

MEXICO OIL CONSERVATION CO.
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS

RECEIVED BY

JUN 18 1984

O. C. D.

ARTESIA, OFFICE

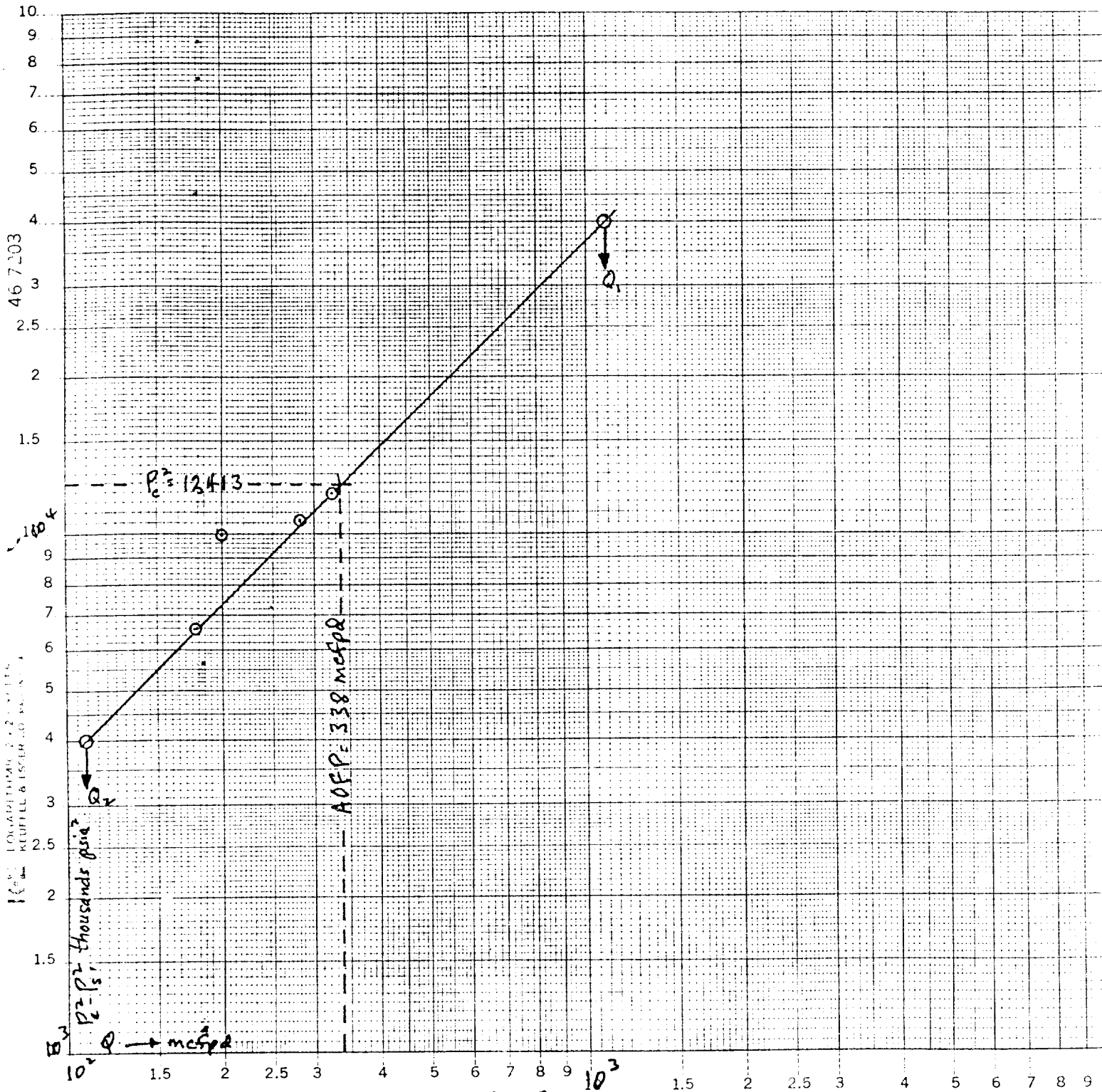
AMENDED*

AMENDED*

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 4-5-82	
Company YATES PETROLEUM CORPORATION		Connection TRANSWESTERN PIPELINE CO.	
Pool WEST ATOKA MORROW		Formation MORROW	
Completion Date 12-17-81	Total Depth 9034KB	Plug back To 8987KB	Elevation 3504KB
Casing Size 4-1/2		Set At 9034KB	Perforations From 8709 To 8818
Tubing Size 2-3/8"		Set At 8680KB	Perforations From To
Type well - Single - Prodenhead - G.G. or G.O. Multiple SINGLE		Packer Set At 8680KB	County Eddy
Producing Thru Tbng	Reservoir Temp. °F 147 ° 8800	Mean Annual Temp. °F 62	Baro. Press. - P _a 13.2
L 8795	H 8795	G _g 0.620	% CO ₂ 0.47
		% N ₂ 1.46	% H ₂ S NIL
		Prover -	Meter Run 2"
			flanged
FLOW DATA			
NO.	Prover Line Size	Orifice Size	Press. p.s.i.g.
1.	2.067 x 0.750	222	11
2.	2.067 x 0.750	239	25
3.	2.067 x 0.750	248	48
4.	2.067 x 0.750	256	62
5.			
TUBING DATA			
	Press. p.s.i.g.	Temp. °F	
	2550	60	
	1350	68	
	1005	70	
	928	71	
	280	71	
CASING DATA			
	Press. p.s.i.g.	Temp. °F	
RATE OF FLOW CALCULATIONS			
NO.	Coefficient (24 Hour)	$\sqrt{P_m \cdot P_m}$	Pressure P _m
1	2.709	50.86	235.2
2	2.709	79.40	252.2
3	2.709	111.97	261.2
4	2.709	129.19	269.2
5			
NO.	P ₁	Temp. °R	T ₁
1	0.345	525	1.446
2	0.370	525	1.446
3	0.384	530	1.460
4	0.395	534	1.471
5			
Gas Liquid Hydrocarbon Ratio _____ Mol/Foot.			
A.P.L. Gravity of Liquid Hydrocarbons _____ Deg.			
Specific Gravity Separator Gas _____ 0.620		X X X X X X X X	
Specific Gravity Flowing Fluid _____ X X X X X		0.620	
Critical Pressure _____ 681		P.S.I.A. 736 P.S.I.A.	
Critical Temperature _____ 363		R 383 R	
P _c 3523.2 P _c ² 12413			
NO.	P ₁ ²	P _w ²	P _c ² - P _w ²
1		5827	6586
2		2445	9968
3		1807	10606
4		462	11951
5			
(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0387$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0387$			
ADP = 0 $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 338$			
Absolute Open Flow _____ 338		Meter 15.025	Angle of Slope θ _____ 45 deg
			Slope, n _____ 1.000
