OIL CONSERVATION DIVISION

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 BY
DEC -5 1986
O. C. D.
ARTESIA, OFFICE

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: 4 POINT [X] Initial [ ] Annual [ ] Special				Test Date: 11-12-86
Company: MCKAY OIL Corp.		Connection: TO AIR		Unit
Pool: PECOS SLOPE - ABO		Formation: ABO		
Completion Date: 11-9-86	Total Depth: 3349	Plug Back TD: 3286	Elevation: 4118	Farm or Lease Name: SOUTH 4 MILE DRAW Fed
Csg. Size: 4.500 / Wt.: 10.5 / d: 4.052 / Set At: 3336		Perforations: From 2763.5 To 2909.5		Well No.: 3
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 2735		Perforations: From OPEN To ENDED		Unit: C / Sec.: 24 / Twp.: 6S / Rge.: 22E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: NONE		County: CHAVES
Producing Thru: TUBING	Reservoir Temp. °F: 91 @ 2836.5	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2	State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
2836.5	2836.5	.631	.184	5.519	0	2.000	0	0

	FLOW DATA					TUBING DATA		CASING DATA		
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	Duration of Flow
SI						885	37	885		72 HRS
1.	2.000	.125	879	0.00	34	879	34	879		60 MIN
2.	2.000	.1875	863	0.00	45	863	45	871		60 MIN
3.	2.000	.250	842	0.00	45	842	45	853		60 MIN
4.	2.000	.3125	823	0.00	54	823	54	835		60 MIN
5.	2.000	.375	764	0.00	55	764	55	807		60 MIN

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	.2648	0.00	892.2	1.026	1.259	1.092	333
2.	.6082	0.00	876.2	1.015	1.259	1.083	737
3	1.087	0.00	855.2	1.015	1.259	1.081	1284
4.	1.672	0.00	836.2	1.006	1.259	1.075	1904
5	2.378	0.00	777.2	1.005	1.259	1.073	2509

NO.	P_t	Temp. °R	T_f	Z
1	1.35	494	1.41	.838
2.	1.33	505	1.44	.853
3.	1.30	505	1.44	.855
4.	1.27	514	1.46	.865
5	1.18	515	1.47	.869

Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0 Deg.
Specific Gravity Separator Gas .631 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .631
Critical Pressure 659 P.S.I.A. 659 P.S.I.A.
Critical Temperature 351 R 351 R

P_c 898.2 P_c^2 807

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		892.2	796	11
2		884.2	782	25
3		866.2	750	57
4		848.2	719	88
5		820.2	673	134

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 6.0224$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4.28167$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 10743$

Absolute Open Flow 10743 Mcfd @ 15.025 Angle of Slope θ 51.0 Slope, n .810

Remarks:

Approved By Division	Conducted By:	Calculated By:	Checked By:

2987

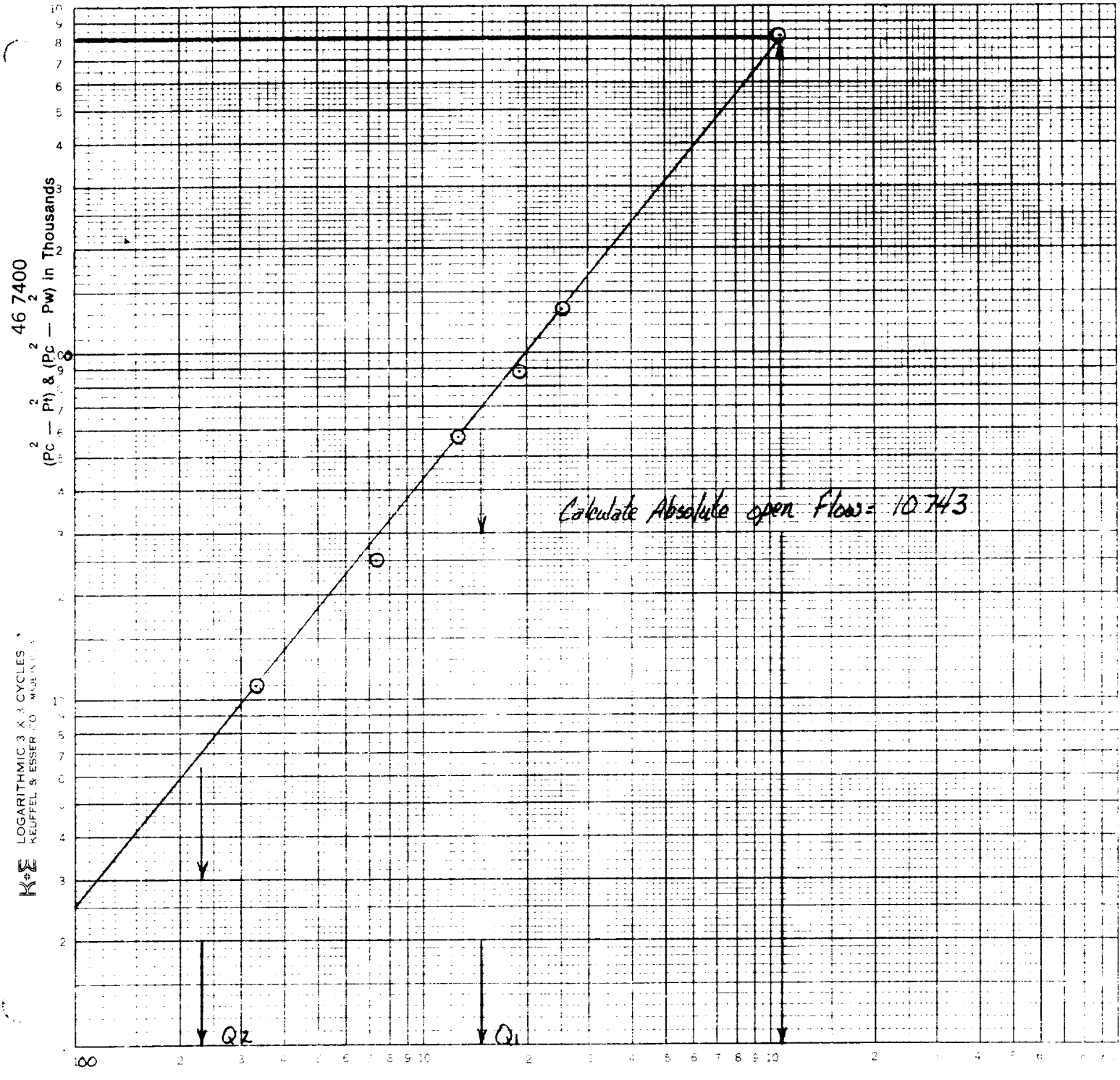
BACK PRESSURE CURVE

Operator McKay Oil Lease South 4 Mile Draw Fed Well No. 3

County Chaves Field Pecos Slope Location C 24 6S 22E

Date of Test 11-12-86 Slope "n" 0.810 Angle of Slope 51.0

Calc. Abs. Potential 10743 MCF/D



$\overline{\Delta P_1^2}$ $P_c^2 - P_w^2 =$ 70

$\overline{\Delta P_2^2}$ $P_c^2 - P_w^2 =$ 7

$Q_1 =$ 1485

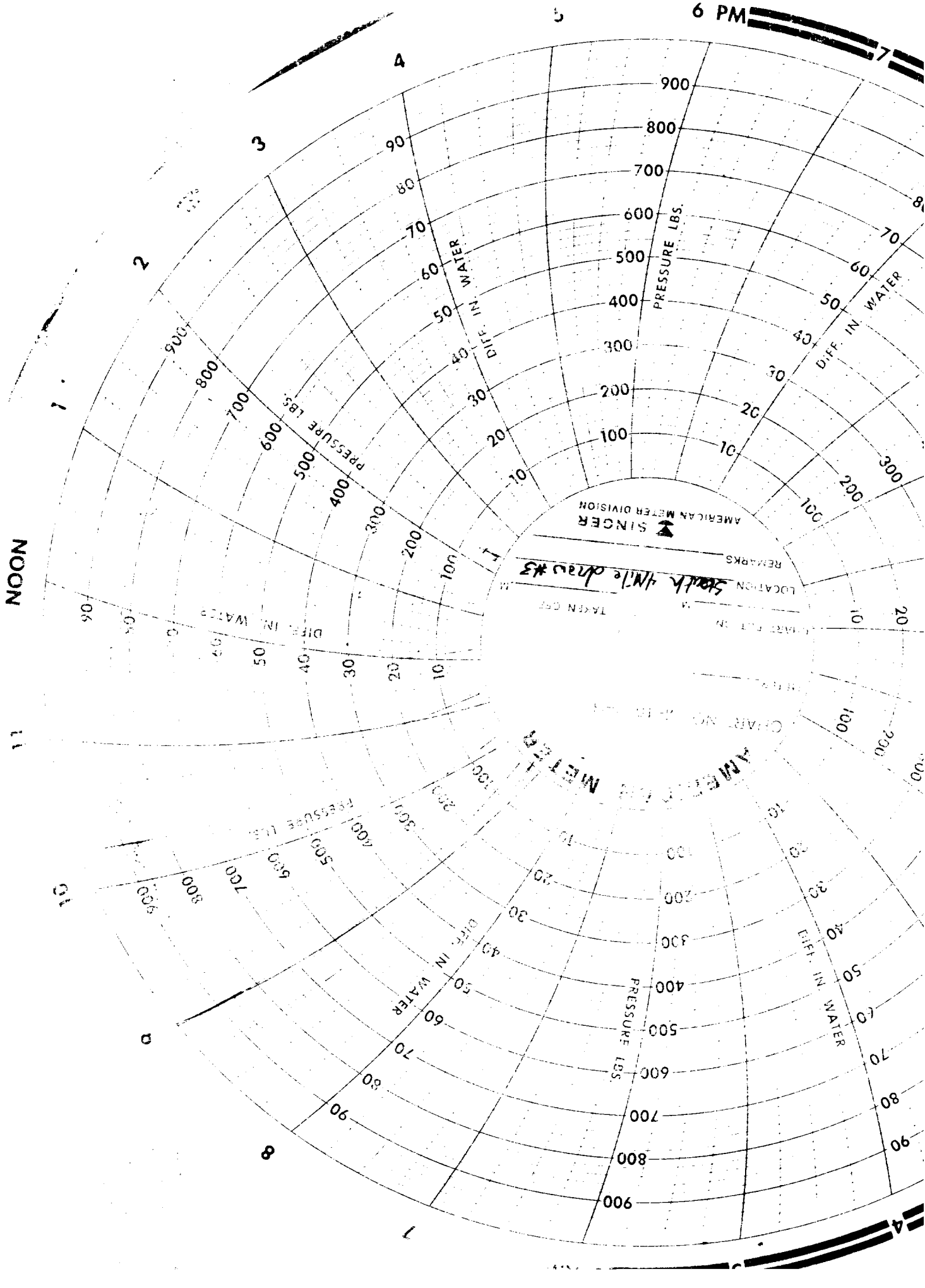
$Q_2 =$ 230

LOG $Q_1 =$ 3.1717

LOG $Q_2 =$ 2.3617

$n =$ 0.810

Form No. 1131


NOON
6 PM
PRESSURE LBS.
DIFF. IN WATER
SINGER
AMERICAN METER DIVISION
REMARKS
LOCATION
TAKEN OFF
CHART NO.
AMERICAN GAS METER