

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

457

Type Test ☒ Initial FOUR POINT ☐ Annual ☐ Special					Test Date 2-9-82		AUG 9 1982	
Company MC KAY OIL COMPANY				Connection AIR NEW WELL			O. C. D.	
Pool West Pecos Slope also UNDESIGNATED				Formation ABO			Unit ARTESIA, OFFICE	
Completion Date 2-9-82		Total Depth 3300		Plug Back TD 3260		Elevation 4043KB		Farm or Lease Name APRII
Csg. Size 4.500	Wt. 10.5	d 4.052	Set At 3300	Perforations: From 2603 To 3168		Well No. 2		
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 2550	Perforations: From OPEN To ENDED		Unit Soc. Twp. Rge. J 27 8S 32E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE		County CHAVES		
Producing Thru TUBING		Reservoir Temp. °F 86° 2396		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State NEW MEXICO
L 2885	H 2885	Gg 08256	% CO ₂ 25.261	% N ₂ 4.399	% H ₂ S 2.00	Prover 2.00		Meter Run Taps

FLOW DATA							TUBING DATA		BOTTOM HOLE		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	B.H.P. PSIA	Temp. °F	
SI							1019		1130		72 HRS.
1.	2.00	X	.500	30	0	32	945	42	1049		1
2.	2.00	X	.500	52	0	27	832	43	922		1
3.	2.00	X	.500	73	0	29	740	49	818		1
4.	2.00	X	.500	104	0	30	590	48	653		1
5.			.500								

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	4.3880	.00	43.2	1.0281	1.1003	1.0045	215
2	4.3880	.00	65.2	1.0333	1.1003	1.0066	327
3	4.3880	.00	86.2	1.0312	1.1003	1.0021	433
4	4.3880	.00	117.2	1.0302	1.1003	1.0117	590
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	.06	492	1.31	.991	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	.09	487	1.30	.987	Specific Gravity Separator Gas 8260 XXXXXX
3.	.11	489	1.30	.984	Specific Gravity Flowing Fluid XXXXX 8260
4.	.15	490	1.30	.997	Critical Pressure 766 P.S.I.A. P.S.I.A.
5.					Critical Temperature 376 R R

NO.	P _r ²	P _w ²	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.5137$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4264$
1		1061.7	1127.2	181.0	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 841.6$	
2		934.8	873.9	434.0		
3		831.6	691.6	616.0		
4		666.5	444.2	864.0		
5						

Absolute Open Flow 841.6 Mcfd @ 15.025	Angle of Slope 49.4	Slope, n .8568
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Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE ELEMENTS.

Approved By Commission:	Conducted By: RICHARD TOWNLEY	Calculated By: BENNETT-CATHEY	Checked By:
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APRIL #2

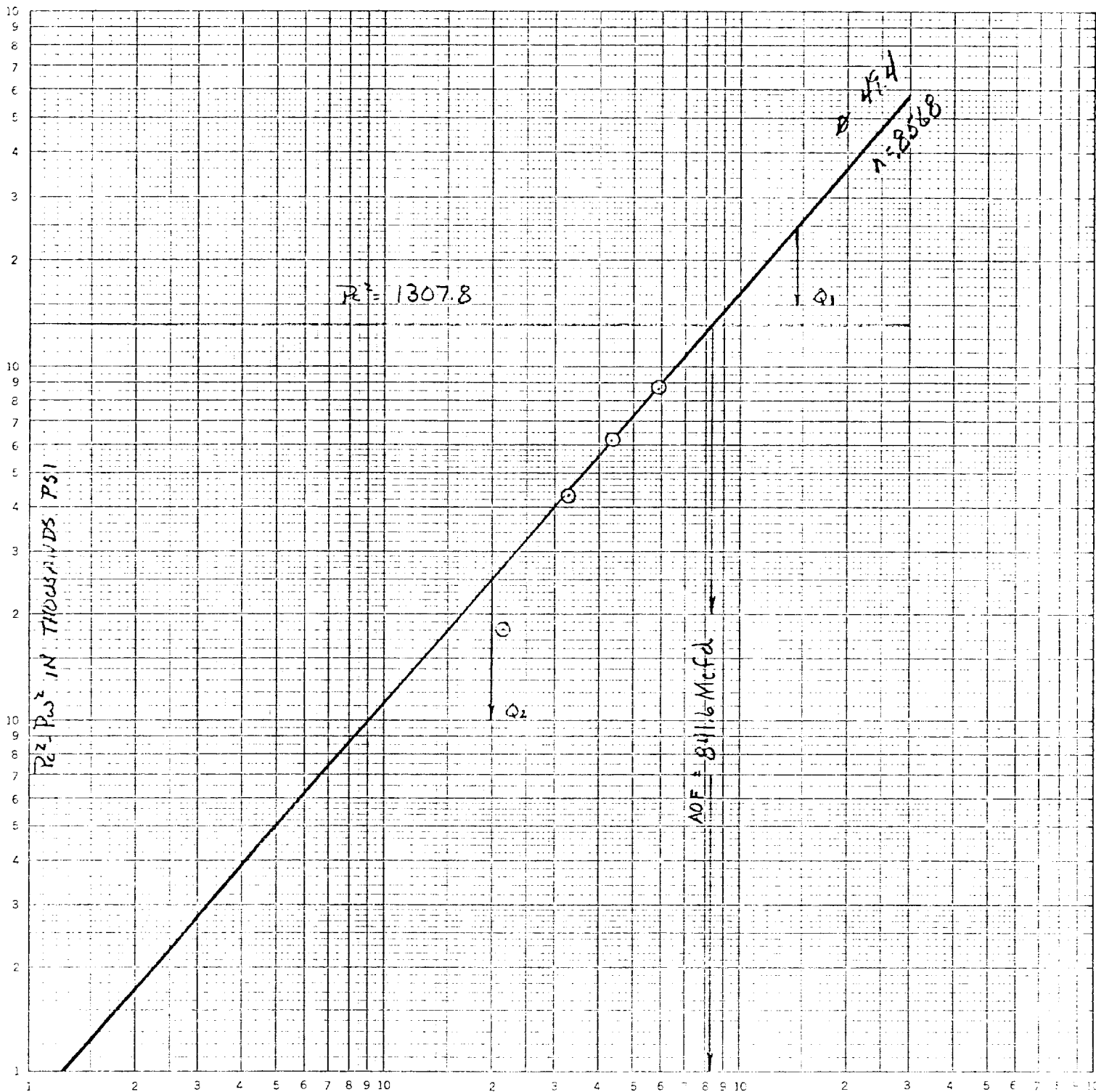
27-85-22E

CHAVES COUNTY

2-9-82

46 7400

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



$$\Delta P_1^2 \quad R^2 - P_w^2 = 1500$$

Q, Mcfd

$$\log Q_1 = 3.15752$$

$$\Delta P_2^2 \quad R^2 - P_w^2 = 250$$

$$\log Q_2 = 2.30103$$

$$Q_1 = 1438.2$$

$$h = 8568$$

$$Q_2 = 200$$

NEW-TEX LAB
P.O. BOX 1161
HOBBS NM 88241-1161
505-393-3561

ANALYSIS NUMBER: 6650
DATE OF RUN: 02/10/82
DATE SECURED: 02/09/82

ANALYSIS CERTIFICATE

SAMPLE IDENT: MCKAY OIL - APRIL #2

CLIENT: BENNETT & CATHEY INC
ADDRESS: BOX 787
CITY, STATE: ARTESIA NM 88210

SAMPLING PRESS: 0 PSIG SAMPLING TEMP: 0 DEG F
STATION NUMBER:

***** GAS ANALYSIS *****

	MOLE PERCENT	GAL/ MCF
NITROGEN	4.3988212	
CARBON DIOXIDE	25.2609978	
METHANE	69.1849442	
ETHANE	0.7740270	0.2064330
PROPANE	0.1642671	0.0450913
ISO-BUTANE	0.0227963	0.0074384
NORMAL BUTANE	0.0798801	0.0251143
ISO-PENTANE	0.0157630	0.0057551
NORMAL PENTANE	0.0350380	0.0126627
HEXANES	0.0242323	0.0099401
HEPTANES PLUS	0.0392332	0.0180551
TOTAL	100.0000000	0.3304900

PROPANE GPM:	0.05	BUTANES GPM:	0.03
ETHANE GPM:	0.21	PENTANES PLUS GPM:	0.05

SPECIFIC GRAV (CALC): .8256
MOLE WEIGHT: 23.91

HHV-BTU/CU FT	PRESSURE (PSIA)	WET	DRY
14.696		713	725
14.650		710	723
14.730		714	727
14.735		715	727

ANALYZED BY:

APPROVED BY:

