NEW XICO OIL CONSERVATION COMMSSIC

MULTIPOINT AND ONE POINT BACK PRESSURE TEST F... GAS WELL

Form C-122
Revised 9-1-65

Type Test: XXX Initial ☐ Annual ☐ Special			Test Date: 5/25/77	
Company: Petroleum Development Corp.	Connection: None			Unit
Pool: North Lusk Morrow	Formation: Morrow			
Completion Date: 5/25/77	Total Depth: 13,086	Plug Back TD: 12,673	Elevation: 3715 KB	Farm or Lease Name: Gulf-McKay Federal
Csg. Size: 5½ / Wt.: 17# / d: 4.892" / Set At: 12,919		Perforations: From 12634 To 44		Well No.: 1
Tbg. Size: 2-3/8 / Wt.: 4.7# / d: 1.995" / Set At: 12,617		Perforations: From 12583 To 85		Unit: N / Sec.: 34 / Twp.: 18S / Rge.: 32E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 12577		County: Lea
Producing Thru: tubing	Reservoir Temp. °F: 17 @ 13086	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
12639	12639	.660	.35	0.40	--	--	4"	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							4300	70	pkr	choke	17 hrs.
1.	4"		2"	600	82	67	2960	68	pkr	20/64	1 hr.
2.	4"		2"	600	61	71	3260	68	pkr	16/64	1 hr.
3.	4"		2"	600	43	78	3580	70	pkr	13/64	1 hr.
4.	4"		2"	600	25	84	3850	70	pkr	11/64	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	19.81	224.24	613.2	0.9933	1.231	1.065	5785
2.	19.81	193.40	613.2	0.9896	1.231	1.063	4961
3.	19.81	162.38	613.2	0.9831	1.231	1.059	4123
4.	19.81	123.81	613.2	0.9777	1.231	1.057	3120
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	0.92	527	1.39	0.881
2.	0.92	531	1.40	0.885
3.	0.92	540	1.43	0.892
4.	0.92	544	1.44	0.895
5.				

Gas Liquid Hydrocarbon Ratio 14.7 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 53° @ 60° F. 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 6553.2 P_c^2 42.944

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	8.840	5238.2	27.439	15.505
2	10.714	5525.2	30.527	12.417
3	12.911	5799.2	33.631	9.313
4	14.924	6060.2	36.726	6.218
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.770$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.977$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 11437$

Absolute Open Flow 11436 Mcfd @ 15.025 Angle of Slope θ ____ Slope, m 0.669

Remarks: ____

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	JC Johnson	JC Johnson	LGW