

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Sawyer Formation San Andres (Gas) County Lea
Initial Annual X Special Date of Test April 23, 1965
Company Western Drilling Company Lease McDermott Federal Well No. 1
Unit F Sec. 30 Twp. 9S Rge. 38E Purchaser Nearburg & Ingram
Casing 4 1/2" Wt. 11.60# I.D. 4" Set at 5,010' Perf. 4,952' To 4,936'
Tubing 2-3/8" Wt. 4.70# I.D. 1.995" Set at 4,934' Perf. Open To
Gas Pay: From 4,931' To 4,996' L xG -GL Bar. Press. 13.2 psia
Producing Thru: Casing Tubing X Type Well Single
Date of Completion: July 22, 1960 Packer None Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp.

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps Flange

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						1,193		1,193	70 ^U	72 hrs
1.	2"	0.0625"			76°	964		1,179	76°	2 hrs 0 min
2.	2"	0.125"			73°	769		1,138	73°	3 hrs 0 min
3.	3.065"	1.250"	332.9	15.21	73°	750		1,020	73°	3 hrs 0 min
4.	3.065"	1.250"	327.1	32.49	70°	662		897	70°	3 hrs 0 min
5.	3.065"	1.250"	351.5	21.25	70°	570		852	70°	20 hrs 0 min

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.	0.0827	-	1,192.2	.9850	0.8543	1.119	93
2.	0.3418	-	1,151.2	.9877	0.8543	1.123	373
3.	7.5773	72.56	346.1	.9877	1.1030	1.038	622
4.	7.5773	105.15	340.3	.9905	1.1030	1.038	904
5.	7.5773	88.03	364.7	.9905	1.1030	1.038	756

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio cf/bbl. Specific Gravity Separator Gas 0.822
Gravity of Liquid Hydrocarbons deg. Specific Gravity Flowing Fluid
P_c P_w Measured (1-e⁻⁸) P_c 1,206.2 P_c 1,454.9

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ⁻⁸)	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w /P _c
1.	1,192.2					1,421.3	33.6		98.8
2.	1,151.2					1,325.3	129.6		95.4
3.	1,033.2					1,067.5	387.4		85.7
4.	910.2					828.5	626.4		75.5
5.	865.2					748.6	706.3		71.7

Absolute Potential: 1,324.7 MCFPD; n 0.76354
COMPANY Denton Oil Company
ADDRESS Post Office Box 4359 Tech Station, Lubbock, Texas
AGENT and TITLE C. J. Jordan, Jr., Gas Engineer
WITNESSED
COMPANY

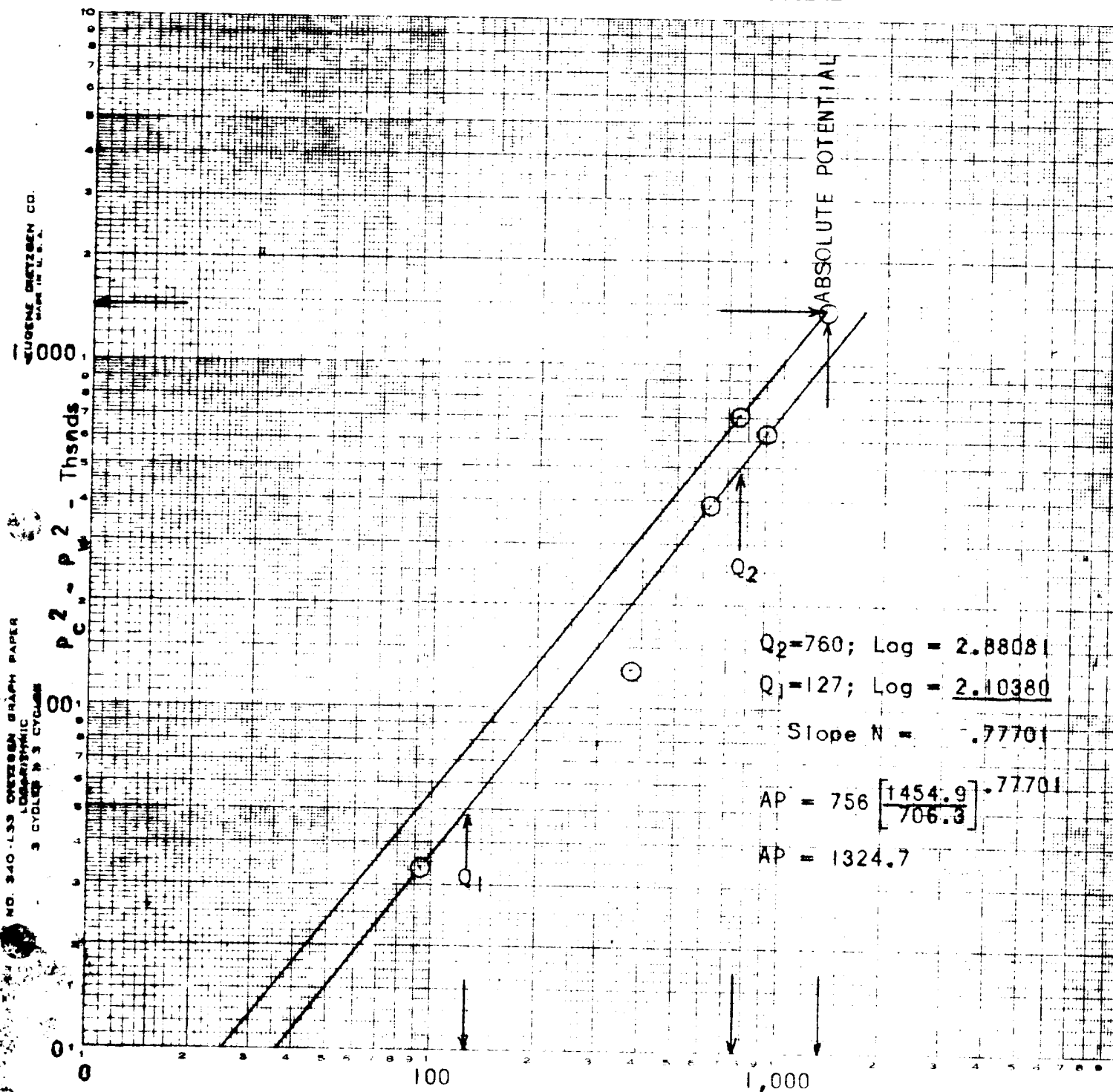
REMARKS

CO₂ and N composition considered as being 10% each.

*Note: Critical flow prover used for first two points and for determining formation in attempting to produce and report on.

DENTON OIL COMPANY

COMPANY: Western Drilling Company
 LSE & WELL: McDermott Federal No. 1
 LOCATION: F-30-9S-38E
 FIELD: Sawyer
 COUNTY: Lea
 DATE: April 23, 1965



Q-MCFD-15.025 psia