



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No 20164

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

Elevation 1209 GL Formation Simpson Eff. Pay Ft.

District Augusta Date 6-26-93 Customer Order No.

COMPANY NAME Oxy USA Inc

ADDRESS 110 S. Main #800 Wichita, KS. 67202

LEASE AND WELL NO. Brown A #25 COUNTY Butler STATE KS Sec. 16 Twp. 28 Rge. 4E

Mail Invoice To Co. Name Address No. Copies Requested

Mail Charts To #25 Brown A Address No. Copies Requested

Formation Test No. 1 Interval Tested From 2456 ft. to 2502 ft. Total Depth 2502 ft.

Packer Depth 2456 ft. Size 6 3/4 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) 2461 ft. Recorder Number 13548 Cap. 4075

Bottom Recorder Depth (Outside) 2502 ft. Recorder Number 13521 Cap. 4375

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor ALLEN Rig #2 Drill Collar Length 175' I. D. 2 1/4 in.

Mud Type Chem 1091 Viscosity 56 Weight Pipe Length - I. D. - in.

Weight 9.3 Water Loss UC cc. Drill Pipe Length 2260' I. D. 3.8 in.

Chlorides UC P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 in.

Jars: Make WTC Serial Number 406 Anchor Length 46 ft. Size 5 1/2 in.

Did Well Flow? Reversed Out YCS Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 x H in.

Blow: Strong Blow off Btm of Bucket

Recovered 1225 ft. of Very Slightly oil Cut muddy water 37% oil

Recovered ft. of 30% mud.

Recovered ft. of 67% wtr.

Recovered ft. of

Recovered ft. of

Chlorides 22,000 P.P.M. Sample Jars used Remarks:

Time On Location 1:00 A.M. P.M. Time Pick Up Tool 7:30 A.M. P.M. Time Off Location A.M. P.M.

Time Set Packer(s) 8:30 A.M. P.M. Time Started Off Bottom 10:45 A.M. P.M. Maximum Temperature 111°

Initial Hydrostatic Pressure (A) 1203 P.S.I.

Initial Flow Period Minutes 15 (B) 151 P.S.I. to (C) 253 P.S.I.

Initial Closed In Period Minutes 30 (D) 879 P.S.I.

Final Flow Period Minutes 30 (E) 354 P.S.I. to (F) 485 P.S.I.

Final Closed In Period Minutes 60 (G) 879 P.S.I.

Final Hydrostatic Pressure (H) 1193 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 Mavis G. Belcher Signature of Customer or his authorized representative

Western Representative Stuart Stone Thals

FIELD INVOICE

Table with 2 columns: Item, Amount. Includes Open Hole Test (\$600.00), Jars (\$225.00), Circ. Sub (\$35.00), and TOTAL (\$860.00).

WESTERN TESTING CO., INC.

Pressure Data

Date 6-26-93

Test Ticket No. 20164

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

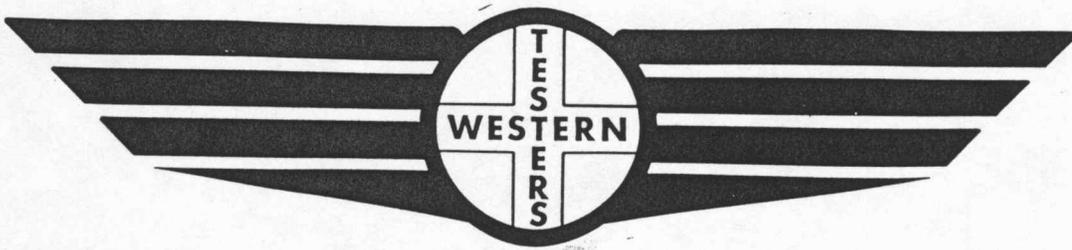
Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature \_\_\_\_\_ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1201</u> P.S.I.	Open Tool		M
B First Initial Flow Pressure	P.S.I.	First Flow Pressure	<u>15</u> Mins.	<u>15</u> Mins
C First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins
D Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins
E Second Initial Flow Pressure	P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>60</u> Mins
F Second Final Flow Pressure	P.S.I.			
G Final Closed-in Pressure	P.S.I.			
H Final Hydrostatic Mud	<u>1191</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
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>137</u>	0	<u>248</u>	0	<u>360</u>	0	<u>496</u>
P 2 5	<u>155</u>	3	<u>759</u>	5	<u>360</u>	3	<u>783</u>
P 3 10	<u>188</u>	6	<u>794</u>	10	<u>372</u>	6	<u>810</u>
P 4 15	<u>248</u>	9	<u>814</u>	15	<u>398</u>	9	<u>825</u>
P 5 20		12	<u>829</u>	20	<u>435</u>	12	<u>833</u>
P 6 25		15	<u>841</u>	25	<u>465</u>	15	<u>841</u>
P 7 30		18	<u>849</u>	30	<u>496</u>	18	<u>847</u>
P 8 35		21	<u>858</u>	35		21	<u>851</u>
P 9 40		24	<u>862</u>	40		24	<u>855</u>
P10 45		27	<u>868</u>	45		27	<u>860</u>
P11 50		30	<u>872</u>	50		30	<u>862</u>
P12 55		33		55		33	<u>866</u>
P13 60		36		60		36	<u>868</u>
P14 65		39		65		39	<u>870</u>
P15 70		42		70		42	<u>872</u>
P16 75		45		75		45	<u>873</u>
P17 80		48		80		48	<u>875</u>
P18 85		51		85		51	<u>877</u>
P19 90		54		90		54	<u>878</u>
P20 95		57		95		57	<u>879</u>
100		60		100		60	<u>880</u>

# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800-688-7021

DST REPORT

GENERAL INFORMATION

DATE : 6-26-93 TICKET : 20164  
CUSTOMER : OXY USA INC. LEASE : BROWN  
WELL : 25-A TEST: 1 GEOLOGIST: BELCHER  
ELEVATION: 1209 G.L. FORMATION: SIMPSON  
SECTION : 16 TOWNSHIP : 28S  
RANGE : 4E COUNTY: BUTLER STATE : KS  
GAUGE SN#: 13548 RANGE : 4075 CLOCK : 12HR

WELL INFORMATION

PERFORATION INTERVAL FROM: 2456.00 ft TO: 2502.00 ft TVD: 2502.0 ft  
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL  
DEPTH OF RECORDERS: 2461.0 ft 2502.0 ft  
TEMPERATURE: 111.0

DRILL COLLAR LENGTH: 175.0 ft I.D.: 2.250 in  
WEIGHT PIPE LENGTH : 0.0 ft I.D.: 0.000 in  
DRILL PIPE LENGTH : 2260.0 ft I.D.: 3.800 in  
TEST TOOL LENGTH : 21.0 ft TOOL SIZE : 5.500 in  
ANCHOR LENGTH : 46.0 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: 2456.0 ft SIZE: 6.625 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 RIG #2  
MUD TYPE : CHEMICAL VISCOSITY : 56.00 cp  
WEIGHT : 9.300 ppg WATER LOSS: 0.000 cc  
CHLORIDES : 900 ppm  
JARS-MAKE : NONE SERIAL NUMBER:  
DID WELL FLOW?: NO REVERSED OUT?: NO

COMMENTS

Comment

INITIAL AND FINAL FLOW PERIODS STRONG BLOW OFF  
BOTTOM OF BUCKET

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
1225.0	3.0	0.0	67.0	30.0	VERY SLIGHTY OIL CUT
0.0	0.0	0.0	0.0	0.0	MUDDY WATER

RATE INFORMATION

OIL VOLUME:	0.4676	STB	TOTAL FLOW TIME:	45.0000	min.
GAS VOLUME:	0.0000	SCF	AVERAGE OIL RATE:	21.3781	STB/D
MUD VOLUME:	4.6765	STB	AVERAGE WATER RATE:	477.4453	STB/D
WATER VOLUME:	10.4441	STB			
TOTAL FLUID :	15.5882	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1203.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	151.00	253.00
INITIAL SHUT-IN	30.00		879.00
FINAL FLOW	30.00	354.00	485.00
FINAL SHUT-IN	60.00		879.00

FINAL HYDROSTATIC PRESSURE: 1193.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1201.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	137.00	248.00
INITIAL SHUT-IN	30.00		872.00
FINAL FLOW	30.00	360.00	496.00
FINAL SHUT-IN	60.00		880.00

FINAL HYDROSTATIC PRESSURE: 1191.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 6-26-93	TICKET : 20164
CUSTOMER : OXY USA INC.	LEASE : BROWN
WELL : 25-A TEST: 1	GEOLOGIST: BELCHER
ELEVATION: 1209 G.L.	FORMATION: SIMPSON
SECTION : 16	TOWNSHIP : 28S
RANGE : 4E COUNTY: BUTLER	STATE : KS
GAUGE SN#: 13548 RANGE : 4075	CLOCK : 12HR

INITIAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	137.00	137.00
5.00	155.00	18.00
10.00	188.00	33.00
15.00	248.00	60.00

INITIAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	759.00	759.00	0.00
6.00	794.00	35.00	0.00
9.00	814.00	20.00	0.00
12.00	829.00	15.00	0.00
15.00	841.00	12.00	0.00
18.00	849.00	8.00	0.00
21.00	858.00	9.00	0.00
24.00	862.00	4.00	0.00
27.00	868.00	6.00	0.00
30.00	872.00	4.00	0.00

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	360.00	360.00
5.00	360.00	0.00
10.00	372.00	12.00
15.00	398.00	26.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

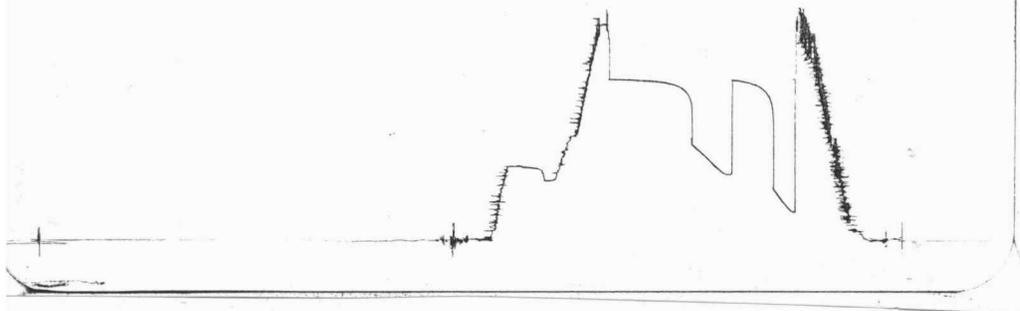
<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
20.00	435.00	37.00
25.00	465.00	30.00
30.00	496.00	31.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	783.00	783.00	0.00
6.00	810.00	27.00	0.00
9.00	825.00	15.00	0.00
12.00	833.00	8.00	0.00
15.00	841.00	8.00	0.00
18.00	847.00	6.00	0.00
21.00	851.00	4.00	0.00
24.00	855.00	4.00	0.00
27.00	860.00	5.00	0.00
30.00	862.00	2.00	0.00
33.00	866.00	4.00	0.00
36.00	868.00	2.00	0.00
39.00	870.00	2.00	0.00
42.00	872.00	2.00	0.00
45.00	873.00	1.00	0.00
48.00	875.00	2.00	0.00
51.00	877.00	2.00	0.00
54.00	878.00	1.00	0.00
57.00	879.00	1.00	0.00
60.00	880.00	1.00	0.00

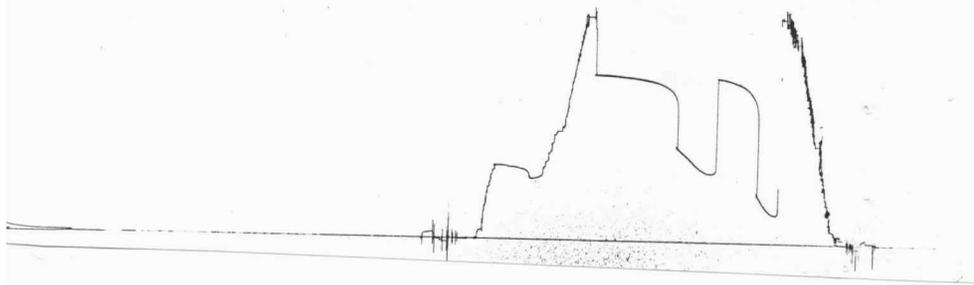
13521

20164



13548

20164





WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No 20165

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

Elevation 1209 GL Formation Arbuckle Eff. Pay Ft.

District Augusta Date 6-26-93 Customer Order No.

COMPANY NAME Oxy USA Inc

ADDRESS 110 S. main #800 Wichita KS 67202

LEASE AND WELL NO. Brown A #25 COUNTY Butler STATE KS Sec. 16 Twp. 28 Rge. 4E

Mail Invoice To Co. Name Same Address No. Copies Requested

Mail Charts To Co. Name Same #25 Brown A Address No. Copies Requested

Formation Test No. 2 Interval Tested From 2502 ft. to 2502 ft. Total Depth 2524 ft.

Packer Depth 2502 ft. Size 6 3/4 in. Packer Depth 24 ft. Size in.

Packer Depth ft. Size in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 2507 ft. Recorder Number 13548 Cap. 4075

Bottom Recorder Depth (Outside) 2512 ft. Recorder Number 13521 Cap. 4375

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor ALLEN Rig #2 Drill Collar Length 175' I. D. 2 1/4" in.

Mud Type Chemical Viscosity 50 Weight Pipe Length I. D. in.

Weight 9.3 Water Loss NC cc. Drill Pipe Length 2296' I. D. 3.8 in.

Chlorides NC P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 in.

Jars: Make W.T.C. Serial Number 406 Anchor Length 22 ft. Size 5 1/2 in.

Did Well Flow? Reversed Out YES Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 x 14 in.

Blow: Strong Blow Btm of Bucket - Both Flows

Recovered 1700 ft. of Clean oil

Recovered 640 ft. of Heavy oil Cut muddy wtr 35% oil

Recovered ft. of 50% water

Recovered ft. of Gravity 35 15% mud

Recovered ft. of

Chlorides 21,000 P.P.M. Sample Jars used Remarks:

Time On Location 5:00 A.M. Time Pick Up Tool 6:45 P.M. Time Off Location A.M. P.M.

Time Set Packer(s) 6:55 P.M. Time Started Off Bottom 9:10 P.M. Maximum Temperature 114°

Initial Hydrostatic Pressure (A) 1223 P.S.I.

Initial Flow Period Minutes 15 (B) 334 P.S.I. to (C) 567 P.S.I.

Initial Closed In Period Minutes 30 (D) 948 P.S.I.

Final Flow Period Minutes 30 (E) 711 P.S.I. to (F) 948 P.S.I.

Final Closed In Period Minutes 60 (G) 948 P.S.I.

Final Hydrostatic Pressure (H) 1223 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 Mandy Belcher Signature of Customer or his authorized representative

Western Representative Stuart Stover

Thanks!

FIELD INVOICE

Table with 2 columns: Item, Amount. Includes Open Hole Test \$600.00, Jars \$225.00, Circ. Sub. \$35.00, TOTAL \$860.00

WESTERN TESTING CO., INC.

Pressure Data

Date 6-26-93

Test Ticket No. 20165

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

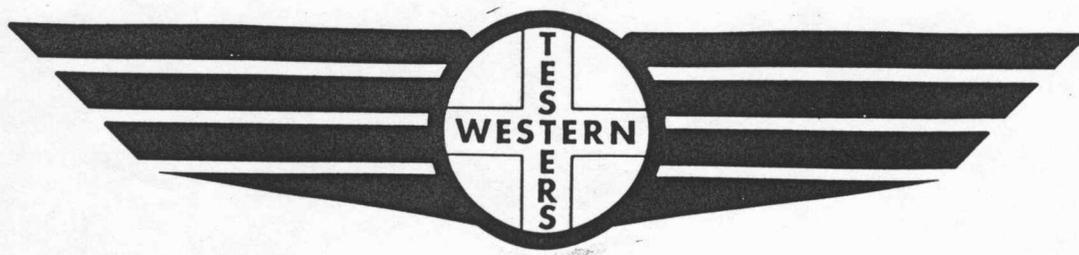
Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature \_\_\_\_\_ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud <u>1219</u>	P.S.I.		M
B First Initial Flow Pressure	P.S.I.	<u>15</u> Mins.	<u>15</u> Mins.
C First Final Flow Pressure	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
F Second Final Flow Pressure	P.S.I.		
G Final Closed-in Pressure	P.S.I.		
H Final Hydrostatic Mud <u>1201</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
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>348</u>	0	<u>598</u>	0	<u>716</u>	0	<u>907</u>
P 2 5	<u>374</u>	3	<u>921</u>	5	<u>722</u>	3	<u>932</u>
P 3 10	<u>471</u>	6	<u>938</u>	10	<u>751</u>	6	<u>940</u>
P 4 15	<u>598</u>	9	<u>944</u>	15	<u>804</u>	9	<u>946</u>
P 5 20		12	<u>948</u>	20	<u>845</u>	12	<u>952</u>
P 6 25		15	<u>952</u>	25	<u>880</u>	15	<u>954</u>
P 7 30		18	<u>954</u>	30	<u>907</u>	18	<u>954</u>
P 8 35		21	<u>955</u>	35		21	<u>955</u>
P 9 40		24	<u>956</u>	40		24	<u>955</u>
P10 45		27	<u>957</u>	45		27	<u>956</u>
P11 50		30	<u>958</u>	50		30	<u>956</u>
P12 55		33		55		33	<u>956</u>
P13 60		36		60		36	<u>957</u>
P14 65		39		65		39	<u>957</u>
P15 70		42		70		42	<u>958</u>
P16 75		45		75		45	<u>958</u>
P17 80		48		80		48	<u>959</u>
P18 85		51		85		51	<u>959</u>
P19 90		54		90		54	<u>960</u>
P20 95		57		95		57	<u>960</u>
100		60		100		60	<u>960</u>

# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800-688-7021

DST REPORT

GENERAL INFORMATION

DATE : 6-26-93	TICKET : 20165
CUSTOMER : OXY USA INC.	LEASE : BROWN
WELL : 25-A TEST: 2	GEOLOGIST: BELCHER
ELEVATION: 1209 G.L.	FORMATION: ARBUCKLE
SECTION : 16	TOWNSHIP : 28S
RANGE : 4E COUNTY: BUTLER	STATE : KS
GAUGE SN#: 13548 RANGE : 4075	CLOCK : 12HR

WELL INFORMATION

PERFORATION INTERVAL FROM: 2502.00 ft	TO: 2502.00 ft	TVD: 2524.0 ft
DEPTH OF SELECTIVE ZONE:	TEST TYPE: OIL	
DEPTH OF RECORDERS: 2507.0 ft	2512.0 ft	
TEMPERATURE: 114.0		
DRILL COLLAR LENGTH: 175.0 ft	I.D.:	2.250 in
WEIGHT PIPE LENGTH : 0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH : 2296.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH : 21.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH : 22.0 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: 2502.0 ft	SIZE:	6.625 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 RIG #2	VISCOSITY : 50.00 cp
MUD TYPE : CHEMICAL	WATER LOSS: 0.000 cc
WEIGHT : 9.300 ppg	SERIAL NUMBER:
CHLORIDES : 0 ppm	REVERSED OUT?: NO
JARS-MAKE : NONE	
DID WELL FLOW?: NO	

COMMENTS

Comment

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INITIAL AND FINAL FLOW PERIODS STRONG BLOW OFF  
BOTTOM OF BUCKET

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
1700.0	100.0	0.0	0.0	0.0	CLEAN OIL
640.0	35.0	0.0	50.0	15.0	HEAVY OIL CUT MUDDY WATER

RATE INFORMATION

OIL VOLUME:	26.4288	STB	TOTAL FLOW TIME:	45.0000	min.
GAS VOLUME:	0.0000	SCF	AVERAGE OIL RATE:	860.3131	STB/D
MUD VOLUME:	1.1074	STB	AVERAGE WATER RATE:	138.9706	STB/D
WATER VOLUME:	3.6914	STB			
TOTAL FLUID :	31.2276	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1223.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	334.00	567.00
INITIAL SHUT-IN	30.00		948.00
FINAL FLOW	30.00	711.00	948.00
FINAL SHUT-IN	60.00		948.00

FINAL HYDROSTATIC PRESSURE: 1223.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1219.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	348.00	598.00
INITIAL SHUT-IN	30.00		958.00
FINAL FLOW	30.00	716.00	907.00
FINAL SHUT-IN	60.00		960.00

FINAL HYDROSTATIC PRESSURE: 1201.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 6-26-93	TICKET : 20165
CUSTOMER : OXY USA INC.	LEASE : BROWN
WELL : 25-A      TEST: 2	GEOLOGIST: BELCHER
ELEVATION: 1209 G.L.	FORMATION: ARBUCKLE
SECTION : 16	TOWNSHIP : 28S
RANGE : 4E      COUNTY: BUTLER	STATE : KS
GAUGE SN#: 13548      RANGE : 4075	CLOCK : 12HR

INITIAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	348.00	348.00
5.00	374.00	26.00
10.00	471.00	97.00
15.00	598.00	127.00

INITIAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	921.00	921.00	0.00
6.00	938.00	17.00	0.00
9.00	944.00	6.00	0.00
12.00	948.00	4.00	0.00
15.00	952.00	4.00	0.00
18.00	954.00	2.00	0.00
21.00	955.00	1.00	0.00
24.00	956.00	1.00	0.00
27.00	957.00	1.00	0.00
30.00	958.00	1.00	0.00

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	716.00	716.00
5.00	722.00	6.00
10.00	751.00	29.00
15.00	804.00	53.00

PRESSURE TRANSIENT REPORT (CONTINUED)

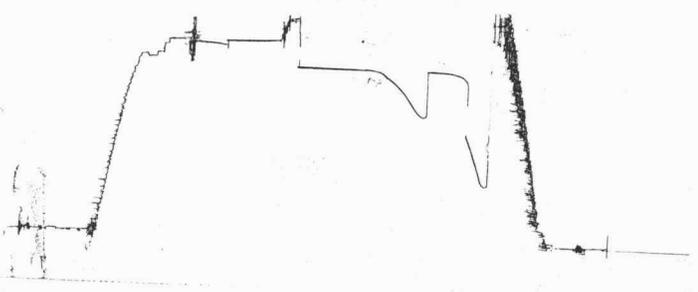
FINAL FLOW (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
20.00	845.00	41.00
25.00	880.00	35.00
30.00	907.00	27.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	932.00	932.00	0.00
6.00	940.00	8.00	0.00
9.00	946.00	6.00	0.00
12.00	952.00	6.00	0.00
15.00	954.00	2.00	0.00
18.00	954.00	0.00	0.00
21.00	955.00	1.00	0.00
24.00	955.00	0.00	0.00
27.00	956.00	1.00	0.00
30.00	956.00	0.00	0.00
33.00	956.00	0.00	0.00
36.00	957.00	1.00	0.00
39.00	957.00	0.00	0.00
42.00	958.00	1.00	0.00
45.00	958.00	0.00	0.00
48.00	959.00	1.00	0.00
51.00	959.00	0.00	0.00
54.00	960.00	1.00	0.00
57.00	960.00	0.00	0.00
60.00	960.00	0.00	0.00

13521  
20165



13378  
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