NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

Form C-122
Revised 9-1-65

RECEIVED
APR 13 1983
O. C. D.
ARTESIA, OFFICE

C/SF File

Type Test: [X] Initial 4-POINT [ ] Annual [ ] Special				Test Date: 4-4-83	
Company: DEPCO	Connection: AIR NEW WELL				Unit: F
Pool: PECOS SLOPE ~~U.D.~~ Abo	Formation: ABO				
Completion Date: 4-1-83	Total Depth: 4220	Plug Back T.D.: ~~4167~~ 4165		Elevation: 3868	Farm or Lease Name: ROSE FEDERAL
O.D. Size: 4.500	Wt.: 10.5	d: 4.052	Set At: ~~4167~~ 4213	Perforations: From 3684 To 3854	Well No.: 6
Tbg. Size: 2.375	Wt.: 4.7	d: 1.995	Set At: 3624	Perforations: From 0 To 0	Unit: K; Sec.: 19; Twp.: 5S; Rge.: 25S
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE			Packer Set At:		County: CHAVES
Producing Thru: TUBING	Reservoir Temp. °F: 100 @ 3769	Mean Annual Temp. °F: 60.0	Baro. Press. – P_a: 13.2		State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3769	3769	0.679	1.44	6.51	0	0	2.1	FLANGE

NO	Prover Line Size	X	Orifice Size	FLOW DATA: 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							970		1086		77.0
1	2.07	X	1.500	365	4.5	78°	934	60°	1050	10.5/64	1.0
2	2.07	X	1.500	365	12.7	89°	899	60°	1016	12/64	1.0
3	2.07	X	1.500	367	22.0	60°	830	60°	964	17.5/64	1.0
4	2.07	X	1.500	370	36.0	51°	798	60°	924	20/64	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	12.76	41.25	378.2	0.9831	1.2136	1.0318	648
2	12.76	69.44	378.2	0.9732	1.2136	1.0293	1077
3	12.76	91.46	380.2	1.0000	1.2136	1.0363	1467
4	12.76	117.45	383.2	1.0088	1.2136	1.0383	1905
5							

NO	P_t	Temp. °R	T_d	Z
1	0.57	538	1.48	0.939
2	0.57	549	1.51	0.944
3	0.57	520	1.43	0.931
4	0.58	511	1.41	0.928
5				

Gas Liquid Hydrocarbon Ratio: 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 0 Deg.
Specific Gravity Separator Gas: 0.679 XXXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX 0.679
Critical Pressure: 664 P.S.I.A. 664 P.S.I.A.
Critical Temperature: 363 R 363 R

P_c 989.8 P_c^2 980

NO	P_t^2	P_w	R_w^2	$P_c^2 - R_w^2$
1	1130	958	918	62
2	1059	928	861	119
3	955	882	777	203
4	878	846	716	264
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.7090$ (2) $\left[\frac{P_t^2}{P_t^2 - P_w^2}\right]^n = 2.6596$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 5066$

Post ID-2
4-15-83
Comp + BK.

