Recomplete in Delaware Zone 1990

HOC Oper. <u>State 4 #1</u>, Grama Ridge-Bone Springs Fld, Lea Co., New Mexico, TD 14,317', Bone Springs, PBTD 5952', AFE 3574 (\$108,500), Pool Well Service Rig #238, Recomplete in Delaware

4-01-90: MI&RU Pool Well Service . Bled gas off 7" csg. Pmpd 30 bbls fresh wtr. Installed BOP. PU 5-3/4" Bowen overshot with 3-1/16" grapple, bumper jars, Bowen oil jars, 4 - 3-1/2" DC's, (BHA = 141.56'), & 201 JTS 2-7/8" N-80 workstring tbg (6302' total length of string). Tagged fish @ 6302'. Attempted to work over top of fish - could not work over fish or push collar down to catch 3-1/16" tbg Upset. TOOH, changed to 3-21/32" grapple in 5-3/4" overshot to fish tbg collar. TIH & caught 2-7/8" tbg collar. Pulled 80,000#. Tripped jars. Pulled 4,000 over string wt. Turned tbg 12 rounds to right, rel Baker R-2 anchor. POOH & LD fishing tools. LD 137 JTS 2-7/8" tbg, SN, B-2 anchor, 4' perf sub, & bull plugged Tail JT. RU Apollo WL. Ran 5.719" gauge ring junk basket to 9500'. POOH & TIH with Baker CIBP & set @ 9436' (CBL depth). DWC 7,821, CWC 7,821. (Co. man on loc. - J. B. Lauderdale). 4-02-90: Dumped 5 sx cmt on top of CIBP @ 9436' (CBL depth) in 2 bailer runs. RD Apollo. RU Howco RTTS pkr & TIH to 6103' with 198 JTS 2-7/8" workstring & test 7" from 6103' to CIBP @ 9436' with 1500# for 10 mins -OK. Attempted to press tbg-csg annulus - had circ out 9-5/8" gas valve. TOOH testing csg every 600'. Test @ 515' OK. Located leaks from 187' to 509'. Perf with 4 holes from 5962-5964'. TIH with RTTS pkr & set @ 5940'. Circ thru perfs (7" - 9-5/8") @ 3 BPM @ 650# to surf. Circ with 8.6# cut Brine to surf. POOH with RTTS. Set Cmt Retainer on WL @ 5952'. TIH with Ret. Seal & set in Retainer with 8000# wt. (SLM 5958'). Pmpd 500 gals mud flush & cmtd with 225 sx Class H cmt with 5#/sx salt (15.8 ppg). Displaced with 33.5 bbls 8.6#Brine. PU & rev out 1 bbl cmt. Job complete @ 6:00 a.m. 4-2-90. TOOH with 2-7/8" tbg @ report time. DWC 4,662, CWC 12,483. (Co. man on loc. -J. B. Lauderdale).

<u>4-3-90</u>: PBTD 5952' (Cmt Retainer). WOC. Plan to run CBL this A.M. DWC I,000, CWC 13,483. (Co. man on loc. - J. B. Lauderdale).

<u>4-4-90</u>: 9# Brine. Ran GR-CBL from 5947-4100'. Top cmt @ 4400'. Ran 4" csg gun & perf 5901', 5905', 5910', 5913', 5917', 5922', 5924', 5926', & 5929' (CBL -9 holes). RU swab. Swbd 2-7/8" tbg to SN @ 5848'. FL 4800-5000' (stabilized). Rec. total 77.2 BW (43 bbls form wtr & 34.2 BLW), no shows Hydrocarbons except fumes of gas. Analysis of water:

Rw0.0495 @ 70°F

Sp. Grav. 1.15 pH7.6 Calcium 2,800 Magnesium 1,020 Chlorides 132,000 Sulphates Heavy BiCarbonates 24

This A.M. prep to set CIBP @ 5870' (CBL). DWC 28,889, CWC 42,372. (Co. man on loc. - J. B. Lauderdale).

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Rw	0.0495 @ 70°F
Sp. Grav.	1.15
рН	7.6
Calcium	2,800
Magnesium	1,020
Chlorides	132,000
Sulphates	Heavy
BiCarbonates	24
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abd BS