C/SP File

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 FEB 2 5 1986

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED BY
MAY 23 1986
O. C. D.
ARTESIA, OFFICE

Type Test: 4-POINT [X] Initial [ ] Annual				Test Date: 2-20-86	
Company: MC KAY OIL COMPANY		Connection: TO AIR			
Pool: WEST PECOS SLOPE Abo		Formation: ABO		Unit	
Completion Date: 2-26-86	Total Depth: 3326	Plug Back TD: 3079	Elevation: 3997	Farm or Lease Name: CHINA DRAW FEDERAL	
Csg. Size: 4.5 / Wt.: 9.5 / d: / Set At: 3126		Perforations: From 2753 To 2865		Well No.: 3	
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 2736		Perforations: From OPEN To ENDED		Unit: J / Sec.: 31 / Twp.: 6S / Rge.: 23E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: NONE		County: CHAVES	
Producing Thru: TUBING	Reservoir Temp. °F:	Mean Annual Temp. °F: 60	Barc. Press. – P_a: 13.2	State: NEW MEXICO	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
2809	2809	.619	.031	5.787	0	2.00	–	–

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					920	62	922	62	72 HRS
1.	2.00 X .09375"	825	0.00	60	825	60	840	62	60 MIN
2.	2.00 X .125	750	0.00	60	730	60	750	62	60 MIN
3.	2.00 X .1875	540	0.00	59	520	59	560	62	60 MIN
4.	2.00 X .21875	340	0.00	60	330	60	350	62	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	0.1410	0.00	838.2	1.000	1.271	1.069	161
2.	0.2648	0.00	763.2	1.000	1.271	1.063	273
3	0.6082	0.00	573.2	1.001	1.271	1.047	464
4.	0.8393	0.00	363.2	1.000	1.271	1.030	399
5							

NO.	P_t	Temp. °R	T_t	Z
1	1.27	520	1.49	.875
2.	1.16	520	1.49	.885
3.	.87	519	1.49	.912
4.	.55	520	1.49	.943
5				

Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0 Deg.
Specific Gravity Separator Gas _____ XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure 660 P.S.I.A. – P.S.I.A.
Critical Temperature 348 R – R

P_c 935.2 P_c^2 874.6

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		853.2	727.9	146.7
2		763.2	582.5	292.1
3		573.2	328.5	546.1
4		363.2	131.9	742.7
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.6015$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.4644$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 679$

Absolute Open Flow 679 Mcfd @ 15.025 | Angle of Slope θ 51 | Slope, n .810

Remarks:

Approved By Division	Conducted By:	Calculated By:	Checked By:
	BENNETT & CAHTEY	RICHARD TOWNLEY	

