

8/2/83

WATER ANALYSIS

	<u>2:00 PM, 7/30/83</u>	<u>5:30 PM, 7/30/83</u>
SG	1.105 @ 73°F	1.110 @ 73°F
Ph	6.5	7.0
Fe	good to strong	fair to strong
H ₂ S	-0-	-0-
Hardness	54,000	45,000
Ca	12,000	11,600
Mg	5,589	3,888
Na-k	36,273	45,125
Res.	1.65 @ 73°F	1.062 @ 73°F
SO ₄	1,600	1,500
HCO ₃	464	561
Cl	92,000	100,000
NaCl	151,340	164,500
Na	31,029	40,930
K	5,244	4,195

Oil gravity 39° @ 60°F

Well flowing gas w/40 psi on 10/64" choke, opened choke & blew dn press, ran swb, fluid scattered dn to 4000', first 2½ hrs, swbd 3.9 BO + 15.6 BW, total of 19.6 FF, % oil cut 30%, swbd an additional 7½ hrs for a total 10 hrs, rec 51.91 bbls, 10 BO & 41.91 BW, 58.9 BUL, pulled tbg & pkr, SD, set 3 frac tanks & filled w/10# BW.

8/3/83

RU Western & fracked well dn 5½" csg in 3 equal stages of 20,000 gals ea, mini max 3-40, total of 60,000 gals plus 70,000# 20-40 mesh sand, per 1000 gals of brine / gal LT 22, 60# gel, 40# f-11, 600# Wes block 1 and 600# Wes block 3-X, 1st stage 4000 gals 10# brine, gelled pad, 2000 gals @ 1#/gal 20-40 sand, 2000 gals 1# 20-40 pad, 4000 gals 2# 20-40 sand, 8000 gals 3# 20-40 sand, ran 600# blocking stage @ 50/50 mixture of 1&3 X, pumped second stage frac & ran second blocking stage & followed w/3rd stage frac, flushed w/205 bbls slick 10# brine, 1st block press inc 1900 to 2200 psi, 2nd block pressure inc from 1900 psi to 2200 psi, max press 2400 psi, min 1700 psi, avg 1900 psi, rate 29 BPM, ISDP 1300 psi, 5" 1250, 10" 1200, 15" 1200, 20" 1200, total load 1527 bbls, left closed in for night.

8/4/83

SICP 200 psi, 4" frac valve was leaking, small amt, opened to pit on 1" choke w/100 psi for 1 hr, removed choke & flowed on full 2" for ½ hr, had ½" stream load & frac wtr, ran Bkr. Model AE1, retriev-o-matic pkr w/2 jts tail pipe w/seating nipple on top of pkr on 2" tbg to 8359', set pkr & ran swb, swbd 3 hrs, rec 72 bbls load and frac wtr and sand, sand line broke (was pulling 1500' wtr) pulling OOH, left swb & 1000' line in tbg, released pkr, pulled tbg, rec sand line & swb, reran tbg & pkr to 8359', set pkr, ran sinker bar & line to 6000', checking line, line is bad, will replace sand line, FL was lowered to 500', SD.