

OIL CONSERVATION DIV 10-1

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501RECEIVED BY
O. C. D.
ARTESIA, OFFICE

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR WELL 10-1-78

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 6/27/85		O. C. D. ARTESIA, OFFICE	
Company SANTA FE ENERGY ✓			Connection NONE		
Pool S. Canlsbad STRAWN			Formation STRAWN		
Completion Date 6/27/85		Total Depth 12,290		Plug Back TD 12,253	
Elevation 3098.3		Farm or Lease Name HENRY			
Csg. Size 5	Wt. 18	d 4.276	Set At 12,290	Perforations: From 10585 To 10954	
Thq. Size 2 3/8	Wt. 4.7	d 1.995	Set At 10,344	Perforations: From OPEN To END	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple SINGLE				Packer Set At 10,344	
Producing Thru TBG.		Reservoir Temp. °F 180 @ 10,590		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State NEW MEXICO			
L 10,590	H 10,590	G _g .655	% CO ₂ .339	% N ₂ .365	% H ₂ S
Prover		Meter Run 2.90		Taps Flg	

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							2630				
1.	2.90	X	1.250	570	3	85	2212				1 HR
2.	2.90	X	1.250	585	4	85	1350				1 HR
3.	2.90	X	1.250	585	8	82	1150				1 HR
4.	2.90	X	1.250	600	24	85	978				1 HR
5.											

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1	7.615	41.83	583.2	.9768	1.237	1.052	405
2	7.615	48.92	598.2	.9768	1.237	1.054	474
3	7.615	69.18	598.2	.9795	1.237	1.054	673
4	7.615	121.31	613.2	.9768	1.237	1.055	1178
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcfd/bbl.
1	.87	545	1.45	.903	18.958	
2	.89	545	1.45	.900	57.5	
3	.89	545	1.45	.900	.653	
4	.91	545	1.45	.898	670	
5.					375	

NO.	P _t ²	P _w	P _w ²	P _t ² - P _w ²	(1) $\frac{P_t^2}{P_t^2 - P_w^2} =$	(2) $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n =$
1	3133.7	9820.1	1046.2		1.6693	1.6693
2	2939.6	8641.2	2225.1			
3	2486.0	6180.2	4686.1			
4	2087.3	4356.8	6509.5			
5						

$$AOF = Q \left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 1.9664$$

Post FD 2
8-2-85
Comp + BK

Absolute Open Flow	1,9664	Mcfd @ 15.025	Angle of Slope @	45.0	Slope, n	1.00
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Remarks: MADE 26 bbls WATER 6 bbls OIL DURING TEST; P_c & P_w CALCULATED FROM KNOWN B.H.P.

Approved By Division	Conducted By: DUKE SERVICES INC	Calculated By: R RESTON	Checked By: P T Gaume
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