

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Emery Formation Tates - Queen County Lea
Initial _____ Annual _____ Special X Date of Test 9-30-56
Company The Atlantic Refining Company Lease State "J" Well No. 1
Unit H Sec. 29 Twp. 21-S Rge. 36-E Purchaser Permian Basin Pipe Line Company
Casing 5 1/2" Wt. 17# I.D. 4.992" Set at 3049' Perf. _____ To _____
Tubing 2-7/8" Wt. 6.5# I.D. 2.441" Set at 3187' Perf. _____ To _____
Gas Pay: From 3200 To 3195 L 3187 xG 0.670 -GL 2135' Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Date of Completion: 7-11-56 Packer _____ Reservoir Temp. _____
Single-Bradenhead-G. G. or G.O. Dual

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)Type Taps Pipe

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(<u>Prover</u>) (Line) Size	(<u>Choke</u>) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						<u>1049.5</u>				<u>73 1/4</u>
1.	<u>1</u>	<u>1.00</u>	<u>171.3</u>	<u>5.0</u>	<u>64</u>	<u>971.4</u>				<u>28 1/4</u>
2.	<u>1</u>	<u>1.00</u>	<u>168.5</u>	<u>14.7</u>	<u>63</u>	<u>872.7</u>				<u>24</u>
3.	<u>1</u>	<u>1.00</u>	<u>170.7</u>	<u>28.7</u>	<u>67</u>	<u>743.4</u>				<u>23-3/4</u>
4.	<u>1</u>	<u>1.00</u>	<u>162.0</u>	<u>40.0</u>	<u>67</u>	<u>663.5</u>				<u>23-3/4</u>
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w P_f}$	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>6.375</u>	<u>49.22</u>		<u>.9962</u>	<u>.9463</u>	<u>1.050</u>	<u>311</u>
2.	<u>6.375</u>	<u>81.15</u>		<u>.9971</u>	<u>.9463</u>	<u>1.049</u>	<u>531</u>
3.	<u>6.375</u>	<u>117.9</u>		<u>.9933</u>	<u>.9463</u>	<u>1.048</u>	<u>741</u>
4.	<u>6.375</u>	<u>137.9</u>		<u>.9933</u>	<u>.9463</u>	<u>1.047</u>	<u>865</u>
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 5.866 (1-e^{-s}) 0.137

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 1062.7 P_c 1129.3

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>984.6</u>	<u>969.4</u>	<u>1.830</u>	<u>3.349</u>	<u>0.4500</u>	<u>969.2</u>	<u>159.4</u>	<u>984.6</u>	<u>.93</u>
2.	<u>885.9</u>	<u>784.8</u>	<u>3.115</u>	<u>9.703</u>	<u>1.3290</u>	<u>786.1</u>	<u>303.2</u>	<u>886.6</u>	<u>.83</u>
3.	<u>756.6</u>	<u>572.4</u>	<u>4.347</u>	<u>18.900</u>	<u>2.5890</u>	<u>575.0</u>	<u>554.3</u>	<u>758.3</u>	<u>.71</u>
4.	<u>676.7</u>	<u>457.9</u>	<u>5.074</u>	<u>25.750</u>	<u>3.5280</u>	<u>461.4</u>	<u>667.9</u>	<u>679.3</u>	<u>.61</u>
5.									

Absolute Potential: 1275 MCFPD; n .74COMPANY The Atlantic Refining Company
ADDRESS P.O. Box 1038 Denver City, TexasAGENT and TITLE N. A. Carr District Superintendent

WITNESSED _____

COMPANY _____

REMARKS

Retest

ELVIS A. UTZ
GAS ENGINEER