

FORM C-108
ITEM VII(4)

EXHIBIT I

ANALYSIS - BRUSHY CANYON
PRODUCED WATER

16010 Barker's Point Lane • Houston, Texas 77079
713 558-5200 • Telex: 4620346 • FAX: 713 589-4737

POGO PRODUCING COMPANY
Proximity "31" Federal #4
Section 31, TWP 22-S, R 32-E
Lea County, New Mexico

Reply to: P.O. Box FF
Artesia, New Mexico 88210
(505) 746-3588 Phone
(505) 746-3580 Fax

WATER ANALYSIS REPORT

Company : POGO PRODUCING Date : 01/08/93
Address : MIDLAND, TEXAS Date Sampled : 01/04/93
Lease : RED TANK FED. 28 Analysis No. : 005
Well : #1 *Brushy Canyon (Del)*
Sample Pt. : WELLHEAD

ANALYSIS	mg/L	* meq/L
1. pH	6.2	
2. H2S	3 PPM	
3. Specific Gravity	1.160	
4. Total Dissolved Solids	279018.4	
5. Suspended Solids	NR	
6. Dissolved Oxygen	NR	
7. Dissolved CO2	80 PPM	
8. Oil In Water	NR	
9. Phenolphthalein Alkalinity (CaCO3)		
10. Methyl Orange Alkalinity (CaCO3)	50.0	
11. Bicarbonate	HCO3 73.2	HCO3 1.2
12. Chloride	Cl 170409.6	Cl 4807.0
13. Sulfate	SO4 1000.0	SO4 20.8
14. Calcium	Ca 16881.7	Ca 842.4
15. Magnesium	Mg 1186.3	Mg 97.6
16. Sodium (calculated)	Na 89409.6	Na 3889.1
17. Iron	Fe 58.0	
18. Barium	Ba NR	
19. Strontium	Sr NR	
20. Total Hardness (CaCO3)	47042.3	

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt X meq/L	= mg/L
842 *Ca <----- *HCO3	Ca(HCO3)2	81.0 1.2	97
----- /----->	CaSO4	68.1 20.8	1417
98 *Mg -----> *SO4	CaCl2	55.5 820.4	45523
----- <----- /	Mg(HCO3)2	73.2	
3889 *Na -----> *Cl	MgSO4	60.2	
----- /----->	MgCl2	47.6 97.6	4646
Saturation Values Dist. Water 20 C	NaHCO3	84.0	
CaCO3 13 mg/L	Na2SO4	71.0	
CaSO4 * 2H2O 2090 mg/L	NaCl	58.4 3889.1	227277
BaSO4 2.4 mg/L			

REMARKS:

----- L. MALLET / FILE

Petrolite Oilfield Chemicals Group

Respectfully submitted,
ROZANNE JOHNSON