

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

Other instructions on reverse side

FOR APPROVED  
OMB NO. 1004-0137  
Expires: December 31, 1991

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_  
 b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  FLUR BACK  DIFF. ENVR.  Other \_\_\_\_\_

2. NAME OF OPERATOR  
Robert L. Bayless

3. ADDRESS AND TELEPHONE NO.

P.O. Box 168 Farmington, N.M. 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State regulations)  
 At surface 1185 FSL & 790 FWL  
 At top prod. interval reported below Same  
 At total depth Same

**RECEIVED**  
JUL 31 1992  
OIL CON. DIV.  
DIST. 3

5. LEASE DESIGNATION AND SERIAL NO.  
701-90-0002  
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Jicarilla  
 7. UNIT AGREEMENT NAME  
#1  
 8. FARM OR LEASE NAME, WELL NO.  
Jicarilla 30-3-28  
 9. API WELL NO.  
#1  
 10. FIELD AND POOL, OR WILDCAT  
East Blanco Pictured Cliffs  
 11. SEC. T. R. M., OR BLOCK AND SURVEY OR AREA  
Sec. 28, T30N, R3W  
 12. COUNTY OR PARISH  
Rio Arriba  
 13. STATE  
New Mexico  
 19. ELEV. CASINGHEAD

14. PERMIT NO. 30-039-25130 DATE ISSUED \_\_\_\_\_  
 15. DATE SPUNDED 11-7-91 16. DATE T.D. REACHED 11-12-91 17. DATE COMPL. (Ready to prod.) 1-14-92  
 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 7137' GL 7149' RKB  
 20. TOTAL DEPTH, MD & TVD 4054' 21. PLUG, BACK T.D., MD & TVD 3949'  
 22. IF MULTIPLE COMPL., HOW MANY\* \_\_\_\_\_ 23. INTERVALS DRILLED BY ROTARY TOOLS 0=TD CABLE TOOLS \_\_\_\_\_

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
Pictured Cliffs: 3642' - 3720'  
 25. WAS DIRECTIONAL SURVEY MADE No  
 26. TYPE ELECTRIC AND OTHER LOGS RUN Induction, Neutron, Density  
 27. WAS WELL CORED No

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
8 5/8"	24#	146.78' / 4049'	12 1/4"	154'	
4 1/2"	10.5#/ft.		7 7/8"	3875 sx 1031 <sup>3</sup> Class B w/2 325 sx 410 <sup>3</sup> 50/50 pozmix 10% salt; 100 sx 118 <sup>3</sup>	% econolite; w/2% gel & Class B

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	3676'	No

31. PERFORATION RECORD (Interval, size and number)

3642 - 3679 37' 75 holes  
 3708 - 3720 12' 25 holes  
 3 1/8" gun - 2JSPF - .34" diameter

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
3642 - 3720	500 gal 7 1/2% DI weighted HCL acid; 150 l.l s.g. RCN ball sealers. 75,000 gal 70 quality foam w/100,000# 20/40 sand. 940,000 SCF Nitrogen

33. PRODUCTION

DATE FIRST PRODUCTION S.I. PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing WELL STATUS (Producing or shut-in) SI

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
1-21-92	3			0	70	0	

FLOW. TUBING PRBS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
	882		0	601 AOF	0	

34. DISPOSITION OF GAS (Bold, used for fuel, vented, etc.)  
Vented

35. LIST OF ATTACHMENTS

TEST WITNESSED BY David Balko

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Kevin H. McCord TITLE Petroleum Engineer DATE January 24, 1992

(See Instructions and Spaces for Additional Data on Reverse Side)

ACCEPTED FOR RECORD

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

OPFRATOR FARMINGTON RESOURCE AREA

31-92

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
Ojo Alamo SS	3142	3384	Sandstone, siltstone, water, small amounts of natural gas.	Ojo Alamo	3142	
Kirtland - Fruitland FMS	3384	3640	Sandstone, siltstone, shale, coal, water, natural gas.	Kirtland - Fruitland FMS	3384	SAME
Pictured Cliffs SS	3640	4054	Sandstone, siltstone, shale, natural gas.	Pictured Cliffs	3640	

38. GEOLOGIC MARKERS

77  
WEST 1/4  
OF CONT. 1A  
T. 12N. R. 10E. S. 10E.

RECEIVED  
BLM

92 JAN 29 AM 10:22

019 FARMINGTON, N.M.

ACCEPTED FOR RECORD

JAN 31 1992

ROBERT L. BAYLESS  
Jicarilla 30-3-28 #1  
1185' FSL & 790' FWL  
Sec. 28, T30N, R3W  
San Juan County, NM

