

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 7/29/83			
Company Tenneco Oil Exploration & Prod.				Connection Air					
Pool Kemnitz				Formation Atoka				Unit D	
Completion Date July 29, 1983		Total Depth 13400'		Plug Back TD 13318'		Elevation		Fracture Length Name Kemnitz LF 32	
Ceq. Size 5 1/2"	Wt. d	Set At 13400'	Perforations: From 12649' To 12670'		Well No. 1				
Tng. Size 2 3/8"	Wt. 4.7	d N-80	Set At 12562'	Perforations: From Open To ended		Unit D		Sec. 32	Twp. 16s
Type Well - Single - Brdenhead - G.C. or G.O. Multiple Single						Packer Set At 12562'		County Lea	
Producing Thru Tubing		Reservoir Temp. °F 201 @ 12660'		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico	
L 12660	H 12660	Cg .6404	% CO ₂ .463	% N ₂ 2.104	% H ₂ S	Prover	Meter Run 2.900	Taps F	

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											
1.	3	X	1.000	510	4.0	98	2080	63	890		48.0 hrs
2.	3	X	1.000	500	7.0	98	2015	63	890		1.0 hr
3.	3	X	1.000	500	27.0	98	1782	63	890		1.0 hr
4.	3	X	1.000	500	45.0	98	1530	63	890		1.0 hr
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 _{sp}	Rate of Flow Q, Mcfd
1	4.801	45.75	523.2	.9653	1.250	1.139	302
2	4.801	59.94	513.2	.9653	1.250	1.139	395
3	4.801	117.71	513.2	.9653	1.250	1.139	777
4	4.801	151.97	513.2	.9653	1.250	1.139	1003
5							

NO.	R _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Dry _____ Mcf/bbl.	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
1	.78	558	1.52	.926	Specific Gravity Separator Gas .6404	XXXXXX
2	.77	558	1.52	.926	Specific Gravity Flowing Fluid XXXXX	
3	.77	558	1.52	.926	Critical Pressure 667 P.S.I.A.	P.S.I.A.
4	.77	558	1.52	.926	Critical Temperature 366 °R	°R
5						

P _c *2371.8 P _c ² 5625.7				
NO	BHP P _i ²	P _w	P _w ²	P _c ² - P _w ²
1	2972.2	2176.1	4735.4	890.3
2	2894.2	2119.0	4490.1	1135.6
3	2600.2	1905.2	3629.7	1996.0
4	2270.2	1669.0	2785.7	2840.0
5	3232.2	S.I.P.		

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.981$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1987$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.981$$

Absolute Open Flow 1987	Mcf/d @ 15.025	Angle of Slope @ 45°	Slope, n 1.000
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Remarks: CALCULATED FROM PRESSURE BOMBS @ 12660'

Approved By Division <i>Lea P. H.</i>	Conducted By: JARREL WELL TESTING, INC.	Calculated By: <i>Rick Pagan</i>	Checked By: Rick Pagan
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