

DRILL STEM TEST REPORT

Prepared For: **ESP Development**

17746 177th Boulevard
Paradise Ks 67658

ATTN: Bud Eulert

3-11-15-Russell-Ks

Eulert East #2

Start Date: 2004.02.12 @ 02:25:45

End Date: 2004.02.12 @ 09:37:15

Job Ticket #: 18243 DST #: 1

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

ESP Development

17746 177th Boulevard
Paradise Ks 67658

ATTN: Bud Eulert

Eulert East #2

3-11-15-Russell-Ks

Job Ticket: 18243

DST#: 1

Test Start: 2004.02.12 @ 02:25:45

GENERAL INFORMATION:

Formation: "D" LKC

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:47:30

Time Test Ended: 09:37:15

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: 3009.00 ft (KB) To 3028.00 ft (KB) (TVD)

Total Depth: 3028.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1821.00 ft (KB)

1816.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6770 Inside

Press@RunDepth: 56.85 psig @ 3010.00 ft (KB)

Start Date: 2004.02.12

End Date:

2004.02.12

Start Time: 02:25:46

End Time:

09:37:15

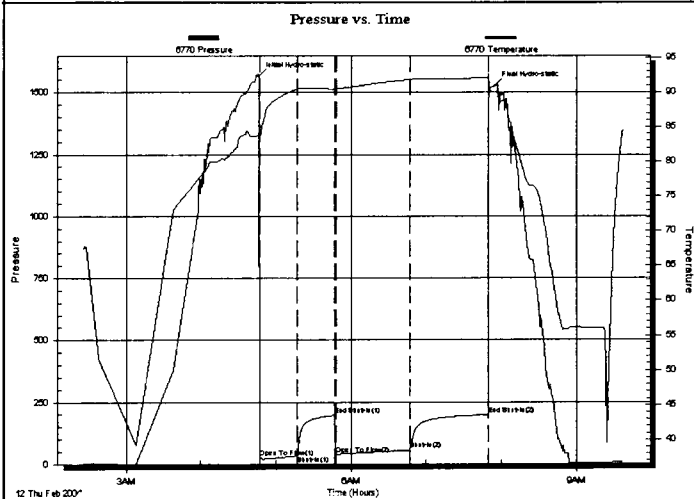
Capacity: 7000.00 psig

Last Calib.: 2004.02.12

Time On Btm: 2004.02.12 @ 04:46:45

Time Off Btm: 2004.02.12 @ 07:55:00

TEST COMMENT: IF-Strong BOB in 3 min
FF-Strong BOB in 3 min
Times-30-30-60-60



PRESSURE SUMMARY

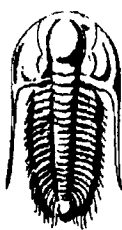
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1568.33	83.82	Initial Hydro-static
1	25.64	83.26	Open To Flow (1)
30	32.47	90.46	Shut-In(1)
60	196.17	90.47	End Shut-In(1)
62	37.96	90.57	Open To Flow (2)
120	56.85	91.81	Shut-In(2)
183	198.02	92.06	End Shut-In(2)
189	1527.50	90.04	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	Mdy Wtr	1.26
0.00	1240 GIP	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

ESP Development

17746 177th Boulevard
Paradise Ks 67658

ATTN: Bud Eulert

Eulert East #2

3-11-15-Russell-Ks

Job Ticket: 18243

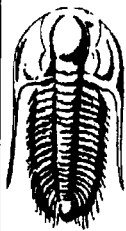
DST#: 1

Test Start: 2004.02.12 @ 02:25:45

Tool Information

Drill Pipe:	Length: 3011.00 ft	Diameter: 3.80 inches	Volume: 42.24 bbl	Tool Weight:	1200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	40000.00 lb
			Total Volume: 42.24 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial	36000.00 lb
Depth to Top Packer:	3009.00 ft			Final	36000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	19.00 ft				
Tool Length:	40.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			2989.00	
Shut In Tool	5.00			2994.00	
Hydraulic tool	5.00			2999.00	
Packer	5.00			3004.00	21.00 Bottom Of Top Packer
Packer	5.00			3009.00	
Stubb	1.00			3010.00	
Recorder	0.00	6770	Inside	3010.00	
Perforations	15.00			3025.00	
Recorder	0.00	13254	Outside	3025.00	
Bullnose	3.00			3028.00	19.00 Bottom Packers & Anchor
Total Tool Length:		40.00			



TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

ESP Development

Eulert East #2

17746 177th Boulevard
Paradise Ks 67658

3-11-15-Russell-Ks

Job Ticket: 18243

DST#: 1

ATTN: Bud Eulert

Test Start: 2004.02.12 @ 02:25:45

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: 46.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	Mdy Wtr	1.262
0.00	1240 GIP	0.000

Total Length: 90.00 ft

Total Volume: 1.262 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

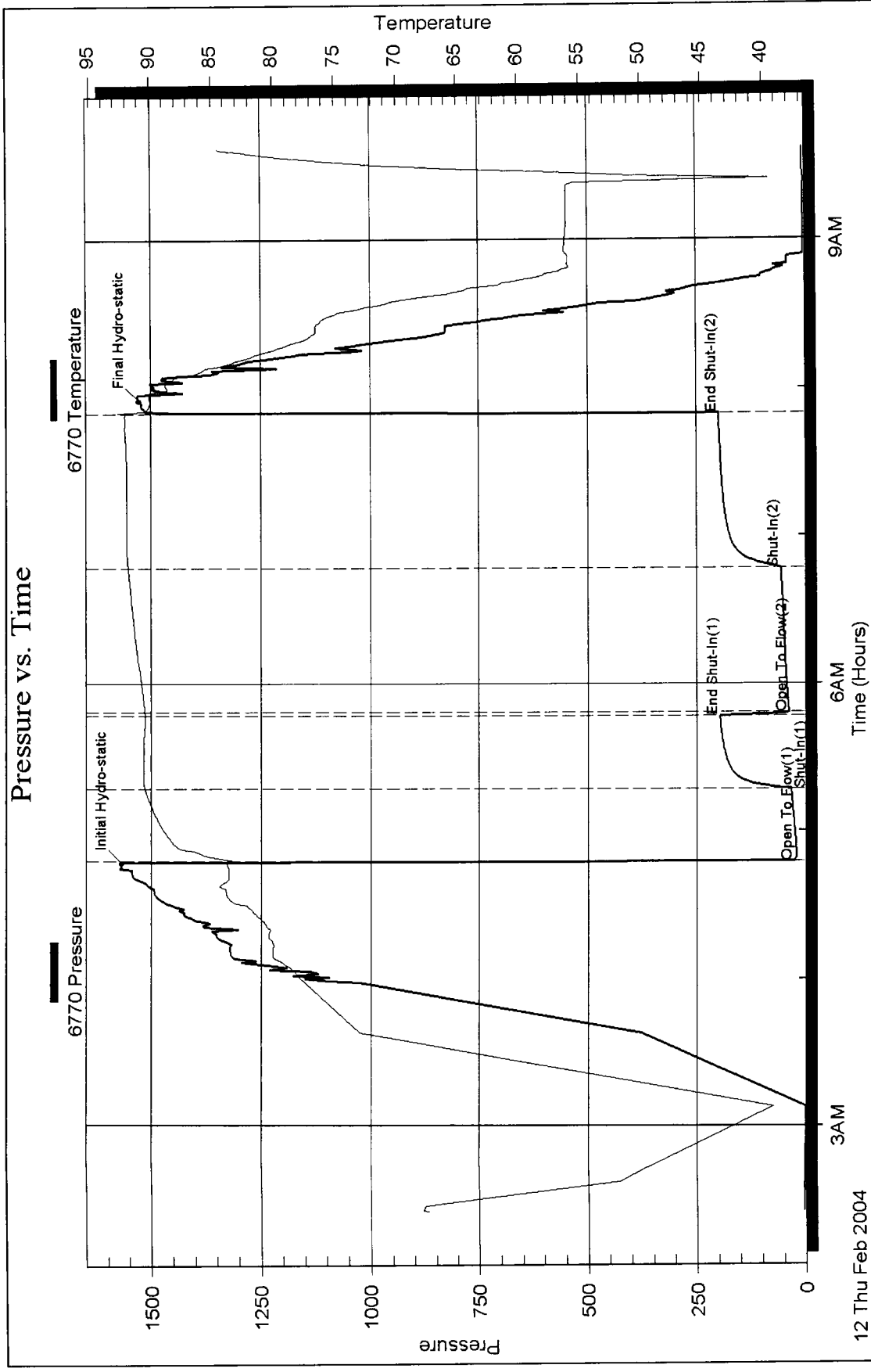
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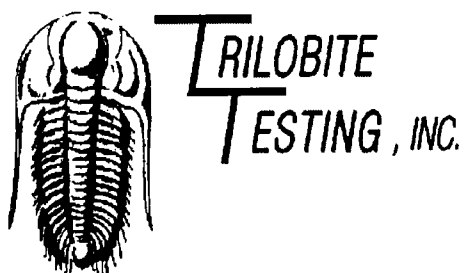
Inside

ESP Development

3-11-15-Russell-Ks

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **ESP Development**

17746 177th Boulevard
Paradise Ks 67658

ATTN: Bud Eulert

3-11-15-Russell-Ks

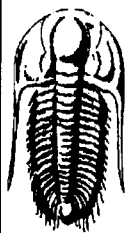
Eulert East #2

Start Date: 2004.02.12 @ 19:50:06

End Date: 2004.02.13 @ 02:07:21

Job Ticket #: 18244 DST #: 2

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



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TESTING, INC**

DRILL STEM TEST REPORT

ESP Development

17746 177th Boulevard
Paradise Ks 67658

ATTN: Bud Eulert

Eulert East #2

3-11-15-Russell-Ks

Job Ticket: 18244

DST#: 2

Test Start: 2004.02.12 @ 19:50:06

GENERAL INFORMATION:

Formation: **F-G LKC**

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

Time Tool Opened: 21:36:06

Time Test Ended: 02:07:21

Test Type: **Conventional Bottom Hole**

Tester: **Dan Bangle**

Unit No: **21**

Interval: **3037.00 ft (KB) To 3085.00 ft (KB) (TVD)**

Total Depth: **3085.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **1821.00 ft (KB)**

1816.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 6770

Inside

Press@RunDepth: **328.04 psig @ 3038.00 ft (KB)**

Start Date: **2004.02.12**

End Date:

2004.02.13

Capacity: **7000.00 psig**

Last Calib.: **2004.02.13**

Start Time: **19:50:07**

End Time:

02:07:21

Time On Btm: **2004.02.12 @ 21:35:06**

Time Off Btm: **2004.02.12 @ 23:54:36**

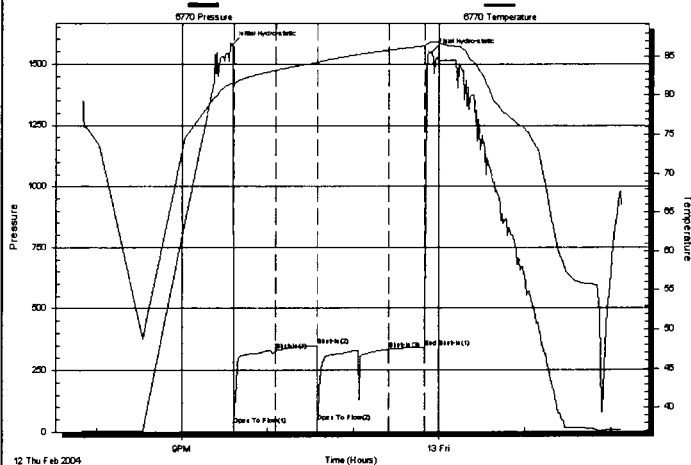
TEST COMMENT: **IF-Weak building to 1 1/2"**

FF-Weak steady surface blow

Times-30-30-30-45

Plugged Tool

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1577.66	81.54	Initial Hydro-static
1	25.31	81.20	Open To Flow (1)
31	328.04	83.22	Shut-In(1)
60	349.71	84.21	Shut-In(2)
61	39.05	84.14	Open To Flow (2)
110	334.44	85.79	Shut-In(3)
135	342.11	86.32	End Shut-In(1)
140	1546.41	86.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud	0.42

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

ESP Development

Eulert East #2

17746 177th Boulevard
Paradise Ks 67658

3-11-15-Russell-Ks

Job Ticket: 18244

DST#: 2

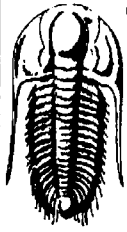
ATTN: Bud Eulert

Test Start: 2004.02.12 @ 19:50:06

Tool Information

Drill Pipe:	Length:	3042.00 ft	Diameter:	3.80 inches	Volume:	42.67 bbl	Tool Weight:	1200.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:	40000.00 lb
					Total Volume:	42.67 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	26.00 ft							
Depth to Top Packer:	3037.00 ft							
Depth to Bottom Packer:	ft							
Interval between Packers:	48.00 ft							
Tool Length:	69.00 ft							
Number of Packers:	2	Diameter:	6.75 inches					
Tool Comments:								
Plugged tool								

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3017.00	
Shut In Tool	5.00			3022.00	
Hydraulic tool	5.00			3027.00	
Packer	5.00			3032.00	21.00 Bottom Of Top Packer
Packer	5.00			3037.00	
Stubb	1.00			3038.00	
Recorder	0.00	6770	Inside	3038.00	
Perforations	44.00			3082.00	
Recorder	0.00	13254	Outside	3082.00	
Bullnose	3.00			3085.00	48.00 Bottom Packers & Anchor
Total Tool Length:	69.00				



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DRILL STEM TEST REPORT

FLUID SUMMARY

ESP Development

Eulert East #2

17746 177th Boulevard
Paradise Ks 67658

3-11-15-Russell-Ks

Job Ticket: 18244

DST#: 2

ATTN: Bud Eulert

Test Start: 2004.02.12 @ 19:50:06

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: 49.00 sec/qt

Cushion Volume:

bbl

Water Loss: 11.97 in³

Gas Cushion Type:

Gas Cushion Pressure:

psig

Resistivity: ohm.m

Salinity: 6000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Mud	0.421

Total Length: 30.00 ft

Total Volume: 0.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

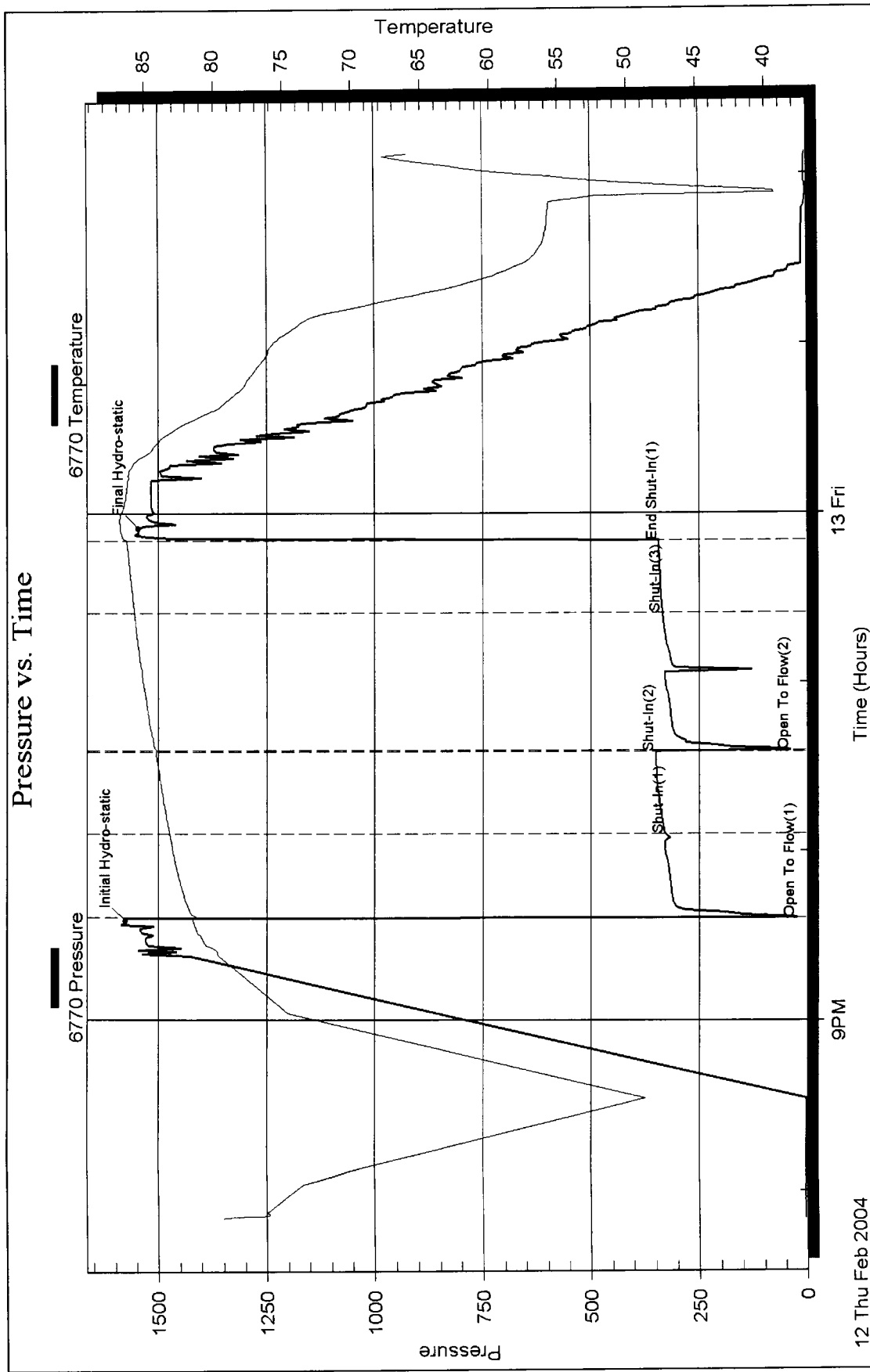
Serial #: 6770

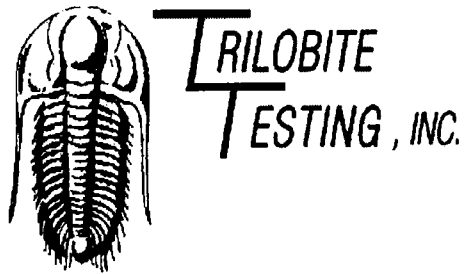
Inside

ESP Development

3-11-15-Russell-Ks

DST Test Number: 2





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Prepared For: **ESP Development**

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ATTN: Bud Eulert

3-11-15-Russell-Ks

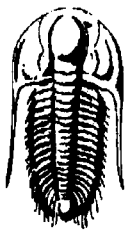
Eulert East #2

Start Date: 2004.02.13 @ 22:35:13

End Date: 2004.02.14 @ 05:39:58

Job Ticket #: 18245 DST #: 3

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DRILL STEM TEST REPORT

ESP Development

17746 177th Boulevard
Paradise Ks 67658

ATTN: Bud Eulert

Eulert East #2

3-11-15-Russell-Ks

Job Ticket: 18245

DST#: 3

Test Start: 2004.02.13 @ 22:35:13

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:13:13

Time Test Ended: 05:39:58

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: **3251.00 ft (KB) To 3288.00 ft (KB) (TVD)**

Total Depth: 3288.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1821.00 ft (KB)

1816.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6770

Inside

Press@RunDepth: 34.23 psig @ 3252.00 ft (KB)

Start Date: 2004.02.13

End Date:

2004.02.14

Start Time: 22:35:14

End Time:

05:39:58

Capacity: 7000.00 psig

Last Calib.: 2004.02.14

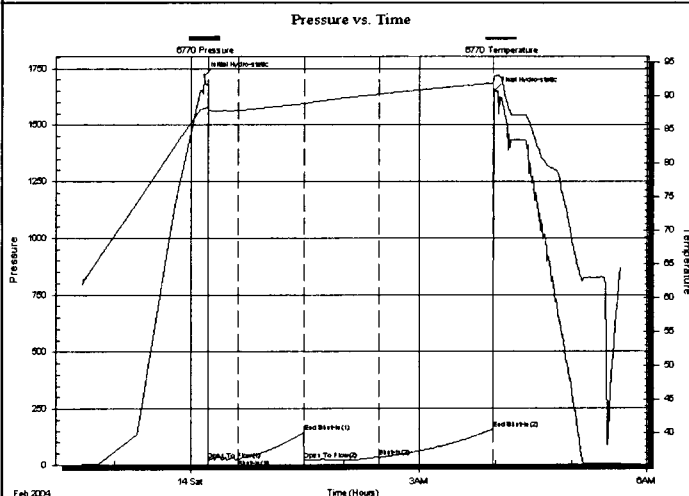
Time On Btm: 2004.02.14 @ 00:10:28

Time Off Btm: 2004.02.14 @ 03:58:43

TEST COMMENT: IF-Weak building to 1/2"

