620ppm	N/a
CO_3	N/a	N/a	0ppm	0ppm
HCO_3	N/a	N/a	756ppm	747ppm

Monitor Well #3 (Continued)

CONTAMINANT	WQCC STANDARD	INITIAL TEST 3/25/00	TEST DATE 6/14/00	TEST DATE 9/28/00	TEST DATE 12/29/00
Arsenic	0.1ppm	N/a	N/a	N/a	N/a
Barium	1.0ppm	N/a	N/a	N/a	N/a
Cadmium	0.01ppm	N/a	N/a	N/a	N/a
Chloride	250.0ppm	1086ppm	1033ppm	1144ppm	1346ppm
Chromium	0.05ppm	N/a	N/a	N/a	N/a
Copper	1.0ppm	N/a	N/a	N/a	N/a
Cyanide	0.2ppm	N/a	N/a	N/a	N/a
Fluoride	1.6ppm	1.92ppm	2.02ppm	2.25ppm	1.05ppm
Iron	1.0ppm	N/a	N/a	N/a	N/a
Lead	0.05ppm	0.611ppm	<0.05ppm	0.379ppm	<0.05ppm
Manganese	0.2ppm	<0.2ppm	<0.2ppm	<0.2ppm	0.168ppm
Mercury	0.002ppm	N/a	N/a	N/a	N/a
Nitrate	10.0ppm	N/a	N/a	N/a	N/a
Phenols	0.005ppm	N/a	N/a	N/a	N/a
Selenium	0.05ppm	N/a	N/a	N/a	N/a
Silver	0.05ppm	<0.05ppm	0.200ppm	<0.05ppm	0.114ppm
Sulfate	600ppm	1230ppm	971ppm	800ppm	866ppm
Zinc	10.0ppm	N/a	N/a	N/a	N/a
TDS	1000.0ppm	4058ppm	3848ppm	3764ppm	4078ppm
pH	> 6 & <9	7.08	7.26	7.12	7.14
PAH	0.03ppm	N/a	N/a	N/a	N/a
PCBs	0.001ppm	N/a	N/a	N/a	N/a
Benzene	0.01ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm
Toluene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm
Ethyl Benzene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm
Total Xylenes	0.62ppm	<0.006ppm	<0.006ppm	<0.006ppm	<0.006ppm
TPH	N/a	1.47	<1.0	<1.0	<1.0
Sodium	N/a	N/a	N/a	1085ppm	1033ppm
Calcium	N/a	158ppm	142ppm	100ppm	146ppm
Magnesium	N/a	236ppm	238ppm	148ppm	226ppm
Potassium	N/a	8.5ppm	4.35ppm	6.90ppm	16.25ppm
Conductivity	N/a	5550ppm	5372ppm	5117ppm	5932ppm
T-Alkalinity	N/a	624ppm	664ppm	800ppm	764ppm
CO_3	N/a	0ppm	0ppm	0ppm	0ppm
HCO_3	N/a	761ppm	810ppm	975ppm	932ppm

Monitor Well #4

CONTAMINANT	WQCC STANDARD	INITIAL TEST 4/08/99	TEST DATE 9/23/99	TEST DATE 12/09/99
Arsenic	0.1ppm	<0.1ppm	N/a	N/a
Barium	1.0ppm	<1.0ppm	N/a	N/a
Cadmium	0.01ppm	<0.01ppm	N/a	N/a
Chloride	250.0ppm	1893ppm	1612ppm	2220ppm
Chromium	0.05ppm	<0.05ppm	N/a	N/a
Copper	1.0ppm	<1.0ppm	N/a	N/a
Cyanide	0.2ppm	<0.02ppm	N/a	N/a
Fluoride	1.6ppm	2.12ppm	1.68ppm	4.04ppm
Iron	1.0ppm	<1.0ppm	N/a	N/a
Lead	0.05ppm	.239ppm	0.20ppm	<0.05ppm
Manganese	0.2ppm	0.475ppm	0.71ppm	.417ppm
Mercury	0.002ppm	<0.002ppm	N/a	N/a
Nitrate	10.0ppm	0.22ppm	N/a	N/a
Phenols	0.005ppm	<0.005ppm	N/a	N/a
Selenium	0.05ppm	<0.05ppm	N/a	N/a
Silver	0.05ppm	0.059ppm	<0.05ppm	<0.05ppm
Sulfate	600ppm	651ppm	1088ppm	187ppm
Zinc	10.0ppm	<1.0ppm	N/a	N/a
TDS	1000.0ppm	6200ppm	5190ppm	4770ppm
PH	> 6 & <9	7.51	7.30	7.30
PAH	0.03ppm	<0.005ppm	N/a	N/a
PCBs	0.001ppm	<0.001ppm	N/a	N/a
Benzene	0.01ppm	<0.002ppm	<0.002ppm	<0.002ppm
Toluene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm
Ethyl Benzene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm
Total Xylenes	0.62ppm	<0.006ppm	<0.006ppm	<0.006ppm
TPH	N/a	N/a	2.76ppm	<1.0ppm
Sodium	N/a	N/a	1167ppm	1393ppm
Calcium	N/a	N/a	176ppm	136ppm
Magnesium	N/a	N/a	272ppm	159ppm
Potassium	N/a	N/a	20.83ppm	32ppm
Conductivity	N/a	N/a	1812ppm	1812ppm
T-Alkalinity	N/a	N/a	720ppm	N/a
CO_3	N/a	N/a	0ppm	0ppm
HCO_3	N/a	N/a	878ppm	891ppm

Monitor Well #4 (Continued)

CONTAMINANT	WQCC STANDARD	TEST DATE 3/25/00	TEST DATE 6/14/00	TEST DATE 9/28/00	TEST DATE 12/29/00
Arsenic	0.1ppm	N/a	N/a	N/a	N/a
Barium	1.0ppm	N/a	N/a	N/a	N/a
Cadmium	0.01ppm	N/a	N/a	N/a	N/a
Chloride	250.0ppm	1554ppm	1691ppm	1716ppm	1760ppm
Chromium	0.05ppm	N/a	N/a	N/a	N/a
Copper	1.0ppm	N/a	N/a	N/a	N/a
Cyanide	0.2ppm	N/a	N/a	N/a	N/a
Fluoride	1.6ppm	1.83ppm	1.98ppm	2.29ppm	1.10ppm
Iron	1.0ppm	N/a	N/a	N/a	N/a
Lead	0.05ppm	0.603ppm	<0.05ppm	0.444ppm	<0.05ppm
Manganese	0.2ppm	0.403ppm	0.435ppm	0.462ppm	0.416ppm
Mercury	0.002ppm	N/a	N/a	N/a	N/a
Nitrate	10.0ppm	N/a	N/a	N/a	N/a
Phenols	0.005ppm	N/a	N/a	N/a	N/a
Selenium	0.05ppm	N/a	N/a	N/a	N/a
Silver	0.05ppm	<0.05ppm	0.249ppm	<0.05ppm	0.130ppm
Sulfate	600ppm	1040ppm	804ppm	850ppm	760ppm
Zinc	10.0ppm	N/a	N/a	N/a	N/a
TDS	1000.0ppm	4730ppm	5144ppm	4818ppm	4758ppm
pH	> 6 & <9	7.52	7.39	7.35	7.32
PAH	0.03ppm	N/a	N/a	N/a	N/a
PCBs	0.001ppm	N/a	N/a	N/a	N/a
Benzene	0.01ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm
Toluene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm
Ethyl Benzene	0.75ppm	<0.002	<0.002ppm	<0.002ppm	<0.002ppm
Total Xylenes	0.62ppm	<0.006	<0.006ppm	<0.006ppm	<0.006ppm
TPH	N/a	1.11	<1.0	3.31	<1.0
Sodium	N/a	1224ppm	822ppm	1485ppm	1319ppm
Calcium	N/a	178ppm	242ppm	132ppm	197ppm
Magnesium	N/a	228ppm	217ppm	153ppm	192ppm
Potassium	N/a	12.1ppm	12.39ppm	13.71ppm	30.88ppm
Conductivity	N/a	6950ppm	7380ppm	6737ppm	7102ppm
T-Alkalinity	N/a	800ppm	840ppm	943ppm	918ppm
CO_3	N/a	0ppm	0ppm	0ppm	0ppm
HCO_3	N/a	673ppm	1025ppm	1150ppm	1120ppm

