

CONSERVATION COMMISSION

HOBBS OFFICE O. C.

Form C-122
Nov 6 10 33 AM '66
Revised 12-1-65

BACK PRESSURE TEST FOR GAS WELLS

Well Sawyer Location San Andres County Lea
 Initial X Special Date of Test April 10, 1961
 Company Alamo Corp. Lease Bell Federal Well No. 3
 Unit N Sec. 20 Twp. 9S Rge. 38E Purchaser None - shut-in
 Casing 5 1/2 Wt. 14 1/2 I.D. 5.012 Set at 5019' Perf. 4917'-38' To
 Tubing 2 Wt. 4.70 I.D. 1.935 Set at 4883' Perf. None To
 Surface Press. 4917' 4894' L 40553' xG .773 -GL 3631 Bar.Press. 13.2 psia
 Corrosion Tubing X Type Well Single
 Single-Bradenhead-G. G. or G.O. Dual
 Date of Test 4-10-61 Packer None Reservoir Temp.

OBSERVED DATA

Tested To (Initial) (Final)

Type Taps

Tubing Size	Flow Rate (GPM)	Flow Temp. (°F)	Tubing Temp. (°F)	Tubing Data		Casing Data		Duration of Flow Hr.
				Press. (psia)	Temp. (°F)	Press. (psig)	Temp. (°F)	
2"				1189	66	1133	66°	72 hr.
2"	6.0025			1188	53	1130		1 hr. 15 min
2"	6.0125			1128	68	1133		3 hr.
2"	6.127			1010	77	1023		3 hr.
2"	6.216			852	71	921		3 hr.

DATA CALCULATIONS

Flow Rate (GPM)	Flow Temp. (°F)	Gravity Factor (F _g)	Compress. Factor (F _{cp})	Rate of Flow Q-MCFPD @ 15.025 psia
6.0025	1241.2	1.0000	1.127	6.3
6.0125	1141.2	.9924	1.102	37.7
6.127	1023.2	.9840	1.007	75.3
6.216	868.2	.9690	1.077	88.6

ANALYSIS

-0- Specific Gravity Gas .773
 -0- Specific Gravity Flowing Fluid
1212.2 1400.4

Flow Rate (GPM)	Flow Temp. (°F)	Gravity Factor (F _g)	Compress. Factor (F _{cp})	Rate of Flow Q-MCFPD @ 15.025 psia
1130.2	1433.1	1.013		92.0
1146.2	1313.8	1.051		94.8
1041.2	1084.1	1.053		35.9
934.2	872.7	1.067		77.1

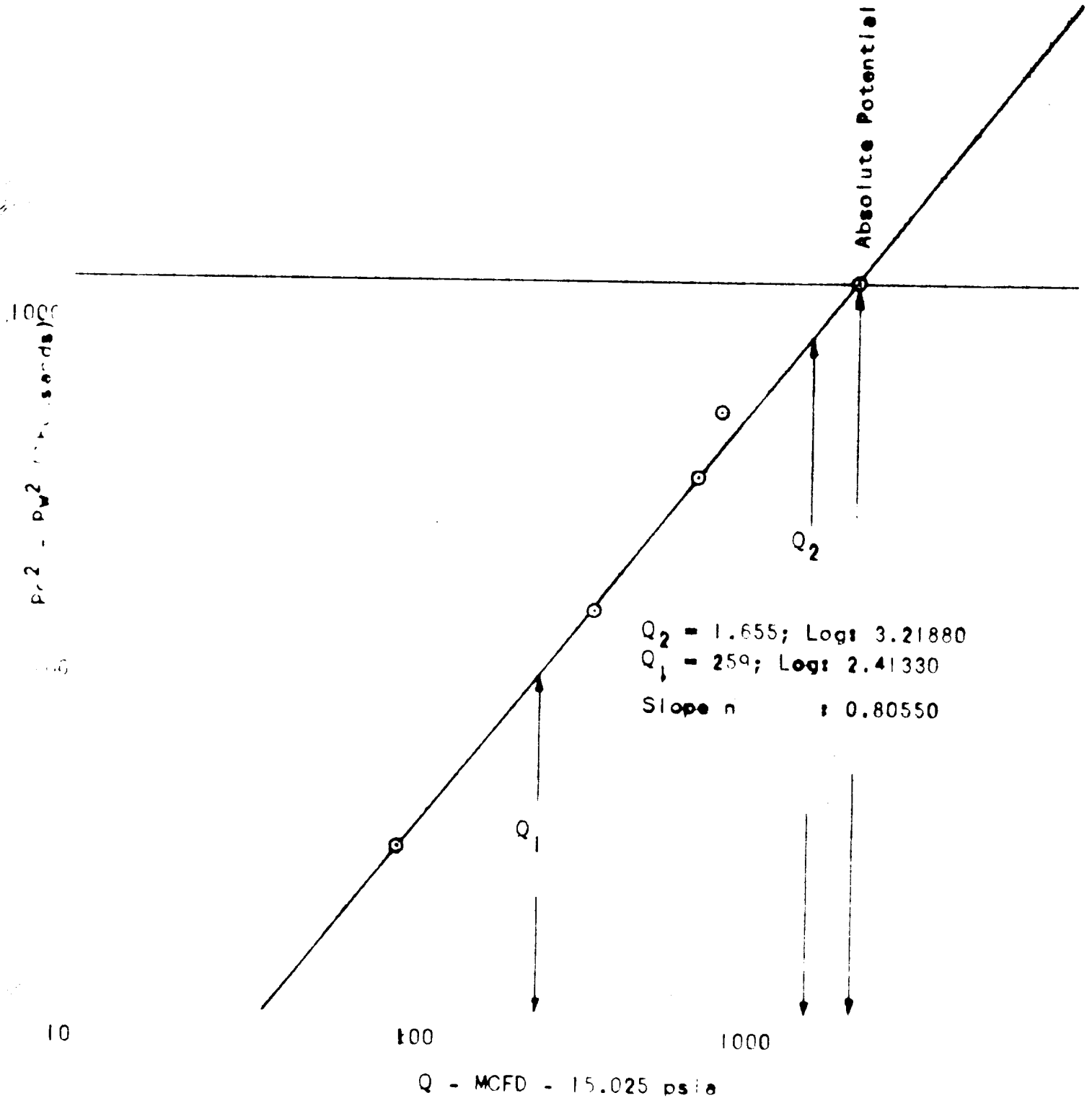
Absolute Potential 2226 2226 2226
 COMPANY Denton Oil Company
 ADDRESS 5233 34th Street, Lubbock, Texas
 AGENT G. J. Jordan, Jr., Gas Engineer
 WITNESSED
 COMPANY

*CO₂ & N Composition of Gas 0.00% & 0.08%

Notes: The fourth flow stabilized at 3 hrs and was therefore not continued beyond that time.

DENTON OIL COMPANY

Company: Alamo Corporation
 Well: Bell Federal No. 3
 Location: SE/4 SW/4, Sec. 20, T-9S, R-38E
 County: Lee
 Date: April 10, 1961



ILLEGIBLE

CONSERVATION COMMISSION

HOBBS OFFICE O. C.

Form C-122
Nov 6 10 23 AM '61
Revised 12-1-55

SHUT-IN BACK PRESSURE TEST FOR GAS WELLS

Pool Sawyer Formation San Andres County Lea
Initial X Annual _____ Special _____ Date of Test April 10, 1961
Company Alamo Corp. Lease Bell Federal Well No. 3
Unit N Sec. 20 Twp. 9S Rge. 38E Purchaser None - shut-in
Casing 5 1/2 Wt. 14 1/2 I.D. 5.012 Set at 5019' Perf. 4917'-38' To 4950'-94'
Tubing 2 Wt. 4.70 I.D. 1.935 Set at 4883' Perf. None To _____
Gas Day From 4917' To 4994' L 4955 1/2' xG .773 -GL 3831 Bar.Press. 13.2 psia
Flowing Time _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 4-10-61 Packer None Reservoir Temp. _____

OBSERVED DATA

Tested Through (Annular) (Packer) (Water)

Type Taps _____

	Flow Data		Temp.	Tubing Data		Temp.	Casing Data		Duration of Flow Hr.
	(Inlet) (psig)	(Orifice) (psig)		Press. (psig)	Temp. (°F)		Press. (psig)	Temp. (°F)	
1	2"			1199	60		1199	60	72 hr.
2	2"	0.0625		1188	53		1186		1 hr. 15 min.
3	2"	0.0125		1125	68		1133		3 hr.
4	2"	0.137		1010	77		1028		3 hr.
5	2"	0.213		852	71		921		3 hr.

FLOW CALCULATIONS

	Flow Rate (Q)	Flow Temp. (°F)	Gravity Factor (Fg)	Compress. Factor (Fcv)	Rate of Flow (Q-MCFPD @ 15.025 psia)
1	0.0427	1261.2	1.8038	1.127	99.3
2	0.3416	1141.2	1.9924	1.102	37.7
3	0.7861	1023.2	1.9840	1.007	756.9
4	1.0634	866.2	1.9696	1.077	880.6

ADDITIONAL

-0-
-0-

Specific Grav. Separator Gas 0.773
Specific Gravity Flowing Fluid 0
P 1212.2 P_{sc} 1459.4

	(P _{sc} /P) ²	(P _{sc} /P)	(P _{sc} /P) ^{1/2}	(P _{sc} /P) ^{1/4}
XX 1130.2		1438.1	31.3	92.9
1146.2		1313.8	155.0	94.8
1041.2		1084.1	335.3	85.9
934.2		872.7	596.7	77.1

Absolute Potential 2220 DEPTH: 0.30550

COMPANY Denton Oil Company

ADDRESS 5232 34th Street, Lubbock, Texas

AGENT and TITLE C. J. Jordan, Jr., Gas Engineer

WITNESSED

COMPANY

REMARKS

*CO₂ & H Composition of Gas 0.90% & 9.08%

Therefore not continued

100-100000

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DENTON OIL COMPANY

Company: Alamo Corporation
 Well: Bell Federal No. 3
 Location: SE/4 SW/4, Sec. 20, T-9S, R-38E
 County: Lee
 Date: April 10, 1961

