

Submit in duplicate to
appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator TEXACO EXPLORATION						Lease or Unit Name SKELLY B STATE COMM					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 11-7-94		Well No. 4			
Completion Date		Total Depth 3730		Plug Back TD 3701		Elevation		Unit Ltr. - Sec. - TWP - Rge. 16 21S 36E			
Csg. Size 5 1/2	Wt. 15.5	d 4.950	Set At 3730	Perforations: From: 3550 To: 3671				County LEA			
Tbg. Size 2-3/8	Wt. 4.7	d 1.995	Set At 3530	Perforations: From: To:				Pool			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single						Packer Set At none		Formation PENROSE			
Producing Thru 186		Reservoir Temp. °F 90		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection AIK			
L 3610.5	H 3610.5	G _g .739	% CO ₂ 7.32	% N ₂ 1.54	% H ₂ S	Prover		Meter Run 2.067	Taps FLG		

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.	
SI							190			
1.	2.067	X	1.500	18	32	60	35		N/A	
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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	12.76	31.60	31.2	1.000	1.163	1.004	471
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.05	520	1.35	.993	DRY GAS	
2.					A.P.I. Gravity of Liquid Hydrocarbons DRY	Deg.
3.					Specific Gravity Separator Gas .739	XXXXXXXXXX
4.					Specific Gravity Flowing Fluid DRY	XXXXXX
5.					Critical Pressure 697	P.S.I.A. P.S.I.A.
					Critical Temperature 386	R R

P_c **203.2** P_c² **41.3**

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1.	2.3	75.9	5.8	35.5
2.				
3.				
4.				
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{1.162}{1.162 - 0.324} = 1.162$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.162$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .547$

Absolute Open Flow 547	Mcf/d @ 15.025	Angle of Slope θ 45°	Slope, n 1.000
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Remarks: **NO FLUID MADE DURING TEST**

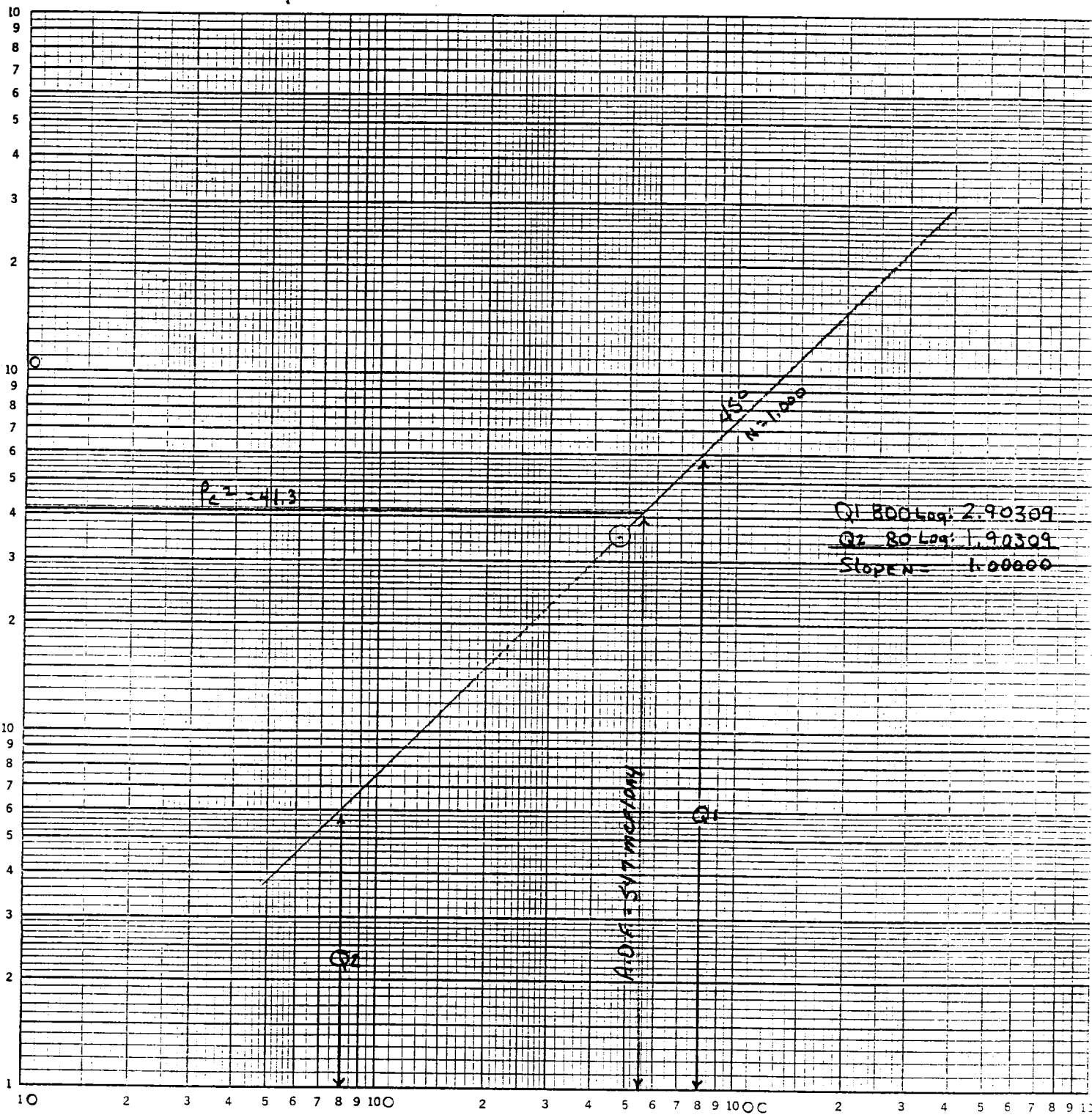
Approved By Division 	Conducted By: PRO WELL TESTERS	Calculated By: KS	Checked By:
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NOV 16 1994

TEXACO EXPLORATION
 Skelly B State Comm. Well # 4
 16-21S-36E
 Lea County, New Mexico
 11-7-94

$P_c^2 - P_w^2$ (thsd/s) 46 7400

LOGARITHMIC 3 X 3 CYCLES
 KEUFFEL & ESSER CO. MADE IN U.S.A.



Q (MCF/DAY)

Laboratory Services, Inc.1331 Tasker Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR:

Pro Well Testing & Wireline
Attention: Mr. Leonard Abney
P. O. Box 791
Hobbs, New Mexico 88241

SAMPLE

IDENTIFICATION: Skelly "B" #4

COMPANY: Texaco E. & P. Inc.

LEASE:

PLANT:

SAMPLE DATA:	DATE SAMPLED:	11-08-94 10:20AM	GAS (XX)	LIQUID ()
	ANALYSIS DATE:	11-08-94	SAMPLED BY:	Pro Well
	PRESSURE - PSIG		ANALYSIS BY:	Rolland Perry
	SAMPLE TEMP. °F			
	ATMOS. TEMP. °F	75.00		

REMARKS:

COMPONENT ANALYSIS

COMPONENT		MOL PERCENT	GPM
Hydrogen Sulfide	(H2S)		
Nitrogen	(N2)	1.54	
Carbon Dioxide	(CO2)	7.32	
Methane	(C1)	78.09	
Ethane	(C2)	7.02	1.873
Propane	(C3)	3.77	1.036
I-Butane	(IC4)	0.51	0.166
N-Butane	(NC4)	1.02	0.321
I-Pentane	(IC5)	0.25	0.091
N-Pentane	(NC5)	0.21	0.076
Hexane Plus	(C6)	0.27	0.111
		100.00	3.674

BTU/CU.FT. - DRY	1089	MOLECULAR WT.	21.4054
AT 14.650 DRY	1086		
AT 14.650 WET	1067		
AT 14.73 DRY	1091		
AT 14.73 WET	1072		

SPECIFIC GRAVITY -
CALCULATED
MEASURED

0.739

Equivalent Diameter Program

Author: Bob Murray

Date: December 26, 1990

L1 =	3530 ft.	L5 =	0 ft.	Lt =	3610.5 ft.
D1 =	1.995 in.	D5 =	1 in.	C =	0.10797
L2 =	80.5 ft.	L6 =	0 ft.		
D2 =	4.95 in.	D6 =	1 in.	Deff =	2.003 in.
L3 =	0 ft.	L7 =	0 ft.	Fr =	0.01758
D3 =	1 in.	D7 =	1 in.		
L4 =	0 ft.	L8 =	0 ft.		
D4 =	1 in.	D8 =	1 in.		

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||      Pc = 203.2      Pc2 = 41.3 *
||                               *
||      Pt2 = 2.3      Pw = 75.9 *
||              0.0      ERR *
||              0.0      ERR *
||              0.0      ERR *

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Pc2-Pw2=	35.5	Pw2 =	5.8 *
	ERR		ERR *
	ERR		ERR *
	ERR		ERR *

n = 1,000

PC2/(PC2-PW2) =	1.162
	ERR
	ERR
	ERR

[Pc2/Pc2-Pw2]n =	1.162
	ERR
	ERR
	ERR
AOF= Q	0.547
	ERR
	ERR
	ERR

$$AOF = Q \quad 0.547$$

FORM C122-D