Monitor Well #5

CONTAMINANT	WQCC STANDARD	INITIAL TEST 4/08/99	TEST DATE 9/23/99	TEST DATE 12/09/99
Arsenic	0.1ppm	<0.1ppm	N/a	N/a
Barium	1.0ppm	<1.0ppm	N/a	N/a
Cadmium	0.01ppm	<0.01ppm	N/a	N/a
Chloride	250.0ppm	2092ppm	2139ppm	2320ppm
Chromium	0.05ppm	<0.05ppm	N/a	N/a
Copper	1.0ppm	<1.0ppm	N/a	N/a
Cyanide	0.2ppm	<0.02ppm	N/a	N/a
Fluoride	1.6ppm	2.32ppm	1.88ppm	4.04ppm
Iron	1.0ppm	<1.0ppm	N/a	N/a
Lead	0.05ppm	.264ppm	0.27ppm	<0.05ppm
Manganese	0.2ppm	0.476ppm	0.57ppm	.404ppm
Mercury	0.002ppm	<0.002ppm	N/a	N/a
Nitrate	10.0ppm	1.92ppm	N/a	N/a
Phenols	0.005ppm	<0.005ppm	N/a	N/a
Selenium	0.05ppm	<0.05ppm	N/a	N/a
Silver	0.05ppm	0.061ppm	<0.05ppm	<0.05ppm
Sulfate	600ppm	2278ppm	2259ppm	387ppm
Zinc	10.0ppm	<1.0ppm	N/a	N/a
TDS	1000.0ppm	7260ppm	8230ppm	7000ppm
PH	> 6 & <9	7.23	7.10	7.44
PAH	0.03ppm	<0.005ppm	N/a	N/a
PCBs	0.001ppm	<0.001ppm	N/a	N/a
Benzene	0.01ppm	<0.002ppm	<0.002ppm	<0.002ppm
Toluene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm
Ethyl Benzene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm
Total Xylenes	0.62ppm	<0.006ppm	<0.006ppm	<0.006ppm
TPH	N/a	N/a	2.90ppm	<1.0ppm
Sodium	N/a	N/a	1600ppm	1285ppm
Calcium	N/a	N/a	336ppm	206ppm
Magnesium	N/a	N/a	360ppm	210ppm
Potassium	N/a	N/a	44.35ppm	40ppm
Conductivity	N/a	N/a	1760ppm	10650ppm
T-Alkalinity	N/a	N/a	490ppm	N/a
CO_3	N/a	N/a	0ppm	0ppm
HCO_3	N/a	N/a	598ppm	671ppm

Monitor Well #5 (Continued)

CONTAMINANT	WQCC STANDARD	INITIAL TEST 3/25/00	TEST DATE 6/14/00	TEST DATE 9/28/00	TEST DATE 12/29/00
Arsenic	0.1ppm	N/a	N/a	N/a	N/a
Barium	1.0ppm	N/a	N/a	N/a	N/a
Cadmium	0.01ppm	N/a	N/a	N/a	N/a
Chloride	250.0ppm	2059ppm	2104ppm	2193ppm	2691ppm
Chromium	0.05ppm	N/a	N/a	N/a	N/a
Copper	1.0ppm	N/a	N/a	N/a	N/a
Cyanide	0.2ppm	N/a	N/a	N/a	N/a
Fluoride	1.6ppm	1.98ppm	2.10ppm	2.44ppm	1.05ppm
Iron	1.0ppm	N/a	N/a	N/a	N/a
Lead	0.05ppm	0.747ppm	<0.005ppm	0.483ppm	<0.05ppm
Manganese	0.2ppm	0.380ppm	0.402ppm	0.397ppm	0.515ppm
Mercury	0.002ppm	N/a	N/a	N/a	N/a
Nitrate	10.0ppm	N/a	N/a	N/a	N/a
Phenols	0.005ppm	N/a	N/a	N/a	N/a
Selenium	0.05ppm	N/a	N/a	N/a	N/a
Silver	0.05ppm	0.103ppm	0.327ppm	<0.05ppm	0.144ppm
Sulfate	600ppm	2254ppm	2247ppm	2598ppm	4034ppm
Zinc	10.0ppm	N/a	N/a	N/a	N/a
TDS	1000.0ppm	8054ppm	7744ppm	7926ppm	7628ppm
pH	> 6 & <9	7.14	7.38	7.15	7.21
PAH	0.03ppm	N/a	N/a	N/a	N/a
PCBs	0.001ppm	N/a	N/a	N/a	N/a
Benzene	0.01ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm
Toluene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm
Ethyl Benzene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm
Total Xylenes	0.62ppm	<0.006ppm	<0.006ppm	<0.006ppm	<0.006ppm
TPH	N/a	2.38	<1.0	1.17	<1.0
Sodium	N/a	N/a	N/a	2300ppm	2963ppm
Calcium	N/a	283ppm	333ppm	256ppm	296ppm
Magnesium	N/a	441ppm	349ppm	210ppm	343ppm
Potassium	N/a	14.5ppm	13.38ppm	1.75ppm	21.95ppm
Conductivity	N/a	10370ppm	10210ppm	9956ppm	10600ppm
T-Alkalinity	N/a	532ppm	560ppm	636ppm	629ppm
CO_3	N/a	0ppm	0ppm	0ppm	0ppm
HCO_3	N/a	649ppm	683ppm	775ppm	768ppm

Monitor Well #6

CONTAMINANT	WQCC STANDARD	INITIAL TEST 4/08/99	TEST DATE 9/23/99	TEST DATE 12/09/99
Arsenic	0.1ppm	<0.1ppm	N/a	N/a
Barium	1.0ppm	<1.0ppm	N/a	N/a
Cadmium	0.01ppm	<0.01ppm	N/a	N/a
Chloride	250.0ppm	785ppm	933ppm	1310ppm
Chromium	0.05ppm	<0.05ppm	N/a	N/a
Copper	1.0ppm	<1.0ppm	N/a	N/a
Cyanide	0.2ppm	<0.02ppm	N/a	N/a
Fluoride	1.6ppm	2.30ppm	1.94ppm	4.04ppm
Iron	1.0ppm	<1.0ppm	N/a	N/a
Lead	0.05ppm	.208ppm	0.16ppm	<0.05ppm
Manganese	0.2ppm	<0.20ppm	<0.20ppm	<0.20ppm
Mercury	0.002ppm	<0.002ppm	N/a	N/a
Nitrate	10.0ppm	0.13ppm	N/a	N/a
Phenols	0.005ppm	<0.005ppm	N/a	N/a
Selenium	0.05ppm	<0.05ppm	N/a	N/a
Silver	0.05ppm	0.056ppm	<0.05ppm	<0.05ppm
Sulfate	600ppm	399ppm	501ppm	76ppm
Zinc	10.0ppm	<1.0ppm	N/a	N/a
TDS	1000.0ppm	2800ppm	2640ppm	2090ppm
pH	> 6 & <9	7.61	7.32	7.33
PAH	0.03ppm	<0.005ppm	N/a	N/a
PCBs	0.001ppm	<0.001ppm	N/a	N/a
Benzene	0.01ppm	<0.002ppm	<0.002ppm	<0.002ppm
Toluene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm
Ethyl Benzene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm
Total Xylenes	0.62ppm	<0.006ppm	<0.006ppm	<0.006ppm
TPH	N/a	N/a	2.66ppm	<1.0ppm
Sodium	N/a	N/a	578ppm	728ppm
Calcium	N/a	N/a	144ppm	115ppm
Magnesium	N/a	N/a	122ppm	84ppm
Potassium	N/a	N/a	6.49ppm	22ppm
Conductivity	N/a	N/a	1796ppm	4770ppm
T-Alkalinity	N/a	N/a	290ppm	N/a
CO_3	N/a	N/a	0ppm	0ppm
HCO_3	N/a	N/a	354ppm	390ppm

Monitor Well #6 (Continued)

CONTAMINANT	WQCC STANDARD	TEST DATE 3/25/00	TEST DATE 6/14/00	TEST DATE 9/28/00	TEST DATE 12/29/00
Arsenic	0.1ppm	N/a	N/a	N/a	N/a
Barium	1.0ppm	N/a	N/a	N/a	N/a
Cadmium	0.01ppm	N/a	N/a	N/a	N/a
Chloride	250.0ppm	1104ppm	1090ppm	1526ppm	1449ppm
Chromium	0.05ppm	N/a	N/a	N/a	N/a
Copper	1.0ppm	N/a	N/a	N/a	N/a
Cyanide	0.2ppm	N/a	N/a	N/a	N/a
Fluoride	1.6ppm	1.97ppm	2.03ppm	2.46ppm	1.01ppm
Iron	1.0ppm	N/a	N/a	N/a	N/a
Lead	0.05ppm	0.770ppm	<0.05ppm	0.208ppm	<0.05ppm
Manganese	0.2ppm	<0.2ppm	<0.2ppm	<0.2ppm	0.129ppm
Mercury	0.002ppm	N/a	N/a	N/a	N/a
Nitrate	10.0ppm	N/a	N/a	N/a	N/a
Phenols	0.005ppm	N/a	N/a	N/a	N/a
Selenium	0.05ppm	N/a	N/a	N/a	N/a
Silver	0.05ppm	0.088ppm	0.250ppm	<0.05ppm	0.147ppm
Sulfate	600ppm	533ppm	694ppm	823ppm	720ppm
Zinc	10.0ppm	N/a	N/a	N/a	N/a
TDS	1000.0ppm	3096ppm	3244ppm	3332ppm	3512ppm
pH	> 6 & <9	7.33	7.44	7.37	7.42ppm
PAH	0.03ppm	N/a	N/a	N/a	N/a
PCBs	0.001ppm	N/a	N/a	N/a	N/a
Benzene	0.01ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm
Toluene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm
Ethyl Benzene	0.75ppm	<0.002ppm	<0.002ppm	<0.002ppm	<0.002ppm
Total Xylenes	0.62ppm	<0.006ppm	<0.006ppm	<0.006ppm	<0.006ppm
TPH	N/a	<1.0	<1.0	<1.0	<1.0
Sodium	N/a	N/a	N/a	1190ppm	922ppm
Calcium	N/a	182ppm	200ppm	123ppm	210ppm
Magnesium	N/a	133ppm	152ppm	102ppm	148ppm
Potassium	N/a	5.9ppm	2.46ppm	6.15ppm	9.46ppm
Conductivity	N/a	4700ppm	4721ppm	4872ppm	5593ppm
T-Alkalinity	N/a	316ppm	320ppm	357ppm	359ppm
CO_3	N/a	0ppm	0ppm	0ppm	0ppm
HCO_3	N/a	386ppm	390ppm	435ppm	438ppm

Appendix B
Analytical Results

CARDINAL 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, STE 103
HOBBS, NM 88240
FAX TO: (505) 397-4388

Receiving Date: 01/02/01
Reporting Date: 01/05/01
Project Number: NOT GIVEN
Project Name: CHEVRON-DYNEGY
Project Location: MONUMENT

Sampling Date: 12/29/00
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (mS/cm)	T-Alkalinity ($mgCaCO_3/L$)
ANALYSIS DATE:		01/04/00	01/02/01	01/02/01	01/02/00	01/03/01	01/02/01
H5482-1	MW #1	2390	429	302	12.86	10507	308
H5482-2	MW #2	1046	197	164	6.85	6283	615
H5482-3	MW #3	1033	146	226	16.25	5932	764
H5482-4	MW #4	1319	197	192	30.88	7102	918
H5482-5	MW #5	2963	296	343	21.95	10600	629
H5482-6	MW #6	922	210	148	9.46	5593	359
Quality Control		NR	51	52	4.94	1489	NR
True Value QC		NR	50	50	5.00	1413	NR
% Accuracy		NR	102	104	98.8	105	NR
Relative Percent Difference		NR	0	1.9	1.6	0.3	NR
METHODS:			SM3500-Ca-D	3500-Mg E	8049	120.1	310.1

LAB NUMBER	SAMPLE ID	Cl^- (mg/L)	SO_4 (mg/L)	CO_3 (mg/L)	HCO_3 (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		01/02/01	01/03/01	01/02/01	01/02/01	01/03/01	01/04/01
H5482-1	MW #1	2691	3293	0	375	7.44	7350
H5482-2	MW #2	1346	902	0	750	7.35	3968
H5482-3	MW #3	1346	866	0	932	7.14	4078
H5482-4	MW #4	1760	760	0	1120	7.32	4758
H5482-5	MW #5	2691	4034	0	768	7.21	7628
H5482-6	MW #6	1449	720	0	438	7.42	3512
Quality Control		1004	53.19	NR	995	7.01	NR
True Value QC		1000	50.00	NR	1000	7.00	NR
% Accuracy		100	106	NR	99.5	100	NR
Relative Percent Difference		7.2		NR	0	0.1	NR
METHODS:		SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1

