

**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Bennett & Schulte Oil Co.**

PO Box 329
Russell KS 67665

ATTN: Dave Shumaker

27-12s-16w

Froelich No 9

Start Date: 2005.05.17 @ 12:00:29

End Date: 2005.05.17 @ 19:03:29

Job Ticket #: 22795 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Bennett & Schulte Oil Co.

Froelich No 9

27-12s-16w

DST # 1

ARB

2005.05.17



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Bennett & Schulte Oil Co.

Froelich No 9

PO Box 329
Russell KS 67665

27-12s-16w

Job Ticket: 22795

DST#: 1

ATTN: Dave Shumaker

Test Start: 2005.05.17 @ 12:00:29

GENERAL INFORMATION:

Formation: **ARB**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:47:14

Time Test Ended: 19:03:29

Test Type: Conventional Straddle

Tester: Michael

Unit No: 15

Interval: **3545.00 ft (KB) To 3565.00 ft (KB) (TVD)**

Reference Elevations: 2083.00 ft (KB)

Total Depth: 3610.00 ft (KB) (TVD)

2075.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8166

Inside

Press@RunDepth: 1073.90 psig @ 3546.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2005.05.17

End Date:

2005.05.17

Last Calib.: 2005.05.17

Start Time: 12:00:30

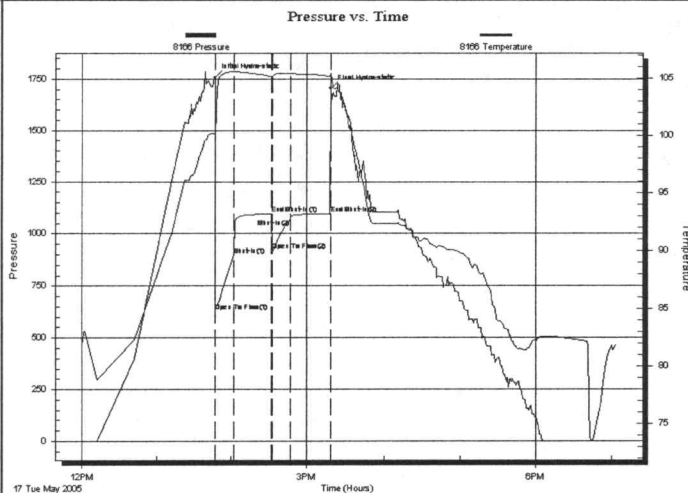
End Time:

19:03:29

Time On Btm: 2005.05.17 @ 13:46:59

Time Off Btm: 2005.05.17 @ 15:18:14

TEST COMMENT: IF- Bottom of the bucket in 30 s
IS- No blow
FF- Bottom of the bucket in 30s



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1756.81	100.14	Initial Hydro-static
1	625.85	99.74	Open To Flow (1)
15	896.60	105.50	Shut-In(1)
46	1094.96	105.10	End Shut-In(1)
46	916.70	105.01	Open To Flow (2)
60	1073.90	105.39	Shut-In(2)
91	1095.02	105.14	End Shut-In(2)
92	1703.49	105.35	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
420.00	Muddy w atery oil 40%o 30%w 30%m	5.89
360.00	Oily w ater 20%o 80% w	5.05
180.00	Oily w ater 5%o 95%w	2.52
1320.00	Water 32000 c	18.52

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Bennett & Schulte Oil Co.

Froelich No 9

PO Box 329
Russell KS 67665

27-12s-16w

Job Ticket: 22795

DST#: 1

ATTN: Dave Shumaker

Test Start: 2005.05.17 @ 12:00:29

Tool Information

Drill Pipe:	Length: 3534.00 ft	Diameter: 3.80 inches	Volume: 49.57 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: lb
			<u>Total Volume: 49.57 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 34000.00 lb
Depth to Top Packer:	3545.00 ft			Final lb
Depth to Bottom Packer:	3565.00 ft			
Interval between Packers:	20.00 ft			
Tool Length:	78.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3530.00	
Shut In Tool	5.00			3535.00	
Hydraulic tool	5.00			3540.00	
Packer	5.00			3545.00	16.00 Bottom Of Top Packer
Stubb	1.00			3546.00	
Recorder	0.00	8166	Inside	3546.00	
Perforations	15.00			3561.00	
Recorder	0.00	11020	Outside	3561.00	
Blank Off Sub	1.00			3562.00	
Blank Spacing	3.00			3565.00	20.00 Tool Interval
Packer	0.00			3565.00	
Stubb	1.00			3566.00	
Perforations	5.00			3571.00	
Change Over Sub	1.00			3572.00	
Drill Pipe	31.00			3603.00	
Change Over Sub	1.00			3604.00	
Recorder	0.00	11090	Below	3604.00	
Bullnose	3.00			3607.00	42.00 Bottom Packers & Anchor

Total Tool Length: 78.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Bennett & Schulte Oil Co.

Froelich No 9

PO Box 329
Russell KS 67665

27-12s-16w

Job Ticket: 22795

DST#: 1

ATTN: Dave Shumaker

Test Start: 2005.05.17 @ 12:00:29

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
420.00	Muddy watery oil 40%o 30%w 30%m	5.891
360.00	Oily water 20%o 80% w	5.050
180.00	Oily water 5%o 95%w	2.525
1320.00	Water 32000 c	18.516

Total Length: 2280.00 ft

Total Volume: 31.982 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

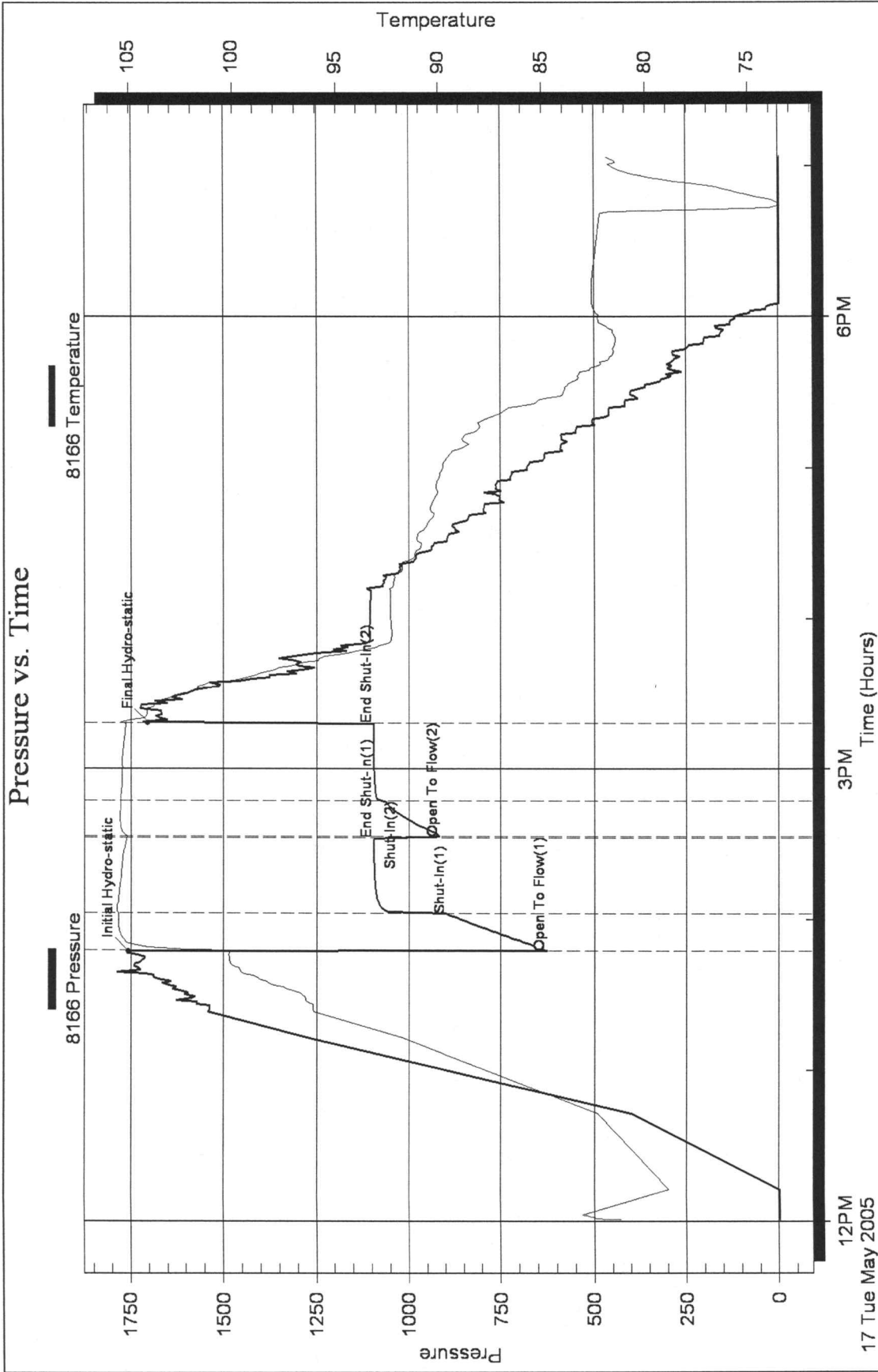
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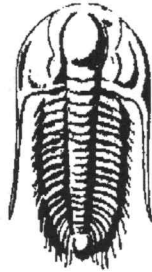
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Bennett & Schulte Oil Co.**

PO Box 329
Russell KS 67665

ATTN: Dave Shumaker

27-12s-16w

Froelich No 9

Start Date: 2005.05.17 @ 19:30:22

End Date: 2005.05.18 @ 02:34:52

Job Ticket #: 22796 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Bennett & Schulte Oil Co.

Froelich No 9

27-12s-16w

DST # 2

ARB

2005.05.17



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Bennett & Schulte Oil Co.

Froelich No 9

PO Box 329
Russell KS 67665

27-12s-16w

Job Ticket: 22796

DST#: 2

ATTN: Dave Shumaker

Test Start: 2005.05.17 @ 19:30:22

GENERAL INFORMATION:

Formation: **ARB**

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

Time Tool Opened: 21:51:37

Time Test Ended: 02:34:52

Test Type: **Conventional Straddle**

Tester: **Michael**

Unit No: **15**

Interval: **3537.00 ft (KB) To 3548.00 ft (KB) (TVD)**

Reference Elevations: **2083.00 ft (KB)**

Total Depth: **3607.00 ft (KB) (TVD)**

2075.00 ft (CF)

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

KB to GR/CF: **8.00 ft**

Serial #: 8166

Inside

Press@RunDepth: **1084.57 psig @ 3538.00 ft (KB)**

Capacity: **7000.00 psig**

Start Date: **2005.05.17**

End Date: **2005.05.18**

Last Calib.: **2005.05.18**

Start Time: **19:30:23**

End Time: **02:34:52**

Time On Btm: **2005.05.17 @ 21:51:07**

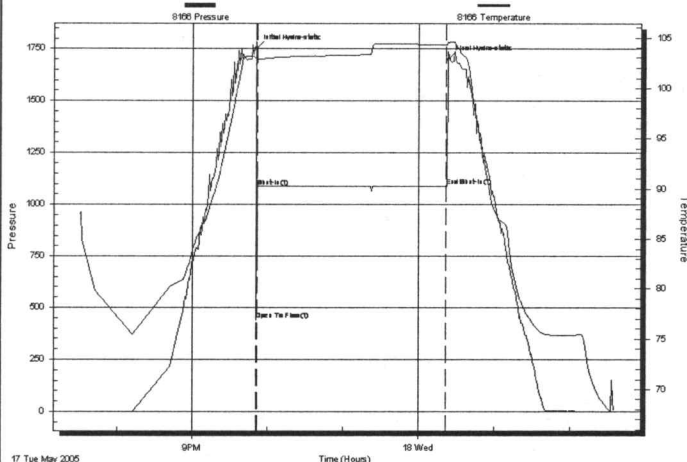
Time Off Btm: **2005.05.18 @ 00:23:07**

TEST COMMENT: **IF-Started at 1/2 10m weakened to 1/4m Then surface blow 5 m died 28 m**

IS- No blow

FF- No blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1752.40	102.87	Initial Hydro-static
1	440.06	102.23	Open To Flow (1)
1	1084.57	102.71	Shut-In(1)
151	1090.88	104.29	End Shut-In(1)
152	1699.96	104.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Very slight oil cut mud	0.21

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Bennett & Schulte Oil Co.

Froelich No 9

PO Box 329
Russell KS 67665

27-12s-16w

Job Ticket: 22796

DST#: 2

ATTN: Dave Shumaker

Test Start: 2005.05.17 @ 19:30:22

Tool Information

Drill Pipe:	Length: 3534.00 ft	Diameter: 3.80 inches	Volume: 49.57 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 40000.00 lb
			<u>Total Volume: 49.57 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 34000.00 lb
Depth to Top Packer:	3537.00 ft			Final 34000.00 lb
Depth to Bottom Packer:	3548.00 ft			
Interval between Packers:	11.00 ft			
Tool Length:	91.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3517.00	
Shut In Tool	5.00			3522.00	
Hydraulic tool	5.00			3527.00	
Packer	5.00			3532.00	21.00 Bottom Of Top Packer
Packer	5.00			3537.00	
Stubb	1.00			3538.00	
Recorder	0.00	8166	Inside	3538.00	
Perforations	6.00			3544.00	
Recorder	0.00	11020	Outside	3544.00	
Blank Off Sub	1.00			3545.00	
Blank Spacing	3.00			3548.00	11.00 Tool Interval
Packer	0.00			3548.00	
Stubb	1.00			3549.00	
Perforations	22.00			3571.00	
Change Over Sub	1.00			3572.00	
Drill Pipe	31.00			3603.00	
Change Over Sub	1.00			3604.00	
Recorder	0.00	11090	Below	3604.00	
Bullnose	3.00			3607.00	59.00 Bottom Packers & Anchor

Total Tool Length: 91.00



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FLUID SUMMARY

Bennett & Schulte Oil Co.

Froelich No 9

PO Box 329
Russell KS 67665

27-12s-16w

Job Ticket: 22796

DST#: 2

ATTN: Dave Shumaker

Test Start: 2005.05.17 @ 19:30:22

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	Very slight oil cut mud	0.210

Total Length: 15.00 ft

Total Volume: 0.210 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

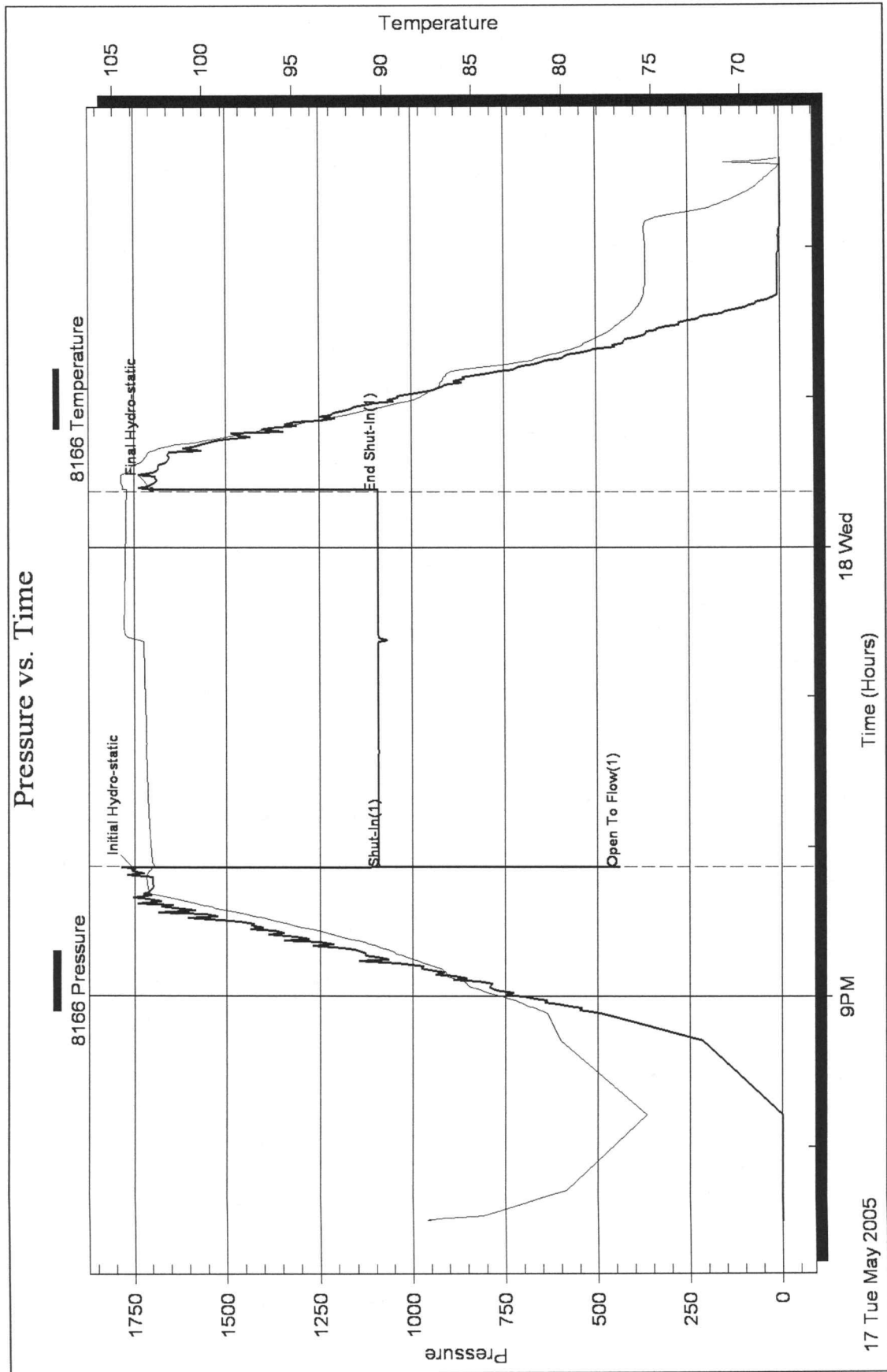
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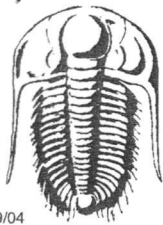
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

IMV
7487

No 22795

Test Ticket

Well Name & No. Froelich No 9 Test No. 1 Date 5-17-05
 Company Bennett & Schulte Oil Co. Zone Tested ARB
 Address PO Box 329 Russell, KS 67665 Elevation 2083 KB 2025 GL
 Co. Rep / Geo. Dave Shumaker Cont. Vonfeldt Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 27 Twp. 12s Rge. 16 Co. Ellis State KS
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3545 - 3565 Initial Str Wt./Lbs. 34000 Unseated Str Wt./Lbs. 45000
 Anchor Length 20 Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 42000
 Top Packer Depth 3545 Tool Weight 2000
 Bottom Packer Depth 3565 Hole Size 7 7/8" Rubber Size 6 3/4"
 Total Depth 3607 Wt. Pipe Run 0 Drill Collar Run 0
 Mud Wt. 9.2 LCM 1/2 # Vis. 58 WL 8.2 Drill Pipe Size 4 1/2 Ft. Run 3539
 Blow Description IF - Bottom of Bucket 30 seconds

ISI No blow back
FF Bottom of bucket 30s
FS - No blow back

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
Rec. <u>420</u>	Feet of <u>Muddy watery Oil</u>	%gas <u>40</u> %oil <u>30</u> %water <u>30</u> %mud	
Rec. <u>360</u>	Feet of <u>oily water</u>	%gas <u>20</u> %oil <u>80</u> %water %mud	
Rec. <u>180</u>	Feet of <u>oily water</u>	%gas <u>5</u> %oil <u>95</u> %water %mud	
Rec. <u>1320</u>	Feet of <u>Water 32,000 ch</u>	%gas %oil <u>100</u> %water %mud	
Rec. _____	Feet of _____	%gas %oil %water %mud	

BHT 105 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides _____ ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		<u>1757</u> PSI	<u>8166</u>	_____
(B) First Initial Flow Pressure		<u>626</u> PSI	(depth) <u>3546</u>	Jars _____
(C) First Final Flow Pressure		<u>897</u> PSI	Recorder No. <u>11020</u>	Safety Jt. _____
(D) Initial Shut-In Pressure		<u>1095</u> PSI	(depth) <u>3561</u>	Circ Sub _____
(E) Second Initial Flow Pressure		<u>917</u> PSI	Recorder No. <u>10991</u>	Sampler _____
(F) Second Final Flow Pressure		<u>1074</u> PSI	(depth) <u>3604</u>	Straddle <input checked="" type="checkbox"/>
(G) Final Shut-In Pressure		<u>1095</u> PSI	Initial Opening <u>15</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud		<u>1703</u> PSI	Initial Shut-In <u>30</u>	Shale Packer _____
			Final Flow <u>15</u>	Ruined Packer _____
			Final Shut-In <u>30</u>	Mileage <u>42</u>
			T-On Location <u>10:30</u>	Sub Total: <u>1242</u>
			T-Started <u>12:00</u>	Std. By _____
			T-Open <u>13:47</u>	Other _____
			T-Pulled <u>15:17</u>	Total: _____
			T-Out _____	

TRILOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGED 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 _____
 Our Representative Michael Armbrister

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

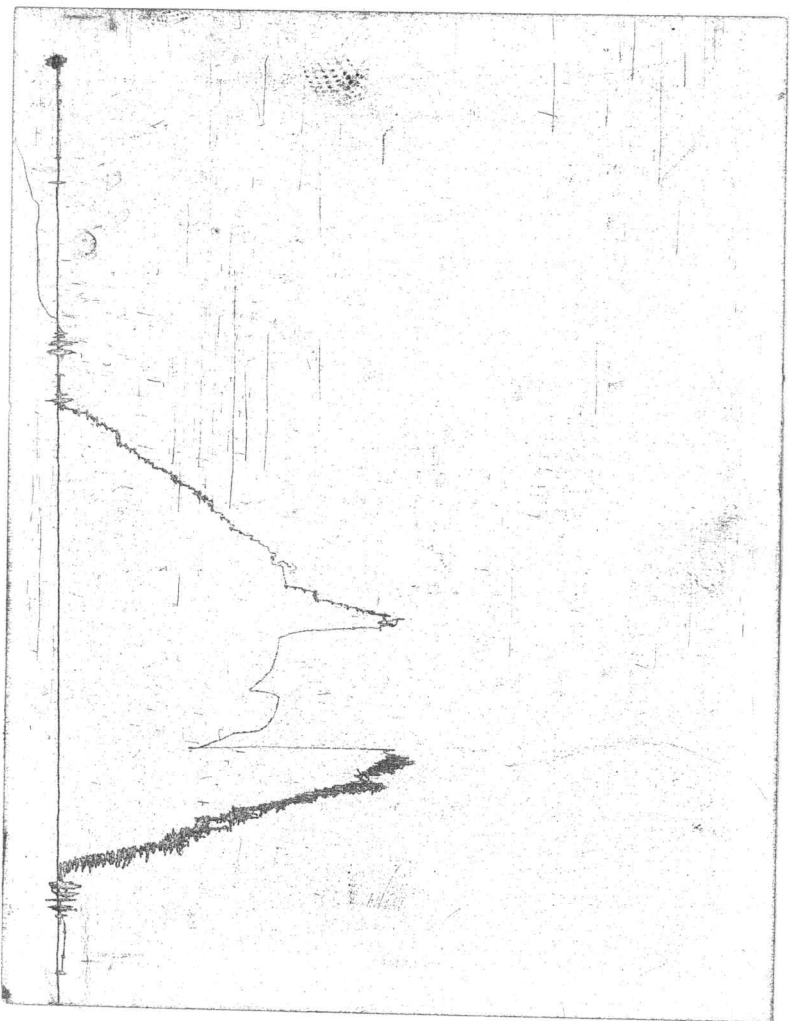


CHART PAGE

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

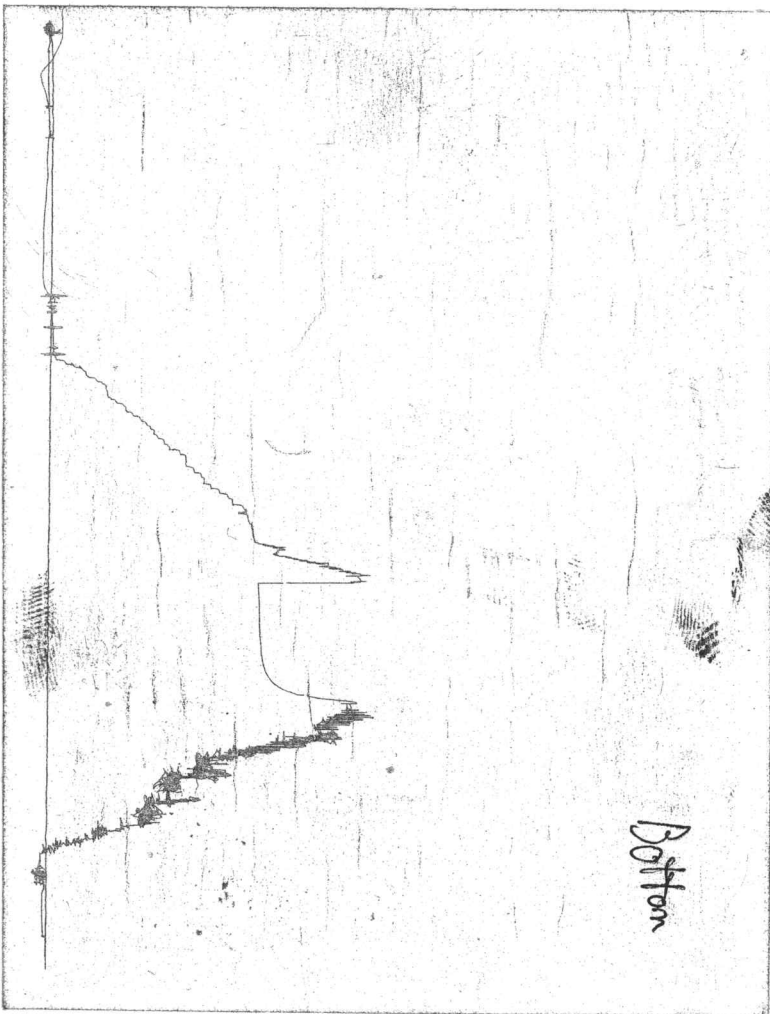


CHART PAGE
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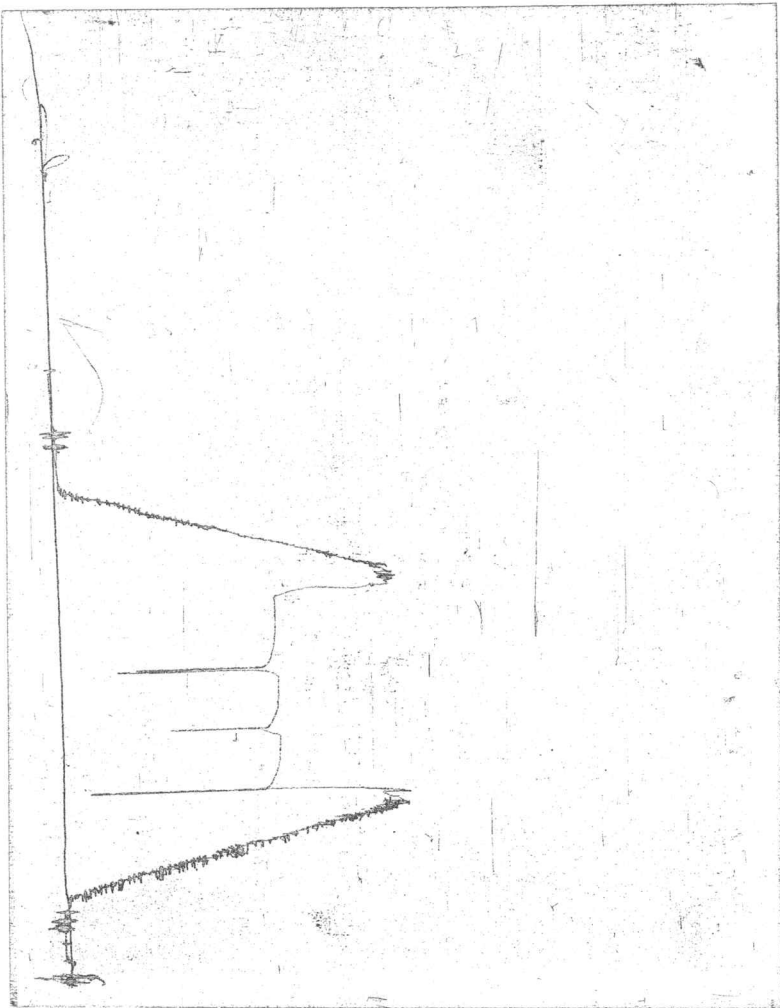
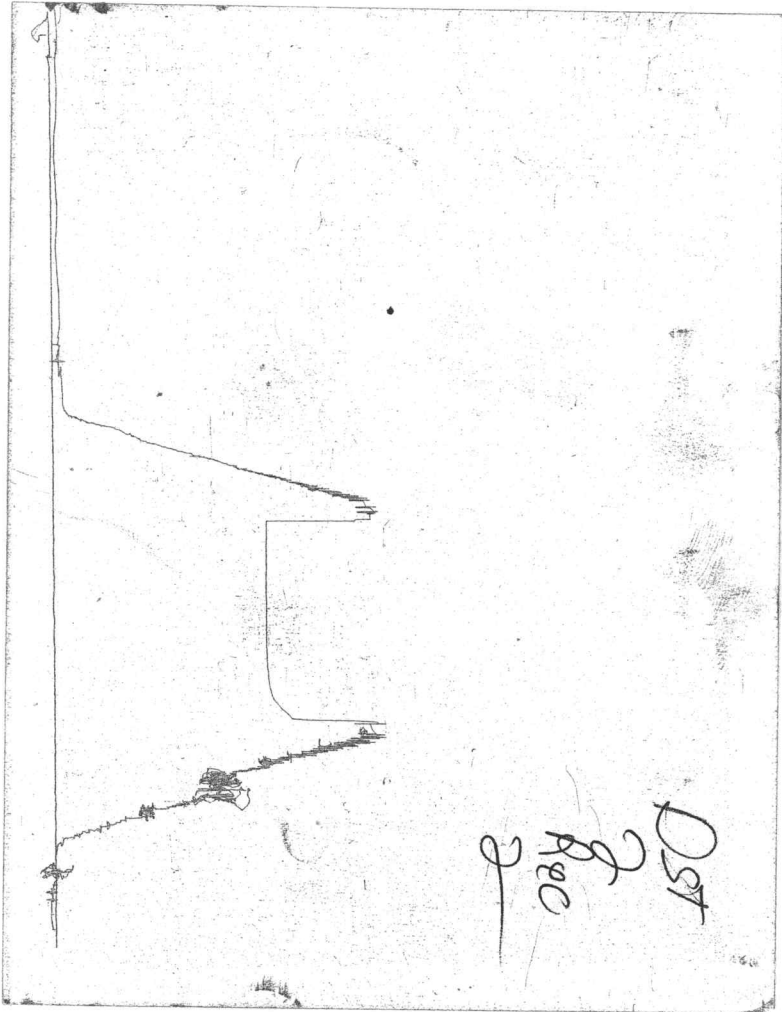
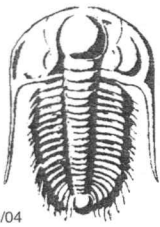


CHART PAGE

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





TRILOBITE TESTING INC.

No 22796

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

Well Name & No. Froelich No 9 Test No. 2 Date 5-17-05
 Company Bennett & Schulte Oil Co. Zone Tested ARB
 Address PO Box 329 Russell KS 67645 Elevation 2083 KB 2075 GL
 Co. Rep / Geo. Dave Shumaker Cont. Vonfeldt Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 27 Twp. 12s Rge. 16w Co. Ellis State KS
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3537 - 3548 Initial Str Wt./Lbs. 34,000 Unseated Str Wt./Lbs. 34,000
 Anchor Length 11 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 40,000
 Top Packer Depth 3537 Tool Weight 2000
 Bottom Packer Depth 3548 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓
 Total Depth 3607 Wt. Pipe Run 0 Drill Collar Run 0
 Mud Wt. 9.2 LCM 1/2 Vis. 58 WL 8.2 Drill Pipe Size 4 1/2 Ft. Run 3534
 Blow Description IF - started 1/2" 10m then 1/4" 10m then surface 5m - died 28m
ISI - No Blow
FF - No blow

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
Rec. <u>15</u>	Feet of <u>very slight oil cut mud</u>	%gas	%oil
Rec. _____	Feet of _____	%gas	%oil
Rec. _____	Feet of _____	%gas	%oil
Rec. _____	Feet of _____	%gas	%oil
Rec. _____	Feet of _____	%gas	%oil
BHT <u>104</u>	°F Gravity	°API D @	°F Corrected Gravity
RW _____	@ _____ °F	Chlorides _____ ppm	Recovery _____ Chlorides _____ ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>Plugged</u>	<u>1752</u> PSI	<u>8166</u>	<u>940</u>
(B) First Initial Flow Pressure		<u>440</u> PSI	(depth) <u>3538</u>	Jars _____
(C) First Final Flow Pressure	<u>Tool</u>	PSI	Recorder No. <u>11020</u>	Safety Jt. _____
(D) Initial Shut-In Pressure		<u>1085</u> PSI	(depth) <u>3544</u>	Circ Sub _____
(E) Second Initial Flow Pressure		<u>1091</u> PSI	Recorder No. <u>10991</u>	Sampler _____
(F) Second Final Flow Pressure		PSI	(depth) <u>3604</u>	Straddle <u>✓</u> <u>250</u>
(G) Final Shut-In Pressure		PSI	Initial Opening <u>45</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud		<u>1700</u> PSI	Initial Shut-In <u>45</u>	Shale Packer _____
			Final Flow <u>30</u>	Ruined Packer _____
			Final Shut-In <u>30</u>	Mileage <u>42</u> <u>1200</u>

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Approved By Dave Shumaker
 Our Representative Michael Armbrister

T-On Location
 T-Started _____ Std. By _____
 T-Open 21:50 21:50 Other _____
 T-Pulled 12:20 Total: _____
 T-Out _____