

3 NMOCD

1 Southland Royalty 1 File
OIL CONSERVATION DIVISION

1 Hawthorn Oil

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-122
Revised 10-1-78RECEIVED
FEB 28 1985
OIL CON. DIV.
DIST. 3

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test		☒ Initial		☐ Annual		☐ Special		Test Date		1-29-85	
Company				Connection				FEB 28 1985			
Dugan Production Corp.								OIL CON. DIV.			
Pool				Formation				Unit			
WAW Fruitland PC				Pictured Cliffs				DIST. 3			
Completion Date		Total Depth		Plug Back TD		Elevation		Farm or Lease Name			
1-22-85		1335'		1301'		6070' GL		Irish			
Csq. Size	Wt.	d	Set At	Perforations:		Well No.					
2-7/8"	6.4		1330	From 1203' To 1212'		2					
Tbg. Size	Wt.	d	Set At	Perforations:		Unit		Sec.	Twp.	Rge.	
1-1/4"	2.4		1199	From None To		P		11	26N	13W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple						Packer Set At		County			
Single						---		San Juan			
Producing Thru tubing		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P _a		State			
						12.2 psia		New Mexico			
L	H	Gg	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps			
		.62									
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							124		124		7 days
1.											
2.	1/2" pos.choke		1			30	1		2		3 hrs
3.											
4.											
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, Fpv	Rate of Flow Q, Mcfd				
1											
2											
3	5.4315		13	1.030	.9837	1.000	71.5				
4											
5											
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.						
1					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.						
2					Specific Gravity Separator Gas _____ XXXXXXXXXX						
3					Specific Gravity Flowing Fluid _____ XXXXX						
4					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.						
5					Critical Temperature _____ R _____ R						
P _c 136 P _c ² 18496					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0107$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.009$						
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²							
1											
2		14	196	18300							
3											
4											
5											
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 72$											
Absolute Open Flow 72 Mcfd @ 15.025					Angle of Slope ϕ					Slope, n 85	
Remarks:											
Approved By Division											
Conducted By:				Calculated By:				Checked By:			
Sherman E. Dugan				Sherman E. Dugan							