

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Tubb Formation Tubb Gas County Lea
Initial x Annual _____ Special _____ Date of Test 1-24 to 1-31-64
Company Shell Oil Company Lease Argo Well No. 5
Unit N Sec. 15 Twp. 21S Rge. 37E Purchaser El Paso Natural Gas Company
Casing 5 1/2" Wt. 15.54 I.D. 4.976 Set at 7785 Perf. 6191 To 6278
Tubing 2" Wt. 4.74 I.D. 1.995 Set at 6450 Perf. 6513 To 6641
Gas Pay: From 6191 To 6278 L 6191 xG Mix .708 -GL 4383 Bar.Press. 13.2
Producing Thru: Casing x Tubing _____ Type Well G.O. Dual
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 8-1-63 Packer 6430 Reservoir Temp. _____

OBSERVED DATA

Tested Through (~~Prover~~) (~~Choke~~) (Meter) Type Taps Flgs.

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								1315		72
1.	4	1.750	634	57.00	61			1195		24
2.	4	1.750	607	69.72	58			1185		24
3.	4	1.750	660	74.82	61			1165		24
4.	4	1.750	662	88.36	62			1150		24
5.										

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.	19.27	192.1	647.2	.9980	.9373	1.076	3,729
2.	19.27	207.9	620.2	1.0019	.9373	1.075	4,044
3.	19.27	224.4	673.2	.9980	.9373	1.080	4,373
4.	19.27	244.2	675.2	.9981	.9373	1.080	4,754
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 97.688 cf/bbl. Specific Gravity Separator Gas .683
Gravity of Liquid Hydrocarbons 70 deg. Specific Gravity Flowing Fluid 7022
F_c 1.758 (1-e^{-s}) .260 P_c 1328.2 P_c² 1764.1

No.	$\frac{P}{P_t}$ 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	$\frac{P}{P_c}$ P _w
1.	1208.2	1459.7	6.555	42.968	11.172	1470.9	293.2	1212.8	91.3
2.	1198.2	1435.7	7.109	50.538	13.140	1448.8	315.3	1203.6	90.6
3.	1178.2	1388.1	7.688	59.105	15.367	1403.5	360.6	1184.7	89.2
4.	1163.2	1351.0	8.357	69.839	18.158	1371.1	393.0	1170.9	88.1
5.									

Absolute Potential: 16,750 MCFPD; n .830

COMPANY Shell Oil Company
ADDRESS P. O. Box 1858, Roswell, New Mexico
AGENT AND TITLE A. L. Ellard - Gas Tester
WITNESSED J. B. Murray
COMPANY El Paso Natural Gas Company

REMARKS

This is the 4th test conducted on this well since completion, and the only one with any point alignment at all.

FEB 6 11 07 AM '64

HOBBS OFFICE O. C. C.