STATE 31 NO. 1

WELL HISTORY

LOCATION: 1,980' FROM NORTH LINE, 660' FROM EAST LINE, SECTION 31-11S-35E, LEA COUNTY, NEW MEXICO.

CONTRACTOR: TRG Drilling Corporation

4/23/75 Building location.

4/25/75

4/26/75 Moved in and rigged up. Preparing to spud.

4/27/75 D 304' (304'). SPUDDED AT 8:45 P.M., 4/26/75. 1/4 degree at 300'. Running 13-3/8" casing.

4/28/75 D 1,320' (1,016'). 1/2 degree at 800'. Ran 10 joints, 13-3/8", 54.50#, K-55, ST&C, casing; set at 304'. Cemented with 325 sacks, Class C, with 2% CaCl₂. Plug down at 8:45 A.M., 4/27/75. Had cement returns. Drilled out at 9 P.M., 4/27/75. CDC, \$116,100.

4/29/75 D 2,160' (840'). Mud weight, 9.5#; viscosity, 36 sec. 1/2 degree at 1,300' and 1,800'; 3/4 degree at 1,900'. CMC, \$600; CDC, \$117,700.

4/30/75 D 2,882' (722'). Mud weight, 9.4#; viscosity, 35 sec. 3/4 degree at 2,200'. CMC, \$800; CDC, \$117,900.

5/ 1/75 D 3,470' (588'). Mud weight, 10.2#; viscosity, 35 sec. 1 degree at 2,875' and 3,375'.

5/ 2/75 D 3,845' (375'). Mud weight 10.2#; viscosity, water. 1-1/2 degrees at 3,600'. CMC, \$1,200; CDC, \$119,100.

5/ 3/75 D 4,212' (367'). Mud weight, 10.0#; viscosity, 35 sec. 3/4^o at 3,970'. Circulating.

5/ 4/75 D 4,255'. (43'). Mud weight, 10.0#; viscosity, 35 sec. 1/2° at4,212'. Rigged up and ran 106 jts, 8-5/8" casing. Set at 4,212'. Cemented with 225 sxs Class "C" plus 2% CaCl. Plug down at 6 PM, 5/3/75. Waited on cement, 6 hrs. Drilled plug and 45' cement. Drilling.

5/4/75	36 jts, 32#, K-55, LT&C, 8-5/8" 8rd R3		1062.30'
	59 ", 28#, H-40, ST&C, 8-5/8" 8rd R3		3071. 93'
	2 ", 32#, K-55, LT&C, 8-5/8" 8rd R3		83.39
			4217.62
	Less up on Landing joint		5.00
		Seat	4212.62'

5/5/75 D 4,710' (455'). Mud weight, 9.0#, viscosity, water. Drilling.

5/6/75 D 5,320' (610'). Viscosity, water. 1/2° at 4,780'; 3/4° at 5,250' Drilling. CMC, \$2,000; CDC \$119,900.

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5/23/75

(5/ 7/75 D 5,766' (446'). Mud weight, 8.5#; viscosity, water. 3/4° at 5,750'. Tripping. D 6,255' (489'). Mud weight, 8.5#; viscosity, water. Drilling. CMC, \$1,296; 5/ 8/75 CDC, \$169,090. D 6,650' (395'). Mud weight, 8.5#; viscosity, water. 1^o at 6,250'. 5/ 9/75 Drilling. \$169,290. D 6,905' (255'). Mud weight, 9.4#; viscosity, water. 1/2° at 6,670'. 5/10/75 Drilling. D 7,365' (460'). Mud weight, 9.6#; viscosity, water. Drilling. 5/11/75 D 7,655' (290'). Mud weight, 9.5#; viscosity, water. 1° at 7,150'; 3/4°. 5/12/75 at 7,408'. Drilling. D 8,025' (370'). Mud weight, 9.6#; viscosity, 45 sec. 1^o at 7,900'. 5/13/75 Drilling. CMC, \$1,296; CDC, \$169,290. D 8,225' (200'). Mud weight, 9.6#; viscosity, 46 sec; water loss, no control; 5/14/75 oil, 7%. 1° at 8,180'. Drilling in lime and shale. CDC, \$170,290. D 8,440' (215'). Mud weight, 9.8#; viscosity, 45 sec; water loss, no control; 5/15/75 % oil 6-1/2. Drilling in lime and shale. CDC, \$209,273. D 8,650' (210'). Mud weight, 9.9#; viscosity, 46 sec; water loss, no control; 5/16/75 %oil, 6. Drilling. CDC, \$213,033. D 8,900' (250'). Mud weight, 9.8#; viscosity 43 sec; %oil, 6. 1-1/4° at 5/17/75 8,650'. Drilling. D 9,045' (145'). Mud weight, 9.8#; viscosity, 42 sec; %oil, 6. 1-3/4° at 5/18/75 8.870'. Drilling. D 9,270' (225'). Mud weight, 9.8#; viscosity, 43 sec; % oil, 6. Drilling 5/19/75 in lime and shale. CDC, \$213,533. D 9,470' (200'). Mud weight, 10.1#; viscosity, 40 sec; water loss, no control; 5/20/75 %oil, 7. 1-1/2^o at 9,350[']. Drilling in lime and shale. CMC, \$2,582; CDC, \$213,033. D 9,660' (190'). Mud weight, 19.1#; viscosity, 44 sec; %oil, 6. 5/21/75 Drilling in lime and shale. CMC, \$2,582; CDC, \$213,033. D 9,757' (97'). Mud weight, 10.2#; viscosity, 42 sec; % oil, 6. 2-1/4° at 5/22/75 9,700'. Drilling in lime and shale. CMC, \$2,979; CDC, \$213,517. D 9,925' (168'). Mud weight, 10.3#; viscosity, 52 sec; water loss, 28 cc.

Drilling in lime and shale. CMC, \$2,979; CDC, \$213,517.

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C.E. CONSTRUCTION COMM. HOBBS, N. M. State 31 No. 1 Well History Page No. 3 13-3/8" at 304' 8-5/8" at 4,212'

5/24/75

D 10,029' (104'). Mud weight, 10.0#; viscosity, 47 sec; water loss, 9.6 cc. Drilling in lime.

5/25/75 D 10,085' (56'). Mud weight, 10.2#; viscosity, 45 sec; water loss, 10 cc.. 1-3/4^o at 10,080'. Drilled to 10,085'; reached total depth at 2:15 PM. Took steel line measurement; no correction. Rigging up to log.

5/26/75 TD 10,085' (driller). Mud weight, 10.2#; viscosity, 48 sec; water loss, 10 cc; Circulated and conditioned to log. Rigged up and ran Schlumberger DILL, Density CNL and Sonic, 4,200' - 10,091'. Rigged up to run drillstem test No. 1. Running drillstem test No. 1.

5/27/75 TD 10,091' (Schlumberger). Set packer at 10,048'. Drillstem Test No. 1 - 10,048' - 10,091' - Bough "B": Opened on 3/8" bottomhole choke with good blow; no water cushion. Gas to surface in 11 minutes. Initial open 15 minutes; ISI, 60 minutes. Maximum build up at surface, 20#. Opened on 1/4" choke, 90 minutes; shut in. Recovered 6,000' oil and gas (50% oil, small amount of water); 46.8° API gravity oil. Bottomhole temperate, 148° F.

lst Test

5567 \mathbf{FH} 53.94 IΗ 2543 \mathbf{FF} 1349 IF 1288 FF 1140 IF FSI: 3169 (BH) ISI (BH) 3119 Calculated BH (static) 3264#. Estimated oil productio, 238 bbls/day; water, 400 bbls/day; chlorides, 92.5 ppm. Total production 638 bbls/day. Rigged up to run HOWCO Straddle packer test, 4,940' - 5,043' - San Andres. Running drillstem test No. 2. CMC, \$5,697; CDC, \$232,835.

2nd Test

5/28/75

TD 10,091'. Mud weight, 10.0#; viscosity, 50 sec; water loss, 10 cc. Attempted to set packers for DST No. 2; failed. Pulled out of hole; loaded out test tools. Went in hole to bottom; washed 3' of fill. Circulated. Waiting on 5-1/2" casing. CMC, \$8,926; CDC, \$250,000; CCC, \$840; CWC, \$250,840.

5/29/75 TD 10,091'. Mud weight, 10.0#. Circulated while waiting on 5-1/2" casing, 11 hrs. Unloaded and measured casing on rack. Laid down 4-1/2" drill pipe. Rigged up and ran 6,000' 5-1/2" casing. Running 5-1/2" casing. CMC, \$8,926; CDC, \$250,000; CCC; \$2,975; CWC, \$252,975. State 31 No. 1 Well History Page No. 4 13-3/8" at 304' 8-5/8" at 4,212' 5-1/2" at 10,091'

5/30/75 TD 10,091'. Ran 240 jts, 17# and 15.5#, N-80 and K-55, LT&C new 5-1/2" casing as follows:

22	2 jts 17# N-80 LT&C			989.57'
29	jts 17# K-55 I	T&C		1165.66'
79	jts 15.5#; K-5	5 LT&C	• •	3280.95'
	HOWCO DV Tool			2.85'
3	jts 15.5# K-55	121.14'		
50	jts 17# K-55 I	1983.09'		
57	jts 17# N-80 I	2560.72		
\$	HOWCO Float Co	1.50'		
	HOWCO Float Sh	1.65'		
240	jts		•	10107.13
	Less above rotary			16.13'
	Set at			10091.00'
	DV Tool	Тор	5,420.05'	
		Bottom	5,422.90'	· .
	Top of Float C	ollar	10,087.85'	

Top of Float Shoe 10,089.35'

Rigged up HOWCO and cemented first stage with 300 sxs Lite-wate with 15% salt plus .6% Hallad 22, plus 275 sxs Class "C" with 8% salt plus .6% Hallad 22. Dropped bomb and opened DV tool. Circulated through DV tool, 6 hrs. Cemented second stage with 450 sxs Class "C" with 6% salt plus .6% CFUR. Plug down at 7:30 AM, 5/30/75, with 1500#. Set casing slips. Nippled up tubing head and blowout preventers. Waited on cement, 10-1/2 hrs. Waiting on cement. CMC, \$8,926; CDC, \$250,000; CCC, \$75,974; CWC, \$325,974.

- 5/31/75 TD 10,091'. Waited on tubing, 11-1/2 hrs. Pulled up 162 jts, 5,420' to DV tool. Drilled 120' cement and DV tool. Picking up tubing.
- 6/ 1/75 TD 10,091'. Finished picking up 2-7/8" tubing. Drilled floact collar and plug. Tested casing to 2,000#; O.K. Pulled out of hole; laid down drill collars. Rigged up McCullough. Logging.
- 6/ 2/75 PBTD 10,089'. Ran GR-IES and CBL Sonic logs. Rigged up and ran 318 jts. 2-7/8" J-55 6.5# EUE tubing to 9,879'. Seating nipple at 6,014'.

Completion string:	Rotary elevation	9.00'
	318 jts 2-7/8 J-55 6.5# EUE tbg	9879.00'
	Baker Model "R" Packer	8.00'
• .	Packer set at	9896.00'

Tested packer to 1500#; O.K. Nippled down blowout preventers; installed tree. Cleaned mud tanks. Rigged down derrick. RIG RELEASED 12 Midnight, 6/1/75. Waiting on swabbing unit.

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CIL CONSERVATION COMM. HOBBS, N. M.