

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Ballard Formation PICTURED CLIFFS County 7 RIO ARriba
Initial X Annual _____ Special _____ Date of Test 7-30-64
Company CONTINENTAL OIL COMPANY Lease AXI APACHE H Well No. 13
Unit P Sec. 31 Twp. 24N Rge. 5W Purchaser SOUTHERN UNION GAS COMPANY
Casing 4 1/2 Wt. 9.54 I.D. 4.090" Set at 2375' Perf. 2122' To 2172'
Tubing 2 3/8" Wt. 4.74 I.D. 1.995" Set at 2119' Perf. None To _____
Gas Pay: From 2122' To 2172' L 2119' xG .660 -GL 1399 Bar.Press. 12 PSIA
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 7-8-64 Packer None Reservoir Temp. 82°F

OBSERVED DATA

Tested Through (Prover) (X) 1 1/2 in. (Orifice) Type Taps _____

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (1 1/2 in.) Size	(Orifice) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	<u>2 in.</u>					<u>434</u>	<u>78</u>	<u>434</u>	<u>78</u>	<u>SI 546 HRS.</u>
1.	<u>1/2</u>		<u>321</u>		<u>66</u>	<u>321</u>	<u>66</u>	<u>404</u>	<u>78</u>	<u>1 HR.</u>
2.	<u>5/8</u>		<u>260</u>		<u>67</u>	<u>260</u>	<u>67</u>	<u>393</u>	<u>78</u>	<u>1 HR.</u>
3.	<u>3/4</u>		<u>209</u>		<u>67</u>	<u>209</u>	<u>67</u>	<u>386</u>	<u>78</u>	<u>1 HR.</u>
4.	<u>7/8</u>		<u>163</u>		<u>65</u>	<u>163</u>	<u>65</u>	<u>379</u>	<u>78</u>	<u>1 HR.</u>
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wP_f}}$	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>5.5233</u>		<u>333</u>	<u>.9943</u>	<u>.9535</u>	<u>1.034</u>	<u>1808</u>
2.	<u>8.3555</u>		<u>272</u>	<u>.9933</u>	<u>.9535</u>	<u>1.027</u>	<u>2218</u>
3.	<u>12.2023</u>		<u>221</u>	<u>.9933</u>	<u>.9535</u>	<u>1.021</u>	<u>2610</u>
4.	<u>16.7816</u>		<u>175</u>	<u>.9952</u>	<u>.9535</u>	<u>1.017</u>	<u>2840</u>
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry Gas cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c P_w Measured (1-e^{-s}) _____
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 446 P_c² 198.92

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>416</u>					<u>173.06</u>	<u>25.86</u>		<u>93.3</u>
2.	<u>405</u>					<u>164.02</u>	<u>34.90</u>		<u>90.8</u>
3.	<u>398</u>					<u>158.40</u>	<u>40.52</u>		<u>89.2</u>
4.	<u>391</u>					<u>152.88</u>	<u>46.04</u>		<u>87.7</u>
5.									

Absolute Potential: 8810 MCFPD; n .77COMPANY CONTINENTAL OIL COMPANYADDRESS P. O. BOX 3312, DURANGO, COLORADOAGENT and TITLE E. B. ERRETT, TEST ENGINEERWITNESSED E. B. HALEY, DISTRICT MANAGERCOMPANY CONTINENTAL OIL COMPANY

REMARKS