Remarks: Static pressures by Bennett Wireline flowing pressures by DWT Calculations worksheet C122D Attached			
Approved By Commissioner _____		Conducted By: _____ Bob Gary	Calculated By: _____ Eddie Mahfood
			Checked By: _____

YPC- Connor RR Com. No. 1

K-23-18s-25E, West Atoka Morrow, Eddy Co, N.M.



$$Q_1 = 1090 \text{ mcfpd}$$

$$\log Q_1 = 3.0374$$

$$Q_2 = 109 \text{ mcfpd}$$

$$\log Q_2 = 2.0374$$

$$n = 1.000$$

WORKSHEET FOR CALCULATION OF ST. SIC COLUMN WELLHEAD PRESSURE (P_w)

C-122D
Revised 9-1-65

COMPANY YPC LEASE Conner RR Co WELL NO. 1 DATE 4-5-82

LOCATION: Unit K Section 23 Township 18-S Range 25-E

1 879558105 H 879558105 L/H 1.000 G 0.640 %CO₂ 0.47 %N₂ 1.46 %H₂S NT
2 879558105 D 2.035 F₁ 0.01584 GH 5455 5025 1.86% H₂O P_{cr} 236 T_{cr} 383
3 879558105 36430

LINE	1	2	3	4	1	2	3	4
1 <u>2m</u>		0.178	0.200	0.222	0.325		0.200	0.222
2 <u>2m (H.H. 2B)</u>	520	528	530	531	531			
3 <u>2m (H.H. 2B)</u>	607	606	606	605	605			
4 <u>2m (H.H. 2B)</u>	563.5	567	568	568	568		568	568
5 <u>2m (H.H. 2B)</u>	0.7565	.769	.849	.868	.953		0.8505	.893
6 <u>2m</u>	426.288	436.023	482.232	493.024	541.304		423.567	495.864
7 <u>2m</u>	11.7873	11.5246	10.4203	10.1922	9.2831		10.3915	10.1338
8 <u>2m (H.H. 2B)</u>	1.5559	1.5406	1.4781	1.4655	1.4164		1.4765	1.4623
9 <u>2m (H.H. 2B)</u>		0.3509	0.3235	0.3176	0.2926		0.3227	0.3162
10 <u>2m</u>	2.5632	1863.2	1018.2	841.2	293.2		1018.2	841.2
11 <u>2m</u>	652.6	3471.5	1036.73	707.62	45.79		1036.73	707.62
12 <u>2m</u>	0.44204	0.63217	0.59076	0.55621	0.54312		0.38463	0.39022
13 <u>2m</u>		6.1166	7.6506	7.8225	8.5924		7.6547	7.8545
14 <u>2m</u>		1.222	1.528	2.202	2.7266		1.532	2.215
15 <u>2m</u>		1.511	2.334	4.850	7.725		2.347	4.466
16 <u>2m</u>		0.53	0.76	1.54	2.28		0.76	1.35
17 <u>2m</u>		3423.6	1037.44	704.16	88.25		1037.44	704.17
18 <u>2m</u>	10222.3	5239.5	1532.5	1034.3	125.6		1531.9	1037.0
19 <u>2m</u>	3197.2	2312.8	1238.4	1045	353.5		1237.7	1012.3
20 <u>2m</u>	2880.2	2629.0	1123.3	930.3	323.4		1127.9	929.8
21 <u>2m</u>	3.413	2.237	1.533	1.264	0.439		1.533	1.263
22 <u>2m</u>	1.4713	1.420	1.423	1.433	1.423		1.423	1.423
23 <u>2m</u>	0.7365	0.769	0.768	0.768	0.768		0.768	0.768