



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1132010
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

| | | |
|-----------------------------------|-----------------|---|
| Spud Date or Recompletion Date | Date Reached TD | Completion Date or Recompletion Date |
|-----------------------------------|-----------------|---|

API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1132010

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

| | | | | |
|---|--|------------------------------|----------------------------------|---------------------------------|
| Drill Stem Tests Taken <i>(Attach Additional Sheets)</i> | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Log | Formation (Top), Depth and Datum | <input type="checkbox"/> Sample |
| Samples Sent to Geological Survey | <input type="checkbox"/> Yes <input type="checkbox"/> No | Name | Top | Datum |
| Cores Taken | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| Electric Log Run | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| List All E. Logs Run: | | | | |

| CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used | | | | | | | |
|---|-------------------|---------------------------|-------------------|---------------|----------------|--------------|----------------------------|
| Report all strings set-conductor, surface, intermediate, production, etc. | | | | | | | |
| Purpose of String | Size Hole Drilled | Size Casing Set (In O.D.) | Weight Lbs. / Ft. | Setting Depth | Type of Cement | # Sacks Used | Type and Percent Additives |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| ADDITIONAL CEMENTING / SQUEEZE RECORD | | | | |
|---|------------------|----------------|--------------|----------------------------|
| Purpose: | Depth Top Bottom | Type of Cement | # Sacks Used | Type and Percent Additives |
| <input type="checkbox"/> Perforate | | | | |
| <input type="checkbox"/> Protect Casing | | | | |
| <input type="checkbox"/> Plug Back TD | | | | |
| <input type="checkbox"/> Plug Off Zone | | | | |

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

| Shots Per Foot | PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated | Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i> | Depth |
|----------------|---|--|-------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method:
 Flowing Pumping Gas Lift Other *(Explain)* _____

| Estimated Production Per 24 Hours | Oil Bbls. | Gas Mcf | Water Bbls. | Gas-Oil Ratio | Gravity |
|-----------------------------------|-----------|---------|-------------|---------------|---------|
| | | | | | |

| | | |
|--|--|---|
| DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i> | METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ | PRODUCTION INTERVAL: _____ _____ |
|--|--|---|

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

April 08, 2013

Charles Ramsay
H & C Oil Operating Inc.
PO BOX 86
PLAINVILLE, KS 67663-0086

Re: ACO1
API 15-065-23894-00-00
Gosselin 16-1
NW/4 Sec.16-08S-22W
Graham County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Charles Ramsay



DRILL STEM TEST REPORT

Prepared For: **H & C Oil Operating Inc**

PO Box 86
Plainville KS 67663

ATTN: Charles R. Ramsay

Gosselin #16-1

16-8s-22w Graham,KS

Start Date: 2013.03.03 @ 12:47:00

End Date: 2013.03.03 @ 18:48:39

Job Ticket #: 51599 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.03.08 @ 15:09:35



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

H & C Oil Operating Inc

16-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Gosselin #16-1

Job Ticket: 51599

DST#: 1

ATTN: Charles R. Ramsay

Test Start: 2013.03.03 @ 12:47:00

GENERAL INFORMATION:

Formation: **LKC "C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:18:30

Time Test Ended: 18:48:39

Test Type: Conventional Bottom Hole (Initial)

Tester: Cody Bloedorn

Unit No: 41

Interval: 3356.00 ft (KB) To 3384.00 ft (KB) (TVD)

Reference Elevations: 2082.00 ft (KB)

Total Depth: 3384.00 ft (KB) (TVD)

2077.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6752 Inside

Press @ Run Depth: 182.27 psig @ 3357.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.03.03

End Date:

2013.03.03

Last Calib.: 2013.03.03

Start Time: 12:47:01

End Time:

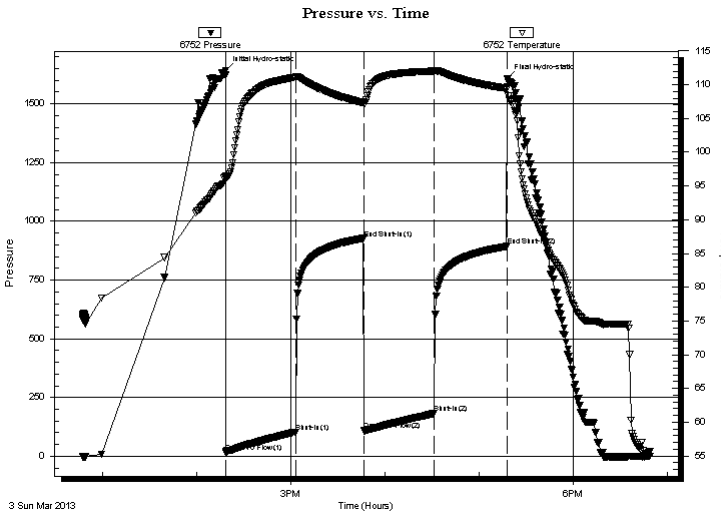
18:48:40

Time On Btm: 2013.03.03 @ 14:18:20

Time Off Btm: 2013.03.03 @ 17:18:00

TEST COMMENT: 45 - IF- B.O.B. in 16 min
45 - IS- Surface return, died in 23 min
45 - FF- B.O.B. in 21 min
45 - FS- No return

PRESSURE SUMMARY



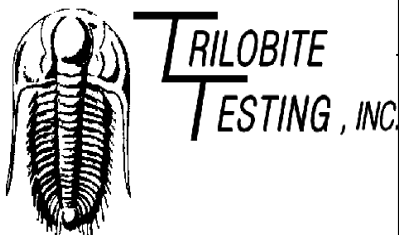
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1642.28 | 96.41 | Initial Hydro-static |
| 1 | 16.99 | 96.13 | Open To Flow (1) |
| 45 | 103.78 | 111.09 | Shut-In(1) |
| 88 | 927.34 | 107.32 | End Shut-In(1) |
| 89 | 109.34 | 107.15 | Open To Flow (2) |
| 133 | 182.27 | 112.03 | Shut-In(2) |
| 180 | 893.27 | 109.46 | End Shut-In(2) |
| 180 | 1607.06 | 109.65 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------|--------------|
| 412.00 | MW, 5%M, 95%W | 5.78 |
| 5.00 | Free Oil | 0.07 |
| | | |
| | | |
| | | |

Gas Rates

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



DRILL STEM TEST REPORT

H & C Oil Operating Inc

16-8s-22w Graham, KS

PO Box 86
Plainville KS 67663

Gosselin #16-1

Job Ticket: 51599 DST#: 1

ATTN: Charles R. Ramsay

Test Start: 2013.03.03 @ 12:47:00

GENERAL INFORMATION:

Formation: **LKC "C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:18:30

Time Test Ended: 18:48:39

Test Type: Conventional Bottom Hole (Initial)

Tester: Cody Bloedorn

Unit No: 41

Interval: **3356.00 ft (KB) To 3384.00 ft (KB) (TVD)**

Reference Elevations: 2082.00 ft (KB)

Total Depth: 3384.00 ft (KB) (TVD)

2077.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8322 Outside

Press @ Run Depth: psig @ 3357.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.03.03

End Date:

2013.03.03

Last Calib.:

2013.03.03

Start Time: 12:47:01

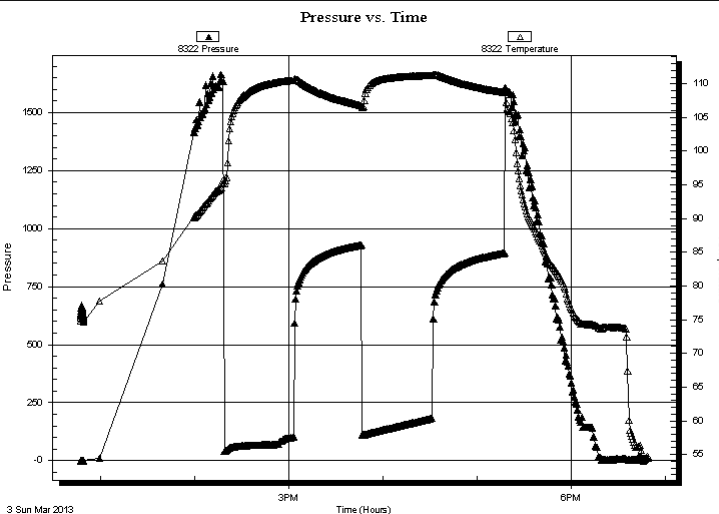
End Time:

18:48:40

Time On Btm:

Time Off Btm:

TEST COMMENT: 45 - IF- B.O.B. in 16 min
 45 - IS- Surface return, died in 23 min
 45 - FF- B.O.B. in 21 min
 45 - FS- No return



PRESSURE SUMMARY

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

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------|--------------|
| 412.00 | MW, 5%M, 95%W | 5.78 |
| 5.00 | Free Oil | 0.07 |
| | | |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H & C Oil Operating Inc

16-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Gosselin #16-1

Job Ticket: 51599

DST#: 1

ATTN: Charles R. Ramsay

Test Start: 2013.03.03 @ 12:47:00

Tool Information

| | | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------|-------------|
| Drill Pipe: | Length: 3341.00 ft | Diameter: 3.80 inches | Volume: 46.87 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: | 44000.00 lb |
| | | | <u>Total Volume: 46.87 bbl</u> | Tool Chased | 0.00 ft |
| Drill Pipe Above KB: | 6.00 ft | | | String Weight: Initial | 38000.00 lb |
| Depth to Top Packer: | 3356.00 ft | | | Final | 40000.00 lb |
| Depth to Bottom Packer: | ft | | | | |
| Interval between Packers: | 28.00 ft | | | | |
| Tool Length: | 49.00 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 | | | 3336.00 | |
| Shut In Tool | 5.00 | | | 3341.00 | |
| Hydraulic tool | 5.00 | | | 3346.00 | |
| Packer | 5.00 | | | 3351.00 | 21.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 3356.00 | |
| Stubb | 1.00 | | | 3357.00 | |
| Recorder | 0.00 | 8322 | Outside | 3357.00 | |
| Recorder | 0.00 | 6752 | Inside | 3357.00 | |
| Perforations | 24.00 | | | 3381.00 | |
| Bullnose | 3.00 | | | 3384.00 | 28.00 Bottom Packers & Anchor |
| Total Tool Length: | 49.00 | | | | |



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H & C Oil Operating Inc

16-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Gosselin #16-1

Job Ticket: 51599

DST#: 1

ATTN: Charles R. Ramsay

Test Start: 2013.03.03 @ 12:47:00

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:

40000 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 4.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|---------------|---------------|
| 412.00 | MW, 5%M, 95%W | 5.779 |
| 5.00 | Free Oil | 0.070 |

Total Length: 417.00 ft

Total Volume: 5.849 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

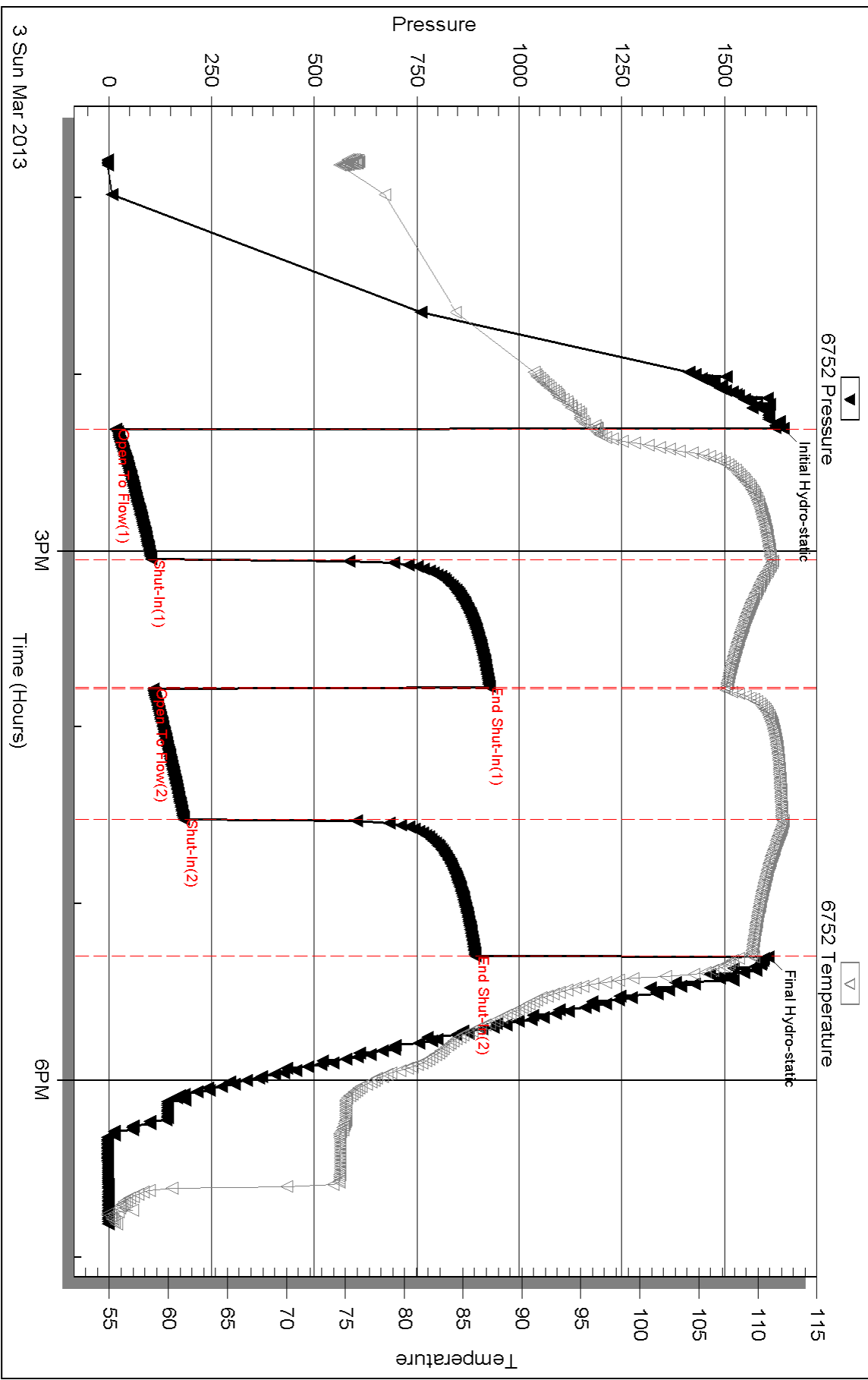
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

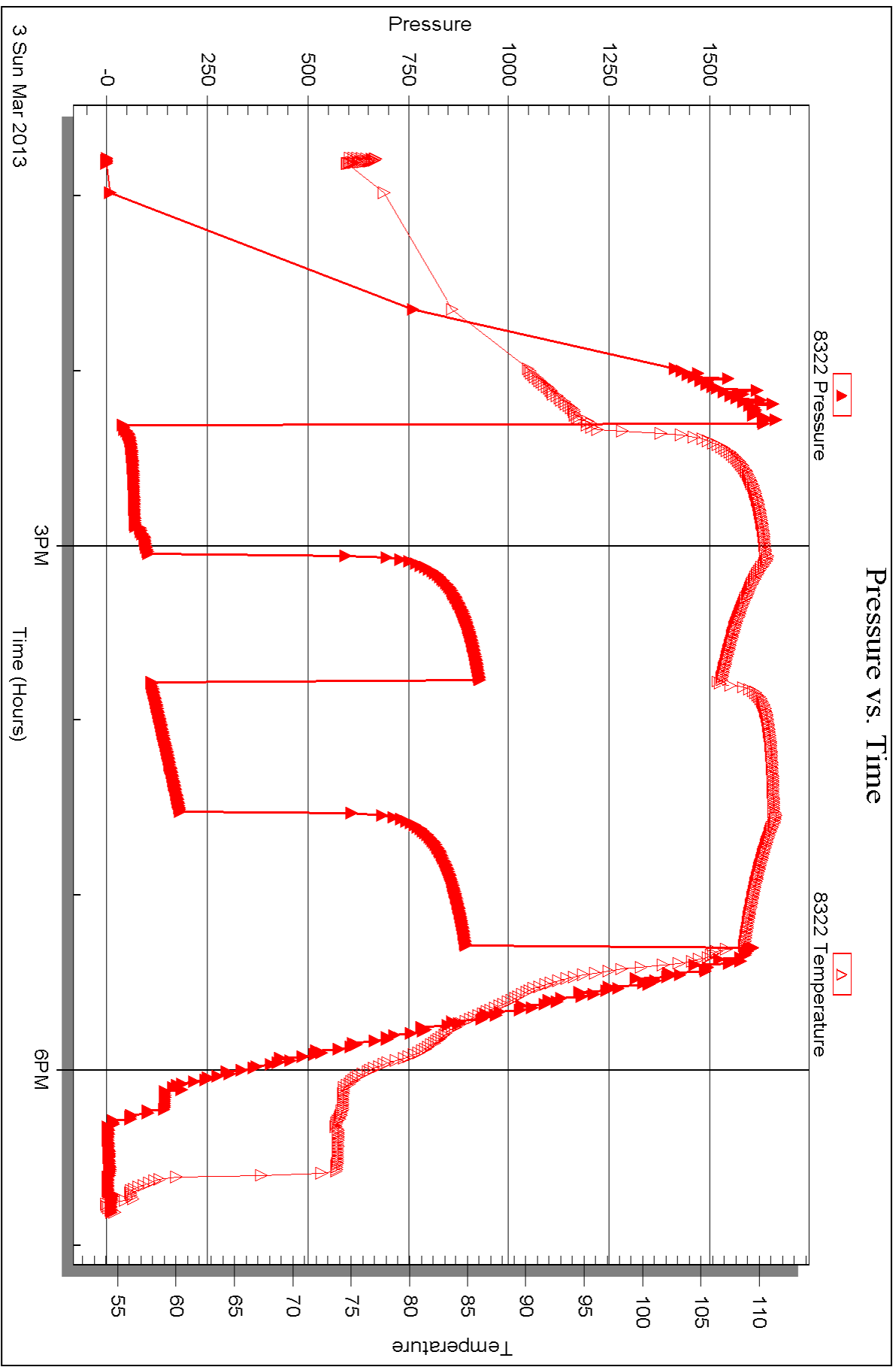


Serial #: 8322

Outside H & C Oil Operating Inc

Gosselin #16-1

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **H & C Oil Operating Inc**

PO Box 86
Plainville KS 67663

ATTN: Charles R. Ramsay

Gosselin #16-1

16-8s-22w Graham,KS

Start Date: 2013.03.04 @ 09:53:00

End Date: 2013.03.04 @ 15:17:39

Job Ticket #: 51600 DST #: 2

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

Printed: 2013.03.08 @ 15:09:01



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H & C Oil Operating Inc

16-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Gosselin #16-1

Job Ticket: 51600

DST#: 2

ATTN: Charles R. Ramsay

Test Start: 2013.03.04 @ 09:53:00

GENERAL INFORMATION:

Formation: **H,I,J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:48:50

Time Test Ended: 15:17:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Cody Bloedorn

Unit No: 41

Interval: 3450.00 ft (KB) To 3515.00 ft (KB) (TVD)

Reference Elevations: 2082.00 ft (KB)

Total Depth: 3515.00 ft (KB) (TVD)

2077.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6752 Inside

Press @ RunDepth: 31.28 psig @ 3488.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.03.04

End Date: 2013.03.04

Last Calib.: 2013.03.04

Start Time: 09:53:01

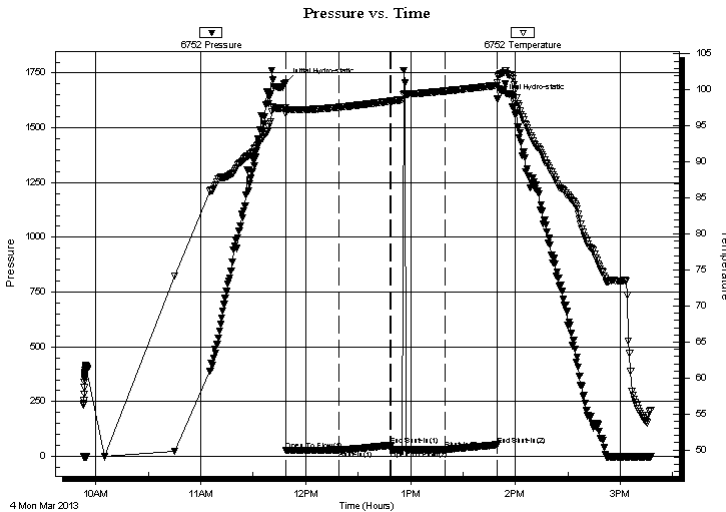
End Time: 15:17:40

Time On Btm: 2013.03.04 @ 11:48:40

Time Off Btm: 2013.03.04 @ 13:49:30

TEST COMMENT: 30 - IF- 3/4" blow
30 - IS- No return
30 - FF- No blow for 5 min flushed tool, surged and died.
30 - FS- No return

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1705.19 | 97.52 | Initial Hydro-static |
| 1 | 26.60 | 96.66 | Open To Flow (1) |
| 31 | 29.27 | 97.61 | Shut-In(1) |
| 60 | 50.80 | 98.44 | End Shut-In(1) |
| 61 | 29.26 | 98.45 | Open To Flow (2) |
| 91 | 31.28 | 99.85 | Shut-In(2) |
| 121 | 52.06 | 100.63 | End Shut-In(2) |
| 121 | 1633.88 | 100.99 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 15.00 | Mud, 100%M | 0.21 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H & C Oil Operating Inc

16-8s-22w Graham, KS

PO Box 86
Plainville KS 67663

Gosselin #16-1

Job Ticket: 51600

DST#: 2

ATTN: Charles R. Ramsay

Test Start: 2013.03.04 @ 09:53:00

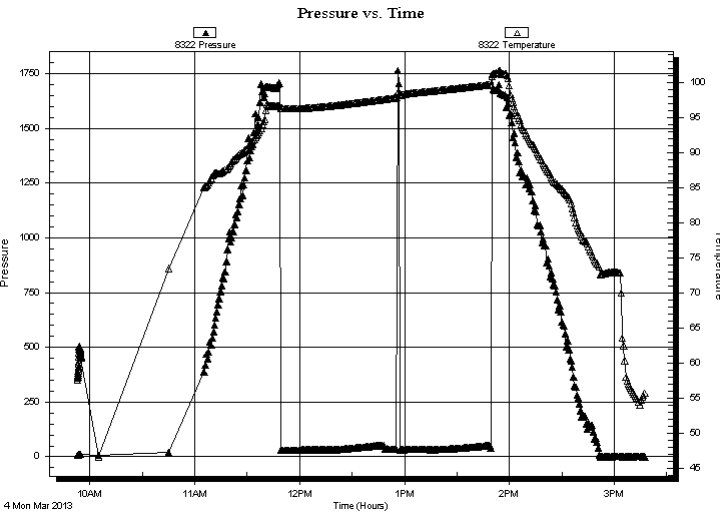
GENERAL INFORMATION:

Formation: **H,I,J**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 11:48:50
 Time Test Ended: 15:17:39
 Interval: **3450.00 ft (KB) To 3515.00 ft (KB) (TVD)**
 Total Depth: 3515.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Cody Bloedorn
 Unit No: 41
 Reference Elevations: 2082.00 ft (KB)
 2077.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8322 Outside

Press @ Run Depth: psig @ 3488.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.03.04 End Date: 2013.03.04 Last Calib.: 2013.03.04
 Start Time: 09:53:01 End Time: 15:17:40 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30 - IF- 3/4" blow
 30 - IS- No return
 30 - FF- No blow for 5 min flushed tool, surged and died.
 30 - FS- No return



PRESSURE SUMMARY

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

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 15.00 | Mud, 100%M | 0.21 |
| | | |
| | | |
| | | |
| | | |

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H & C Oil Operating Inc

16-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Gosselin #16-1

Job Ticket: 51600

DST#: 2

ATTN: Charles R. Ramsay

Test Start: 2013.03.04 @ 09:53:00

Tool Information

| | | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------|-------------|
| Drill Pipe: | Length: 3436.00 ft | Diameter: 3.80 inches | Volume: 48.20 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: | 42000.00 lb |
| | | | <u>Total Volume: 48.20 bbl</u> | Tool Chased | 0.00 ft |
| Drill Pipe Above KB: | 7.00 ft | | | String Weight: Initial | 38000.00 lb |
| Depth to Top Packer: | 3450.00 ft | | | Final | 38000.00 lb |
| Depth to Bottom Packer: | ft | | | | |
| Interval between Packers: | 65.00 ft | | | | |
| Tool Length: | 86.00 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 | | | 3430.00 | |
| Shut In Tool | 5.00 | | | 3435.00 | |
| Hydraulic tool | 5.00 | | | 3440.00 | |
| Packer | 5.00 | | | 3445.00 | 21.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 3450.00 | |
| Stubb | 1.00 | | | 3451.00 | |
| Perforations | 4.00 | | | 3455.00 | |
| Change Over Sub | 1.00 | | | 3456.00 | |
| Drill Pipe | 31.00 | | | 3487.00 | |
| Change Over Sub | 1.00 | | | 3488.00 | |
| Recorder | 0.00 | 8322 | Outside | 3488.00 | |
| Recorder | 0.00 | 6752 | Inside | 3488.00 | |
| Perforations | 24.00 | | | 3512.00 | |
| Bullnose | 3.00 | | | 3515.00 | 65.00 Bottom Packers & Anchor |

Total Tool Length: 86.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H & C Oil Operating Inc

16-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Gosselin #16-1

Job Ticket: 51600

DST#: 2

ATTN: Charles R. Ramsay

Test Start: 2013.03.04 @ 09:53:00

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:

ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 900.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-------------|---------------|
| 15.00 | Mud, 100%M | 0.210 |

Total Length: 15.00 ft Total Volume: 0.210 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

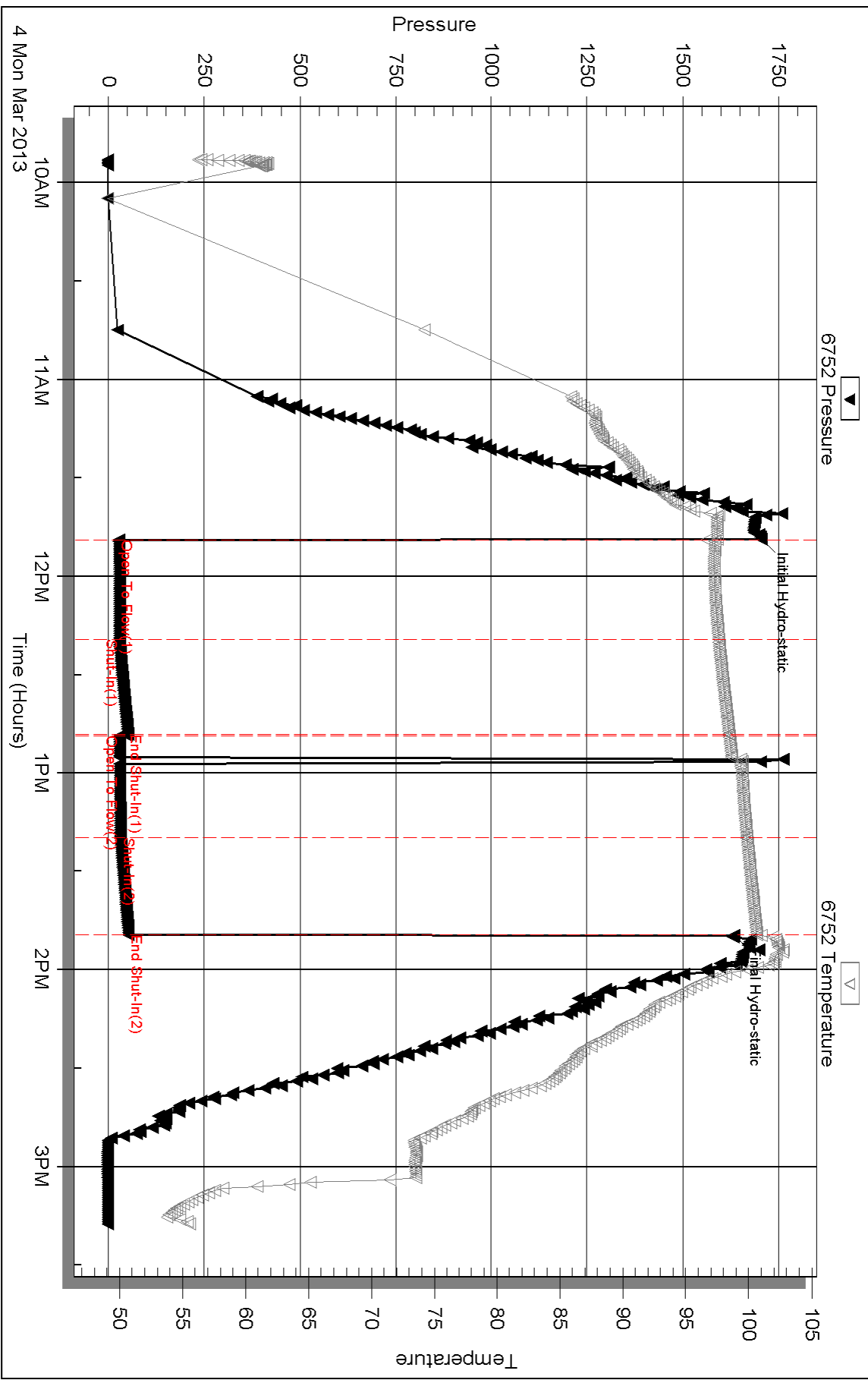
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

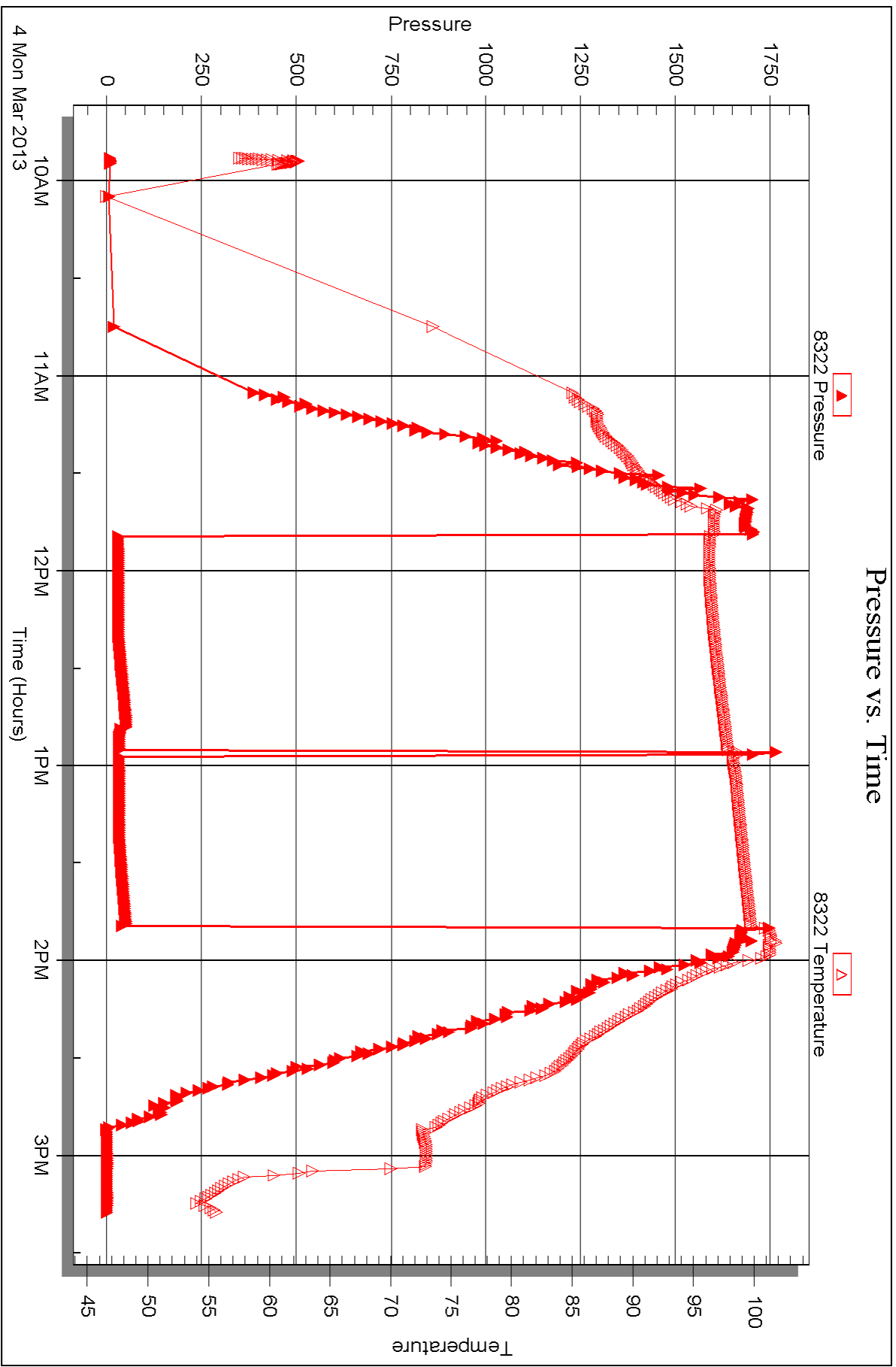


Serial #: 8322

Outside H & C Oil Operating Inc

Gosselin #16-1

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **H & C Oil Operating Inc**

PO Box 86
Plainville KS 67663

ATTN: Charles R. Ramsay

Gosselin #16-1

16-8s-22w Graham,KS

Start Date: 2013.03.04 @ 23:51:00

End Date: 2013.03.05 @ 06:54:39

Job Ticket #: 52055 DST #: 3

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

Printed: 2013.03.08 @ 15:08:22



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

H & C Oil Operating Inc

16-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Gosselin #16-1

Job Ticket: 52055

DST#: 3

ATTN: Charles R. Ramsay

Test Start: 2013.03.04 @ 23:51:00

GENERAL INFORMATION:

Formation: **LKC "K,L"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 02:48:10
 Time Test Ended: 06:54:39
 Interval: **3513.00 ft (KB) To 3553.00 ft (KB) (TVD)**
 Total Depth: 3553.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Cody Bloedorn
 Unit No: 41
 Reference Elevations: 2082.00 ft (KB)
 2077.00 ft (CF)
 KB to GR/CF: 5.00 ft

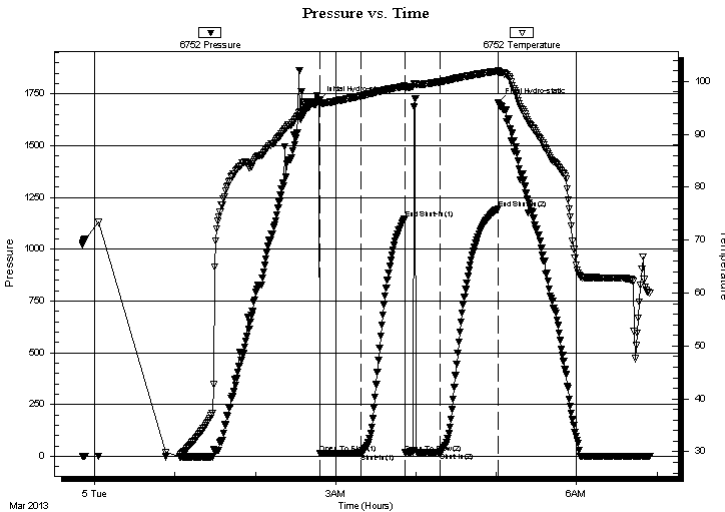
Serial #: 6752

Inside

Press @ Run Depth: 19.73 psig @ 3550.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.03.04 End Date: 2013.03.05 Last Calib.: 2013.03.05
 Start Time: 23:51:01 End Time: 06:54:40 Time On Btm: 2013.03.05 @ 02:47:50
 Time Off Btm: 2013.03.05 @ 05:01:20

TEST COMMENT: 30 - IF- 3/4" blow , dying off to 1/4" blow .
 30 - IS- No return.
 30 - FF- No blow for 5 min, flushed tool, surged and died.
 30 - FS- No return.

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1719.06 | 96.25 | Initial Hydro-static |
| 1 | 12.71 | 95.92 | Open To Flow (1) |
| 31 | 15.83 | 97.24 | Shut-In(1) |
| 64 | 1146.30 | 99.10 | End Shut-In(1) |
| 64 | 16.52 | 98.74 | Open To Flow (2) |
| 90 | 19.73 | 99.91 | Shut-In(2) |
| 134 | 1195.39 | 101.94 | End Shut-In(2) |
| 134 | 1706.55 | 102.07 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 10.00 | Mud, 100%M | 0.14 |
| | | |
| | | |
| | | |
| | | |

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H & C Oil Operating Inc

PO Box 86
Plainville KS 67663

ATTN: Charles R. Ramsay

16-8s-22w Graham, KS

Gosselin #16-1

Job Ticket: 52055 DST#: 3

Test Start: 2013.03.04 @ 23:51:00

GENERAL INFORMATION:

Formation: LKC "K,L"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:48:10

Time Test Ended: 06:54:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Cody Bloedorn

Unit No: 41

Interval: 3513.00 ft (KB) To 3553.00 ft (KB) (TVD)

Total Depth: 3553.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2082.00 ft (KB)

2077.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8322 Outside

Press @ Run Depth: psig @ 3550.00 ft (KB)

Start Date: 2013.03.04

End Date:

2013.03.05

Start Time: 23:51:01

End Time:

06:54:40

Capacity: 8000.00 psig

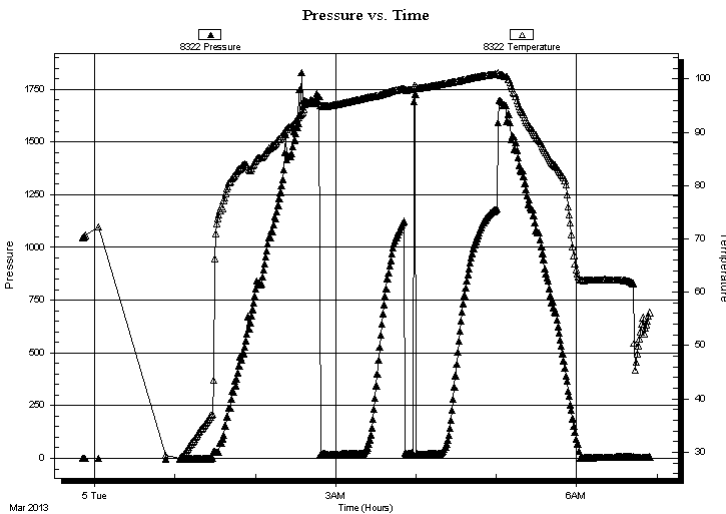
Last Calib.: 2013.03.05

Time On Btm:

Time Off Btm:

TEST COMMENT: 30 - IF- 3/4" blow , dying off to 1/4" blow .
30 - IS- No return.
30 - FF- No blow for 5 min, flushed tool, surged and died.
30 - FS- No return.

PRESSURE SUMMARY



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

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 10.00 | Mud, 100%M | 0.14 |
| | | |
| | | |
| | | |
| | | |

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H & C Oil Operating Inc

16-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Gosselin #16-1

Job Ticket: 52055

DST#: 3

ATTN: Charles R. Ramsay

Test Start: 2013.03.04 @ 23:51:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3498.00 ft | Diameter: 3.80 inches | Volume: 49.07 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: 44000.00 lb |
| | | | <u>Total Volume: 49.07 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 6.00 ft | | | String Weight: Initial 40000.00 lb |
| Depth to Top Packer: | 3513.00 ft | | | Final 40000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 40.00 ft | | | |
| Tool Length: | 61.00 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 | | | 3493.00 | |
| Shut In Tool | 5.00 | | | 3498.00 | |
| Hydraulic tool | 5.00 | | | 3503.00 | |
| Packer | 5.00 | | | 3508.00 | 21.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 3513.00 | |
| Stubb | 1.00 | | | 3514.00 | |
| Perforations | 3.00 | | | 3517.00 | |
| Change Over Sub | 1.00 | | | 3518.00 | |
| Drill Pipe | 31.00 | | | 3549.00 | |
| Change Over Sub | 1.00 | | | 3550.00 | |
| Recorder | 0.00 | 8322 | Outside | 3550.00 | |
| Recorder | 0.00 | 6752 | Inside | 3550.00 | |
| Bullnose | 3.00 | | | 3553.00 | 40.00 Bottom Packers & Anchor |

Total Tool Length: 61.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H & C Oil Operating Inc

16-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Gosselin #16-1

Job Ticket: 52055

DST#: 3

ATTN: Charles R. Ramsay

Test Start: 2013.03.04 @ 23:51:00

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:

ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 900.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-------------|---------------|
| 10.00 | Mud, 100%M | 0.140 |

Total Length: 10.00 ft Total Volume: 0.140 bbl

Num Fluid Samples: 0

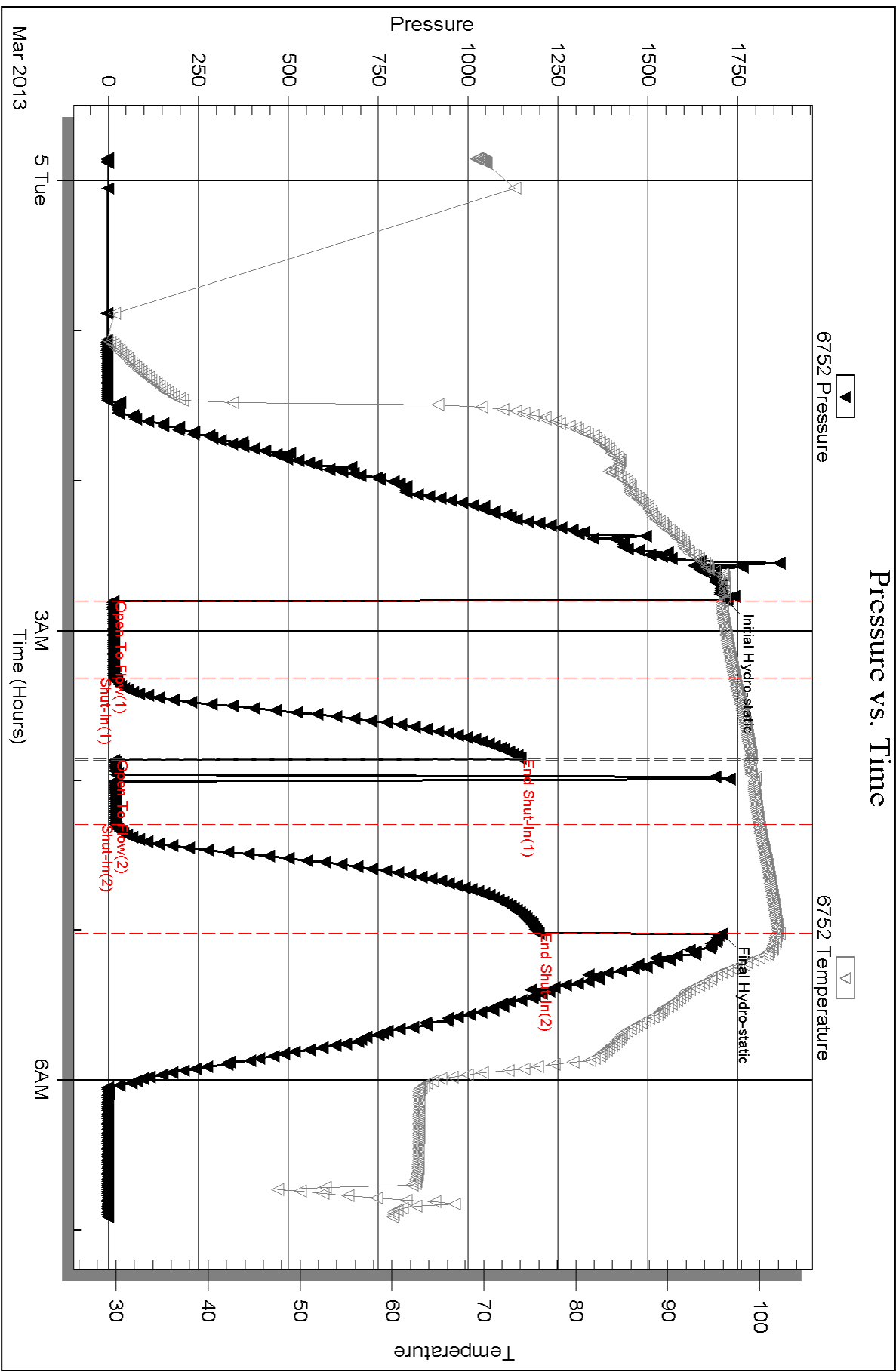
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

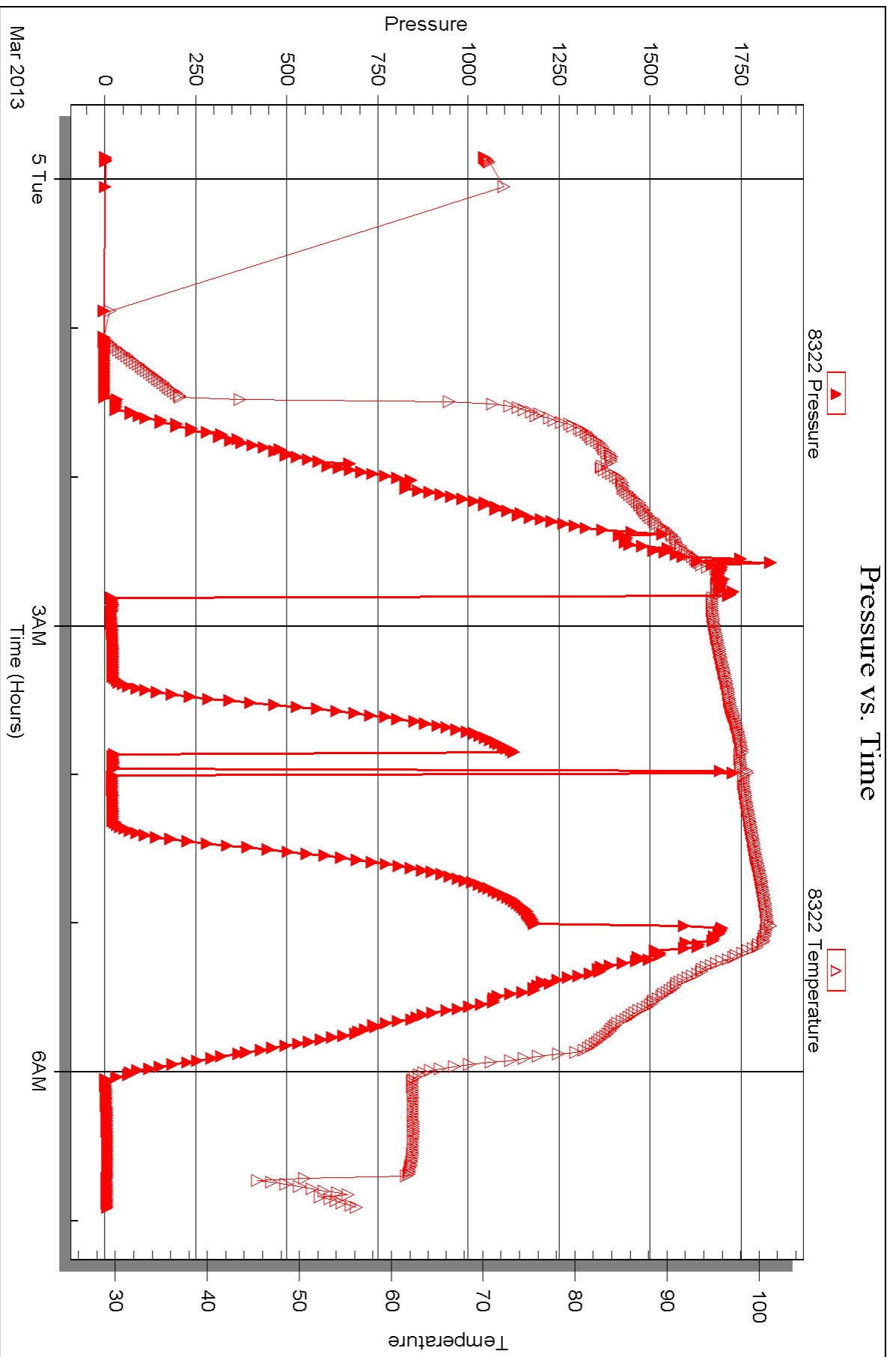


Serial #: 8322

Outside H & C Oil Operating Inc

Gosselin #16-1

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 52055

Printed: 2013.03.08 @ 15:08:25



DRILL STEM TEST REPORT

Prepared For: **H & C Oil Operating Inc**

PO Box 86
Plainville KS 67663

ATTN: Charles R. Ramsay

Gosselin #16-1

16-8s-22w Graham,KS

Start Date: 2013.03.05 @ 22:34:00

End Date: 2013.03.06 @ 05:38:30

Job Ticket #: 52056 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.03.08 @ 15:07:43



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H & C Oil Operating Inc

16-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Gosselin #16-1

Job Ticket: 52056

DST#: 4

ATTN: Charles R. Ramsay

Test Start: 2013.03.05 @ 22:34:00

GENERAL INFORMATION:

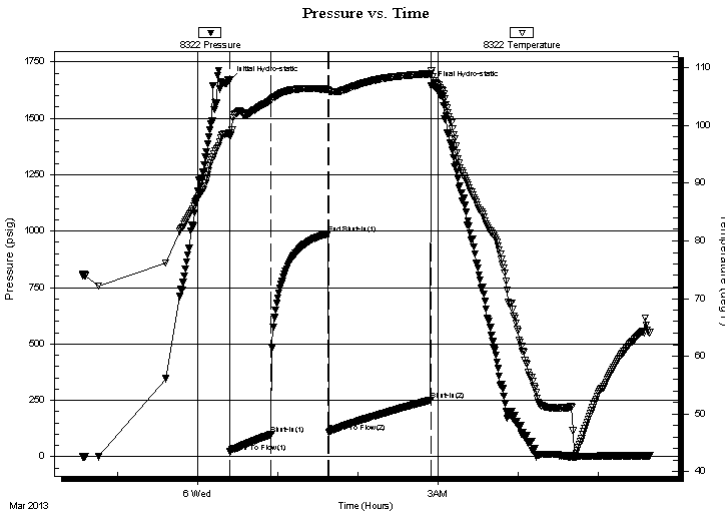
Formation: **LKC "E,F"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:24:10
 Time Test Ended: 05:38:30
 Interval: **3398.00 ft (KB) To 3430.00 ft (KB) (TVD)**
 Total Depth: 3597.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Straddle (Reset)
 Tester: Cody Bloedorn
 Unit No: 41
 Reference Elevations: 2082.00 ft (KB)
 2077.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8322 Outside

Press @ Run Depth: 98.32 psig @ 3399.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.03.05 End Date: 2013.03.06 Last Calib.: 2013.03.06
 Start Time: 22:34:01 End Time: 05:38:30 Time On Btm: 2013.03.06 @ 00:23:50
 Time Off Btm: 2013.03.06 @ 02:54:50

TEST COMMENT: 30 - IF- B.O.B. in 13 min
 45 - IS- No return
 30 - FF- 9" blow
 45 - FS- 1 1/4" return

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1669.21 | 98.72 | Initial Hydro-static |
| 1 | 21.17 | 98.29 | Open To Flow (1) |
| 32 | 98.32 | 104.43 | Shut-In(1) |
| 74 | 988.98 | 106.28 | End Shut-In(1) |
| 75 | 109.84 | 106.01 | Open To Flow (2) |
| 151 | 250.82 | 109.00 | Shut-In(2) |
| 151 | 1643.75 | 109.47 | Final Hydro-static |

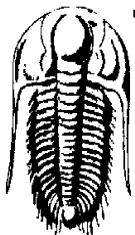
Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|----------------|--------------|
| 62.00 | WM, 30 %W,70%M | 0.87 |
| 434.00 | MW, 5%M, 95%W | 6.09 |
| 186.00 | WM, 20%W, 80%M | 2.61 |
| | | |
| | | |

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H & C Oil Operating Inc

16-8s-22w Graham, KS

PO Box 86
Plainville KS 67663

Gosselin #16-1

ATTN: Charles R. Ramsay

Job Ticket: 52056 **DST#: 4**

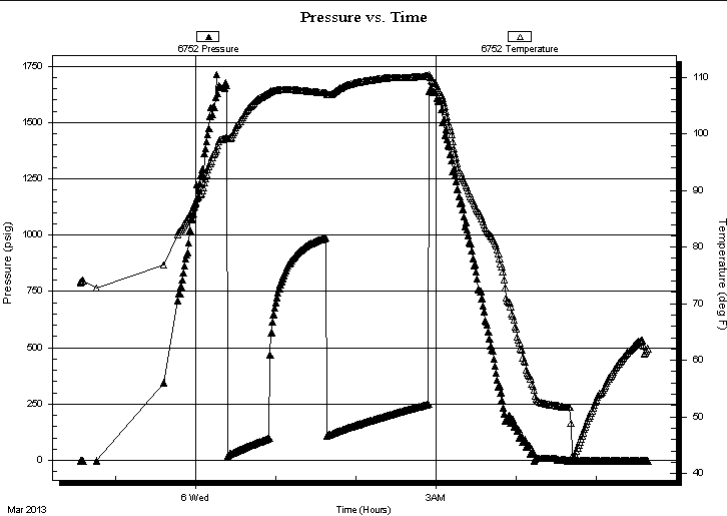
Test Start: 2013.03.05 @ 22:34:00

GENERAL INFORMATION:

| | | | |
|-------------------|---|----------------------|--|
| Formation: | LKC "E,F" | | |
| Deviated: | No Whipstock: | ft (KB) | Test Type: Conventional Straddle (Reset) |
| Time Tool Opened: | 00:24:10 | | Tester: Cody Bloedorn |
| Time Test Ended: | 05:38:30 | | Unit No: 41 |
| Interval: | 3398.00 ft (KB) To 3430.00 ft (KB) (TVD) | | Reference Elevations: 2082.00 ft (KB) |
| Total Depth: | 3597.00 ft (KB) (TVD) | | 2077.00 ft (CF) |
| Hole Diameter: | 7.88 inches | Hole Condition: Fair | KB to GR/CF: 5.00 ft |

| | | | | |
|-----------------------|---------------|----------------------|---------------|--------------|
| Serial #: 6752 | Inside | | | |
| Press @ Run Depth: | psig @ | 3399.00 ft (KB) | Capacity: | 8000.00 psig |
| Start Date: | 2013.03.05 | End Date: 2013.03.06 | Last Calib.: | 2013.03.06 |
| Start Time: | 22:34:01 | End Time: 05:38:30 | Time On Btm: | |
| | | | Time Off Btm: | |

TEST COMMENT: 30 - IF- B.O.B. in 13 min
45 - IS- No return
30 - FF- 9" blow
45 - FS- 1 1/4" return



PRESSURE SUMMARY

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

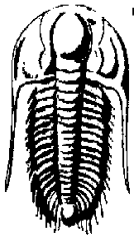
Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-----------------|--------------|
| 62.00 | WM, 30 %W, 70%M | 0.87 |
| 434.00 | MV, 5%M, 95%W | 6.09 |
| 186.00 | WM, 20%W, 80%M | 2.61 |
| | | |
| | | |

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H & C Oil Operating Inc

16-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Gosselin #16-1

Job Ticket: 52056

DST#: 4

ATTN: Charles R. Ramsay

Test Start: 2013.03.05 @ 22:34:00

GENERAL INFORMATION:

Formation: **LKC "E,F"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:24:10

Time Test Ended: 05:38:30

Test Type: Conventional Straddle (Reset)

Tester: Cody Bloedorn

Unit No: 41

Interval: **3398.00 ft (KB) To 3430.00 ft (KB) (TVD)**

Reference Elevations: 2082.00 ft (KB)

Total Depth: 3597.00 ft (KB) (TVD)

2077.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8734

Below (Straddle)

Press @ RunDepth: psig @ 3592.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.03.05

End Date:

2013.03.06

Last Calib.:

2013.03.06

Start Time: 22:34:01

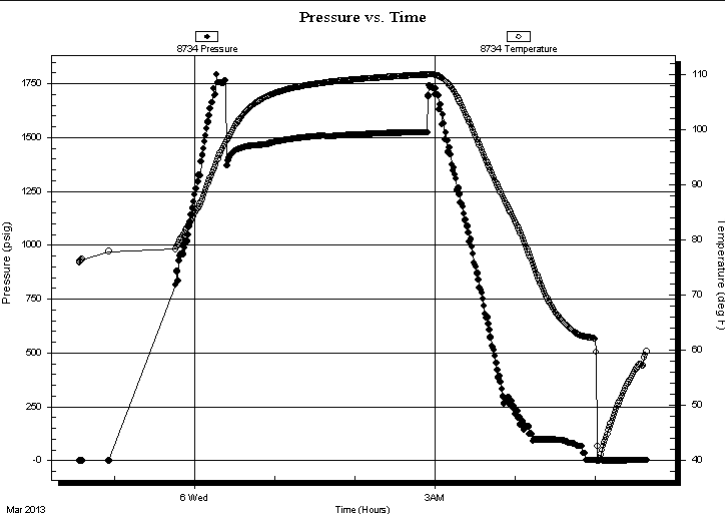
End Time:

05:38:30

Time On Btm:

Time Off Btm:

TEST COMMENT: 30 - IF- B.O.B. in 13 min
45 - IS- No return
30 - FF- 9" blow
45 - FS- 1 1/4" return



PRESSURE SUMMARY

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

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|----------------|--------------|
| 62.00 | WM, 30 %W,70%M | 0.87 |
| 434.00 | MW, 5%M, 95%W | 6.09 |
| 186.00 | WM, 20%W, 80%M | 2.61 |
| | | |
| | | |
| | | |

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H & C Oil Operating Inc

16-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Gosselin #16-1

Job Ticket: 52056

DST#: 4

ATTN: Charles R. Ramsay

Test Start: 2013.03.05 @ 22:34:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3405.00 ft | Diameter: 3.80 inches | Volume: 47.76 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: 46000.00 lb |
| | | | <u>Total Volume: 47.76 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 28.00 ft | | | String Weight: Initial 40000.00 lb |
| Depth to Top Packer: | 3398.00 ft | | | Final 42000.00 lb |
| Depth to Bottom Packer: | 3430.00 ft | | | |
| Interval between Packers: | 32.00 ft | | | |
| Tool Length: | 224.00 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 | | | 3378.00 | |
| Shut In Tool | 5.00 | | | 3383.00 | |
| Hydraulic tool | 5.00 | | | 3388.00 | |
| Packer | 5.00 | | | 3393.00 | 21.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 3398.00 | |
| Stubb | 1.00 | | | 3399.00 | |
| Recorder | 0.00 | 6752 | Inside | 3399.00 | |
| Recorder | 0.00 | 8322 | Outside | 3399.00 | |
| Perforations | 26.00 | | | 3425.00 | |
| Blank Off Sub | 1.00 | | | 3426.00 | |
| Blank Spacing | 4.00 | | | 3430.00 | 32.00 Tool Interval |
| Packer | 5.00 | | | 3435.00 | |
| Stubb | 1.00 | | | 3436.00 | |
| Drill Pipe | 155.00 | | | 3591.00 | |
| Change Over Sub | 1.00 | | | 3592.00 | |
| Recorder | 0.00 | 8734 | Below | 3592.00 | |
| Perforations | 6.00 | | | 3598.00 | |
| Bullnose | 3.00 | | | 3601.00 | 171.00 Bottom Packers & Anchor |
| Total Tool Length: | 224.00 | | | | |



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H & C Oil Operating Inc

16-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Gosselin #16-1

Job Ticket: 52056

DST#: 4

ATTN: Charles R. Ramsay

Test Start: 2013.03.05 @ 22:34:00

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:

ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 900.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbbl |
|--------------|----------------|----------------|
| 62.00 | WM, 30 %W,70%M | 0.870 |
| 434.00 | MW, 5%M, 95%W | 6.088 |
| 186.00 | WM, 20%W, 80%M | 2.609 |

Total Length: 682.00 ft Total Volume: 9.567 bbl

Num Fluid Samples: 0

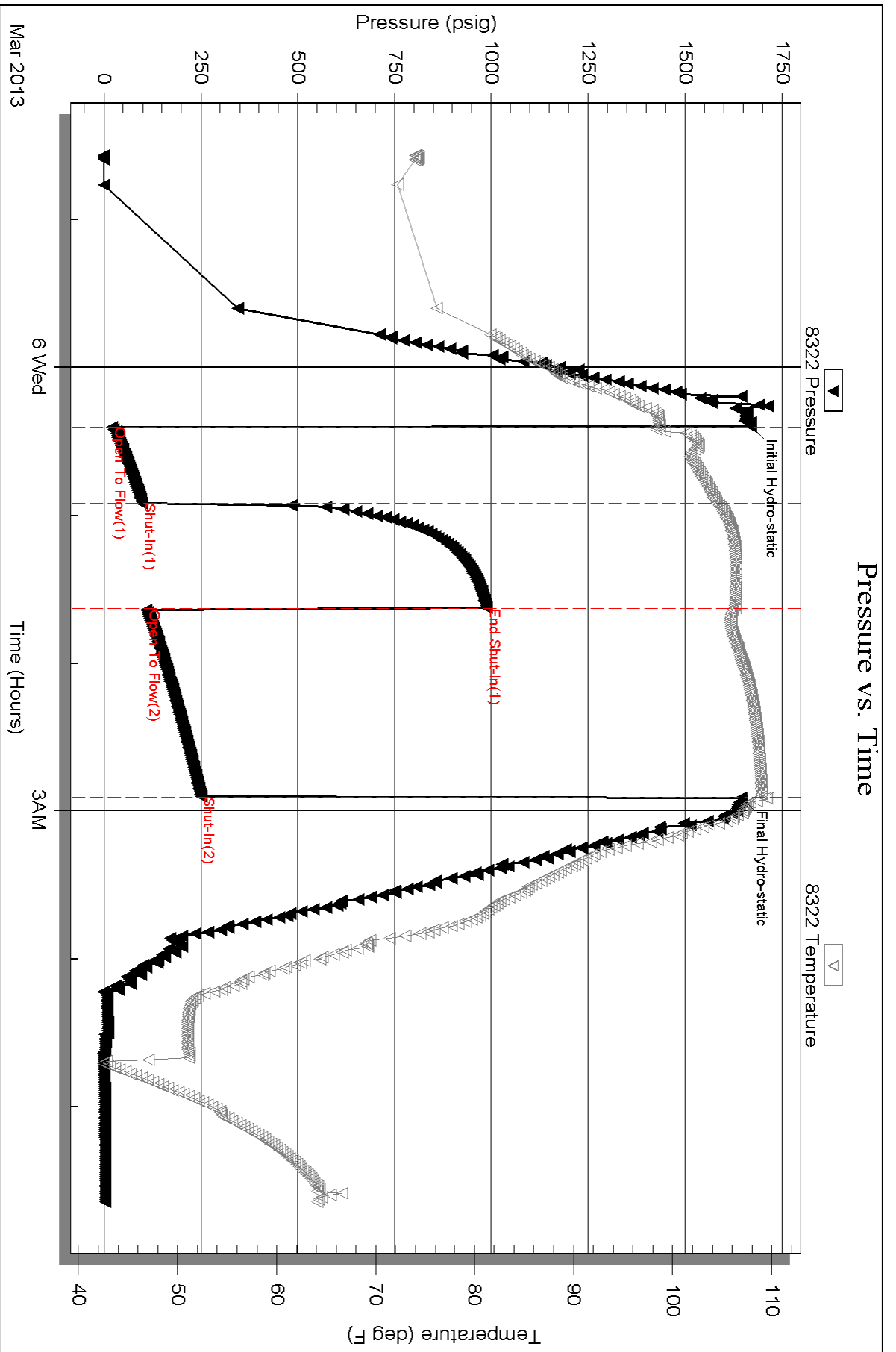
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



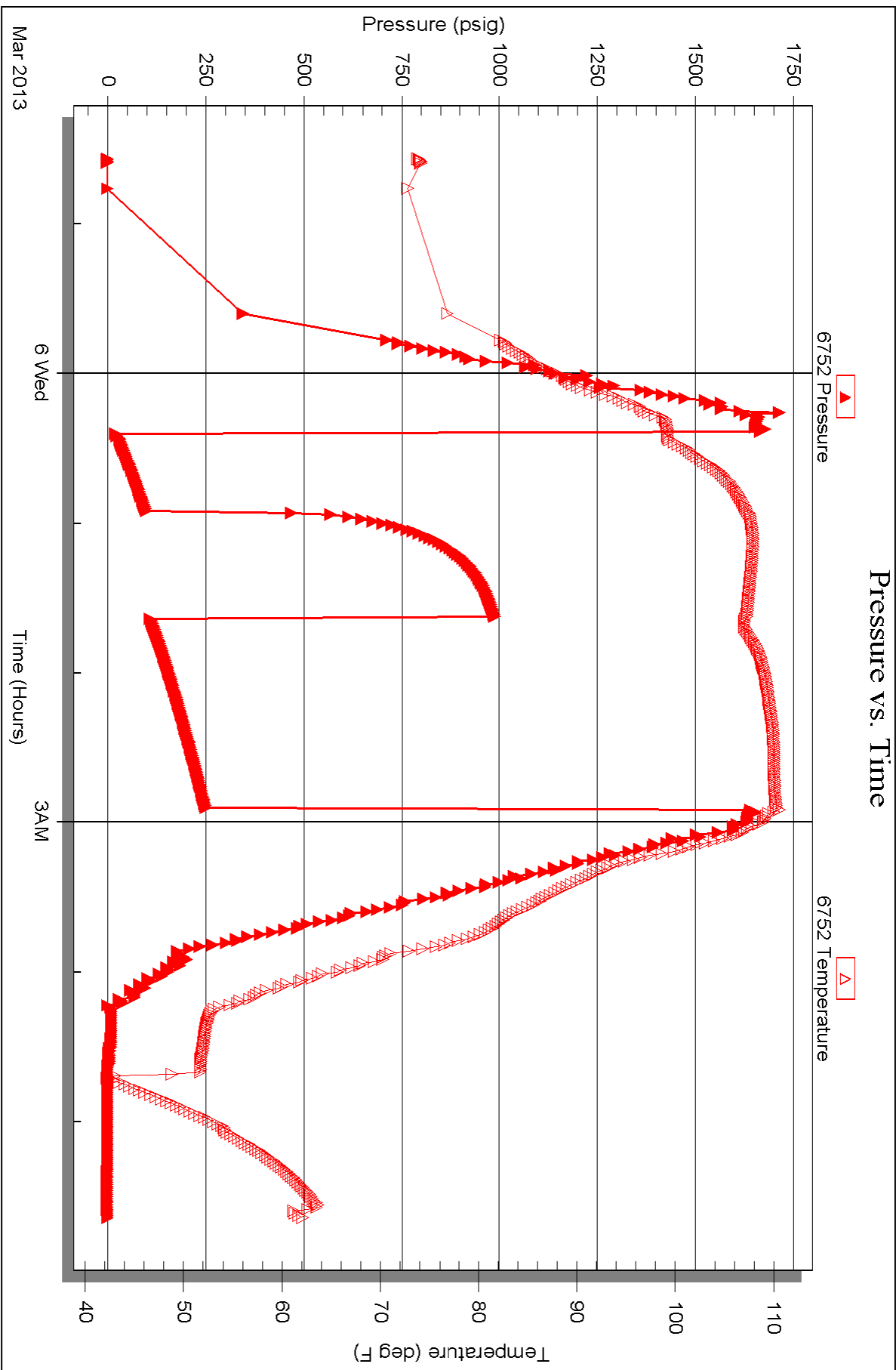
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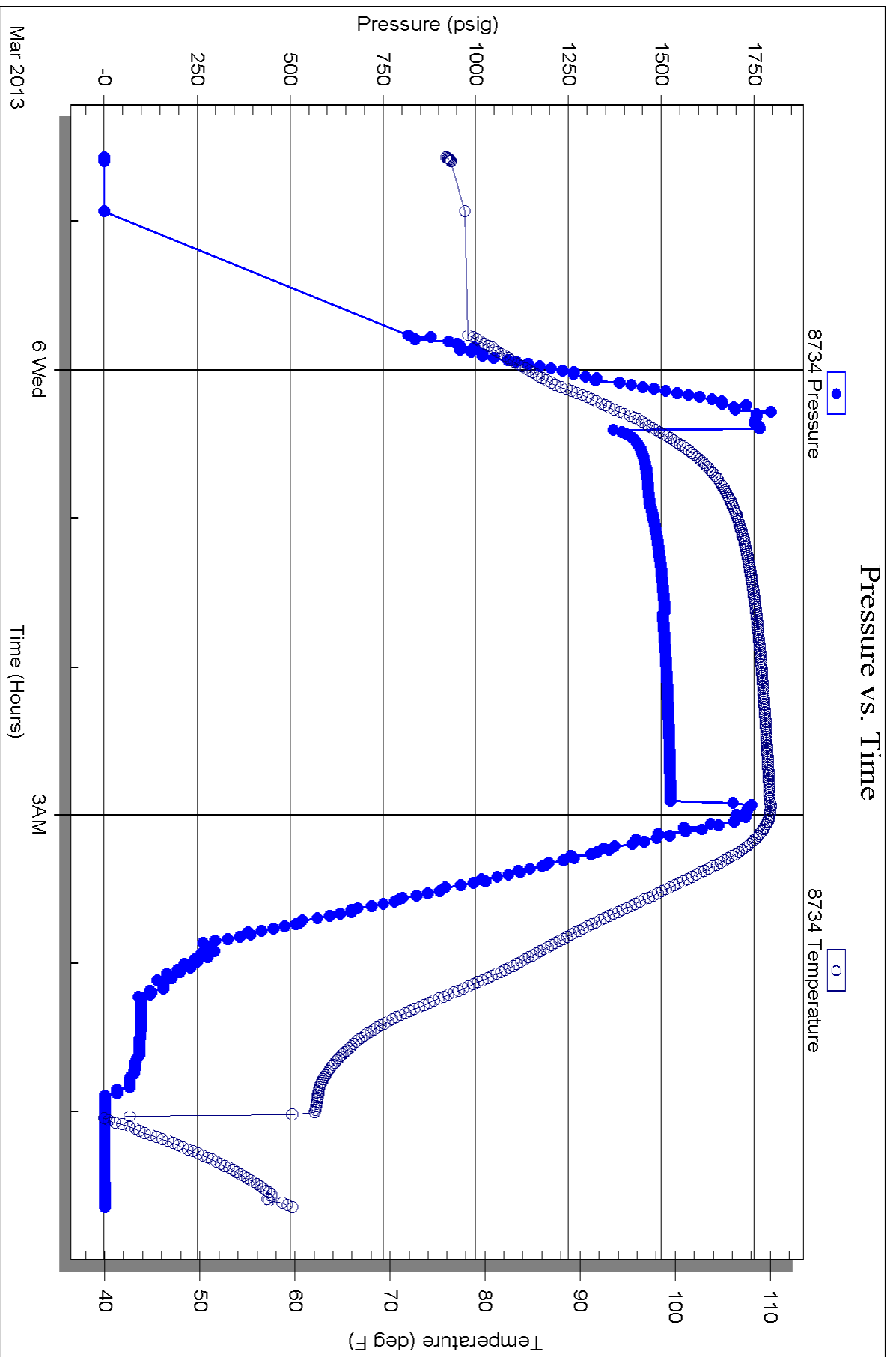
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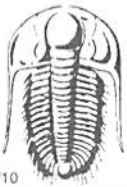
H & C Oil Operating Inc

Gosselin #16-1

DST Test Number: 4







TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 51599

4/10

Well Name & No. Gosselin 16-1 Test No. 1 Date 3-3-13
 Company H&C Oil Operating Inc Elevation 2082 KB 2077 GL
 Address Po Box 86, Plainville KS, 67663
 Co. Rep / Geo. Charles R. Ramsay Rig American Eagle
 Location: Sec. 16 Twp. 8s Rge. 22w Co. Graham State KS

Interval Tested 3356-3384 Zone Tested LKC "C"
 Anchor Length 28' Drill Pipe Run 3341' Mud Wt. 8.9
 Top Packer Depth 3351 Drill Collars Run - Vis 62
 Bottom Packer Depth 3356 Wt. Pipe Run - WL 5
 Total Depth 3384 Chlorides 500 ppm System LCM -

Blow Description IF- B.O.B. in 16 Minutes
ISI- Surfact blow back, Died in 23 min.
FF- B.O.B. in 21 Min.
FSI-

| Rec | Feet of | %gas | %oil | %water | %mud |
|-------------|-----------------|------|-----------|----------|------|
| <u>412'</u> | <u>MW</u> | | <u>95</u> | <u>5</u> | |
| <u>5'</u> | <u>free oil</u> | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

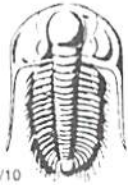
Rec Total 417' BHT 109° Gravity - API RW .21 @ 62° F Chlorides 40,000 ppm

(A) Initial Hydrostatic 1642 Test 1150 T-On Location 10:40am
 (B) First Initial Flow 16 Jars - T-Started 12:47pm
 (C) First Final Flow 103 Safety Joint - T-Open 2:18pm
 (D) Initial Shut-In 927 Circ Sub - T-Pulled ~~6:48pm~~ 5:18pm
 (E) Second Initial Flow 109 Hourly Standby - T-Out 6:48pm
 (F) Second Final Flow 182 Mileage 120 RT 186 Comments -
 (G) Final Shut-In 893 Sampler -
 (H) Final Hydrostatic 1607 Straddle - Ruined Shale Packer -
 Shale Packer - Ruined Packer -
 Extra Packer - Extra Copies -
 Extra Recorder - Sub Total 0
 Day Standby - Total 1336
 Accessibility - MP/DST Disc't -

Initial Open 45
 Initial Shut-In 45
 Final Flow -
 Final Shut-In -
 Sub Total 1336

Approved By _____ Our Representative Cody Woodson

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.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 51600

4/10

Well Name & No. Gosselin 16-1 Test No. 2 Date 3-4-13
 Company H&C Oil Operating INC Elevation 2082 KB 2077 GL
 Address Po Box 86, Plainville KS, 67663
 Co. Rep / Geo. Charles R. Ramsay Rig American Eagle #3
 Location: Sec. 16 Twp. 8S Rge. 22W Co. Graham State KS

Interval Tested 3450 - 3515 Zone Tested "H,I,J"
 Anchor Length 65' Drill Pipe Run 3436' Mud Wt. 9.1
 Top Packer Depth 3445 Drill Collars Run - Vis 51
 Bottom Packer Depth 3450 Wt. Pipe Run - WL 5.2
 Total Depth 3515 Chlorides 900 ppm System LCM 2#

Blow Description ±F - 3/4" blow
ISI - No return
FF - No blow for 5 Minutes. Flushed tool, surged & died.
FSI - No return

| Rec | Feet of | %gas | %oil | %water | %mud |
|-----------|------------|------|------|------------|------|
| <u>15</u> | <u>Mud</u> | | | <u>100</u> | |
| 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 |

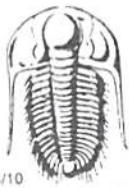
Rec Total 15' BHT 100° Gravity - API RW - @ - °F Chlorides - ppm

(A) Initial Hydrostatic 1705 Test 1150 T-On Location 9:35 am
 (B) First Initial Flow 26 Jars _____ T-Started 9:53 am
 (C) First Final Flow 29 Safety Joint _____ T-Open 11:49 am
 (D) Initial Shut-In 50 Circ Sub _____ T-Pulled 1:49 pm
 (E) Second Initial Flow 29 Hourly Standby _____ T-Out 3:18 pm
 (F) Second Final Flow 31 Mileage 120 RT 186
 (G) Final Shut-In 52 Sampler _____
 (H) Final Hydrostatic 1633 Straddle _____

Initial Open 30 Shale Packer _____
 Initial Shut-In 30 Extra Packer _____
 Final Flow 30 Extra Recorder _____
 Final Shut-In 30 Day Standby _____
 Sub Total 1336 Accessibility _____
 Total 1336 Ruined Shale Packer _____
 MP/DST Disc't _____ Ruined Packer _____
 Sub Total 1336 Extra Copies _____
 Sub Total 0
 Total 1336

Approved By _____ Our Representative Cody Bloodorn

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 52055

Well Name & No. Gosselin 16-1 Test No. 3 Date 3-4-13
 Company H&C Oil Operating INC Elevation 2082 KB 2077 GL
 Address Po Box 86 Plainville KS. 67663
 Co. Rep / Geo. Charles R. Ramsay Rig American Eagle 3
 Location: Sec. 16 Twp. 8S Rge. 22W Co. Graham State KS

Interval Tested 3513 - 3553 Zone Tested K.L
 Anchor Length 40' Drill Pipe Run 3498' Mud Wt. 9.1
 Top Packer Depth 3508 Drill Collars Run — Vis 51
 Bottom Packer Depth 3513 Wt. Pipe Run — WL 5.2
 Total Depth 3553 Chlorides 900 ppm System LCM 2#

Blow Description IF - 3/4" blow dying off to 1/4" blow.
ISI - No blow back.
FF - No blow for 5 min. Flushed tool, surged & dived.
FSI - No return.

| Rec | Feet of | %gas | %oil | %water | %mud |
|-----------|------------|------|------|------------|------|
| <u>10</u> | <u>Mud</u> | | | <u>100</u> | |
| 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 |

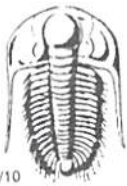
Rec Total 10' BHT 101° Gravity — API RW — @ — °F Chlorides 1113 ppm

(A) Initial Hydrostatic 1719 Test 1150 T-On Location 11:13 pm
 (B) First Initial Flow 12 Jars — T-Started 11:51 pm
 (C) First Final Flow 15 Safety Joint — T-Open 2:48 am
 (D) Initial Shut-In 1146 Circ Sub — T-Pulled 4:48 am
 (E) Second Initial Flow 16 Hourly Standby — T-Out 6:55 am
 (F) Second Final Flow 19 Mileage 120 RT 186 Comments —
 (G) Final Shut-In 1195 Sampler —
 (H) Final Hydrostatic 1706 Straddle —
 Shale Packer —
 Ruined Shale Packer —
 Ruined Packer —
 Extra Packer —
 Extra Copies —
 Extra Recorder —
 Day Standby —
 Accessibility —

Initial Open 30
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 30
 Sub Total 0
 Total 1336
 MP/DST Disc't —
 Sub Total 1336

Approved By — Our Representative Cody Bloodorn

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 52056

Well Name & No. Gosselin 16-1 Test No. 4 Date 3-5-13
 Company H&C Oil Operating INC Elevation 2082 KB 2077 GL
 Address Po Box 86, Plainville KS, 67663
 Co. Rep / Geo. Charles R. Ramsay Rig American Eagle 3
 Location: Sec. 16 Twp. 8s Rge. 22w Co. Graham State KS

Interval Tested 3398 - 3430 TD³⁵⁹⁷ Zone Tested LKC "E&F"
 Anchor Length 32' Drill Pipe Run 3405' Mud Wt. 9.1
 Top Packer Depth 3393 Drill Collars Run — Vis 51
 Bottom Packer Depth 3398 Wt. Pipe Run — WL 5.2
 Total Depth 3430 Chlorides 900 ppm System LCM —
 Blow Description IF - B.O.B. in 13 Minutes
FSI - No return
FF - 9" blow
FSI - 1/4" return

| Rec | Feet of | %gas | %oil | %water | %mud |
|------------|-----------|------|-----------|-----------|------|
| <u>62</u> | <u>WM</u> | | <u>30</u> | <u>70</u> | |
| <u>434</u> | <u>MW</u> | | <u>95</u> | <u>5</u> | |
| <u>186</u> | <u>WM</u> | | <u>20</u> | <u>80</u> | |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |

Rec Total 682' BHT _____ Gravity _____ API RW .25 @ 50° F Chlorides 40,000 ppm

| | | |
|-------------------------------------|--|--|
| (A) Initial Hydrostatic <u>1669</u> | <input checked="" type="checkbox"/> Test <u>1150</u> | T-On Location <u>10:20pm</u> |
| (B) First Initial Flow <u>21</u> | <input type="checkbox"/> Jars _____ | T-Started <u>10:34pm</u> |
| (C) First Final Flow <u>98</u> | <input type="checkbox"/> Safety Joint _____ | T-Open <u>12:24am</u> |
| (D) Initial Shut-In <u>988</u> | <input type="checkbox"/> Circ Sub _____ | T-Pulled <u>2:54am</u> |
| (E) Second Initial Flow <u>109</u> | <input type="checkbox"/> Hourly Standby _____ | T-Out <u>5:39am</u> |
| (F) Second Final Flow <u>250</u> | <input checked="" type="checkbox"/> Mileage <u>120 RT</u> ¹⁸⁶ | Comments <u>167' tail</u> |
| (G) Final Shut-In _____ | <input type="checkbox"/> Sampler _____ | <u>TD = 3597'</u> |
| (H) Final Hydrostatic <u>1643</u> | <input checked="" type="checkbox"/> Straddle <u>600</u> | <input type="checkbox"/> Ruined Shale Packer _____ |
| Initial Open <u>30</u> | <input type="checkbox"/> Shale Packer _____ | <input type="checkbox"/> Ruined Packer _____ |
| Initial Shut-In <u>45</u> | <input type="checkbox"/> Extra Packer _____ | <input type="checkbox"/> Extra Copies _____ |
| Final Flow <u>30</u> | <input type="checkbox"/> Extra Recorder _____ | Sub Total <u>0</u> |
| Final Shut-In <u>45</u> | <input type="checkbox"/> Day Standby _____ | Total <u>1936</u> |
| | <input type="checkbox"/> Accessibility _____ | MP/DST Disc't _____ |
| | Sub Total <u>1936</u> | |

Approved By _____

Our Representative Cody P...

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QUALITY O'LLWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 6421

| | | | | | | | | | | | | | | | |
|------------------------|----------------------|------|----------|----------|---|-------|----|--------|--------|-------|--------|-------------|--|--------------|---------|
| Date | 2-27-13 | Sec. | 14 | Twp. | 8 | Range | 22 | County | GRAHAM | State | KANSAS | On Location | | Finish | 4:45 pm |
| Lease | GOSSELIN | | | | | | | | | | | | | | |
| Contractor | A.E #3 | | | | | | | | | | | | | | |
| Type Job | SURFACE | | | | | | | | | | | | | | |
| Hole Size | 12 1/4" | | | | | | | | | | | | | | |
| Csg. | 8 7/8" 231B-NEW | | | | | | | | | | | | | | |
| Tbg. Size | | | | | | | | | | | | | | | |
| Tool | | | | | | | | | | | | | | | |
| Cement Left in Csg. | Shoe Joint | | | | | | | | | | | | | | |
| Meas Line | Displace 13 1/2 BBLs | | | | | | | | | | | | | | |
| EQUIPMENT | | | | | | | | | | | | | | | |
| Pumptrk # | 15 | No. | Cementer | | | | | | | | | | | | |
| Bulktrk # | 14 | No. | Helper | NICK W. | | | | | | | | | | | |
| Bulktrk # | | No. | Driver | DAVID L. | | | | | | | | | | | |
| Bulktrk # | | No. | Driver | CISCO A. | | | | | | | | | | | |
| JOB SERVICES & REMARKS | | | | | | | | | | | | | | | |
| Remarks: | | | | | | | | | | | | | | | |
| Rat Hole | | | | | | | | | | | | | | | |
| Mouse Hole | | | | | | | | | | | | | | | |
| Centralizers | | | | | | | | | | | | | | | |
| Baskets | | | | | | | | | | | | | | | |
| DM or Port Collar | | | | | | | | | | | | | | | |
| CEMENT DID CIRCULATE! | | | | | | | | | | | | | | | |
| FLOAT EQUIPMENT | | | | | | | | | | | | | | | |
| Guide Shoe | | | | | | | | | | | | | | | |
| Centralizer | | | | | | | | | | | | | | | |
| Baskets | | | | | | | | | | | | | | | |
| AFU Inserts | | | | | | | | | | | | | | | |
| Float Shoe | | | | | | | | | | | | | | | |
| Latch Down | | | | | | | | | | | | | | | |
| Pumptrk Charge | Surface | | | | | | | | | | | | | | |
| Mileage | 51 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | Tax | |
| | | | | | | | | | | | | | | Discount | |
| | | | | | | | | | | | | | | Total Charge | |

THANK YOU!

X Signature: 

QUALITY C'WLWELL CEMENT'ING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025

Home Office P.O. Box 32 Russell, KS 67665

No. 6448

Cell 785-324-1041

| | | | | | | | | | | | | | | | | | |
|--------------------------|-----------------|-------|-----------------|----------|---|-------|----|--------|--------|-------|----|-------------|--------------|--------|---------|----------|-----|
| Date | 3-6-13 | Sec. | 16 | Twp. | 8 | Range | 22 | County | Graham | State | KS | On Location | | Finish | 12:00pm | | |
| Lease | Gosselin | | | | | | | | | | | | | | | | |
| Contractor | Am Fgk 2 | | | | | | | | | | | | | | | | |
| Type Job | Plug | | | | | | | | | | | | | | | | |
| Hole Size | 4 1/2" pipe | | | | | | | | | | | | | | | | |
| Csg. | Dill pipe | | | | | | | | | | | | | | | | |
| Tbg. Size | | | | | | | | | | | | | | | | | |
| Tool | | | | | | | | | | | | | | | | | |
| Cement Left in Csg. | | | | | | | | | | | | | | | | | |
| Meas Line | Displace | | | | | | | | | | | | | | | | |
| EQUIPMENT | | | | | | | | | | | | | | | | | |
| Pumptrk | 5 | No. | Cementer/Helper | Mike B | | | | | | | | | | | | Common | 123 |
| Bulktrk | 1 | No. | Driver | Brett P | | | | | | | | | | | | Poz. Mix | 82 |
| Bulktrk | 04 | No. | Driver | Kontie M | | | | | | | | | | | | Gel. | 7 |
| JOB SERVICES & REMARKS | | | | | | | | | | | | | | | | | |
| Remarks: | | | | | | | | | | | | | | | | | |
| Rat Hole | 30 5x | | | | | | | | | | | | | | | | |
| Mouse Hole | | | | | | | | | | | | | | | | | |
| Centralizers | | | | | | | | | | | | | | | | | |
| Baskets | | | | | | | | | | | | | | | | | |
| D/V or Port Collar | | | | | | | | | | | | | | | | | |
| 1st plug | 1720 | 255x | | | | | | | | | | | | | | | |
| 2nd | 930 | 1005x | | | | | | | | | | | | | | | |
| 3rd | 280 | 405x | | | | | | | | | | | | | | | |
| 4th | 40 | 105x | | | | | | | | | | | | | | | |
| Mileage | FLOAT EQUIPMENT | | | | | | | | | | | | | | | | |
| Guide Shoe | | | | | | | | | | | | | | | | | |
| Centralizer | | | | | | | | | | | | | | | | | |
| Baskets | | | | | | | | | | | | | | | | | |
| AFU Inserts | | | | | | | | | | | | | | | | | |
| Float Shoe | | | | | | | | | | | | | | | | | |
| Latch Down | wood plug | | | | | | | | | | | | | | | | |
| Pumptrk Charge | plug | | | | | | | | | | | | | | | | |
| Mileage | 51 | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | Tax | | | | |
| | | | | | | | | | | | | | Discount | | | | |
| | | | | | | | | | | | | | Total Charge | | | | |
| Signature: <i>Quayle</i> | | | | | | | | | | | | | | | | | |

The above was done to satisfaction and supervision of owner agent or contractor.
 Cement Amount Ordered **205 60410 490 94**
gel 14 floaseal

Owner
 To Quality Oilwell Cementing, Inc.
 You are hereby requested to rent cementing equipment and furnish centerman and helper to assist owner or contractor to do work as listed.

COMPANY: H+C Oil Operations, Inc.
 WELL: Gosselin # 16-1
 FIELD: Abilene

LOCATION: T50 Fur + 1986 Fur
 ELEVATION: KB 2081
 DF 2082
 GL 2082

SEC. 16 TWP. 8S RGE. 22W
 COUNTY: Graham
 STATE: Kansas

OPERATOR: H+C Oil Operations, Inc.
 CONTRACTOR: American Eagle, Rig #3
 COMM: E-24-13
 COMP: 3-S-13

CASING RECORD
 SURF: 8 5/8" @ 22'
 TOTAL DEPTH DRILLERS: 3595'
 TOTAL DEPTH LOG: 3597'

PRODUCTION: 0+ A
 MEL
 Saver

| FORMATION | SAMPLE TOP | ELECTRIC LOG TOP | SUB-SEA DATUM | STRUCTURAL POSITION |
|------------------------------|------------|------------------|---------------|---------------------|
| Top Anhydrite Base Anhydrite | 1754 | 1754 | 4350 | NA |
| Tapeka | 3088 | 3088 | -1003 | NA |
| Hebena | 3306 | 3306 | -1214 | 12 |
| Toronto | 3323 | 3323 | -1234 | 14 |
| LKC | 3339 | 3339 | -1254 | +2 |
| BKC | 3547 | 3547 | -1463 | NA |

FORMATION TOPS AND STRUCTURAL POSITION

REFERENCE WELL FOR STRUCTURE: Maxfin Drilling Sec. 16-8S-22W
 Marker #1: N15-N15-22W

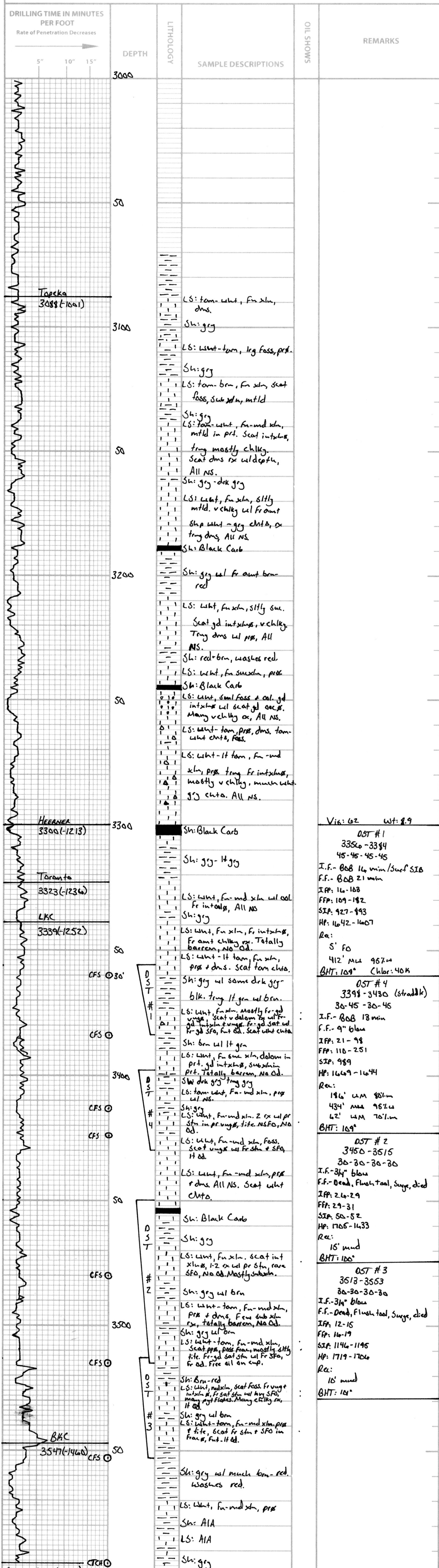
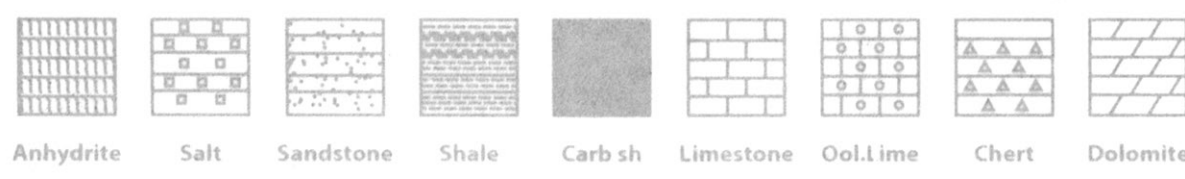
DRILL STEM TESTS

| No. | Interval | IFP/Time | ISF/Time | FFP/Time | ESF/Time | HP/HP | RECOVERY |
|-----|----------|----------|----------|----------|----------|-------|----------|
| | | | | | | | |

REMARKS AND RECOMMENDATIONS
 Due to structural position, DST recovery & log evaluations, it was decided to plug & abandon the well.

Mel Downing

LEGEND



Mel Downing