

Submit in duplicate to
appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Robert L. Bayless						Lease or Unit Name Apache Bend											
Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special						Test Date 3-15-93			Well No. 3								
Completion Date 1-28-93			Total Depth 2977			Plug Back TD 2910			Elevation 7325 GL			Unit Ltr. - Sec. - TWP - Rge. F-31-T23N-R2W					
Csg. Size 4 1/2		Wt. 10.5		d 2965		Set At 2965			Perforations: From: 2846 To: 2858			Country Sandoval					
Tbg. Size 1 1/4		Wt. 2.4		d 2858		Set At 2858			Perforations: From: To:			Pool Ballard					
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At None			Formation Pictured Cliffs								
Producing Thru Tubing			Reservoir Temp. °F			Mean Annual Temp. °F			Baro. Press. - P _a 12.0 psi est.			Connection EPNG					
L		H		Gg est. .65		% CO ₂		% N ₂		% H ₂ S		Prover		Meter Run		Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F		
SI						425		425			
1.	2 inch x .750"					98		389			3 hrs.
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$h_w P_m$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	12.365		110	1.000	1.240	1.014	1710
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P. I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	0.16		1.39	0.973						
2.										
3.										
4.										
5.										

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1.		401	160,801	30,168		
2.						
3.						
4.						
5.						

Absolute Open Flow 8207 Mcfd @ 15.025		Angle of Slope θ		Slope, n .85	
Remarks:					

Approved By Division	Conducted By: David Ball	Calculated By: Kevin McCord	Checked By:
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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
Robert L. Bayless

3. Address and Telephone No.
PO Box 168, Farmington, NM 87499-0168 (505)326-2659

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1795' FNL & 1570' FWL Sec. 31, T23N, R2W

5. Lease Designation and Serial No.
701-92-0004 Jic Min Development Agreement

6. If Indian, Allottee or Tribe Name
Apache

7. If Unit or CA, Agreement Designation

8. Well Name and No.
Apache Bend #3

9. API Well No.
30-043-20878

10. Field and Pool, or Exploratory Area
Ballard Pictured Cliffs

11. County or Parish, State
Sandoval County, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other Acidize, Frac	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

See Attached Daily Report

RECEIVED
MAR 8 1993
OIL CON. DIV
DIST. 3

APPROVED:

MINERALS STAFF CHIEF
BUREAU OF LAND MANAGEMENT
RIO PUERCO RESOURCE AREA

14. I hereby certify that the foregoing is true and correct

Signed Price M. Bayless Title Petroleum Engineer Date 1-5-93

(This space for Federal or State office use)

Approved by S/ Jaramillo Title For AM Date 2/15/93

Conditions of approval, if any:

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.

Robert L. Bayless
 Apache Bend #3
 1795' FNL & 1570' FWL
 Sec. 31, T23N, R2W
 Sandoval County, NM

12-24-92 Rig up Western Company. Pump 250 gal 7 1/2% HCl acid. Start displacement and break down perfs @ 1550 psi. Pump water to displace acid into perforations at 12 bpm @ 350 psi. ISIP = 0. Let acid sit for 5 min. Roll acid into perforations. Start frac and stimulate well with 32,000 gal 70 quality foam with 46,000 lbs 12-20 sand as follows:

			<u>Avg. Press.</u>
Pad	8,000 gal 70 quality foam		1280 psi
1st Stage	10,000 gal w/1 ppg sand	10,000 lbs	1180 psi
2nd Stage	8,000 gal w/2 ppg sand	16,000 lbs	1160 psi
3rd Stage	4,000 gal w/3 ppg sand	12,000 lbs	1200 psi
4th Stage	2,000 gal w/4 ppg sand	8,000 lbs	1230 psi
Flush	1,800 gal 70 quality foam		1270 psi
		<u>46,000 lbs</u>	

Average testing pressure = 1160. Average rate = 21 bpm. ISIP = 1110 psi. 5 min = 1020 psi. 10 min = 1010 psi. 15 min = 990 psi. Shut well in for 4 hours. Open well to pit through 1/8" choke to clean up. Leave well flowing to pit.

12-26-92 Well flowing. Will burn intermittently. Leave well flowing.

12-28-92 Well flowing dry gas. Shut well in.

12-29-92 Surface casing pressure at 240 psi.