3-NMOCC/ 1-File

NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: ☐ Initial ☐ Annual ☐ Special			Test Date: 10/18/76	
Company: Dugan Production	Connection: New Well			
Pool: Undes	Formation: Pictured Cliffs		Unit	
Completion Date	Total Depth	Plug Back TD	Elevation: 6752	Farm or Lease Name: Sherman Edward
Csg. Size: 5.500 / Wt. / d / Set At: 6111	Perforations: From 3528 To 3720			Well No.: #2 PC
Tbg. Size: 1.660 / Wt.: 24 / d: 1.380 / Set At: 3727	Perforations: From To			Unit: M / Sec.: 3 / Twp.: 29 / Rge.: 5
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Gas - Duel Completion		Packer Set At: 5545		County: Rio Arriba
Producing Thru: Tubing	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. – P_a: 12.0	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
		.639	1.08	.12	sweet	2"		

	FLOW DATA				TUBING DATA		CASING DATA		
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	Duration of Flow
SI						1174		1174		SIP
1.	2"	X 1/8"	1093		56°	1093		1113		2hrs.
2.	2"	X 3/16"	822		58°	822		982		2hrs.
3.	2"	X 7/32"	639		56°	639		930		2hrs.
4.	2"	X 1/4"	529		54°	529		885		2hrs.
5.	2"	X 1/4"	488		55°	488		810		12hrs.

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	0.265		1105	1.004	1.251	1.117	411
2.	0.608		834	1.002	1.251	1.087	691
3.	0.839		651	1.004	1.251	1.059	726
4.	1.087		541	1.006	1.251	1.056	782
5.	1.087		500	1.005	1.251	1.051	718

NO.	P_t	Temp. °R	T_f	Z
1.	1.63	516	1.40	.802
2.	1.23	518	1.40	.847
3.	.86	516	1.40	.892
4.	.80	514	1.39	.896
5.	.74	515	1.40	.906

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas _____ XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 670 + 8 P.S.I.A. 678 P.S.I.A.
Critical Temperature 372 - 3 369 R

P_c 1186 P_c^2 1406596

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		1125	1265625	140971
2		994	988036	418560
3		942	887364	519232
4		897	804609	601987
5		822	675684	730912

(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$ _____ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right] =$ _____

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

RECEIVED
NOV 12 1976
OIL CON. COM.
DIST. 3

Absolute Open Flow 1,050 Mcfd @ 15.025 Angle of Slope θ 33° Slope, n .65

Remarks: Well produced heavy water through - out test.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Fred Hamrick	Fred Hamrick	

CH

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Pool: Undes	Formation: Pictured Cliffs		Unit	
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Tbg. Size: 1.660 / Wt.: 24 / d: 1.380 / Set At: 3727	Perforations: From To			Unit: M / Sec.: 3 / Twp.: 29 / Rge.: 5
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Gas - Duel Completion		Packer Set At: 5545		County: Rio Arriba
Producing Thru: Tubing	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. – P_a: 12.0	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
		.639	1.08	.12	sweet	2"		

	FLOW DATA				TUBING DATA		CASING DATA		
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	Duration of Flow
SI					1174		1174		SIP
1.	2" X 1/8"	1093		56°	1093		1113		2hrs.
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RATE OF FLOW CALCULATIONS

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