December 12, 1973

Tenneco Oil Company
Suite 1200 Lincoln Tower Bldg.
Denver, Colorado 80203

Attention: Mr. Harold Korell

> Subject: Bottom Hole Pressure Measuresurement
> & Absolute Open Flow Measurements
> Gallegos No. 8
> Basin Dakota Field
> San Juan County, New Mexico
> Our File No. 2-5413-AOF

Gentlemen:

Attached hereto are the results of bottom hole pressure measurement and absolute open flow measurement which were made on the above captioned well November 30, 1973.

The data presented are in tabular and graphical form. The form C-122 is attached.

It has been our pleasure to have conducted this service for you. If we may be of further assistance, please call us at any time.

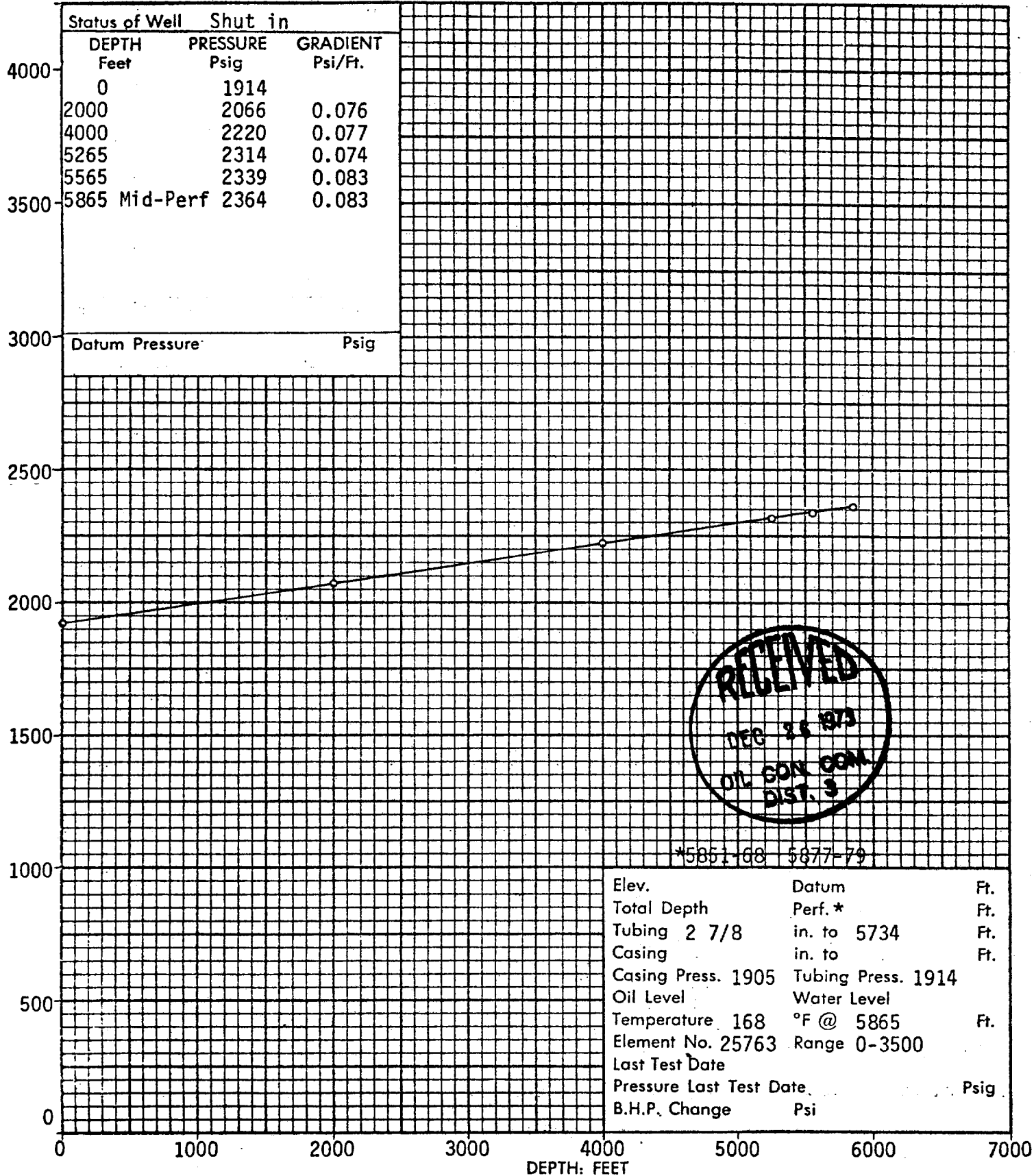Respectfully submitted,

TEFTELLER, INC.

Neil Tefteller

NT/jw

RECEIVED
DEC 26 1973
OIL CON. COM.
DIST. 3

Company __TENNECO OIL COMPANY__   Lease __GALLEGOS__   Well No. __8__
Field __BASIN DAKOTA__   County __SAN JUAN__   State __NEW MEXICO__
Formation __DAKOTA__   Test Date __NOVEMBER 30, 1973__

Status of Well	Shut in	
DEPTH Feet	PRESSURE Psig	GRADIENT Psi/Ft.
0	1914	
2000	2066	0.076
4000	2220	0.077
5265	2314	0.074
5565	2339	0.083
5865 Mid-Perf	2364	0.083

Datum Pressure _____ Psig

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OIL CON COM
DIST. 3

*5851-68 5877-79

Elev.		Datum	Ft.
Total Depth		Perf.*	Ft.
Tubing 2 7/8		in. to 5734	Ft.
Casing		in. to	Ft.
Casing Press. 1905		Tubing Press. 1914	
Oil Level		Water Level	
Temperature 168	°F @	5865	Ft.
Element No. 25763		Range 0-3500	
Last Test Date			
Pressure Last Test Date			Psig
B.H.P. Change		Psi	

PRESSURE POUNDS PER SQUARE INCH GAUGE

DEPTH: FEET

Type Test					Test Date	
[X] Initial		☐ Annual		☐ Special	11-30-73	

Company
Tenneco Oil Company

Connection

Pool
Basin Dakota

Formation
Dakota

Unit

Completion Date	Total Depth	Plug Back TD 5946	Elevation 6281KB 6268GL	Farm or Lease Name Gallegos

Csg. Size 5 1/2	Wt.	d	Set At 5965	Perforations: From 5851 To 5879	Well No. 8

Tbg. Size 2 7/8	Wt.	d	Set At 5734	Perforations: From To	Unit	Sec. 34	Twp. 26	Rge. 11

Type Well — Single — Bradenhead — G.G. or G.O. Multiple
Single gas

Packer Set At

County
San Juan

Producing Thru Tbg	Reservoir Temp. °F 168 @ 5865	Mean Annual Temp. °F	Baro. Press. — P_a 12.0	State New Mexico

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

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI							1914		1905		7(le)
1.	2	x 3/4					90	60	264		3 hrs.
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor F_t	Gravity Factor F_g	Super Compress. Factor, F_{pv}	Rate of Flow Q, Mcfd
1	12.3650		102	1.0000	.9608		1212
2.							
3.							
4.							
5.							

NO.	P_t	Temp. °R	T_f	z	
1.					Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
2.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
3.					Specific Gravity Separator Gas _____ xxxxxxxxx
4.					Specific Gravity Flowing Fluid _____ xxxxxxxxx
5.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
					Critical Temperature _____ R _____ R

P_c 1926 P_c^2 3709476

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		276	76176	3633300
2				
3				
4				
5				

(1) $\dfrac{P_c^2}{P_c^2 - P_w^2} = 1.0210$

(2) $\left[\dfrac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.0156$

$AOF = Q \left[\dfrac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1231$

Absolute Open Flow ___1231___ Mcfd @ 15.025

Angle of Slope ϴ _____

Slope, n ___.75___

Remarks: _____

Approved By Commission:	Conducted By: Tefteller, Inc.	Calculated By: Neil Tefteller	Checked By: