WESTERN TESTING CO., INC.
FORMATION TESTING TICKET

OK

Nº 18930

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

Bill to D24760

Elevation 1215 GL Formation Simpson Sd. Eff. Pay — Ft.

District GT. Bend Date 6-16-93 Customer Order No. —

COMPANY NAME Oxy U.S.A. Inc.

ADDRESS 110 S. Main #800 Wichita, Ks 67202

LEASE AND WELL NO. Brown-Scully "A" #1 COUNTY Butler STATE Ks Sec. 16 Twp. 28S Rge. 4E

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

Mail Charts To Same No. Copies Requested Reg
Address

Formation Test No. 1 Interval Tested From 2440 ft. to 2460 ft. Total Depth 2460 ft.

Packer Depth ~~2435~~ ft. Size ~~6 5/8~~ in.		Packer Depth — ft. Size — in.	
Packer Depth 2440 ft. Size 6 5/8 in.		Packer Depth — ft. Size — in.	
Depth of Selective Zone Set —			
Top Recorder Depth (Inside) 2452 ft.	Recorder Number 10270	Cap. 4150	
Bottom Recorder Depth (Outside) 2455 ft.	Recorder Number 13550	Cap. 4175	
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 53	Weight Pipe Length —	I. D. — in.	
Weight 9.3 Water Loss N/A cc.	Drill Pipe Length 2240	I. D. 3.8 in.	
Chlorides N/A P.P.M.	Test Tool Length 20 ft.	Tool Size 5½ in.	
Jars: Make WTC Serial Number 422	Anchor Length 20 ft.	Size 5½ 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 4½XH in.	

Blow: IF - Weak building to a strong blow in 8 min
FF - Strong Blow throughout

Recovered 20 ft. of Clean oil
Recovered 90 ft. of Slightly oil cut watery mud 17% oil 25% water 74% mud
Recovered 240 ft. of Water w/show of oil
Recovered ft. of
Recovered ft. of
Chlorides 18,000 P.P.M. Sample Jars used 4 Remarks:

JUN 2 2 1993

Time On Location 10:00 A.M. Time Pick Up Tool 11:55 A.M. Time Off Location — A.M.
Time Set Packer(s) 1:05 P.M. Time Started Off Bottom 3:20 P.M. Maximum Temperature 106°

Initial Hydrostatic Pressure		(A) 1195	P.S.I.	
Initial Flow Period	Minutes 15	(B) 62	P.S.I. to (C) 72	P.S.I.
Initial Closed In Period	Minutes 30	(D) 655	P.S.I.	
Final Flow Period	Minutes 30	(E) 124	P.S.I. to (F) 145	P.S.I.
Final Closed In Period	Minutes 60	(G) 686	P.S.I.	
Final Hydrostatic Pressure		(H) 1163	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 Marvin G Belcher
Signature of Customer or his authorized representative

Western Representative Ray Schwager Thank 404

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	$

WESTERN TESTING CO., INC.

Pressure Data

Date 6-16-93 Test Ticket No. 18930

Recorder No. 10570 Capacity Location Ft.

Clock No. Elevation Well Temperature °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	1216 P.S.I.	Open Tool	M	
B	First Initial Flow Pressure	79 P.S.I.	First Flow Pressure	Mins. 15	Mins
C	First Final Flow Pressure	95 P.S.I.	Initial Closed-in Pressure	Mins. 30	Mins
D	Initial Closed-in Pressure	673 P.S.I.	Second Flow Pressure	Mins. 30	Mins
E	Second Initial Flow Pressure	145 P.S.I.	Final Closed-in Pressure	Mins. 60	Mins
F	Second Final Flow Pressure	173 P.S.I.			
G	Final Closed-in Pressure	701 P.S.I.			
H	Final Hydrostatic Mud	1188 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure

Breakdown: Inc.
of 5 mins. and a
final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	75
P 2	5	79
P 3	10	85
P 4	15	95
P 5	20	
P 6	25	
P 7	30	
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14	65	
P15	70	
P16	75	
P17	80	
P18	85	
P19	90	
P20	95	
	100	

Initial Shut-In

Breakdown: Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	95
3	478
6	554
9	575
12	600
15	619
18	635
21	647
24	659
27	666
30	673
33	
36	
39	
42	
45	
48	
51	
54	
57	
60	

Second Flow Pressure

Breakdown: Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	145
5	
10	145
15	150
20	156
25	163
30	173
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	
95	
100	