Gayle A. Potter, Chemist

01/05/2001
Date

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CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY AND ENVIRONMENTAL SOLUTIONS, INC.
ATTN: BOB ALLEN
703 E. CLINTON, SUITE 103
HOBBS, NM 88240
FAX TO:

Receiving Date: 01/02/01
Reporting Date: 01/04/01
Project Number: NOT GIVEN
Project Name: NOT GIVEN
Project Location: MONUMENT

Sampling Date: 12/29/00
Sample Type: GROUNDWATER
Sample Condition: COOL, INTACT
Sample Received By: BC
Analyzed By: JA

LAB NUMBER	SAMPLE ID	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)
ANALYSIS DATE		01/03/01	01/03/01	01/03/01	01/03/01
H5482-1	MW #1	<2.00	<2.00	<2.00	<6.00
H5482-2	MW #2	<2.00	<2.00	<2.00	<6.00
H5482-3	MW #3	<2.00	<2.00	<2.00	<6.00
H5482-4	MW #4	<2.00	<2.00	<2.00	<6.00
H5482-5	MW #5	<2.00	<2.00	<2.00	<6.00
H5482-6	MW #6	<2.00	<2.00	<2.00	<6.00
Quality Control		91.6	102	89.8	283
True Value QC		100	100	100	300
% Accuracy		91.6	102	89.8	94.3
Relative Percent Difference		1.9	1.2	2.3	3.2

METHOD: EPA SW 846-8020, 5030, Gas Chromatography

Chemist

1-4-01
Date

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CARDINAL 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, STE 103
HOBBS, NM 88240
FAX TO: (505) 397-4388

Receiving Date: 01/02/01
Reporting Date: 01/05/01
Project Number: NOT GIVEN
Project Name: CHEVRON-DYNEGY
Project Location: MONUMENT

Sampling Date: 12/29/00
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: AH

LAB NUMBER	SAMPLE ID	F^- (ppm)	Ag (ppm)	Mn (ppm)	Pb (ppm)
ANALYSIS DATE		01/03/01	01/05/01	01/05/01	01/05/01
H5482-1	MW #1	1.04	0.092	0.204	<0.05
H5482-2	MW #2	1.12	0.107	0.315	<0.05
H5482-3	MW #3	1.05	0.114	0.168	<0.05
H5482-4	MW #4	1.10	0.130	0.416	<0.05
H5482-5	MW #5	1.05	0.144	0.515	<0.05
H5482-6	MW #6	1.01	0.147	0.129	<0.05
Quality Control		0.87	4.435	5.002	4.996
True Value QC		1.00	5.000	5.000	5.000
% Accuracy		87.0	88.7	100	99.9
Relative Percent Difference		6.9	0.3	0.2	1.7
METHODS:	EPA 600/4-79-020	4500-F^-D*	272.1	243.1	239.1

*Std. Methods

Chemist

01/05/2001
Date

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CARDINAL 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, STE 103
HOBBS, NM 88240
FAX TO: (505) 397-4388

Receiving Date: 01/02/01
Reporting Date: 01/05/01
Project Number: NOT GIVEN
Project Name: CHEVRON-DYNEGY
Project Location: MONUMENT

Analysis Date: 01/04/00
Sampling Date: 12/29/00
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC

LAB NUMBER	SAMPLE ID	TPH (mg/L)
H5482-1	MW #1	<1.0
H5482-2	MW #2	<1.0
H5482-3	MW #3	<1.0
H5482-4	MW #4	<1.0
H5482-5	MW #5	<1.0
H5482-6	MW #6	<1.0
Quality Control		5.65
True Value QC		6.00
% Recovery		94.2
Relative Percent Difference		8.2

METHOD: EPA 600/4-79-020 418.1

Chemist

1/5/01
Date

H5482B.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.

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

D-41

Page____ of____

Company Name:	SEST	**BILL TO**	
Project Manager:	Joe Whatley	P.O. #:	
Address:		Company:	
City:	State: Zip:	Attn:	
Phone #:	Fax #:	Address:	
Project #:	Project Owner:	City:	
Project Name:		State: Zip:	
Project Location:	Monument	Phone #:	
Sampler Name:	Chevron - Dyregg	Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST								
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	BTEX	TPH 418.1	Flourine	Cations & Anions	M.W.	Pb.	Ag.		
H54827	M.W. #1		4	X							X		12-29		↑	↑	↑	↑	↑	↑	↑		
-2	MW #2		4	X							X				↑	↑	↑	↑	↑	↑	↑		
-3	MW #3		4	X							X				↑	↑	↑	↑	↑	↑	↑		
-4	MW #4		4	X							X				↑	↑	↑	↑	↑	↑	↑		
-5	MW #5		4	X							X				↑	↑	↑	↑	↑	↑	↑		
-6	MW #6		4	X							X		↓		↑	↑	↓	↑	↑	↑	↑		

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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:	Received By:	Phone Result:	☐ Yes	☐ No
	Time:		Fax Result:	☐ Yes	☐ No
Relinquished By:	Date:	Received By: (Lab Staff)	REMARKS:		
	Time:				
Delivered By: (Circle One)		Sample Condition Cool ☐ Yes ☐ No Intact ☑ Yes ☐ No	CHECKED BY: (Initials)		
Sampler - UPS - Bus - Other:					

Add'l Phone #:

Add'l Fax #:

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476.

Appendix C
Water Analysis Validation

Cations and Anions Calculation Check							
	Sample Name	H5482-1	H5482-2	H5482-3	H5482-4	H5482-5	H5482-6
	Well Number	MW1	MW2	MW3	MW4	MW5	MW6
	Date	12/29/00	12/29/00	12/29/00	12/29/00	12/29/00	12/29/00
Equivalent Weight:	Lab	Cardinal	Cardinal	Cardinal	Cardinal	Cardinal	Cardinal
22.99	Sodium (mg/L)	2,390	1,046	1,033	1,319	2,963	922
20.04	Calcium (mg/L)	429	197	146	197	296	210
12.15	Magnesium (mg/L)	302	164	226	192	343	148
39.09	Potassium (mg/L)	12.9	6.9	16.3	30.9	22.0	9.5
35.45	Chloride (mg/L)	2,691	1,346	1,346	1,760	2,691	1,449
48.04	Sulfate (mg/L)	3,293	902	866	760	4,034	720
30.00	Carbonate (mg/L)	0.0	0.0	0.0	0.0	0.0	0.0
61.01	Bicarbonate (mg/L)	375	750	932	1120	768	438
50.04	Alkalinity (mg/L CaCO3)	308	615	764	918	629	359
62.00	Nitrate (mg/L)	0.0	0.0	0.0	0.0	0.0	0.0
	Sum Cations (meq/L)	150.6	69.0	71.2	83.8	172.4	63.0
	Sum Anions (meq/L)	150.6	69.0	71.3	83.8	172.5	63.0
	Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0
	Measured TDS (evap., mg/L)	7,350	3,968	4,078	4,758	7,628	3,512
	TDS (calc. USGS sum, mg/L)	9,303	4,031	4,092	4,810	10,726	3,674
	TDS (meas.) / TDS (calc. USGS)	0.8	1.0	1.0	1.0	0.7	1.0
	TDS (calc. sum, mg/L)	9,493	4,412	4,565	5,379	11,117	3,896
	Elect. Conductivity (umhos/cm)	10,507	6,283	5,932	7,102	10,600	5,593
	TDS (C*0.7, mg/L)	7,355	4,398	4,152	4,971	7,420	3,915
	TDS (calc. USGS) / Conductivity	0.89	0.64	0.69	0.68	1.01	0.66
	Test Criteria						
1. Anion-Cation Balance:			Anion Sum	Max % diff.			
			0 - 3.0	± 0.2			
			3.0 - 10.0	± 2			
			10.0 - 800	± 5			
2. TDS, Measured to Calculated:			1.0 < (measured TDS/calculated TDS) < 1.2				
3. TDS (calculated USGS) to EC Ratio:			Calculated TDS/conductivity = 0.55 - 0.7				