NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
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ARTESIA, OFFICE

Type Test: 4 POINT ☒ Initial ☐ Annual ☐ Special		Test Date: 9-7-82	
Company: PENNZOIL Co	Connection: AIR NEW WELL		
Pool: WHITE CITY Penn	Formation: MORROW	Unit:	
Completion Date: 8-27-82	Total Depth: 11,500	Plug Back T.D.: 11,432	Elevation: 0
Farm or Lease Name: EDDY 21 FEDERAL COM			
Csg. Size: 4.5000 / Wt.: 11.60 / d: 4.0 / Set At: 11,500	Perforations: From 11,048 To 11,409	Well No.: 1	
Tbg. Size: 2.375 / Wt.: 4.70 / d: 1.995 / Set At: 10,892	Perforations: From OPEN To ENDED	Unit: F / Sec.: 21 / Twp.: 24S / Rge.: 26E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE	Packer Set At: 10,892	County: EDDY	
Producing Thru: TUBING	Reservoir Temp. °F: 182 @ 11,228	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2
State: NEW MEXICO			
L: 11,228 / H: 11,228 / Gg: 0.578	% CO_2: 1.10	% N_2: .76	% H_2S: .0
Prover: .0	Meter Run: 4.0	Taps: FLANGE	

	FLOW DATA				TUBING DATA		B.H.P. DATA		
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.	CHOKE	Duration of Flow
SI						1856	88			72 HRS
1.	4.03	X 1.00	400	4.0	106	1756	84	.00	3/64	1 HR
2.	4.03	X 1.00	405	6.5	110	1707	90	.00	5/64	1 HR
3.	4.03	X 1.00	400	15.0	108	1577	92	.00	7/64	1 HR
4.	4.03	X 1.00	400	23.0	100	1426	90	.00	10/64	1 HR
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	4.75	40.65	413.2	0.9585	1.3151	1.0233	249.
2	4.75	52.14	418.2	0.9551	1.3151	1.0229	318.
3	4.75	78.73	413.2	0.9567	1.3151	1.0229	482.
4	4.75	96.49	413.2	0.9636	1.3151	1.0243	601.
5							

NO.	P_t	Temp. °R	T_t	Z
1	.61	566.	1.63	0.955
2	.62	570.	1.64	0.956
3	.61	568.	1.63	0.956
4	.61	560.	1.61	0.053
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas 0.578 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.578
Critical Pressure 677 P.S.I.A. _____ P.S.I.A.
Critical Temperature 348 R _____ R

P_c 1849.5 P_c^2 3420.

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		1754	3077	344
2		1702	2898	523
3		1573	2475	945
4		1427	2037	1383
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.4725$ (2) $\left[\frac{P_t^2}{P_t^2 - P_w^2}\right]^n = 1.7735$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1067.$

Absolute Open Flow 1067. Mcfd @ 15.025 | Angle of Slope θ 57.7 | Slope, n 0.633

Remarks: _____

Approved By Commission:	Conducted By:	Calculated By:	Checked By: