

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

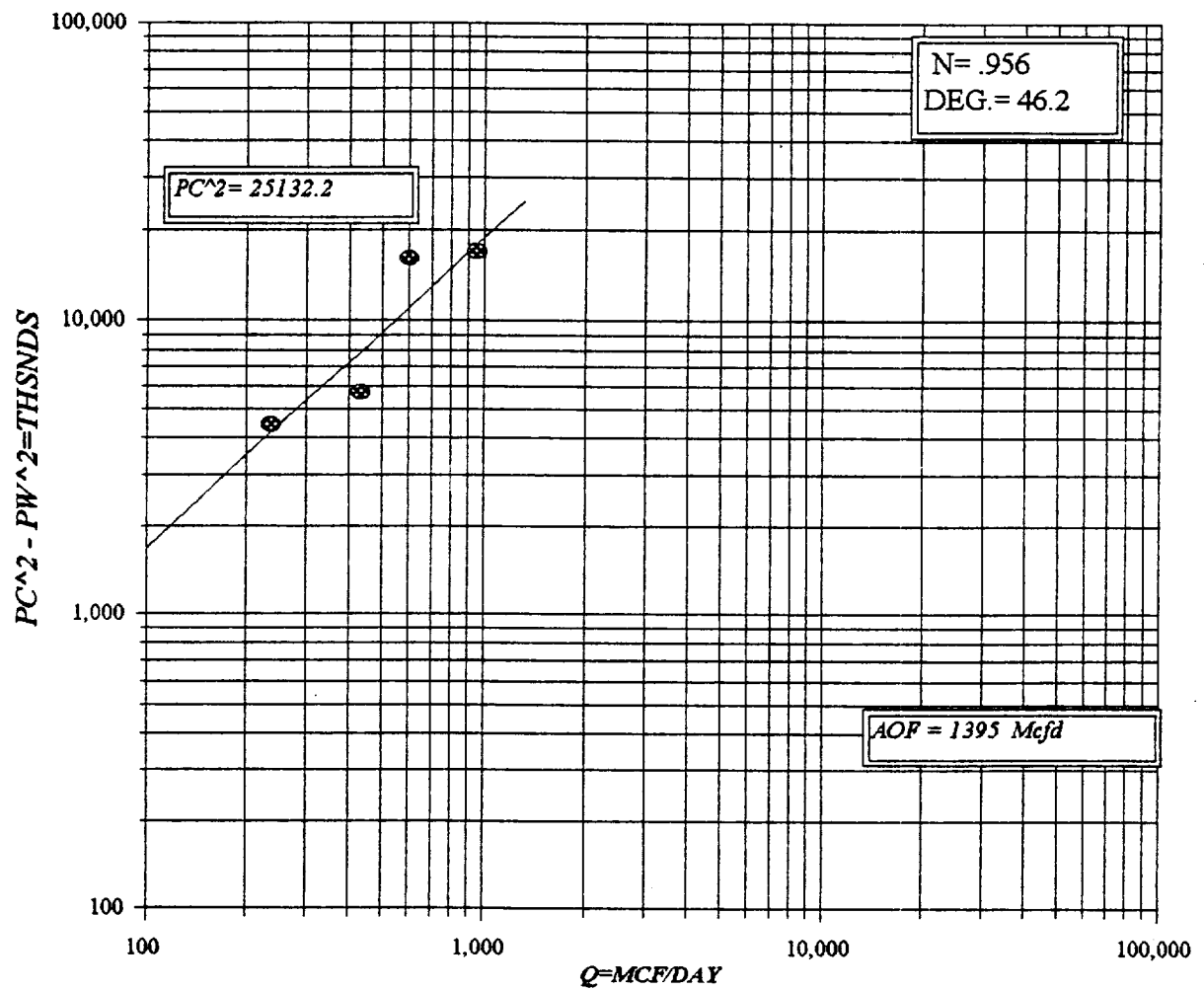
OIL CONSERVATION DIVISION

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator BURLINGTON RESOURCES OIL & GAS COMPANY					Lease or Unit Name PITCHFORK "4" FEDERAL				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 5-12-98				
Completion Date 5-7-98					Well No. 2				
Total Depth 13,955' MD, 13,845' TVD					Unit Ltr. - Sec. - TWP - Rge. 4 25-S 34-E				
Casing Size 4 1/2					Perforations: WOLFCAMP PERFS				
Well Size 15.1					From: 13546 To: 13,604' MD				
Well Size 2. 7/8					Perforations: STRAWN PERFS				
Well Size 6.8					From: 13,701' To: 13,880' ,D				
Type Well - Single - Bradenhead - G.O. Multiple					Formation GAS & WILDCAT				
Producing Thru Tbg					Well Name Wolcamp & Strawn				
Reservoir Temp. 199.8					Connection Sales 5-12-98				
Mean Annual Temp. 60°					Baro. Press. 13.2				
L 12577					Meter Run 3.068				
II 12577					Taps F/G				
Gg .733									
% CO ₂ 1.662									
% N ₂ .899									
% H ₂ S 0									
Prover 0									
FLOW DATA									
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
1.	3.068 X 2.125		62.5	1"	82°	4540	80°		60 min
2.	3.068 X 2.125		62.5	3.24"	80°	4400	82°		60 min
3.	3.068 X 2.125		62.5	6.25	80°	3000	32°		60 min
4.	3.068 X 2.125		84.1	11.5	65°	2360	82°		60 min
5.									
RATE OF FLOW CALCULATIONS									
NO.	COEFFICIENT (24 HOUR)	$\frac{h_w}{P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd		
1.	24.76	7.90	62.5	.9795	1.168	1.061	237		
2.	24.76	14.23	62.5	.9813	1.168	1.071	432		
3.	24.76	19.76	62.5	.9813	1.168	1.071	600		
4.	24.76	31.09	84.1	.9952	1.168	1.063	955		
5.									
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 3.707 Mcf/bbl				
1.	.80	542	1.37	.882	A.P. I. Gravity of Liquid Hydrocarbons 52.5 Deg				
2.	.80	540	1.36	.872	Specific Gravity Separator Gas .733 XXXXXXXXXX				
3.	.80	540	1.36	.872	Specific Gravity Flowing Fluid N/A XXXXXX				
