

RECEIVED MAY - 8 1988

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 4-26-88		MAY 27 '88	
Company MCKAY OIL CORPORATION				Connection Air			
Pool WEST PECOS SLOPE 1140				Formation ABO SAND		Unit O. C. D.	
Completion Date 4-26-88 4-27-88		Total Depth 3290' 3274'		Plug Back TD 2960' 2950'		Elevation 4340 KB	
Csg. Size 4-1/2"		Wt. 10.5#		d 4.090		Set At 3009'	
Perforations: From 2731' To 2750'		Well No. #1		Form of Lease Name Lucky Comm.			
Tubg. Size 2-3/8"		Wt. 4.7#		d 1.995		Set At 2860'	
Perforations: From -- To --		Unit 17		Sec. 6S		Twp. 22E	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single				Packer Set At		County Chaves	
Producing Thru Tubing		Reservoir Temp. °F 90 • 2740		Mean Annual Temp. °F 60		Baro. Press. - P _g 13.2	
State New Mexico							
L 2740		H 2740		G _g 0.636		% CO ₂ 0.00	
				% N ₂ 5.898		% H ₂ S 0.00	
Prover 2.00		Meter Run --		Taps --			

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
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	
SI							998		NA		SI 72 Hrs.
1.	2.000	.250	132	--	60		952				SI 60 MIN.
2.	2.000	.375	127	--	60		872				SI 60 MIN.
3.	2.000	.500	110	--	60		660				SI 60 MIN.
4.	2.000	.500	134	--	60		422				SI 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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	1.087	--	145.2	1.000	1.254	1.012	200
2	2.378	--	140.2	1.000	1.254	1.011	423
3	4.279	--	123.2	1.000	1.254	1.010	668
4	4.279	--	147.2	1.000	1.254	1.012	799
5							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	.22	520	1.48	.977	--	--	0.636	X X X X X X X X	659	351
2	.21	520	1.48	.978				X X X X X		
3	.19	520	1.48	.980						
4	.22	520	1.48	.977						
5										

NO.	P _t ²	P _w ²	P _w ²	P _t ² - P _w ²
1	931.2	965.2	931.6	90.9
2	783.6	886.2	785.2	237.3
3	453.2	676.2	457.2	565.3
4	189.4	442.2	195.6	826.9
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.8087$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 987.3$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4780$

Absolute Open Flow	987	Mcfd @ 15.025	Angle of Slope @	56.60	Slope, n	0.659
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Remarks: Produced light to medium spray of water last 1-1/2 Hrs. of test.

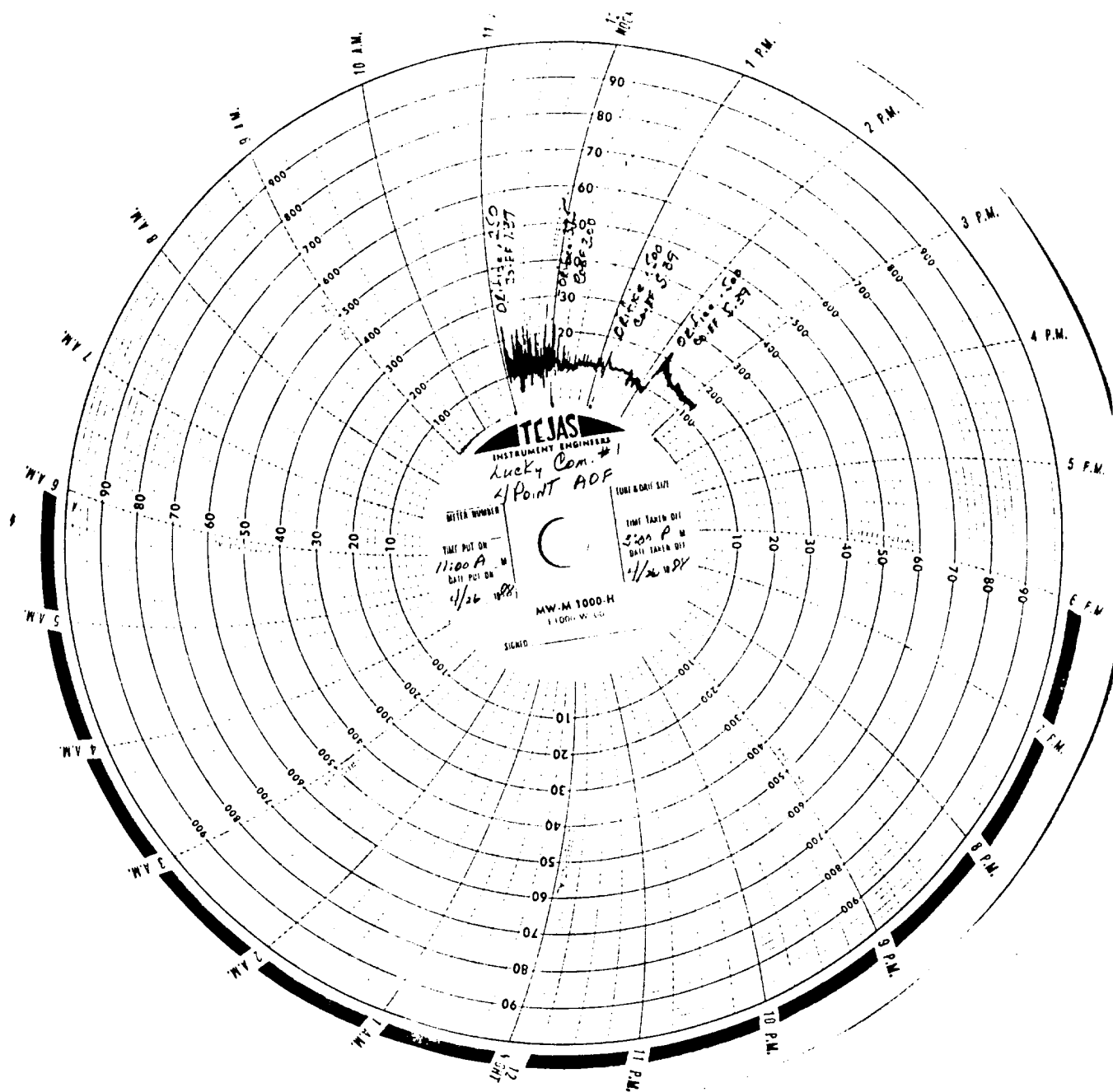
Approved By Division	Conducted By: D. Kelton	Calculated By: C. Sanders	Checked By: P. Stewart
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4-2688

2740	H	2740	LH	62.636	% CO ₂	—	% N ₂	5.898	% H ₂ S	—
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$d = \frac{F_{CH}}{F_{CH} - 1}$ $CH = 114$
 $P_{CH} = \frac{P_{CH}}{P_{CH} - 1}$ $CH = 114$

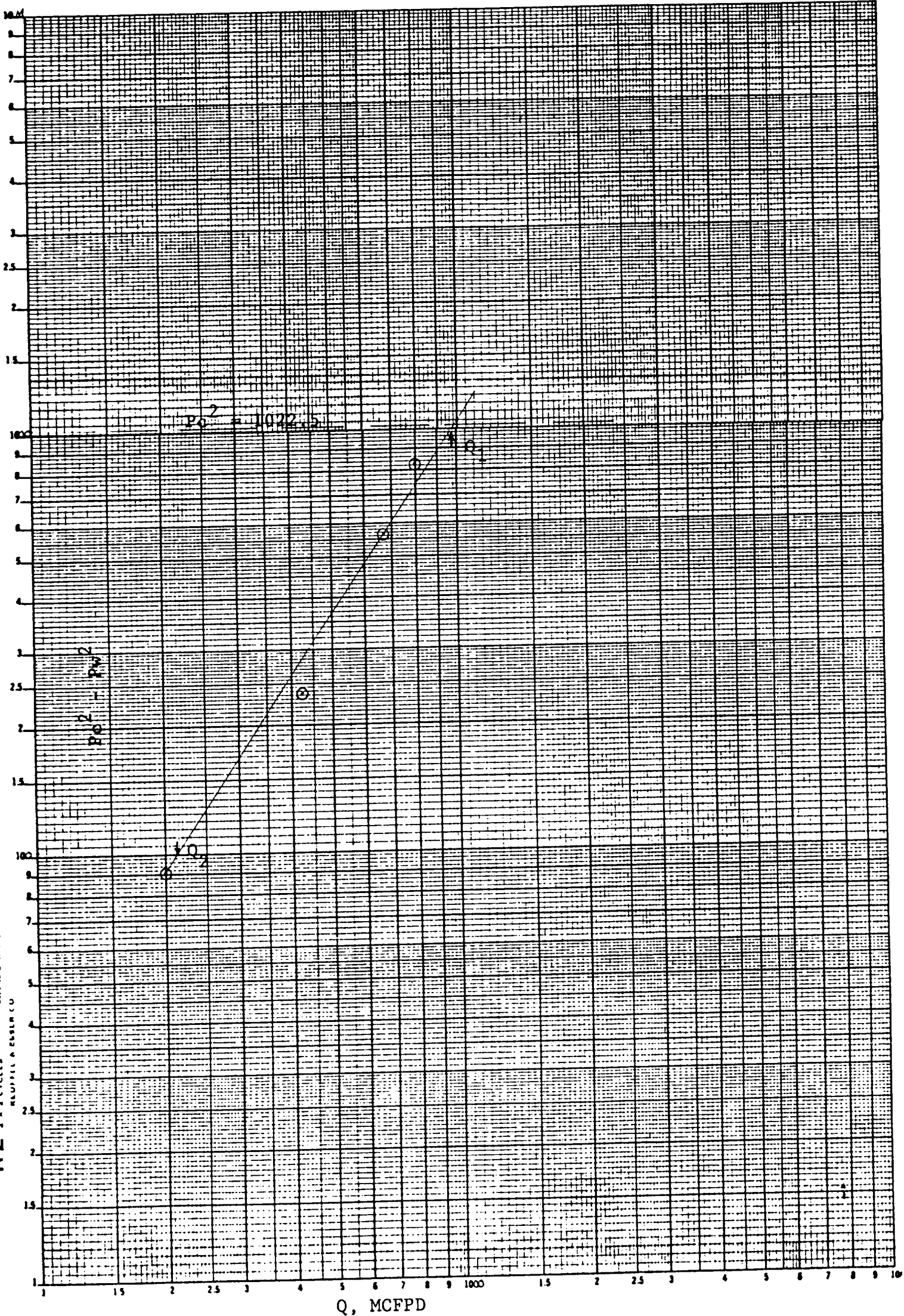
One copy to be filed in District Office (Work copy acceptable)



MCKAY OIL CORPORATION
Lucky Comm #1

4-26-88

K-E LOGARITHMIC
46 7203
2 IN 2 CYCLES
HALLIBURTON



$$\begin{aligned} Q_1 &= 972; \log = 2.98767 \\ Q_2 &= 213; \log = 2.32838 \\ &\quad \underline{0.65929} \\ n &= 0.659 \end{aligned}$$

1000 = 0.07 MCFPD