

WATER Supply Well #1 (WS-1) SANTA ROSA

2849 FSL
2170 FWL

RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION

Form H-7
(Eff. 3/1/68)

Sec 19 BIK 5 ANDREWS

FRESH WATER DATA FORM

1A TIGHEAL SEC

100' W. of TEXAS 'E' TANK BATTERY
TO 1703'

Date:

APRIL 3, 1997

PERF 1442-1640

API 42-003-00001

1. RRC District 8		2. Field Name (as per current proration schedule) MAGUTEX (QUEEN)	
3. County ANDREWS		4. Reservoir (into which fresh water is to be injected) QUEEN	
5. Operator MARIAH ENERGY CORP.			
6. Lease Name(s) and RRC No(s), (on which fresh water is to be injected) MAGUTEX QUEEN UNIT (17377) INJECTION SPECIAL ORDER #8-50618			
7. Name of Fresh Water Formation or Source SANTA ROSA		8. Depth to Top of Fresh Water Formation (Feet) 1,400	
9. Gross Thickness of Fresh Water Formation (Feet) 250'		10. Net Thickness of Fresh Water Formation (Feet) 175	
11. Total Number of Acres in Project Area where Applicant has Exclusive Use of Fresh Water Rights for Subject Project. Include Land Description. (Also furnish plat. See "Required Attachments" on back.) 2,080 ACRES			
12. Volume of Recoverable Fresh Water-in-Place beneath Applicant's Water Rights Acreage (Barrels) 450,000,000		13. Rate of Recharge of Fresh Water Formation beneath Subject Water Rights Acreage (Barrels/Day) LIMITED	
14. Total Volume of Fresh Water to be Used in Injection Project (Barrels) 5,000,000		15. Fresh Water Withdrawal Rates for Project (Barrels/Day) 2,500	
16. Other Uses and Withdrawal Rates in Project Area for the same Fresh Water Formation or Source <div style="display: flex; justify-content: space-between;"> <div> <p>USES (Specify each.)</p> <p>NONE</p> </div> <div> <p>RATES (Barrels/Day)</p> </div> </div>			
17. Names of and Distances to Municipal Water Supplies Utilizing Same Fresh Water Formation or Source (within 20 mile radius) <div style="display: flex; justify-content: space-between;"> <div> <p>CITY/TOWN</p> <p>NONE</p> </div> <div> <p>DISTANCE AND DIRECTION</p> </div> </div>			
18. Name of Shallowest Salt Water or Brackish Water Supply Zone NONE		19. Depth of Shallowest Salt Water or Brackish Water Supply Zone (Feet) -----	
		20. Rate of Salt Water or Brackish Water Available from All Sources for Project (Barrels/Day) -----	

(OVER)

EXHIBIT "A"

The Santa Rosa was used as make-up water by the previous operator, Texaco, for this waterflood unit. Mariah is continuing to use the same water supply well for this same unit. Other operators in the area also use the Santa Rosa for make-up water.

We have contacted the following offset operators for make-up water: 1) Caprock Operating, Inc. 2) Lion Production, Inc. 3) Mewbourne Oil Co. and 4) Saga Petroleum Corp. They are, however, using their own water for their own injection projects or do not have sufficient volumes for our injection needs.

We are, and will continue, using all of our produced water. There are no other salt water formations, other than the Santa Rosa, which could be used for make-up water.

Although the TNRC requires surface casing to protect the Santa Rosa formation, the Santa Rosa is not fresh. The water has 8,000 PPM Chloride and 16,000 PPM of solids and is unusable for human or agricultural purposes.

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cc: Steve Hull, Midland

