STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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

Form C-122
Revised 10-1-78

RECEIVED JUL 24 1987

C/SF
File

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

AUG 6 - 1987
O. C. D.
ARTESIA, OFFICE

Type Test: ☒ Initial ☐ Annual ☐ Special			Test Date: 7-13-87		
Company: McKAY OIL CORPORATION		Connection: AIR			
Pool: West Pecos Slope		Formation: Abo			Unit
Completion Date: 7-13-87	Total Depth: 3400'	Plug Back TD: 3255'	Elevation: 4278 GR		Farm or Lease Name: South Fork Mile Draw Federal Com.
Csg. Size: 4-1/2" / Wt.: 10.5# / d: 4.090 / Set At: 3313'		Perforations: From 2803 To 3115.5			Well No.: #8
Tbg. Size: 2-3/8" / Wt.: 4.7# / d: 1.995 / Set At: 2761'		Perforations: From -- To --			Unit: J / Sec.: 22 / Twp.: 6S / Rge.: 22E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: --			County: Chaves
Producing Thru: Tubing	Reservoir Temp. °F: 90	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2		State: New Mexico
L: 2,959.25	H: 2,959.25	Gg: 0.608	% CO_2: 0.052	% N_2: 6.185	% H_2S: 0.00
Prover: 2.00	Meter Run: --	Taps: --			

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						948		953		SI 72 HRS.
1.	2.000	.500	101	--	46.0	904	46	910	46	60 MIN.
2.	2.000	.750	101	--	36.5	806	36.5	820	36.5	60 MIN.
3.	2.000	.750	130	--	41.0	702	41.0	723	41.0	60 MIN.
4.	2.000	.875	110	--	46.0	558	46.0	592	46.0	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	4.279	--	114.2	1.0137	1.282	1.009	641
2	9.453	--	114.2	1.0234	1.282	1.009	1429
3	9.453	--	143.2	1.0188	1.282	1.012	1789
4	13.000	--	123.2	1.0137	1.282	1.010	2102
5							

NO.	P_t	Temp. °R	T_r	Z
1	.173	506	1.484	.982
2	.173	496.5	1.456	.982
3	.217	501	1.469	.976
4	.187	506	1.484	.980
5				

Gas Liquid Hydrocarbon Ratio -- Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons -- Deg.
Specific Gravity Separator Gas 0.608 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 660 P.S.I.A. ____ P.S.I.A.
Critical Temperature 341 R ____ R

P_c 966.2 P_c^2 933.5

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		923.2	852.3	81.2
2		833.2	694.2	239.3
3		736.2	542.0	391.5
4		605.2	366.3	567.2
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.384$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.670$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2986.90$

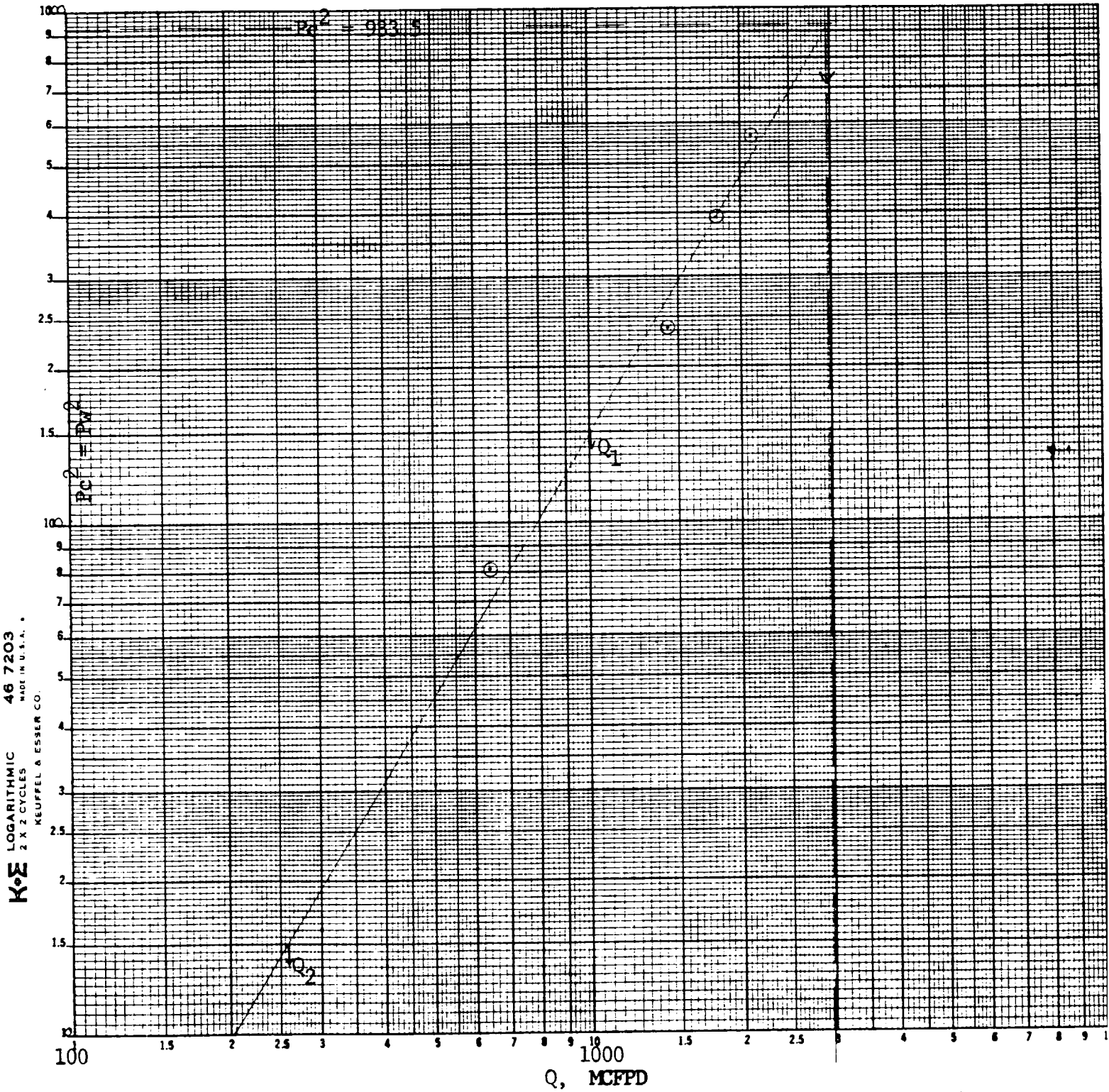
Absolute Open Flow 2,987 Mcfd @ 15.025 Angle of Slope θ 59.46 Slope 0.72

Remarks: No water produced during test.

Approved By Division	Conducted By:	Calculated By:	Checked By:
	R. Snyder	C. Sanders	P. Stewart

MCKAY OIL CORPORATION
South Four Mile Draw Federal Comm. #8

Sec. 22, T6S, R22E
7-13-87



Q_1 = 1010; log = 3.00432
Q_2 = 259; log = 2.41330

n = 0.59102
n = 0.59

AOF = 2,987 MCF Per Day

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