

15-017-20827

13-19s-7E

Range is East,
not West as
printed.



TRILOBITE
TESTING, INC.

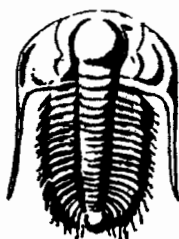
DRILL STEM TEST REPORT

Prepared for

Range Oil Company Inc
125 N Market St Ste 1120
Wichita, KS 67202

Roberts A#1
13 19s 7~~W~~ E
Chase co KS

Trilobite Testing, Inc
PO Box 362 - Hays, Kansas - 67601
ph: 785-625-4778 fax: 785-625-5620
e-mail: trilobite@eaglecom.net



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Well name#:	Roberts A#1	Date:	6/13/2002
Location#:	13 19s 7w	Ticket #:	15727
		DST#	1

General Informaion:

Formation:	Severy	Test Type:	Conventional	BHT:	86
Interval:	490-511	Tester:	Darren Amerine	OIL API:	
Total Depth:	511	Elevation:	1200 ft(KB)	H2O Salinity:	
Hole Diameter:	7 7/8"		1190 ft(CF)		
Start Data:	6/13/2002	Tool Weight:	2100	Mud Type:	Chemical
Start Time:	12:00:00	Weight Set on Packers:	20000	Mud Weight:	8.9
Time tool opened:	13:06:00	Weight to Pull Loose:	26000	Viscosity:	40
Time Off Btm:	16:06:00	Initial String Weight:	24000	Water Loss:	NA
End Date:	6/13/02	Final String Weight:	24000	Resistivity:	-
End Time:	17:30	Drill Pipe Length:	199	Salinity:	NA
		Drill Collar Length:	308.41		

Test Comment:

IF: Strong blow b.o.b. in 30 sec. GTS in 4 min. Gauge Gas
 ISI: Bled down for 1 min. No blow back
 FF: Strong blow b.o.b. in 10 sec. Gauge Gas
 FSI: Bled down for 5 min. No blow back

Recovery	35	472ft GIP	35ft in DC
Length(ft):	Description:		
35	SGCM 10%gas 90%mud		
472	GIP		

Gas Volume Report

Recorder #:	10991	Open	Min:	Ins. Of water	Orifice	MCF/D
Pressure Summary:	Time:(min)			PSIG	size	
Initial Hydro-static:	223	1st	9	3#	1/4	15700
Open to Flow (1):	44		14	3.5#	1/4	17100
Shut-in (1):	37		19	4#	1/4	18500
End Shut-in (1):	200		24	5#	1/4	20700
Open to Flow (2):	56		29	5.5#	1/4	21800
Shut-in (2):	31					
End Shut-in (2):	192					
Final Hydro-static:	241					



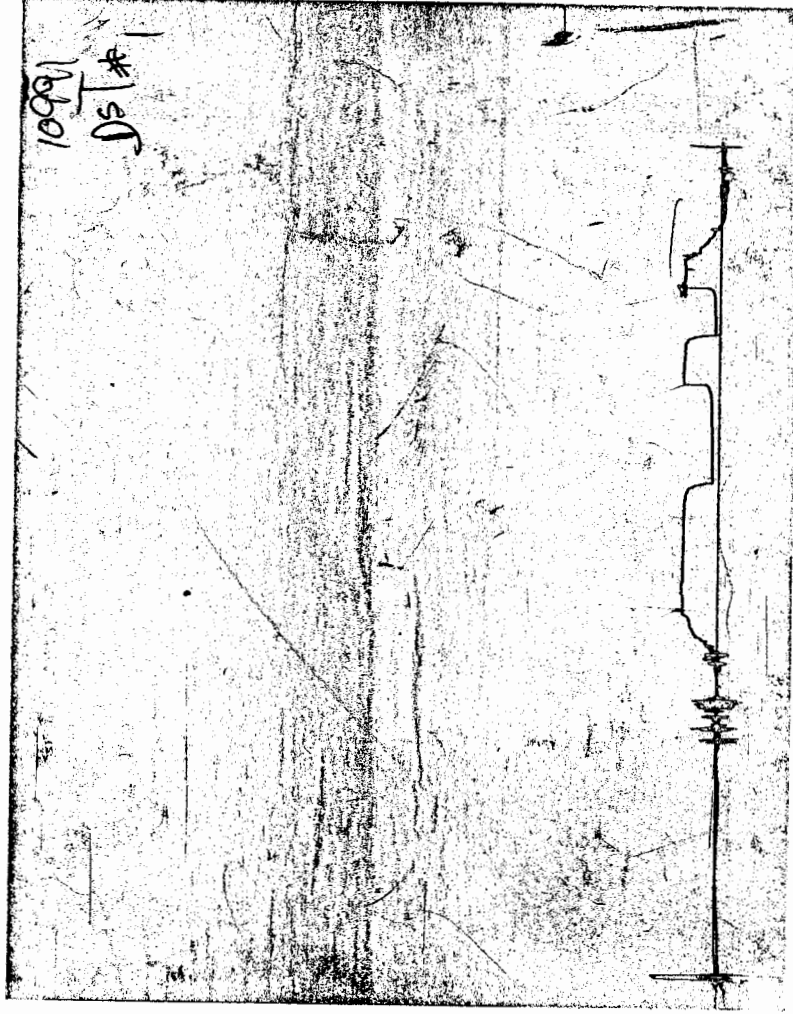
GAS VOLUME REPORT

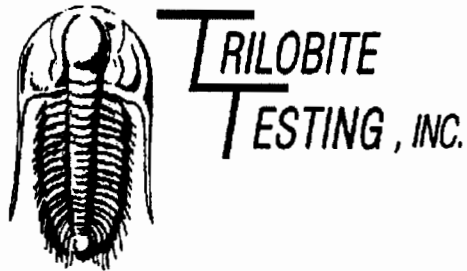
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CHART PAGE

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





DRILL STEM TEST REPORT

Prepared For: **Range Oil Company Inc.**

125 N. Market suite 1120
Wichita, KS 67202

ATTN: Frank Mize

13-19S-7W Chase-KS

Roberts "A" #1

Start Date: 2002.06.14 @ 09:59:34

End Date: 2002.06.14 @ 17:23:19

Job Ticket #: 15728 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Range Oil Company Inc.

125 N. Market suite 1120
Wichita, KS 67202

ATTN: Frank Mize

Roberts "A" #1

13-19S-7W Chase-KS

Job Ticket: 15728

DST#: 2

Test Start: 2002.06.14 @ 09:59:34

GENERAL INFORMATION:

Formation: **Calhoun**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:57:04

Time Test Ended: 17:23:19

Test Type: Conventional Bottom Hole

Tester: Darren L. Amerine

Unit No: 19

Interval: **576.00 ft (KB) To 601.00 ft (KB) (TVD)**

Total Depth: 601.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1200.00 ft (KB)

1190.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 3302

Inside

Press@RunDepth: 61.33 psig @ 577.00 ft (KB)

