660 FNL
660 FEL

Form C-122
Revised 9-1-65

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

Type Test: ☒ Initial ☐ Annual ☐ Special		Test Date: 9-10-75	
Company: CONTINENTAL OIL Co	Connection: TRANSWESTERN PIPELINE Co		
Pool: BELL LAKE	Formation: MORROW		Unit
Completion Date: 8-28-75	Total Depth: 14,140	Plug Back TD: 13,954 / Elevation: 3601	Farm or Lease Name: BELL LAKE Unit 5
Csg. Size: 7 5/8 [illegible] / Wt.: 33.7-39, 18.0 / d / Set At: 12,331, 12,020-14,14[illegible]	Perforations: From 13,802 To 13,830		Well No.: 16
Tbg. Size: 3.50 / Wt.: 9.30 / d: 2.992 / Set At: 12,034	Perforations: From To		Unit: A / Sec.: 7 / Twp.: 24S / Rge.: 34E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: 11,991	County: LEA
Producing Thru: Tubing	Reservoir Temp. °F @ / Mean Annual Temp. °F	Baro. Press. – P_a	State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
		.583	0.0037	0.0027	—		X	X

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size	X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI	4.026	2.00				7155	76			72 hrs
1.	4.026	2.00	850	16	90	6248	77			2.167 hrs
2.	4.026	2.00	840	32	110	5825	84			3.833 hrs
3.	4.026	2.00	835	55.5	110	5373	87			1.500 hrs
4.	4.026	2.00	840	79.5	109	4943	93			1.750 hrs
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	19.81	117.52	863.2	.9653	1.310	1.049	3.088
2.	"	165.33	853.2	.9551	1.310	1.052	4311
3.	"	212.87	848.2	.9551	1.310	1.052	5.550
4.	"	260.55	853.2	.9551	1.310	1.052	6.794
5.							

NO.	P_r	Temp. °R	T_r	Z
1	1.285	553	1.594	.918
2.	1.269	570	1.628	[illegible]
3.	[illegible]	[illegible]	[illegible]	.924
4.	1.2[illegible]	5[illegible]	1.626	[illegible]
5				

Gas Liquid Hydrocarbon Ratio 4 Bbls per MM Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 45.8 Deg.
Specific Gravity Separator Gas .583 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 672 P.S.I.A. P.S.I.A.
Critical Temperature 350 R R

P_c 8793.4 P_c^2 77,324

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		78[illegible]	60,[illegible]	16,358
2	*	738[illegible].5	54,560	22,764
3		[illegible]	[illegible]	36,[illegible]
4		6390[illegible]	40,8[illegible]	36,492
5				

(1) $\dfrac{P_c^2}{P_c^2 - P_w^2}$ $\left(= \dfrac{77,324}{77,324 - 54,560}\right)^{.937}$ (2) $\left[\dfrac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 3.343

AOF = Q $\left[\dfrac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 4311 × 3.343 = 14.41 MMCFD

Absolute Open Flow 14.41 MM Mcfd @ 15.025 | Angle of Slope θ | Slope, n 0.937

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
John W. Runyan	Walter [illegible]	Walter [illegible]	