AP - 67

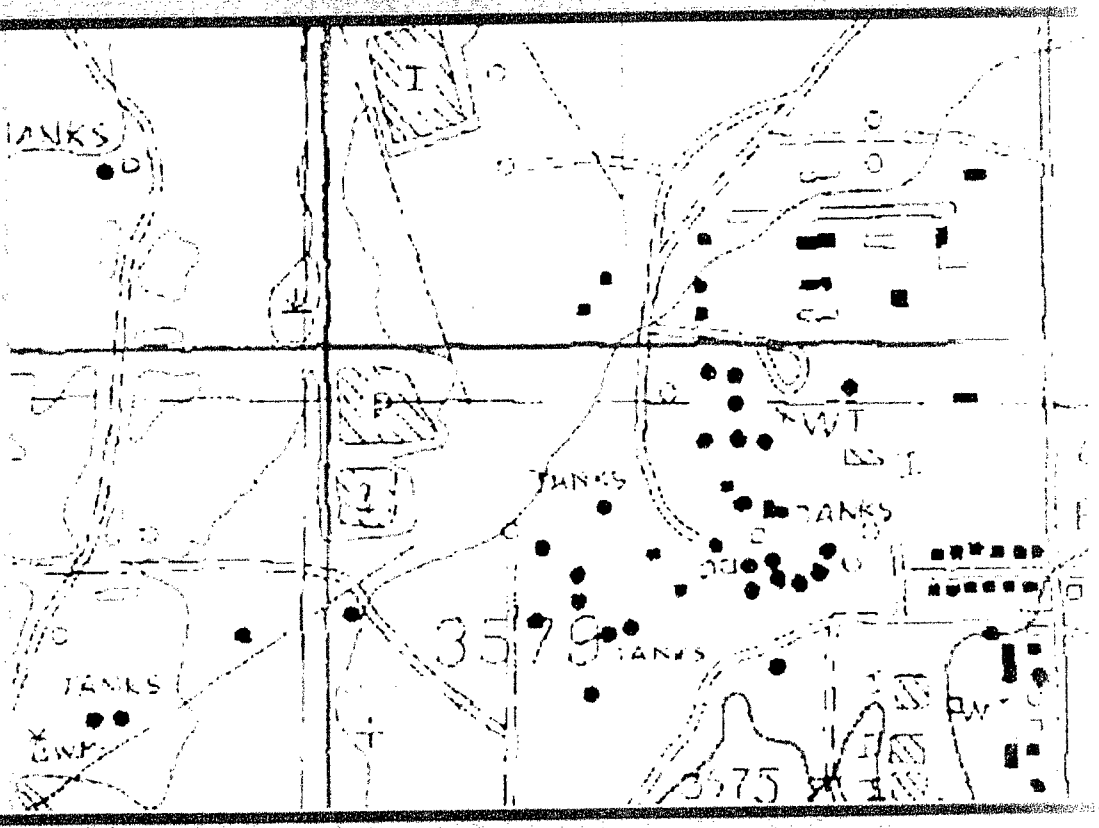
ANNUAL MONITORING REPORT

YEAR(S):

2005

January 6, 2005

2005 Annual Groundwater Monitoring Report



D-1 Junction Box Site
T20S, R36E, Section 1, Unit Letter D
Lea County, New Mexico

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January 6, 2006

Mr. Wayne Price
New Mexico Energy, Minerals, & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

RE: 2005 ANNUAL MONITORING WELL REPORT
EME D-1 JUNCTION BOX SITE
T20S-R36E-Section 1, Unit Letter D
NMOCD CASE # Not yet assigned

Mr. Price:

R. T. Hicks Consultants, Ltd. takes this opportunity to submit the 2005 Annual Monitoring Well Report for the EME D-1 junction box site located in the Eunice Monument Eumont (EME) Salt Water Disposal (SWD) System. The Stage 1 Abatement Plan for this site was submitted to the NMOCD on December 5, 2005, and is administratively complete pending the on-going public notice procedures.

ROC is the service provider (operator) for the EME Salt Water Disposal System and has no ownership of any portion of pipeline, well, or facility. The EME SWD System is owned by a consortium of oil producers, System Partners, who provide all operating capital on a percentage ownership/usage basis.

Thank you for your consideration concerning this annual summary of groundwater monitoring information. If you have any questions, do not hesitate to contact me at (423) 638-8740 or Kristin Farris Pope at (505) 393-9174.

Sincerely,

Gilbert J. Van Deventer, REM, PG, NMCS
R. T. Hicks Consultants Ltd.

enclosures: Summary table & graphs, analytical results, well sampling data sheets

cc: LBG, CDH, KFP, file

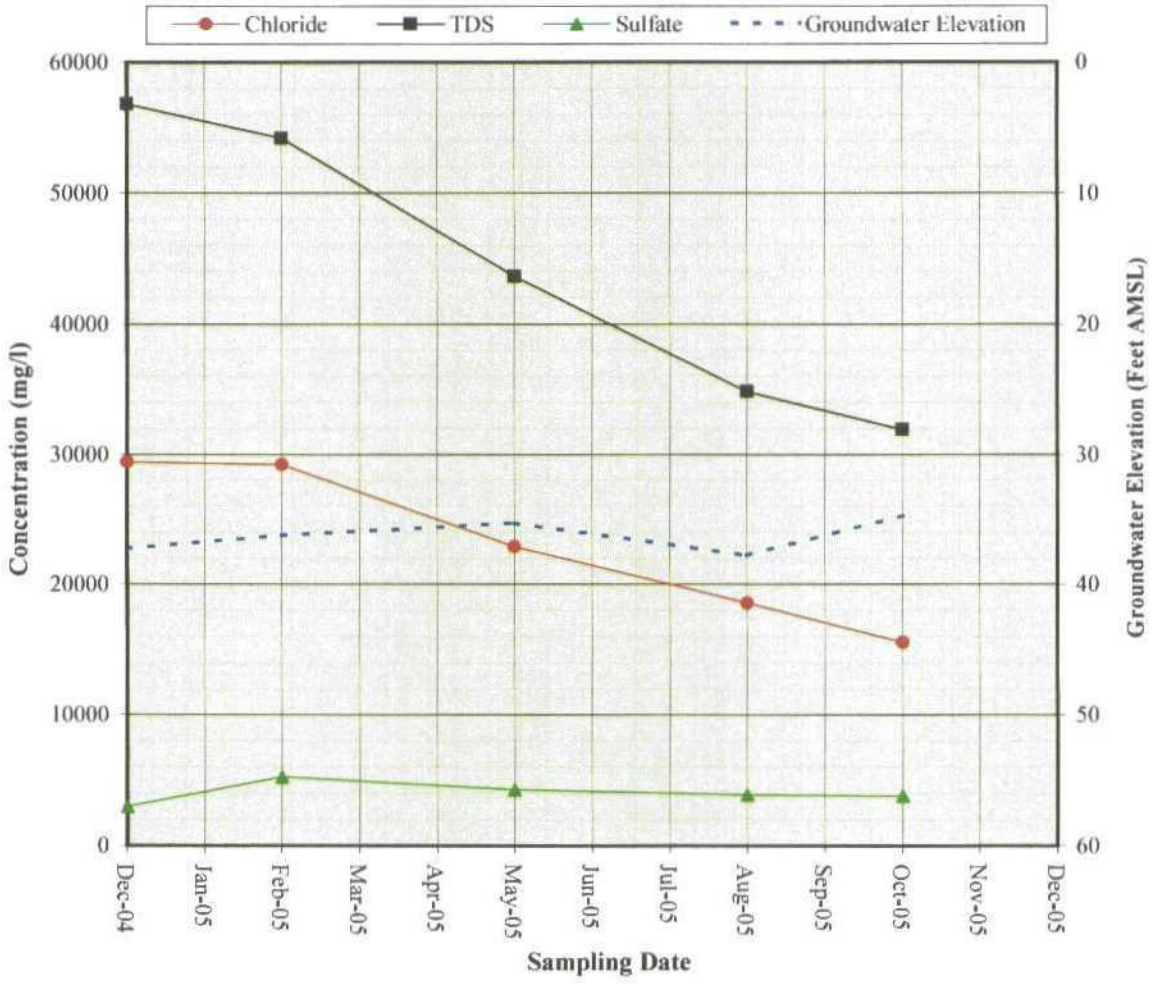
TABLE AND GRAPH

Table 1
Summary of Groundwater Sampling Results
EME D-1 Junction Box Site

Monitoring Well	Sample Date	Depth to Groundwater (feet BTOC)	Chloride (mg/L)	Sulfate (mg/L)	TDS (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
MW-1	12/21/04	37.20	**29,400**	**3,000**	**56,800**	<0.001	<0.001	<0.001	<0.001
	02/09/05	36.20	**29,200**	**5,220**	**54,200**	<0.001	<0.001	<0.001	<0.001
	05/03/05	35.27	**22,900**	**4,270**	**43,600**	<0.001	<0.001	<0.001	<0.001
	08/13/05	37.74	**18,600**	**3,900**	**34,800**	<0.001	<0.001	<0.001	<0.001
	10/19/05	34.70	**15,600**	**3,810**	**31,900**	<0.001	<0.001	<0.001	<0.001
WQCC Standards			250	600	1000	0.01	0.75	0.75	0.62

Total Dissolved Soilds (TDS), chloride, sulfate, and BTEX concentrations listed in milligrams per liter (mg/L)
Analyses performed by Environmental Lab of Texas (Odessa TX) or Cardinal Laboratories (Hobbs NM).
Values in boldface type indicate concentrations exceed New Mexico Water Quality Commission (WQCC) standards.

Figure 1
Chloride, Sulfate, TDS, and Groundwater Elevation Values Versus Time (MW-1)



WELL SAMPLE DATA SHEETS

WELL SAMPLING DATA FORM

CLIENT: RICE *Operating Company* WELL ID: MW-1

SYSTEM: EME DATE: February 9, 2005

SITE LOCATION: D-1 Junction Box SAMPLER: Gil Van Deventer

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☑ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☑ Alconox ☑ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 42.65 Feet
DEPTH TO WATER: 36.20 Feet
HEIGHT OF WATER COLUMN: 6.45 Feet
WELL DIAMETER: 2.0 Inch

3 Minimum gallons to purge 3 well volumes
8 Actual Gallons purged

TIME	VOLUME PURGED (GAL)	TEMP. °C	COND. mS/cm	pH	DO (mg/L)	Fe^{+2} (mg/L)	PHYSICAL APPEARANCE AND REMARKS
15:45	0	---	---	---	---	---	Began bailing
15:47	1	19.2	> 20	7.19	---	---	
15:49	2	18.8	> 20	7.07	---	---	
15:51	3	18.8	> 20	6.87	---	---	
15:53	4	18.7	> 20	6.72			
15:55	5	18.7	> 20	6.68			
15:57	6	18.6	> 20	6.70			
15:59	7	18.3	> 20	6.71			
16:01	8	18.1	56	6.71			Diluted sample 3X to get conductivity value
						16:05	Samples collected
0:16	:Total Time (hr:min)		8	:Total Vol (gal)		0.50	:Average Flow Rate (gal/min)

COMMENTS:

Hanna Model 98130 instrument used to obtain pH, conductivity, and temperature measurements.

Delivered samples to Environmental Lab of Texas for BTEX, Major Ions, and TDS analysis.

WELL SAMPLING DATA FORM

CLIENT: RICE *Operating Company* WELL ID: MW-1

SYSTEM: EME DATE: May 3, 2005

SITE LOCATION: D-1 Junction Box SAMPLER: Gil Van Deventer

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☑ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☑ Alconox ☑ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 42.65 Feet

DEPTH TO WATER: 35.27 Feet

HEIGHT OF WATER COLUMN: 7.38 Feet

WELL DIAMETER: 2.0 Inch

4 *Minimum gallons to purge 3 well volumes*

4 Actual Gallons purged

TIME	VOLUME PURGED (GAL)	TEMP. °C	COND. mS/cm	pH	DO (mg/L)	Fe^{+2} (mg/L)	PHYSICAL APPEARANCE AND REMARKS
10:30	0	---	---	---	---	---	Began bailing
10:35	1	17.3	44.1	7.23	---	---	
10:40	2	17.3	53.7	7.04	---	---	
10:46	3	17.3	61.2	6.92	---	---	
10:50	4	16.3	55.2	7.19			
						11:00	Samples collected
0:20	:Total Time (hr:min)		4	:Total Vol (gal)		0.20	:Average Flow Rate (gal/min)

COMMENTS:

Hanna Model 98130 instrument used to obtain pH, conductivity, and temperature measurements.

Delivered samples to Environmental Lab of Texas for BTEX, Major Ions, and TDS analysis.

WELL SAMPLING DATA FORM

CLIENT: RICE *Operating Company* WELL ID: MW-1

SYSTEM: EME DATE: August 11, 2005

SITE LOCATION: D-1 Junction Box SAMPLER: Patrick Van Deventer

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☑ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☑ Alconox ☑ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 42.65 Feet

DEPTH TO WATER: 37.74 Feet

HEIGHT OF WATER COLUMN: 4.91 Feet

WELL DIAMETER: 2.0 Inch

2 Minimum gallons to purge 3 well volumes

6 Actual Gallons purged

TIME	VOLUME PURGED (GAL)	TEMP. °F	COND. mS/cm	pH	DO (mg/L)	Fe^{+2} (mg/L)	PHYSICAL APPEARANCE AND REMARKS
15:15	0	---	---	---	---	---	Began bailing
15:21	2	71.4	50.0	7.86	---	---	
15:26	4	66.4	52.8	7.79	---	---	
15:31	6	65.2	53.3	7.76	---	---	
						15:35	Samples collected
0:16	:Total Time (hr:min)		6	:Total Vol (gal)		0.37	:Average Flow Rate (gal/min)

COMMENTS:

Hanna Model 98130 instrument used to obtain pH, conductivity, and temperature measurements.

Delivered samples to Environmental Lab of Texas for BTEX, Major Ions, and TDS analysis.

WELL SAMPLING DATA FORM

CLIENT: RICE *Operating Company* WELL ID: mw-1

SYSTEM: EME DATE: October 19, 2005

SITE LOCATION: D-1 Junction Box SAMPLER: Rozanne Johnson

PURGING METHOD: ☑ Hand Bailed ☐ Pump, Type:

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other:

DISPOSAL METHOD OF PURGE WATER: ☐ On-site Drum ☐ Drums ☑ SWD Disposal Facility

TOTAL DEPTH OF WELL: 42.65 Feet
DEPTH TO WATER: 34.70 Feet
HEIGHT OF WATER COLUMN: 7.95 Feet
WELL VOLUME: 1.3 Gal.

2 In. Well Diameter
5 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
9:30	19.3	44.44	6.88	Clear with no odor
				Samples Collected
				BTEX (2-40ml VOA)
				Major Ions/TDS (1-1000ml Plastic)
0:00 :Total Time (hr:min)		#DIV/0! :Average Flow Rate (gal/min)		

Comments

Myron Model 6P instrument used to obtain pH, conductivity, and temperature measurements.

Delivered samples to Environmental Lab of Texas for BTEX, Major Ions and TDS analysis.

LABORATORY REPORTS

AND

CHAIN OF CUSTODY DOCUMENTATION

(See attached compact disk for this information)