



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 19059

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

Elevation 1388' GL Formation Arbuckle Eff. Pay - Ft.

District GT Bend Date 5-18-93 Customer Order No. -

COMPANY NAME Oxy U.S.A. Inc.

ADDRESS 110 S. MAIN #800 WICHITA KS 67202

LEASE AND WELL NO. Wilson A #419 COUNTY BUTLER STATE KS Sec. 8 Twp. 25 Rge. 5E

Mail Charts To SAME Co. Name #419 Wilson A Address No. Copies Requested 109

Mail Charts To SAME #419 Wilson A Address No. Copies Requested 109

Formation Test No. 1 Interval Tested From 2395 ft. to 2415 ft. Total Depth 2415 ft.

Packer Depth 2395 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Packer Depth 2395 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2407 ft. Recorder Number 3659 Cap. 4000

Bottom Recorder Depth (Outside) 2410 ft. Recorder Number 11018 Cap. 4425

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor ALLEN Drilling rig 2 Drill Collar Length 180 I. D. 2.2 in.

Mud Type Chemical Viscosity 48 Weight Pipe Length - I. D. - in.

Weight 9.4 Water Loss 7.2 cc. Drill Pipe Length 2195 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 418 Anchor Length 20 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 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: IF - WEAK Blow Throughout 1/4" Blow

FF - NO BLOW

Recovered 5 ft. of slightly oil & gas cut mud

Recovered - ft. of 27% gas 3% oil 95% mud

Recovered - ft. of w/show of clean oil on top of tool

Recovered - ft. of

Recovered - ft. of

Chlorides - P.P.M. Sample Jars used 1 Remarks:

MAY 20 1993

Time On Location 11:00 A.M. Time Pick Up Tool 12:15 P.M. Time Off Location - P.M.

Time Set Packer(s) 1:10 P.M. Time Started Off Bottom 2:05 P.M. Maximum Temperature 103°

Initial Hydrostatic Pressure (A) 1186 P.S.I.

Initial Flow Period Minutes 15 (B) 81 P.S.I. to (C) 81 P.S.I.

Initial Closed In Period Minutes 30 (D) 738 P.S.I.

Final Flow Period Minutes 10 (E) 81 P.S.I. to (F) 81 P.S.I.

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

Final Hydrostatic Pressure (H) 1186 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: [Signature] AFE
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 5-18-92

Test Ticket No. 19059

Recorder No. 21059

Capacity _____ Location _____

Clock No. _____ Elevation _____ Well Temperature _____

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1192</u> P.S.I.	Open Tool	M	
B First Initial Flow Pressure	<u>85</u> P.S.I.	First Flow Pressure	Mins. <u>20</u>	Mi
C First Final Flow Pressure	<u>85</u> P.S.I.	Initial Closed-in Pressure	Mins. <u>27</u>	Mi
D Initial Closed-in Pressure	<u>232</u> P.S.I.	Second Flow Pressure	Mins. <u>10</u>	Mi
E Second Initial Flow Pressure	<u>88</u> P.S.I.	Final Closed-in Pressure	Mins. <u>—</u>	Mi
F Second Final Flow Pressure	<u>88</u> P.S.I.			
G Final Closed-in Pressure	<u>—</u> P.S.I.			
H Final Hydrostatic Mud	<u>1192</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>85</u>	0	<u>85</u>	0	<u>88</u>	0	
P 2 5	<u>2</u>	3	<u>401</u>	5	<u>5</u>	3	
P 3 10	<u>2</u>	6	<u>543</u>	10	<u>88</u>	6	
P 4 15	<u>2</u>	9	<u>608</u>	15		9	
P 5 20	<u>85</u>	12	<u>639</u>	20		12	
P 6 25		15	<u>674</u>	25		15	
P 7 30		18	<u>694</u>	30		18	
P 8 35		21	<u>208</u>	35		21	
P 9 40		24	<u>256</u>	40		24	
P10 45		27	<u>232</u>	45		27	
P11 50		30		50		30	
P12 55		33		55		33	
P13 60		36		60		36	
P14 65		39		65		39	
P15 70		42		70		42	
P16 75		45		75		45	
P17 80		48		80		48	
P18 85		51		85		51	
P19 90		54		90		54	
P20 95		57		95		57	
100		60		100		60	

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

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

DST REPORT

GENERAL INFORMATION

DATE : 5/18/93	TICKET : 19059
CUSTOMER : OXY USA, INC.	LEASE : WILSON A
WELL : 419 TEST: 1	GEOLOGIST: SCHROEDER
ELEVATION: 1388 GL	FORMATION: ARBUCKLE
SECTION : 8	TOWNSHIP : 25S
RANGE : 5E COUNTY: BUTLER	STATE : KS
GAUGE SN#: 3659 RANGE : 4000	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 2395.00 ft	TO: 2415.00 ft	TVD: 2415.0 ft
DEPTH OF SELECTIVE ZONE:		TEST TYPE: OIL
DEPTH OF RECORDERS: 2407.0 ft	2410.0 ft	
TEMPERATURE: 103.0		
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 : 2195.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH : 20.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH : 20.0 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: 2395.0 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 RIG 2	
MUD TYPE : CHEMICAL	VISCOSITY : 48.00 cp
WEIGHT : 9.400 ppg	WATER LOSS: 7.200 cc
CHLORIDES : 0 ppm	
JARS-MAKE : WTC	SERIAL NUMBER: 418
DID WELL FLOW?: NO	REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK BLOW THROUGHOUT- 1/4 INCH BLOW. FINAL FLOW PERIOD NO BLOW.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
5.0	3.0	2.0	0.0	95.0	SL. OIL & GAS CUT MUD
0.0	0.0	0.0	0.0	0.0	W/SHOW OF CLEAN OIL ON
0.0	0.0	0.0	0.0	0.0	TOP OF TOOL

RATE INFORMATION

OIL VOLUME:	0.0007	STB	TOTAL FLOW TIME:	30.0000	min.
GAS VOLUME:	0.0026	SCF	AVERAGE OIL RATE:	1.1058	STB/D
MUD VOLUME:	0.0223	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.0230	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1186.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	81.00	81.00
INITIAL SHUT-IN	30.00		738.00
FINAL FLOW	10.00	81.00	81.00
FINAL SHUT-IN	0.00		0.00

FINAL HYDROSTATIC PRESSURE: 1186.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1192.00

Description	Duration	p1	p End
INITIAL FLOW	20.00	85.00	85.00
INITIAL SHUT-IN	27.00		732.00
FINAL FLOW	10.00	88.00	88.00

FINAL HYDROSTATIC PRESSURE: 1192.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 5/18/93	TICKET : 19059
CUSTOMER : OXY USA, INC.	LEASE : WILSON A
WELL : 419 TEST: 1	GEOLOGIST: SCHROEDER
ELEVATION: 1388 GL	FORMATION: ARBUCKLE
SECTION : 8	TOWNSHIP : 25S
RANGE : 5E COUNTY: BUTLER	STATE : KS
GAUGE SN#: 3659 RANGE : 4000	CLOCK : 12

INITIAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	85.00	85.00
5.00	85.00	0.00
10.00	85.00	0.00
15.00	85.00	0.00
20.00	85.00	0.00

INITIAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	401.00	401.00	0.00
6.00	543.00	142.00	0.00
9.00	608.00	65.00	0.00
12.00	639.00	31.00	0.00
15.00	674.00	35.00	0.00
18.00	694.00	20.00	0.00
21.00	708.00	14.00	0.00
24.00	726.00	18.00	0.00
27.00	732.00	6.00	0.00

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	88.00	88.00
5.00	88.00	0.00
10.00	88.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN

Time
(min)

Pressure

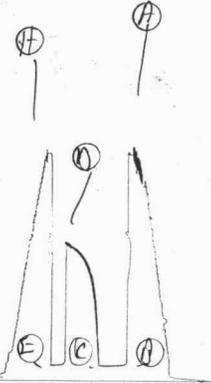
Delta P

Horner T

No Data Entered

JK+19059

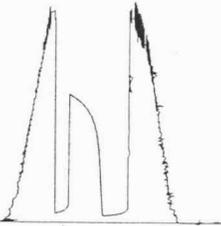
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OST 11
3659

JK+19059

0



OST 11
11018



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 19060

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

Elevation 1388 GL Formation Arbuckle Eff. Pay - Ft.

District GT. Bend Date 5-18-93 Customer Order No. -

COMPANY NAME Oxy U.S.A. Inc.

ADDRESS 110 S. MAIN #800 WICHITA, Ks. 67202

LEASE AND WELL NO Wilson A #419 COUNTY Butler STATE Ks Sec. 8 Twp. 25 Rge. 5E

Mail Invoice To SAME Co. Name #419 Wilson A Address No. Copies Requested Reg

Mail Charts To SAME Address No. Copies Requested Reg

Formation Test No. 2 Interval Tested From 2426 ft. to 2437 ft. Total Depth 2437 ft.

Packer Depth 2426 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) 2429 ft. Recorder Number 3659 Cap. 4000

Bottom Recorder Depth (Outside) 2432 ft. Recorder Number 11018 Cap. 4425

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Allen Orlg rig 2 Drill Collar Length 180 I. D. 2.2 in.

Mud Type Chemical Viscosity 45 Weight Pipe Length - I. D. - in.

Weight 9.4 Water Loss 7.2 cc. Drill Pipe Length 2226 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 418 Anchor Length 11 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 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: IF - WEAK Blow throughout 1/4" Blow

FF - NO BLOW

Recovered 5 ft. of slightly oil cut mud

Recovered ft. of 5% oil 95% mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Chlorides - P.P.M. Sample Jars used 1 Remarks: MAY 20 1993

Time On Location 11:00 A.M. Time Pick Up Tool 8:05 P.M. Time Off Location - P.M.

Time Set Packer(s) 9:00 A.M. Time Started Off Bottom 9:50 P.M. Maximum Temperature 104"

Initial Hydrostatic Pressure (A) 1206 P.S.I.

Initial Flow Period Minutes 15 (B) 51 P.S.I. to (C) 51 P.S.I.

Initial Closed In Period Minutes 30 (D) 838 P.S.I.

Final Flow Period Minutes 5 (E) 61 P.S.I. to (F) 61 P.S.I.

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

Final Hydrostatic Pressure (H) 1186 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: [Signature] Signature of Customer or his authorized representative

Western Representative: Ray Schwager Thank you

FIELD INVOICE

Table with 2 columns: Item and Amount. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, and TOTAL.

WESTERN TESTING CO., INC.

Pressure Data

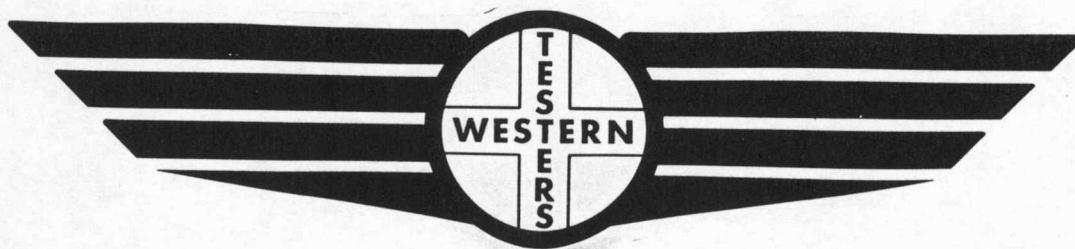
Date 5-18-51 Test Ticket No. 1902cc
 Recorder No. 21059 Capacity _____ Location _____
 Clock No. _____ Elevation _____ Well Temperature _____

Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1249</u> P.S.I.	_____ M		
B First Initial Flow Pressure	<u>54</u> P.S.I.	First Flow Pressure	_____ Mins.	<u>20</u> Mi
C First Final Flow Pressure	<u>54</u> P.S.I.	Initial Closed-in Pressure	_____ Mins.	<u>27</u> Mi
D Initial Closed-in Pressure	<u>856</u> P.S.I.	Second Flow Pressure	_____ Mins.	<u>5</u> Mi
E Second Initial Flow Pressure	<u>101</u> P.S.I.	Final Closed-in Pressure	_____ Mins.	_____ Mi
F Second Final Flow Pressure	<u>89</u> P.S.I.			
G Final Closed-in Pressure	_____ P.S.I.			
H Final Hydrostatic Mud	<u>1197</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>54</u>	0	<u>54</u>	0	<u>101</u>	0	
P 2 5		3	<u>256</u>	5	<u>89</u>	3	
P 3 10		6	<u>214</u>	10		6	
P 4 15		9	<u>284</u>	15		9	
P 5 20	<u>54</u>	12	<u>807</u>	20		12	
P 6 25		15	<u>826</u>	25		15	
P 7 30		18	<u>837</u>	30		18	
P 8 35		21	<u>847</u>	35		21	
P 9 40		24	<u>852</u>	40		24	
P10 45		27	<u>856</u>	45		27	
P11 50		30		50		30	
P12 55		33		55		33	
P13 60		36		60		36	
P14 65		39		65		39	
P15 70		42		70		42	
P16 75		45		75		45	
P17 80		48		80		48	
P18 85		51		85		51	
P19 90		54		90		54	
P20 95		57		95		57	
100		60		100		60	

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

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

DST REPORT

GENERAL INFORMATION

DATE	: 5/18/93	TICKET	: 19060
CUSTOMER	: OXY USA, INC.	LEASE	: WILSON A
WELL	: 419	TEST: 2	GEOLOGIST: SCHROEDER
ELEVATION	: 1388 GL	FORMATION	: ARBUCKLE
SECTION	: 8	TOWNSHIP	: 25S
RANGE	: 5E	COUNTY: BUTLER	STATE : KS
GAUGE SN#	: 3659	RANGE : 4000	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	2426.00 ft	TO:	2437.00 ft	TVD:	2437.0 ft
DEPTH OF SELECTIVE ZONE:	TEST TYPE: OIL				
DEPTH OF RECORDERS:	2429.0 ft	2432.0 ft			
TEMPERATURE:	104.0				
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 :	2226.0 ft	I.D.:	3.800 in		
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :	5.500 in		
ANCHOR LENGTH :	11.0 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:	2426.0 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 RIG 2	VISCOSITY :	45.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	7.200 cc
WEIGHT :	9.400 ppg	SERIAL NUMBER:	418
CHLORIDES :	0 ppm	REVERSED OUT?:	NO
JARS-MAKE :	WTC		
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK BLOW THROUGHOUT- 1/4 INCH BLOW. FINAL FLOW PERIOD NO BLOW.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
5.0	5.0	0.0	0.0	95.0	SLIGHTLY OIL CUT MUD

RATE INFORMATION

OIL VOLUME:	0.0012 STB	TOTAL FLOW TIME:	25.0000 min.
GAS VOLUME:	0.0000 SCF	AVERAGE OIL RATE:	1.3540 STB/D
MUD VOLUME:	0.0223 STB	AVERAGE WATER RATE:	0.0000 STB/D
WATER VOLUME:	0.0000 STB		
TOTAL FLUID :	0.0235 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1206.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	51.00	51.00
INITIAL SHUT-IN	30.00		838.00
FINAL FLOW	5.00	61.00	61.00
FINAL SHUT-IN	0.00		0.00

FINAL HYDROSTATIC PRESSURE: 1186.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1249.00

Description	Duration	p1	p End
INITIAL FLOW	20.00	54.00	54.00
INITIAL SHUT-IN	27.00		856.00
FINAL FLOW	5.00	101.00	89.00

FINAL HYDROSTATIC PRESSURE: 1197.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 5/18/93	TICKET : 19060
CUSTOMER : OXY USA, INC.	LEASE : WILSON A
WELL : 419	TEST: 2
ELEVATION: 1388 GL	GEOLOGIST: SCHROEDER
SECTION : 8	FORMATION: ARBUCKLE
RANGE : 5E	TOWNSHIP : 25S
COUNTY: BUTLER	STATE : KS
GAUGE SN#: 3659	RANGE : 4000
	CLOCK : 12

INITIAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	54.00	54.00
5.00	54.00	0.00
10.00	54.00	0.00
15.00	54.00	0.00
20.00	54.00	0.00

INITIAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	356.00	356.00	0.00
6.00	714.00	358.00	0.00
9.00	784.00	70.00	0.00
12.00	807.00	23.00	0.00
15.00	826.00	19.00	0.00
18.00	837.00	11.00	0.00
21.00	847.00	10.00	0.00
24.00	852.00	5.00	0.00
27.00	856.00	4.00	0.00

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	101.00	101.00
5.00	89.00	-12.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN

Time
(min)

Pressure

Delta P

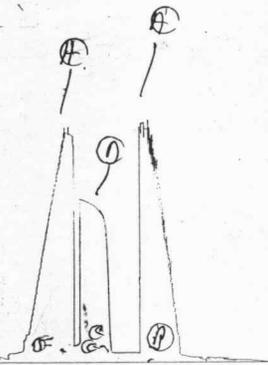
Horner T

No Data Entered

JK+19060

I

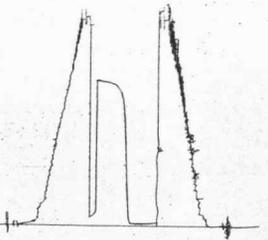
05750



JK+19060

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05750





WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET

LAST No 19061

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

Elevation 7388 GL Formation Arbuckle Eff. Pay - Ft.

District GT Bend Date 5-19-93 Customer Order No. -

COMPANY NAME Oxy USA, Inc

ADDRESS 110 S. MAIN #800 WICHITA, KS 67202

LEASE AND WELL NO Wilson "A" #419 COUNTY BUTLER STATE KS Sec. 8 Twp 25 Rge 5E

Mail Invoice To SAME Co. Name #419 Wilson Address A No. Copies Requested Reg

Mail Charts To SAME Address A No. Copies Requested Reg

Formation Test No 3 Interval Tested From 2437 ft. to 2452 ft. Total Depth 2452 ft.

Packer Depth 2437 ft. Size 6 3/8 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) 2449 ft. Recorder Number 3659 Cap. 4000

Bottom Recorder Depth (Outside) 2447 ft. Recorder Number 11018 Cap. 4425

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Allen Delgrig 2 Drill Collar Length 180 I. D. 2.2 in.

Mud Type Chemical Viscosity 45 Weight Pipe Length - I. D. - in.

Weight 9.4 Water Loss 7.2 cc. Drill Pipe Length 2237 I. D. 3.8 in.

Chlorides N/A P.P.M. Test Tool Length 20 ft. Tool Size 5/8 in.

Jars: Make WTC Serial Number 418 Anchor Length 15 ft. Size 5/8 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 strong blow in 14 min FF - Strong blow in 5 min

Recovered 65 ft. of Slightly oil cut muddy water 2% oil 20% mud 78% water

Recovered 300 ft. of WATER

Recovered - ft. of

Recovered - ft. of

Recovered - ft. of

Chlorides 13000 P.P.M. Sample Jars used 3 Remarks: MAY 20 1993

Time On Location 4:35 P.M. Time Pick Up Tool 3:05 A.M. Time Off Location 9:10 P.M.

Time Set Packer (s) 4:35 P.M. Time Started Off Bottom 6:50 A.M. Maximum Temperature 109

Initial Hydrostatic Pressure (A) 1206 P.S.I.

Initial Flow Period (B) 15 Minutes (B) 81 P.S.I. to (C) 91 P.S.I.

Initial Closed In Period (D) 30 Minutes (D) 858 P.S.I.

Final Flow Period (E) 30 Minutes (E) 163 P.S.I. to (F) 183 P.S.I.

Final Closed In Period (G) 60 Minutes (G) 858 P.S.I.

Final Hydrostatic Pressure (H) 1206 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 AFE Dale 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 5-19-92

Test Ticket No. 19061

Recorder No. 3659

Capacity _____ Location _____

Clock No. _____ Elevation _____ Well Temperature _____

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1214</u> P.S.I.	Open Tool		M
B First Initial Flow Pressure	<u>88</u> P.S.I.	First Flow Pressure	Mins. <u>20</u>	Mi
C First Final Flow Pressure	<u>102</u> P.S.I.	Initial Closed-in Pressure	Mins. <u>30</u>	Mi
D Initial Closed-in Pressure	<u>865</u> P.S.I.	Second Flow Pressure	Mins. <u>30</u>	Mi
E Second Initial Flow Pressure	<u>169</u> P.S.I.	Final Closed-in Pressure	Mins. <u>62</u>	Mi
F Second Final Flow Pressure	<u>184</u> P.S.I.			
G Final Closed-in Pressure	<u>869</u> P.S.I.			
H Final Hydrostatic Mud	<u>1107</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>88</u>	0	<u>102</u>	0	<u>169</u>	0	<u>184</u>
P 2 5	<u>88</u>	3	<u>821</u>	5	<u>169</u>	3	<u>822</u>
P 3 10	<u>89</u>	6	<u>838</u>	10	<u>169</u>	6	<u>827</u>
P 4 15	<u>94</u>	9	<u>848</u>	15	<u>169</u>	9	<u>847</u>
P 5 20	<u>102</u>	12	<u>854</u>	20	<u>175</u>	12	<u>856</u>
P 6 25		15	<u>860</u>	25	<u>180</u>	15	<u>860</u>
P 7 30		18	<u>865</u>	30	<u>184</u>	18	<u>863</u>
P 8 35		21	<u>863</u>	35		21	<u>865</u>
P 9 40		24	<u>864</u>	40		24	<u>5</u>
P10 45		27	<u>865</u>	45		27	<u>5</u>
P11 50		30	<u>865</u>	50		30	<u>865</u>
P12 55		33		55		33	<u>866</u>
P13 60		36		60		36	<u>5</u>
P14 65		39		65		39	<u>866</u>
P15 70		42		70		42	<u>8107</u>
P16 75		45		75		45	<u>867</u>
P17 80		48		80		48	<u>867</u>
P18 85		51		85		51	<u>868</u>
P19 90		54		90		54	<u>5</u>
P20 95		57		95		57	<u>868</u>
100		60		100		60	<u>869</u>
						<u>65</u>	<u>869</u>

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

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

DST REPORT

GENERAL INFORMATION

DATE : 5/19/93	TICKET : 19061
CUSTOMER : OXY USA, INC.	LEASE : WILSON A
WELL : 419 TEST: 3	GEOLOGIST: SCHROEDER
ELEVATION: 1388 GL	FORMATION: ARBUCKLE
SECTION : 8	TOWNSHIP : 25S
RANGE : 5E COUNTY: BUTLER	STATE : KS
GAUGE SN#: 3659 RANGE : 4000	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 2437.00 ft	TO: 2452.00 ft	TVD: 2452.0 ft
DEPTH OF SELECTIVE ZONE:		TEST TYPE: OIL
DEPTH OF RECORDERS: 2444.0 ft	2447.0 ft	
TEMPERATURE: 109.0		

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 : 2237.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH : 20.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH : 15.0 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: 2437.0 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 RIG 2	
MUD TYPE : CHEMICAL	VISCOSITY : 45.00 cp
WEIGHT : 9.400 ppg	WATER LOSS: 7.200 cc
CHLORIDES : 0 ppm	
JARS-MAKE : WTC	SERIAL NUMBER: 418
DID WELL FLOW?: NO	REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK BUILDING TO A STRONG BLOW
IN 14 MINUTES. FINAL FLOW PERIOD STRONG BLOW IN
5 MINUTES.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	%	%	%	%	Comments
Oil	Gas	Water	Mud		
65.0	2.0	0.0	78.0	20.0	SL OIL CUT MUDDY WATER
300.0	0.0	0.0	100.0	0.0	WATER
0.0	0.0	0.0	0.0	0.0	CHLORIDES 13000 PPM

RATE INFORMATION

OIL VOLUME:	0.0182	STB	TOTAL FLOW TIME:	50.0000	min.
GAS VOLUME:	0.0000	SCF	AVERAGE OIL RATE:	0.6564	STB/D
MUD VOLUME:	0.1823	STB	AVERAGE WATER RATE:	98.4478	STB/D
WATER VOLUME:	3.2405	STB			
TOTAL FLUID :	3.4411	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1206.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	81.00	91.00
INITIAL SHUT-IN	30.00		858.00
FINAL FLOW	30.00	163.00	183.00
FINAL SHUT-IN	60.00		858.00

FINAL HYDROSTATIC PRESSURE: 1206.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1214.00

Description	Duration	p1	p End
INITIAL FLOW	20.00	88.00	102.00
INITIAL SHUT-IN	30.00		865.00
FINAL FLOW	30.00	169.00	184.00
FINAL SHUT-IN	63.00		869.00

FINAL HYDROSTATIC PRESSURE: 1207.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 5/19/93	TICKET	: 19061
CUSTOMER	: OXY USA, INC.	LEASE	: WILSON A
WELL	: 419	TEST: 3	GEOLOGIST: SCHROEDER
ELEVATION	: 1388 GL	FORMATION: ARBUCKLE	
SECTION	: 8	TOWNSHIP	: 25S
RANGE	: 5E	COUNTY: BUTLER	STATE : KS
GAUGE SN#	: 3659	RANGE : 4000	CLOCK : 12

INITIAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	88.00	88.00
5.00	88.00	0.00
10.00	89.00	1.00
15.00	94.00	5.00
20.00	102.00	8.00

INITIAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	821.00	821.00	0.00
6.00	838.00	17.00	0.00
9.00	848.00	10.00	0.00
12.00	854.00	6.00	0.00
15.00	860.00	6.00	0.00
18.00	862.00	2.00	0.00
21.00	863.00	1.00	0.00
24.00	864.00	1.00	0.00
27.00	865.00	1.00	0.00
30.00	865.00	0.00	0.00

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	169.00	169.00
5.00	169.00	0.00
10.00	169.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
15.00	169.00	0.00
20.00	173.00	4.00
25.00	180.00	7.00
30.00	184.00	4.00

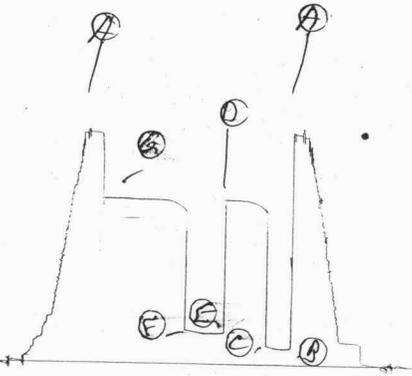
FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	822.00	822.00	0.00
6.00	837.00	15.00	0.00
9.00	847.00	10.00	0.00
12.00	856.00	9.00	0.00
15.00	860.00	4.00	0.00
18.00	863.00	3.00	0.00
21.00	865.00	2.00	0.00
24.00	865.00	0.00	0.00
27.00	865.00	0.00	0.00
30.00	865.00	0.00	0.00
33.00	866.00	1.00	0.00
36.00	866.00	0.00	0.00
39.00	866.00	0.00	0.00
42.00	867.00	1.00	0.00
45.00	867.00	0.00	0.00
48.00	867.00	0.00	0.00
51.00	868.00	1.00	0.00
54.00	868.00	0.00	0.00
57.00	868.00	0.00	0.00
60.00	869.00	1.00	0.00
63.00	869.00	0.00	0.00

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