

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Emery Formation Tates - Seven Rivers County San
Initial X Annual _____ Special _____ Date of Test 7-24-58
Company THE ATLANTIC REFINING COMPANY Lease SEALE FEDERAL Well No. 4
Unit _____ Sec. 34 Twp. 20-S Rge. 36-E Purchaser Phillips Petroleum Co.
Casing 5 1/2" Wt. 14.1 Lb./ft. D. 5.012 Set at 3883' Perf. 3914' To 3930'
Tubing 2" Wt. 4.75 Lb./ft. D. 2.800 Set at 3792' Perf. _____ To _____
Gas Pay: From 3814' To 3850' L 3814' xG 0.625 -GL 2813 Bar.Press. 12.2
Producing Thru: Casing _____ Tubing X Type Well Single
Date of Completion: _____ Packer TIM 6327.7 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (Proven) (Choke) (Meter)Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(<u>Proven</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>3.068</u>					<u>510</u>		<u>0</u>		
1.	<u>3.068</u>	<u>1.75</u>	<u>24</u>	<u>14</u>	<u>103</u>	<u>25</u>		<u>0</u>		
2.	<u>3.068</u>	<u>1.25</u>	<u>22</u>	<u>20</u>	<u>110</u>	<u>110</u>		<u>0</u>		
3.	<u>3.068</u>	<u>1.25</u>	<u>22</u>	<u>40</u>	<u>103</u>	<u>140</u>		<u>0</u>		
4.	<u>3.068</u>	<u>1.25</u>	<u>21</u>	<u>21</u>	<u>103</u>	<u>220</u>		<u>0</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>30.15</u>	<u>22.81</u>	<u>37.2</u>	<u>0.9792</u>	<u>0.9792</u>	<u>1.000</u>	<u>11.70</u>
2.	<u>9.781</u>	<u>41.95</u>	<u>35.2</u>	<u>0.9751</u>	<u>0.9751</u>	<u>1.000</u>	<u>12.70</u>
3.	<u>9.781</u>	<u>37.53</u>	<u>35.2</u>	<u>0.9792</u>	<u>0.9792</u>	<u>1.000</u>	<u>12.70</u>
4.	<u>9.781</u>	<u>26.80</u>	<u>34.2</u>	<u>0.9792</u>	<u>0.9792</u>	<u>1.000</u>	<u>12.70</u>
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry Gas cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 9.936 (1-e^{-s}) 0.165

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 523.2 P_c² 273.74

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>123.2</u>	<u>15.178</u>	<u>4.12</u>	<u>16.974</u>	<u>2.800</u>	<u>15.178</u>	<u>273.74-15.178</u>	<u>15.178</u>	<u>0.165</u>
2.	<u>173.2</u>	<u>30.000</u>	<u>3.290</u>	<u>10.822</u>	<u>1.783</u>	<u>30.000</u>	<u>273.74-30.000</u>	<u>30.000</u>	<u>0.165</u>
3.	<u>233.2</u>	<u>54.382</u>	<u>2.349</u>	<u>5.518</u>	<u>0.9105</u>	<u>54.382</u>	<u>273.74-54.382</u>	<u>54.382</u>	<u>0.165</u>
4.									
5.									

Absolute Potential: 430 MCFPD; n 1
COMPANY THE ATLANTIC REFINING COMPANY
ADDRESS P.O. Box 1036
AGENT and TITLE H.A. Carr, Dist. Supt. 6-20-58
WITNESSED _____
COMPANY _____

REMARKS