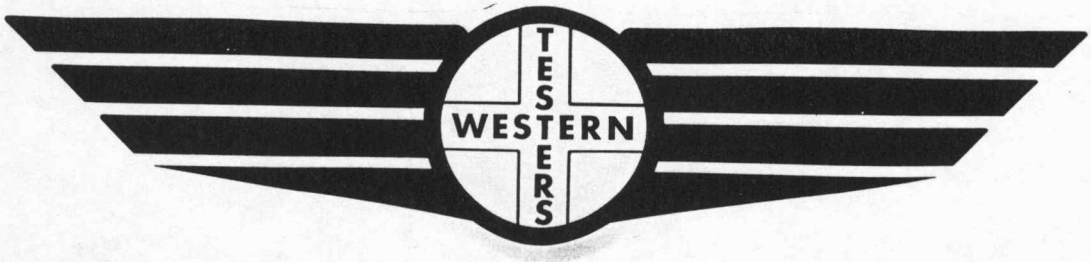
Final Shut-In

Breakdown: Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	173
3	497
6	541
9	565
12	588
15	610
18	628
21	638
24	650
27	661
30	667
33	673
36	677
39	683
42	687
45	691
48	695
51	695
54	697
57	699
60	701

COMPANY OXY USA, INC. LEASE & WELL NO. #1 BROWN-SCULLY A SEC. 16 TWP. 28S RGE. 4E TEST NO. 1 DATE 6/16/93

FORMATION TEST REPORT



Home Office: Wichita, Kansas 67201

P.O. Box 1599 Phone **1-800-688-7021**

DST REPORT

GENERAL INFORMATION

DATE	: 06-16-93	TICKET	: 18930
CUSTOMER	: OXY U.S.A. INC.	LEASE	: BROWN-SCULLY "A"
WELL	: #1 TEST: 1	GEOLOGIST	: M. BELCHER
ELEVATION	: 1215 G.L.	FORMATION	: SIMPSON SAND
SECTION	: 16	TOWNSHIP	: 28S
RANGE	: 4E COUNTY: BUTLER	STATE	: KS
GAUGE SN#	: 18930 RANGE : 4150	CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 2440.00 ft TO: 2460.00 ft TVD: 2460.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 2452.0 ft 2455.0 ft
TEMPERATURE: 106.0

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 :	2240.0 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:	2440.0 ft	SIZE:	6.630 in
PACKER DEPTH:	0.0 ft	SIZE:	6.630 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON.	: ALLEN DRILLING #2		
MUD TYPE	: CHEMICAL	VISCOSITY :	53.00 cp
WEIGHT	: 9.300 ppg	WATER LOSS:	0.000 cc
CHLORIDES	: 0 ppm		
JARS-MAKE	: WTC	SERIAL NUMBER:	422
DID WELL FLOW?	: NO	REVERSED OUT?:	NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK BUILDING TO A STRONG BLOW IN 8 MINUTES. STRONG BLOW THROUGHOUT FINAL FLOW PERIOD.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
20.0	100.0	0.0	0.0	0.0	CLEAN OIL
90.0	1.0	0.0	25.0	74.0	SLI. OIL C/WATERY MUD
240.0	0.0	0.0	100.0	0.0	WATER W/SHOW OF OIL
0.0	0.0	0.0	0.0	0.0	CHLORIDES 18000 PPM

RATE INFORMATION

OIL VOLUME: 0.2932 STB
GAS VOLUME: 0.0000 SCF
MUD VOLUME: 0.9342 STB
WATER VOLUME: 2.0034 STB
TOTAL FLUID : 3.2307 STB

TOTAL FLOW TIME: 45.0000 min.
AVERAGE OIL RATE: 10.5306 STB/D
AVERAGE WATER RATE: 92.8526 STB/D

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1195.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	62.00	72.00
INITIAL SHUT-IN	30.00		655.00
FINAL FLOW	30.00	124.00	145.00
FINAL SHUT-IN	60.00		686.00

FINAL HYDROSTATIC PRESSURE: 1163.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1216.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	79.00	95.00
INITIAL SHUT-IN	30.00		673.00
FINAL FLOW	30.00	145.00	173.00
FINAL SHUT-IN	60.00		701.00

FINAL HYDROSTATIC PRESSURE: 1188.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 06-16-93			TICKET	: 18930
CUSTOMER	: OXY U.S.A. INC.			LEASE	: BROWN-SCULLY "A"
WELL	: #1	TEST: 1		GEOLOGIST	: M. BELCHER
ELEVATION	: 1215 G.L.			FORMATION	: SIMPSON SAND
SECTION	: 16			TOWNSHIP	: 28S
RANGE	: 4E	COUNTY:	BUTLER	STATE	: KS
GAUGE SN#	: 18930	RANGE	: 4150	CLOCK	: 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	79.00	79.00
5.00	79.00	0.00
10.00	85.00	6.00
15.00	95.00	10.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	482.00	482.00	0.00
6.00	534.00	52.00	0.00
9.00	575.00	41.00	0.00
12.00	600.00	25.00	0.00
15.00	619.00	19.00	0.00
18.00	635.00	16.00	0.00
21.00	647.00	12.00	0.00
24.00	659.00	12.00	0.00
27.00	666.00	7.00	0.00
30.00	673.00	7.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	145.00	145.00
5.00	145.00	0.00
10.00	145.00	0.00
15.00	150.00	5.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

Time (min)	Pressure	Delta P
20.00	156.00	6.00
25.00	163.00	7.00
30.00	173.00	10.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	497.00	497.00	0.00
6.00	541.00	44.00	0.00
9.00	565.00	24.00	0.00
12.00	588.00	23.00	0.00
15.00	610.00	22.00	0.00
18.00	628.00	18.00	0.00
21.00	638.00	10.00	0.00
24.00	650.00	12.00	0.00
27.00	661.00	11.00	0.00
30.00	667.00	6.00	0.00
33.00	673.00	6.00	0.00
36.00	677.00	4.00	0.00
39.00	683.00	6.00	0.00
42.00	687.00	4.00	0.00
45.00	691.00	4.00	0.00
48.00	693.00	2.00	0.00
51.00	695.00	2.00	0.00
54.00	697.00	2.00	0.00
57.00	699.00	2.00	0.00
60.00	701.00	2.00	0.00

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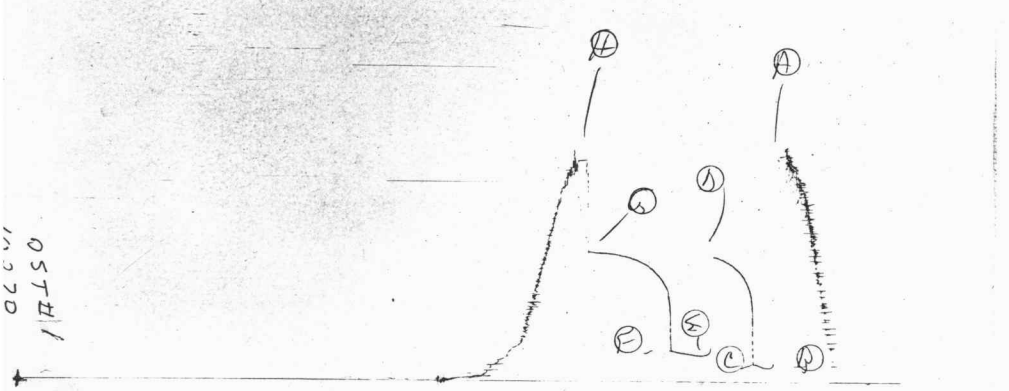

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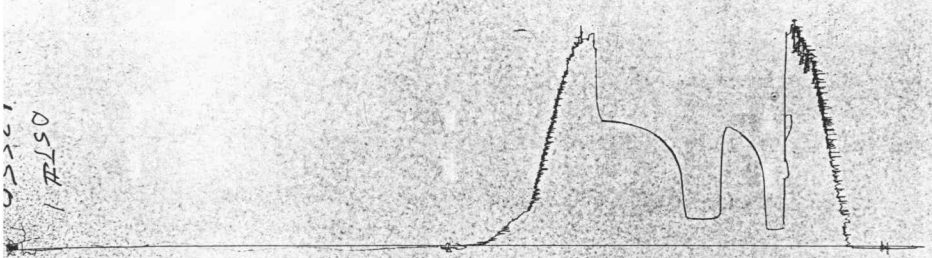

WESTERN TESTING CO., INC.
FORMATION TESTING TICKET

Nº 18931

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

Elevation 1215 GL Formation Arbuckle Eff. Pay — Ft.

District GT, Bend Date 6-17-93 Customer Order No. —

COMPANY NAME Oxy U.S.A. Inc.

ADDRESS 110 S. Main #800 Wichita, Ks 67202

LEASE AND WELL NO. Brown-Scully #2 COUNTY Butler STATE Ks Sec. 16 Twp. 28S Rge. 4E

Mail Invoice To Same (Co. Name) (Address) No. Copies Requested Reg

Mail Charts To Same (Address) No. Copies Requested Reg

Formation Test No. 2 Interval Tested From 2460 ft. to 2483 ft. Total Depth 2483 ft.

Packer Depth 2 ft. Size — in. Packer Depth — ft. Size — in.

Packer Depth 2460 ft. Size — in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 2475 ft. Recorder Number 10270 Cap. 4150

Bottom Recorder Depth (Outside) 2478 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 45 Weight Pipe Length — I. D. — in.

Weight 9.3 Water Loss 8 cc. Drill Pipe Length 2260 I. D. 3.8 in.

Chlorides N/A P.P.M. Test Tool Length 20 ft. Tool Size 5½ in.

Jars: Make WTC Serial Number 422 Anchor Length 23 ft. Size 5½ 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 4½ XH in.

Blow: IF - Strong Blow in 1 min
FF - Strong Blow throughout

Recovered 2 ft. of Oil

Recovered 90 ft. of Oil cut muddy WATER 7% oil 28% mud 65% WATER

Recovered 60 ft. of Slightly oil cut muddy WATER 2% oil 25% mud 73% WATER

Recovered 1350 ft. of WATER w/ scum of oil throughout

Recovered ft. of

Chlorides 18000 P.P.M. Sample Jars used 5 Remarks:

JUN 22 1993

Time On Location A.M. P.M. Time Pick Up Tool 11:05 A.M. P.M. Time Off Location 4:30 A.M. P.M.

Time Set Packer(s) 12:00 A.M. P.M. Time Started Off Bottom 2:15 A.M. P.M. Maximum Temperature 107°

Initial Hydrostatic Pressure		(A)	1195	P.S.I.	
Initial Flow Period	Minutes 15	(B)	93	P.S.I. to (C) 312	P.S.I.
Initial Closed In Period	Minutes 30	(D)	925	P.S.I.	
Final Flow Period	Minutes 30	(E)	375	P.S.I. to (F) 655	P.S.I.
Final Closed In Period	Minutes 60	(G)	925	P.S.I.	
Final Hydrostatic Pressure		(H)	1174	P.S.I.	

COMPANY TERMS

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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 Maria G. Belcher
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.	$ 35.00
Mileage	$
Fluid Sampler	$
Extra Charts	$
Insurance	$
Telecopier	$
TOTAL	$

WESTERN TESTING CO., INC.

Pressure Data

Date 6-17-95 Test Ticket No. 18924

Recorder No. 10270 Capacity Location Ft.

Clock No. Elevation Well Temperature °F

Point		Pressure	
A	Initial Hydrostatic Mud	1256	P.S.I.
B	First Initial Flow Pressure	108	P.S.I.
C	First Final Flow Pressure	345	P.S.I.
D	Initial Closed-in Pressure	926	P.S.I.
E	Second Initial Flow Pressure	393	P.S.I.
F	Second Final Flow Pressure	655	P.S.I.
G	Final Closed-in Pressure	934	P.S.I.
H	Final Hydrostatic Mud	1198	P.S.I.

	Time Given	Time Computed
Open Tool	M	
First Flow Pressure	Mins. 5	Mins
Initial Closed-in Pressure	Mins. 30	Mins
Second Flow Pressure	Mins. 30	Mins
Final Closed-in Pressure	Mins. 109	Mins

PRESSURE BREAKDOWN

First Flow Pressure

Breakdown: Inc. of 5 mins. and a final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	108
P 2	5	159
P 3	10	248
P 4	15	345
P 5	20	
P 6	25	
P 7	30	
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14	65	
P15	70	
P16	75	
P17	80	
P18	85	
P19	90	
P20	95	
	100	

Initial Shut-In

Breakdown: Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	345
3	875
6	900
9	908
12	915
15	918
18	920
21	922
24	923
27	924
30	925
33	926
36	
39	
42	
45	
48	
51	
54	
57	
60	

Second Flow Pressure

Breakdown: Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	393
5	468
10	460
15	511
20	567
25	614
30	655
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	
95	
100	

Final Shut-In

Breakdown: Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	655
3	887
6	905
9	915
12	919
15	922
18	924
21	925
24	926
27	926
30	927
33	927
36	928
39	928
42	929
45	929
48	930
51	930
54	931
57	931
60	932
63	932
66	933
109	933

COMPANY OXY USA, INC. LEASE & WELL NO. #1 BROWN-SCULLY A SEC. 16 TWP. 28S RGE. 4E TEST NO. 2 DATE 6/17/93

FORMATION TEST REPORT



Home Office: Wichita, Kansas 67201

P.O. Box 1599 Phone **1-800-688-7021**

DST REPORT

GENERAL INFORMATION

DATE	: 06-27-93	TICKET	: 18931
CUSTOMER	: OXY U.S.A. INC.	LEASE	: BROWN-SCULLY "A"
WELL	: #1 TEST: 2	GEOLOGIST	: M. BELCHER
ELEVATION	: 1215 G.L.	FORMATION	: ARBUCKLE
SECTION	: 16	TOWNSHIP	: 28S
RANGE	: 4E COUNTY: BUTLER	STATE	: KS
GAUGE SN#	: 10270 RANGE : 4150	CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 2460.00 ft TO: 2483.00 ft TVD: 2483.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 2475.0 ft 2478.0 ft
TEMPERATURE: 107.0

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 :	2260.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	23.0 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:	2460.0 ft	SIZE:	6.630 in
PACKER DEPTH:	0.0 ft	SIZE:	6.630 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON.	: ALLEN DRILLING #2		
MUD TYPE	: CHEMICAL	VISCOSITY :	45.00 cp
WEIGHT	: 9.300 ppg	WATER LOSS:	8.000 cc
CHLORIDES	: 0 ppm		
JARS-MAKE	: WTC	SERIAL NUMBER:	422
DID WELL FLOW?	: NO	REVERSED OUT?:	NO

