

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

Copy 6512
Form C-122
Revised 9-1-65
RECEIVED 0-122

Type Test: ☐ Initial ☐ Annual ☒ Special						Test Date: <u>12-4-73</u>		DEC 20 1973			
Company: <u>Monsanto Company</u>				Connection: <u>TWP + SK</u>				O. C. C. ARTESIA, OFFICE			
Well: <u>Burton Flat (Atoka)</u>				Formation: <u>Atoka</u>				Unit: <u>G</u>			
Completion Date: <u>5-1-73</u>		Total Depth: <u>11,510</u>		Plug Back TD: <u>11,432</u>		Elevation: <u>3199 DF</u>		Farm or Lease Name: <u>Miller Federal</u>			
Gas Size: <u>5 1/2</u>	Wt.: <u>17</u>	d: <u>4.892</u>	Set At: <u>11,50</u>	Perforations: From <u>10,658</u> To <u>10,668</u>		Well No.: <u>1X</u>					
Gas Size: <u>2 7/8 EUE</u>	Wt.: <u>6.5</u>	d: <u>2.441</u>	Set At: <u>11,137</u>	Perforations: From _____ To _____		Unit: <u>G</u>		Sec.: <u>3</u>	Twp.: <u>21-S</u>	Rgn.: <u>27-E</u>	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: <u>Dual</u>						Packer Set At: <u>11,126</u>		County: <u>Eddy</u>			
Producing Thru Casing		Reservoir Temp. °F: <u>155 @ 10,663</u>		Mean Annual Temp. °F: <u>60°</u>		Baro. Press. - P _a : <u>13.2</u>		State: <u>New Mexico</u>			
L: <u>10,663</u>	H: <u>10,663</u>	Gg: <u>.611</u>	% CO ₂ : _____	% N ₂ : _____	% H ₂ S: _____	Prover: _____		Meter Run: _____	Taps: _____		

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	of Flow
1.	4.0		1.5	760	12	52			1195	56	1 Hr
2.	4.0		1.5	760	25	53			1154	60	1 Hr
3.	4.0		1.5	760	68	59			1113	62	1 Hr
4.	4.0		1.5	760	94	59			1050	63	1 Hr
5.									983	64	1 Hr

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, Mgd
1.	10.84	95.32	773.2	1.0078	1.2793	1.079	1453
2.	10.84	139.03	773.2	1.0068	1.2793	1.077	2091
3.	10.84	229.29	773.2	1.0010	1.2793	1.075	3422
4.	10.84	269.59	773.2	1.0010	1.2793	1.075	4023
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio: <u>None Produced</u> Mcf/sbl.
1.	1.15	512	1.41	.859	A.P.I. Gravity of Liquid Hydrocarbons: _____ Deg.
2.	1.15	513	1.42	.862	Specific Gravity Separator Gas: <u>.611</u> XXXXXXXXXX
3.	1.15	519	1.43	.865	Specific Gravity Flowing Fluid: <u>XXXXX</u>
4.	1.15	519	1.43	.865	Critical Pressure: <u>671</u> P.S.I.A. <u>671</u> P.S.I.A.
5.					Critical Temperature: <u>362</u> °R <u>362</u> °R

P _a <u>1208.2</u>	P _c ² <u>1460</u>	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{1460}{186}$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{6.5613}{1}$
NO.	P _w	P _w ²	P _c ² - P _w ²
1.	1103.1	1217	243
2.	1128.7	1274	186
3.	1073.8	1153	307
4.	1011.5	1023	437
5.			

Absolute Open Flow: <u>13719</u> Mgd @ 15.025		Angle of Slope @: <u>47.6</u>		Slope, n: <u>.913</u>	
Remarks: <u>Shut-In 24 Hours Prior to Start of Test.</u>					
Approved by Commission: _____		Conducted By: <u>W T Hagler</u>		Calculated By: <u>H L Hagler</u>	
		West Texas Consulting Service, Inc.		Checked By: _____	