

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

DEC 17 1984

O. C. D.

Type Test ☒ Initial ☐ Special		Test Date 12-11-84	
Company McCLELLAN OIL CO.		Connection AIR	
Pool PENJACK <i>S. P. ...</i>		Formation ABO	
Completion Date 12-12-84	Total Depth 4450	Plug Back TD 4358	Elevation 3622' GL
Well No. 4	Farm or Lease Name TOLAMC <i>St.</i>		
Well Size 4 1/2	Well No. 4		
Well Size 2 3/8	Well No. 4		
Type Well - Single - Bradenhead - G.C. or G.O. Multiple SINGLE		Packer Set At NONE	
Producing Thru TUBING		State NEW MEXICO	
Reservoir Temp. °F 60°		Mean Annual Temp. °F 13.2	
L		H	
Gg		% CO ₂	
% N ₂		% H ₂ S	
Prover		Meter Run 3"	
Taps PIPE			

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
1	3		1/2	200	50	45	885		885		1 hr
2	3		1	201	25	51	809		817		"
3	3		1	201	60	52	625		721		"
4	3		1-1/4	201	35	53	355		565		"
5											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor Fpv	Rate of Flow Q, Mcfd
1	1.206	103.25	213.2	1.0147	1.2127	1.0249	157
2	5.118	73.18	214.2	1.0087	1.2127	1.0241	469
3	5.118	113.36	214.2	1.0078	1.2127	1.0239	726
4	8.403	86.59	214.2	1.0068	1.2127	1.0238	909
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										
2										
3										
4										
5										

NO.	P _i	P _w	P _w ²	P _i 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	998	986	974	22	1.649	1.2903
2		910	828	168		
3		801	642	354		
4		626	391	604		
5						

Absolute Open Flow 1173 Mcfd @ 15.025 Angle of Slope 63 Slope, n 5095

BOTTOM HOLE PRESSURE DONE W/AMERADA TYPE GAUGE.

Remarks:

Approved By Division:	Conducted By: KELTIC SERVICES	Calculated By: KELLY	Checked By:
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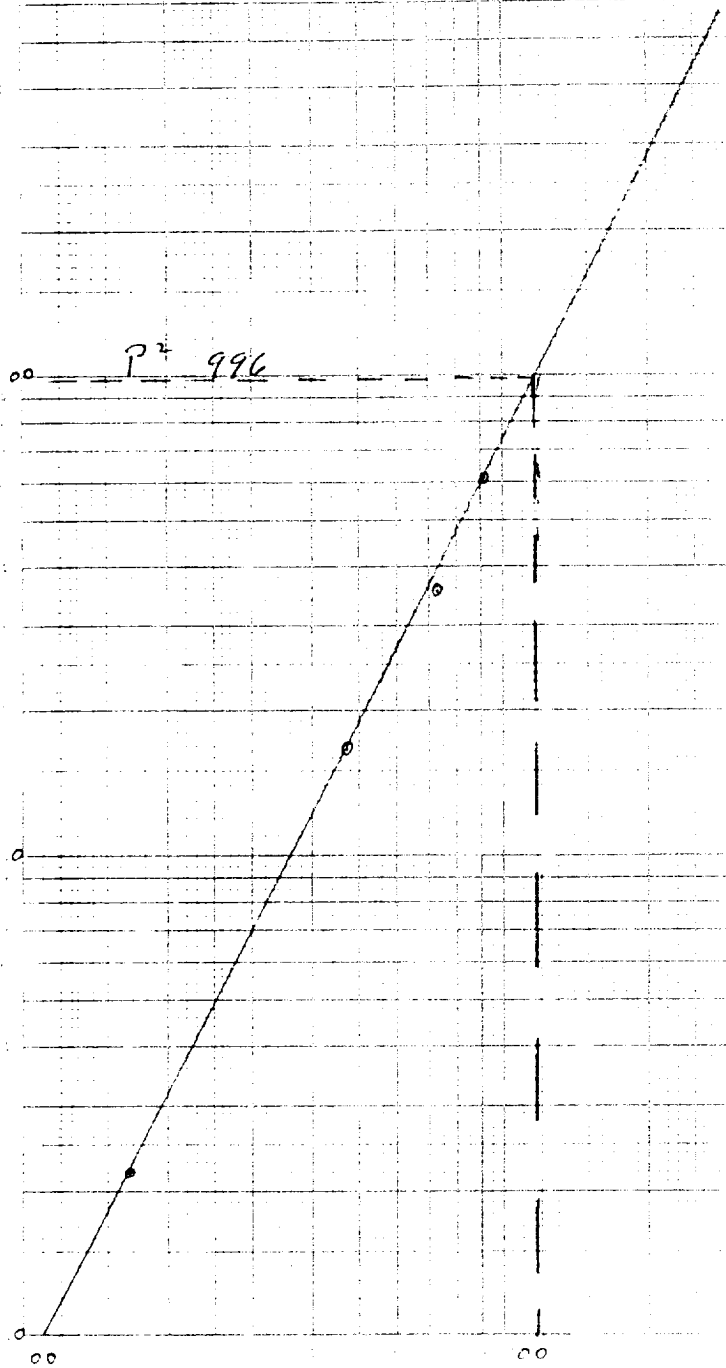
*Post # D-2
1-25-85
Comp & BH*

McClellan Oil Corp

12/11/84

TOLMAC #4

$P^2 - P^2$ (000)



63° m .5095

Q
MSCFPD

"Let your Interest in Measurement be our Concern"



PRECISION SERVICE INC.
Flow Measurement Engineers
Analysis Results Summary
Casper, WY 82601

Run No. 1211-17
Date Run 12/11/84
Date Sampled 12/11/84

Analysis For: McClellan Oil Corp.

Use: Totmac #4 Producer: McClellan Oil Corp.
Location: Bitter Lakes County: Chaves State: New Mexico
Purpose: Well Test Sampled By: Keltic Services, Inc
Sampling Temp. 46 °F Atmos Temp. 50 °F
Volume/day: _____ Formation: _____
Pressure on Bomb 200 PSIG; Line Pressure 213.2 PSIA PSIG

Gas Component

Analysis

Press. Base: 14.73

Mol. % Liq. % GPM
Per MCF

Carbon Dioxide CO ₂	<u>.072</u>		
Oxygen O ₂	<u>.030</u>		
Nitrogen N ₂	<u>4.722</u>		
Hydrogen Sulfide H ₂ S			
Ethane C ₂	<u>87.149</u>		<u>14.771</u>
Propane C ₃	<u>4.708</u>		<u>1.259</u>
Isobutane iC ₄	<u>1.826</u>		<u>.503</u>
Normal Butane nC ₄	<u>.297</u>		<u>.097</u>
	<u>.586</u>		<u>.185</u>
Isopentane iC ₅	<u>.175</u>		<u>.064</u>
Normal Pentane nC ₅	<u>.184</u>		<u>.067</u>
Hexanes plus	<u>.250</u>		<u>.115</u>
Hexanes C ₆			
Heptanes			
Heptanes Plus C ₇ +			
Total	<u>100.000</u>		<u>17.062</u>
Heptane + G.P.M.			<u>.246</u>
Propane + GPM			<u>1.031</u>
1b Gasoline			<u>.820</u>

BTU Dry 1071
BTU Wet 1053
Calc. Specific Gravity .643

@ Std. Press. 14.696

BTU Dry 1069
BTU Wet 1050

Calc. Vap. Press. #/Sq. In. _____
Reid Vap. Press. #/Sq. In. _____

Z Factor .9976
N Value 1.2997
Ave Mol Wt 18.5896
Ave Cu Ft/Gal _____

Run by Jeffrey A. Propp

Calculated By Jeffrey A. Propp

Ethane + GPM 2.291

Remarks:

Distribution: