

NEW MEXICO OIL CONSERVATION COMMISSION

NOV 8 7 37 AM '65

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Sawyer Formation San Andres County Lea
Initial x Annual _____ Special _____ Date of Test Oct. 19, 1965
Company Ralph S. Cooley Lease Brown "35" Well No. 1
Unit p Sec. 13 Twp. 9S Rge. 37E Purchaser Capitan, Inc.
Casing 4 1/2" Wt. 11.6# I.D. 4.0" Set at 5,020 Perf. 4,915 To 4,984
Tubing 2-3/4" Wt. _____ I.D. _____ Set at 4,926 Perf. Open To _____
Gas Pay: From 4915 To _____ L 4984 xG _____ -GL _____ Bar.Press. 13.2
Producing Thru: Casing _____ Tubing x Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: Sept. 1, 1965 Packer None 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			960			960	62°	933	62°	72 Hrs.
1.	2"	0.0625"	955		65°	955	65°	928		1 Hr. 30 Min.
2.	2"	0.125 "	936		68°	936	68°	910		3 Hrs. 0 Min.
3.	3.068"	1.125 "	338	26.52	66°	833		861	66°	3 Hrs. 0 Min.
4.	3.068"	1.125 "	337	54.76	63°	754		808	63°	3 Hrs. 0 Min.
5.	3.068	1.125 "	334	53.58	65°	752		791	65°	22 Hrs. 0 Min.

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.	0.0827		968.2	0.9952	0.8660	1.107	76
2.	0.3418		949.2	0.9924	0.8660	1.103	308
3.	7.868	96.52	351.2	0.9943	0.8660	1.039	679
4.	7.868	138.48	350.2	0.9971	0.8660	1.039	978
5.	7.868	136.39	347.2	0.9952	0.8660	1.039	961

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c P_w Measured (1-e⁻⁸) _____
Specific Gravity Separator Gas 0.800
Specific Gravity Flowing Fluid _____
P_c 973.2 P_c 947.1

No.	P _w P _t (psia)	P _c 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.	968.2					937.4	9.7		99.5
2.	949.2					901.0	46.1		97.5
3.	874.2					764.2	182.9		89.8
4.	821.2					674.4	272.7		84.4
5.	804.2					646.7	300.4		82.6

Absolute Potential: 2,634.4 MCFPD; n 0.87823

COMPANY Denton Oil Company
ADDRESS P. O. Box 4359, Lubbock, Texas
AGENT and TITLE G. 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 due to hydrate formation in attempting to produce into pipeline.

COMPANY: Ralph S. Cooley
 LSE & WELL: Brown "35" No. 1
 LOCATION: P-13-9S-38E, Sawyer Field
 FIELD: Sawyer
 COUNTY: Lea
 DATE: October 19, 1965