FF-Weak died in 20 min

Times-30-45-60-90



PRESSURE SUMMARY

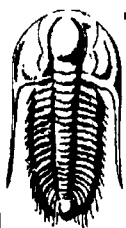
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1719.98	88.11	Initial Hydro-static
3	19.74	87.62	Open To Flow (1)
27	23.32	87.76	Shut-In(1)
79	142.97	88.80	End Shut-In(1)
79	20.48	88.75	Open To Flow (2)
138	34.23	90.20	Shut-In(2)
228	156.75	91.84	End Shut-In(2)
229	1650.99	92.75	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud w/show of oil in tool	0.14

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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DRILL STEM TEST REPORT

TOOL DIAGRAM

ESP Development

17746 177th Boulevard
Paradise Ks 67658

ATTN: Bud Eulert

Eulert East #2

3-11-15-Russell-Ks

Job Ticket: 18245

DST#: 3

Test Start: 2004.02.13 @ 22:35:13

Tool Information

Drill Pipe:	Length: 3261.00 ft	Diameter: 3.80 inches	Volume: 45.74 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 45000.00 lb
			Total Volume: 45.74 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3251.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	37.00 ft			
Tool Length:	58.00 ft			
Number of Packers:	2	Diameter:	6.75 inches	
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3231.00	
Shut In Tool	5.00			3236.00	
Hydraulic tool	5.00			3241.00	
Packer	5.00			3246.00	21.00 Bottom Of Top Packer
Packer	5.00			3251.00	
Stubb	1.00			3252.00	
Recorder	0.00	6770	Inside	3252.00	
Perforations	33.00			3285.00	
Recorder	0.00	13254	Outside	3285.00	
Bullnose	3.00			3288.00	37.00 Bottom Packers & Anchor
Total Tool Length:	58.00				



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DRILL STEM TEST REPORT

FLUID SUMMARY

ESP Development

Eulert East #2

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Paradise Ks 67658

3-11-15-Russell-Ks

Job Ticket: 18245

DST#: 3

ATTN: Bud Eulert

Test Start: 2004.02.13 @ 22:35:13

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: 45.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mud w/show of oil in tool	0.140

Total Length: 10.00 ft

Total Volume: 0.140 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6770

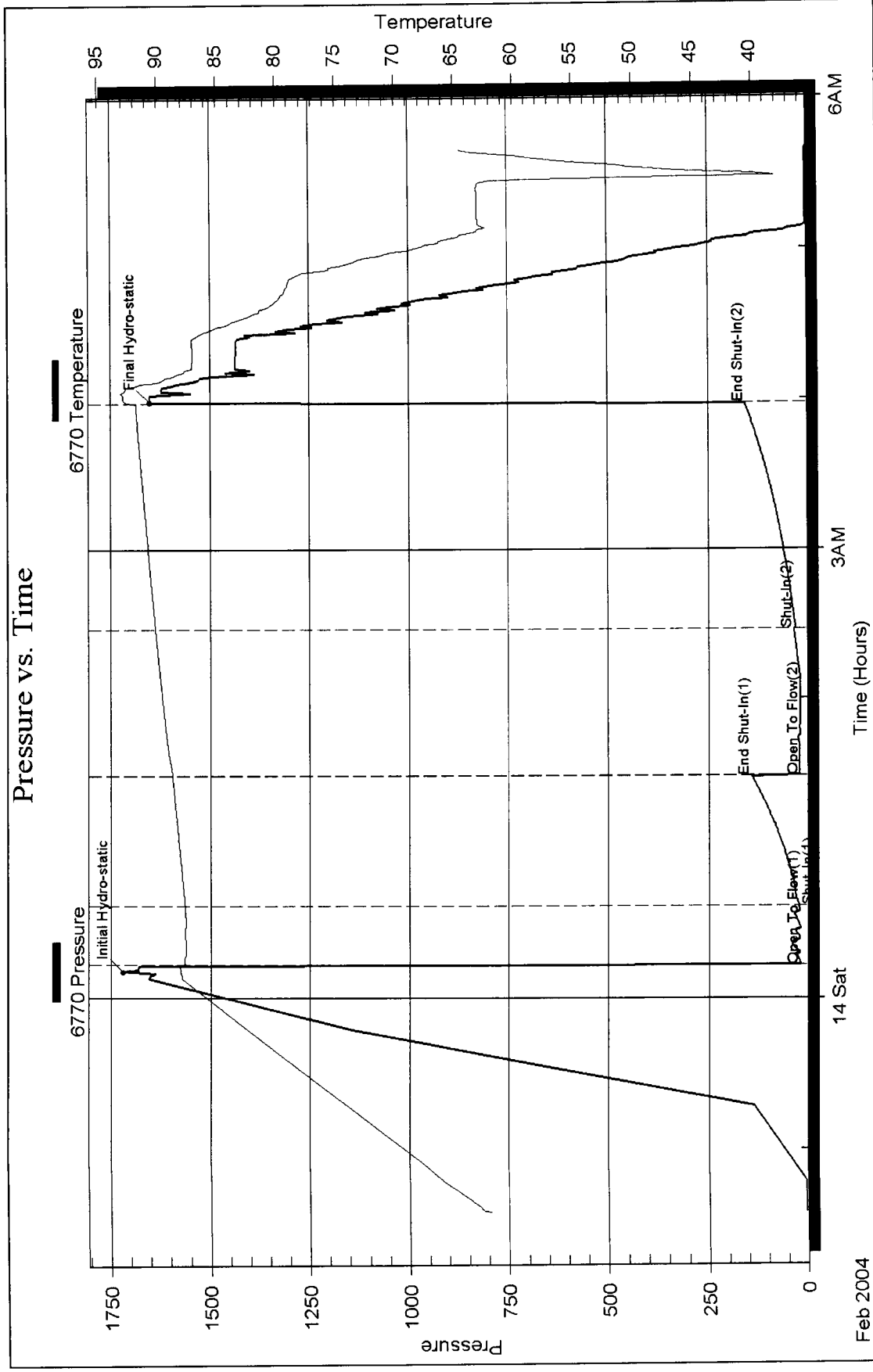
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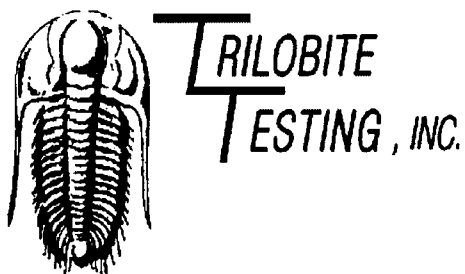
ESP Development

3-11-15-Russell-Ks

DST Test Number: 3

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **ESP Development**

17746 177th Boulevard
Paradise Ks 67658

ATTN: Bud Eulert

3-11-15-Russell-Ks

Eulert East #2

Start Date: 2004.02.14 @ 12:00:54

End Date: 2004.02.14 @ 19:20:39

Job Ticket #: 18246 DST #: 4

Trilobite Testing, Inc
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ph: 785-625-4778 fax: 785-625-5620



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DRILL STEM TEST REPORT

ESP Development

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Paradise Ks 67658

ATTN: Bud Eulert

Eulert East #2

3-11-15-Russell-Ks

Job Ticket: 18246

DST#: 4

Test Start: 2004.02.14 @ 12:00:54

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:46:54

Time Test Ended: 19:20:39

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: **3251.00 ft (KB) To 3293.00 ft (KB) (TVD)**

Total Depth: 3293.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1821.00 ft (KB)

1816.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6770

Inside

Press@RunDepth: 45.48 psig @ 3252.00 ft (KB)

Start Date: 2004.02.14

End Date:

2004.02.14

Start Time: 12:00:55

End Time:

19:20:39

Capacity: 7000.00 psig

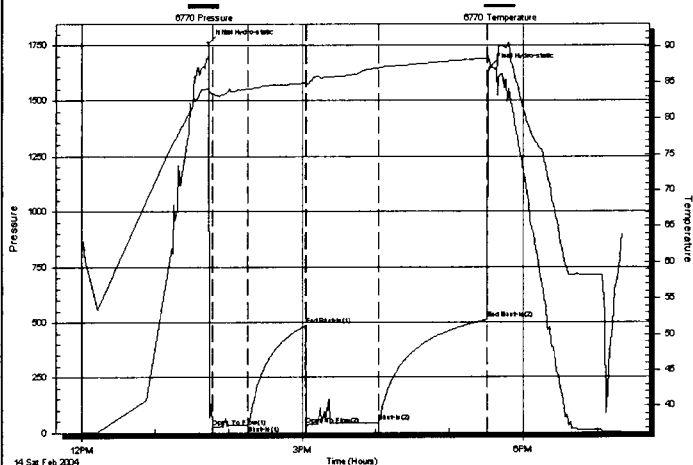
Last Calib.: 2004.02.14

Time On Btm: 2004.02.14 @ 13:43:39

Time Off Btm: 2004.02.14 @ 17:33:24

TEST COMMENT: IF-Weak surging blow - flushed tool - built to 2" surging - flushed tool
FF-No blow - flushed tool - 2" surging blow - flushed tool - blow surging
Times-30-45-60-90

Pressure vs. Time



PRESSURE SUMMARY

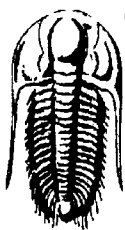
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1760.26	84.06	Initial Hydro-static
4	26.37	83.42	Open To Flow (1)
32	32.84	84.05	Shut-In(1)
79	486.00	84.87	End Shut-In(1)
80	35.67	84.73	Open To Flow (2)
139	45.48	86.95	Shut-In(2)
228	511.21	88.28	End Shut-In(2)
230	1648.68	87.51	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	HO&GCM 5%g 30%o 65%m	0.84

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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DRILL STEM TEST REPORT

TOOL DIAGRAM

ESP Development

Eulert East #2

17746 177th Boulevard
Paradise Ks 67658

3-11-15-Russell-Ks

Job Ticket: 18246

DST#: 4

ATTN: Bud Eulert

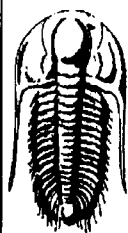
Test Start: 2004.02.14 @ 12:00:54

Tool Information

Drill Pipe:	Length:	3261.00 ft	Diameter:	3.80 inches	Volume:	45.74 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:	30000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:	50000.00 lb
					<u>Total Volume:</u>	<u>45.74 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:		31.00 ft					String Weight: Initial	38000.00 lb
Depth to Top Packer:		3251.00 ft					Final	38000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		42.00 ft						
Tool Length:		63.00 ft						
Number of Packers:		2	Diameter:	6.75 inches				
Tool Comments:								

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

Change Over Sub	1.00			3231.00	
Shut In Tool	5.00			3236.00	
Hydraulic tool	5.00			3241.00	
Packer	5.00			3246.00	21.00 Bottom Of Top Packer
Packer	5.00			3251.00	
Stubb	1.00			3252.00	
Recorder	0.00	6770	Inside	3252.00	
Perforations	38.00			3290.00	
Recorder	0.00	13254	Outside	3290.00	
Bullnose	3.00			3293.00	42.00 Bottom Packers & Anchor
Total Tool Length:	63.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

ESP Development

Eulert East #2

17746 177th Boulevard
Paradise Ks 67658

3-11-15-Russell-Ks

Job Ticket: 18246

DST#: 4

ATTN: Bud Eulert

Test Start: 2004.02.14 @ 12:00:54

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: 57.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	HO&GCM 5%g 30%o 65%m	0.842

Total Length: 60.00 ft

Total Volume: 0.842 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

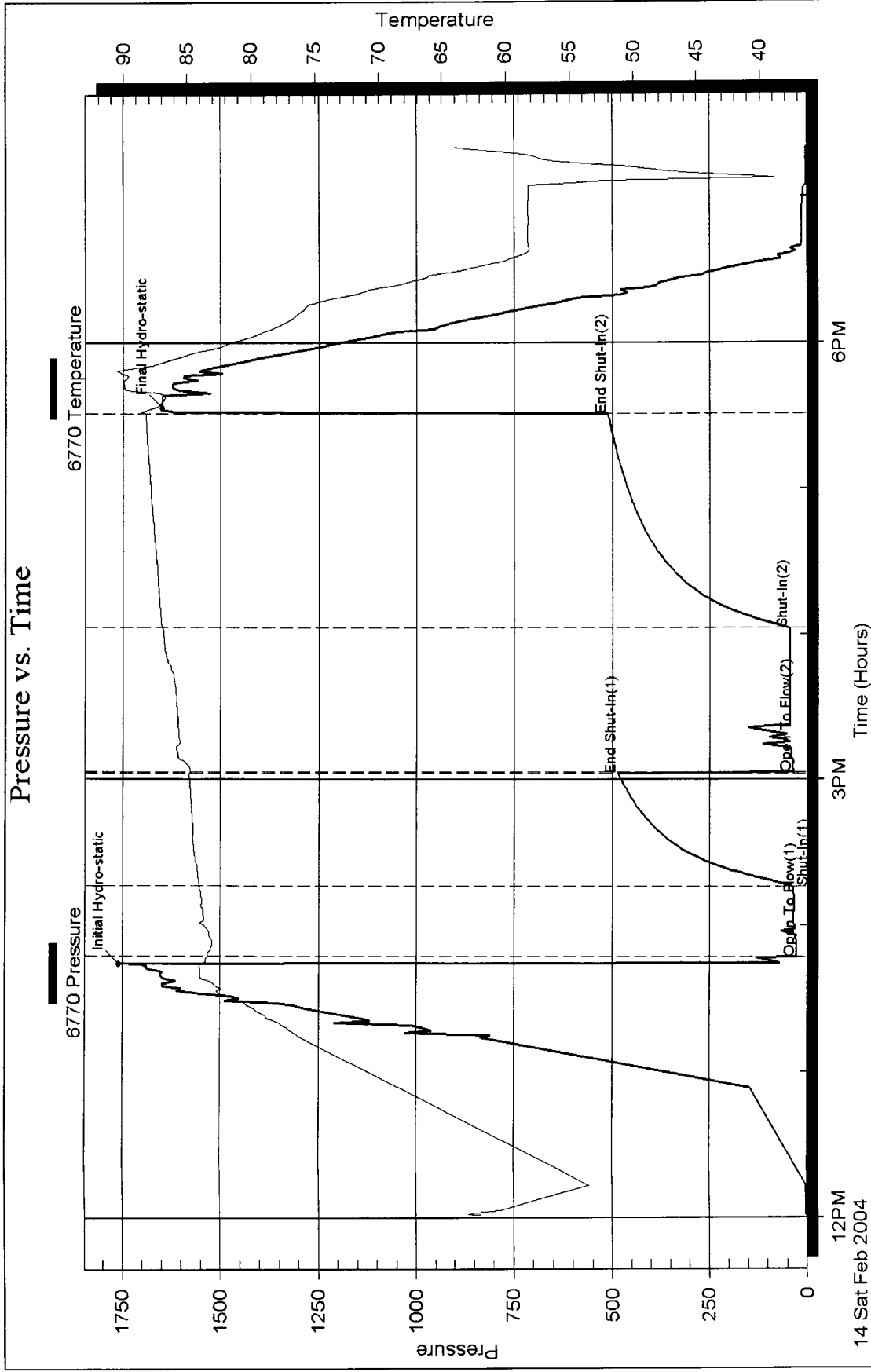
Serial #: 6770

Inside

ESP Development

3-11-15-Russell-Ks

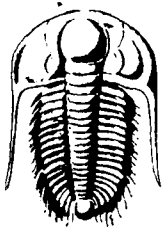
DST Test Number: 4



Triobite Testing, Inc

Ref. No: 18246

Printed: 2004.02.18 @ 13:39:59 Page 5



TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

Nº 18243

05/03

Test Ticket

Well Name & No. Euler East #2 Test No. 1 Date 2-12-04
 Company ESP Development Zone Tested 'D' LKC
 Address 17746 177th Boulevard, Paradise, Ks. 67658 Elevation 1821 KB 1816 GL
 Co. Rep / Geo. Randy Kilian Cont. Vonfeldt Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 3 Twp. 11 Rge. 15 Co. Russell State Ks
 No. of Copies _____ Disbtribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3009 — 3028 Initial Str Wt./Lbs. 36,000 Unseated Str Wt./Lbs. 36,000
 Anchor Length 19 Wt. Set Lbs. 30,000 Wt. Pulled Loose/Lbs. 40,000
 Top Packer Depth 3004 Tool Weight 1200
 Bottom Packer Depth 3009 Hole Size 7 7/8" Rubber Size 6 3/4"
 Total Depth 3028 Wt. Pipe Run _____ Drill Collar Run _____
 Mud Wt. 9.4 LCM _____ Vis. 46 WL 8.8 Drill Pipe Size 4.5XH Ft. Run 3011
 Blow Description I.F. Strong - B.O.B. in 3 min.

I.F. Strong - B.O.B. in 3 min.

Recovery - Total Feet 90 GIP 1240 Ft. in DC _____ Ft. in DP _____
 Rec. 90 Feet of mdy wtr. %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 92 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW .19 @ 65 °F Chlorides 83,000 ppm Recovery _____ Chlorides 5000 ppm System

	AK-1	Alpine			
(A) Initial Hydrostatic Mud	<u>1568</u>	PSI	Recorder No.	<u>6770</u>	Test _____
(B) First Initial Flow Pressure	<u>25</u>	PSI	(depth)	<u>3010</u>	Elec. Rec. <u>X</u>
(C) First Final Flow Pressure	<u>32</u>	PSI	Recorder No.	<u>12254</u>	Jars _____
(D) Initial Shut-In Pressure	<u>196</u>	PSI	(depth)	<u>3025</u>	Safety Jt. _____
(E) Second Initial Flow Pressure	<u>37</u>	PSI	Recorder No.		Circ Sub _____
(F) Second Final Flow Pressure	<u>56</u>	PSI	(depth)		Sampler _____
(G) Final Shut-In Pressure	<u>198</u>	PSI	Initial Opening	<u>30</u>	Straddle _____
(Q) Final Hydrostatic Mud	<u>1527</u>	PSI	Initial Shut-In	<u>30</u>	Ext. Packer _____
			Final Flow	<u>60</u>	Shale Packer _____
			Final Shut-In	<u>60</u>	Mileage <u>35</u>
			T-On Location	<u>01:00</u>	Sub Total: <u>909.50</u>
			T-Started	<u>02:25</u>	Std. By <u>KR</u> <u>15</u>
			T-Open	<u>04:45</u>	Other _____
			T-Pulled	<u>07:45</u>	Total: <u>924.50</u>
			T-Out	<u>09:37</u>	

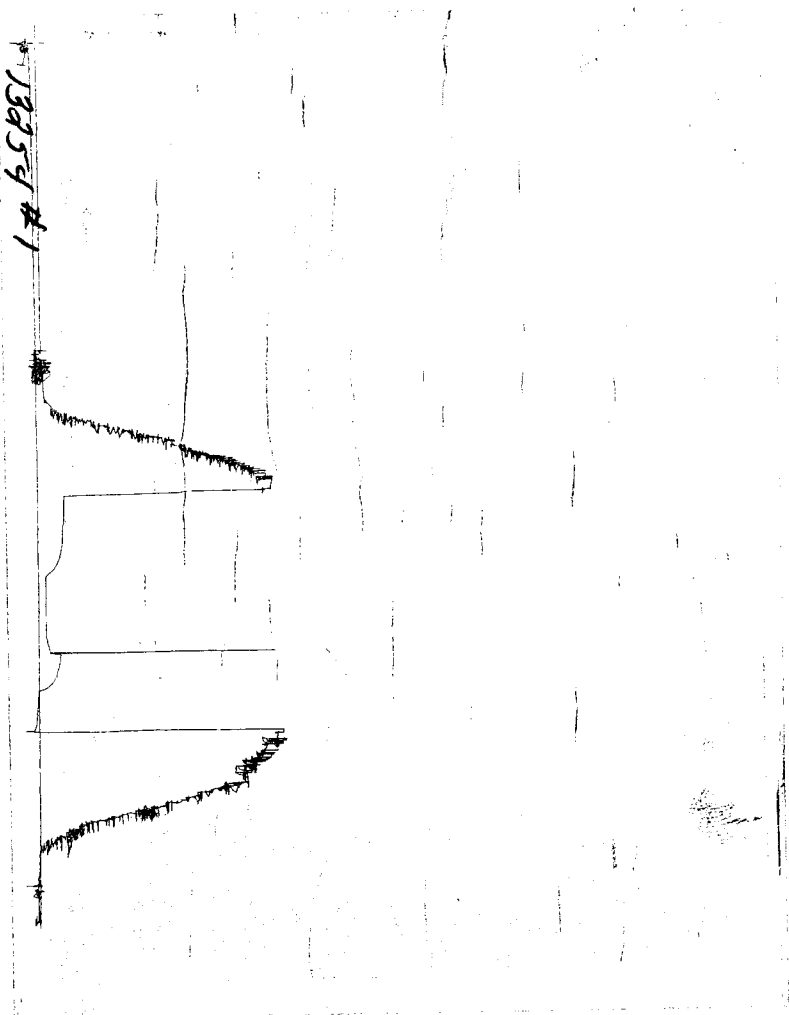
TRILOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGED OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

