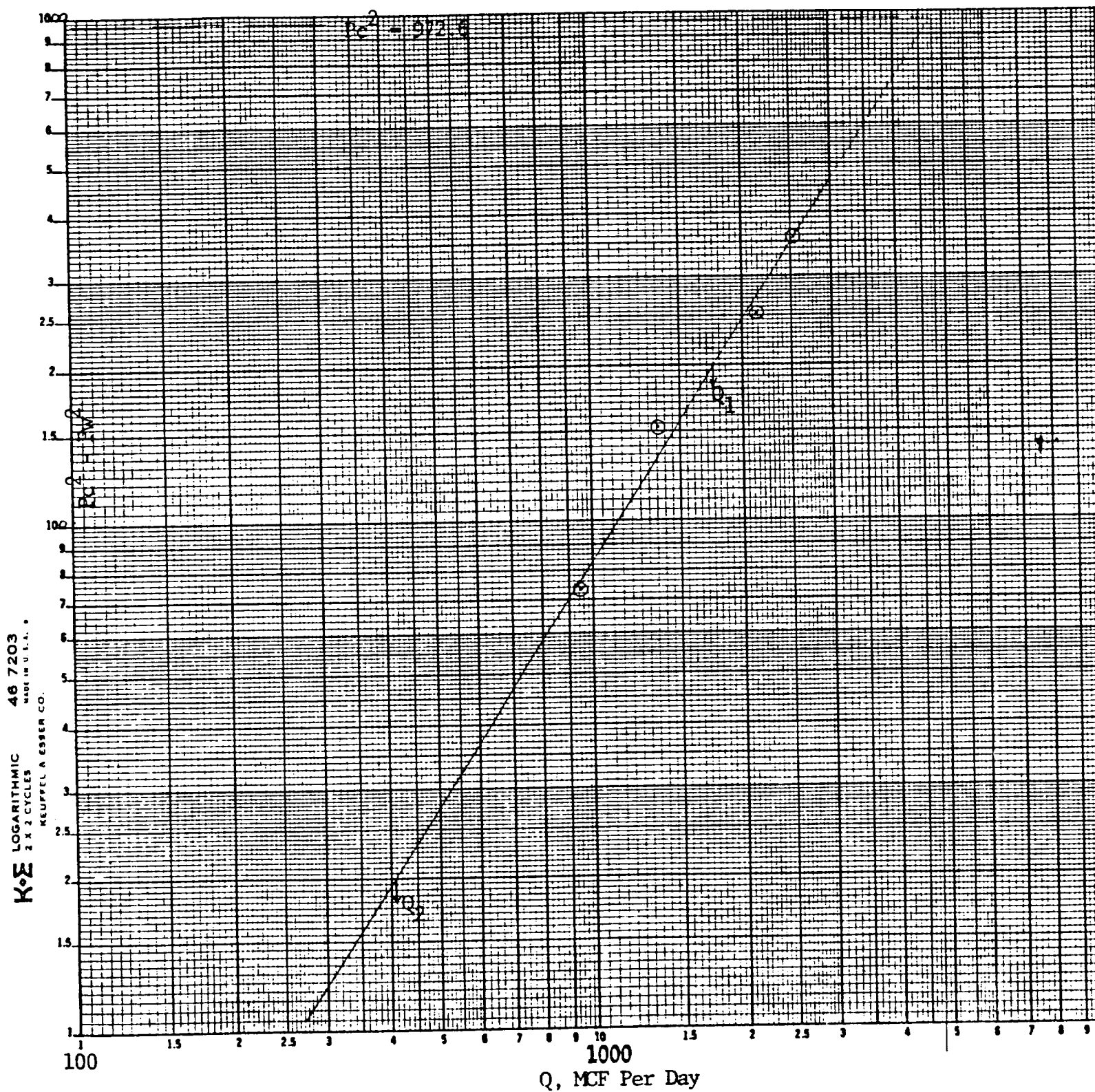


MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

454
File

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date RECEIVED BY AUG 6 - 1987 O. C. D. ARTESIAN 4259 CR	
Company MCKAY OIL CORPORATION		Connection AIR	
Pool West Pecos Slope Abo		Formation Abo	
Completion Date 7-16-87		Total Depth 3400'	Plug Back TD 3182'
Farm or Lease Name Remmele Federal Comm.			
Cog. Size 4-1/2"	Wt. 10.5#	d 4.090	Set At 3267
Perforations: From 2785.5 To 3101.5		Well No. #9	
Tng. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 2742'
Perforations: From -- To --		Unit Sec. Twp. Rge. B 27 6S 22E	
Type Well - Single - Drdhead - G.C. or G.O. Multiple Single		Packer Set At ---	County Chaves
Producing Thru Tubing	Reservoir Temp. °F 92 • 2943.5	Mean Annual Temp. °F 60	Baro. Press. - P ₀ 13.2
State New Mexico			
L 2943.5	H 2943.5	G _g 0.620	% CO ₂ 0.00
% N ₂ 4.731	% H ₂ S 0	Prover 2.00	Meter Run --
Taps --			
FLOW DATA			
NO.	Prover Line Size	X	Orifice Size
SI			
1.	2.000	.500	157
2.	2.000	.625	147
3.	2.000	.875	112
4.	2.000	1.000	102
5.			
TUBING DATA			
	Press. p.s.i.g.	Temp. °F	
	966		
	922	51	
	882	46	
	811	43	
	721	43.5	
CASING DATA			
	Press. p.s.i.g.	Temp. °F	
	973		
	935	51	
	892	46	
	836	43	
	770	43.5	
Duration of Flow SI 72 HRS 60 MIN 60 MIN 60 MIN 60 MIN			
RATE OF FLOW CALCULATIONS			
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m
1	4.279	--	170.2
2	6.473	--	160.2
3	13.000	--	125.2
4	17.090	--	115.2
5			
	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{sp}
	1.0088	1.270	1.015
	1.0137	1.270	1.014
	1.0168	1.270	1.012
	1.0163	1.270	1.002
Rate of Flow O. Mc/d			
	947		
	1354		
	2127		
	2546		
NO.	P ₁	Temp. °R	T ₁
1	0.26	511	1.46
2	0.24	506	1.44
3	0.19	503	1.43
4	0.17	503.5	1.43
5			
Z			
	0.971		
	0.972		
	0.977		
	0.980		
Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.			
A.P.I. Gravity of Liquid Hydrocarbons 0 Deg.			
Specific Gravity Separator Gas 0.620 X X X X X X X X			
Specific Gravity Flowing Fluid X X X X X			
Critical Pressure 662 P.S.I.A. P.S.I.A.			
Critical Temperature 351 R R			
P _c 986.2 P _c ² 972.6			
NO.	P ₁ ²	P _w	P _w ²
1		948.2	899.1
2		905.2	819.4
3		849.2	721.1
4		783.2	613.4
5			
(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.708$			
(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.875$			
AOF = 0 $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4,773.4$			
Absolute Open Flow 4773 Mc/d @ 15.025			
Angle of Slope @ 57.75			
Slope, n 0.631			
Remarks: No water produced during test.			
Approved By Division		Conducted By: R. Snyder	Calculated By: C. Sanders
		Checked By: P. Stewart	

MCKAY OIL CORPORATION
 Remmele Federal Comm. #9
 Sec. 27, T6S, R22 E
 7-16-87



$$Q_1 = 1750; \log = 3.24304$$

$$Q_2 = 409; \log = 2.61172$$

$$n = 0.63132$$

$$n = 0.631$$

$$AOF = 4.773$$



Our Interest in Measurement be our Concern

PRECISION SERVICE INC.
Flow Measurement Engineers
Analysis Results Summary
Casper, WY 82601

RECEIVED JUL 27 1987

Run No. 3050-5
Date Run 7/24/87
Date Sampled 7/16/87

Analysis For: MCKAY OIL CO.

Lease: PECOS SLOPE ABO

Location REMMELE FED. COMM, #9

Purpose

Sampling Temp. 42 °F

Volume/day

Pressure on Bomb 110

Producer

County CHAVES

State NEW MEXICO

Sampled By K.O.S.

Atmos Temp. °F

Formation

PSIG; Line Pressure 110 PSIG

Gas Component

Analysis

Press. Base: 14.73

Mol. %

Liq. %

GPM
Per MCF

Carbon Dioxide CO₂

Oxygen O₂

Nitrogen N₂

Hydrogen Sulfide H₂S

Methane C₁

Ethane C₂

Propane C₃

Iso-Butane IC₄

Nor-Butane NC₄

Iso-Pentane IC₅

Nor-Pentane NC₅

Hexanes plus

Hexanes C₆

Heptanes

Heptanes Plus C₇+

Total

Pentane + G.P.M.

Propane + GPM

26-lb Gasoline

BTU Dry

BTU Wet

Calc. Specific Gravity

@ Std. Press. 14.696

BTU Dry

BTU Wet

Calc. Vap. Press. #/Sq.In.

Reid Vap. Press. #/Sq.In.

Z Factor

N Value

Ave Mol Wt

Ave Cu Ft/Gal

Run by MARY DEMOS

Calculated By EVELYN SUANSON

Remarks:

Distribution: