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NEW MEXICO OIL CONSERVATION COMMISSION

NOV 25 1964

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

O. C. Revised 12-1-55
ARTESIA, OFFICE

Pool Wildcat Formation Penn-Atoka County Eddy
Initial X Annual _____ Special _____ Date of Test 11/20/64
Company Harvey E. Yates Lease Hondo Singer A Well No. 1
Unit P Sec. 7 Twp. 20S. Rge. 27E. Purchaser None
Casing 5 1/2 Wt. 17# I.D. .4892 Set at 10302 Perf. 9945 To 9953
Tubing 2" Wt. 4.70 I.D. 1.995 Set at 9945 Perf. sleeve To _____
Gas Pay: From 9945 To _____ L 9945 xG .611 -GL 6076 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing 9945 Type Well Dual
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 11/20/64 Packer 10,086 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.	
SI	3	1"				2703	89	70 hr. SI
1.	3	1"	304	9	81	2523	86	1
2.	3	1"	304	16	80	2401	86	1
3.	3	1"	310	24	80	2204	84	1
4.	3	1"	318	36	78	1876	83	1
5.								

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.	6.182	53.412	317.2	.9804	.9918	1.025	329
2.	6.182	71.216	317.2	.9813	.9918	1.025	439
3.	6.182	88.045	323.2	.9813	.9918	1.025	543
4.	6.182	109.152	331.2	.9831	.9918	1.026	675
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 81,000 cf/bbl.
Gravity of Liquid Hydrocarbons 52 deg.
P_c 9.936 (1-e^{-s}) 0.342
Specific Gravity Separator Gas .611
Specific Gravity Flowing Fluid .623
P_c 2716.2 P_c 7378

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.	2536.2	6432.	3.268	10.680	3.653	6435.7	942.	2536.37	.9338
2.	2414.2	5828.	4.36	19.010	6.501	5834.5	1543.	2415.27	.8892
3.	2217.2	4916.	5.40	29.160	9.973	4926.0	2453.	2219.45	.8171
4.	1989.2	3957.	6.71	45.024	15.399	3972.4	3406.	1993.88	.7341
5.									

Absolute Potential: 1.050 MCFPD; n .57/

COMPANY Harvey E. Yates
ADDRESS 305 Carper Building, Artesia, New Mexico
AGENT and TITLE Marshall B. Morris, Lease Supt.
WITNESSED James D. Monroe
COMPANY Harvey E. Yates

REMARKS

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