NEW MEXICO OIL CONSERVATION COMMSSION

Form C-122
Revised 9-1-65

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

TIGHT HOLE - PLEASE KEEP CONFIDENTIAL FOR ALLOWED PERIOD

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 9-21-77	
Company: Petroleum Development Corp.			Connection: None - WO Pipeline		
Pool: Wildcat			Formation: Mississippian (Gas Condensate)		Unit: M
Completion Date: 9-21-77	Total Depth: 10,460		Plug Back TD: 9983	Elevation: 3939 KB	Farm or Lease Name: Hudson Federal
Csg. Size: 4½" / Wt.: 11.60# / d: 4.000 / Set At: 10,019			Perforations: From 9746 To 9756, From 9769 To 9782		Well No.: #1
Tbg. Size: 2-3/8" / Wt.: 4.7# / d: 1.995" / Set At: 9736			Perforations: From 9746 To 9682		Unit: M / Sec.: 27 / Twp.: 12S / Rge.: 30E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 9688		County: Chaves
Producing Thru: Tubing	Reservoir Temp. °F: 156 @ 9746	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2		State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
9764	9764	0.660	0.35	0.40	0	--	3"	Flange

	FLOW DATA					TUBING DATA		CASING 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.	Temp. °F	Duration of Flow
SI						2530			Choke	19 hrs.
1.	3"	2"	410	33	66	1465	68	pkr.	22/64	1:15
2.	3"	2"	410	26	66	1625	70	pkr.	19/64	1:00
3.	3"	2"	405	17	66	1885	70	pkr.	15/64	1:00
4.	3"	2"	400	6	66	2202	70	pkr.	11/64	1:00
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	21.32	118.18	423.2	.9943	1.231	1.044	3220
2	"	104.90	423.2	"	1.231	1.044	2858
3	"	80.51	418.2	"	1.231	1.043	2191
4	"	49.79	413.2	"	1.231	1.043	1355
5							

NO.	P_t	Temp. °R	T_r	Z
1	.63	526	1.39	.917
2	.63	526	"	.917
3	.62	526	"	.919
4	.62	526	"	.919
5				

Gas Liquid Hydrocarbon Ratio 18.405 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 57.6 Deg.
Specific Gravity Separator Gas 0.660 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure ____ P.S.I.A. ____ P.S.I.A.
Critical Temperature ____ R ____ R

P_c 3697.2 P_c^2 13,669

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	2.185	2309.2	5.332	8.337
2	2.684	2483.2	6.166	7.503
3	3.603	2847.2	8.107	5.562
4	4.907	3218.2	10.357	3.312
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.822$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.7206$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4917$

Absolute Open Flow 4917 Mcfd @ 15.025 Angle of Slope θ 47.87° Slope, n 0.904555

Remarks: Calculated from bottom-hole pressure measurements with bomb at 9700'.

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