

TRETOLITE

NEW MEXICO

OIL CONSERVATION D 

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EXHIBIT

6B

Reply to: P.O. Box 5250
Hobbs, New Mexico 88241
505 392-6711 Phone
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CASE NO.

10866/10867

WATER ANALYSIS REPORT

Company : OXY USA
Address : HOBBS NM
Lease : EAST EUMONT UNIT
Well : WATER SOURCE WELL
Sample Pt. : WELLHEAD NW 14 Sec 10 T-19-S R-37-E
San Juan County, NM

Date : 12-11-93

Date Sampled : 11-22-93

Analysis No. : 1103

ANALYSIS	mg/L	* meq/L
1. pH	7.2	
2. H2S	0	
3. Specific Gravity	1.000	
4. Total Dissolved Solids	2028.6	
5. Suspended Solids	NR	
6. Dissolved Oxygen	NR	
7. Dissolved CO2	NR	
8. Oil In Water	NR	
9. Phenolphthalein Alkalinity (CaCO3)		
10. Methyl Orange Alkalinity (CaCO3)	204.0	
11. Bicarbonate	HCO3 248.9	HCO3 4.1
12. Chloride	Cl 1147.7	Cl 32.4
13. Sulfate	SO4 25.0	SO4 0.5
14. Calcium	Ca 268.5	Ca 13.4
15. Magnesium	Mg 228.5	Mg 18.8
16. Sodium (calculated)	Na 109.8	Na 4.8
17. Iron	Fe 0.2	
18. Barium	Ba NR	
19. Strontium	Sr NR	
20. Total Hardness (CaCO3)	1611.4	

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt	X meq/L	= mg/L
13 *Ca <----- *HCO3	Ca(HCO3)2	81.0	4.1	331
----- /----->	CaSO4	68.1	0.5	35
19 *Mg -----> *SO4	CaCl2	55.5	8.8	488
----- <----- /	Mg(HCO3)2	73.2		
5 *Na -----> *Cl	MgSO4	60.2		
----- +----->	MgCl2	47.6	18.8	895
Saturation Values Dist. Water 20 C	NaHCO3	84.0		
CaCO3 13 mg/L	Na2SO4	71.0		
CaSO4 * 2H2O 2090 mg/L	NaCl	58.4	4.8	279
BaSO4 2.4 mg/L				

REMARKS:

----- G Archer, Sid Nichols, Joe Gibson, Scott Gingler, File

Petrolite Oilfield Chemicals Group

Respectfully submitted,
G. ARCHER

SCALE TENDENCY REPORT

Company	: OXY USA	Date	: 12-11-93
Address	: HOBBS NM	Date Sampled	: 11-22-93
Lease	: EAST EUMONT UNIT	Analysis No.	: 1103
Well	: WATER SOURCE WELL	Analyst	: G. ARCHER
Sample Pt.	: WELLHEAD		

STABILITY INDEX CALCULATIONS
(Stiff-Davis Method)
CaCO₃ Scaling Tendency

S.I. =	0.2	at	40 deg. F	or	4 deg. C
S.I. =	0.3	at	60 deg. F	or	16 deg. C
S.I. =	0.3	at	80 deg. F	or	27 deg. C
S.I. =	0.4	at	100 deg. F	or	38 deg. C
S.I. =	0.4	at	120 deg. F	or	49 deg. C

CALCIUM SULFATE SCALING TENDENCY CALCULATIONS
(Skillman-McDonald-Stiff Method)
Calcium Sulfate

S =	1146	at	40 deg. F	or	4 deg C
S =	1201	at	60 deg. F	or	16 deg C
S =	1239	at	80 deg. F	or	27 deg C
S =	1243	at	100 deg. F	or	38 deg C
S =	1234	at	120 deg. F	or	49 deg C

Petrolite Oilfield Chemicals Group

Respectfully submitted,
G. ARCHER