

NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE O. C. C. Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS NOV 10 34 AM '69 revised 12-1-55

Pool Sewer Formation San Andres County Lea
Initial X Annual _____ Special _____ Date of Test April 8, 1961
Company Alamo Corporation Lease Bell Federal Well No. 2
Unit P Sec. 20 Twp. 9S Rge. 38E Purchaser None-Well Shut In
Casing 4 1/2" Wt. 9.52/lb. I.D. 4.090" Set at 4,997' Perf. 4,877' To 4,900'
Tubing 2" Wt. 4.76 I.D. 1.995" Set at 4,906" Perf. _____ To _____
Gas Pay: From 4,877' To 4,966' L 4,921 1/2' xG 0.773 -GL 3,804 Bar.Press. 13.2 psia
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 4-8-61 Packer None Reservoir Temp. 111.5

OBSERVED DATA

Tested Through (Prover) (~~XXXXXX~~) Type Taps XXXX

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (XXXX) Size	(Orifice) (XXXX) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	2"					1,215	60	1,213	60	72 hr.
1.	1"	0.218"				867	67	973		3 hr.
2.	1"	0.187"				790	65	920		3 hr.
3.	1"	0.125"				674	54	1,011		3 hr.
4.	1"	0.0625"				1,085	41	1,100		3 hr.
5.	1"	0.0625"				1,125	52	1,154		24 hr.

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wp}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	1.0834		580.2	.9933	.8809	1.079	593.5
2.	.7851		803.2	.9952	.8809	1.072	598.7
3.	.3418		887.2	1.0058	.8809	1.081	288.2
4.	.0827		1,098.2	1.0188	.8809	1.122	91.3
5.	.0827		1,138.2	1.0078	.8809	1.120	98.6

PRESSURE CALCULATIONS

Liquid Hydrocarbon Ratio _____ cf/obl.
Gravity of Liquid Hydrocarbons _____ deg.
_____ (1-e⁻⁵) _____

Specific Gravity Separator Gas 0.773
Specific Gravity Flowing Fluid ---
P_c 1,228.2 P_c 1,508.5

No.	P _w (psia)	P _t ²	P _c Q	(P _c Q) ²	(P _c Q) ² (1-e ⁻⁵)	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w /P _c
1.	986.2					972.6	535.9		80.3
2.	943.2					889.6	618.9		76.8
3.	1,024.2					1,049.0	450.5		83.4
4.	1,113.2					1,239.2	269.3		90.6
5.	1,167.2					1,362.4	146.1		95.0

Absolute Potential: 971 MCFPD; n 1.0000
COMPANY DENTON OIL COMPANY
ADDRESS 5238-34th Street., Lubbock, Texas
AGENT and TITLE C. J. Jordan, Jr., Gas Engineer
WITNESSED _____
COMPANY _____

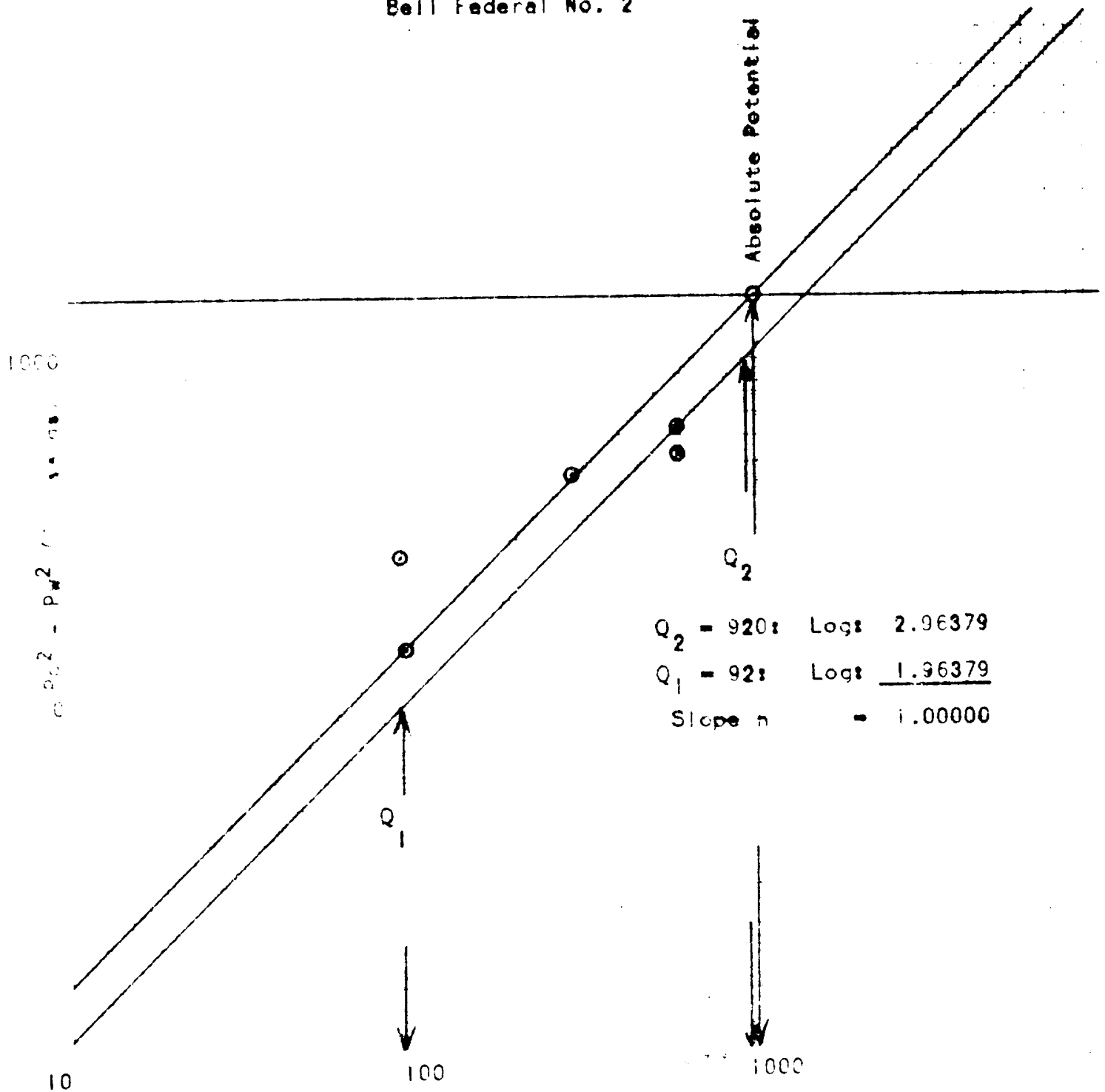
REMARKS

* CO₂ composition of gas - 9.90%
N₂ composition of gas - 9.68%
NOTE: Decreasing flow rate used to test this well as previous attempt to test by increasing flow failed due to excess liquid accumulation in well bore.

DENTON OIL COMPANY

Company: Alamo Corporation
 Well: Bell Federal No. 2
 Location: SE/4 SE/4, Sec. 20, T-9S, R-38E
 County: Lea
 Date: April 8, 1961

Bell Federal No. 2



$Q = \text{MCFD} = 15.025 \text{ psia}$