NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 11-16-70	
Company: Marathon Oil Company	Connection:			
Pool: South Blanco Pictured Cliffs	Formation: Pictured Cliffs		Unit:	
Completion Date: 11-6-70	Total Depth:	Plug Back TD: 2942 PBTD, 2877 Fill up sand	Elevation: 6515KB	Farm or Lease Name: Jicarilla Apache
Csg. Size: 4.5 / Wt.: 10.5 / d: 4.052 / Set At: 2982		Perforations: From 2826 To 2877		Well No.: 15
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 2811		Perforations: From To		Unit: G / Sec.: 33 / Twp.: 26 / Rge.: 5
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single gas		Packer Set At:		County: Rio Arriba
Producing Thru: Tubing	Reservoir Temp. °F: @	Mean Annual Temp. °F:	Baro. Press. – P_a: 12	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
		.650				X		

	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					689		691		
1.	2 x 3/4				227	60	520		3 hours
2.									
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	12.3650		239	1.0000	.9608	1.025	~~2906~~ 2910
2.							
3.							
4.							
5.							

NO.	P_t	Temp. °R	T_t	Z
1.				
2.				
3.				
4.				
5.				

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 _____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

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DEC 2 1970
OIL CON. COM.
DIST. 3

P_c ~~707~~ 703 P_c^2 ~~490401~~ 494209

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		532	283024	~~207377~~
2				211,185
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$ ~~2.3678~~ 2.3402

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ ~~2.0806~~ 2.0600

AOF = $Q\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ ~~6046~~ 5995

Absolute Open Flow ~~6046~~ 5995 Mcfd @ 15.025 | Angle of Slope θ _____ | Slope, n 0.85

Remarks: _____

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
DEC 2 1970	Archie Hughes	Neil Tefteller	P. J. Patterson, MARATHON OIL CO.

File 4-4029-AOF

TEFTELLER, INC.

reservoir engineering data

MIDLAND, TEXAS

Company MARATHON OIL COMPANY Lease JICARILLA APACHE Well No. 15

Field SOUTH BLANCO PICTURED CLIFFS County RIO ARRIBA State NEW MEXICO

Formation PICTURED CLIFFS Test Date NOVEMBER 16, 1970

Status of Well Shut in 96 hours

DEPTH Feet	PRESSURE Psig	GRADIENT Psi/Ft.
0	689	
1000	708	.019
2000	729	.021
2400	737	.020
2600	741	.020
2800	745	.020
2851 *	746	.020

* Mid-Perforation

Datum Pressure Psig

PRESSURE POUNDS PER SQUARE INCH GAUGE

1600
1400
1200
1000
800
600
400
200
0

0 500 1000 1500 2000 2500 3000 3500

DEPTH: FEET

*2877 Sand Fill-up

Elev. 6515 KB	Datum	Ft.
Total Depth *	Perf. 2826-77	Ft.
Tubing 2 3/8	in. to 2811	Ft.
Casing 4 1/2	in. to 2982	Ft.
Casing Press. 691	Tubing Press. 689	
Oil Level	Water Level	
Temperature	°F @	Ft.
Element No. 15065N	Range 0-2100	
Last Test Date		
Pressure Last Test Date		Psig
B.H.P. Change	Psi	