



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET

Last No 18534

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

Elevation 1360 GL Formation Simpson Eff. Pay Ft.

District GT Bend Date 4-17-93 Customer Order No.

COMPANY NAME Oxy-U.S.A., Inc
ADDRESS 110 S. MAIN #800 WICHITA, Ks. 67202
LEASE AND WELL NO Wilson 'A' #416 COUNTY BUTLER STATE Ks Sec. 9 Twp. 25 Rge. 5E
Mail Invoice To SAME Co. Name #416 Wilson A Address No. Copies Requested Reg
Mail Charts To SAME #416 Wilson A Address No. Copies Requested Reg

Formation Test No. 1 Interval Tested From 2484 ft. to 2496 ft. Total Depth 2496 ft.
Packer Depth 2484 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
Top Recorder Depth (Inside) 2487 ft. Recorder Number 10270 Cap. 4150
Bottom Recorder Depth (Outside) 2490 ft. Recorder Number 13550 Cap. 4175
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Allen Drlg rig 2 Drill Collar Length 180 I. D. 2.2 in.
Mud Type Chemical Viscosity 40 Weight Pipe Length - I. D. - in.
Weight 9.3 Water Loss N/A cc. Drill Pipe Length 2284 I. D. 3.8 in.
Chlorides N/A P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.
Jars: Make WTC Serial Number 422 Anchor Length 12 ft. Size 5 1/2 in.
Did Well Flow? - Reversed Out - Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: IF - WEAK building to a fair blow 1" to 5 1/2" Blow
FF - FAIR building to a strong blow in 20 min 6" to bottom of bucket
Recovered 80 ft. of WATER cut mud w/show of oil 40% WATER 60% mud
Recovered - ft. of
Recovered 120 ft. of Muddy WATER 85% WATER 15% mud
Recovered - ft. of
Recovered - ft. of
Chlorides 13000 P.P.M. Sample Jars used 4 Remarks: APR 15 1993

Time On Location 11:00 A.M. Time Pick Up Tool 1:45 P.M. Time Off Location - A.M.
Time Set Packer(s) 3:00 A.M. Time Started Off Bottom 5:15 P.M. Maximum Temperature 110
Initial Hydrostatic Pressure (A) 1236 P.S.I.
Initial Flow Period (B) 15 Minutes (C) 31 P.S.I. to (D) 41 P.S.I.
Initial Closed In Period (E) 30 Minutes (F) 520 P.S.I.
Final Flow Period (G) 30 Minutes (H) 62 P.S.I. to (I) 93 P.S.I.
Final Closed In Period (J) 60 Minutes (K) 520 P.S.I.
Final Hydrostatic Pressure (L) 1215 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Sale Schroeder Signature of Customer or his authorized representative

Western Representative Ray Schwager THANK YOU

FIELD INVOICE

Open Hole Test 600.00
Misrun \$
Straddle Test \$
Jars 225.00
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Fluid Sampler \$
Extra Charts \$
Insurance \$
Telecopier \$
TOTAL 825.00

WESTERN TESTING CO., INC.

Pressure Data

Date 4-17-93

Test Ticket No. 18534

Recorder No. 10270 Capacity \_\_\_\_\_ Location \_\_\_\_\_ Ft.

