

1R - 427-87

**Annual GW Mon.
REPORTS**

DATE:

2007

L. Peter Galusky, Jr. Ph.D., P.G.

Texerra

RECEIVED

2008 MAR 17 PM 1 36

March 7th, 2008

Mr. Edward Hansen

New Mexico Energy, Minerals, & Natural Resources
Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, New Mexico 87504

**RE: Annual Report: OCD Case Number: 1R427-87
Rice Operating Company – EME SWD System
H-20 SWD Facilities (UL H Sec 20 T 20S R 37E)
OCD Case Number: 1R427-87**

Sent via E-mail and U.S. Certified Mail (with Corrective Action Plan)
Return Receipt No. 7007 0710 0003 0305 3712

Dear Mr. Hansen:

This letter summarizes the results of an Investigation and Characterization Plan¹ which was completed by Texerra in November of 2007. This work evaluated the potential for groundwater contamination stemming from the operation of two below-grade redwood tanks and an emergency overflow pit, both of which were removed and closed in 2007.

Elevated chloride levels (1,420 ppm) were found in a monitor well (MW-1) approximately 25 ft down-gradient from the former excavation. Groundwater chloride concentrations were similarly elevated (also 1,420 ppm) in a down-gradient well (MW-3) and 980 ppm in an up-gradient well (MW-2). Low levels of BTEX (0.052 ppm) were found in the near-source well, and near-trace concentrations (0.002 ppm) were found in the down-gradient well; (see Figure 3 and Table 1). A hydrocarbon sheen has also been noted in the near-source well. These results indicate that groundwater is not pristine as it flows onto the subject site, but suggests some impact from the former facilities.

The results summarized here will be presented in more detail in a proposed "Corrective Action Plan" for this site. This Plan will propose further and more detailed, groundwater monitoring, as well as a remedy to attenuate dissolved phase hydrocarbons.

Sincerely,



L. Peter Galusky, Jr. Ph.D.
Principal

Encl: Site maps and data
Copy: Kristin Pope, Rice Operating Company

¹ A project history and further details can be found in the Investigation and Characterization Plan.

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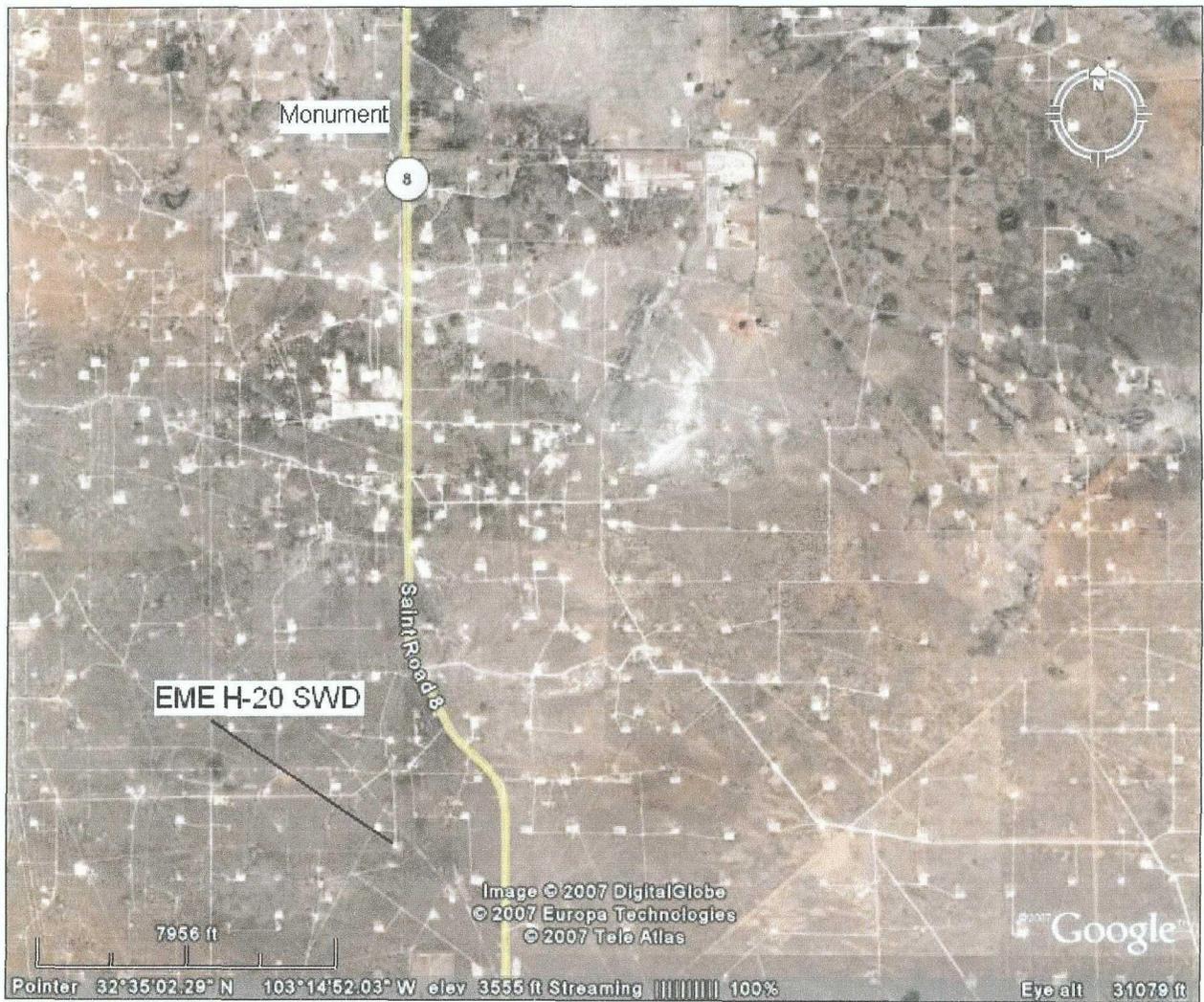


Figure 1 – EME H-20 SWD location.

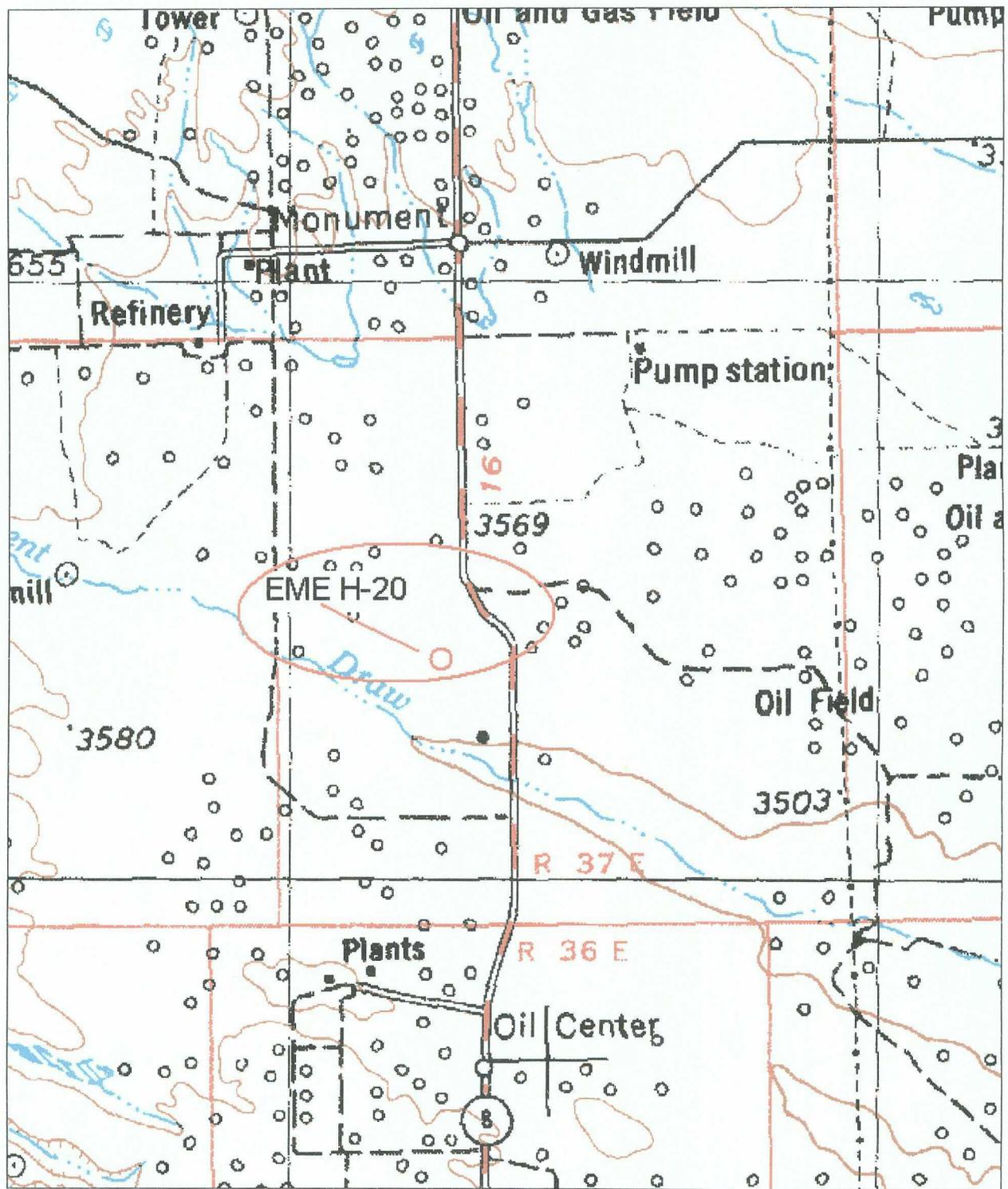
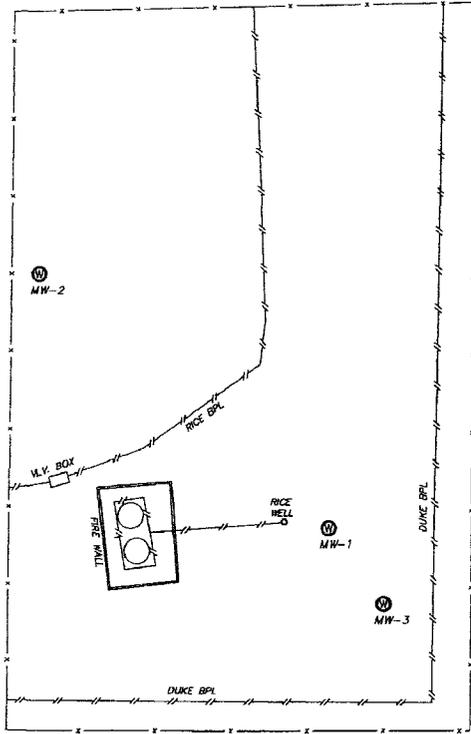


Figure 2 - EME H-20 SWD location on a USGS topographic base map. The direction of groundwater flow is from northwest to southeast, parallel to the ground surface.

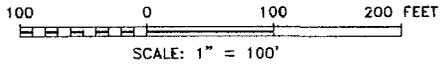
SECTION 20, TOWNSHIP 20 SOUTH, RANGE 37 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.



NOTE:
ELEVATIONS ARE ON BLACK MARK
ON NORTH SIDE OF PVC CASING.

NEW MEXICO STATE PLANE COORDINATES (NAD83)

WELL	NORTHING	EASTING	LATITUDE	LONGITUDE	ELEV. PVC	ELEV. GRND	ELEV. CONC.
MW-1	568769.64	870358.86	N 32°33'32.6"	W 103°15'55.5"	3518.88'	3516.53'	3516.81'
MW-2	568988.2	870159.1	N 32°33'34.6"	W 103°15'57.9"	3520.37'	3517.35'	3517.55'
MW-3	568711.9	870430.8	N 32°33'32.1"	W 103°15'54.7"	3518.80'	3515.72'	3515.99'



I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.

GARY L. JONES, N.M.S. No. 7977
GARY L. JONES, N.M.S. No. 5074

RICE OPERATING COMPANY

REF: EME SWD WELL H-20

MONITOR WELL LOCATED IN
SECTION 20, TOWNSHIP 20 SOUTH, RANGE 37 EAST,
N.M.P.M., LEA COUNTY, NEW MEXICO.

W.O. Number: 18858 Drawn By: K. GOAD

Date: 12-12-2007 Disk: KJG - RC18858MW.DWG Survey Date: 12-04-2007 Sheet 2 of 2 Sheets

BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

Figure 3 – Site survey map showing approximate locations of facilities and monitor wells.

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Table 1 – Groundwater chloride and BTEX concentrations.

EME H-20 SWD			
Chloride concentrations (mg/l or ppm)			
	Well ID		
	MW-1	MW-2	MW-3
	approx dist (ft) from ctr of excavation		
	25	100	-300
4/23/2007	1,939	<i>not yet installed</i>	
7/12/2007	1,230	"	
11/1/2007	1,260	1,100	1,710
1/18/2008	1,420	980	1,420
BTEX concentrations (mg/l or ppm)			
	Well ID		
	MW-1	MW-2	MW-3
	approx dist (ft) from ctr of excavation		
	25	100	-300
4/23/2007	0.062	<i>not yet installed</i>	
7/12/2007	0.084	"	
11/1/2007	0.065	<0.006	<0.006
1/18/2008	0.052	<0.003	0.002