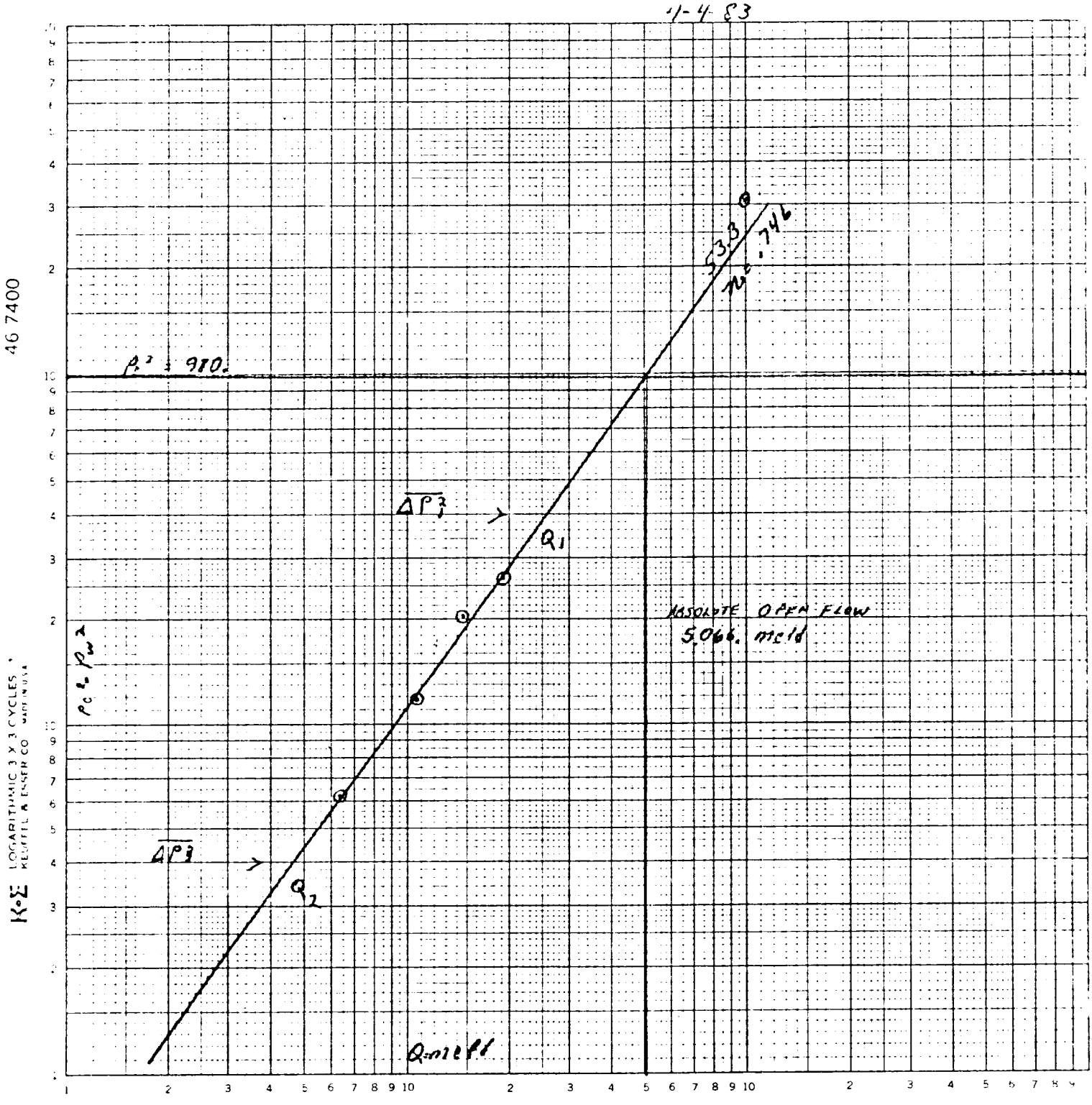
Absolute Open Flow: 5066 Mcfd @ 15.025 Angle of Slope θ: 53.3 Slope, n: 0.746

Remarks: BOTTOM HOLE PRESSURE MEASURED WITH AMERADA PRESSURE ELEMENTS

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	DON BENNETT	BENNETT & CATHEY	

Rose Federal
Well No 6
Unit K
S 19, T 5S, R 25E
Chaves County
New Mexico

1-4-83



46 7400

K&E LOGARITHMIC 3 X 3 CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

$\overline{\Delta P_1^2}$ $P_c^2 - P_w^2 = 300$

$\overline{\Delta P_2^2}$ $P_c^2 - P_w^2 = 30$

$Q_1 = 2588.2$ mcfd

$Q_2 = 465.0$ mcfd

$\log Q_1 = 3.413$

$\log Q_2 = 2.667$

$n = .746$