

P. O. Box 813 - Farmington, N. M.

September 27, 1957

Re: Rincon Unit #84  
Sec. 26-27N-7W  
Rio Arriba County,  
New Mexico

United States Geological Survey  
208B West Main  
Farmington, New Mexico

Gentlemen:

For your file on the captioned well, we enclose here-  
with two copies of the well history.

With copy of this letter we are sending two copies  
of this well history to the New Mexico Oil Conservation  
Commission, Aztec, New Mexico.

Very truly yours,

TEXAS NATIONAL PETROLEUM CO.,

*D. E. A. Johnson*  
D. E. A. Johnson



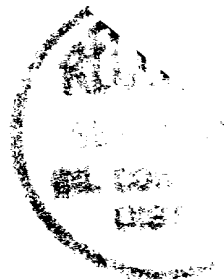
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TEXAS NATIONAL PETROLEUM CO.

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WELL HISTORY

RINCON UNIT #84



September 6, 1957

D. E. A. Johnson

Location: 990' SWL, 990' WEL of SW NE NE Sec. 26-T27N-R7W, NMPM  
Rio Arriba County, New Mexico

Elevation: Ground 6747', KB 6758'

Spud Date: 11/24/56

Completion Date: 1/15/57 (Rotary Rig)  
7/ 9/57 (Service Rig)

Contractor: Corbett Drilling Co.

Casings: Surfaces: 10-3/4" w 409 w 250 sax  
Production string: 5-1/2" w 5665' w 275 sax + 4 1/2 gal  
Tubing: 2-3/8" OD @ 5550' w sawtooth pin collar on bottom  
TD: 7790' FBD: 5615' COD: 5580'  
IP 839 MCF/D (AOP)

<u>FORMATION TOPS:</u>	<u>Depth</u>	<u>Datum</u>	<u>Thickness</u>
Kirtland	2554	+ 4204	421
Fruitland	2975	+ 3783	200
Pictured Cliffs	3175	+ 3583	71
Lewis	3246	+ 3512	1628
Cliffhouse	4874	+ 1884	26
Menefee	4900	+ 1858	530
Point Lookout	5430	+ 1328	140
Mancos	5570	+ 1188	1997
Dowell (Tocito Mem.)	6962	- 204	12
Greenhorn (Las. Mem.)	7345	- 587	55
Graneros Mem.	7400	- 642	167
Dakota	7567	- 809	153
Burro Canyon	7720	- 962	50
Morrison	7770	- 1012	-
TD	7790	- 1032	-

CHRONOLOGICAL HISTORY

<u>Date</u>	<u>Depth</u>	<u>Remarks</u>
11/24/56	266	Spudded 12:00 noon with 13-3/4" bit. 1/2 deg. at 108'
11/25	433	Drilled 13-3/4" hole. Preparing to run 10-3/4" csg. 0° at 428'
11/26	433	Ran 12 joints (409.13') 10-3/4" 32.75# J-55 csg. Landed shoes at 419' KB and cemented w 210 sax cement. Plug down at 1:00 A.M. WOC
11/27	1075	WOC 24 hrs. Found plug at 370'. Drilled out with 8-3/4" bit.
11/28	1958	Drilled 8-3/4" hole. 1/2° at 1689'
11/29	2583	Drilled 8-3/4" hole. 1° at 2361'
11/30	2875	Drilled 8-3/4" hole
12/1	3409	Drilled 8-3/4" hole
12/2	3507	Tail shaft on pump went out. Pulled out of hole and waited on repairs
12/3	3507	Waiting on repairs
12/4	3651	Repaired pump and resumed drilling. 1° at 3528'
12/5	3946	Drilled 8-3/4" hole. Lost 6 hours working on pump
12/6	4170	Drilled 8-3/4" hole. Lost 7 hours working on pump
12/7	4368	Drilled 8-3/4" hole
12/8	4505	Drilled 8-3/4" hole
12/9	4706	Drilled 8-3/4" hole
12/10	4808	Drilled 8-3/4" hole
12/11	4780	Drilled to 4852'. Ran Halliburton wire line. Depth corrected from 4852' to 4754'. Drilled from 4754 to 4780'

## WELL HISTORY - RINCON #84 (continued)

CHRONOLOGICAL HISTORY

<u>Date</u>	<u>Depth</u>	<u>Remarks</u>
12/12/56	4852	Drilled 8-3/4" hole. Preparing to core
12/13	4903	Core #1 (6-1/8" D.) 4852-4903. Cut and recovered 51' sand and shale. (4852-4873 shale; 4873-4888 fine grained sandstone, faint gas odor, no fluorescence or cut; 4888-4891 shale; 4891-4899 sandstone, no shows, looked wet; 4899-4903 shale). DST #1 4873-4903 (Cliff House) Open 1 hour, SI 30 minutes. No blow. Recovered 200' water cut mud. BHFP 89-116 psi. BHSIP - HP 2527. Reamed and drilled ahead with 8-3/4" bit.
12/14	4929	
12/15	5083	Drilled 8-3/4" hole
12/16	5248	Drilled 8-3/4" hole
12/17	5375	Drilled 8-3/4" hole
12/18	5432	Drilled to 5415'. Tripped to take core #2. Lost circulation while coring at 5432'. Mixed mud and L.C. material
12/19	5432	Regained circulation. DP stuck. Worked DP. Lost circulation again. Mixed mud and jarred on DP. Spotted oil around stuck pipe and jarred on pipe.
12/20	5432	Spotted oil - worked pipe. Backed off and left outer barrel in hole. Before pulling out, displaced oil out of hole with mud.
12/21	5432	Pulled out with inner barrel. Core #2 (6-1/8" D.) 5415-5432 Cut and recovered 17' sand and shale. (5415-5422 fine grained sandstone, bubbling slightly, gas odor. No visible porosity; 5422-5427 shale; 5427-5432 fine grained sandstone with vertical fractures throughout. Strong sweet gas odor.) Went in with wash over pipe. Washed over fish to top of rat hole. Pulled out - did not have fish. Waited on shoe for wash pipe.
12/22	5432	Went in and washed over fish to bottom. Came out without fish. Went in with safety joint and tried to screw into fish. Came out without fish.
12/23	5486	Went in with overshot and recovered fish. Reamed rat hole and drilled ahead with 8-3/4" bit.
12/24	5637	Drilled 8-3/4" hole. Tripped to test
12/25	5670	DST #2 5416-5637 (Point Lookout). Open 5 hours. SI 30 minutes. Good blow throughout. No gas to surface. Reversed out 4200' highly gas cut mud with four small pockets of gas. BHFP 1360-1985 psi. BHSIP 2015 psi. HP 2610 psi. Pulled tester and drilled ahead.
12/26	5736	Drilled 8-3/4" hole. 17 hours fighting lost circulation.
12/27	5886	Drilling
12/28	6128	Drilling. Vis. 59, wt. 9.2
12/29	6238	Lost returns at 6229. Vis. 71, wt. 9.2
12/30	6367	Mixed mud 11-1/4 hours and drilled ahead
12/31	6530	Drilling. Vis. 60, wt. 9.0
1/1/57	6742	Drilling
1/2	6918	Drilling
1/3	7065	Drilling. Vis. 66, wt. 9.2
1/4	7263	Drilling
1/5	7442	Drilling. Vis. 54, wt. 9.2
1/6	7548	Drilling
1/7	7599	Circulated samples at 7599' and strung up new drilling line
1/8	7649	Drilling. Vis. 65 wt. 9.3
1/9	7696	Drilling and working on rotary sprocket
1/10	7779	Circulated samples 3-1/4 hrs. and pulled out to run Schlumberger
1/11	7795	Ran Schlumberger and drilled ahead
1/12	7795	Conditioned hole and w/o casing
1/13	PB 6080	Plugged back 6240-6080 w 50 sax. Conditioned hole and mixed mud for lost circulation.
1/14	6080	Layed down 4-1/2" drill pipe and started running casing
1/15	5615	Ran 136 jts 5-1/2" 15.50# J-55 csg. to 5665'. Float collar at 5620'. Cemented w 275 sx slosset + 4% gel. Plug down 2:40 AM Used 5 centralizers + 7 scratchers 5660-5200 (Pt. Lookout). Full mud returns during cementing. Temp. survey found TD at 5615. Top cement in annulus 4570'. Landed casing and released rig because of weather.

WELL HISTORY - RINCON #84 (continued)



COMPLETION

<u>Date</u>	<u>Depth</u>	<u>Remarks</u>
6/27/57	5615	Started moving in "Burr" Gibbons cable tool rig Finished rigging up and started running Lane Wells Logs Ran Lane Wells G.R., Neutron and M.S. Logs. Tagged bottom at 5615'. Perforated with L.W. "E" gun (Pt. Lookout) 3 shots per foot. 5444-5490; 4 shots per foot 5508-5514, 5522-5526, 5530-5532, 5539-5542, 5550-5554. (Total 222 bullets) Sand water fraced with 70,000 gallons and 70,000# 20-40 sand. Flushed with 185 bbls. water (overflushed 50 bbls.) Formation breakdown pressure 2200#, treating pressure 2000#, final pressure 2000#. Fraced in seven stages using 225 rubber coated nylon balls. No breakdown during treatment. Average injection rate 5 1/2 bbls. per minute. Ran junk pusher to 5200'. Set L.W. Magnesium bridge plug @ 5140'. Pressured plug w 2000#. Held OK. Perf- orated Mansfee w L.W. "E" gun 3 shots per foot 5062-5078, 5088- 5098, 5104-5114, 5120-5130 (Total 138 bullets). Sand-water fraced w 46,000 gallons, 46,000# 20-40 sand. Flushed w 180 bbls. water (over flushed 50 bbls.) Formation breakdown pressure 3250#, treating pressure 2300-2600#. Final pressure 2600#. Fraced in 5 stages using 135 rubber coated nylon balls. Had good build up and breakdown on all five stages. Average injection rate 4 1/2 bbls. per minute. Formation pressure bled to 1200# immediately and after 20 minutes had leveled off at 1100#. Dowell tore down and moved out. Cracked valve on casing head and flowed one inch stream of water.
6/28	5615	
6/29	5140	
6/30	5140	Flowed small stream of water until well died at 3:00 A.M. Rig- ged up and ran sand pump. Found sand at 5100'. Cleaned out to top of bridge plug at 5140'. Recovered 216 balls. Ran in cable tool bit and started drilling on bridge plug. Sand came in and had to clean out with sand pump again.
7/1	5140	Drilling bridge plug down to rubber but plug still did not give way. Rigged up to drill with gas. Started in with tubing and 4" bit.
7/2	5140	Going in with tubing and blowing hole dry. Cleaned out to 4000'. Had to circulate every 5 joints to clean hole w 250 psi line pressure. Using El Paso gas.
7/3		Found bridge plug at 4739'. With upper slips drilled up, the water pressure below plug had forced it up the hole. Pushed plug to 5284' with weight of tubing, cleaning out water on way down. At that depth water came in from below plug and had to pull 11 joints of tubing to unload water with gas.
7/4		Pushing and drilling plug to bottom and blowing well clean
7/5	5580	Pushed and drilled bridge plug to 5580'
7/6		Blew well with supply gas
7/7		Pulled tubing to remove bit and run production tubing. In 15 hours the well filled up 450 ft. with water.
7/8		Running tubing two joints at a time and blowing water out of well.
7/9	5580	Tubing detail: KB to casing flange 9.60 2-3/8" OD 4.70# J-55 177 Jts 5532.25 2-3/8" OD pup 6.00 2-3/8" OD sub with serrtoothed pin collar 2.80 <u>2.80</u>
		Landed at 5550.65
7/10		Rig released 7:00 A.M. Could not reverse supply gas. Blowing well down tubing up somalus. Water 2460 PPM chloride. Well shut in 8:30 - 11:30 A.M. to tear out rig. Continued to blow well clean but still could not reverse. Well making about 186 MCF/D formation gas.
7/11		Blowing well but not able to reverse supply gas.
7/12		Reversed supply gas down casing up tubing. With supply gas off 45 minutes, well gauged 291 MCF but started loading up with water. Well making some distillate. Water 3607 PPM chloride.

## WELL HISTORY - RINCON #81 (continued)

COMPLETION

<u>Date</u>	<u>PBD Depth</u>	<u>Remarks</u>
7/13/57	5530	Put supply gas on intermitter: 1 hour on, 1 hour off. Well making considerable fluid
7/14		with supply gas off 40 minutes, flow was not enough to measure. When supply gas came on, initial flow had very heavy mist. Diminished to fine mist after 25 minutes. Changed intermitter to 1/2 hour on, 1-1/2 hours off.
7/15		Well unloaded about 1/2 bbl. fluid during 1/2 hour supply gas was on. Estimate 1/4 to 1/2 of fluid was distillate. After supply gas was off 30 minutes flow was too small to measure.
7/16		Well unloaded heavy mist during entire half hour supply gas was on.
7/17		No change
7/18		After supply gas had been on 25 minutes, mist had decreased to very light. After supply gas had been off 35 minutes, flow measured 345 MCF/D. Left intermitter on 1/2 hour on - 1-1/2 hrs. off.
7/19		No change
7/20		During first 15 minutes with supply gas on mist decreased from heavy to light. After supply gas had been off 45 minutes, flow measured 200 MCF/D. Changed intermitter to 20 minutes on, 1 hour 40 minutes off.
7/30		After being shut in 24 hours, CP 775 psi, TP 400 psi. Opened tubing and blew solid water and distillate for 5 minutes. After 30 minutes well was blowing dry. Shut in tubing and pressures equalized immediately at 300 psi.
8/1		Shut in 44 hours. CP 875 psi, TP 875 psi. Open 1 hour, CP 180 psi, TP 20 psi. Gauged 1,020 MCF/D and still blowing heavy mist.
8/4		Shut in 75 hours. CP 930 psi, TP 930 psi. Open 1 hour. CP 190 psi, TP 45 psi. Gauged 1393 MCF/D. Flowed 2 barrels fluid, 65% distillate, 25% water (2130 PPM chloride) 10% BS and mud.
8/20		Shut in 16 days. CP 1025 psi, TP 1100 psi. It took 2-1/2 hrs. to get the well full open. After 3 hours the rate was 1730 MCF/D. After 4 hrs. the rate was 1038 MCF/D and the well was making approximately 5 gallons fluid per hour through separator. After 16 hours the well leveled off at 517 MCF/D and held that rate to the end of the 24 hour test. The water at the beginning of the test analyzed 12,638 PPM chlorides and a sample caught at the end of the test analyzed 2840 PPM chlorides.
9/4		Shut in 14 days for potential test. Static shut in tubing pressure 1032 psig. Well opened 11:30 A.M. on a 3/4" choke. At 2:30 P.M. tubing pressure 50 psig, casing pressure 166 psig, temperature 66°F, flow rate 821 MCF/D, calculated AOF 839 MCF/D.

