

RESULT OF WATER ANALYSES

Mr. Richard Lauderdale
To: P.O. Box 2497, Midland, TX 79702

LABORATORY NO. 799179
SAMPLE RECEIVED 7-30-99
RESULTS REPORTED 7-30-99

COMPANY Anadarko Production Corp. LEASE As Listed
FIELD OR POOL 1. Penrose Skelly 2. Eunice, South
SECTION BLOCK SURVEY COUNTY Lea STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

Produced water - taken from Hugh #13.

NO. 1 Produced water - taken from E. W. Walden #12

NO. 2

NO. 3

NO. 4

REMARKS: 1. Grayburg 2. San Andres

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0140	1.0149		
pH When Sampled				
pH When Received	7.05	7.38		
Bicarbonate as HCO ₃	2,245	2,684		
Supersaturation as CaCO ₃				
Undersaturation as CaCO ₃				
Total Hardness as CaCO ₃	2,200	950		
Calcium as Ca	584	216		
Magnesium as Mg	180	100		
Sodium and/or Potassium	4,728	5,871		
Sulfate as SO ₄	603	0		
Chloride as Cl	7,100	8,165		
Iron as Fe	0.16	0.23		
Barium as Ba		0		
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	15,441	17,036		
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen, Winkler				
Hydrogen Sulfide	42.0	16.0		
Resistivity, ohms/m at 77° F.	0.530	0.490		
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks The objective herein is to evaluate compatibility between these two waters. A careful study of each water and a comparison of the two has revealed no evidence of any incompatibility. This is to say that we would not anticipate any precipitation or scaling potential to develop as a result of combining these waters in any proportion.

Form No. 3

BEFORE THE
OIL CONSERVATION DIVISION
Case No. 12215 Exhibit No. — 5
Submitted By:
Anadarko Petroleum Corp.
Hearing Date: August 5, 1999

Waylan C. Martin, M.A.