

Drilling Report
Kimbell Oil Company of Texas
Liberman #4R
1470' FWL & 1040' FSL
Section 5-T25N-R7W
Rio Arriba County, New Mexico

8/24-25/98: Build Location and pits and commence moving in and rigging up L&B Speed Drill Rig.

8/26/98: Spud well at 1100 hrs. with 12-1/4" bit. Drilled to 134' and run 133.80' new 8-5/8" 24 J-55 casing. Cemented with 83 sacks (98 cu.ft.) Class "B" cement containing 2% CaCl₂. Plug down @ 2100 hrs. 8/26/98. Plug held OK and circulated 7.0 barrels of clean cement to surface.

8/27/98: T.D. 570'. Current Operations: Drilling. MW 9.0 Vis. 37

8/28/98: T.D. 1530'. MW 9.0 Vis 36

8/29/98: T.D. 1865'. MW 9.0 Vis 36

8/30/98: T.D. 2101'. MW 9.0 Vis 36

8/31/98: Plan to T.D. well today and mud up in preparation of open hole logging in a.m. Tuesday, 9/1 with Schlumberger.

9/1/98: POH to change bit. Will resume drilling to T.D.

9/2/98: T.D. 2328' Current Operations: Logging RU Schlumberger log truck. Should have log on the bank this P.M.

9/3/98: T.D. 2328' Current Operations: WOC. Ran Schlumberger DIL and Gamma Ray/ Neutron Density Logs. RD log truck. Ran 2324', 4-1/2, 11.6# J-55 LT&C new casing. Cement with 10 Bbls. mud flush, followed by 190 sx. (390 cubic feet) Class B cement containing 1/4#/ sk. Celloflake + 2% C-lite, followed by 75 sx. (88 cubic feet) Class B Neat cement containing 1/4 #/sk Celloflake. Had good circulation throughout job. Displaced to float and bumped plug @ 2284' with 1000 psig. Float held OK. Circulated 10 Bbls. good cement to surface. Shut in well awaiting completion operations.

9/15/98: Move in and rig up Weatherford Wireline and tagged PBTD @ 2291' G.L. Rig down and move out.

9/17/98: Move in and rig up Blue Jet Perforators. Ran GR/CCL log from PBTD of 2291' to 1950'. PU 3-1/8" casing gun loaded 4 JSPF @ 120 degree phasing. TIH and perforate from 2198'-2218' (depth reference from Open hole density neutron log). Rig down perforators.

9/18/98: Well SI -Preparing to N2 Foam Frac tomorrow AM.

9/19/98: Move in and rig up BJ. Frac down 4-1/2" casing with 60,000 # 20/40 sand in 70% quality Nitrogen Foam at 40 BPM. ISIP 1100 Psig. 45 minute SIP 990 psig. Opened well to pit on 16/64" choke. Left flowing overnight.

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Drilling & Completion report

9/20/98: 26 Hr. FCP @ 100 psig on 16/64" choke. Opened up to 32/64" choke and FCP dropped to 35 psig. Est. gas rate at 250 MCF/D. Left flowing overnight.

9/21/98: After 24 hrs. on 32/64" choke, FCP stabilized @ 40 psig. Est. gas rate at 225-275 MCF/D. Shut well in at 0740 hrs. At 0830 hrs., after 50 minutes, SICP 190 psig. At 1530 hrs., SICP 245 psig.

9/22/98: At 0900 hrs. SICP 265 psig. Notified EPFS to reactivate Old Liberman #4 sales meter for gas sales from Liberman #4R. Shut well in for 7 day shut in pressure buildup & to conduct State Potential test. Final report will be made on date of first sales.

CEMENT JOB DETAIL SHEET

Surface Casing

[illegible]



LONG STRING

[illegible]

PRESSURE RATE DETAIL

[illegible]