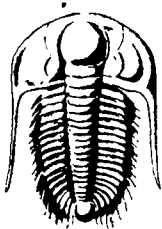
Approved By _____

Our Representative Dan Bangle

CHART PAGE

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





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

Nº 18244

05/03

Test Ticket

Well Name & No.	Euler East #2		Test No.	2	Date	2-12-04
Company	ESP Development		Zone Tested	F-G	LKC	
Address			Elevation	1821	KB	1816 GL
Co. Rep / Geo.	Randy Kilian	Cont.	Vonfeldt	Est. Ft. of Pay		Por. %
Location: Sec.	3	Twp.	11	Rge.	15	Co. Russell State KS
No. of Copies	Distribution Sheet (Y, N)		Turnkey (Y, N)		Evaluation (Y, N)	

Interval Tested 3037 — 3085 Initial Str Wt./Lbs. 36,000 Unseated Str Wt./Lbs. 36,000
Anchor Length 48 Wt. Set Lbs. 30,000 Wt. Pulled Loose/Lbs. 40,000
Top Packer Depth 3032 Tool Weight 1200
Bottom Packer Depth 3037 Hole Size 7 7/8" Rubber Size 6 3/4"
Total Depth 3085 Wt. Pipe Run Drill Collar Run
Mud Wt. 9.6 LCM Vis. 49 WL 12 Drill Pipe Size 4.5XH Ft. Run 3042
Blow Description I.F. Weak - building to 1 1/2"

F.F. Weak steady surface blow Plugged Tool

Recovery - Total Feet 30 GIP Ft. in DC Ft. in DP 30
Rec. 30 Feet of D.M. %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 86 °F Gravity °API D @ °F Corrected Gravity °API
RW @ °F Chlorides ppm Recovery Chlorides 6,200 ppm System

AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	1577 PSI	6770	
(B) First Initial Flow Pressure	— PSI (depth)	3038	Elec. Rec. X
(C) First Final Flow Pressure	— PSI	13254	Jars
(D) Initial Shut-In Pressure	349 PSI (depth)	3082	Safety Jt.
(E) Second Initial Flow Pressure	— PSI		Circ Sub
(F) Second Final Flow Pressure	— PSI (depth)		Sampler
(G) Final Shut-In Pressure	342 PSI	Initial Opening	Straddle
(Q) Final Hydrostatic Mud	1546 PSI	Initial Shut-In	Ext. Packer

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Approved By

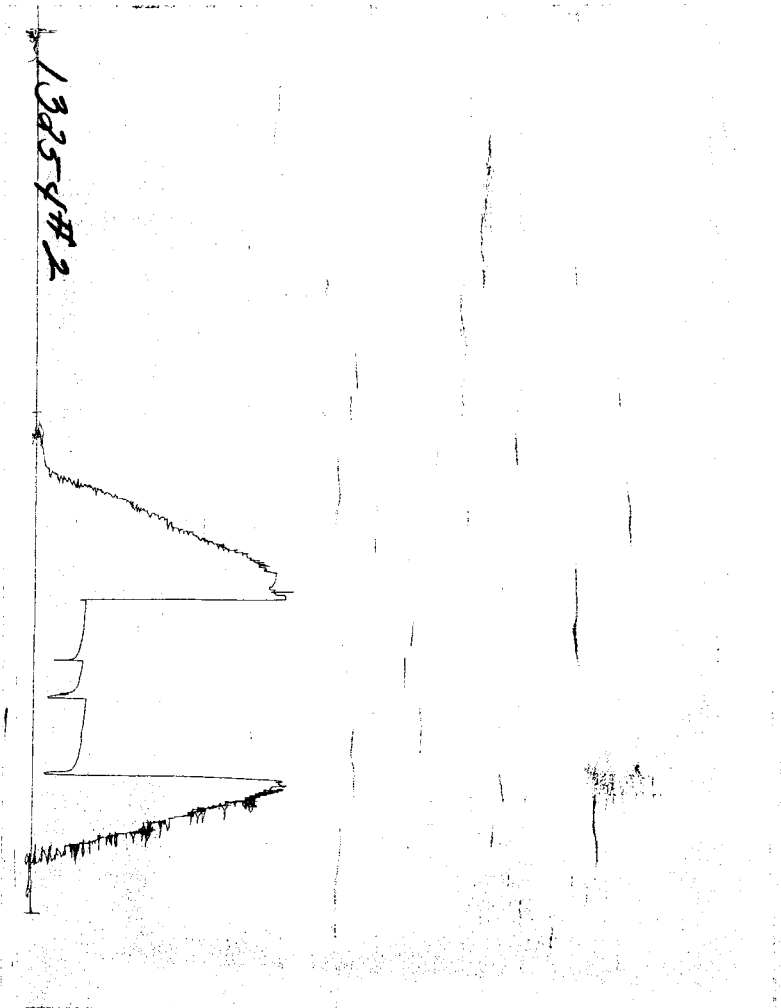
Our Representative

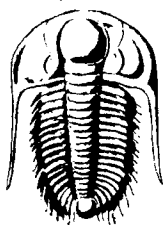
Dan Bunge

Final Flow	30	Shale Packer
Final Shut-In	45	Mileage 35
T-On Location	18:20	Sub Total: 909.50
T-Started	19:50	Std. By
T-Open	21:35	Other
T-Pulled	23:50	Total:
T-Out	02:07	

CHART PAGE

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





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

Nº 18246

05/03

Test Ticket

Well Name & No. Euler East #2 Test No. 3 Date 2-14-04
 Company ESP Development Zone Tested Arbuckle
 Address _____ Elevation 1821 KB 1816 GL
 Co. Rep / Geo. Randy Kilian Cont. Vonfeldt Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 3 Twp. 11 Rge. 15 Co. Russell State Ks
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3251 — 3293 Initial Str Wt./Lbs. 38,000 Unseated Str Wt./Lbs. 38,000
 Anchor Length 42 Wt. Set Lbs. 30,000 Wt. Pulled Loose/Lbs. 38,000
 Top Packer Depth 3246 Tool Weight 2100
 Bottom Packer Depth 3251 Hole Size 7 7/8" Rubber Size 6 3/4"
 Total Depth 3293 Wt. Pipe Run _____ Drill Collar Run _____
 Mud Wt. 9.3 LCM Y4 Vis. 57 WL 8.8 Drill Pipe Size 4.5 X 14 Ft. Run 3261
 Blow Description I.F. Weak surging blow - flushed tool - built to
2"-surging - flushed tool
E.F. No blow - flushed tool - 2" surging blow - flushed tool
blow surging Plugging in IF - FF
 Recovery - Total Feet 60 GIP _____ Ft. in DC _____ Ft. in DP 60
 Rec. 60 Feet of HO + GCM 5' %gas 30 %oil _____ %water 65 %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 88 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides 6500 ppm System

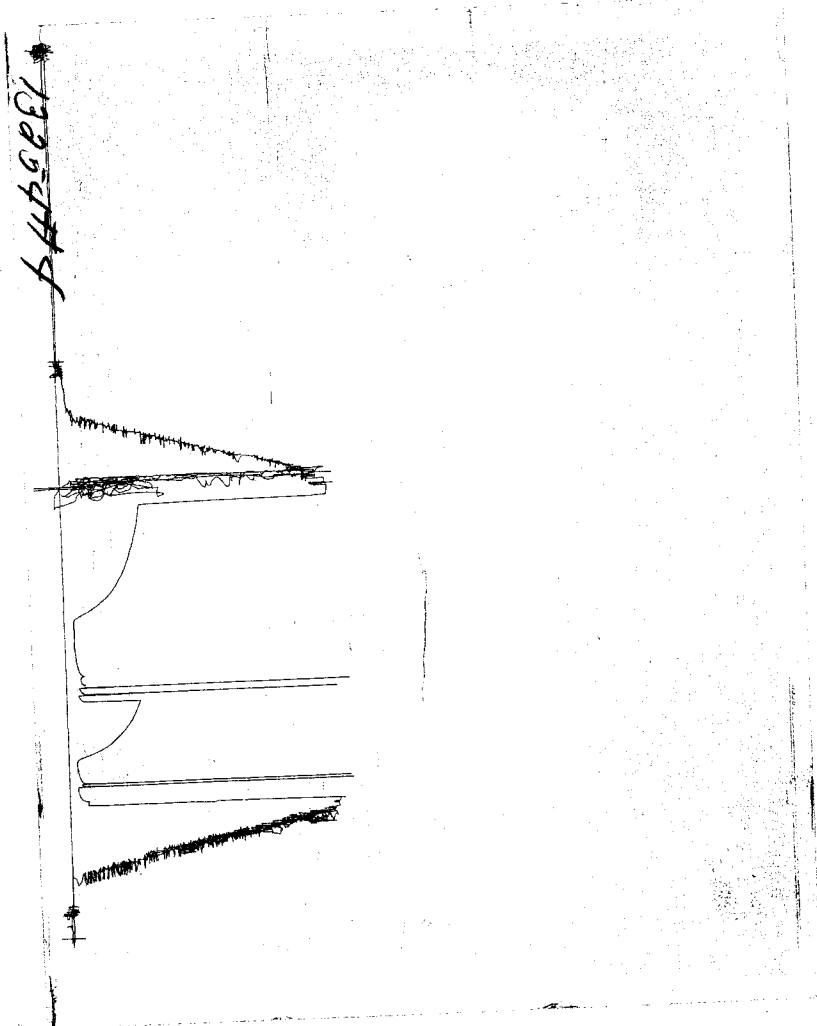
AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>1760</u> PSI	<u>6770</u>	
(B) First Initial Flow Pressure	<u>26</u> PSI	(depth) <u>3252</u>	Elec. Rec. <u>X</u>
(C) First Final Flow Pressure	<u>32</u> PSI	Recorder No. <u>13254</u>	Jars _____
(D) Initial Shut-In Pressure	<u>486</u> PSI	(depth) <u>3290</u>	Safety Jt. _____
(E) Second Initial Flow Pressure	<u>35</u> PSI	Recorder No. _____	Circ Sub _____
(F) Second Final Flow Pressure	<u>45</u> PSI	(depth) _____	Sampler _____
(G) Final Shut-In Pressure	<u>511</u> PSI	Initial Opening <u>30</u>	Straddle _____
(Q) Final Hydrostatic Mud	<u>1648</u> PSI	Initial Shut-In <u>45</u>	Ext. Packer _____
		Final Flow <u>60</u>	Shale Packer _____
		Final Shut-In <u>90</u>	Mileage <u>35</u>
		T-On Location <u>11:00</u>	Sub Total: <u>909.50</u>
		T-Started <u>12:00</u>	Std. By <u>15</u>
		T-Open <u>13:45</u>	Other <u>924.50</u>
		T-Pulled <u>17:30</u>	Total: _____
		T-Out <u>19:20</u>	

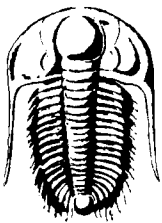
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Approved By _____
 Our Representative Dan Rangle

CHART PAGE

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TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

Nº 18245

05/03

Test Ticket

Well Name & No. Euler East #2 Test No. 3 Date 2-12-04
 Company ESP Development Zone Tested Arbuckle
 Address _____ Elevation 1821 KB 1816 GL _____
 Co. Rep / Geo. Randy Kilian Cont. Vonfeldt Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 3 Twp. 11 Rge. 15 Co. Russell State Ks
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3251 — 3288 Initial Str Wt./Lbs. 38,000 Unseated Str Wt./Lbs. 38,000
 Anchor Length 37 Wt. Set Lbs. 30,000 Wt. Pulled Loose/Lbs. 45,000
 Top Packer Depth 3246 Tool Weight 2000
 Bottom Packer Depth 3251 Hole Size 7 7/8" Rubber Size 6 3/4"
 Total Depth 3288 Wt. Pipe Run _____ Drill Collar Run _____
 Mud Wt. 9.3 LCM Y Vis. 45" WL 8.8 Drill Pipe Size 4.5XH Ft. Run 3261
 Blow Description I.F. Weak - building to 1/2"

F.F. Weak - Died in 20 min.

Recovery - Total Feet 10 GIP _____ Ft. in DC _____ Ft. in DP 10
 Rec. 10 Feet of Mud w/ show oil %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of in Tool %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 91 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides 6500 ppm System

	AK-1	Alpine			
(A) Initial Hydrostatic Mud	<u>1719</u>	PSI	Recorder No.	<u>6770</u>	Test _____
(B) First Initial Flow Pressure	<u>19</u>	PSI	(depth)	<u>3252</u>	Elec. Rec. <u>X</u>
(C) First Final Flow Pressure	<u>23</u>	PSI	Recorder No.	<u>13254</u>	Jars _____
(D) Initial Shut-In Pressure	<u>142</u>	PSI	(depth)	<u>3285</u>	Safety Jt. _____
(E) Second Initial Flow Pressure	<u>20</u>	PSI	Recorder No.		Circ Sub _____
(F) Second Final Flow Pressure	<u>34</u>	PSI	(depth)		Sampler _____
(G) Final Shut-In Pressure	<u>156</u>	PSI	Initial Opening	<u>30</u>	Straddle _____
(Q) Final Hydrostatic Mud	<u>1650</u>	PSI	Initial Shut-In	<u>45</u>	Ext. Packer _____
			Final Flow	<u>60</u>	Shale Packer _____
			Final Shut-In	<u>90</u>	Mileage <u>30</u>
			T-On Location	<u>22:30</u>	Sub Total: _____
			T-Started	<u>22:35</u>	Std. By _____
			T-Open	<u>00:15</u>	Other _____
			T-Pulled	<u>04:00</u>	Total: _____
			T-Out	<u>05:39</u>	

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

Dan Bangle

CHART PAGE

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13254#3