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG BLOW IN ONE MINUTE.
FINAL FLOW PERIOD STRONG BLOW THROUGHOUT.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
2.0	100.0	0.0	0.0	0.0	OIL
90.0	7.0	0.0	65.0	28.0	OIL CUT MUDDY WATER
60.0	2.0	0.0	73.0	25.0	SLI. OIL C/MUDDY WATER
1350.0	0.0	0.0	0.0	100.0	WTR W/SCUM OF OIL
0.0	0.0	0.0	0.0	0.0	CHLORIDES 18000 PPM

RATE INFORMATION

OIL VOLUME:	0.1333 STB		
GAS VOLUME:	0.0000 SCF	TOTAL FLOW TIME:	45.0000 min.
MUD VOLUME:	17.8209 STB	AVERAGE OIL RATE:	5.5432 STB/D
WATER VOLUME:	1.4349 STB	AVERAGE WATER RATE:	62.6810 STB/D
TOTAL FLUID :	19.3891 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1195.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	93.00	312.00
INITIAL SHUT-IN	30.00		925.00
FINAL FLOW	30.00	375.00	655.00
FINAL SHUT-IN	60.00		925.00

FINAL HYDROSTATIC PRESSURE: 1174.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1236.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	108.00	315.00
INITIAL SHUT-IN	33.00		926.00
FINAL FLOW	30.00	393.00	653.00
FINAL SHUT-IN	69.00		933.00

FINAL HYDROSTATIC PRESSURE: 1198.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 06-27-93			TICKET	: 18931
CUSTOMER	: OXY U.S.A. INC.			LEASE	: BROWN-SCULLY "A"
WELL	: #1	TEST: 2		GEOLOGIST	: M. BELCHER
ELEVATION	: 1215 G.L.			FORMATION	: ARBUCKLE
SECTION	: 16			TOWNSHIP	: 28S
RANGE	: 4E	COUNTY:	BUTLER	STATE	: KS
GAUGE SN#	: 10270	RANGE	: 4150	CLOCK	: 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	108.00	108.00
5.00	159.00	51.00
10.00	238.00	79.00
15.00	315.00	77.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	873.00	873.00	0.00
6.00	900.00	27.00	0.00
9.00	908.00	8.00	0.00
12.00	915.00	7.00	0.00
15.00	918.00	3.00	0.00
18.00	920.00	2.00	0.00
21.00	922.00	2.00	0.00
24.00	923.00	1.00	0.00
27.00	924.00	1.00	0.00
30.00	925.00	1.00	0.00
33.00	926.00	1.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	393.00	393.00
5.00	408.00	15.00
10.00	460.00	52.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

Time (min)	Pressure	Delta P
15.00	512.00	52.00
20.00	567.00	55.00
25.00	614.00	47.00
30.00	653.00	39.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	887.00	887.00	0.00
6.00	905.00	18.00	0.00
9.00	912.00	7.00	0.00
12.00	919.00	7.00	0.00
15.00	922.00	3.00	0.00
18.00	924.00	2.00	0.00
21.00	925.00	1.00	0.00
24.00	926.00	1.00	0.00
27.00	926.00	0.00	0.00
30.00	927.00	1.00	0.00
33.00	927.00	0.00	0.00
36.00	928.00	1.00	0.00
39.00	928.00	0.00	0.00
42.00	929.00	1.00	0.00
45.00	929.00	0.00	0.00
48.00	930.00	1.00	0.00
51.00	930.00	0.00	0.00
54.00	931.00	1.00	0.00
57.00	931.00	0.00	0.00
60.00	932.00	1.00	0.00
63.00	932.00	0.00	0.00
66.00	933.00	1.00	0.00
69.00	933.00	0.00	0.00

7K+ 18931

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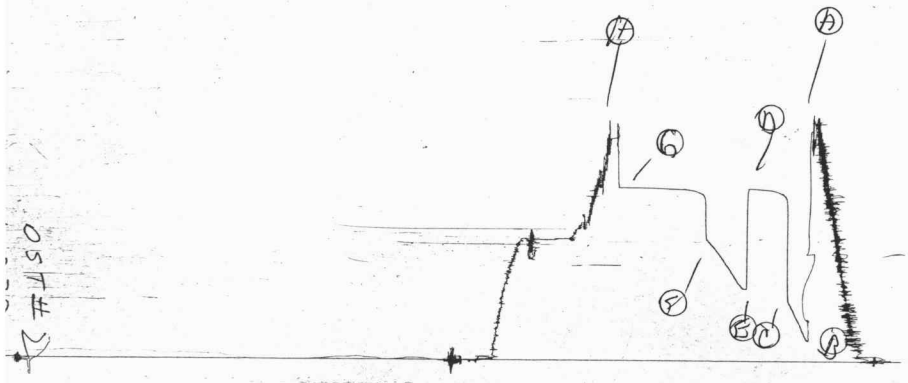

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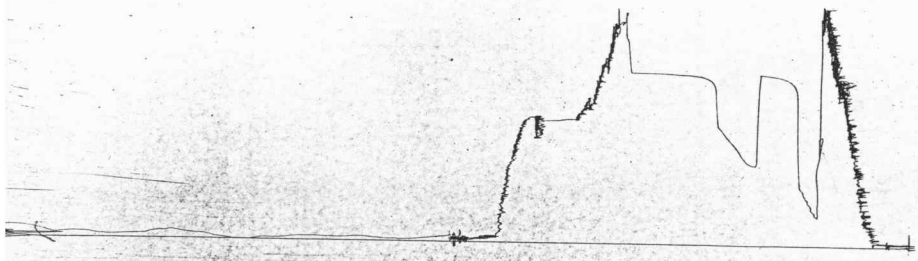


WESTERN TESTING CO., INC.
FORMATION TESTING TICKET

Last
No 18932

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

Elevation 1215 GL Formation Arbuckle Eff. Pay — Ft.

District GT. Bend Date 6-17-93 Customer Order No. —

COMPANY NAME Oxy U.S.A. Inc.

ADDRESS 110 S. Main #800 Wichita, Ks 67202

LEASE AND WELL NO. Brown-Scully #2 COUNTY Butler STATE Ks Sec. 16 Twp. 28S Rge. 4E

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

Mail Charts To Same — Address — No. Copies Requested Reg

Formation Test No. 3 Interval Tested From 2488 ft. to 2495 ft. Total Depth 2495 ft.

Packer Depth 2488 ft. Size 6 7/8 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) 2480 ft. Recorder Number 10270 Cap. 4150

Bottom Recorder Depth (Outside) 2492 ft. Recorder Number 13550 Cap. 4175

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

Drilling Contractor Allen Drlg rig 2

Mud Type Chemical Viscosity 45

Weight 9.3 Water Loss 9 cc.

Chlorides N/A P.P.M.

Jars: Make WTC Serial Number 422

Did Well Flow? — Reversed Out Yes

Drill Collar Length 180 I. D. 2.2 in.

Weight Pipe Length — I. D. — in.

Drill Pipe Length 2283 I. D. 3.8 in.

Test Tool Length 25 ft. Tool Size 5 1/2 in.

Anchor Length 7 ft. Size 5 1/2 in.

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 - STRONG Blow Throughout
FF - STRONG Blow Throughout

Recovered 1880 ft. of Clean Oil Gravity 36

Recovered 65 ft. of Heavy Oil cut mud 35% oil 65% mud

Recovered 55 ft. of Oil cut muddy water 5% oil 35% mud 60% water

Recovered ft. of

Recovered ft. of

Chlorides 18,000 P.P.M. Sample Jars used 3 Remarks:

JUN 22 1993

Time On Location 8:55 A.M. (P.M.) Time Pick Up Tool 9:10 A.M. (P.M.) Time Off Location 4:00 (A.M.) P.M.

Time Set Packer(s) 10:20 (A.M.) P.M. Time Started Off Bottom 12:35 A.M. (P.M.) Maximum Temperature 108°

Initial Hydrostatic Pressure			(A) 1184	P.S.I.		
Initial Flow Period	Minutes 15	(B) 114	P.S.I. to	(C) 354	P.S.I.	
Initial Closed In Period	Minutes 30	(D) 956	P.S.I.			
Final Flow Period	Minutes 30	(E) 437	P.S.I. to	(F) 697	P.S.I.	
Final Closed In Period	Minutes 60	(G) 956	P.S.I.			
Final Hydrostatic Pressure			(H) 1184	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 Mark D. Belcher
Signature of Customer or his authorized representative

Western Representative Ray Schwagy Mark 404

FIELD INVOICE

Open Hole Test	$ 600.00
Misrun	$
Straddle Test	$
Jars	$ 225.00
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$ 35.00
Mileage	$
Fluid Sampler	$
Extra Charts	$
Insurance	$
Telecopier	$
TOTAL	$

WESTERN TESTING CO., INC.

Pressure Data

Date 6-17-92 Test Ticket No. 1892

Recorder No. 10270 Capacity Location Ft.

Clock No. Elevation Well Temperature °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	1408 P.S.I.	Open Tool	M	
B	First Initial Flow Pressure	125 P.S.I.	First Flow Pressure	Mins. 15	Mins
C	First Final Flow Pressure	364 P.S.I.	Initial Closed-in Pressure	Mins. 45	Mins
D	Initial Closed-in Pressure	965 P.S.I.	Second Flow Pressure	Mins. 30	Mins
E	Second Initial Flow Pressure	443 P.S.I.	Final Closed-in Pressure	Mins. 60	Mins
F	Second Final Flow Pressure	707 P.S.I.			
G	Final Closed-in Pressure	969 P.S.I.			
H	Final Hydrostatic Mud	1177 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure

Breakdown: Inc. of 5 mins. and a final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	125
P 2	5	194
P 3	10	281
P 4	15	364
P 5	20	
P 6	25	
P 7	30	
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14	65	
P15	70	
P16	75	
P17	80	
P18	85	
P19	90	
P20	95	
	100	

Initial Shut-In

Breakdown: Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	364
3	871
6	931
9	944
12	952
15	956
18	959
21	961
24	963
27	963
30	964
33	965
36	
39	
42	
45	
48	
51	
54	
57	
60	

Second Flow Pressure

Breakdown: Inc. of 5 mins. and a final inc. of 0 Min.

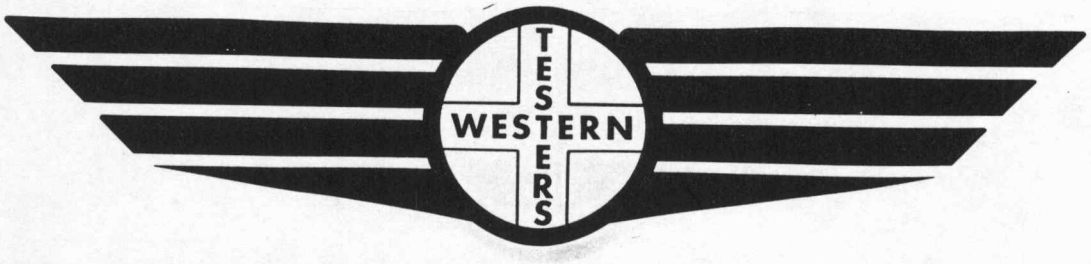
Point Minutes	Press.
0	443
5	467
10	530
15	583
20	645
25	677
30	707
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	
95	
100	

Final Shut-In

Breakdown: Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	707
3	940
6	951
9	959
12	963
15	964
18	966
21	968
24	969
27	
30	
33	
36	
39	
42	
45	969
48	
51	
54	
57	
60	969

FORMATION TEST REPORT



Home Office:

P.O. Box 1599

Wichita, Kansas 67201

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

COMPANY OXY USA, INC. LEASE & WELL NO. #1 BROWN-SCULLY A SEC. 16 TWP. 28S RGE. 4E TEST NO. 3 DATE 6/17/93

DST REPORT

GENERAL INFORMATION

DATE	: 06-17-93			TICKET	: 18932
CUSTOMER	: OXY U.S.A. INC.			LEASE	: BROWN-SCULLY "A"
WELL	: #1	TEST: 3		GEOLOGIST	: M. BELCHER
ELEVATION	: 1215 G.L.			FORMATION	: ARBUCKLE
SECTION	: 16			TOWNSHIP	: 28S
RANGE	: 4E	COUNTY: BUTLER		STATE	: KS
GAUGE SN#	: 10270	RANGE : 4150		CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 2488.00 ft TO: 2495.00 ft TVD: 2495.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 2480.0 ft 2492.0 ft
TEMPERATURE: 108.0

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 :	2283.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	25.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	7.0 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:	2488.0 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 DRILLING #2		
MUD TYPE	: CHEMICAL	VISCOSITY :	45.00 cp
WEIGHT	: 9.300 ppg	WATER LOSS:	9.000 cc
CHLORIDES	: 0 ppm		
JARS-MAKE	: WTC	SERIAL NUMBER:	422
DID WELL FLOW?	: NO	REVERSED OUT?:	YES

COMMENTS

Comment

STRONG BLOW THROUGHOUT TEST.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
1880.0	100.0	0.0	0.0	0.0	CLEAN OIL GRAVITY 36
65.0	35.0	0.0	0.0	65.0	H. OIL CUT MUD
55.0	5.0	0.0	60.0	35.0	OIL C/MDDY WATER
0.0	0.0	0.0	0.0	0.0	CHLORIDES 18000 PPM

RATE INFORMATION

OIL VOLUME: 25.9299 STB
GAS VOLUME: 0.0000 SCF
MUD VOLUME: 0.2891 STB
WATER VOLUME: 0.1551 STB
TOTAL FLUID : 26.3742 STB

TOTAL FLOW TIME: 45.0000 min.
AVERAGE OIL RATE: 836.3368 STB/D
AVERAGE WATER RATE: 7.6379 STB/D

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1195.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	93.00	312.00
INITIAL SHUT-IN	30.00		925.00
FINAL FLOW	30.00	375.00	655.00
FINAL SHUT-IN	60.00		925.00

FINAL HYDROSTATIC PRESSURE: 1174.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1236.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	135.00	0.00
INITIAL SHUT-IN	33.00		965.00
FINAL FLOW	30.00	443.00	707.00
FINAL SHUT-IN	60.00		969.00

FINAL HYDROSTATIC PRESSURE: 1198.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 06-17-93	TICKET	: 18932
CUSTOMER	: OXY U.S.A. INC.	LEASE	: BROWN-SCULLY "A"
WELL	: #1 TEST: 3	GEOLOGIST	: M. BELCHER
ELEVATION	: 1215 G.L.	FORMATION	: ARBUCKLE
SECTION	: 16	TOWNSHIP	: 28S
RANGE	: 4E COUNTY: BUTLER	STATE	: KS
GAUGE SN#	: 10270 RANGE : 4150	CLOCK	: 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	135.00	135.00
5.00	194.00	59.00
10.00	364.00	170.00
15.00	0.00	-364.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	871.00	871.00	0.00
6.00	931.00	60.00	0.00
9.00	944.00	13.00	0.00
12.00	952.00	8.00	0.00
15.00	956.00	4.00	0.00
18.00	959.00	3.00	0.00
21.00	961.00	2.00	0.00
24.00	962.00	1.00	0.00
27.00	963.00	1.00	0.00
30.00	964.00	1.00	0.00
33.00	965.00	1.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	443.00	443.00
5.00	467.00	24.00
10.00	530.00	63.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

Time (min)	Pressure	Delta P
15.00	583.00	53.00
20.00	635.00	52.00
25.00	677.00	42.00
30.00	707.00	30.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	707.00	707.00	0.00
6.00	940.00	233.00	0.00
9.00	951.00	11.00	0.00
12.00	959.00	8.00	0.00
15.00	962.00	3.00	0.00
18.00	964.00	2.00	0.00
21.00	966.00	2.00	0.00
24.00	968.00	2.00	0.00
27.00	969.00	1.00	0.00
30.00	969.00	0.00	0.00
33.00	969.00	0.00	0.00
36.00	969.00	0.00	0.00
39.00	969.00	0.00	0.00
42.00	969.00	0.00	0.00
45.00	969.00	0.00	0.00
48.00	969.00	0.00	0.00
51.00	969.00	0.00	0.00
54.00	969.00	0.00	0.00
57.00	969.00	0.00	0.00
60.00	969.00	0.00	0.00

DST 1892

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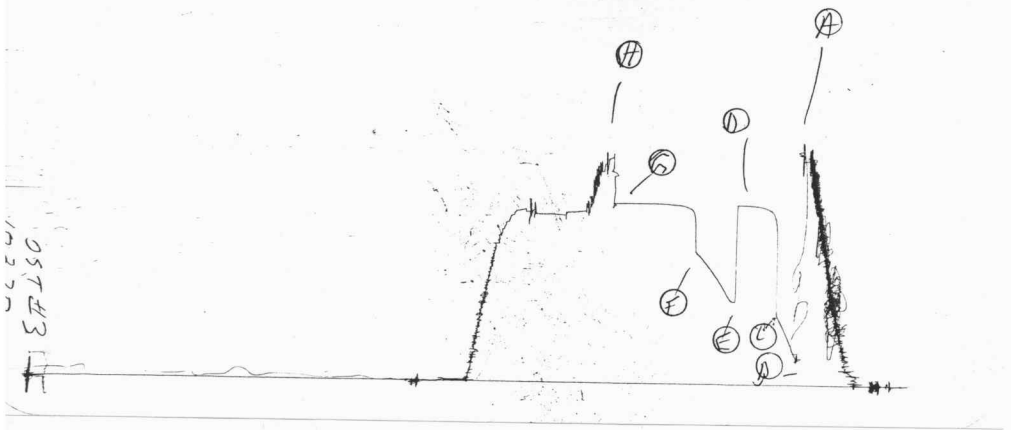

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DST 1892

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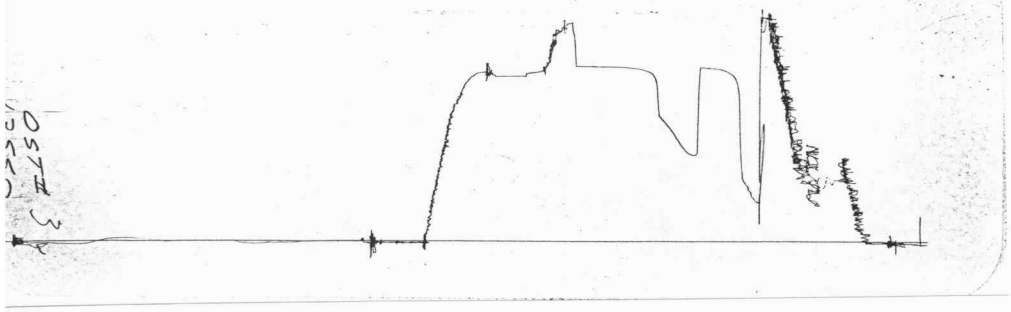

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