

Well Name: MLP Cavner "B-1"
Company: Oxy USA Inc.
Location: 32-31s-38w
Stevens County Kansas
Date: 7-29-99

TRILOBITE TESTING L.L.C.

OPERATOR : Oxy USA Inc.

DATE 7-27-99

WELL NAME: MLP Cavner "B-1"

KB 3196.00 ft

TICKET NO: 11769 DST #1

LOCATION : 32-31S-38W Stevens co KS

GR 3186.00 ft

FORMATION: Morrow

INTERVAL : 5810.00 To 5835.00 ft

TD 5835.00 ft

TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 0 Rec.	13630	13630	Alpine			PF Fr. to hr
SI 0 Range(Psi)	4625.0	4625.0	5000.0	0.0	0.0	IS Fr. to hr
SF 0 Clock(hrs)	12 HR	12 HR	12 HR			SF Fr. to hr
FS 0 Depth(ft)	5832.0	5832.0	5812.0	0.0	0.0	FS Fr. to hr

	Field	1	2	3	4	
A. Init Hydro	0.0	0.0	791.0	0.0	0.0	T STARTED 1900 hr
B. First Flow	0.0	0.0	0.0	0.0	0.0	T ON BOTM hr
B1. Final Flow	0.0	0.0	0.0	0.0	0.0	T OPEN hr
C. In Shut-in	0.0	0.0	0.0	0.0	0.0	T PULLED 2015 hr
D. Init Flow	0.0	0.0	0.0	0.0	0.0	T OUT 2140 hr
E. Final Flow	0.0	0.0	0.0	0.0	0.0	
F. Fl Shut-in	0.0	0.0	0.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	0.0	0.0	779.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	O	O	I			Wt Set On Packer 0.00 lbs
						Wt Pulled Loose 0.00 lbs
						Initial Str Wt 0.00 lbs
						Unseated Str Wt 0.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.78 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 591.00 ft
						D.P. Length 5209.00 ft

RECOVERY

Tot Fluid 0.00 ft of 0.00 ft in DC and 0.00 ft in DP

0.00 ft of

0.00 ft of

0.00 ft of

0.00 ft of

0.00 ft of

0.00 ft of

0.00 ft of

0.00 ft of

SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Bride at 1692'

8 5/8 set to 1709'

Suspect a joint of 8 5/8 off

MUD DATA-----

Mud Type Chemical

Weight 8.90 lb/cf

Vis. 55.00 S/L

W.L. 7.60 in3

F.C. 0.00 in

Mud Drop N

Amt. of fill 0.00 ft

Btm. H. Temp. 104.00 F

Hole Condition Bridge

% Porosity 8.00

Packer Size 6.75 in

No. of Packers 2

Cushion Amt. 0.00

Cushion Type

Reversed Out N

Tool Chased N

Tester Lanny Saloga

Co. Rep. Cal Wylie

Contr. Cheyenne

Rig # 2

Unit #

Pump T.

SAMPLES:

SENT TO:

Test Successful: N

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: MLP Cavern "B-1"

LOCATION : 32-31S-38W Stevens co KS

WELL No. 11770 D.S.T. No. 2 DATE 7-27-99

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 25

TOTAL TOOL 55

WELL COLLAR ANCHOR IN INTERVAL

C. ANCHOR STAND.Stands Single Total

P. ANCHOR STAND.Stands Single Total

TOTAL ASSEMBLY

C. ABOVE TOOLS.Stands 10 Single Total 591

P. ABOVE TOOLS.Stands 84 Single Total 5209

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5855

TOTAL DEPTH 5835

TOTAL DRILL PIPE ABOVE K.B. 20

REMARKS:

Hit bridge at 1662'. Surface pipe set at 1709'. Tool was not opened.

Missrun.

Damaged safety jt. Hard band ripped off.

6' perf bent badly.

P.O. SUB Cir. sub	5720
C.O. SUB Top of tool	5780
Double pin	5781
S.I. TOOL H&T	5786
Sampler	5789
HMV Sterling	5794
JARS Bowen	5799
SAFETY JOINT Bowen	5801
PACKER Shale	5806
PACKER Shale	5810
DEPTH	
STUBB 1 ft.	5811
ANCHOR Rec. sub	5812
Alpine	5812
T.C.	
DEPTH	
Pu. sub	5817
AK-1	5832
16 ft. perfs	5833
BULLNOSE 2 ft. perf	
T.D.	5835

11769 D.S.T.#1 Cavern "B-1" Oxy U.S.A.

TEST HISTORY

Flag Points
 t(Min.) P(PSig)
 R: 0.00 791.52
 Q: 0.00 779.13

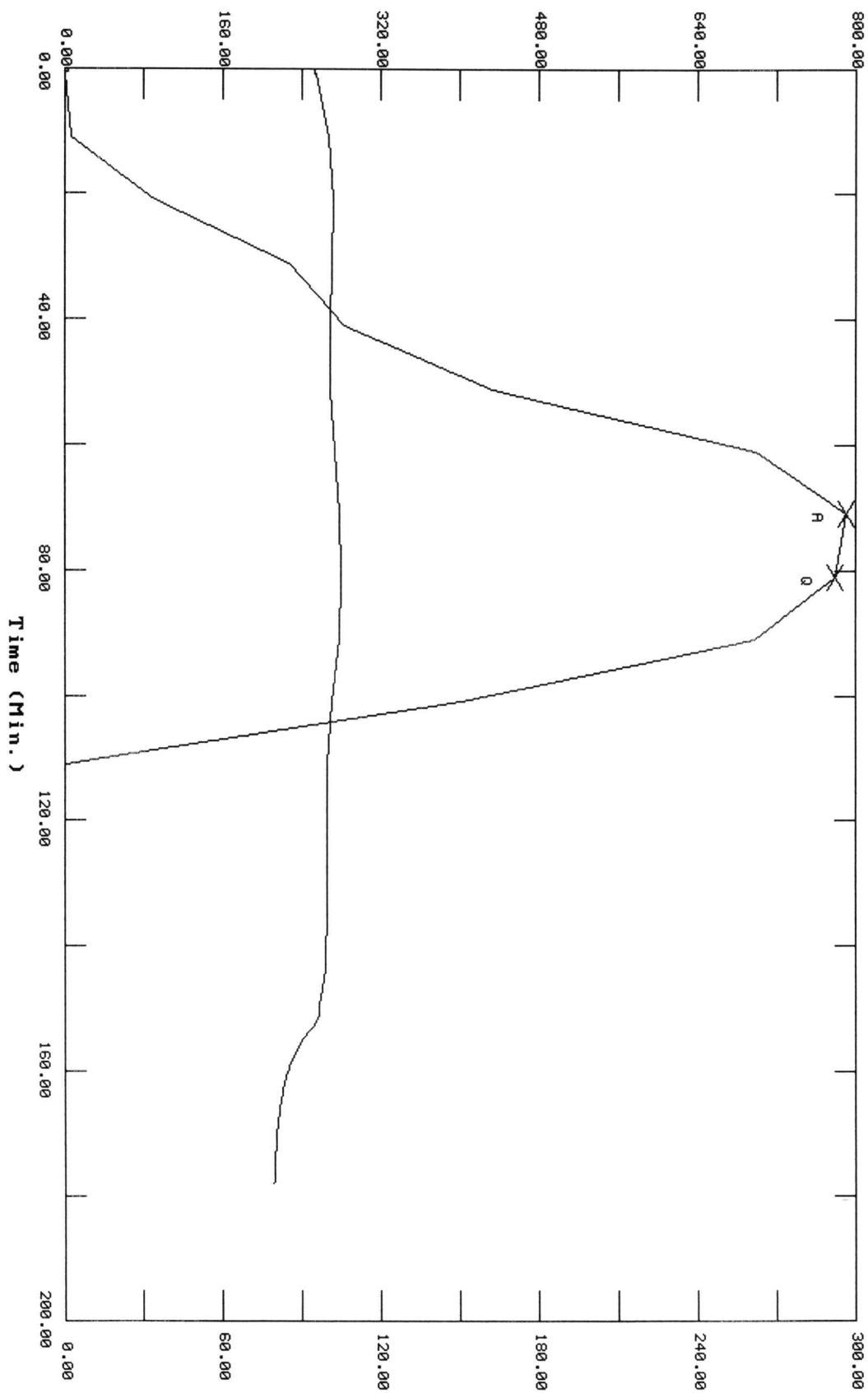
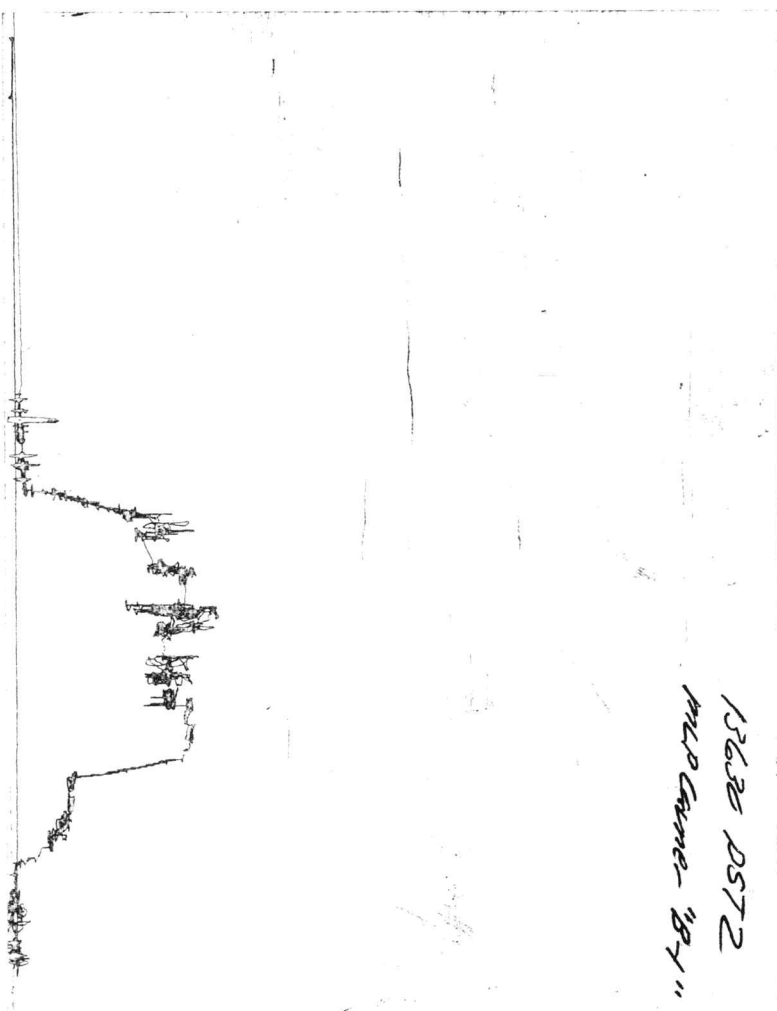


CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 11769 D.S.T.#1 Cavner "B-1" Oxy U.S.A.

DATE: 07/27/99 TIME: 18:46:09

	Time	Pressure	delta P	Temp.	(T+dT)/dT	P ² /10 ⁶
		PSig	PSig	DEG F		
***** Initial Hydro.	71.00	791.5	0.0	104.15		
***** Start Flow 1	0.00	779.1	0.0	104.63		
***** End Flow 1	10.00	697.9	-81.2	104.21		
***** End Shut-in 1	92.00	697.9	0.0	104.21	0.1087	0.487
***** Final Hydro.	91.00	697.9	0.0	104.21		

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 11770

Well Name & No. <u>M.P. Canner "8-1"</u>	Test No. <u>2</u>	Date <u>7-27-99</u>
Company <u>Oxy USA Inc.</u>	Zone Tested <u>Marrow</u>	
Address <u>OK City OK. Liberal KS.</u>	Elevation <u>3196</u> KB <u>3186</u> GL	
Co. Rep / Geo. <u>Cal Wylie</u>	Cont. <u>Cheyenne Rig 2</u>	Est. Ft. of Pay <u>13</u> Por. <u>8</u> %
Location: Sec. <u>32</u> Twp. <u>31S</u> Rge. <u>38W</u>	Co. <u>Stevens</u>	State <u>KS.</u>
No. of Copies <u>21</u>	Distribution Sheet (Y, N) <u>Y</u>	Turnkey (Y, N) <u>N</u> Evaluation (Y, N) <u></u>

Interval Tested <u>5810-5835</u>	Initial Str Wt./Lbs. <u></u>	Unseated Str Wt./Lbs. <u></u>
Anchor Length <u>25'</u> <u>Tool = 30'</u>	Wt. Set Lbs. <u></u>	Wt. Pulled Loose/Lbs. <u></u>
Top Packer Depth <u>5805</u>	Tool Weight <u>4800</u>	
Bottom Packer Depth <u>5810</u>	Hole Size — 7 7/8" <u></u>	Rubber Size — 6 3/4" <u></u>
Total Depth <u>5835</u>	Wt. Pipe Run <u></u>	Drill Collar Run <u>591</u>
Mud Wt. <u>8.9</u> LCM <u>6#</u> Vis. <u>55</u> WL <u>7.6</u>	Drill Pipe Size <u>4 1/2 F.H.</u>	Ft. Run <u>5209 20' up</u>

Blow Description

Hit bridge at 1662' 8 5/8 set to 1709' ??
Miss-Run "Tool was not opened."
1 Hard Band tore off safety jt- 1 5' part bent badly.

Recovery — Total Feet <u>0</u>	GIP <u>0</u>	Ft. in DC <u>0</u>	Ft. in DP <u>0</u>
Rec. <u>0</u> Feet Of <u></u>	%gas <u></u>	%oil <u></u>	%water <u></u> %mud <u></u>
Rec. <u></u> Feet Of <u></u>	%gas <u></u>	%oil <u></u>	%water <u></u> %mud <u></u>
Rec. <u></u> Feet Of <u></u>	%gas <u></u>	%oil <u></u>	%water <u></u> %mud <u></u>
Rec. <u></u> Feet Of <u></u>	%gas <u></u>	%oil <u></u>	%water <u></u> %mud <u></u>
BHT <u>98</u> °F Gravity <u></u>	°API D@ <u></u>	°F Corrected Gravity <u></u>	°API <u></u>
RW <u></u> @ <u></u> °F Chlorides <u></u>	ppm Recovery <u></u>	Chlorides <u>1800</u>	ppm System <u></u>

(A) Initial Hydrostatic Mud <u></u>	AK-1 <u>876</u> Alpine	PSI Recorder No. <u>2341 "23-53"</u>	T-On Location <u>3:30 P.M.</u>
(B) First Initial Flow Pressure <u></u>	<u></u>	PSI (depth) <u>5812</u>	T-Started <u>12:15 A.M.</u>
(C) First Final Flow Pressure <u></u>	<u></u>	PSI Recorder No. <u>13630</u>	T-Open <u></u>
(D) Initial Shut-In Pressure <u></u>	<u></u>	PSI (depth) <u>5832</u>	T-Pulled <u>1:55 A.M.</u>
(E) Second Initial Flow Pressure <u></u>	<u></u>	PSI Recorder No. <u></u>	T-Out <u>3:45 A.M.</u>
(F) Second Final Flow Pressure <u></u>	<u></u>	PSI (depth) <u></u>	T-Off Location <u></u>
(G) Final Shut-in Pressure <u></u>	<u></u>	PSI Initial Opening <u></u>	Test <u>1 Misscon</u> ✓ <u>600</u>
(Q) Final Hydrostatic Mud <u></u>	<u>734</u>	PSI Initial Shut-in <u></u>	Jars <u>1</u> ✓ <u>200</u>