Start Date: 2002.06.14

End Date: 2002.06.14

Start Time: 09:59:36

End Time: 17:23:19

Capacity: 7000.00 psig

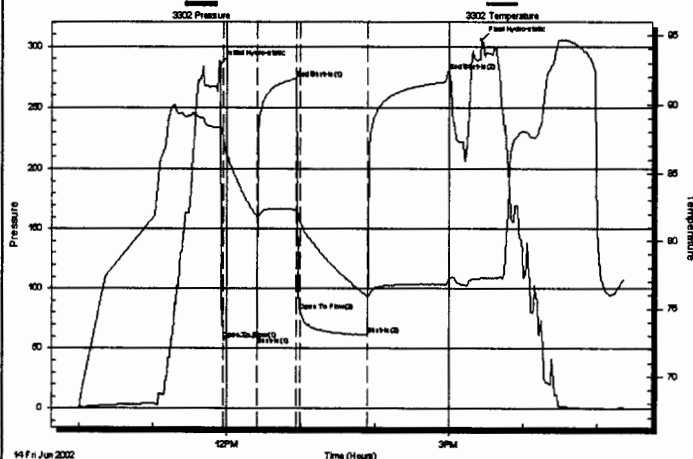
Last Calib.: 2002.06.14

Time On Btm: 2002.06.14 @ 11:55:04

Time Off Btm: 2002.06.14 @ 15:26:19

TEST COMMENT: IF: Strong blow b.o.b in 10 sec. GST in 2 min. gauge gas.
IS: Bled down for 2 min. no blow back.
FF: Strong blow b.o.b in 10 sec. gauge gas.
FS: Bled down for 4 min. no blow back.

Pressure vs. Time



14 Feb Jun 2002

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	285.93	88.33	Initial Hydro-static
2	57.10	87.40	Open To Flow (1)
30	59.69	81.72	Shut-In(1)
62	273.98	82.33	End Shut-In(1)
65	80.95	81.32	Open To Flow (2)
120	61.33	75.89	Shut-In(2)
186	280.02	77.21	End Shut-In(2)
212	305.58	77.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
557.00	01 - Gas	3.84

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.50	34.00	326.49
Last Gas Rate	0.50	35.00	333.24
Max. Gas Rate	0.50	36.00	339.98



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Range Oil Company Inc.

Roberts "A"#1

125 N. Market suite 1120
Wichita, KS 67202

13-19S-7W Chase-KS

Job Ticket: 15728

DST#: 2

ATTN: Frank Mize

Test Start: 2002.06.14 @ 09:59:34

Tool Information

Drill Pipe:	Length:	251.59 ft	Diameter:	3.10 inches	Volume:	2.35 bbl	Tool Weight:	2100.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length:	308.41 ft	Diameter:	2.25 inches	Volume:	1.52 bbl	Weight to Pull Loose:	26000.00 lb
					Total Volume:	3.87 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	5.00 ft							
Depth to Top Packer:	576.00 ft							
Depth to Bottom Packer:	ft							
Interval between Packers:	25.00 ft							
Tool Length:	46.00 ft							
Number of Packers:	2	Diameter:	6.75 inches					

Tool Comments:

pulled tool loose hole started to unload set packers dropped bar pumped 10+ weight mud through drill pipe.

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
C.O. Sub	1.00			556.00		
S.I. Tool	5.00			561.00		
HMV	5.00			566.00		
Packer	5.00			571.00	21.00	Bottom Of Top Packer
Packer	5.00			576.00		
Stubb	1.00			577.00		
Recorder	0.00	3302	Inside	577.00		
Anchor	22.00			599.00		
Recorder	0.00	10991	Outside	599.00		
Bullnose	2.00			601.00	25.00	Bottom Packers & Anchor
Total Tool Length:		46.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Range Oil Company Inc.

Roberts "A" #1

125 N. Market suite 1120
Wichita, KS 67202

13-19S-7W Chase-KS

Job Ticket: 15728

DST#: 2

ATTN: Frank Mize

Test Start: 2002.06.14 @ 09:59:34

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 75.00 sec/qt

Cushion Volume:

bbl

Water Loss: in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: 0.32 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
557.00	01 - Gas	3.837

Total Length: 557.00 ft

Total Volume: 3.837 bbl

Num Fluid Samples: 1

Num Gas Bombs: 0

Serial #:

Laboratory Name: Caraway

Laboratory Location: Liberal KS

Recovery Comments:



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Range Oil Company Inc.

Roberts "A" #1

125 N. Market suite 1120
Wichita, KS 67202

13-19S-7W Chase-KS

Job Ticket: 15728

DST#: 2

ATTN: Frank Mize

Test Start: 2002.06.14 @ 09:59:34

Gas Rates Information

Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
1	12	0.50	34.00	326.49
1	12	0.50	34.00	326.49
1	22	0.50	35.00	333.24
1	30	0.50	35.00	333.24
2	10	0.50	36.00	339.98
2	20	0.50	35.00	333.24
2	30	0.50	35.00	333.24
2	40	0.50	35.00	333.24
2	50	0.50	35.00	333.24

Serial #: 3302

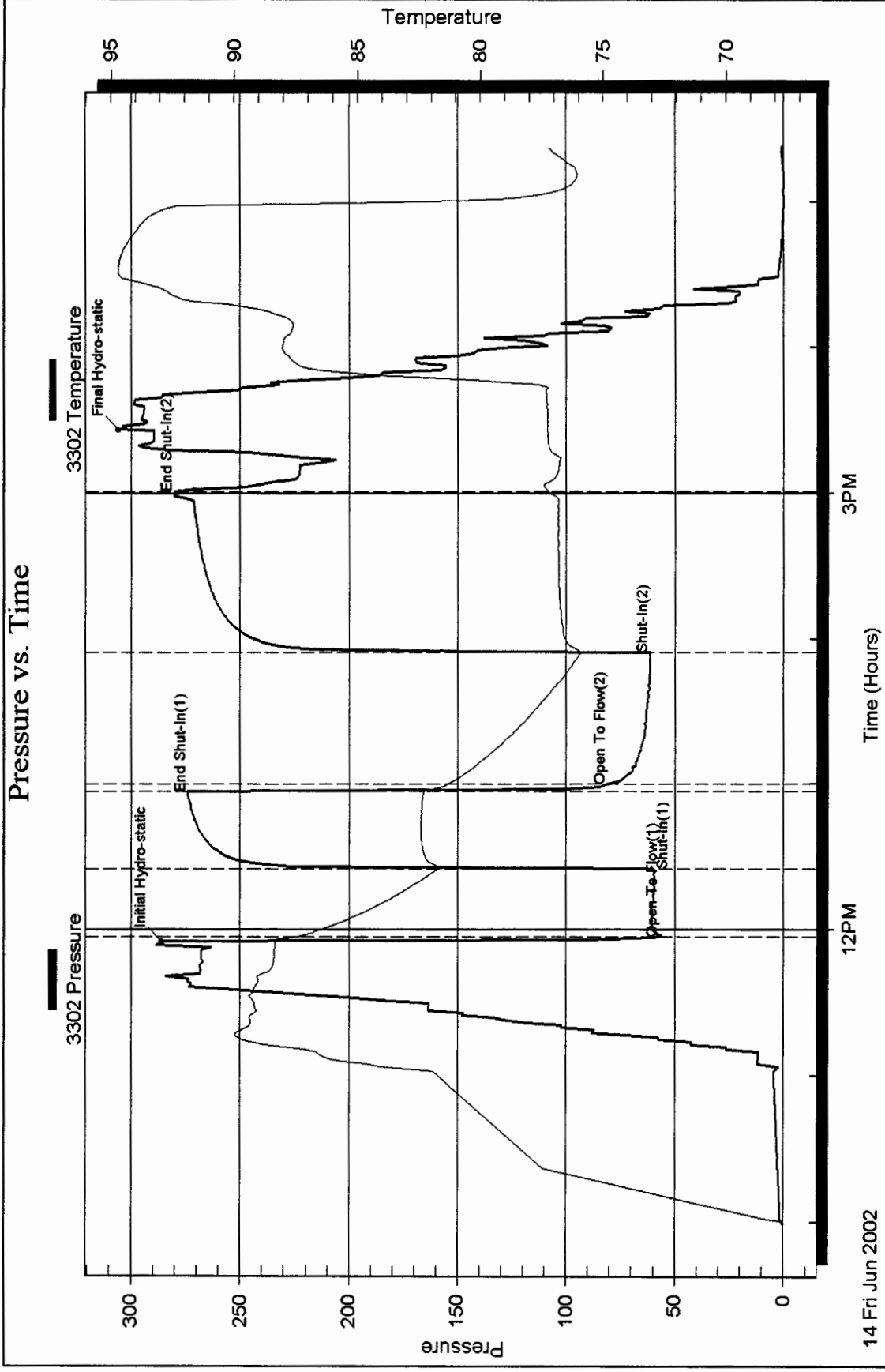
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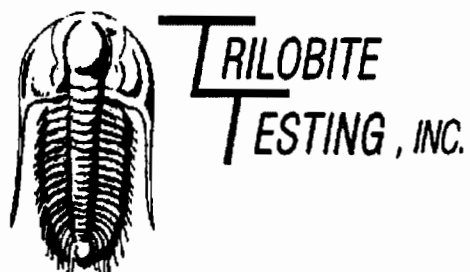
Range Oil Company Inc.

