

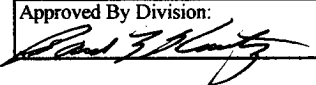
Submit in duplicate to
appropriate district office.
See Rule 401 & Rule 1122

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

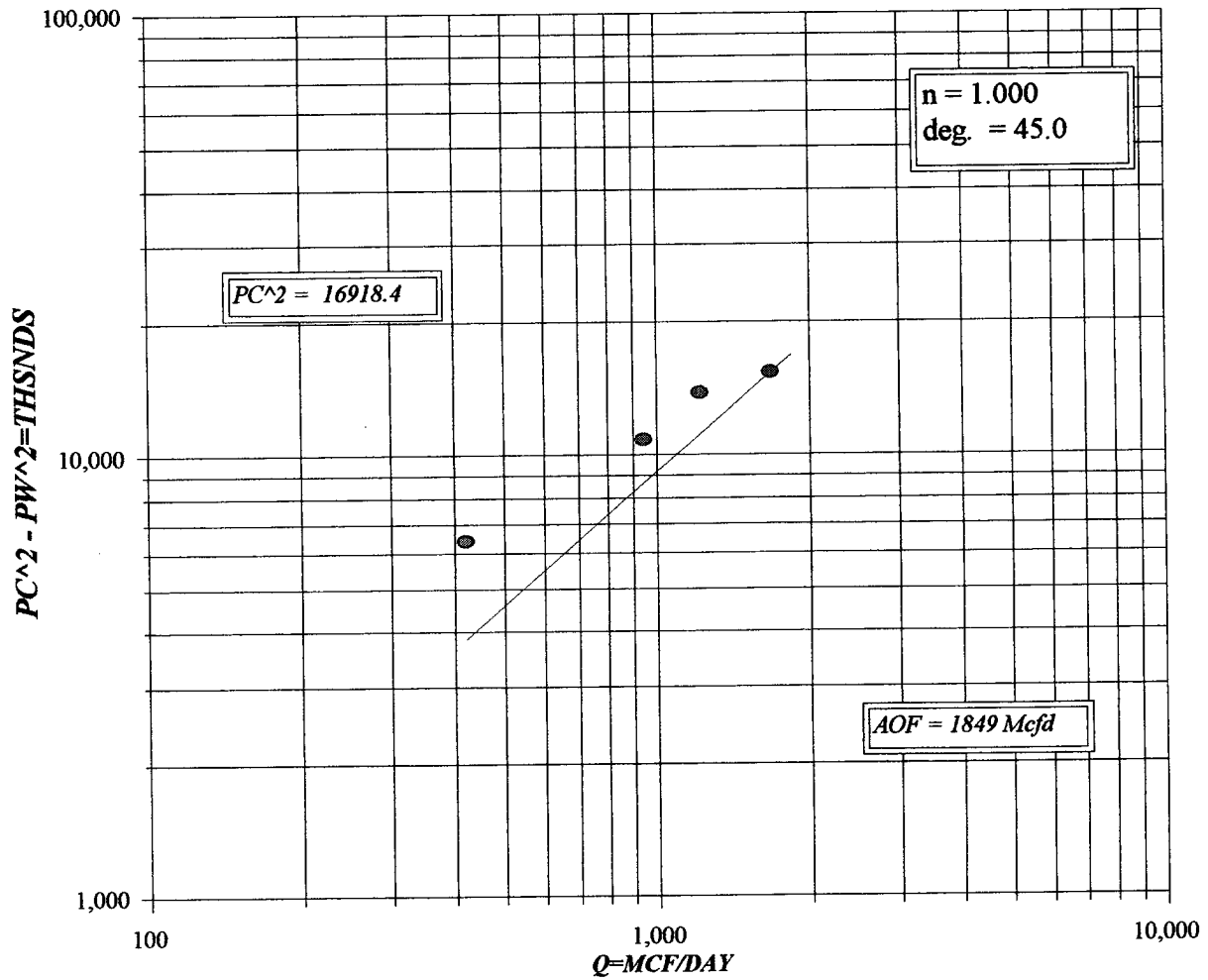
Form C-122
Revised October, 1999

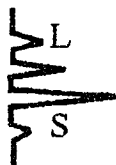
30-025-35972

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator GRUY PET.MANG.				Lease or Unit Name MESCALERO "29" FED COM			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 1/26/04		Well No. 2	
Completion Date		Total Depth 13770		Plug Back TD 13724		Elevation Unit Ltr - Sec - TWP - Rge 27 19S 34S	
Csg. Size 5 1/2	Wt. 17	d 4.892	Set At 13770	Perforations: From: 13507 To: 13529		County LEA	
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 13324	Perforations: From: To:		Pool	
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 13342		Formation MORROW	
Producing Thru TUBING		Reservoir Temp. 193		Mean Annual Temp. 60		Baro. Press.-P _a 13.2	
Connection SALES							
L 13342	H 13342	Gg 0.69	%CO ₂ 0.889	%N ₂ 3.215	%H ₂ S	Prover	Meter Run 2.067
Taps FLG							
FLOW DATA				TUBING DATA		CASING DATA	
No.	Prover Line Size	Orifice x Size	Press p.s.i.g.	Diff. h _w	Temp.	Press p.s.i.g.	Temp.
SI						4100	
1	2.067 X 1.375		484	1.8	91	3227	
2	2.067 X 1.375		489	9.6	72	2481	2
3	2.067 X 1.375		495	21.5	71	1730	
4	2.067 X 1.375		498	29.4	76	1211	
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 _{sp}	Rate of Flow Q, Mcfd
1							420
2	TOTAL	FLOW	METER				948
3							1220
4							1681
5							
No.	P _r	Temp. R	T _r	Z	Gas Liquid Hydrocarbon Ratio 44.469 Mcf bbl.		
1					A.P. I. Gravity of Liquid Hydrocarbons 47 Deg.		
2					Specific Gravity Separator Gas 0.69 XXXXXXXX		
3	TOTAL	FLOW	METER		Specific Gravity Flowing Fluid XXXXXX GMIX = .760		
4					Critical Pressure 667 P.S.I.A. 665 P.S.I.A.		
5					Critical Temperature 378 R. 410 R		
P _c 4113.2 P _w 15918.4							
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1$		
1		3240.6	10501.3	6417.1			
2		2496.5	6232.3	10868.1			
3		1748.4	3057	13861.4			
4		1238.9	1535	15383.4			
5							
Absolute Open Flow 1.849 Mcfd @ 15.025				Angle of Slope (°): 45		Slope n: 1	
Remarks: * WELL MADE 4 BBLS OF 47.0 API GRAVITY CONDENSATE DURING TEST.							
Approved By Division: 		Conducted By: PRO WELL TESTING		Calculated By: MERV BUECKER		Checked By: BM	

GRUY PET. MANAGEMENT
MESCALERO "29" FED COM #2





Laboratory Services, Inc.

4016 Fleeta Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

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

SAMPLE:
IDENTIFICATION: Mescalero 29 Fed. Com #2
COMPANY: Gruy Petroleum
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 1/26/04
ANALYSIS DATE: 1/27/04
PRESSURE - PSIG 500
SAMPLE TEMP. °F 72
ATMOS. TEMP. °F

GAS (XX) LIQUID ()
SAMPLED BY: Glen - Pro Well
ANALYSIS BY: Rolland Perry

REMARKS:

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H2S)		
Nitrogen (N2)	3.215	
Carbon Dioxide (CO2)	0.889	
Methane (C1)	81.520	
Ethane (C2)	8.500	2.268
Propane (C3)	3.612	0.993
I-Butane (IC4)	0.528	0.172
N-Butane (NC4)	1.026	0.323
I-Pentane (IC5)	0.247	0.090
N-Pentane (NC5)	0.207	0.075
Hexane Plus (C6+)	0.256	0.111
	100.000	4.032

BTU/CU.FT. - DRY 1146
AT 14.650 DRY 1142
AT 14.650 WET 1122
AT 14.73 DRY 1148
AT 14.73 WET 1128

MOLECULAR WT. 19.9839

SPECIFIC GRAVITY -
CALCULATED 0.690
MEASURED



Laboratory Services, Inc.

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

SULFUR IN CRUDE OIL

Pro Well Testing & Wireline
Attention: Mr. Merv Buecker
P. O. Box 791
Hobbs, New Mexico 88241

Jan 26, 2004

	Total Sulfur	API Gravity @ 60° F	Specific Gravity @ 60° F
Gruy Petroleum Mescalero 29 Fed. Com #2	0.060	47.0	0.7927

Thank You,
Rolland Perry

**Laboratory Services, Inc.**

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

Water Analysis

COMPANY Pro Well Testing & Wireline

SAMPLE Gruy Petroleum - Mescalero 29 Fed. Com #2

SAMPLED BY Pro Well

DATE TAKEN 1/26/04

REMARKS

Barium as Ba	0	
Carbonate alkalinity PPM	0	
Bicarbonate alkalinity PPM	72	
pH at Lab	5.69	
Specific Gravity @ 60°F	1.042	
Magnesium as Mg	18,328	
Total Hardness as CaCO ₃	31,600	
Chlorides as Cl	56,833	
Sulfate as SO ₄	675	
Iron as Fe	15.5	
Potassium	1,412.5	
Hydrogen Sulfide	0	
Rw	0.15	23.0 c
Total Dissolved Solids	90,732	
Calcium as Ca	13,272	
Nitrate	123.2	

Results reported as Parts per Million unless stated

Langelier Saturation Index - 0.71

Analysis by: Rolland Perry

Date: 1/28/04