

NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE O. C. C.
 Nov 6 10 53 AM '61
 Revised 12-1-65

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Sawyer Formation San Andres County Lee
 Initial X Annual _____ Special _____ Date of Test March 30, 1961
 Company Alamo Corporation Lease Bell Federal Well No. 1
 Unit C Sec. 20 Twp. 9S Rge. 38E Purchaser None - Shut-in
 Casing 9 5/8" 53#/ft 8.535" Set at 4295 Perf. 4,902'-08, 4910'-14"
 Casing 2" Wt. 14#/ft I.D. 5.012" Set at 5098' Perf. 4,926'-36, 4951'-71"
 Gas Pay: From 4,902" To 4,971" L 4936' xG 0.769 -GL 3706' Bar.Press. 13.2psia
 Producing Thru: Casing _____ Tubing X Type Well Single
 Date of Completion: 3-30-61 Packer 4,500' Reservoir Temp. _____
 Single-Bradenhead-G. G. or G.O. Dual

OBSERVED DATA

Through (Prover) (Choke) (Meter) XXXXX XXXXXType Taps None

Casing (Prover) Size	Flow Data				Tubing Data		Casing Data		Duration of Flow Hr.
	(Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
		1,230		58	1,230	58	None		72 hr.
2"	0.218	643		52	643	52	"		12 hr.
2"	0.187	709		49	709	49	"		24 hr.
2"	0.125	978		62	978	62	"		11 hr.
2"	0.0625	1,161			1,161	71	"		12 hr.

FLOW CALCULATIONS

Pressure (psia)	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1,003.4	0.9978	0.8533	1.004	673.4
722.2	0.9987	0.8533	1.000	541.1
491.2	0.9981	0.8533	1.000	325.3
174.2	0.9896	0.8533	1.000	93.2

PRESSURE CALCULATIONS

Liquid Hydrocarbon Ratio 0.0 cf/bbl.
 Viscosity of Liquid Hydrocarbons 0.0 deg.
0.030 (15.025) 0.230

Specific Gravity Separator Gas 0.769
 Specific Gravity Flowing Fluid 0.0
 P_c 1303.2 P_c 1008.3

P _t (psia)	P _c	P _w	(P _c Q) ²	(P _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	F _w P _c
1,003.4	430.6	0.001	44.8	10.3	440.5	1257.4	614.6	51.0
722.2	521.0	5.376	28.9	0.6	529.2	1170.1	720.8	55.8
491.2	902.5	3.232	10.4	2.4	934.9	713.4	992.4	76.2
1,174.2	1,378.7	0.920	0.9	0.2	1,379.0	319.4	1174.3	90.1

Absolute Potential: 900 MCFPD; n 1.000

COMPANY Denton Oil Company
 ADDRESS 1234 34th Street, Lubbock, Texas
 AGENT and TITLE C. J. Jordan, Jr., Gas Engineer
 WITNESSED _____
 COMPANY _____

REMARKS

*Nitrogen & carbon dioxide content

9.40% & 9.44%

Notes: Decreasing flow rate used to test this well as previous attempt to test by increasing flow method failed due to excess liquid accumulation in well bore.

DENISON OIL COMPANY

Company: Alamo Corporation
 Well: Bell Federal No. 1
 Location: SW/4 NE/4, Sec. 20, T-9S, R-38E, Sawyer Area,
 Lea County, New Mexico

Bell Federal #1

