

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

Form C-122
Revised 9-1-65

RECEIVED

65X

Type Test ☒ Initial FOUR POINT ☐ Annual ☐ Special						Test Date 1-27-82		AUG 9 1982	
Company MC KAY OIL COMPANY				Connection AIR NEW WELL				O. C. D. ARTESIA, OFFICE	
Pool <i>West Boca Slope also</i> UNDESIGNATED				Formation ABO				Unit	
Completion Date 1-21-82		Total Depth 3500		Plug Back TD 3368		Elevation		Farm or Lease Name APRIL	
Csg. Size 4.5	Wt. 10.5	d 4.052	Set At 4.052	Perforations: From 3094 To 3218		Well No. 1			
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 1.995	Perforations: From OPEN To ENDED		Unit J 26 8S 22E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE		County CHAVES			
Producing Thru TUBING		Reservoir Temp. °F 108 @ 3156		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State NEW MEXICO	
L 3156	H 3156	Gg .784	% CO ₂ 21.15	% N ₂ 5.527	% H ₂ S	Prover	Meter Run 4.00	Taps FLANGE	

FLOW DATA						TUBING DATA		CASING DATA		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							1012		1183.0		72 HRS.
1.	4.00	X	.500	320	21.0	34	947	51	922.2		1
2.	4.00	X	.500	340	48.0	29	920	48	871.3		1
3.	4.00	X	.500	340	90.0	34	795	47	654.1		1
4.	4.00	X	.750	340	30.0	46	755	47	591.6		1
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	1.182	86.12	333.2	1.026	1.129	1.035	122
2	1.182	130.21	353.2	1.026	1.129	1.038	185
3	1.182	178.29	353.2	1.026	1.129	1.038	253
4	2.661	102.94	353.2	1.026	1.129	1.034	328
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	.44	494	1.34	.934	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	.47	489	1.33	.928	Specific Gravity Separator Gas .784 X X X X X X X X
3	.47	494	1.34	.929	Specific Gravity Flowing Fluid X X X X X
4	.47	506	1.37	.935	Critical Pressure 749 P.S.I.A. _____ P.S.I.A.
5					Critical Temperature 368 R _____ R

P _c 1025.2 P _c ² 1051.0				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1			922.2	128.8
2			871.3	179.7
3			654.1	396.9
4			591.6	459.4
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.2878$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.8866$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 618.8$

Absolute Open Flow 618.8 Mcfd @ 15.025	Angle of Slope @ 52.5	Slope, n .767
--	-----------------------	---------------

Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE GUAGES

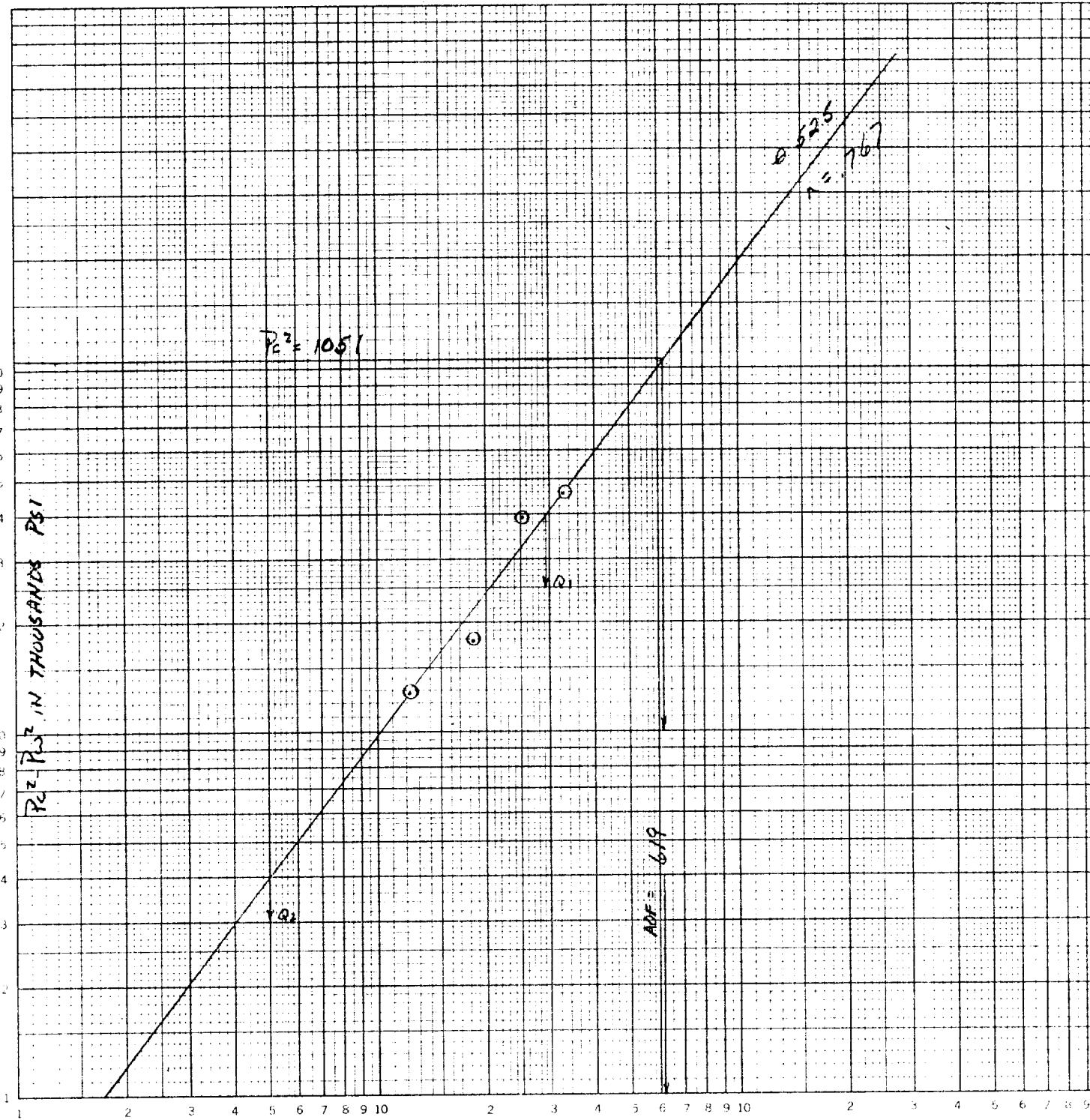
Approved By Commission:	Conducted By:	Calculated By:	Checked By:
-------------------------	---------------	----------------	-------------

APRIL #1
SEC. 26 TWP 8S RGE 22E
CHAVES COUNTY
1-27-82

46 7400

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

$P_2 - P_w$ IN THOUSANDS PSI



$$\begin{aligned} \Delta P_1 & P_2 - P_w^2 = 400 \\ \Delta P_2 & P_2 - P_w^2 = 40 \\ Q_1 &= 2924 \\ Q_2 &= 50 \end{aligned}$$

Q, Mcfd

$$\begin{aligned} \log Q_1 &= 2.46597 \\ \log Q_2 &= 1.69897 \\ n &= .767 \end{aligned}$$

DATE 1-21-00

TABLE

[illegible]

ILLECIBLE

AS Simpson

COMPANY MC KAY OIL COMPANY WELL NAME APRIL WELL NO. 1
DATE OF TEST 1-24-82 TO 1-27-82 FORMATION ABO PAGE 1 OF 1

ELEMENT NUMBER	RPG3 #37882	RANGE	3,500 LBS.
CLOCK NUMBER	19040	RANGE	72 HOURS
TIME WELL SHUT IN	1545 HOURS	1-24-82	
TIME CLOCK STARTED	1514 HOURS		
DEAD WEIGHT ELEMENT ON SURFACE	842	SHUT IN	LBS.
TIME ELEMENT REACHED BOTTOM	1538	HOURS	
DEAD WEIGHT ELEMENT ON BOTTOM	628	FLOWING	LBS.
ELEMENT SET AT	3251		FEET.
TEMPERATURE	3251	FT.	94 °F.
DEAD WEIGHT AT THE END OF	74	HOURS	15 MINUTES.

[illegible]