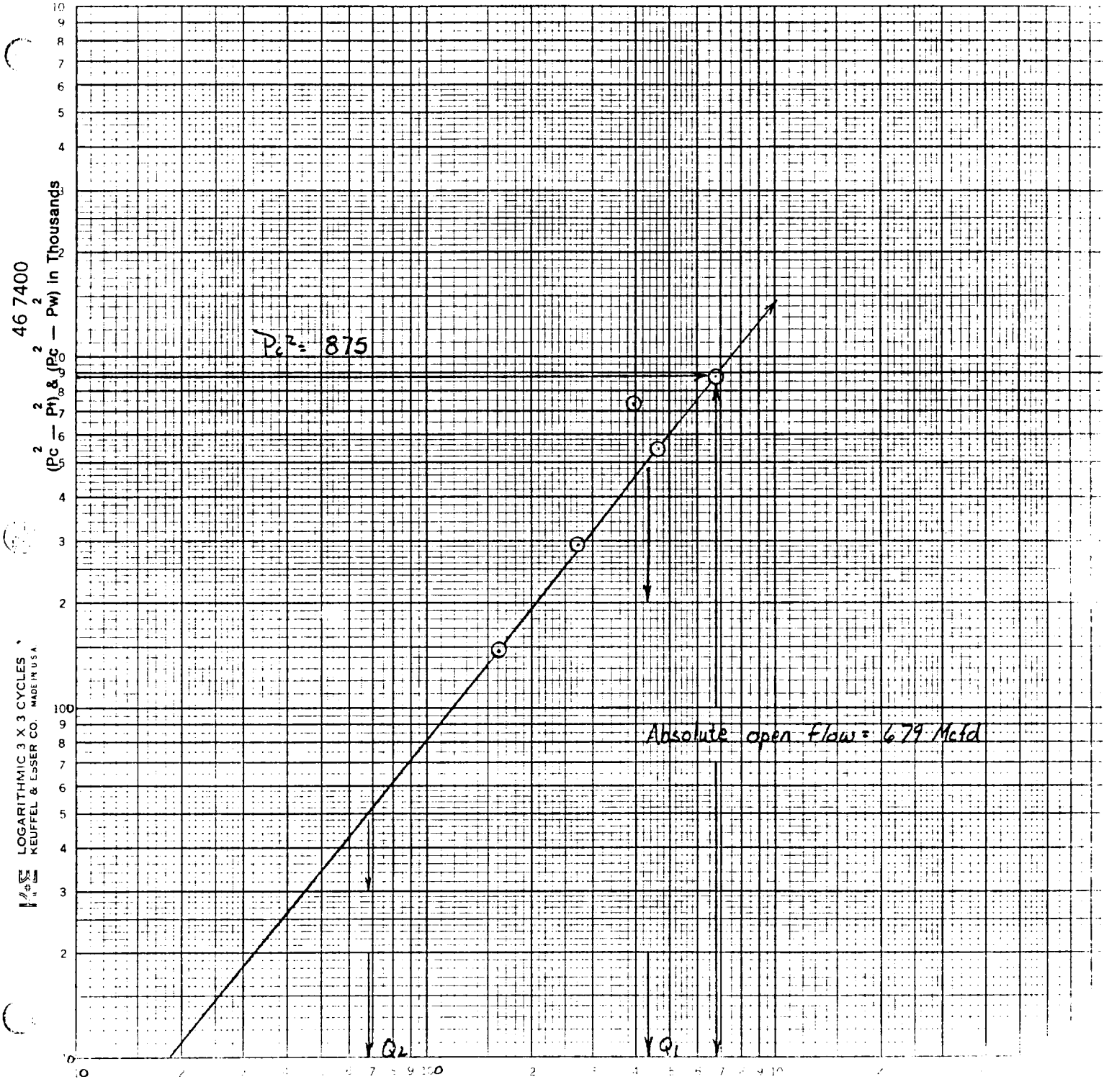
BACK PRESSURE CURVE

Operator McKay Oil Lease China Draw Fed Well No. 3

County Chaves Field West Pecos Slope Location 31 6S 23E

Date of Test 2-20-86 Slope "n" 0.810 Angle of Slope 51°

Calc. Abs. Potential 679 MCF/D



$\overline{\Delta P_1^2}$ $P_c^2 - P_w^2 =$ 500

$\overline{\Delta P_2^2}$ $P_c^2 - P_w^2 =$ 50

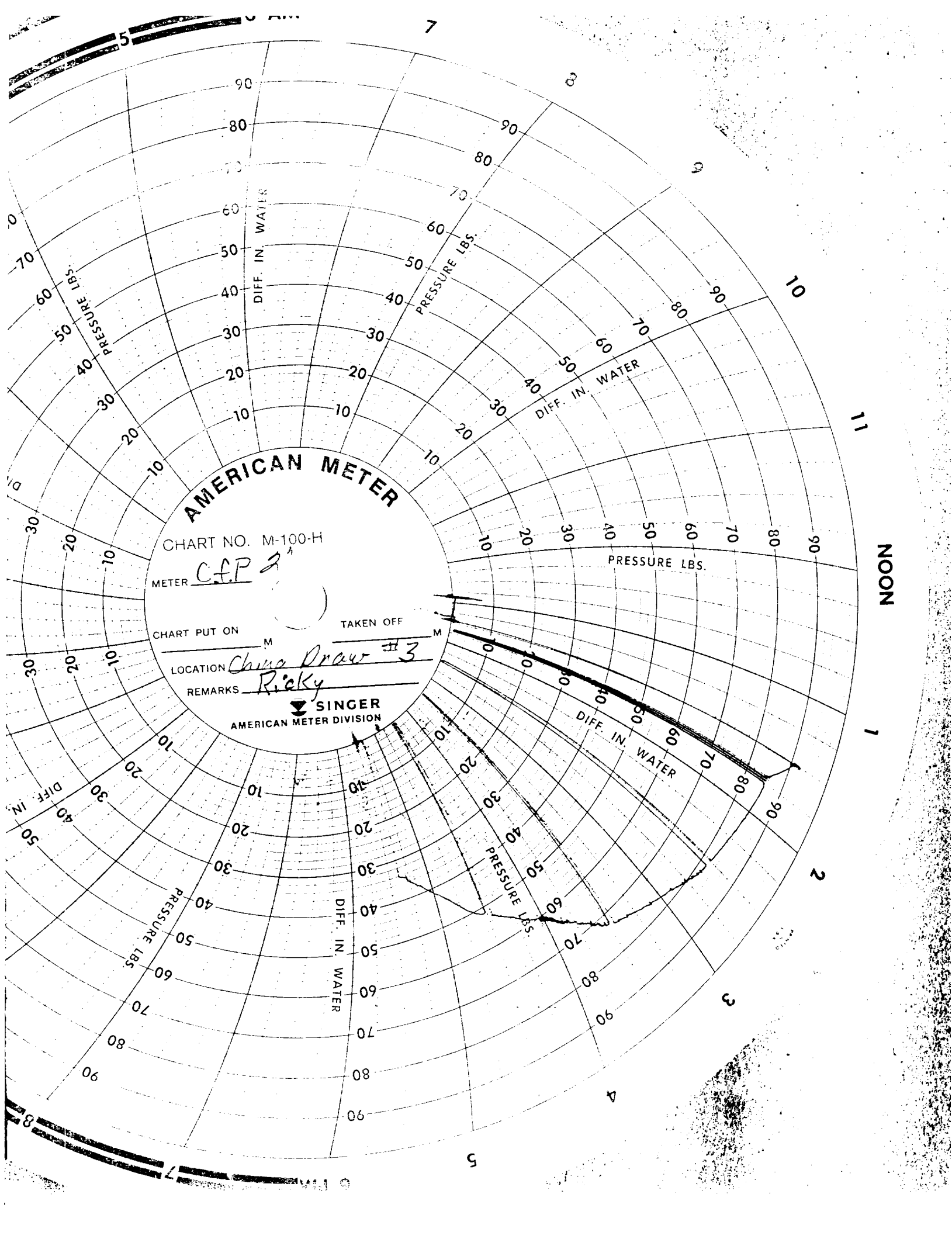
$Q_1 =$ 439

$Q_2 =$ 68

LOG $Q_1 =$ 2.6425

LOG $Q_2 =$ 1.8325

$n =$ 0.8106


AMERICAN METER
CHART NO. M-100-H
METER C.F.P 3"
CHART PUT ON
TAKEN OFF
LOCATION China Draw #3
REMARKS Ricky
SINGER
AMERICAN METER DIVISION
PRESSURE LBS.
DIFF. IN. WATER
NOON