

NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE 000

Form C-122

Revised 12-1-55

MAIN OFFICE 000

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

AUG 23 AM 11:51

Pool Momument Former McKee County LeaInitial XX Annual _____ Special _____ Date of Test 7-29/8-5-60Company Anderson-Prichard Oil Corp. Lease Britt "A" Unit Well No. 7Unit K Sec. 6 Twp. 20S Rge. 37E Purchaser El Paso Natural Gas CompanyCasing 5-1/2" Wt. 17# I.D. 4.892 Set at 10,091 Perf. 9791 To 9824Tubing 2-3/8" Wt. 4.7# I.D. 1.995 Set at 9,821 Perf. 9816 To 9821Gas Pay: From 9791 To 9824 L 9816 xG mix 2.649 GL 6370 Bar.Press. 13.2Producing Thru: Casing _____ Tubing XX Type Well Single

Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 8-5-60 Packer @ 9750 Reservoir Temp. 128° F

OBSERVED DATA

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

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	<u>4"</u>	<u>1.5"</u>				<u>2636</u>	<u>76</u>			<u>72 hr SI</u>
1.	"	"	<u>569</u>	<u>6.25</u>	<u>63</u>	<u>2383</u>	<u>79</u>			<u>24</u>
2.	"	"	<u>547</u>	<u>11.56</u>	<u>16</u>	<u>2327</u>	<u>81</u>			<u>24</u>
3.	"	"	<u>576</u>	<u>89.69</u>	<u>38</u>	<u>2251</u>	<u>82</u>			<u>24</u>
4.	"	"	<u>554</u>	<u>44.89</u>	<u>16</u>	<u>2210</u>	<u>83</u>			<u>24</u>
5.	"	"	<u>569</u>	<u>56.25</u>	<u>47</u>	<u>2191</u>	<u>82</u>			<u>24</u>

FLOW CALCULATIONS

No.	Coefficient <u>Flg.</u> (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>13.99</u>	<u>60.32</u>	<u>582.2</u>	<u>.9971</u>	<u>.9721</u>	<u>1.056</u>	<u>863.7</u>
2.	"	<u>80.47</u>	<u>560.2</u>	<u>1.0452</u>	<u>.9721</u>	<u>1.075</u>	<u>1230</u>
3.	"	<u>152.92</u>	<u>589.2</u>	<u>1.0219</u>	<u>.9721</u>	<u>1.066</u>	<u>2265</u>
4.	"	<u>159.57</u>	<u>567.2</u>	<u>1.0452</u>	<u>.9721</u>	<u>1.080</u>	<u>2449</u>
5.	"	<u>180.97</u>	<u>582.2</u>	<u>1.0127</u>	<u>.9721</u>	<u>1.062</u>	<u>2646</u>

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 30,802 cf/bbl.
Gravity of Liquid Hydrocarbons 71.0° @ 60 deg.
F_c 9.936 (1-e^{-S}) 0.355Specific Gravity Separator Gas .635
Specific Gravity Flowing Fluid .6988
P_c 2649.2 P_c 7018.3

No.	<u>XX</u> 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>2396.2</u>	<u>5741.8</u>	<u>8.582</u>	<u>73.65</u>	<u>26.1</u>	<u>5767.9</u>	<u>1250.4</u>	<u>2401.7</u>	<u>90.6</u>
2.	<u>2340.2</u>	<u>5476.5</u>	<u>12.221</u>	<u>149.353</u>	<u>53.0</u>	<u>5529.5</u>	<u>1488.8</u>	<u>2351.5</u>	<u>88.8</u>
3.	<u>2223.2</u>	<u>5126.6</u>	<u>22.505</u>	<u>506.475</u>	<u>179.8</u>	<u>5306.4</u>	<u>1711.9</u>	<u>2303.6</u>	<u>86.9</u>
4.	<u>2223.2</u>	<u>4942.6</u>	<u>24.333</u>	<u>592.095</u>	<u>210.2</u>	<u>5152.8</u>	<u>1865.5</u>	<u>2270.0</u>	<u>85.7</u>
5.	<u>2204.2</u>	<u>4858.5</u>	<u>26.291</u>	<u>691.217</u>	<u>245.4</u>	<u>5103.9</u>	<u>1914.4</u>	<u>2259.2</u>	<u>85.3</u>

Absolute Potential: 10,000 MCFPD; n 1.000COMPANY El Paso Natural Gas CompanyADDRESS Jal, New MexicoAGENT and TITLE J. B. Murray, Gas EngineerWITNESSED R. L. SedwayCOMPANY Anderson-Prichard Oil Corporation

REMARKS

INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

NOMENCLATURE

Q = Actual rate of flow at end of flow period at W. H. working pressure (P_w).
MCF/da. @ 15.025 psia and 60° F.

P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater.
psia

P_w = Static wellhead working pressure as determined at the end of flow period.
(Casing if flowing thru tubing, tubing if flowing thru casing.) psia

P_t = Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia

P_f = Meter pressure, psia.

h_w = Differential meter pressure, inches water.

F_g = Gravity correction factor.

F_t = Flowing temperature correction factor.

F_{pv} = Supercompressability factor.

n = Slope of back pressure curve.

Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t .