



## DRILL STEM TEST REPORT

Prepared For: **Berexco LLC.**

2020 N. Bramblewood  
Wichita, KS 67202

ATTN: Bryan Bynog

### **Ivalee #1-16**

### **16-1s-37w Cheyenne,KS**

Start Date: 2013.04.03 @ 12:25:00

End Date: 2013.04.04 @ 00:32:00

Job Ticket #: 50598                      DST #: 1

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

Printed: 2013.04.09 @ 08:50:44

Berexco LLC. 16-1s-37w Cheyenne,KS Ivalee #1-16 DST # 1 LKC "A" 2013.04.03



# TRILOBITE TESTING, INC.

## DRILL STEM TEST REPORT

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16-1s-37w Cheyenne, KS

2020 N. Bramblewood  
Wichita, KS 67202

Ivaley #1-16

Job Ticket: 50598

DST#: 1

ATTN: Bryan Bynog

Test Start: 2013.04.03 @ 12:25:00

### GENERAL INFORMATION:

Formation: **LKC "A"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:42:00

Time Test Ended: 00:32:00

Test Type: Conventional Bottom Hole (Initial)

Tester: 61

Unit No: Chuck Kreuzer

Interval: **4175.00 ft (KB) To 4250.00 ft (KB) (TVD)**

Reference Elevations: 3196.00 ft (KB)

Total Depth: 4250.00 ft (KB) (TVD)

3186.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

### Serial #: 8791

Inside

Press @ Run Depth: 321.54 psig @ 4176.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.04.03

End Date:

2013.04.04

Last Calib.: 2013.04.05

Start Time: 12:25:01

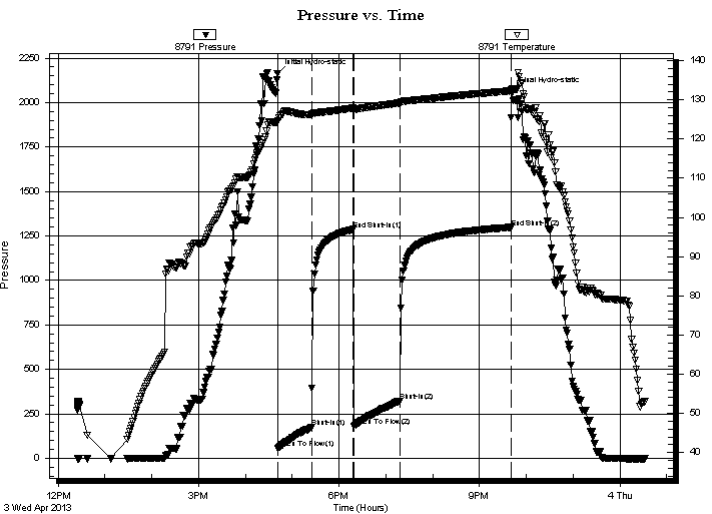
End Time:

00:32:00

Time On Btm: 2013.04.03 @ 16:41:00

Time Off Btm: 2013.04.03 @ 21:41:00

TEST COMMENT: 30 IF - Weak blow built to 4"  
60 ISI - No return  
90 FF - Weak blow built to 7"  
120 FSI - No return



### PRESSURE SUMMARY

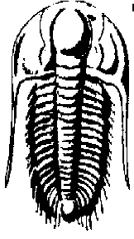
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 2163.96         | 124.40       | Initial Hydro-static |
| 1           | 57.77           | 124.60       | Open To Flow (1)     |
| 44          | 175.40          | 126.29       | Shut-In(1)           |
| 97          | 1287.04         | 127.90       | End Shut-In(1)       |
| 98          | 180.92          | 127.60       | Open To Flow (2)     |
| 157         | 321.54          | 129.21       | Shut-In(2)           |
| 299         | 1298.26         | 132.28       | End Shut-In(2)       |
| 300         | 2059.87         | 132.36       | Final Hydro-static   |

### Recovery

| Length (ft) | Description        | Volume (bbl) |
|-------------|--------------------|--------------|
| 300.00      | vsocm-2%o33%w 65%m | 1.48         |
| 300.00      | mcw -25%m75%w      | 1.55         |
|             |                    |              |
|             |                    |              |
|             |                    |              |

### Gas Rates

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



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Reference Elevations: 3196.00 ft (KB)

Total Depth: 4250.00 ft (KB) (TVD)

3186.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8651

Outside

Press @ RunDepth: psig @ 4176.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.04.03

End Date:

2013.04.04

Last Calib.:

2013.04.05

Start Time: 12:25:01

End Time:

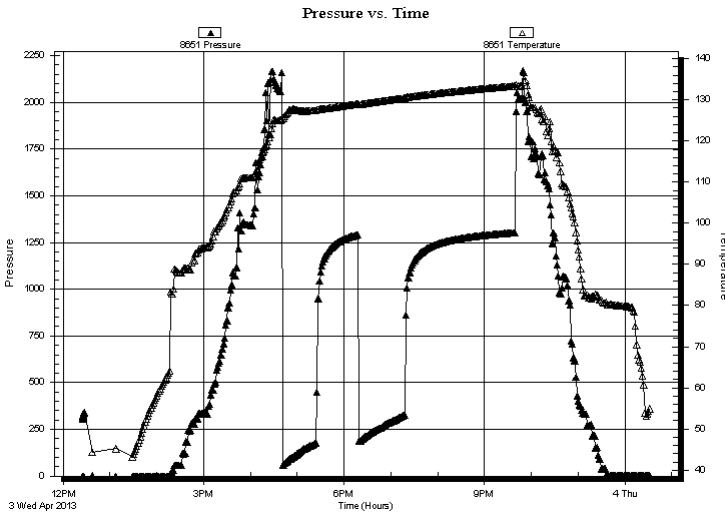
00:31:30

Time On Btm:

Time Off Btm:

TEST COMMENT: 30 IF - Weak blow built to 4"  
60 ISI - No return  
90 FF - Weak blow built to 7"  
120 FSI - No return

### PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|------------|
|-------------|-----------------|--------------|------------|

### Recovery

### Gas Rates

| Length (ft) | Description        | Volume (bbl) |
|-------------|--------------------|--------------|
| 300.00      | vsocm-2%o33%w 65%m | 1.48         |
| 300.00      | mcw-25%m75%w       | 1.55         |
|             |                    |              |
|             |                    |              |
|             |                    |              |

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Berexco LLC.

**16-1s-37w Cheyenne,KS**

2020 N. Bramblewood  
Wichita, KS 67202

**Ivaley #1-16**

Job Ticket: 50598

**DST#: 1**

ATTN: Bryan Bynog

Test Start: 2013.04.03 @ 12:25:00

## Tool Information

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3585.00 ft | Diameter: 3.80 inches | Volume: 50.29 bbl              | Tool Weight: 2500.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 0.00 inches | Volume: 0.00 bbl               | Weight set on Packer: 25000.00 lb  |
| Drill Collar:             | Length: 592.00 ft  | Diameter: 2.25 inches | Volume: 2.91 bbl               | Weight to Pull Loose: 70000.00 lb  |
|                           |                    |                       | <u>Total Volume: 53.20 bbl</u> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 30.00 ft           |                       |                                | String Weight: Initial 63000.00 lb |
| Depth to Top Packer:      | 4175.00 ft         |                       |                                | Final 67000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 75.00 ft           |                       |                                |                                    |
| Tool Length:              | 103.00 ft          |                       |                                |                                    |
| Number of Packers:        | 2                  | Diameter: 6.25 inches |                                |                                    |

Tool Comments:

## Tool Description

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

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                |
|------------------|-------------|------------|----------|------------|-------------------------------|
| Shut In Tool     | 5.00        |            |          | 4152.00    |                               |
| Hydraulic tool   | 5.00        |            |          | 4157.00    |                               |
| Jars             | 5.00        |            |          | 4162.00    |                               |
| Safety Joint     | 3.00        |            |          | 4165.00    |                               |
| Packer           | 5.00        |            |          | 4170.00    | 28.00 Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 4175.00    |                               |
| Stubb            | 1.00        |            |          | 4176.00    |                               |
| Recorder         | 0.00        | 8791       | Inside   | 4176.00    |                               |
| Recorder         | 0.00        | 8651       | Outside  | 4176.00    |                               |
| Perforations     | 2.00        |            |          | 4178.00    |                               |
| change Over Sub  | 1.00        |            |          | 4179.00    |                               |
| Drill Pipe       | 62.00       |            |          | 4241.00    |                               |
| Change Over Sub  | 1.00        |            |          | 4242.00    |                               |
| Perforations     | 5.00        |            |          | 4247.00    |                               |
| Bullnose         | 3.00        |            |          | 4250.00    | 75.00 Bottom Packers & Anchor |

**Total Tool Length: 103.00**



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**FLUID SUMMARY**

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**16-1s-37w Cheyenne,KS**

2020 N. Bramblewood  
Wichita, KS 67202

**Ivaley #1-16**

Job Ticket: 50598

**DST#: 1**

ATTN: Bryan Bynog

Test Start: 2013.04.03 @ 12:25:00

## 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:

50000 ppm

Viscosity: 44.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

| Length<br>ft | Description        | Volume<br>bbl |
|--------------|--------------------|---------------|
| 300.00       | vsocm-2%o33%w 65%m | 1.475         |
| 300.00       | mcw -25%m75%w      | 1.548         |

Total Length: 600.00 ft

Total Volume: 3.023 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

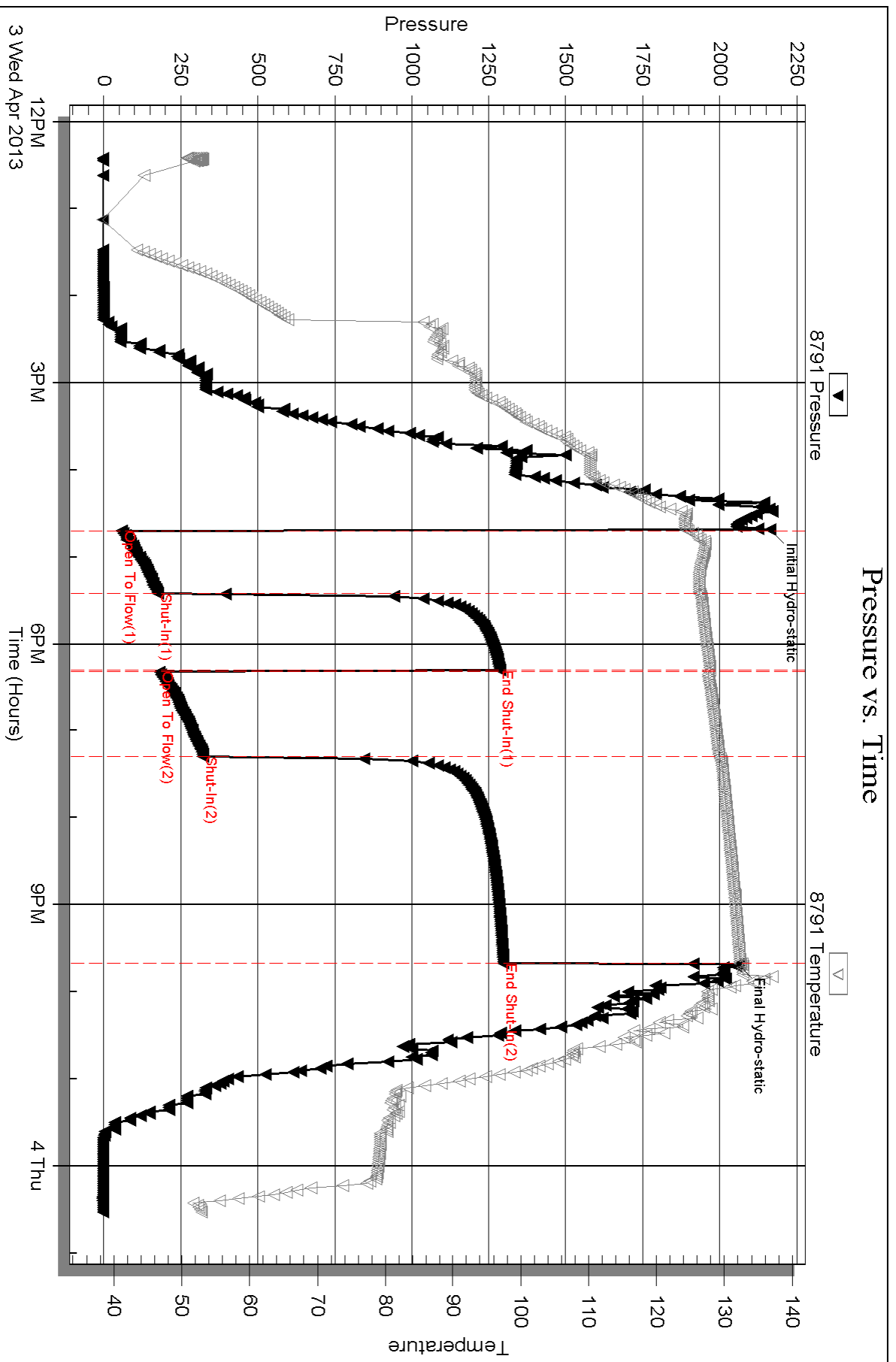
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

# Pressure vs. Time

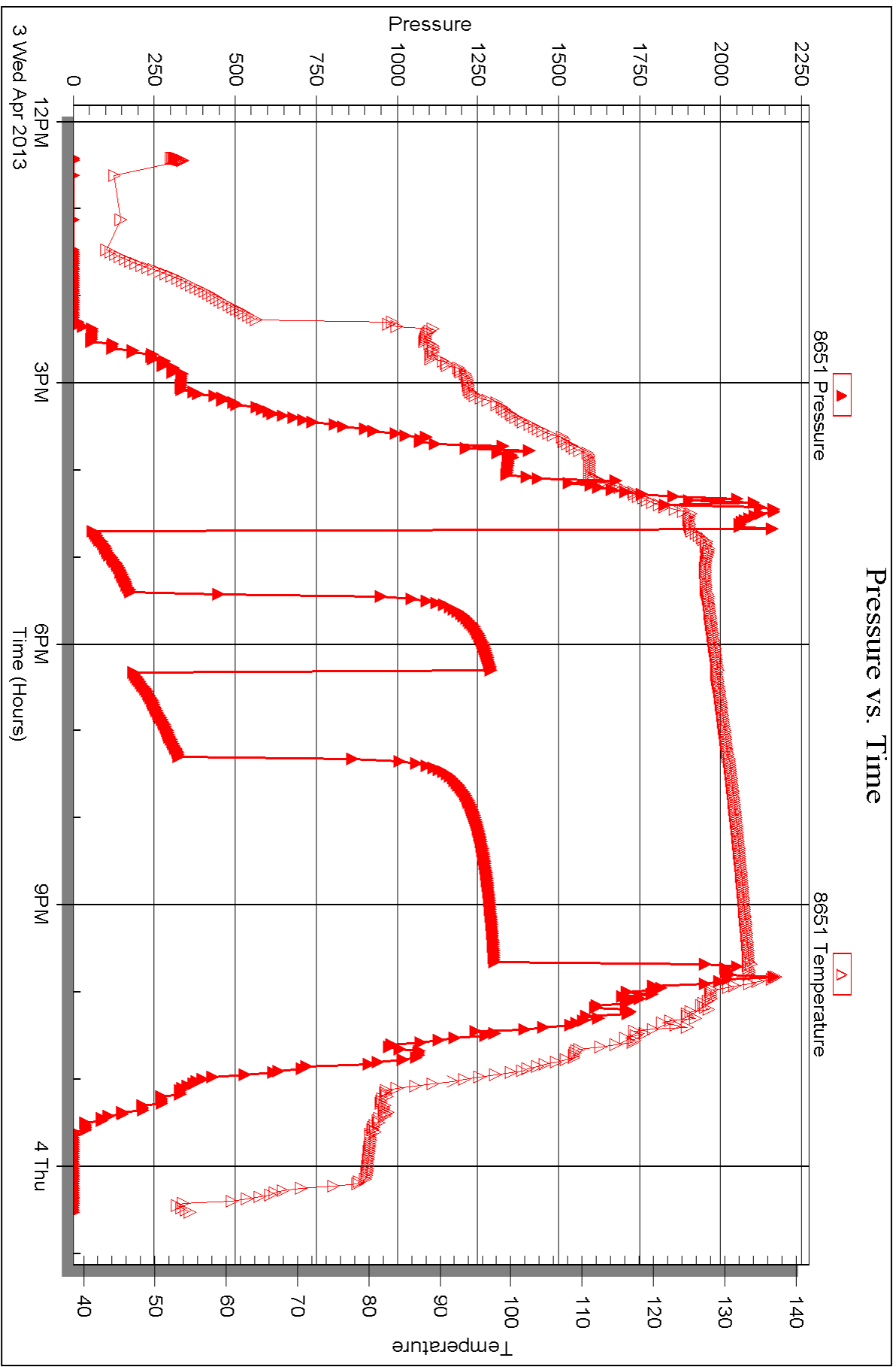


Serial #: 8651

Outside Berexco LLC.

Walee #1-16

DST Test Number: 1





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 50598

4/10

Well Name & No. Ivatee #1-16 Test No. 1 Date 4-2-2013  
 Company Berexco LLC. Elevation 3196 KB 3186 GL  
 Address 2020 N. Bramblewood Wichita KS 67206  
 Co. Rep / Geo. Bryan Bynog Rig Berexco  
 Location: Sec. 16 Twp. 1S Rge. 37W Co. Dundy State NE

Interval Tested 4175 4250 Zone Tested LKL-A  
 Anchor Length 75 Drill Pipe Run 3585 Mud Wt. 9.4  
 Top Packer Depth 4170 Drill Collars Run 600 Vis 44  
 Bottom Packer Depth 4175 Wt. Pipe Run -0- WL 7.2  
 Total Depth 4250 Chlorides \_\_\_\_\_ ppm System LCM Trace

Blow Description IF: Weak blow, Built to 4 in. over 30 mins.  
ISI: No blow back  
FF: Weak blow, Built to 7 in over 90 mins.  
FSI: No blow back

| Rec        | Feet of       | %gas | %oil     | %water    | %mud      |
|------------|---------------|------|----------|-----------|-----------|
| <u>300</u> | <u>USOCNM</u> |      | <u>2</u> | <u>33</u> | <u>65</u> |
| <u>300</u> | <u>mcw</u>    |      |          | <u>35</u> | <u>25</u> |
|            |               |      |          |           |           |
|            |               |      |          |           |           |
|            |               |      |          |           |           |

Rec Total 600 BHT 124 Gravity \_\_\_\_\_ API RW .24 @ 55° F Chlorides 50,000 ppm

|                                     |   |  |
|-------------------------------------|---|--|
| (A) Initial Hydrostatic <u>2168</u> | <input checked="" type="checkbox"/> Test 1250                           | T-On Location <u>23:15</u>                   |
| (B) First Initial Flow <u>53</u>    | <input checked="" type="checkbox"/> Jars 250                            | T-Started <u>00:25</u>                       |
| (C) First Final Flow <u>175</u>     | <input checked="" type="checkbox"/> Safety Joint 75                     | T-Open <u>16:41</u>                          |
| (D) Initial Shut-In <u>1287</u>     | <input type="checkbox"/> Circ Sub                                       | T-Pulled <u>9:40</u>                         |
| (E) Second Initial Flow <u>182</u>  | <input type="checkbox"/> Hourly Standby                                 | T-Out _____                                  |
| (F) Second Final Flow <u>322</u>    | <input checked="" type="checkbox"/> Mileage <u>78x2=156x1.55</u> 241.80 | Comments _____                               |
| (G) Final Shut-In <u>1298</u>       | <input type="checkbox"/> Sampler  |  |
| (H) Final Hydrostatic <u>2079</u>   | <input type="checkbox"/> Straddle                                       | <input type="checkbox"/> Ruined Shale Packer |
|                                     | <input type="checkbox"/> Shale Packer                                   | <input type="checkbox"/> Ruined Packer       |
| Initial Open <u>30</u>              | <input type="checkbox"/> Extra Packer                                   | <input type="checkbox"/> Extra Copies        |
| Initial Shut-In <u>60</u>           | <input type="checkbox"/> Extra Recorder                                 | Sub Total <u>0</u>                           |
| Final Flow <u>90</u>                | <input type="checkbox"/> Day Standby                                    | Total <u>1816.80</u>                         |
| Final Shut-In <u>120</u>            | <input type="checkbox"/> Accessibility                                  | MP/DST Disc't _____                          |
|                                     | Sub Total <u>1816.80</u>  |  |

Approved By \_\_\_\_\_ Our Representative Chuck Hager

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.