4.	.77	525	1.32	.877	Critical Pressure 675 P.S.I.A. P.S.I.A.				
5.					Critical Temperature 395 °R °R				
P _e 5013.2 P _w 25132.2									
NO.	P _e ²	P _w	P _w ²	P _e ² - P _w ²	1) $\frac{P_e^2}{P_e^2 - P_w^2} = 1.49$ (2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 1.46$				
1.	4553.3	20732.6	4399.6		AOF = Q $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 1398$				
2.	4413.6	19479.5	5652.6						
3.	3014.0	9084.4	16047.8						
4.	2375.4	8267.8	16864.4						
5.									
Absolute Open Flow 1398 Mcfd @ 15.025					Angle of Slope 46.2				
					Slope, n .956				
Remarks: * Well made 25 BBL of 52.5 API gravity condensate									
Last Choke Size 11/64"									
Approved By Division			Conducted By: Pro Well Testing			Calculated By: V. 3.		Checked By: B. M.	

BURLINGTON RES.
PITCHFORK 4 FED #2



**Laboratory Services, Inc.**

1331 Tasker Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Pro Well Testing & Wireline
Attention: Mr. Leonard Abney
P. O. Box 791
Hobbs, New Mexico 88241

SAMPLE
IDENTIFICATION: Pitchfork 4 Fed. #2
COMPANY: Burlington Resources
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 5/12/98 2:00 PM
ANALYSIS DATE: 5/12/98
PRESSURE - PSIG 100
SAMPLE TEMP. °F
ATMOS. TEMP. °F

GAS (XX) LIQUID ()
SAMPLED BY: Lane Thorp
ANALYSIS BY: Vickie Walker

REMARKS:

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H2S)		
Nitrogen (N2)	0.899	
Carbon Dioxide (CO2)	1.662	
Methane (C1)	77.771	
Ethane (C2)	11.603	3.096
Propane (C3)	4.614	1.268
I-Butane (IC4)	0.797	0.260
N-Butane (NC4)	1.403	0.441
I-Pentane (IC5)	0.411	0.150
N-Pentane (NC5)	0.347	0.125
Hexane Plus (C6+)	0.493	0.202
	100.000	5.542

BTU/CU.FT. - DRY 1232
AT 14.650 DRY 1229
AT 14.650 WET 1207
AT 14.73 DRY 1235
AT 14.73 WET 1214

MOLECULAR WT. 21.2319

SPECIFIC GRAVITY -
CALCULATED 0.733
MEASURED

NEW MEXICO G.O.R./G. MIX

NO. OF BBLs PRODUCED = 25.0
API GRAVITY @ 60 DEG. = 52.5

SPECIFIC GRAVITY OF GAS = 0.7330

XX
TOTAL GAS PRODUCED = 93

G.O.R. = 3.707

G.MIX = 1.405