

30-015-3007

C/SF

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 6/27/00	
Company OXY USA, INC.		Connection 5-12-00	
Pool Empire Penn		Formation MORROW	
Completion Date		Unit A	
Total Depth		Plug Back TD	
Elevation 3203		Farm or Lease Name OXY SPEED BUMP FED.	
Csg. Size 5.5	Wt. d	Set At	Perforations: From 10042 To 10070
Tbg. Size 2.875	Wt. 6.5	d 2.441	Set At 10001
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE		Packer Set At 10003	
Producing Thru TUBING		Reservoir Temp. °F 155 @ 100015	
Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 10042	H 10042	G _g 0.6495	% CO ₂ 0.530
% N ₂ 0.422	% H ₂ S	Prover	Meter Run 6.065
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	Press. p.s.i.g.		Temp. °F
1.	6.065	3.0		401	1.0	100	1352	73			94
2.	6.065	3.0		407	3.2	98	1336	76			1
3.	6.065	3.0		413	8.5	99	1324	76			1
4.	6.065	3.0		427	27.9	93	1295	76			1
5.							1179	76			1

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor F _g	Super. Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	44.51	20.36	414.4	0.9635	1.2411	1.0319	1120
2.	44.51	36.66	414.4	0.9657	1.2411	1.0329	2023
3.	44.51	60.20	426.3	0.9644	1.2411	1.0331	3317
4.	44.51	110.77	439.8	0.9701	1.2411	1.0357	6156
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	0.62	560	1.51	0.939	878.366	61.8	0.649	XXXX	672	372
2.	0.63	558	1.50	0.937						
3.	0.63	559	1.50	0.937						
4.	0.65	553	1.49	0.932						
5.										

NO.	P _r ²	P _w ²	P _w ² - P _r ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1.	1379	1903	9	17.4601	6.9973
2.	1375	1890	22		
3.	1367	1867	44		
4.	1342	1802	109		
5.					

Absolute Open Flow		Angle of Slope θ		Slope, n	
43078 Mcfd @ 15.025		55.7		0.682	

Remarks: Bottomhole pressures recorded using electronic pressure gauge #T-75.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	ARC Pressure Data, Inc.	Rod Dodson	

GAS WELL BACK-PRESSURE CURVE

OXY USA, INC.
OXY SPEED BUMP FEDERAL #1
EDDY COUNTY, NM
6/27/00

$n = 0.6818$

$\theta = 55.7^\circ$

AOF = 43078

