

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test		☒ Initial		☐ Annual		☐ Special		Test Date		07-11-91	
Company				Connection							
Mewbourne Oil Company				Vented							
Pool				Formation				Unit			
Hargell Ranch A20/Mor				Morrow				Burton Flat			
Completion Date		Total Depth		Plug Back TD		Elevation		Farm or Lease Name			
06-15-91		11,190		11,130				Burton Flat 7 Federal			
Csg. Size	Wt.	Set At	Perforations		Well No.						
5 1/2	20	11,190	From 11,030 To 11,050		1						
Tub. Size	Wt.	Set At	Perforations		Unit		Sec.	Twp.	Rge.		
2 7/8	6.5	10,980	From To		I		7	20	28		
Type Well - Single - Dranehead - G.G. or G.O. Multiple						Packer Set At		County			
Single						10,980		Eddy			
Producing Thru		Reservoir Temp. °F		Mean Annual Temp. °F		Buro. Press. - P _g		State			
Tubing		184 @ 11,040		60		13.2		New Mexico			
L	H	C _g	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps			
*11,040	11,040	.604	1.26	.36			3.068	Flange			

FLOW DATA							TUBING DATA		CASING DATA		Duration
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. In.	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	of Flow
SI							2600		PKR		72 hrs.
1.	3	X	1.250	420	4.00	88	2200		PKR		1 hr.
2.	3	X	1.250	420	10.00	88	1810		PKR		1 hr.
3.	3	X	1.250	430	18.00	90	1490		PKR		30 mins.
4.	3	X	1.250	435	33.00	90	1370		PKR		45 mins.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcf/d
1	7.577	41.63	433.2	.9741	1.287	1.034	409
2	7.577	65.82	433.2	.9741	1.287	1.034	647
3	7.577	89.32	443.2	.9723	1.287	1.034	876
4	7.577	121.62	448.2	.9723	1.287	1.035	1,194
5.							

NO.	P _t	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.64	548	1.53	.936	132.8	46.0 @ 60°	.604		**675	**357
2.	.64	548	1.53	.936						
3.	.65	550	1.54	.935						
4.	.66	550	1.54	.934						
5.										

NO.	P ₁ ²	P _w ²	P ₂ ²	P ₂ ² - P ₁ ²
1		2600.2	6760.5	1158.7
2		2384.2	5684.4	2234.8
3		2240.8	5021.2	2898.0
4		1902.1	3618.0	4301.2
5				

Absolute Open Flow		Angle of Slope	
2,091	Mcf/d @ 15.025	47.5	Slope, n .918

Remarks	
*=BHP instrument set @ this depth	
**=corrected to 1.26% CO ₂	
Well made 9.0 BBLS H ₂ O & .75 BBLS 46.0 API GR. CONDENSATE during test	

Approved By	Conducted By	Calculated By	Checked By

Mewbourne Oil Company
 Burton Flat 7 Federal, Well #1
 7 - 20-S - 28-E
 Eddy County, New Mexico
 07-11-91

