C/SF File

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
JUL 2 1987
O. C. D.
ARTESIA, OFFICE

Type Test: 4 POINT [X] Initial [ ] Annual [ ] Special				Test Date: 6-24-87
Company: MCKAY OIL COMPANY Corp. ✓			Connection: TO AIR	
Pool: WEST PECOS SLOPE - Abo			Formation: ABO	Unit
Completion Date: 6-21-87	Total Depth: 4271		Plug Back TD: 4174	Elevation: 4217
Csg. Size: 4.5 / Wt.: 10.5 / d: 4.000 / Set At: 4226			Perforations: From 2830 To 4018	Farm or Lease Name: LL&E FED
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 2805			Perforations: From 0 To 0	Well No.: 4
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE			Packer Set At: 2805	Unit: N / Sec.: 1 / Twp.: 6S / Rge.: 22E
Producing Thru: TUBING	Reservoir Temp. °F	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2	County: CHAVES
				State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3434	3434	.614	0	5.391		2.000	Ø	Ø

	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.						727	78			72 HRS.
1.	2.000	.250	200	0.00	45	695	82			60 MIN
2.	2.000	.250	345	0.00	54	661	86			60 MIN
3.	2.000	.250	445	0.00	60	624	88			60 MIN
4.	2.000	.250	550	0.00	67	578	89			60 MIN
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	1.087	0.00	213.2	1.015	1.2762	1.0195	305
2.	1.087	0.00	358.2	1.006	1.2762	1.0308	514
3	1.087	0.00	458.2	1.000	1.2762	1.0371	658
4.	1.087	0.00	563.2	0.9933	1.2762	1.0434	808
5.							

NO.	P_t	Temp. °R	T_r	Z
1	0.32	505	1.45	0.962
2.	0.54	514	1.48	0.941
3.	0.69	520	1.49	0.930
4.	0.85	527	1.51	0.919
5				

Gas Liquid Hydrocarbon Ratio: Ø Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Ø Deg.
Specific Gravity Separator Gas: 0.614 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX 0.614
Critical Pressure: 662 P.S.I.A. 662 P.S.I.A.
Critical Temperature: 348 R 348 R

P_c 738.8 P_c^2 546

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		706	498	48
2		673	453	93
3		637	406	140
4		593	352	194
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.9000$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.6651$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1753$

Absolute Open Flow: 1753 Mcfd @ 15.025 | Angle of Slope θ: 54.25 | Slope, n: 0.720

Remarks:

Approved By Division	Conducted By:	Calculated By:	Checked By: