

3 NMOCD 1 Southland Royalty 1 File 1 Hawthorn Oil

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 WELLS

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 1-29-85	
Company Dugan Production Corp.		Connection	
Pool WAW Fruitland PC		Formation Pictured Cliffs	
Completion Date 1-22-85	Total Depth 1380'	Plug Back TD 1355'	Elevation 6129' GL
Farm or Lease Name Irish		Well No. 3	
Csq. Size 2-7/8"	Wt. 6.4#	Set At 1380'	Perforations: From 1263' To 1272'
Tbg. Size 1 1/2"	Wt. 2.4#	Set At 1149'	Perforations: From None To
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single - Gas		Packer Set At None	County San Juan
Producing Thru tubing	Reservoir Temp. °F 8	Mean Annual Temp. °F	Baro. Press. - P _a 12.2 psia
State NM			
L	H	G _g .62	% CO ₂ % N ₂ % H ₂ S Prover Meter Run Taps

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							115		115		7 days
1.											
2.	7/16" pos. choke		1			32°	1		4		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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1							
2							
3	4.1423		13	1.028	.9837	1.000	54.5
4							
5							

NO.	P _t	Temp. °R	T _g	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 _____ XXXXXX
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

P _c 127	P _c ² 16129	(1) $\frac{P_c^2}{P_e^2 - P_w^2} = 1.0161$	(2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 1.0137$
NO	P _t ²	P _w	P _w ²
1			
2		16	256
3			
4			
5			

Absolute Open Flow 55 Mcfd @ 15.025		Angle of Slope ϕ _____	Slope, n .85
Remarks: _____			
Approved By Division		Conducted By: Sherman Dugan	Calculated By: Sherman Dugan
		Checked By:	