

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 4-6-83			
Company David Fasken				Connection None					
Foot Undesignated				Formation Morrow				Unit	
Completion Date 3-30-83		Total Depth 13690		Plug Back TD 13599		Elevation 3629.6GL 3651.6KB		Farm or Lease Name LING FEDERAL	
Csg. Size 5 1/2	Wt. 20#	d	Set At 13690	Perforations: From 13514 To 13522				Well No. 1	
Thq. Size 2 3/8	Wt. 4.7#	d	Set At 13470	Perforations: From To				Unit G	Sec. Twp. Rge. 31 195 34E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 13470		County Lea	
Producing Thru Tubing		Reservoir Temp. °F 188 @ 13418		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 13518	H 13518	Gg 0.680	% CO ₂ 0.45	% N ₂ 0.63	% H ₂ S Nil	Prover	Meter Run Pos. Ck.	Taps	

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	Shut-in 144 hrs.						4295		PKR.		
1.	2"		4/64	4208		54	4208	54	PKR.		60 min.
2.	2"		6/64	4062		60	4062	60	PKR.		60 min.
3.	2"		8/64	3935		62	3935	62	PKR.		60 min.
4.	2"		12/64	3510		65	3510	65	PKR.		60 min.
5.											

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Tubing Pressure P _m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	0.0604		4221.2	1.0058	0.9393	0.082	260.625
2	0.1418		4075.2	1.0000	0.9393	1.087	590.010
3	0.2618		3948.2	0.9981	0.9393	1.094	1060.143
4	0.6101		3523.2	0.9952	0.9393	1.117	2244.431
5							

NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	6.24	514	1.43	0.854	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	6.02	520	1.45	0.846	Specific Gravity Separator Gas 0.625 X X X X X X X X
3.	5.83	522	1.45	0.835	Specific Gravity Flowing Fluid X X X X X
4.	5.20	525	1.46	0.802	Critical Pressure 677 P.S.I.A. P.S.I.A.
5.					Critical Temperature 359 R R

NO.	P _f	P _s	P _f ²	P _s ²	P _f ² - P _s ²
1	6504.2	42305	6482.2	42019	286
2			6425.2	41283	1022
3			6394.2	40886	1419
4			6049.2	36593	5712
5					

$$(1) \frac{P_f^2}{P_f^2 - P_s^2} = 7.40634$$

$$ACF = Q \left[\frac{P_f^2}{P_f^2 - P_s^2} \right]^n = 9471.291$$

$$(2) \left[\frac{P_f^2}{P_f^2 - P_s^2} \right]^n = 4.2199075$$

Absolute Open Flow 9471.291 Mcfd @ 15.025	Angle of Slope @ 54.28°	Slope, n 0.7190666
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Remarks: Bottom hole pressure measured with Amerada RPG-3 gauge No. 47612, 0-8000 psi range

Approved By Commission:	Conducted By: Teffeller, Inc.	Calculated By: C. M. Avery, Jr.	Checked By:
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APR 21 1983

O.C.D.
HOBBS OFFICE