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NEW MEXICO OIL CONSERVATION COMMISSION

FEB 3 1965

D. C. C. Form C-122
ARTESIA, REVISED 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Wildcat Formation Morrow County Eddy
Initial X Annual _____ Special _____ Date of Test 1/12/65
Company Yates Drilling Company Lease Pecos River Deep Unit Well No. 3
Unit H Sec. 13 Twp. 20 S. Rge. 26 E Purchaser _____
Casing 5 1/2 Wt. 17 I.D. 4.892 Set at 10,256 Perf. Open hole To 10,392
Tubing 2 Wt. 4.7 I.D. 1.995 Set at 10,243 Perf. Open end To _____
Gas Pay: From 10,252 To 10,266 L 10,193 xG .610 -GL 6217 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 1/7/65 Packer 10,193 Reservoir Temp. N.A.

OBSERVED DATA

Tested Through (Prover) (2 holes) (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	3	1.75				3095	68	Packer		72 SI
1.	3	1.75	500	7"	70	2941	67			1
2.	3	1.75	500	17"	72	2785	66			1
3.	3	1.75	500	35	72	2596	65			1
4.	3	1.75	690	50	68	2384	64			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.	20.15	59.97	513.2	0.9905	0.9992	1.042	1.236
2.	20.15	101.29	513.2	0.9887	0.9992	1.042	2.100
3.	20.15	133.99	513.2	0.9887	0.9992	1.042	2.779
4.	20.15	185.74	703.2	0.9924	0.9992	1.060	3.933
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 64,000 cf/bbl.
Gravity of Liquid Hydrocarbons 50 deg.
c 9.936 (1-e^{-s}) 0.348
Specific Gravity Separator Gas .601
Specific Gravity Flowing Fluid .610
P_c 3108.2 P_c 9660

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.	2954.2	8727	12.280	150.798	52.477	8779.477	881	2863.010	.95334
2.	2798.2	7829	20.865	435.348	151.501	7980.501	1679	2824.977	.90593
3.	2609.2	6807	27.612	762.422	265.322	7072.322	2587	2659.383	.85535
4.	2397.2	5746	39.078	1527.090	531.427	6277.427	3382	2505.499	.80614
5.									

Absolute Potential: 9,980 MCFPD; n .87
COMPANY Yates Drilling Company
ADDRESS 309 Carper Building
AGENT and TITLE Marshall B. Morris
WITNESSED Cliff Loyd
COMPANY S. P. Yates

REMARKS

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U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO