

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

(So. Crossroads San Andres) MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation San Andres County Lea
Initial X Annual _____ Special _____ Date of Test 11/17-18/65
Company W. K. Byron Lease T.P. State Well No. 1
Unit K Sec. 10 Twp. 10S Rge. 36E Purchaser None
Casing 5 1/2 Wt. 15 1/2 I.D. _____ Set at 5,010 Perf. 4902' To 4934'
Tubing 2 3/8" Wt. 4.7# I.D. 1.995 Set at 4860' Perf. Open End To _____
Gas Pay: From 4902 To 4934 L 4860 xG .792 -GL 3,849 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Date of Completion: _____ Packer 4800' Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) XXXXXXXXXXXXXXX (Choke) (Meter) Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						<u>1423</u>				<u>72</u>
1.	<u>2</u>	<u>5/16</u>	<u>525</u>		<u>73</u>	<u>525</u>				<u>1</u>
2.	<u>2</u>	<u>1/4</u>	<u>607</u>		<u>63</u>	<u>607</u>				<u>1</u>
3.	<u>2</u>	<u>7/32</u>	<u>603</u>		<u>71</u>	<u>603</u>				<u>1</u>
4.	<u>2</u>	<u>3/16</u>	<u>773</u>		<u>70</u>	<u>773</u>				<u>1</u>
5.	<u>2</u>	<u>3/16</u>	<u>679</u>		<u>67</u>	<u>679</u>				<u>17</u>

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	<u>2.1577</u>		<u>530.2</u>	<u>.9677</u>	<u>.8659</u>	<u>1.004</u>	<u>1,077</u>
2.	<u>1.4030</u>		<u>620.2</u>	<u>.9724</u>	<u>.8659</u>	<u>1.099</u>	<u>822</u>
3.	<u>1.0534</u>		<u>701.2</u>	<u>.9792</u>	<u>.8659</u>	<u>1.114</u>	<u>725</u>
4.	<u>.7851</u>		<u>806.2</u>	<u>.9905</u>	<u>.8659</u>	<u>1.134</u>	<u>616</u>
5.	<u>.7851</u>		<u>692.2</u>	<u>.9933</u>	<u>.8659</u>	<u>1.112</u>	<u>520</u>

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Negligible cf/bbl.
Gravity of Liquid Hydrocarbons 9.936 deg.
P_c (1-e^{-s}) .233
Specific Gravity Separator Gas .792
Specific Gravity Flowing Fluid 1.36.2
P_c 1.36.2 P_c 2082.7

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.	<u>530.2</u>	<u>289.66</u>	<u>10.70</u>	<u>114.49</u>	<u>26.676</u>	<u>316.335</u>	<u>1746.4</u>	<u>562.4</u>	<u>39.16</u>
2.	<u>602.2</u>	<u>362.64</u>	<u>8.17</u>	<u>66.75</u>	<u>15.553</u>	<u>370.197</u>	<u>1601.5</u>	<u>615.0</u>	<u>42.62</u>
3.	<u>701.2</u>	<u>491.63</u>	<u>7.20</u>	<u>51.84</u>	<u>12.073</u>	<u>503.759</u>	<u>1553.9</u>	<u>709.7</u>	<u>49.42</u>
4.	<u>806.2</u>	<u>649.96</u>	<u>6.12</u>	<u>37.45</u>	<u>8.726</u>	<u>653.684</u>	<u>1404.0</u>	<u>611.6</u>	<u>56.51</u>
5.	<u>692.2</u>	<u>479.14</u>	<u>5.17</u>	<u>26.73</u>	<u>6.228</u>	<u>485.368</u>	<u>1577.3</u>	<u>696.7</u>	<u>48.51</u>

Absolute Potential 600 MCFPD; n 1.0000
COMPANY Sinclair Oil & Gas Co.
ADDRESS Box 1470 Midland Texas Gas Products Dept. Mr. Frank Rogers
AGENT and TITLE W.R. Lord Gas Technician
WITNESSED Mr. Tack Byron Owner
COMPANY W.K. Byron Hobbs New Mexico

n Slope greater than 1.000 therefore n Slope of 1.000 drawn
through 17 hour point for potential.

WRL

Orig. & W.K. Byron
2- Mr. FCR
1-Tatum GP Plt.
1.- File