

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Bagley Lower Penn. Formation Pennsylvanian County Lea
Initial X Annual _____ Special _____ Date of Test 6-13-58
Company Amerada Petroleum Corporation Lease State BT#K Well No. 1
Unit N Sec. 34 Twp. 11 Rge. 33 Purchaser El Paso Natural Gas Company
Casing 5-1/2 Wt. 17 I.D. 4.892 Set at 9915 Perf. 8596 to 8622
Tubing 2-1/16 Wt. 3.4 I.D. 1.750 Set at 8508 Perf. _____ To _____
Gas Pay: From 8596 To 8660 L 8508 xG .690 -GL .766 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Gas Oil Dual
Date of Completion: 2-25-58 Packer 8495 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. 158

OBSERVED DATA

Tested Through (Flowmeter) (Choke) (Meter) Type Taps _____

No.	Flow Data				Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.
SI									72
1.	4	1.250	583	14.44	64	1773			24
2.	4	1.250	676	31.36	73	1876			24
3.	4	1.250	630	53.29	58	1630			24
4.	4	1.250	663	77.44	80	1598			24
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.	9.643	86.42		.9962	.9323	1.076	852
2.	9.643	146.99		.9877	.9323	1.076	1,405
3.	9.643	185.11		1.0019	.9323	1.076	1,799
4.	9.643	229.13		.9813	.9323	1.076	2,161
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 32.9 cf/bbl. Specific Gravity Separator Gas .690
Gravity of Liquid Hydrocarbons 60 deg. API Specific Gravity Flowing Fluid .7389
F_c 13.99 (1-e^{-s}) .961 P_c 1786.2 P_c² 3190.5

No.	P _t (psia)	P _c 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.	1723.2	2969.4	11.92	142.09	51.29	3020.7	169.8		
2.	1889.2	2853.4	19.66	386.52	139.53	2982.9	171.6		
3.	1843.2	2700.1	25.17	633.53	228.70	2928.8	261.7		
4.	1611.2	2596.0	30.23	913.85	329.90	2923.9	264.0		
5.									

Absolute Potential: 26,000 MCFPD; n 1,000

COMPANY Amerada Petroleum Corporation
ADDRESS Roswell Star Route, Tatum, New Mexico
AGENT and TITLE R.E. Broschat - District Engineer
WITNESSED _____
COMPANY _____

REMARKS

Since the slope through the points is greater than one; a value of one for the slope was assumed and a line with this slope was drawn through the point with the highest flow rate.

AMERADA PET. CORP.
 STATE BT *K* NO-1
 N 34-11S-33E LEA CO.
 6-13-58

