c/SF
File

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RECEIVED BY
JUL 30 1987
O. C. D.
ARTESIA, OFFICE

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: 4 POINT [X] Initial [ ] Annual [ ] Special				Test Date: 6-24-87	
Company: MCKAY OIL CORP.		Connection: TO AIR			Unit: 660 E
Pool: WEST PECOS SLOPE -- ABO		Formation: ABO			Unit
Completion Date: 6-21-87	Total Depth: 3420	Plug Back TD: 3342		Elevation: 4186	Farm or Lease Name: LL & E FED
Csg. Size: 4.5 / Wt.: 9.5 / d: 4.052 / Set At: 3402		Perforations: From 2900.5 To 3017.5			Well No.: 2
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 2850		Perforations: From OPEN To ENDED			Unit: H / Sec.: 12 / Twp.: 6S / Rge.: 22E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE			Packer Set At: NONE		County: CHAVES
Producing Thru: TUBING	Reservoir Temp. °F: 99 @ 2959	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
2959	2959	0.623	0	4.961	Ø	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	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI.							882	90	882	90	72 HRS
1.	2.000		.250	320	0.00	46	848	91	852	91	60 MIN
2.	2.000		.250	560	0.00	54	821	92	826	92	60 MIN
3.	2.000		.375	310	0.00	57	795	93	802	93	60 MIN
4.	2.000		.375	435	0.00	58	737	93	760	93	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	333.2	1.014	1.267	1.030	479
2	1.087	0.00	573.2	1.006	1.267	1.050	834
3	2.378	0.00	323.2	1.003	1.267	1.024	1000
4	2.378	0.00	448.2	1.002	1.267	1.036	1402
5							

NO.	P_t	Temp. °R	T_t	Z
1	.48	506	1.44	.943
2	.85	514	1.46	.907
3	.41	517	1.47	.954
4	.66	518	1.48	.931
5				

Gas Liquid Hydrocarbon Ratio: Ø Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Ø Deg.
Specific Gravity Separator Gas: 0.623 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX 0.623
Critical Pressure: 662 P.S.I.A. 662 P.S.I.A.
Critical Temperature: 351 R 351 R

P_c 895.2 P_c^2 801

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		865.2	748	53
2		839.2	704	97
3		815.2	664	137
4		773.2	598	203
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.9458$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.0399$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4262$

Absolute Open Flow: 4262 Mcfd @ 15.025
Angle of Slope θ: 51 Slope: 0.810

Remarks:

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