

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

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-122
Revised October, 1999

30-025-36087

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Pure Resources, L. P.					Lease or Unit Name Madera "36" State				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 9/16/03		Well No. 1		
Completion Date 9/13/2003		Total Depth 16,389'		Plug Back TD 15,245'		Elevation 3,197' GR		Unit Ltr - Sec - TWP - Rge A-36-26S-34E	
Csg. Size 5"	Wt. 18#	d 4.27'	Set At 16,077'	Perforations: From: 14,518' - To: 15,064'			County LEA		
Tbg. Size 2-7/8"	Wt. 8.7#	d 2.25"	Set At 14330	Perforations: From: To:			Pool Wildcat		
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE					Packer Set At 14330		Formation (Strawn)		
Producing Thru TBG		Reservoir Temp. 197		Mean Annual Temp. 60		Baro. Press.-P _a 13.2		Connection AIR	
L 14340	H 14340	Gg 0.6247	%CO ₂ 0.8744	%N ₂ 0.7618	%H ₂ S -	Prover -	Meter Run 4.026	Taps FLG	

FLOW DATA				TUBING DATA				CASING DATA				Duration of Flow
No.	Prover Line Size	Orifice x Size	Press p.s.i.g.	Diff. h _w	Temp.	Press p.s.i.g.	Temp.	Press p.s.i.g.	Temp.			
SI						9594		PKR				
1	4.026 X 2.250		810	4	94	9397				1 HR		
2	4.026 X 2.250		820	20	71	8990				1 HR		
3	4.026 X 2.250		840	46	68	8388				1 HR		
4	4.026 X 2.250		800	80	62	7649				1 HR		
5												

RATE OF FLOW CALCULATIONS									
No.	COEFFICIENT (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress Factor F _{pv}	Rate of Flow Q, Mcfd		
1	25.64	57.38	823.2	0.9688	1.266	1.041	1878		
2	25.64	129.73	833.2	0.9396	1.266	1.045	4134		
3	25.64	198.1	853.2	0.9924	1.266	1.046	6673		
4	25.64	255.06	813.2	0.9981	1.266	1.048	8660		
5									

No.	P _r	Temp. R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf bbl.
1	0.82	554	1.53	0.923	A.P.I. Gravity of Liquid Hydrocarbons 55.6 @ 60	Deg.
2	0.78	531	1.47	0.916	Specific Gravity Separator Gas 0.6247	XXXXXXX
3	0.78	528	1.46	0.914	Specific Gravity Flowing Fluid XXXXX	GMIX= .844
4	0.77	522	1.44	0.91	Critical Pressure 674	P.S.I.A. 668 P.S.I.A.
5					Critical Temperature 361	R. 434 R

P _c 9951.4 P _{c2} 99030.3				
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		9788.9	95822.6	3207.7
2		94444	89189.1	9841.2
3		8971.6	80489.6	18540.7
4		8399.4	70549.9	28480.4
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{3.47}{\quad}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{2.4}{\quad}$

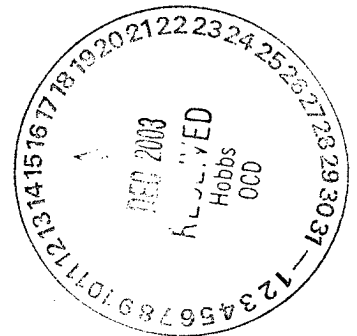
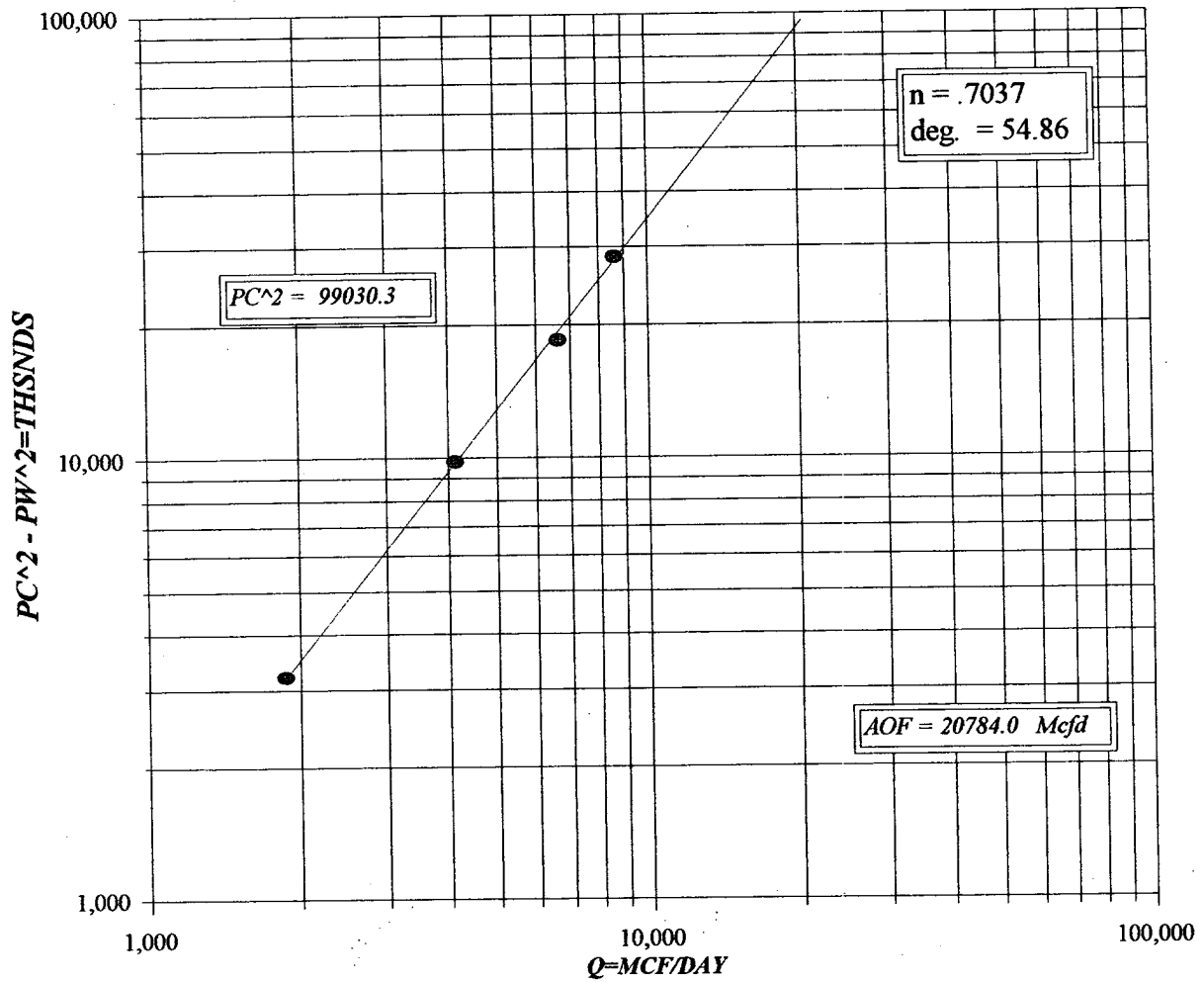
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{20,784}{\quad}$

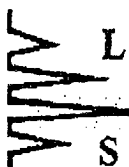
Absolute Open Flow 20,784		Mcf @ 15.025	Angle of Slope (°) 54.86	Slope n: 0.7037
---------------------------	--	--------------	--------------------------	-----------------

Remarks: * WELL MADE 69 BBLS OF 55.6 API GRAVITY CONDENSATE DURING TEST. CALCULATED FROM KNOWN BOTTOM HOLE PRESSURES

Approved By Division:	Conducted By:	Calculated By:	Checked By:
	PRO WELL TESTING	MERV BUECKER	BM

PURE RESOURCES MADERA "36" ST. #1





Laboratory Services, Inc.

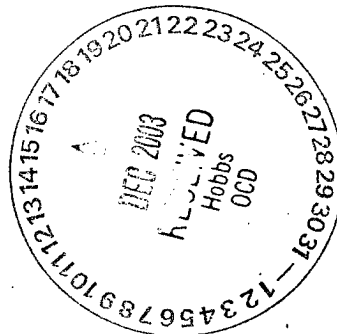
4016 Fiesta Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

Run File	C:\STAR\DATA\05_21_2002\PURE RES MADERA 36.RUN		
Method	C:\star\method_extended_gas_scott.mth		
Operator	Vickie Biggs	Analysis Date	9/17/2003
Station	Madera 36 St. #1	Company	Pure Resources
Effective Date		Pulled Data	9/16/03 8:40 am
Received Date	9/16/03	Composite/Spot	Spot

<u>Component</u>	<u>Mole %</u>	<u>BTU</u>	<u>GPM</u>
H2S	0.0000	0.00	0.0000
Nitrogen	0.7618	0.00	0.0000
Methane	68.2169	893.05	0.0000
CO2	0.8744	0.00	0.0000
1-Butane	0.3732	12.16	0.1221
Ethane	6.9941	124.05	1.8706
n-Butane	0.4214	13.78	0.1329
1-Pentane	0.1141	4.58	0.0418
n-Pentane	0.0748	3.01	0.0271
Cyclopentane	0.0112	0.42	0.0033
2-Methylpentane	0.0108	0.51	0.0045
3-Methylpentane	0.0082	0.39	0.0033
n-Hexane	0.0168	0.80	0.0069
Methylcyclopentane	0.0048	0.22	0.0017
Benzene	0.0045	0.17	0.0013
Cyclohexane	0.0082	0.37	0.0028
n-Heptane	0.0048	0.26	0.0022
Methylcyclohexane	0.0031	0.16	0.0012

9/17/2003



Run File C:\STAR\DATA\05_21_2002\PURE RES MADERA 36 .RUN

Method C:\star\method_extended_gas_scott.mth

Operator Vickie Biggs

Analysis Date 9/17/2003

Station Madera 36 St. #1

Company Pure Resources

Effective Date

Pulled Data 9/16/03 8:40 am

Received Date 9/16/03

Composite/Spot Spot

<u>Component</u>	<u>Mole %</u>	<u>BTU</u>	<u>GPM</u>
Toluene	0.0011	0.05	0.0004
n-Octane	0.0003	0.02	0.0002
Propane	2.0956	32.85	0.5774
Totals	100.0000	1,106.85	2.7996

Relative Density from Composition 0.6247

BTUs @ 14.85 Saturated 1,091

BTUs @ 14.65 Dry 1,110

Compressibility 0.99747

9/17/2003



Laboratory Services, Inc.

4016 Fiesta Drive
Hobbs, New Mexico 88240
Telephone: (505) 397-3713

ASTM DISTILLATION

Pro Well Testing & Wireline
P. O. Box 791
Hobbs, New Mexico 88241

Sample Date: 9/16/03
Sampled By: Rolland Perry

Pure Resources
Madera 36 State #1

Percent Distilled

Temperature

IBP	94
5	115
10	142
20	193
30	227
40	258
50	302
60	365
70	441
80	534
90	552
EP	634

% Recovered = 91.0
% Residue = 4.0
% Loss = 5.0

API Gravity @ 60° F = 55.6
Molecular Weight = 110

Rolland Perry