13-19S-7W Chase-KS

DST Test Number: 2

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Range Oil Company Inc.**

125 N. Market suite 1120
Wichita, KS 67202

ATTN: Frank Mize

13-19S-7W Chase-KS

Roberts "A" #1

Start Date: 2002.06.15 @ 19:54:03

End Date: 2002.06.16 @ 03:12:33

Job Ticket #: 15729 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Range Oil Company Inc.

125 N. Market suite 1120
Wichita, KS 67202

ATTN: Frank Mize

Roberts "A" #1

13-19S-7W Chase-KS

Job Ticket: 15729

DST#: 3

Test Start: 2002.06.15 @ 19:54:03

GENERAL INFORMATION:

Formation: **Ireland**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 22:02:33

Time Test Ended: 03:12:33

Test Type: **Conventional Bottom Hole**

Tester: **Darren L. Amerine**

Unit No: **19**

Interval: **902.00 ft (KB) To 960.00 ft (KB) (TVD)**

Total Depth: **960.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Poor**

Reference Elevations: **1200.00 ft (KB)**

1190.00 ft (CF)

KB to GR/CF: **10.00 ft**

Serial #: **3302**

Inside

Press@RunDepth: **349.86 psig @ 903.00 ft (KB)**

Start Date: **2002.06.15**

End Date: **2002.06.16**

Start Time: **19:54:05**

End Time: **03:12:33**

Capacity: **7000.00 psig**

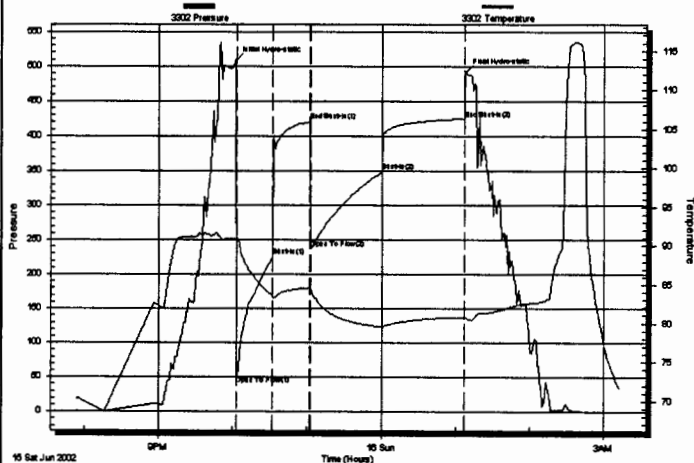
Last Calib.: **2002.06.16**

Time On Btm: **2002.06.15 @ 22:02:18**

Time Off Btm: **2002.06.16 @ 01:08:03**

TEST COMMENT: IF: Fair blow b.o.b in 50 sec.
IS: Bled down n for 5 min. no blow back.
FF: Fair blow built to b.o.b in 2 min.
FS: Bled down n for 5 min. no blow back.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	507.89	90.90	Initial Hydro-static
1	39.46	90.91	Open To Flow (1)
30	225.73	83.53	Shut-In(1)
60	421.44	84.58	End Shut-In(1)
61	237.61	84.44	Open To Flow (2)
118	349.86	79.51	Shut-In(2)
185	424.62	80.72	End Shut-In(2)
186	491.17	80.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
690.00	350 - Mud cut Water	5.21
60.00	104 - Water cut Mud	0.56

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Range Oil Company Inc.

Roberts "A" #1

125 N. Market suite 1120
Wichita, KS 67202

13-19S-7W Chase-KS

Job Ticket: 15729

DST#: 3

ATTN: Frank Mize

Test Start: 2002.06.15 @ 19:54:03

Tool Information

Drill Pipe:	Length: 627.00 ft	Diameter: 3.10 inches	Volume: 5.85 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 278.00 ft	Diameter: 2.25 inches	Volume: 1.37 bbl	Weight to Pull Loose: 40000.00 lb
		Total Volume:	7.22 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 26000.00 lb
Depth to Top Packer:	902.00 ft			Final 30000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.00 ft			
Tool Length:	79.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

C.O. Sub	1.00			882.00	
S.I. Tool	5.00			887.00	
HMV	5.00			892.00	
Packer	5.00			897.00	21.00 Bottom Of Top Packer
Packer	5.00			902.00	
Stubb	1.00			903.00	
Recorder	0.00	3302	Inside	903.00	
Anchor	23.00			926.00	
Recorder	0.00	10991	Outside	926.00	
Blank Spacing	30.00			956.00	
Bullnose	4.00			960.00	58.00 Bottom Packers & Anchor

Total Tool Length: 79.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Range Oil Company Inc.

Roberts "A" #1

125 N. Market suite 1120
Wichita, KS 67202

13-19S-7W Chase-KS

Job Ticket: 15729

DST #: 3

ATTN: Frank Mize

Test Start: 2002.06.15 @ 19:54:03

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 120.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 0.32 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
690.00	350 - Mud cut Water	5.213
60.00	104 - Water cut Mud	0.560

Total Length: 750.00 ft

Total Volume: 5.773 bbl

Num Fluid Samples: 0

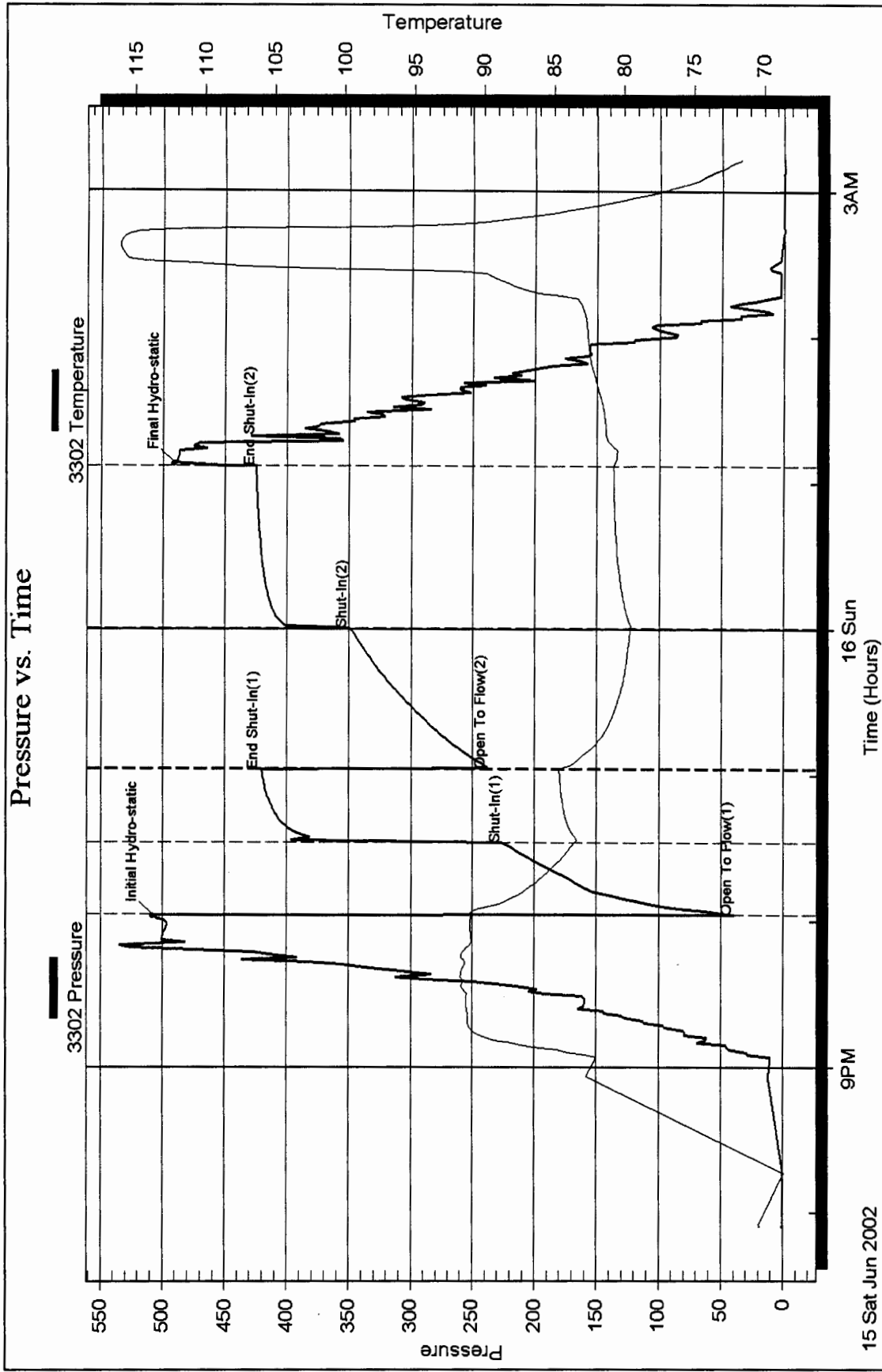
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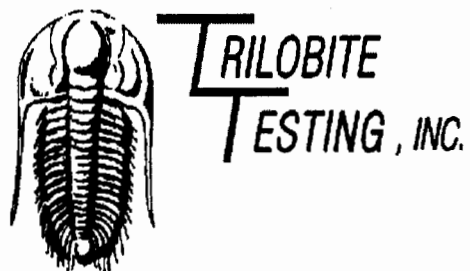
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Range Oil Company Inc.**

125 N. Market suite 1120
Wichita, KS 67202

ATTN: Frank Mize

13-19S-7W Chase-KS

Roberts "A" #1

Start Date: 2002.06.16 @ 19:52:47

End Date: 2002.06.17 @ 03:20:02

Job Ticket #: 15730 DST #: 4

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Range Oil Company Inc.

125 N. Market suite 1120
Wichita, KS 67202

ATTN: Frank Mize

Roberts "A" #1

13-19S-7W Chase-KS

Job Ticket: 15730

DST#: 4

Test Start: 2002.06.16 @ 19:52:47

GENERAL INFORMATION:

Formation: **Lansing "A-B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:31:32

Time Test Ended: 03:20:02

Interval: **1134.00 ft (KB) To 1181.00 ft (KB) (TVD)**

Total Depth: 1181.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole

Tester: Darren L. Amerine

Unit No: 19

Reference Elevations: 1200.00 ft (KB)

1190.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: **3302**

Inside

Press@RunDepth: 19.47 psig @ 1135.00 ft (KB)

Start Date: 2002.06.16

End Date:

2002.06.17

Start Time: 19:52:49

End Time:

03:20:02

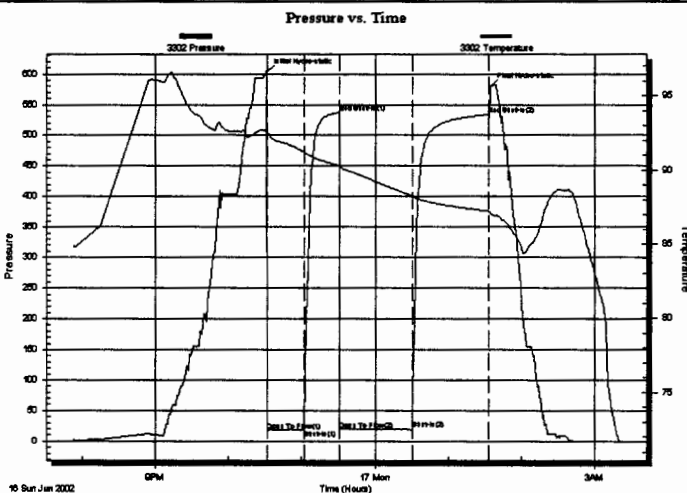
Capacity: 7000.00 psig

Last Calib.: 2002.06.17

Time On Btm: 2002.06.16 @ 22:31:17

Time Off Btm: 2002.06.17 @ 01:34:02

TEST COMMENT: IF: Weak blow built to b.o.b in 2 min. 50 sec.
IS: Bled down for 5 min. no blow back.
FF: Strong blow b.o.b in 10 sec. Gauge gas
FS: Bled down for 2 min. no blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	602.74	92.46	Initial Hydro-static
1	16.71	92.23	Open To Flow (1)
31	17.97	91.20	Shut-In (1)
59	536.43	90.29	End Shut-In (1)
60	18.83	90.39	Open To Flow (2)
120	19.47	88.26	Shut-In (2)
182	533.61	87.22	End Shut-In (2)
183	579.69	87.07	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1089.00	01 - Gas	8.94
30.00	Gas cut mud	0.28

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Range Oil Company Inc.

125 N. Market suite 1120
Wichita, KS 67202

ATTN: Frank Mize

Roberts "A" #1

13-19S-7W Chase-KS

Job Ticket: 15730

DST#: 4

Test Start: 2002.06.16 @ 19:52:47

Tool Information

Drill Pipe:	Length: 846.00 ft	Diameter: 3.10 inches	Volume: 7.90 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 278.00 ft	Diameter: 2.25 inches	Volume: 1.37 bbl	Weight to Pull Loose: 40000.00 lb
		Total Volume:	9.27 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 26000.00 lb
Depth to Top Packer:	1134.00 ft			Final 26000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	47.00 ft			
Tool Length:	68.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

C.O. Sub	1.00			1114.00	
S.I. Tool	5.00			1119.00	
HMV	5.00			1124.00	
Packer	5.00			1129.00	21.00 Bottom Of Top Packer
Packer	5.00			1134.00	
Stubb	1.00			1135.00	
Recorder	0.00	3302	Inside	1135.00	
Anchor	12.00			1147.00	
Recorder	0.00	10991	Outside	1147.00	
Blank Spacing	30.00			1177.00	
Bullnose	4.00			1181.00	47.00 Bottom Packers & Anchor

Total Tool Length: 68.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Range Oil Company Inc.

Roberts "A" #1

125 N. Market suite 1120
Wichita, KS 67202

13-19S-7W Chase-KS

Job Ticket: 15730

DST#: 4

ATTN: Frank Mize

Test Start: 2002.06.16 @ 19:52:47

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: 3.80 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: 0.32 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1089.00	01 - Gas	8.938
30.00	Gas cut mud	0.280

Total Length: 1119.00 ft

Total Volume: 9.218 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Range Oil Company Inc.

Roberts "A" #1

125 N. Market suite 1120
Wichita, KS 67202

13-19S-7W Chase-KS

Job Ticket: 15730

DST#: 4

ATTN: Frank Mize

Test Start: 2002.06.16 @ 19:52:47

Gas Rates Information

Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
		0.00	0.00	0.00

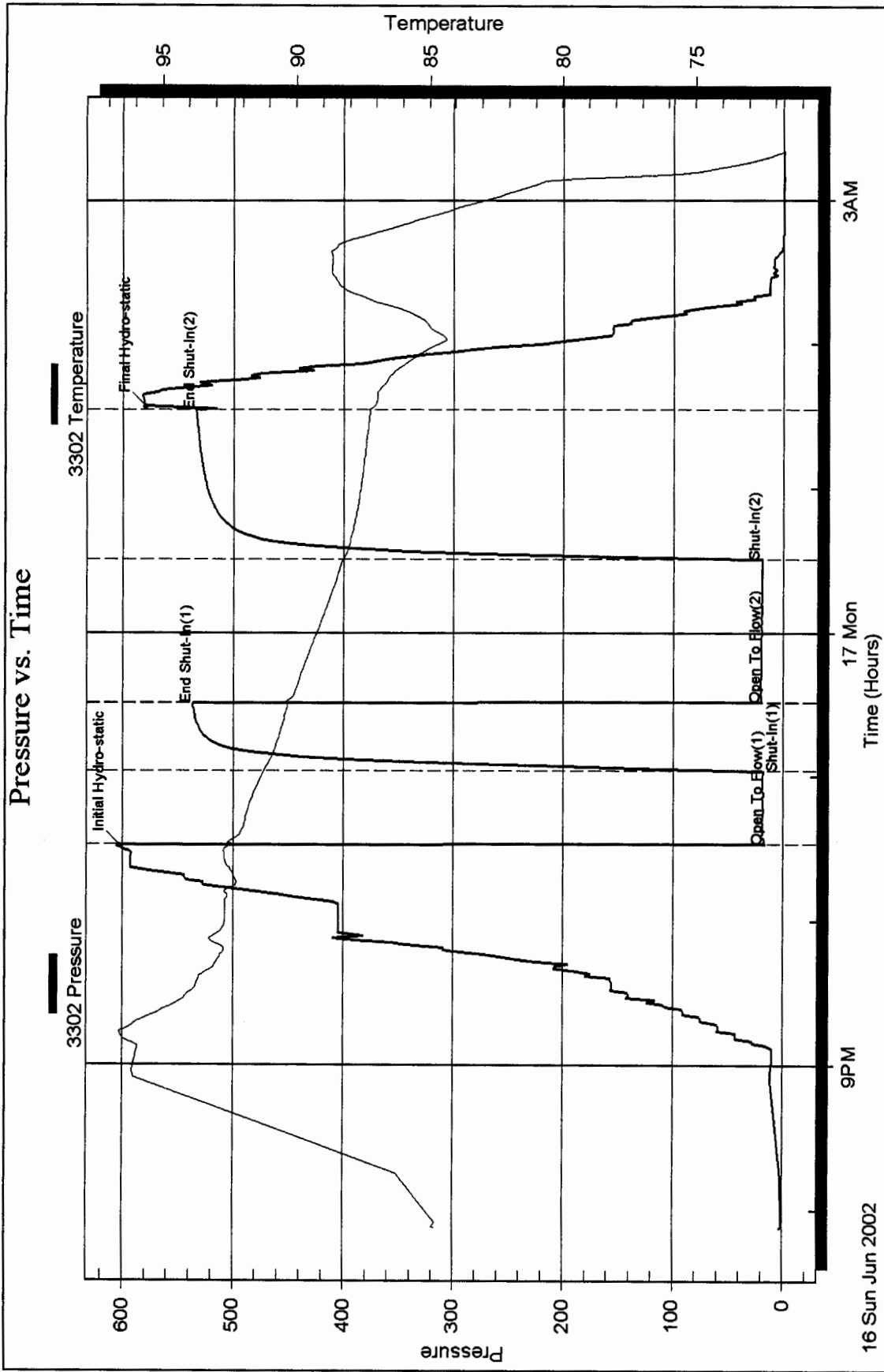
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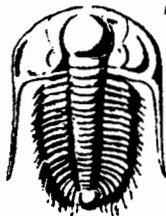
Inside

Range Oil Company Inc.

13-19S-7W Chase-KS

DST Test Number: 4





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 15727

Test Ticket

Well Name & No. Roberts A #1 Test No. #1 Date 06/13/02
 Company Range O/G Inc Zone Tested Severy
 Address 125 N. Market Suite 1120 Wichita KS 67202 Elevation 1200 KB 1190 GL
 Co. Rep / Geo. Frank Mize Cont. Summit Est. Ft. of Pay Por. %
 Location: Sec. 13 Twp. 19S Rge. 7W Co. Chase State KS
 No. of Copies 5 Distribution Sheet (Y, N) Turnkey (Y, N) Evaluation (Y, N)

Interval Tested 490 - 511 Initial Str Wt./Lbs. 24000 Unseated Str Wt./Lbs. 24000
 Anchor Length 21 Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 26000
 Top Packer Depth 485 Tool Weight 2100
 Bottom Packer Depth 490 Hole Size — 7 7/8" ✓ Rubber Size — 6 3/4" ✓
 Total Depth 511 Wt. Pipe Run N/A Drill Collar Run 308.41
 Mud Wt. 8.9 LCM 0 Vis. 40 Wt. N/A Drill Pipe Size 3 1/2 XH Ft. Run 199'
 Blow Description IF: Strong blow b.o. in 30 sec. 6 TS in 4 mins Gauge 6
ISI: Bled down for 1 min. No blow back
FF: Strong blow b.o. in 40 sec. Gauge 6
FSI: Bled down for 5 mins No blow back
 Recovery — Total Feet 35' GIP 472' Ft. in DC 35' Ft. in DP N/A
 Rec. 35' Feet Of 56CM 10 %gas %oil %water 90 %mud
 Rec. 472' Feet Of GIP %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 86° °F Gravity °API D@ °F Corrected Gravity °API
 RW @ °F Chlorides ppm Recovery Chlorides N/A ppm System

	AK-1	Alpine	PSI	Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	<u>255</u>	<u>255</u>		<u>10991</u>	<u>1120</u>
(B) First Initial Flow Pressure	<u>43</u>	<u>43</u>		(depth) <u>502'</u>	T-Started <u>1200</u>
(C) First Final Flow Pressure	<u>43</u>	<u>43</u>		Recorder No. <u>13789</u>	T-Open <u>1306</u>
(D) Initial Shut-In Pressure	<u>223</u>	<u>223</u>		(depth) <u>-508'</u>	T-Pulled <u>1606</u>
(E) Second Initial Flow Pressure	<u>53</u>	<u>53</u>		Recorder No. <u> </u>	T-Out <u>1730</u>
(F) Second Final Flow Pressure	<u>53</u>	<u>53</u>		(depth) <u> </u>	T-Off Location <u>1800</u>
(G) Final Shut-in Pressure	<u>223</u>	<u>223</u>		Initial Opening <u>30</u>	Test <u>✓ 700</u>
(Q) Final Hydrostatic Mud	<u>266</u>	<u>266</u>		Initial Shut-in <u>30</u>	Jars <u> </u>
				Final Flow <u>60</u>	Safety Joint <u> </u>
				Final Shut-in <u>60</u>	Straddle <u> </u>
					Circ. Sub <u> </u>
					Sampler <u> </u>
					Extra Packer <u> </u>
					Elec. Rec. <u> </u>
					Mileage <u>158</u>
					Other <u> </u>
					TOTAL PRICE \$ <u>858</u>

TRILOBITE TESTING INC. 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 Frank Mize
 Our Representative Dan Schenck



GAS VOLUME REPORT

Range Oil Co, Inc.
OPERATOR

VOLUME REPORT # 1
Roberts A
WELL NAME AND NO.

/
DST NO

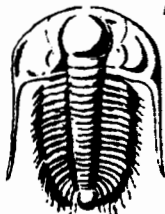
[illegible]**Remarks:**

Roberts A#1

CHART PAGE

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





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 15728

Test Ticket

Well Name & No.	<u>Roberts "A" #1</u>	Test No.	<u>#2</u>	Date	<u>06/14/02</u>
Company	<u>Range Oil Company, Inc. 12514 Market</u>				
Address	<u>Suite 1120 Wichita, Ks. 67202</u>	One Tested	<u>Calhoun</u>		
Co. Rep / Geo.	<u>Frank Mize</u>	Cont.	<u>Summit</u>	Est. Ft. of Pay	<u>Por. %</u>
Location: Sec.	<u>13</u>	Twp.	<u>19S</u>	Rge.	<u>7W</u>
				Co.	<u>Chase</u>
				State	<u>Ks</u>
No. of Copies	<u>5</u>	Distribution Sheet (Y, N)	<u>-</u>	Turnkey (Y, N)	<u>-</u>
				Evaluation (Y, N)	<u>-</u>

Interval Tested	<u>576 - 601'</u>	Initial Str Wt./Lbs	<u>24,000</u>	Unseated Str Wt./Lbs	<u>24,000</u>
Anchor Length	<u>25'</u>	Wt. Set Lbs.	<u>29,000</u>	Wt. Pulled Loose/Lbs	<u>26,000</u>
Top Packer Depth	<u>571'</u>	Tool Weight	<u>2100</u>		
Bottom Packer Depth	<u>576'</u>	Hole Size — 7 7/8"	<u>L</u>	Rubber Size — 6 3/4"	<u>L</u>
Total Depth	<u>601'</u>	Wt. Pipe Run	<u>N/A</u>	Drill Collar Run	<u>308.41</u>
Mud Wt.	<u>9.7</u> LCM <u>0</u> Vis. <u>75</u> WL	Drill Pipe Size	<u>3 1/2 XH</u>	Ft. Run	<u>258.59</u>
Blow Description <u>IF: Strong blow b.o.b in 10 sec. 6 TS in 2 mins Gauge Good</u>					
<u>IST: Bled down for 2 mins. No blow back</u>					
<u>FF: Strong blow b.o.b in 10 sec. Gauge Good</u>					
<u>FST: Bled down 4 mins. No blow back</u>					

Recovery — Total Feet	<u>557'</u>	GIP	<u>557'</u>	Ft. in DC		Ft. in DP	<u>N/A</u>
Rec.	<u>557'</u>	Feet Of	<u>GIP</u>	%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	<u>78°</u>	°F Gravity		°API D@		°F Corrected Gravity	
RW		@		°F Chlorides		ppm Recovery	Chlorides <u>N/A</u> ppm System

(A) Initial Hydrostatic Mud	<u>285</u>	PSI	Recorder No.	<u>3302</u>	T-On Location	<u>0130</u>
(B) First Initial Flow Pressure	<u>57</u>	PSI	(depth)	<u>577'</u>	T-Started	<u>0959</u>
(C) First Final Flow Pressure	<u>60</u>	PSI	Recorder No.	<u>10991</u>	T-Open	<u>1218</u>
(D) Initial Shut-In Pressure	<u>274</u>	PSI	(depth)	<u>599'</u>	T-Pulled	<u>1518</u>
(E) Second Initial Flow Pressure	<u>81</u>	PSI	Recorder No.		T-Out	<u>1723</u>
(F) Second Final Flow Pressure	<u>60</u>	PSI	(depth)		T-Off Location	<u>1800</u>
(G) Final Shut-in Pressure	<u>280</u>	PSI	Initial Opening	<u>30</u>	Test	<u>✓ 700</u>
(Q) Final Hydrostatic Mud	<u>300</u>	PSI	Initial Shut-in	<u>30</u>	Jars	
			Final Flow	<u>60</u>	Safety Joint	
			Final Shut-in	<u>60</u>	Straddle	

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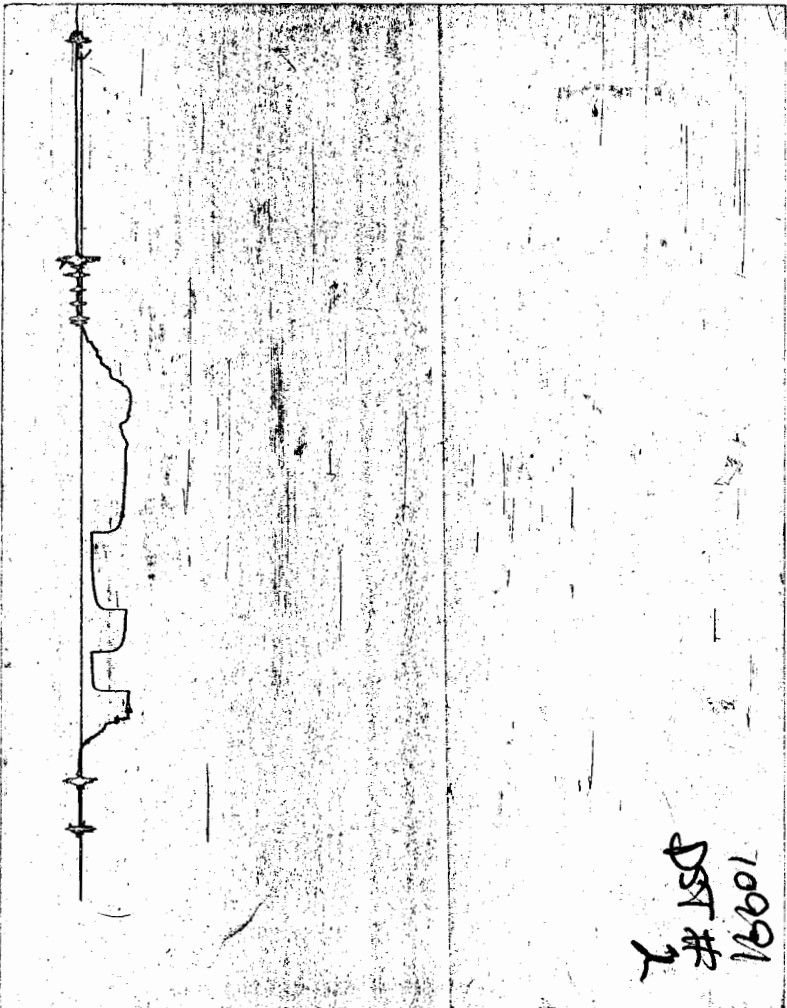
Approved By Frank Mize
Our Representative Darren Stumme

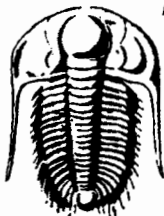
8hrs
120
240
360

Extra Packer
Elec. Rec. ✓ 150
Mileage
Other 8hrs 360
TOTAL PRICE \$ 1210

CHART PAGE

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





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 15729

Test Ticket

Well Name & No. Roberts "A" #1 Test No. #3 Date 06-15-02
 Company Range Oil Company, Inc. 125 N. Market Zone Tested Ireland
 Address Suite 1120 Wichita, KS. 67202 Elevation 1200 KB 1190 GL
 Co. Rep / Geo. Frank Mize Cont. Summit Est. Ft. of Pay Por. %
 Location: Sec. 13 Twp. 19S Rge. 7W Co. Chase State KS
 No. of Copies Distribution Sheet (Y, N) Turnkey (Y, N) Evaluation (Y, N)

Interval Tested 902' - 960' Initial Str Wt./Lbs. 26000 Unseated Str Wt./Lbs. 30000
 Anchor Length 58' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 40,000
 Top Packer Depth 897' Tool Weight 2100
 Bottom Packer Depth 902' Hole Size — 7 7/8" ☒ Rubber Size — 6 3/4" ☒
 Total Depth 960' Wt. Pipe Run N/A Drill Collar Run 308
 Mud Wt. 10.2 LCM Q Vis. 120 WL 10.2 Drill Pipe Size 3 1/2 X 11 Ft. Run 627'
 Blow Description IF: Fair blow built to b.o.b in 50 sec.
ISI: Bled down for 5 mins. No blow back.
FF: Fair blow built to b.o.b in 2 mins.
FSI: Bled down for 5 mins. No blow back.
 Recovery — Total Feet 750 SIP N/A Ft. in DC 278 Ft. in DP 472
 Rec. 60' Feet Of HMCW %gas %oil 55 %water 45 %mud
 Rec. 690' Feet Of Saltwater %gas %oil 90 %water 10 %mud
 Rec. Feet Of %gas %oil %water %mud
 Rec. Feet Of %gas %oil %water %mud
 Rec. Feet Of %gas %oil %water %mud
 BHT 81° °F Gravity °API D@ °F Corrected Gravity °API
 RW @ °F Chlorides ppm Recovery Chlorides 1000 ppm System

	AK-1	Alpine			
(A) Initial Hydrostatic Mud	<u>508</u>	PSI	Recorder No. <u>3302</u>	T-On Location	<u>1900</u>
(B) First Initial Flow Pressure	<u>39</u>	PSI	(depth) <u>903'</u>	T-Started	<u>1954</u>
(C) First Final Flow Pressure	<u>226</u>	PSI	Recorder No. <u>10991</u>	T-Open	<u>2225</u>
(D) Initial Shut-In Pressure	<u>420</u>	PSI	(depth) <u>926'</u>	T-Pulled	<u>0125</u>
(E) Second Initial Flow Pressure	<u>238</u>	PSI	Recorder No. <u> </u>	T-Out	<u>0312</u>
(F) Second Final Flow Pressure	<u>348</u>	PSI	(depth) <u> </u>	T-Off Location	<u>0415</u>
(G) Final Shut-in Pressure	<u>425</u>	PSI	Initial Opening <u>30</u>	Test	<u>✓ 700</u>
(Q) Final Hydrostatic Mud	<u>478</u>	PSI	Initial Shut-in <u>30</u>	Jars	<u> </u>
			Final Flow <u>60</u>	Safety Joint	<u> </u>
			Final Shut-in <u>60</u>	Straddle	<u> </u>
				Circ. Sub	<u> </u>
				Sampler	<u> </u>
				Extra Packer	<u> </u>
				Elec. Rec.	<u>✓ 150</u>
				Mileage	<u> </u>
				Other	<u> </u>
				TOTAL PRICE \$	<u>850</u>

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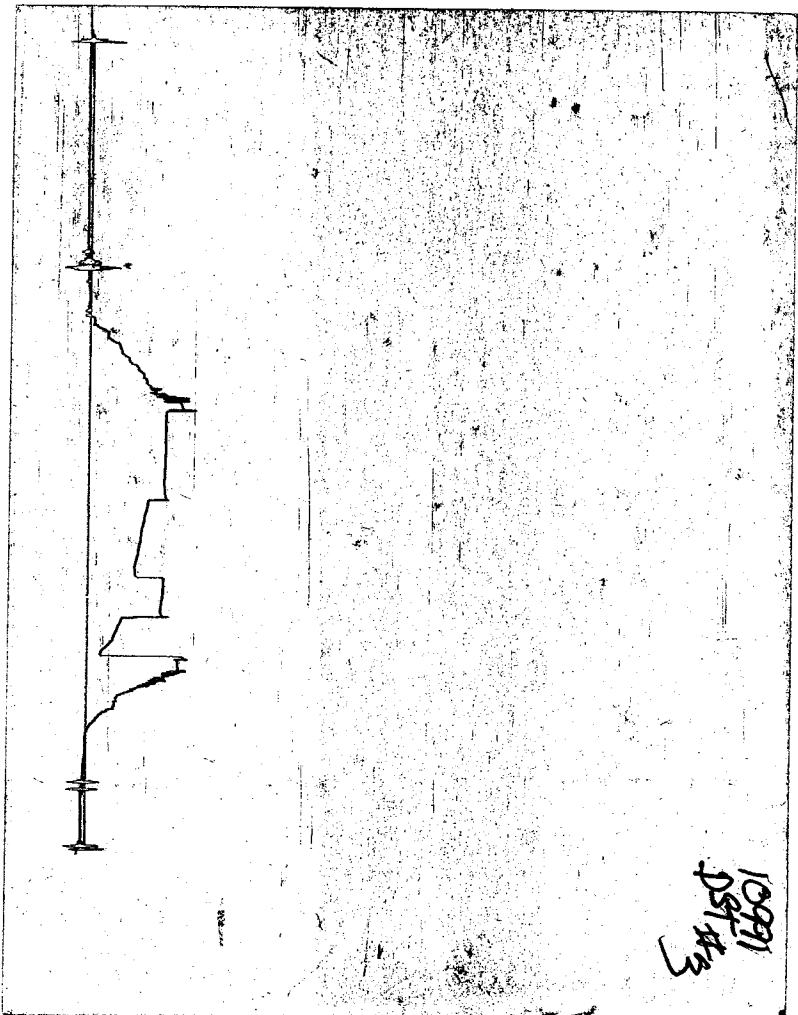
Approved By

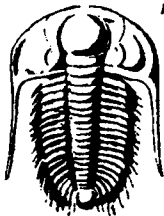
Our Representative

Frank L. Syz
Darren Schmeier

CHART PAGE

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





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 15730

Test Ticket

Well Name & No.	<u>Roberts "A" #1</u>	Test No.	<u>#4</u>	Date	<u>06-16-02</u>
Company	<u>Range Oil Company, Inc 125 N. Market</u>	Zone Tested	<u>Lansing A-B</u>		
Address	<u>Suite 1120 Wichita, KS 67202</u>	Elevation	<u>1200</u>	KB	<u>1190</u> GL
Co. Rep / Geo.	<u>Frank Mize</u>	Cont.	<u>Summit</u>	Est. Ft. of Pay	<u> </u> Por. <u> </u> %
Location: Sec.	<u>13</u>	Twp.	<u>19S</u>	Rge.	<u>7W</u> Co. <u>Chase</u> State <u>KS</u>
No. of Copies	<u>5</u>	Distribution Sheet (Y, N)	<u> </u>	Turnkey (Y, N)	<u> </u> Evaluation (Y, N) <u> </u>

Interval Tested	<u>1134' - 1181'</u>	Initial Str Wt./Lbs.	<u>26000</u>	Unseated Str Wt./Lbs.	<u>26000</u>			
Anchor Length	<u>47'</u>	Wt. Set Lbs.	<u>20,000</u>	Wt. Pulled Loose/Lbs.	<u>40,000</u>			
Top Packer Depth	<u>1129'</u>	Tool Weight	<u>2100</u>					
Bottom Packer Depth	<u>1134'</u>	Hole Size — 7 7/8"	<u>✓</u>	Rubber Size — 6 3/4"	<u>✓</u>			
Total Depth	<u>1181</u>	Wt. Pipe Run	<u>N/A</u>	Drill Collar Run	<u>308</u>			
Mud Wt.	<u>9.7</u> LCM <u>0</u> Vis. <u>4.8</u> WL <u>8.8</u>	Drill Pipe Size	<u>3 1/2 x 11</u>	Ft. Run	<u>1846</u>			
Blow Description	<u>IF: Weak blow h.o.b in 20 min 50 sec. GTS in 20 min 6 sec.</u> <u>ISI: Bled down for 5 mins</u> <u>FF: Strong blow h.o.b in 10 sec. Gauge Gas.</u> <u>FSI: Bled down for 2 mins</u>							
Recovery — Total Feet	<u>30</u>	GIP	<u>1089'</u>	Ft. in DC	<u>30</u>	Ft. in DP	<u>N/A</u>	
Rec.	<u>30</u>	Feet Of	<u>USGCM</u>	<u>6</u> %gas	%oil	%water	<u>94</u> %mud	
Rec.	<u>1089</u>	Feet Of	<u>67P</u>	%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	<u>87°</u>	°F Gravity		°API D@		°F Corrected Gravity		°API
RW		@		°F Chlorides		ppm Recovery	Chlorides <u>1500</u>	ppm System

(A) Initial Hydrostatic Mud	<u>603</u>	PSI Recorder No.	<u>3302</u>	T-On Location	<u>1900</u>	8:20
(B) First Initial Flow Pressure	<u>17</u>	PSI (depth)	<u>1135'</u>	T-Started	<u>1952</u>	
(C) First Final Flow Pressure	<u>18</u>	PSI Recorder No.	<u>10991</u>	T-Open	<u>2254</u>	9:45
(D) Initial Shut-In Pressure	<u>537</u>	PSI (depth)	<u>1147'</u>	T-Pulled	<u>0154</u>	
(E) Second Initial Flow Pressure	<u>19</u>	PSI Recorder No.		T-Out	<u>0320</u>	
(F) Second Final Flow Pressure	<u>19</u>	PSI (depth)		T-Off Location	<u>0445</u>	
(G) Final Shut-in Pressure	<u>533</u>	PSI Initial Opening	<u>30</u>	Test	<u>✓ 70°</u>	
(Q) Final Hydrostatic Mud	<u>581</u>	PSI Initial Shut-in	<u>30</u>	Jars		
		Final Flow	<u>60</u>	Safety Joint		
		Final Shut-in	<u>60</u>	Straddle		

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Approved By Frank S. Mize
Our Representative Lauren Lamerino

Extra Packer
Elec. Rec. ✓ 150
Mileage
Other
TOTAL PRICE \$ 850



GAS VOLUME REPORT

Range Oil Company, Inc. GA
OPERATOR

VOLUME REPORT "A" #1
Roberts
WELL NAME AND NO.

 π_4

POST NO.

Leasing A-B ^{DST NO.}

Initial Flow

Final Flow

[illegible]**Remarks:**

CHART PAGE

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

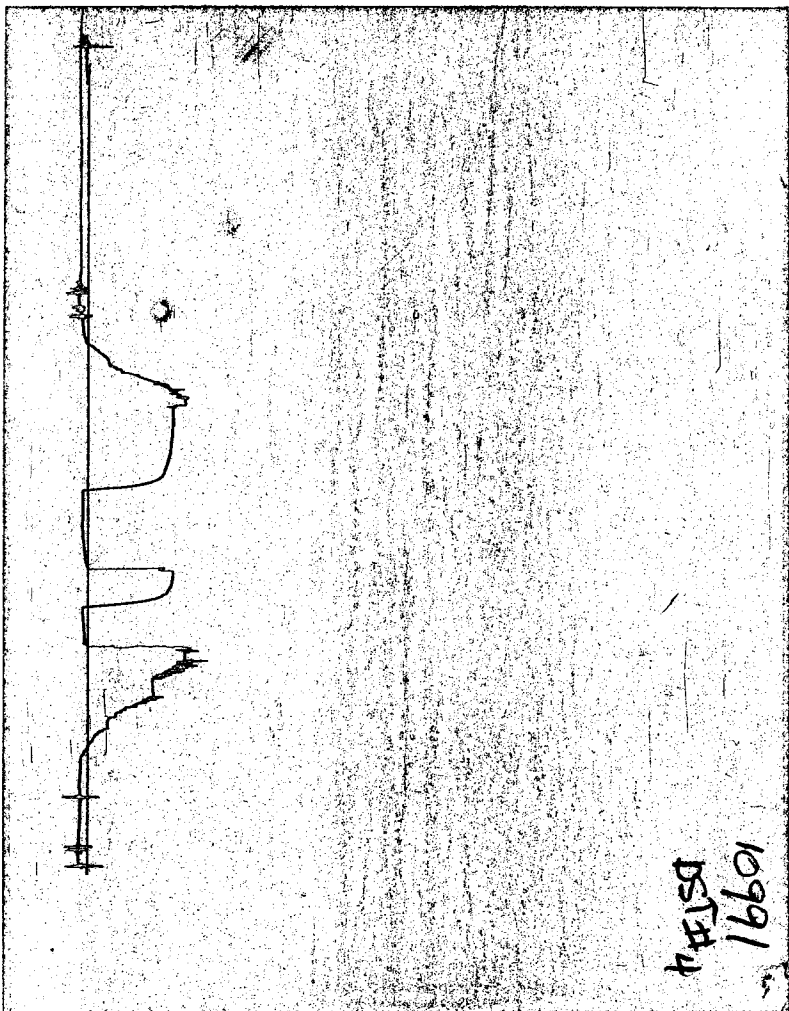


CHART PAGE

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