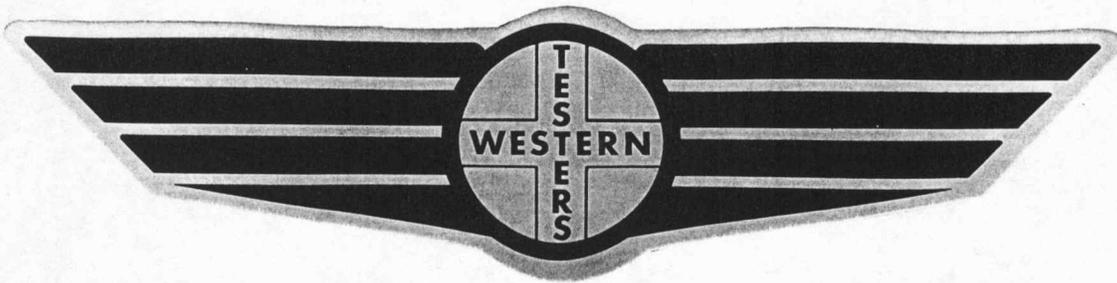
Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature \_\_\_\_\_ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1184</u> P.S.I.	Open Tool		M _____
B First Initial Flow Pressure	<u>39</u> P.S.I.	First Flow Pressure	Mins. <u>15</u>	Mins. _____
C First Final Flow Pressure	<u>53</u> P.S.I.	Initial Closed-in Pressure	Mins. <u>20</u>	Mins. _____
D Initial Closed-in Pressure	<u>535</u> P.S.I.	Second Flow Pressure	Mins. <u>30</u>	Mins. _____
E Second Initial Flow Pressure	<u>73</u> P.S.I.	Final Closed-in Pressure	Mins. <u>60</u>	Mins. _____
F Second Final Flow Pressure	<u>107</u> P.S.I.			
G Final Closed-in Pressure	<u>536</u> P.S.I.			
H Final Hydrostatic Mud	<u>1246</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>39</u>	0	<u>53</u>	0	<u>73</u>	0	<u>107</u>
P 2 5	<u>39</u>	3	<u>450</u>	5	<u>73</u>	3	<u>441</u>
P 3 10	<u>46</u>	6	<u>483</u>	10	<u>76</u>	6	<u>464</u>
P 4 15	<u>53</u>	9	<u>501</u>	15	<u>87</u>	9	<u>482</u>
P 5 20		12	<u>511</u>	20	<u>96</u>	12	<u>493</u>
P 6 25		15	<u>518</u>	25	<u>103</u>	15	<u>500</u>
P 7 30		18	<u>523</u>	30	<u>107</u>	18	<u>508</u>
P 8 35		21	<u>528</u>	35		21	<u>514</u>
P 9 40		24	<u>531</u>	40		24	<u>517</u>
P10 45		27	<u>533</u>	45		27	<u>520</u>
P11 50		30	<u>535</u>	50		30	<u>523</u>
P12 55		33		55		33	<u>525</u>
P13 60		36		60		36	<u>528</u>
P14 65		39		65		39	<u>530</u>
P15 70		42		70		42	<u>532</u>
P16 75		45		75		45	<u>533</u>
P17 80		48		80		48	<u>534</u>
P18 85		51		85		51	<u>535</u>
P19 90		54		90		54	<u>536</u>
P20 95		57		95		57	<u>536</u>
100		60		100		60	<u>536</u>

# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone **1 - 800-688-7021**

DST REPORT

GENERAL INFORMATION

DATE	: 4-17-93	TICKET	: 18534
CUSTOMER	: OXY-U.S.A., INC.	LEASE	: WILSON
WELL	: #416	TEST:	1
ELEVATION:	1860 G.L..	GEOLOGIST:	GALE SCHROEDER
SECTION	: 9	FORMATION:	SIMPSON
RANGE	: 5E	COUNTY:	BUTLER
GAUGE SN#:	10270	RANGE	: 4150
		STATE	: KS
		CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	2484.00 ft	TO:	2496.00 ft	TVD:	2496.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	OIL
DEPTH OF RECORDERS:	2487.0 ft		2490.0 ft		
TEMPERATURE:	110.0				
DRILL COLLAR LENGTH:	180.0 ft	I.D.:		2.200 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	2284.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	12.0 ft	ANCHOR SIZE:		5.500 in	
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:		0.750 in	
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :		4.5XH	
PACKER DEPTH:	2484.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	

MUD INFORMATION

DRILLING CON. :	ALLEN DRLG. #2	VISCOSITY :	40.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	0.000 cc
WEIGHT :	9.300 ppg		
CHLORIDES :	0 ppm	SERIAL NUMBER:	422
JARS-MAKE :	WTC	REVERSED OUT?:	NO
DID WELL FLOW?:	NO		

COMMENTS

Comment

WEAK BUILDING TO A FAIR BLOW 1" TO 5.5" BLOW ON INITIAL FLOW PERIOD. FAIR BLOW BUILDING TO A STRONG BLOW IN 20 MIN. 6" TO BOTTOM OF BUCKET

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

ON FINAL FLOW PERIOD.

FLUID RECOVERY

Feet of Fluid	%	%	%	%	Comments
	Oil	Gas	Water	Mud	
80.0	0.0	0.0	40.0	60.0	WATER C/MUD W/SHOW OF OIL
120.0	0.0	0.0	85.0	15.0	MUDDY WATER
0.0	0.0	0.0	0.0	0.0	CHLORIDES 13000 PPM

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	45.0000	min.
GAS VOLUME:	0.0000	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	0.4222	STB	AVERAGE WATER RATE:	36.0567	STB/D
WATER VOLUME:	0.7046	STB			
TOTAL FLUID :	1.1268	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1236.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	31.00	41.00
INITIAL SHUT-IN	30.00		520.00
FINAL FLOW	30.00	62.00	93.00
FINAL SHUT-IN	60.00		520.00

FINAL HYDROSTATIC PRESSURE: 1215.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1284.00

<u>Description</u>	<u>Duration</u>	<u>p1</u>	<u>p End</u>
INITIAL FLOW	15.00	39.00	53.00
INITIAL SHUT-IN	30.00		535.00
FINAL FLOW	30.00	73.00	107.00
FINAL SHUT-IN	60.00		536.00

FINAL HYDROSTATIC PRESSURE: 1226.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 4-17-93	TICKET	: 18534
CUSTOMER	: OXY-U.S.A., INC.	LEASE	: WILSON
WELL	: #416	TEST:	1
ELEVATION:	1860 G.L..	GEOLOGIST:	GALE SCHROEDER
SECTION	: 9	FORMATION:	SIMPSON
RANGE	: 5E	TOWNSHIP	: 25S
GAUGE SN#:	10270	STATE	: KS
		CLOCK	: 12
		COUNTY:	BUTLER
		RANGE	: 4150

INITIAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	39.00	39.00
5.00	39.00	0.00
10.00	46.00	7.00
15.00	53.00	7.00

INITIAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	453.00	453.00	0.00
6.00	483.00	30.00	0.00
9.00	502.00	19.00	0.00
12.00	511.00	9.00	0.00
15.00	518.00	7.00	0.00
18.00	523.00	5.00	0.00
21.00	528.00	5.00	0.00
24.00	531.00	3.00	0.00
27.00	533.00	2.00	0.00
30.00	535.00	2.00	0.00

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	73.00	73.00
5.00	73.00	0.00
10.00	76.00	3.00
15.00	87.00	11.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
20.00	96.00	9.00
25.00	103.00	7.00
30.00	107.00	4.00

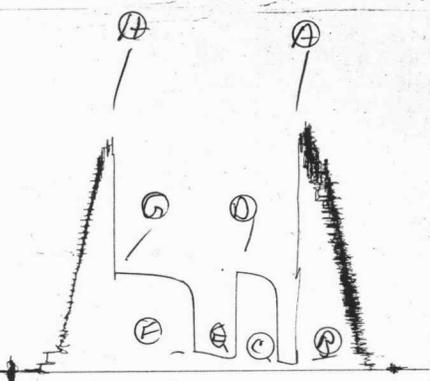
FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	421.00	421.00	0.00
6.00	464.00	43.00	0.00
9.00	482.00	18.00	0.00
12.00	493.00	11.00	0.00
15.00	500.00	7.00	0.00
18.00	508.00	8.00	0.00
21.00	514.00	6.00	0.00
24.00	517.00	3.00	0.00
27.00	520.00	3.00	0.00
30.00	523.00	3.00	0.00
33.00	525.00	2.00	0.00
36.00	528.00	3.00	0.00
39.00	530.00	2.00	0.00
42.00	532.00	2.00	0.00
45.00	533.00	1.00	0.00
48.00	534.00	1.00	0.00
51.00	535.00	1.00	0.00
54.00	536.00	1.00	0.00
57.00	536.00	0.00	0.00
60.00	536.00	0.00	0.00

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