NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPO AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

File

RECEIVED NOV 19 1984

Type Test: ☒ Initial ☐ Annual ☐ Special	Test Date: 11-15-84	710 FNL	
Company: MCKAY OIL COMPANY	Connection: AIR NEW WELL	660 FEL	
Pool: S, PECOS SLOPE ABO	Formation: ABO	Unit: A	
Completion Date: ~~9-16-84~~ 11-15-84	Total Depth: 4251 ~~4172.~~	Plug Back T.D.: 4172.	Elevation: 3568 GR
Farm or Lease Name: MCKAY HARVEY FEDERAL			
Well No.: # 2			

Csg. Size	Wt.	d	Set At	Perforations
4.500	10.5	4.052	4229.	From 4011. To 4052.
Tbg. Size	Wt.	d	Set At	Perforations
2.375	4.7	1.995	4002.	From 0. To 0.

Unit	Sec.	Twp.	Rge.
A	20	9S	25E

Type Well – Single – Bradenhead – G.G. or G.O. Multiple	Packer Set At	County
SINGLE		CHAVES

Producing Thru	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. – P_a	State
TUBING	106 @ 4032.	60.0	13.2	NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
4032.	4032.	0.679	0.03	8.59	0.	2.0	Ø	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	B.H.P. DATA: Press. p.s.i.g.	CHOKE	Duration of Flow
SI					856.		952.		544.0
1.	2.00 X 0.190	200.	0.	60.	820.	0.	907.	8/64	1.0
2.	2.00 X 0.190	425.	0.	60.	779.	0.	867.	10/64	1.0
3.	2.00 X 0.190	650.	0.	62.	720.	0.	805.	12/64	1.0
4.	2.00 X 0.220	625.	0.	62.	650.	0.	717.	16/64	1.0
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	0.63	0.	213.2	1.0000	1.2136	1.0200	165.
2	0.63	0.	438.2	1.0000	1.2136	1.0411	346.
3	0.63	0.	663.2	0.9981	1.2136	1.0613	533.
4	0.85	0.	638.2	0.9981	1.2136	1.0590	694.
5							

NO.	P_t	Temp. °R	T_r	Z
1	0.33	520.	1.45	0.961
2	0.67	520.	1.45	0.923
3	1.01	522.	1.45	0.888
4	0.98	522.	1.45	0.892
5				

Gas Liquid Hydrocarbon Ratio 0. Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0. Deg.
Specific Gravity Separator Gas 0.679 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.679
Critical Pressure 654. P.S.I.A. 654. P.S.I.A.
Critical Temperature 360. R 360. R

P_c 865.7 P_c^2 749.

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	847.	826.	683.	67.
2	775.	791.	625.	124.
3	669.	735.	541.	209.
4	533.	657.	432.	317.
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.3614$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.1996$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1526.$

Pet 10-3
12-7-84
Prog + BR

Absolute Open Flow 1526. Mcfd @ 15.025 Angle of Slope @ 47.5 Slope, n 0.917

Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE ELEMENTS.

Approved By Commission	Conducted By	Calculated By	Checked By
	DON BENNETT	BENNETT & CATHEY INC.	