FARMINGTON RESOURCE AREA

BY RLB

- 11/8/91 Spud well at 3:30 p.m., 11/7/91. Drilled 163 ft. of 12 1/4" surface hole. Ran 4 jts. (146.78) of 8 5/8" used surface casing and landed at 160 ft. RKB. Rigged up Cementers, Inc. Cemented surface with 135 sacks (159 ft<sup>3</sup>) of Class B cement with 3% CaCl<sub>2</sub>. Good circulation throughout job. Circulate cement to surface. Plug down at 8:30 p.m., 11/7/91. Wait on cement. Pressure test surface casing and cement to 600 psi for 30 minutes. Held ok. Drilled cement. Drilled 92 feet of formation. Drilling.
- 11/9/91 Drilling at 2040'.
- 11/10/91 Drilling at 3050'.
- 11/11/91 Bit #3 had one cone left in hole. Bit #4 used to mill up cone and clean up hole. Note: 1 hr. of drilling was working on junk. Drilling at 3490'.
- 11/12/91 Catwork charged involved pulling in casing truck and butane truck and location costs above previous estimate. TD expected at 10 a.m. today.
- 11/13/91 TD wells at 11:15 a.m., 11/12/91. Circulate, short trip, trip out of hole for logs. Rigged up Halliburton Logging Services. Log stopped at 3711'. Ran Induction, Neutron, Density logs out of hole. Hole sticky. Tripped in hole with drillpipe and collars. Work through bridges from 3711 to TD without circulation. Short trip. TOH for logs. Logs went to loggers TD of 4054'. Started logging P.C. interval. Logging tool got stuck at 3713'. Worked on tool. Pulled out of rope socket at 8300 lbs pull. Wait on Homco fishing tools. Rig up fishing tools.
- 11/14/91 Trip in hole with fishing tools. Tag fish at 3835, fish dropped to bottom. Circulate fill. Overshotted fish. Chain out of hole with fish (wet) laydown fish and fishing tools. Trip in hole with collars and drillpipe. Laydown drillpipe and collars. Ran 97 jts. of 4 1/2" 10.5#/ft. J-55 new Maverick casing as follows:

Description

KB to landing point

Length

14.00

Depth

0-14

New Maverick casing	2028.93	14-2043
1 DV Tool	2.15	2043-2045
47 jts. of 4 1/2" 10.5#/ft. J-55		
New Maverick casing	1959.81	2045-4005
1 sure seal float	1.46	4005-4006
1 jt. of 4 1/2" 10.5#/ft. J-55		
New Maverick casing	41.75	4006-4048
1 cement filled guide shoe	<u>0.70</u>	4048-4049
	4048.80	

Centralizers at 4027, 3755, 3713, 3671, 3633, 3590, 3213, 3171, 2087, and 2000 turbo centralizers at 3421, 3379, 3044, and 3002. Circulated for one hour. Rigged up Halliburton. Pumped 10 bbls of water ahead. Pumped 1st stage with 125 sx (258 ft<sup>3</sup>) of Class B cement with 2% econolite tailed by 325 sx (410 ft<sup>3</sup>) of 50/50 pozmix with 2% gel and 10% salt. Good circulation throughout job. Bumped plug to 1000 psi. Held ok. Plug down at 2:15 a.m., 11/14/91. Dropped bomb to open DV tool. Tool opened at 550 psi. Circulate for four hours (circulated approximately five barrels of cement). Pumped 10 barrels of water ahead. Cemented 2nd stage with 50 sx (59 ft<sup>3</sup>) of Class B cement tailed by 3750 sx (773 ft<sup>3</sup>) of Class B cement with 2% econolite tailed by 50 sx (59 ft<sup>3</sup>) of Class B cement. Good circulation throughout job. Circulated 30 barrels of cement to surface. Bumped plug to 2750 psi. Held ok. Plug down at 7 a.m., 11/14/91. Set slips and rig down. Rig released at 10 a.m., 11/14/91. Wait on completion.

- 1-3-92 Move in and rig up Bayless Rig #3 - nipple up wellhead - nipple up BOP - pick up 3 7/8" bit, casing scraper, and 2 3/8" tubing - tag cement on top of DV tool at 1975 ft - SDFN.
- 1-4-92 Drill 68 feet of cement on top of DV tool - Drill most of DV tool - then DV tool quit drilling - bit would spin on top of tool and not drill - SDFN.
- 1-5-92 Trip tubing and bit out of hole, replace bit (worn) and resume drilling - had no better success with new bit - trip bit out of hole (no wear) and trip in hole with mill on tubing - try drilling with mill, still without success - SDFN.
- 1-6-92 Trip out of hole with tubing and mill - pick up 6 - 3 1/8" drill collars and mill - resumed drilling with success - lost air compressor on rig - shut down for night for repairs.
- 1-7-92 Repaired air compressor - drilled through remaining DV tool - trip out of hole with collars and mill - trip in hole with bit and casing scraper - work casing scraper through DV tool and clean out - pressure test to 600 psi - held OK - trip in hole - tag cement on top of float collar at 3955 ft. - PBD @ 3955 ft. - SDFN.
- 1-8-92 Rigged up the Western company - circulated hole clean with 1% KCL water - moved tubing to 3720 ft. - spotted 250 gallons of 7 1/2% DI HCl acid - trip tubing out of hole -

Ran GR-CLL-CBL log from corrected loggers PBD of 3949 feet to 3000 feet - good bond - Pressure tested casing and wellhead to 3500 psi - held OK - Perforated Pictured Cliffs interval with 3 1/8" casing gun and 2JSPF as follows:

3642 - 3679	37'	75 holes
3708 - 3720	12'	<u>25 holes</u>
		100 holes (.34" diameter)

Broke down perforations immediately - Established rate of 6.0 BPM @ 950 PSI, ISIP = 650 psi - acidized Pictured Cliffs perfs with 500 gallons of 7 1/2% DI weighted HCL acid containing 150 1.1 s.g. RCN ball sealers - 6.0 BPM @ 1150 psi, then broke to 6.0 BPM @ 700 psi (at 36 BBLs pumped) - had good ball action - did not quite balloff - 2.2 BPM @ 3300 psi - surged balls off of perforations - final rate 5.8 BPM @ 850 PSI, ISIP @ 650 PSI - ran junk basket in hole - recovered 97 ball sealers - SDFN.

1-9-92 Rigged up the Western Company - Fracture stimulated the Pictured Cliffs interval with 75,000 gallons of 70 quality foam containing 100,000 lbs of 20-40 mesh Arizona sand as follows:

15,000 gal of 70 quality foam pad	30 BPM @ 2200 psi
20,000 gal of 70 quality foam with 1 ppg 20-40 sand	31 BPM @ 2100 psi
40,000 gal of 70 quality foam with 2 ppg 20-40 sand	30 BPM @ 2000 psi
2,400 gal of 70 quality foam flush	30 BPM @ 2000 psi

ISIP = 1650 psi decreasing to 1450 psi after 15 minutes - Average rate 30 BPM, average pressure 2000 psi - maximum pressure 2200 psi, minimum pressure 1950 psi - total fluid pumped 551 bbls - nitrogen pump rate from 16,200 to 14,300 scf/min - total nitrogen pumped 940,000 scf - shut well in for 4 hrs. - opened well to the atmosphere through a 1/2" tapped bullplug - well flowing to cleanup after frac - SDFN.

1-10-92 Well flowing to pit to clean up after frac.

1-11-92 Well flowing burnable gas - remove choke and blow down well - kill well and attempt to fill hole without success - trip in hole with hydrostatic bailer on tubing - tag sand fill at 3706 ft RKB (bottom perfs covered with sand) - clean out 169 feet of sand with bailer to 3875 ft RKB - trip out of hole with tubing and bailer - trip in hole with production tubing and land as follows:

<u>Description</u>	<u>Length</u>	<u>Depth</u>
KB to landing point	10.50	0-11
118 jts 2 3/8" 4.7 #/ft J-55 EUE used tubing	3635.71	11-3646
1 seating nipple	.70	3646-3647
1 jt. 2 3/8" 4.7 #/ft J-55 EUE used tubing	29.12	3647-3676
1 notched collar	.40	3676.
	<u>3676.43</u>	

nipple down BOP - nipple up wellhead - remove frac valves

- 1-12-92 Overnight pressures: tubing 0 psi, annulus 750 psi - opened well to pit - well started flowing on it's own - well flowing open ended to pit making gas, water, and sand - released rig - left well flowing to pit to clean up - SDFN.
- 1-13-92 Well flowing to pit to clean up for AOF.
- 1-14-92 Shut in well for 7 day buildup for AOF test.
- 1-15-92- Well shut in for buildup for AOF  
1-20-92
- 1-21-92 Took 3 hour flow test through 1/2" choke for AOF test - shut in pressures: tubing 880 psi, annulus 882 psi - pressures after 3 hours of flow: tubing 70 psi, annulus 241 psi - calculated Q: 560 MCFD, calculated AOF: 601 MCFD.