

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

AUG 16 '80

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 7-24-89	
Company Oxy USA, Inc.		Connection El Paso Natural	
Pool Burton Flat <i>Wildcat Azoka</i>		Formation Atoka	
Completion Date 7-20-89		Total Depth 11645	Plug Back TD 10930
Casing Size 5 1/2		Set At 11645	Perforations From 10534 To 10734
Tubing Size 2 7/8		Set At 10415	Perforations From open To end
Type Well - Single - Gradeneed - G.C. or G.O. Multiple Single		Packer Set At 10405	County Eddy
Producing Thru Tbg.		Reservoir Temp. °F 181 @ 10634	Mean Annual Temp. °F 60
L		H	State NM
10534	10534	Gg .600	% CO ₂ 0.35
		% N ₂ 0.86	% H ₂ S 0
		Prover	Meter Run 4,027
			Taps Flg.

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. in. Hg	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							4252		Pkr.		48 Hrs.
1.	4	x	.875	520	1.96	82	3810		Pkr.		1 Hr.
2.	4	x	.875	535	9.00	72	3277		Pkr.		1 Hr.
3.	4	x	.875	565	44.90	72	2442		Pkr.		1 Hr.
4.	4	x	.875	565	46.20	90	1735		Pkr.		1 Hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_p P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1	3.630	32.33	533.2	.9795	1.291	1.042	155
2	3.630	70.24	547.2	.9887	1.291	1.044	340
3	3.630	161.12	578.2	.9887	1.291	1.045	780
4	3.630	163.44	578.2	.9723	1.291	1.045	778
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry gas	Mcft/bbl.
1.	.79	542	1.51	.921	A.P.L. Gravity of Liquid Hydrocarbons	Dry	Dec.
2.	.82	532	1.49	.918	Specific Gravity Separator Gas	.600	XXXXXXXXXX
3.	.86	532	1.49	.915	Specific Gravity Flowing Fluid	XXXXXX	
4.	.86	550	1.54	.915	Critical Pressure	671	P.S.I.A.
5.					Critical Temperature	358	°R

NO.	P _r ²	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} =$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n =$
1	**1746.6	14796.3	3482.7	1.493	1.493
2	**1526.5	11065.6	7213.4		
3	**1245.6	6034.9	12244.1		
4	**1768.3	3126.9	15152.1		
5					

Absolute Open Flow	1.165	Mcfd @ 15.325	Angle of Slope	45	Slope, n	1.000
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Remarks: * = Cal. BHP to surface
** = Flowing BHP's cal. to surface

BHP's were obtained with Amerada type RPG-3 Instrument

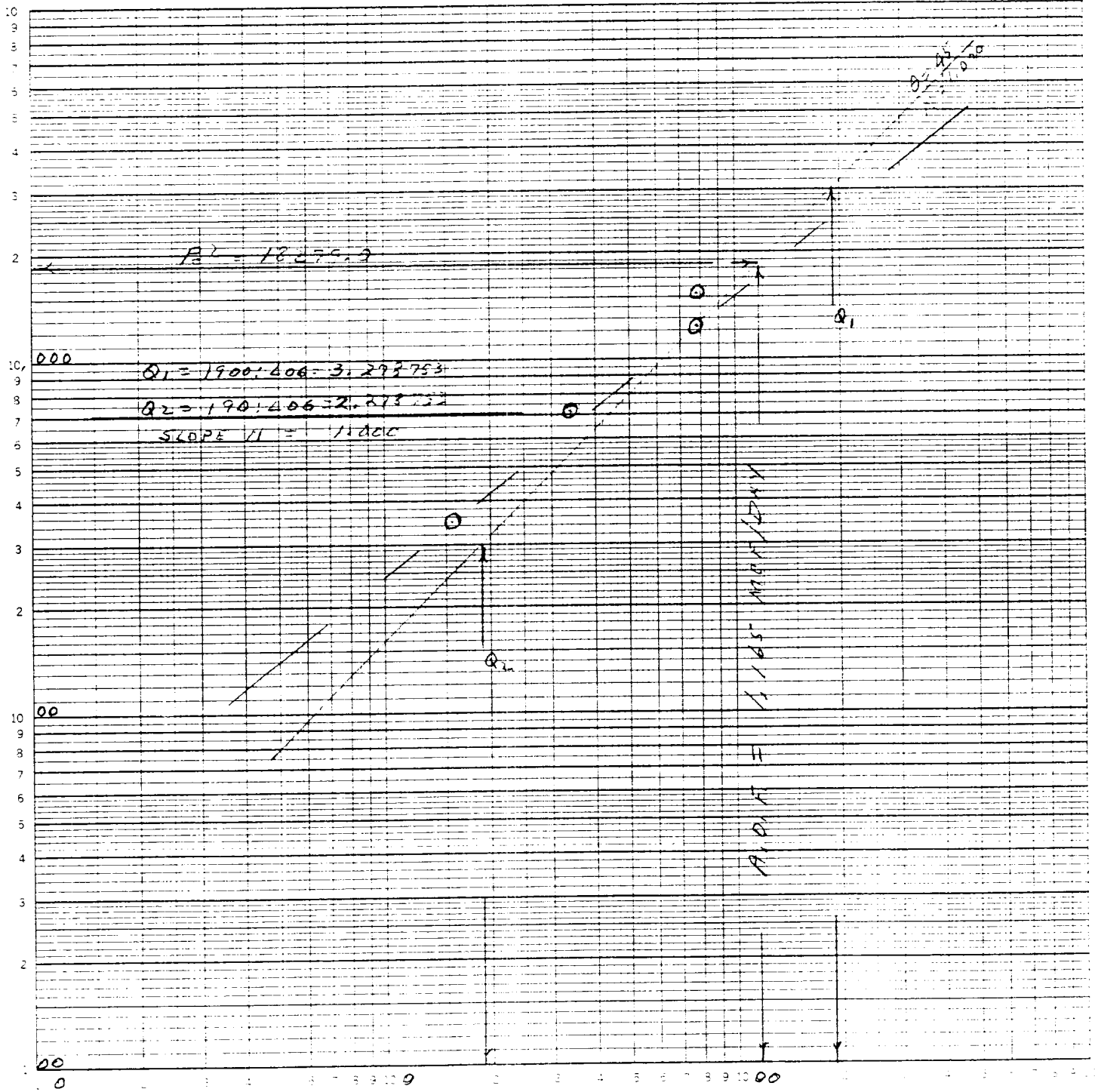
Approved By Division	Conducted By: John West Engineering	Calculated By: JBM	Checked By: JBM
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OXY USA, INC.
Simpson B No. 1

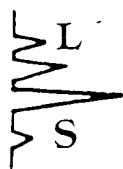
20-21S-27E
Eddy Co., NM
7-24-89

Pc2 - Pw2 (thsnds.)
46 7400

LOGARITHMIC 3 X 3 CYCLES
KLEIN & LASSER CO. MADE IN USA



Q - MCF/DAY



LABORATORY SERVICES

1331 Tasker Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: John West Engineering Co.
412 N. Dal Paso
Hobbs, New Mexico 88240

Attention: Mr. Buz Thomason

SAMPLE
IDENTIFICATION: Simpson "B" #1
COMPANY: Oxy U.S.A., Inc.
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 7/24/89 5:30 PM GAS (XX) LIQUID ()
ANALYSIS DATE: 7/24/89 SAMPLED BY: John West Eng.
PRESSURE — PSIG ANALYSIS BY: Rolland Perry
TEMPERATURE — °F:

REMARKS:

COMPONENT ANALYSIS

COMPONENT		MOL PERCENT	GPM	LIQ. VOL. PERCENT
Hydrogen Sulfide	(H2S)	---		
Nitrogen	(N2)	0.86		
Carbon Dioxide	(CO2)	0.35		
Methane	(C1)	93.30		
Ethane	(C2)	3.87	0.987	
Propane	(C3)	0.97	0.267	
I-Butane	(IC4)	0.16	0.052	
N-Butane	(NC4)	0.17	0.054	
I-Pentane	(IC5)	0.08	0.029	
N-Pentane	(NC5)	0.05	0.018	
Hexane	(C6)	0.11	0.051	
Heptanes Plus	(C7 +)	0.08	0.045	
		<u>100.00</u>	<u>1.503</u>	

BTU/CU. FT.—DRY 1062
AT 14.650 WET 1041

SPECIFIC GRAVITY—CALCULATED 0.600
MEASURED

VAPOR PRESSURE (ABSOLUTE)—CALCULATED

26# GASOLINE— 0.162

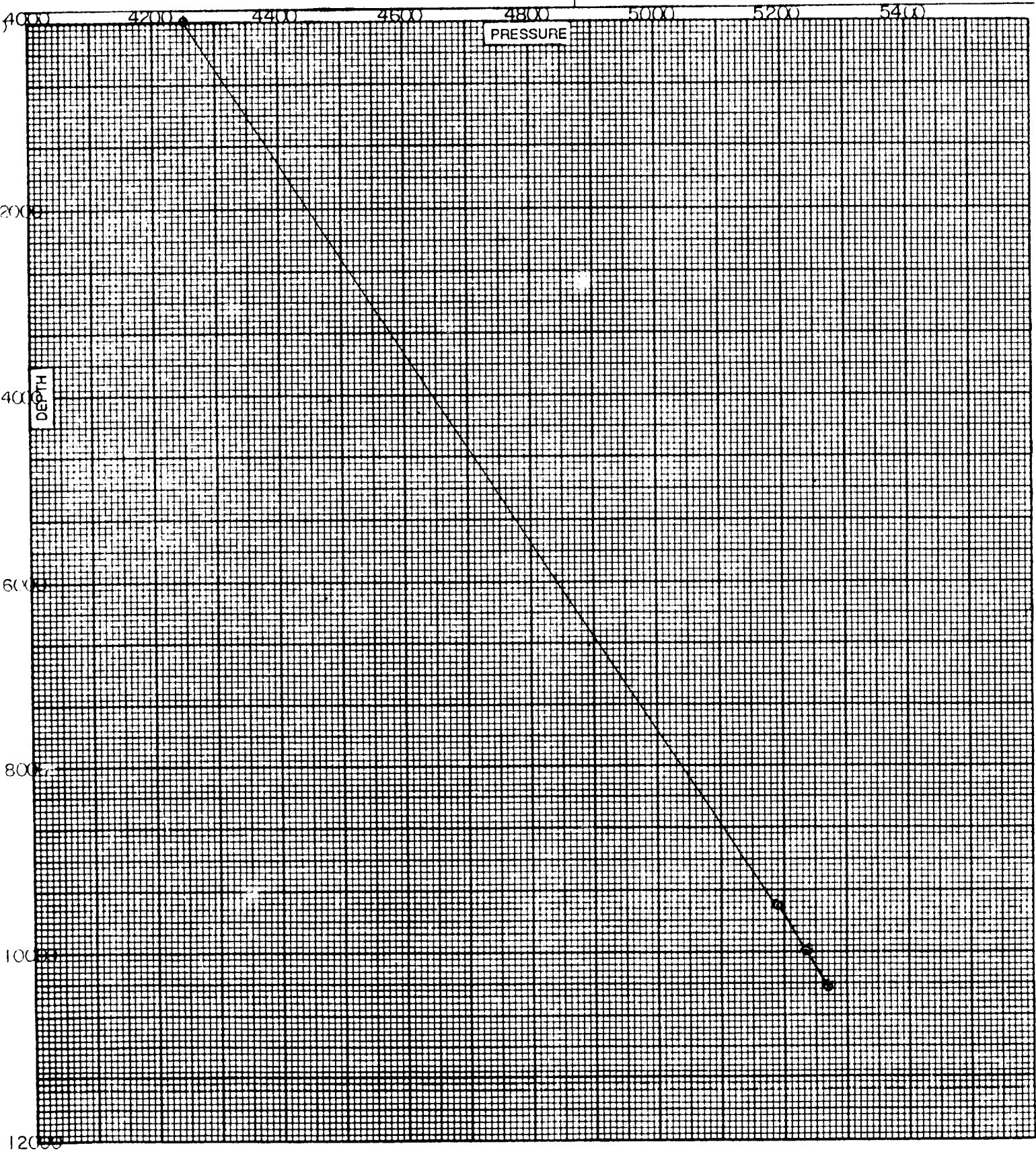
CU. FT./GAL. —

BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR OXY USA, INC.
LEASE Simpson "B"
WELL NO. 1
FIELD _____
DATE 7-24-89 TIME 2:00 P.M.

STATUS Shut-in TEST DEPTH 10,384 Feet
TIME S.I. 72 Hours LAST TEST DATE _____
CAS. PRES. _____ BHP LAST TEST _____
TUB. PRES. 4251 psig BHP CHANGE _____
ELEV. _____ FLUID TOP _____
DATUM _____ WATER TOP _____
TEMP. _____ RUN BY B.J.T.
CLOCK NO. 18007 GAUGE NO. 19389
ELEMENT NO. 34912 (0-8000 PSI)

DEPTH	PRESSURE	GRADIENT
000	4251	
9500	5190	.099
10000	5234	.088
10384	5270	.094



DATE	TIME	CUM. HRS./MIN.	PSIG @ 10,384 FEET	OXY USA, INC.
7-24-89	2:00 PM	00 Hrs 00 Min	5270 Gauge reached 10,384 Feet	Simpson "B" No. 1 Bottom Hole Pressures to use for calculating A O F Test
	2:15 PM	00 15	5270 Open choke, begin test	
		00 30	4988	
		00 45	4870	
		00 00	4810	
	3:15 PM	01 00	4781 End Rate I	Test Date: July 24, 1989
		01 15	4543	Test Depth: 10,384 Feet
		01 30	4381	
		01 45	4259	
	4:15 PM	02 00	4178 End Rate II	Element No.: 34912
		02 15	3824	Range: 0-8000 PSI
		02 30	3580	Clock No.: 18007
				Range: 0-12 Hour

TIME-IN HOURS