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TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF 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, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By [Signature] (Drohn)

Our Representative [Signature]

Final Flow Safety Joint 1 ✓ 50
Final Shut-in Straddle
Circ. Sub
Sampler 1 N/C
2 SALE Packer 1 ✓ N/C
Elec. Rec. 1 ✓ 150
Mileage
Other
TOTAL PRICE \$ 4000.00

5' Anchor - 787.20
Hardband - 37.00

TRILOBITE TESTING L.L.C.

OPERATOR : Oxy USA Inc.

DATE 7-27-99

WELL NAME: MLP Cavern "B-1"

KB 3196.00 ft

TICKET NO: 11770

DST #2

LOCATION : 32-31S-38W Stevens co KS

GR 3186.00 ft

FORMATION: Morrow

INTERVAL : 5810.00 To 5835.00 ft

TD 5835.00 ft

TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 0 Rec.	13630	13630	Alpine			PF Fr. to hr
SI 0 Range(Psi)	4625.0	4625.0	5000.0	0.0	0.0	IS Fr. to hr
SF 0 Clock(hrs)	12 HR	12 HR	12 HR			SF Fr. to hr
FS 0 Depth(ft)	5832.0	5832.0	5812.0	0.0	0.0	FS Fr. to hr

	Field	1	2	3	4	
A. Init Hydro	0.0	0.0	896.0	0.0	0.0	T STARTED 0015 hr
B. First Flow	0.0	0.0	0.0	0.0	0.0	T ON BOTM hr
B1. Final Flow	0.0	0.0	0.0	0.0	0.0	T OPEN hr
C. In Shut-in	0.0	0.0	0.0	0.0	0.0	T PULLED 0155 hr
D. Init Flow	0.0	0.0	0.0	0.0	0.0	T OUT 0345 hr
E. Final Flow	0.0	0.0	0.0	0.0	0.0	
F. Fl Shut-in	0.0	0.0	0.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	0.0	0.0	734.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	O	O	I			Wt Set On Packer 0.00 lbs
						Wt Pulled Loose 0.00 lbs
						Initial Str Wt 0.00 lbs
						Unseated Str Wt 0.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.78 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 591.00 ft
						D.P. Length 5209.00 ft

RECOVERY

Tot Fluid 0.00 ft of 0.00 ft in DC and 0.00 ft in DP

0.00 ft of

0.00 ft of

0.00 ft of

0.00 ft of

0.00 ft of

0.00 ft of

0.00 ft of

0.00 ft of

SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Hit bridge at 1662'

8 5/8 set at 1709

Tool was not opened, 1 hard band tore off safety joint, 1 5' perf bent

MUD DATA-----

Mud Type	Chemical
Weight	8.90 lb/cf
Vis.	55.00 S/L
W.L.	7.60 in3
F.C.	0.00 in
Mud Drop N	

Amt. of fill	0.00 ft
Btm. H. Temp.	98.00 F
Hole Condition	Bridge
% Porosity	8.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	
Tester	Lanny Saloga
Co. Rep.	Cal Wylie
Contr.	Cheyenne
Rig #	2
Unit #	
Pump T.	

SAMPLES:

SENT TO:

Test Successful: N

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: MLP Cavern "B-1"

LOCATION : 32-31S-38W Stevens co KS

WELL No. 11769 D.S.T. No. 1 DATE 7-27-99

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL

TOTAL PACKERS AND ANCHOR 25

TOTAL TOOL 55

WELL COLLAR ANCHOR IN INTERVAL

C. ANCHOR STAND.Stands Single Total

P. ANCHOR STAND.Stands Single Total

TOTAL ASSEMBLY

C. ABOVE TOOLS.Stands 10 Single Total 591

P. ABOVE TOOLS.Stands 84 Single Total 5209

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5855

TOTAL DEPTH 5835

TOTAL DRILL PIPE ABOVE K.B. 20

REMARKS:

Hit bridge at 1692'. Surface pipe set to 1709'. Trip out of hole, suspect bottom joint. Surface pipe off. Missrun. Tool was not opened.

P.O. SUB Cir. sub	5720
C.O. SUB Top of tool	5780
Double pin	5781
S.I. TOOL H&T	5786
Sampler	5789
HMV Sterling	5794
JARS Bowen	5799
SAFETY JOINT Bowen	5801
PACKER Shale	5806
PACKER Shale	5810
DEPTH	
STUBB 1 ft.	5811
ANCHOR Rec. sub	5812
Alpine	5812
Pu. sub	5817
AK-1	5832
16 ft. perfs	5833
BULLNOSE 2 ft. perf	
T.D.	5835

11770 D.S.T.#2 MLP Cavern "B-1" Oxy USA Inc.

TEST HISTORY

Flag Points
 t(min.) P(PSig)
 R: 0.00 896.51
 B: 0.00 734.13
 Q: 0.00 734.13

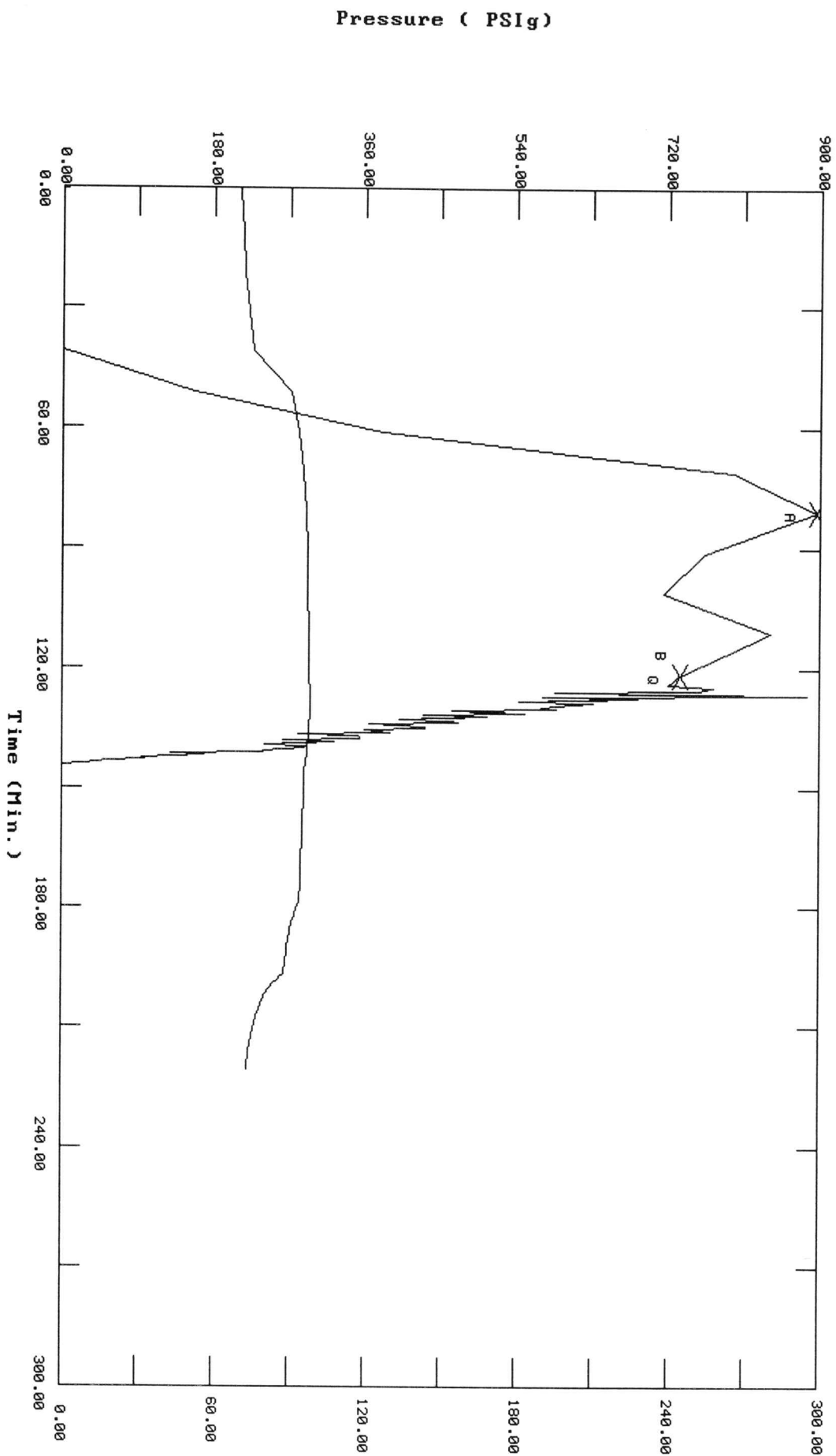
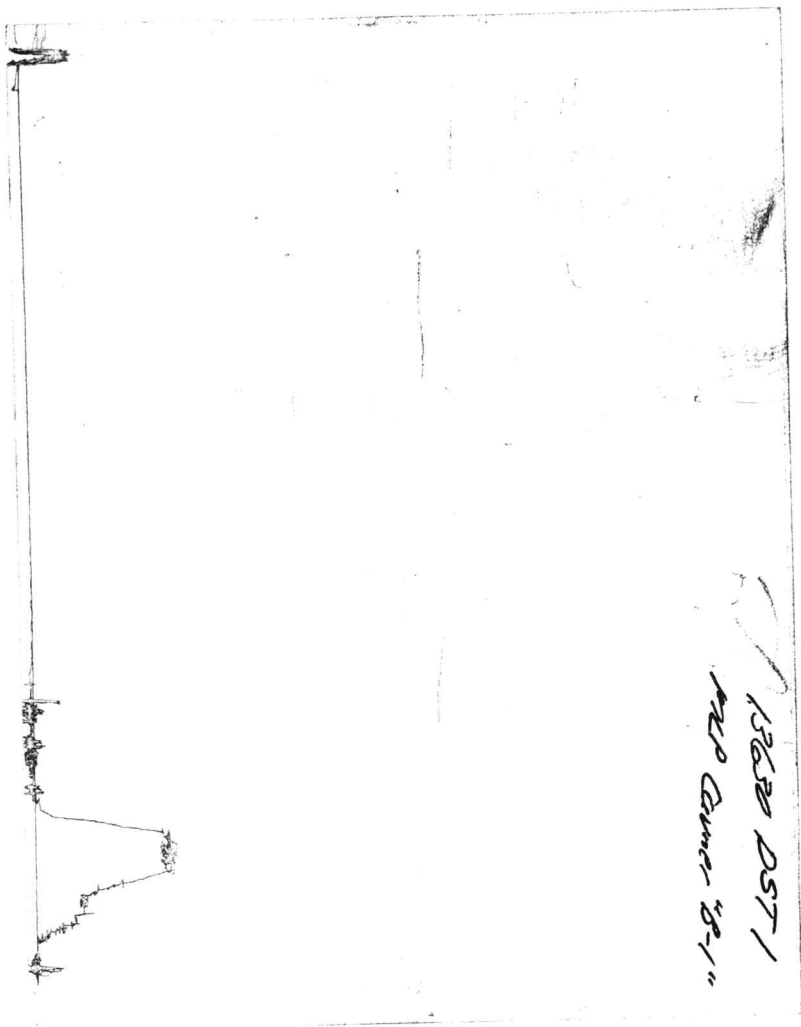


CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 11770 D.S.T.#2 MLP Cavern "B-1" Oxy USA Inc.

DATE: 07/27/99 TIME: 23:53:05

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	81.00	896.5	0.0	96.65		
***** Start Flow 1	0.00	734.1	0.0	97.73		
***** End Flow 1	0.50	731.5	-2.6	97.83		
***** End Shut-in 1	0.50	731.5	0.0	97.83	1.0000	0.535
***** Final Hydro.	122.00	731.5	0.0	97.83		

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 11769

Well Name & No. MPL Canner "8-1" Test No. 1 Date 7-27-99
Company Oxy USA Inc. Zone Tested Mallam
Address OK City OK Liberal KS Elevation 3196 KB 3186 GL
Co. Rep / Geo. Cal Wylie Cont. Cheyenne Rig 2 Est. Ft. of Pay 13 Por. 8 %
Location: Sec. 32 Twp. 31S Rge. 38W Co. Stevens State KS
No. of Copies 21 Distribution Sheet (Y, N) Y Turnkey (Y, N) N Evaluation (Y, N)

Interval Tested 5810 - 5835
Anchor Length 25' Tool = 30'
SHALE Top Packer Depth 5805
SHALE Bottom Packer Depth 5810
Total Depth 5835
Mud Wt. 8.9 LCM 6# Vis. 55 WL 7.6

Initial Str Wt./Lbs. — Unseated Str Wt./Lbs. —
Wt. Set Lbs. — Wt. Pulled Loose/Lbs. —
Tool Weight 4800
Hole Size — 7 7/8" Rubber Size — 6 3/4"
Wt. Pipe Run — Drill Collar Run 591
84 Drill Pipe Size 4 1/2 F.H. Ft. Run 5209 20' up

Blow Description

Bridge at 1692' 8 5/8 set to 1709' suspect a joint at 8 5/8
off "Miss-Run"

Recovery — Total Feet 0 GIP 0 Ft. in DC 0 Ft. in DP 0
Rec. 0 Feet Of — %gas — %oil — %water — %mud —
Rec. — Feet Of — %gas — %oil — %water — %mud —
Rec. — Feet Of — %gas — %oil — %water — %mud —
Rec. — Feet Of — %gas — %oil — %water — %mud —
Rec. — Feet Of — %gas — %oil — %water — %mud —
BHT 104 °F Gravity — °API D@ — °F Corrected Gravity — °API
RW — @ — °F Chlorides — ppm Recovery Chlorides 1800 ppm System

	AK-1	Alpine		
(A) Initial Hydrostatic Mud	<u>—</u>	<u>791</u>	PSI Recorder No. <u>2341 "18:46"</u>	T-On Location <u>3:30 P.M.</u>
(B) First Initial Flow Pressure	<u>—</u>	<u>—</u>	PSI (depth) <u>5812</u>	T-Started <u>7:00 P.M.</u>
(C) First Final Flow Pressure	<u>—</u>	<u>—</u>	PSI Recorder No. <u>13630</u>	T-Open <u>—</u>
(D) Initial Shut-In Pressure	<u>—</u>	<u>—</u>	PSI (depth) <u>5832</u>	T-Pulled <u>8:15 P.M.</u>
(E) Second Initial Flow Pressure	<u>—</u>	<u>—</u>	PSI Recorder No. <u>—</u>	T-Out <u>9:40 P.M.</u>
(F) Second Final Flow Pressure	<u>—</u>	<u>—</u>	PSI (depth) <u>—</u>	T-Off Location <u>—</u>
(G) Final Shut-in Pressure	<u>—</u>	<u>—</u>	PSI Initial Opening <u>—</u>	Test <u>Miss-Run 600</u>
(Q) Final Hydrostatic Mud	<u>—</u>	<u>779</u>	PSI Initial Shut-in <u>—</u>	Jars <u>200</u>
			Final Flow <u>—</u>	Safety Joint <u>50</u>
			Final Shut-in <u>—</u>	Straddle <u>—</u>
				Circ. Sub <u>—</u>
				Sampler <u>N/A</u>
				2- <u>SHALE</u> Extra Packers <u>300</u>
				Elec. Rec. <u>150</u>
				Mileage <u>—</u>
				Other <u>—</u>

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Approved By

Our Representative

TOTAL PRICE \$ 4,300.00