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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 E.H.B. PHILLIPS			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12-2-94 to 12-3-94		Well No. 2	
Completion Date 10-29-94		Total Depth 4100		Plug Back TD 4059		Elevation 610	
Csg. Size 5 1/2		Wt. 15.5		d 4.950		Set At 4100	
Tbg. Size 2-3/8"		Wt. 4.6#		d 1.995		Set At 3773	
Perforations: From: 3485 To: 3740				County LEA			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single				Packer Set At none			
Producing Thru		Reservoir Temp. °F 103° @ 3485		Mean Annual Temp. °F 60		Baro. Press - P 13.2	
L 3485		H 3485		Gg .755		% CO ₂ 5.30	
				% N ₂ 1-26		% H ₂ S	
				Prover		Meter Run 3.067	
						Taps 6lg	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	Orifice X 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						255		80		
1.						43		0		24 hrs.
2.										
3.										
4.										
5.										

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$\frac{h_w P_m}{P_c}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.							307
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1.					A.P. I. Gravity of Liquid Hydrocarbons	Dry	Deg.
2.					Specific Gravity Separator Gas	.755	XXXXXXXXXX
3.					Specific Gravity Flowing Fluid	Dry	XXXXXX
4.					Critical Pressure	*687	P.S.I.A.
5.					Critical Temperature	*396	R

P _c 268.2	P _c 71.9						
NO.	P _c ²	P _w	P _w ²	P _c ² - P _w ²	1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.046$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.046$	
1.	3.2	56.4	3.2	68.7			
2.							
3.							
4.							
5.							

Absolute Open Flow	321	Mcf @ 15.025	Angle of Slope θ	45°	Slope, n	1.000
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Remarks: **NO OIL MADE DURING TEST**
* CORRECTED TO 5% CO₂ & 1% N₂

Approved By Division
Conducted By: PRO WELL TESTER
Calculated By: KS
Checked By: BM

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O COMPANY : TEXACO E & P LEASE : EHB PHILLIPS WELL NO. : 2 Pc = 268.2 Pc2 = 71.9 *
 UNIT : SECTION : 10 TOWNSHIP : 20
 L : 3485 H : 3485 L/H : 1 G/GMIX : 0.755 Pt2 = 3.2 Pw = 56.4 *
 %CO2 : 5.3 %N2 : 1.26 H2S : DATE : 12-03-94 0.0 ERR *
 d : 4.301 Fx : 0.002451 GH : 2631.2 RANGE : 37 0.0 ERR *
 0.0 ERR *

VOL 1 : 307 PSIA 1 : 56.2 RESV.TEMP 103.0 Pc2-Pw2 = 68.7 Pw2 = 3.2 *
 VOL 2 : PSIA 2 : ERR ERR *
 VOL 3 : PSIA 3 : SHUT-IN PR = 268.2 ERR ERR *
 VOL 4 : PSIA 4 : ERR ERR *

PCR : 687 n = 1.000
 TCR : 396

Pc2/(Pc2-Pw2) = 1.046
 ERR
 ERR
 ERR

LINE	RATE 1		RATE 2		RATE 3		RATE 4		
	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND	
1 QM	0.307	0.307	0.000	0.000	0.000	0.000	0.000	0.000	
2 TW	534	534	534	534	534	534	534	534	[Pc2/Pc2-Pw2]n = 1.046
3 Ts	563.0	563.0	563.0	563.0	563.0	563.0	563.0	563.0	ERR
4 T	548.5	548.5	548.5	548.5	548.5	548.5	548.5	548.5	ERR
PR (est)	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	ERR
5 Z(est)	0.965	0.965	ERR	ERR	ERR	ERR	ERR	ERR	
6 TZ	529.4	529.1	ERR	ERR	ERR	ERR	ERR	ERR	AOF = Q 0.321
7 GH/TZ	4.970	4.972	ERR	ERR	ERR	ERR	ERR	ERR	ERR
8 eS	1.205	1.205	ERR	ERR	ERR	ERR	ERR	ERR	ERR
9 L-e-S	0.170	0.170	ERR	ERR	ERR	ERR	ERR	ERR	ERR
10 Pt	56.2	56.2	0.0	0.0	0.0	0.0	0.0	0.0	
11 Pt2 /1000	3.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0	
12 Fx	0.002451	0.002451	0.002451	0.002451	0.002451	0.002451	0.002451	0.002451	
13 Fc=FxTZ	1.298	1.297	ERR	ERR	ERR	ERR	ERR	ERR	
14 FcQm	0.40	0.40	ERR	ERR	ERR	ERR	ERR	ERR	
15 L/H(FcQm)	0.2	0.2	ERR	ERR	ERR	ERR	ERR	ERR	
16 Fw	0.027005	0.026989	ERR	ERR	ERR	ERR	ERR	ERR	
17 Pw2	3.2	3.2	ERR	ERR	ERR	ERR	ERR	ERR	
18 P42	3.8	3.8	ERR	ERR	ERR	ERR	ERR	ERR	
19 P4	62.0	62.0	ERR	ERR	ERR	ERR	ERR	ERR	
20 P	59.1	59.1	ERR	ERR	ERR	ERR	ERR	ERR	
21 Px	0.09	0.09	ERR	ERR	ERR	ERR	ERR	ERR	
22 Tx	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	
23 Z	0.965	0.965	ERR	ERR	ERR	ERR	ERR	ERR	FORM C122-D



Laboratory Services, Inc.

1331 Tasker Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Pro Well Testing & Wireline
Attention: Mr. Ray Ables
P. O. Box 791
Hobbs, New Mexico 88241

SAMPLE
IDENTIFICATION: E. H. B. Phillips #2
COMPANY: Texaco Inc.
LEASE: Lea County New Mexico
PLANT:

SAMPLE DATA:	DATE SAMPLED:	12-03-94	GAS (XX)	LIQUID ()
	ANALYSIS DATE:	12-03-94	SAMPLED BY:	Ray Ables
	PRESSURE - PSIG	32.00	ANALYSIS BY:	Rolland Perry
	SAMPLE TEMP. °F			
	ATMOS. TEMP. °F	67.00		

REMARKS:

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM	
Hydrogen Sulfide (H2S)			
Nitrogen (N2)	1.26		
Carbon Dioxide (CO2)	5.30		
Methane (C1)	76.36		
Ethane (C2)	8.97	2.393	
Propane (C3)	4.91	1.350	
I-Butane (IC4)	0.70	0.228	
N-Butane (NC4)	1.38	0.434	
I-Pentane (IC5)	0.39	0.142	
N-Pentane (NC5)	0.32	0.116	
Hexane Plus (C6)	0.41	0.168	
	100.00	4.831	
BTU/CU.FT. - DRY	1159	MOLECULAR WT.	21.8703
AT 14.650 DRY	1166		
AT 14.650 WET	1145		
AT 14.73 DRY	1172		
AT 14.73 WET	1152		
SPECIFIC GRAVITY -			
CALCULATED	0.755		
MEASURED			

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