NEW M CO OIL CONSERVATION COMMSSIOI

Form C-122
Revised 9-1-65

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 1/14/78	
Company: Petroleum Development Corp.		Connection: None			
Pool: Lusk Morrow		Formation: Morrow		Unit: F	
Completion Date: 1/14/78	Total Depth: 13,000'	Plug Back TD: 12,955		Elevation: 3676 KB	Farm or Lease Name: Sun McKay Federal
Csg. Size: 4½" / Wt.: 11.6# / d: 4,000 / Set At: 13,000'		Perforations: From 12661 To 12935			Well No.: 1
Tbg. Size: 2-3/8" / Wt.: 4.7# / d: 1.995 / Set At: 12624		Perforations: From 12621 To 12624			Unit: F / Sec.: 10 / Twp.: 19S / Rge.: R32E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 12615			County: LEA
Producing Thru: Tubing	Reservoir Temp. °F: 164° @ 12984	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
12624	12624	0.659	0	0	---	---	3"	flange

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					4000				14
1.	3" x 2"	300	30	84	1175				2
2.	3" x 2"	300	26	82	1425				1
3.	3" x 2"	300	18	80	1955				1
4.	3" x 2"	290	10	70	2440				1
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	96.933	313.2	0.9777	1.232	1.029	2561
2.	21.32	90.240	313.2	0.9795	1.232	1.029	2389
3.	21.32	75.084	313.2	0.9813	1.232	1.029	1991
4.	21.32	55.064	303.2	0.9905	1.232	1.030	1476
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	0.47	544	1.44	0.945
2.	0.47	542	1.43	0.944
3.	0.47	540	1.43	0.944
4.	0.45	530	1.40	0.943
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.

Specific Gravity Separator Gas 0.659 XXXXXXXXX

Specific Gravity Flowing Fluid XXXXX

Critical Pressure _____ P.S.I.A. _____ P.S.I.A.

Critical Temperature _____ R _____ R

P_c 5658.2 P_c^2 32.02 x 10^6

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2013.2	4.05	27.97
2		2362.2	5.58	26.44
3		3131.2	9.80	22.22
4		3792.2	14.38	17.63
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1448$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.1448$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2932$

Absolute Open Flow 2932 Mcfd @ 15.025

Angle of Slope θ _____

Slope, n 1

Remarks: _____

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Charles W. Sanders	J. C. Johnson	CWS