

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

Form C-122
Revised 9-1-65

dsf
File

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8-17-89			
Company Oxy USA, Inc.				Connection EPNG				RECEIVED	
Pool North Loving <i>Atoka</i>				Formation Strawn <i>Atoka</i>				Unit	
Completion Date 8-14-89		Total Depth 11,545		Plug Back TD 11250		Elevation <i>AUG 31 '89</i>		Farm or Lease Name Brantley "A"	
Csg. Size 5"	Wt. 	d 	Set At 11250	Perforations: From 11056 To <i>ARTESIAN OFFICE</i>		Well No. 1			
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 10919	Perforations: From perf nipple To 10917		Unit J	Sec. 7	Twp. 23S	Rge. 28E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 10919		County Eddy	
Producing Thru Tbg.		Reservoir Temp. °F 185 @ 11127		Mean Annual Temp. °F		Baro. Press. - P _a		State NM	
L 11127	H 11127	Gg .605	% CO ₂ .44	% N ₂ 1.64	% H ₂ S 0	Prover	Meter Run 4.026	Taps Flg.	

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	
SI							5705		Pkr.		48 hrs
1.	4	X	.500	423	9.00	104	5620		Pkr.		1 hr.
2.	4	X	.500	423	32.50	100	5425		Pkr.		1 hr.
3.	4	X	.500	423	54.80	98	5210		Pkr.		1 hr.
4.	4	X	.500	423	96.00	96	4942		Pkr.		1 hr.
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, Mcid
1	1.182	62.66	436.2	.9602	1.286	1.028	94
2	1.182	119.07	436.2	.9636	1.286	1.029	180
3	1.182	154.61	436.2	.9653	1.286	1.029	233
4	1.182	204.63	436.2	.9671	1.286	1.030	310
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio <u>Dry gas</u> Mcf/bbl.	A.P.I. Gravity of Liquid Hydrocarbons <u>Dry</u> Deg.	Specific Gravity Separator Gas <u>.605</u> X X X X X X X X	Specific Gravity Flowing Fluid <u>X X X X X</u>	Critical Pressure <u>*670</u> P.S.I.A. <u>Dry gas</u> P.S.I.A.	Critical Temperature <u>*355</u> R
1	.65	564	1.58	.946						
2	.65	560	1.57	.945						
3	.65	558	1.57	.945						
4	.65	556	1.56	.943						
5										

P _c 5783.8 P _c ² 33452.3				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.202$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.333$	
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .723$		
1		5699.7	32486.6	965.7			
2		5513.0	30393.2	3059.1			
3		5305.3	28146.2	5306.1			
4		5048.8	25490.4	7961.9			
5							

Absolute Open Flow <u>723</u> Mcid @ 15.025		Angle of Slope <u>59.5</u>		Slope, n <u>.590</u>	
Remarks: <u>*corrected to 1.64% N2</u> <u>no fluid produced during test</u>					
Approved By Commission:		Conducted By: John West Engineering		Calculated By: JBM	
				Checked By: JBM	