

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 10-19-81			
Company William E. Hendon, Jr.				Connection					
Pool Undesignated				Formation Morrow				Unit	
Completion Date 10-12-81		Total Depth 13709		Blue Back TB 13631		Elevation 3729 GR		Farm or Lease Name New Mexico Sec. 35 <i>Fed.</i>	
Csg. Size 5 1/2	Wt. 17	d 4.892	Set At 13709	Perforations: From 13274 To 13612		Well No. 1			
Thg. Size 2 7/8	Wt. 6.40	d 2.441	Set At 11987	Perforations: From To		Unit B		Sec. 35	Twp. 18S
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11987		County Lea			
Producing Thru Tubing		Reservoir Temp. °F 192 @ 13243		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 13443	H 13443	Gg 0.652	% CO ₂ 0.66	% N ₂ 0.46	% H ₂ S Nil	Prover	Meter Run X	Taps Flange	

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	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	79 1/2 hours						4227		Pkr.		
1.	4" X 1.500"			305	1.5	75	3757	75	"	-	1 hour
2.	4" X 1.500"			305	12.0	70	3515	70	"	-	1 hour
3.	4" X 1.500"			500	20.0	63	3028	63	"	-	1 hour
4.	4" X 1.500"			500	78.0	72	2138	72	"	-	1 hour
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	10.84	21.85	318.2	.9851	1.238	1.028	296.9
2	10.84	61.79	318.2	.9905	1.238	1.029	845.2
3	10.84	101.31	513.2	.9971	1.238	1.055	1430.2
4	10.84	200.07	513.2	.9887	1.238	1.050	2787.4
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 19.826 Mcf/bbl.
1.	USED SIMPLIFIED				A.P.I. Gravity of Liquid Hydrocarbons 52.3 Deg.
2.	SUPERCOMPRESSIBILITY				Specific Gravity Separator Gas 0.652
3.	TABLES				Specific Gravity Flowing Fluid X X X X X
4.					Critical Pressure 670 P.S.I.A.
5.					Critical Temperature 375 °R

P _r 6023.2 P _f 36279				
NO.	P _r ²	P _s	P _s ²	P _f ² - P _s ²
1		5500.2	30252	6027
2		5258.2	27649	8630
3		4721.2	22290	13989
4		3586.2	12861	23418
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.54919$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.54919$$

$$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4318.220$$

Absolute Open Flow 4318.220 Mcfd @ 15.025

Angle of Slope θ 45.0

Slope, n 1.0000

Remarks: BHP measured with Amerada RPG-3 Gauge No. 47612, 0-8000 PSI Range

Approved By Commission: Jerry Sorenson	Conducted By: Tefteller, Inc.	Calculated By: D. A. Warren, Jr.	Checked By:
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