



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1122438
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: _____



1122438

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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No 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: _____ | <input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum |
|--|---|

| 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> _____ <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

March 06, 2013

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

Re: ACO1
API 15-065-23890-00-00
Campbell 18-2
SW/4 Sec.18-06S-23W
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

COMPANY: H&C O.I. Operating, Inc.
 WELL: Campbell #18-2

LOCATION: 2316 FSL - 2200' FUL
 SEC. 18 TWP. 6S RGE. 23W

COUNTY: Graham
 STATE: Kansas

OPERATOR: H&C
 CONTRACTOR: American Eagle Rig #3
 COMM: 2-12-13 COM# 2-220-13
 CASING RECORD: PROD. 3926
 SURF: 8576" 280
 TOTAL DEPTH DRILLERS: 3926
 TOTAL DEPTH LOG: 3926

Drilling Measured from: 3400 to TD 2434 ft
 Sampled from: 3550 to TD 2434 ft
 Drilling Time from: 3400 to TD 3400
 Sample Examination from: 3400 to TD 3400
 Geological Supervision from: Wellbore Geologist
 Electrical Supervision: Alan Downing
 Produced from: Dual Induction
 Oils/Gases: Microlog

| FORMATION TOPS AND STRUCTURAL POSITION | | | |
|--|------------|------------------|---------------------|
| FORMATION | SAMPLE TOP | ELECTRIC LOG TOP | STRUCTURAL POSITION |
| Amuduit Base | 2124 | 2124 | +315 -22 |
| | 2155 | 2157 | +282 -21 |
| Topoka | 3459 | 3457 | -1018 -8 |
| Heberner | 3657 | 3654 | -1245 -11 |
| Toronto | 3678 | 3680 | -1241 -9 |
| Lansing | 3698 | 3696 | -1257 -1 |
| BKC | 3887 | 3887 | -1448 -10 |

REFERENCE WELL FOR STRUCTURE: H&C O.I. Operating, Inc.
 Campbell #18-1 2200' FSL - 1650' FEL
 Sec. 18-6S-23W Graham (8.1) K.S.

DRILL STEM TESTS

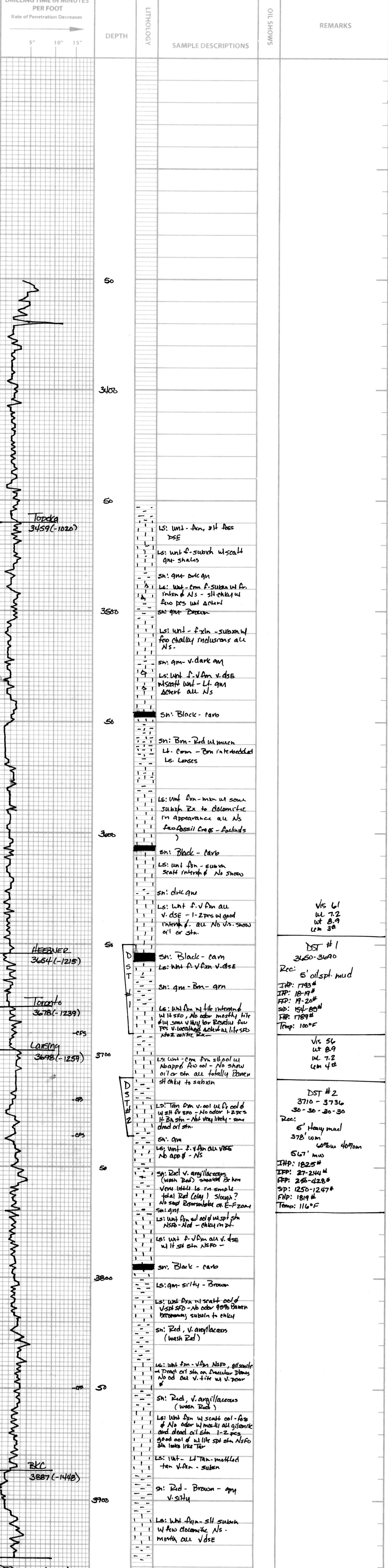
| No. | Interval | IFP Time | ISP Time | FFP Time | ESP Time | HP FBP | RECOVERY |
|-----|----------|----------|----------|----------|----------|--------|----------|
| | | | | | | | |

REMARKS AND RECOMMENDATIONS:
 After two Negative tests and lack of any substantial shows, poor log calculations I was decided to plug this test well.

Marc Downing

LEGEND

- Anhydrite
- Salt
- Sandstone
- Shale
- Carbsh
- Limestone
- Ool.Lime
- Chert
- Dolomite



DST #1
 3650-3690
 Rec: 5' oil spl. mud
 IHP: 1793#
 IFP: 18-19#
 SID: 19-20#
 FHP: 154-89#
 FIP: 1789#
 Temp: 100°F

DST #2
 3710 - 3730
 30-30-30-30
 Rec: 5' Heavy mud
 378' w/m
 60%bu 40%om
 567' mud
 IHP: 1825#
 IFP: 27-244#
 FFIP: 236-428#
 SID: 1250-1247#
 FHP: 1819#
 Temp: 116°F

Marc Downing



DRILL STEM TEST REPORT

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

PO Box 86
Plainville, KS 67663

ATTN: Al Downing / Marc Do

Campell #18-2

18-6s-23w Graham, KS

Start Date: 2013.02.18 @ 19:45:00

End Date: 2013.02.19 @ 02:18:45

Job Ticket #: 51198 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.03.04 @ 15:42:09



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

H & C Oil Operating, Inc.

18-6s-23w Graham, KS

PO Box 86
Plainville, KS 67663

Campell #18-2

Job Ticket: 51198

DST#: 1

ATTN: Al Downing / Marc Do

Test Start: 2013.02.18 @ 19:45:00

GENERAL INFORMATION:

Formation: **Toronto**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:39:45

Time Test Ended: 02:18:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Kevin Mack

Unit No: 43

Interval: 3650.00 ft (KB) To 3690.00 ft (KB) (TVD)

Reference Elevations: 2439.00 ft (KB)

Total Depth: 3690.00 ft (KB) (TVD)

2434.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8648

Inside

Press @ Run Depth: 20.87 psig @ 3651.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.02.18

End Date:

2013.02.19

Last Calib.:

2013.02.19

Start Time:

19:45:05

End Time:

02:18:44

Time On Btm:

2013.02.18 @ 22:39:00

Time Off Btm:

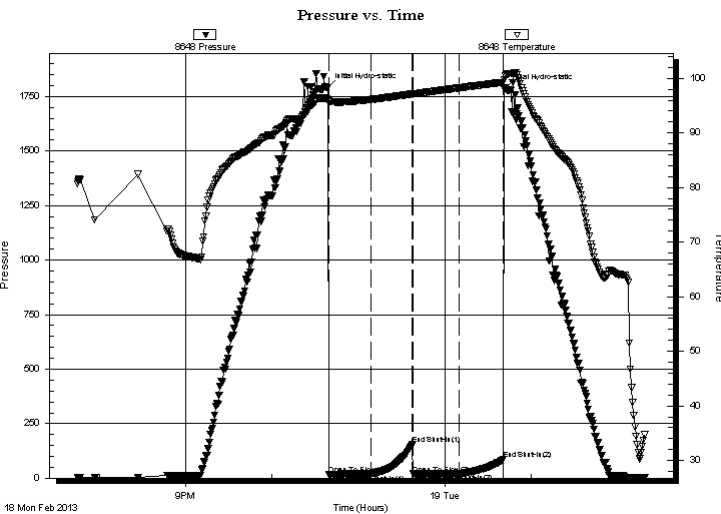
2013.02.19 @ 00:42:00

TEST COMMENT: 30 - IF- 3/4" Blow built to 1"

30 - IS- No Return

30 - FF- No Blow

30 - FS- No Return



PRESSURE SUMMARY

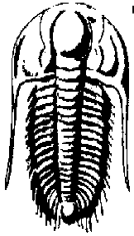
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1793.13 | 96.12 | Initial Hydro-static |
| 1 | 18.00 | 95.80 | Open To Flow (1) |
| 30 | 19.67 | 96.12 | Shut-In(1) |
| 59 | 154.81 | 97.14 | End Shut-In(1) |
| 60 | 19.51 | 97.10 | Open To Flow (2) |
| 91 | 20.87 | 98.24 | Shut-In(2) |
| 122 | 85.55 | 99.27 | End Shut-In(2) |
| 123 | 1789.06 | 100.45 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|----------------------|--------------|
| 5.00 | OSM 100M (Oil Spots) | 0.07 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

H & C Oil Operating, Inc.

18-6s-23w Graham, KS

PO Box 86
Plainville, KS 67663

Campell #18-2

Job Ticket: 51198

DST#: 1

ATTN: Al Downing / Marc Do

Test Start: 2013.02.18 @ 19:45:00

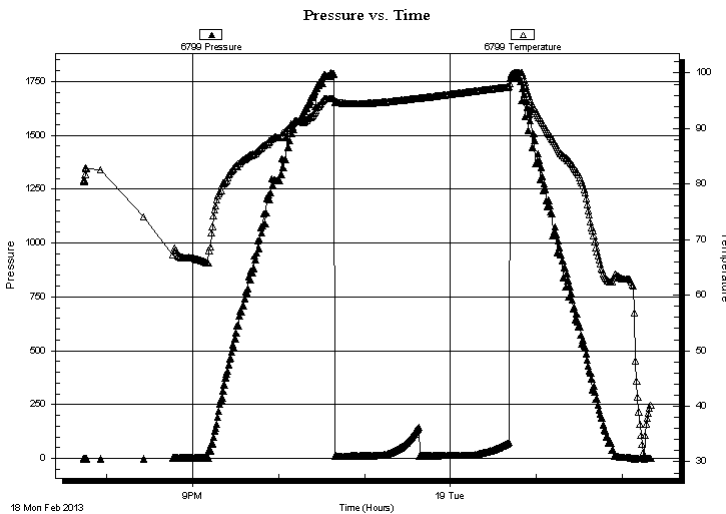
GENERAL INFORMATION:

Formation: **Toronto**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)
Time Tool Opened: 22:39:45 Tester: Kevin Mack
Time Test Ended: 02:18:45 Unit No: 43
Interval: 3650.00 ft (KB) To 3690.00 ft (KB) (TVD) Reference Elevations: 2439.00 ft (KB)
Total Depth: 3690.00 ft (KB) (TVD) 2434.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 5.00 ft

Serial #: 6799 Inside
Press @ Run Depth: psig @ 3651.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.02.18 End Date: 2013.02.19 Last Calib.: 1899.12.30
Start Time: 19:43:50 End Time: 02:19:44 Time On Btm:
Time Off Btm:

TEST COMMENT: 30 - IF- 3/4" Blow built to 1"
30 - IS- No Return
30 - FF- No Blow
30 - FS- No Return

PRESSURE SUMMARY



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

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|----------------------|--------------|
| 5.00 | OSM 100M (Oil Spots) | 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.

18-6s-23w Graham, KS

PO Box 86
Plainville, KS 67663

Campell #18-2

Job Ticket: 51198

DST#: 1

ATTN: Al Downing / Marc Do

Test Start: 2013.02.18 @ 19:45:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3639.00 ft | Diameter: 3.80 inches | Volume: 51.05 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: 25000.00 lb |
| Drill Collar: | Length: 0.00 ft | Diameter: 2.25 inches | Volume: 0.00 bbl | Weight to Pull Loose: 60000.00 lb |
| | | | <u>Total Volume: 51.05 bbl</u> | Tool Chased ft |
| Drill Pipe Above KB: | 10.00 ft | | | String Weight: Initial 40000.00 lb |
| Depth to Top Packer: | 3650.00 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 | | | 3630.00 | |
| Shut In Tool | 5.00 | | | 3635.00 | |
| Hydraulic tool | 5.00 | | | 3640.00 | |
| Packer | 5.00 | | | 3645.00 | 21.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 3650.00 | |
| Stubb | 1.00 | | | 3651.00 | |
| Recorder | 0.00 | 6799 | Inside | 3651.00 | |
| Recorder | 0.00 | 8648 | Inside | 3651.00 | |
| Perforations | 3.00 | | | 3654.00 | |
| Change Over Sub | 1.00 | | | 3655.00 | |
| Drill Pipe | 31.00 | | | 3686.00 | |
| Change Over Sub | 1.00 | | | 3687.00 | |
| Bullnose | 3.00 | | | 3690.00 | 40.00 Bottom Packers & Anchor |

Total Tool Length: 61.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H & C Oil Operating, Inc.

18-6s-23w Graham, KS

PO Box 86
Plainville, KS 67663

Campell #18-2

Job Ticket: 51198

DST#: 1

ATTN: Al Downing / Marc Do

Test Start: 2013.02.18 @ 19:45:00

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: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|----------------------|---------------|
| 5.00 | OSM 100M (Oil Spots) | 0.070 |

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

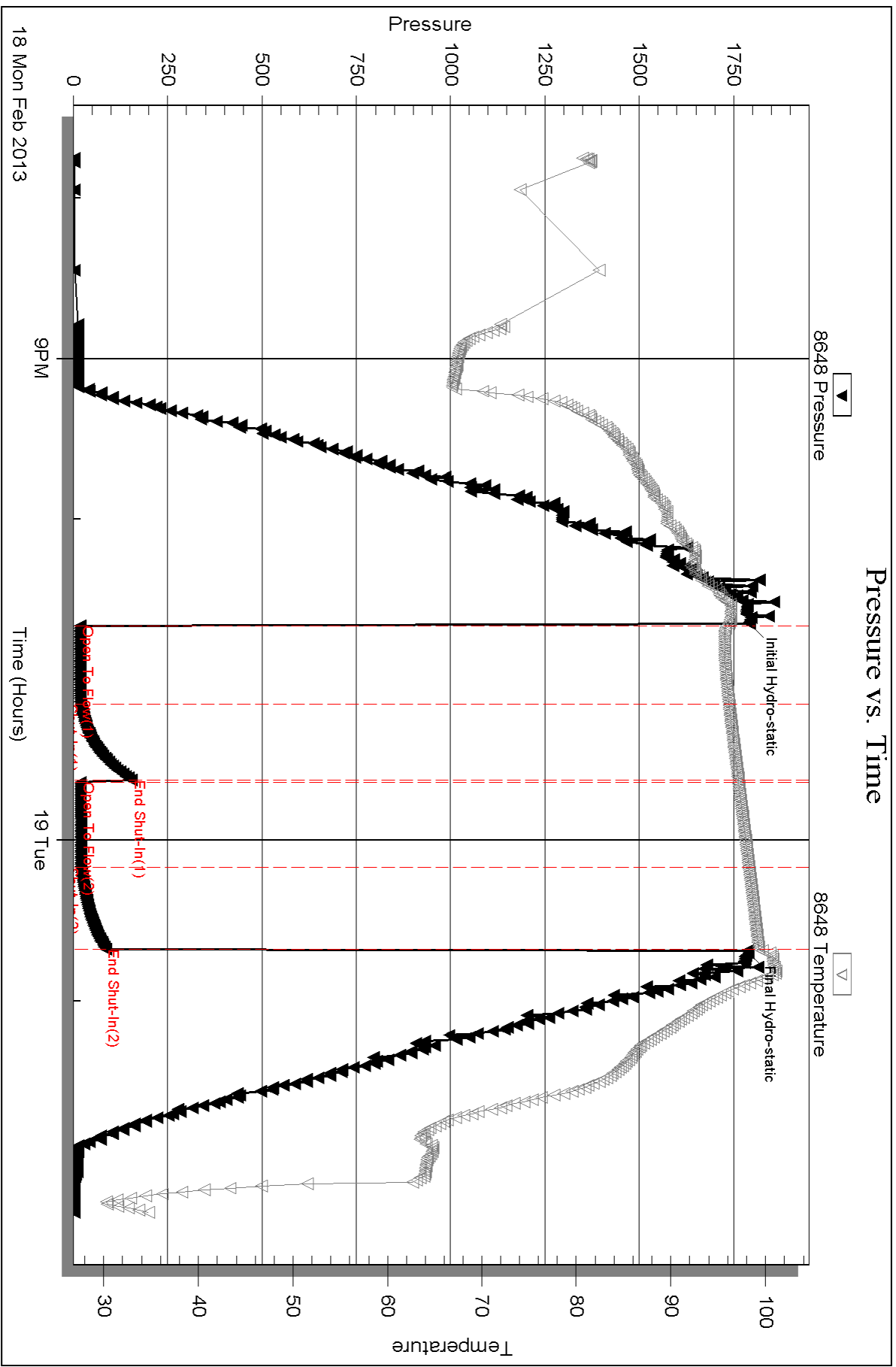
Serial #: 8648

Inside

H & C Oil Operating, Inc.

Campbell #18-2

DST Test Number: 1



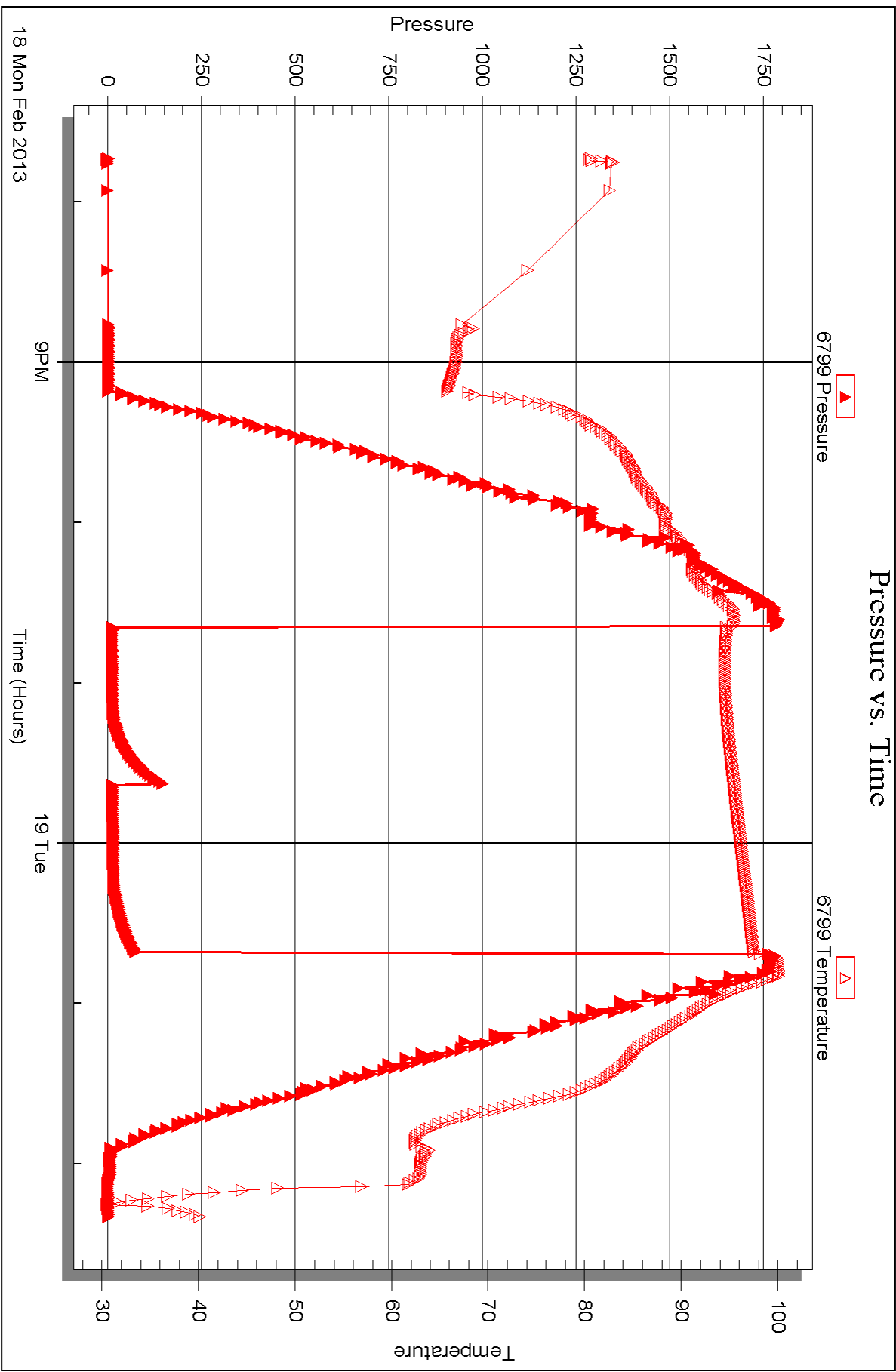
Serial #: 6799

Inside

H & C Oil Operating, Inc.

Campbell #18-2

DST Test Number: 1





DRILL STEM TEST REPORT

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

PO Box 86
Plainville, KS 67663

ATTN: Al Downing / Marc Do

Campell #18-2

18-6s-23w Graham, KS

Start Date: 2013.02.19 @ 10:35:00

End Date: 2013.02.19 @ 17:00:15

Job Ticket #: 51199 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.03.04 @ 15:38:06



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

H & C Oil Operating, Inc.

18-6s-23w Graham, KS

PO Box 86
Plainville, KS 67663

Campell #18-2

Job Ticket: 51199

DST#: 2

ATTN: Al Downing / Marc Do

Test Start: 2013.02.19 @ 10:35:00

GENERAL INFORMATION:

Formation: **LKC "C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:57:30

Time Test Ended: 17:00:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Kevin Mack

Unit No: 43

Interval: 3710.00 ft (KB) To 3736.00 ft (KB) (TVD)

Reference Elevations: 2439.00 ft (KB)

Total Depth: 3736.00 ft (KB) (TVD)

2434.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8648

Inside

Press @ Run Depth: 428.38 psig @ 3711.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.02.19

End Date:

2013.02.19

Last Calib.:

2013.02.19

Start Time: 10:35:05

End Time:

17:00:14

Time On Btm:

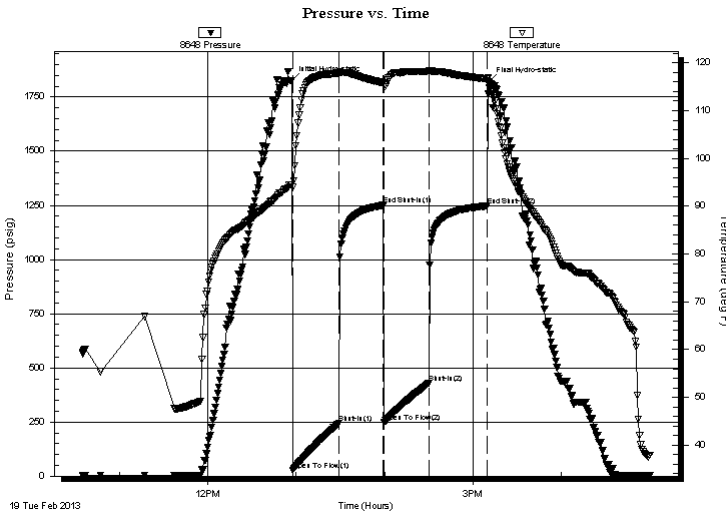
2013.02.19 @ 12:56:45

Time Off Btm:

2013.02.19 @ 15:10:45

TEST COMMENT: 30 - IF- BoB in 8 min.
30 - IS- No Return
30 - FF- BoB in 9 min
30 - FS- No Return

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1825.90 | 94.54 | Initial Hydro-static |
| 1 | 27.65 | 93.98 | Open To Flow (1) |
| 33 | 244.89 | 117.84 | Shut-In(1) |
| 63 | 1250.42 | 115.80 | End Shut-In(1) |
| 63 | 250.11 | 115.34 | Open To Flow (2) |
| 93 | 428.38 | 118.22 | Shut-In(2) |
| 133 | 1247.59 | 116.61 | End Shut-In(2) |
| 134 | 1819.33 | 115.37 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|----------------|--------------|
| 5.00 | Heavy Mud 100M | 0.07 |
| 567.00 | MW 98W 2M | 7.95 |
| 378.00 | MW 60w 40m | 5.30 |
| | | |
| | | |

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H & C Oil Operating, Inc.

18-6s-23w Graham, KS

PO Box 86
Plainville, KS 67663

Campell #18-2

Job Ticket: 51199

DST#: 2

ATTN: Al Downing / Marc Do

Test Start: 2013.02.19 @ 10:35:00

GENERAL INFORMATION:

Formation: **LKC "C"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 12:57:30
 Tester: Kevin Mack
 Time Test Ended: 17:00:15
 Unit No: 43
Interval: 3710.00 ft (KB) To 3736.00 ft (KB) (TVD)
 Reference Elevations: 2439.00 ft (KB)
 Total Depth: 3736.00 ft (KB) (TVD)
 2434.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Good
 KB to GR/CF: 5.00 ft

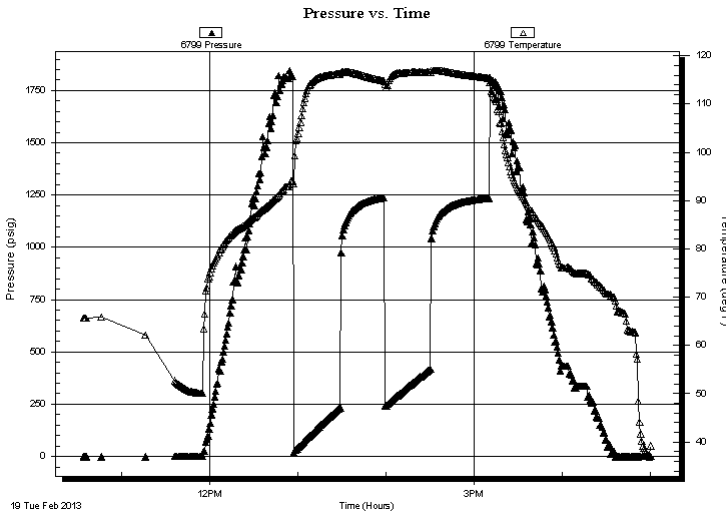
Serial #: 6799

Inside

Press @ Run Depth: psig @ 3711.00 ft (KB)
 Capacity: 8000.00 psig
 Start Date: 2013.02.19 End Date: 2013.02.19 Last Calib.: 2013.02.19
 Start Time: 10:34:20 End Time: 17:00:59
 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30 - IF- BoB in 8 min.
 30 - IS- No Return
 30 - FF- BoB in 9 min
 30 - FS- No Return

PRESSURE SUMMARY



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

Recovery

Gas Rates

| Length (ft) | Description | Volume (bbl) |
|-------------|----------------|--------------|
| 5.00 | Heavy Mud 100M | 0.07 |
| 567.00 | MW 98W 2M | 7.95 |
| 378.00 | MW 60w 40m | 5.30 |
| | | |
| | | |

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H & C Oil Operating, Inc.

18-6s-23w Graham, KS

PO Box 86
Plainville, KS 67663

Campell #18-2

Job Ticket: 51199

DST#: 2

ATTN: Al Downing / Marc Do

Test Start: 2013.02.19 @ 10:35:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3711.00 ft | Diameter: 3.80 inches | Volume: 52.06 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: 25000.00 lb |
| Drill Collar: | Length: 0.00 ft | Diameter: 2.25 inches | Volume: 0.00 bbl | Weight to Pull Loose: 60000.00 lb |
| | | | <u>Total Volume: 52.06 bbl</u> | Tool Chased ft |
| Drill Pipe Above KB: | 22.00 ft | | | String Weight: Initial 40000.00 lb |
| Depth to Top Packer: | 3710.00 ft | | | Final 50000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 26.00 ft | | | |
| Tool Length: | 47.00 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 | | | 3690.00 | |
| Shut In Tool | 5.00 | | | 3695.00 | |
| Hydraulic tool | 5.00 | | | 3700.00 | |
| Packer | 5.00 | | | 3705.00 | 21.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 3710.00 | |
| Stubb | 1.00 | | | 3711.00 | |
| Recorder | 0.00 | 6799 | Inside | 3711.00 | |
| Recorder | 0.00 | 8648 | Inside | 3711.00 | |
| Perforations | 20.00 | | | 3731.00 | |
| Bullnose | 5.00 | | | 3736.00 | 26.00 Bottom Packers & Anchor |
| Total Tool Length: | 47.00 | | | | |



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H & C Oil Operating, Inc.

18-6s-23w Graham, KS

PO Box 86
Plainville, KS 67663

Campell #18-2

Job Ticket: 51199

DST#: 2

ATTN: Al Downing / Marc Do

Test Start: 2013.02.19 @ 10:35:00

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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbbl |
|--------------|----------------|----------------|
| 5.00 | Heavy Mud 100M | 0.070 |
| 567.00 | MW 98W 2M | 7.954 |
| 378.00 | MW 60w 40m | 5.302 |

Total Length: 950.00 ft Total Volume: 13.326 bbl

Num Fluid Samples: 0

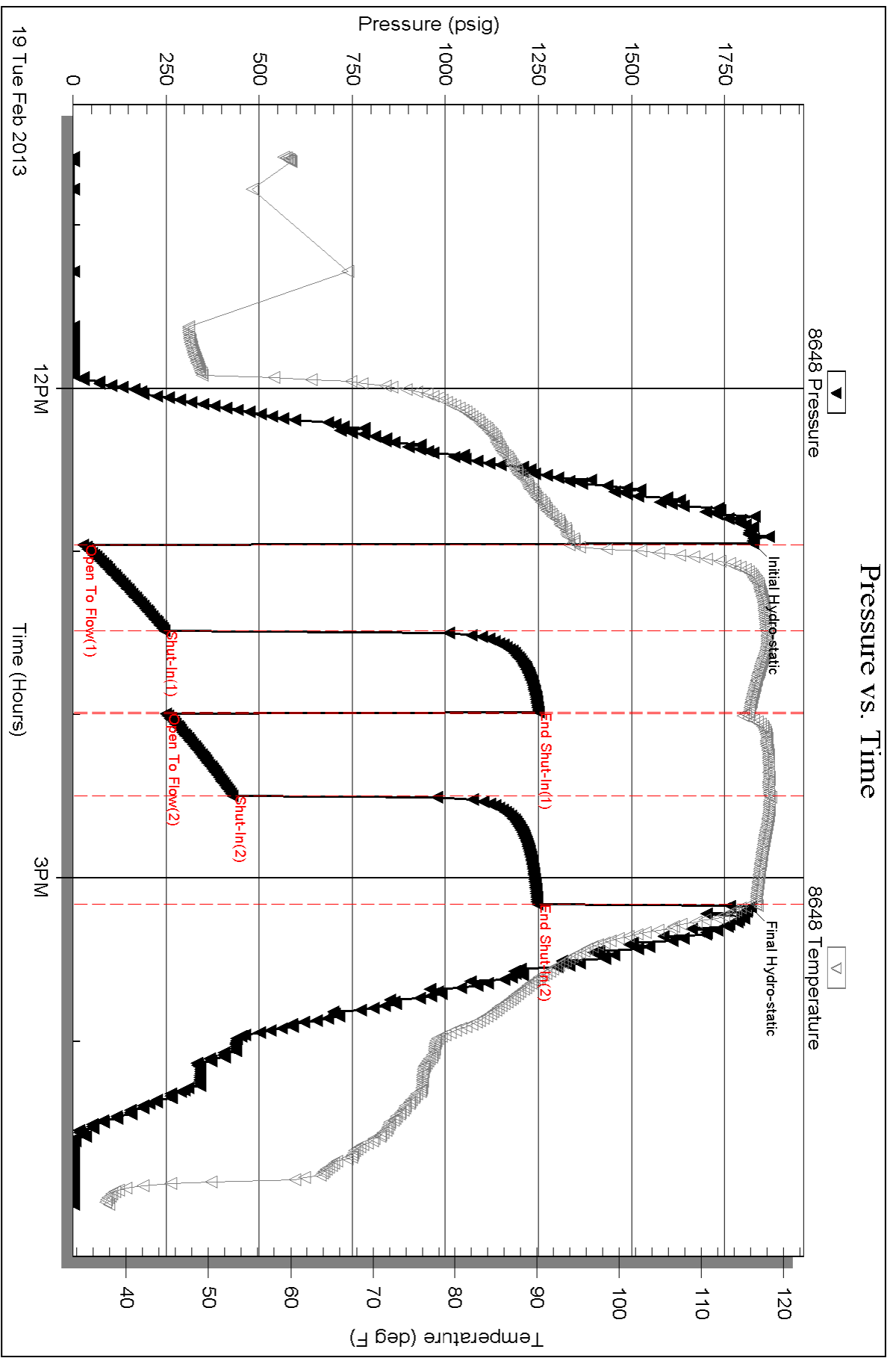
Num Gas Bombs: 0

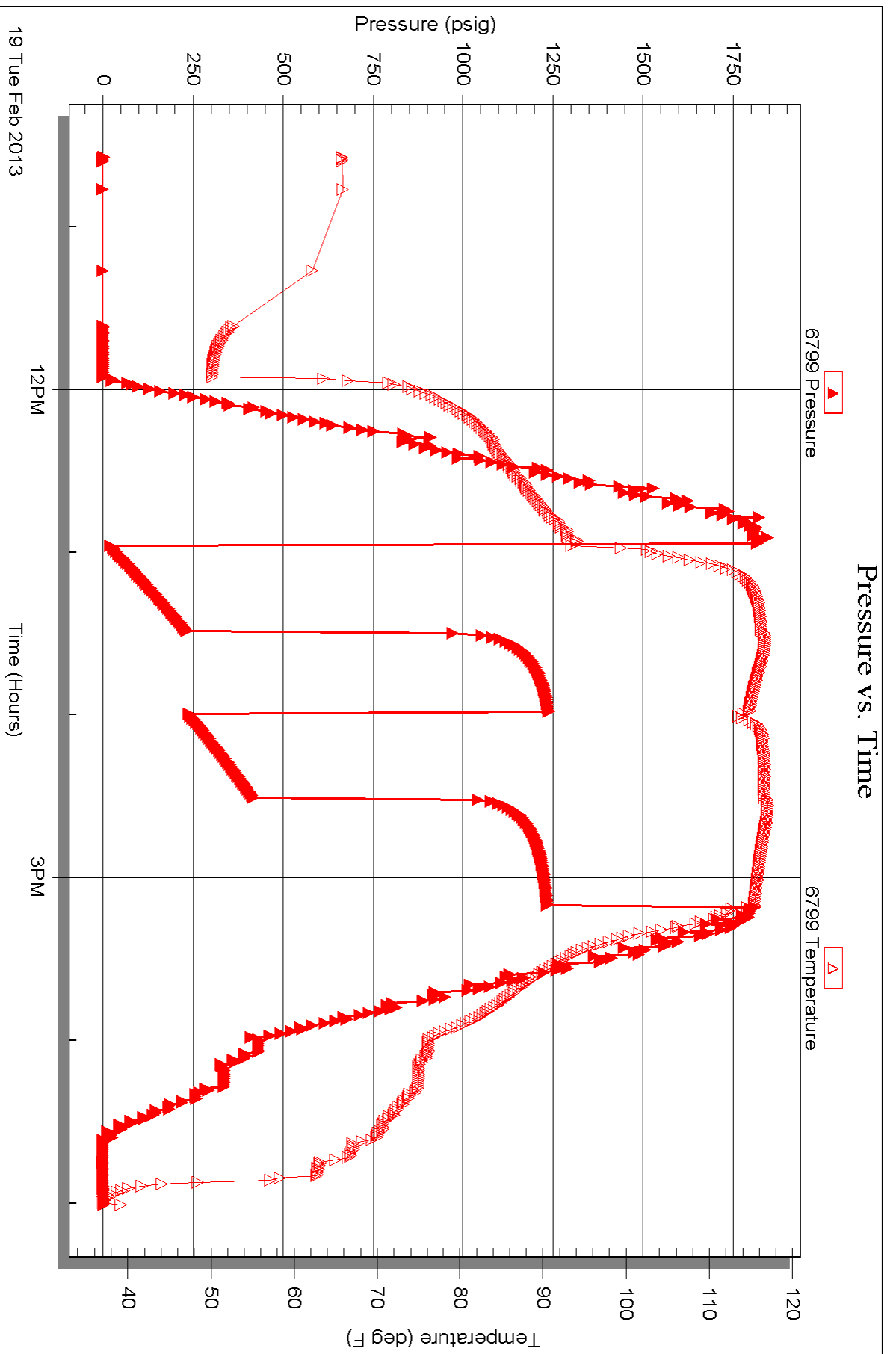
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .16 @ 57 DEG. = 50,000 PPM







TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 51198

4/10

Well Name & No. Campbell #18-2 Test No. 1 Date 2-18-13
 Company H+C Oil Operating, Inc. Elevation 2439 KB 2434 GL
 Address PO Box 86 Plainville, KS 67663
 Co. Rep / Geo. Al Downing / Marc Downing Rig American Eagle #3
 Location: Sec. 18 Twp. 6S Rge. 23W Co. Graham State KS

Interval Tested 3650-3690 Zone Tested Toronto
 Anchor Length 40' Drill Pipe Run 3639 Mud Wt. 8.9
 Top Packer Depth 3646 Drill Collars Run 0 Vis 61
 Bottom Packer Depth 3650 Wt. Pipe Run 0 WL 7.2
 Total Depth 3690 Chlorides 1,200 ppm System LCM 3#

Blow Description IF - 3/4" Blow built to 1"
ISI - NO Return
FF - NO Blow
FSI - NO Return

| Rec | Feet of | %gas | %oil | %water | %mud |
|----------|------------|--------------|------|------------|------|
| <u>5</u> | <u>OSM</u> | <u>SPOTS</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 5 BHT 1000 Gravity - API RW - @ - ° F Chlorides - ppm

| | | | | | |
|-------------------------|-------------|--|--------------------------------------|--|--|
| (A) Initial Hydrostatic | <u>1793</u> | <input checked="" type="checkbox"/> Test | <u>1150</u> | T-On Location | <u>3:50 PM</u> |
| (B) First Initial Flow | <u>18</u> | <input type="checkbox"/> Jars | | T-Started | <u>7:45 PM</u> |
| (C) First Final Flow | <u>19</u> | <input type="checkbox"/> Safety Joint | | T-Open | <u>10:40 PM</u> |
| (D) Initial Shut-In | <u>154</u> | <input checked="" type="checkbox"/> Circ Sub | <u>N/C</u> | T-Pulled | <u>12:40 PM</u> |
| (E) Second Initial Flow | <u>19</u> | <input type="checkbox"/> Hourly Standby | | T-Out | <u>2:20 AM</u> |
| (F) Second Final Flow | <u>20</u> | <input checked="" type="checkbox"/> Mileage | <u>130 RT + 35</u> 201.50 + 54.25 | Comments | <u>Rig had to do an extra 20 stand short trip. + Circulation</u> |
| (G) Final Shut-In | <u>85</u> | <input type="checkbox"/> Sampler | | <input type="checkbox"/> Ruined Shale Packer | |
| (H) Final Hydrostatic | <u>1789</u> | <input type="checkbox"/> Straddle | | <input type="checkbox"/> Ruined Packer | |

| | | | | | |
|-----------------|-----------|---|--|---------------------------------------|----------------|
| Initial Open | <u>30</u> | <input type="checkbox"/> Shale Packer | | <input type="checkbox"/> Extra Copies | |
| Initial Shut-In | <u>30</u> | <input type="checkbox"/> Extra Packer | | Sub Total | <u>0</u> |
| Final Flow | <u>30</u> | <input type="checkbox"/> Extra Recorder | | Total | <u>1405.75</u> |
| Final Shut-In | <u>30</u> | <input type="checkbox"/> Day Standby | | MP/DST Disc't | |
| | | <input type="checkbox"/> Accessibility | | Sub Total | <u>1405.75</u> |

Approved By _____ Our Representative [Signature]

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. 51200

Well Name & No. Campbell # 18-2 Test No. 2 Date 2-19-13
 Company H+C Oil Operating, Inc. Elevation 2439 KB 2434 GL
 Address PO Box 86 Plainville, KS 67663
 Co. Rep / Geo. Al Downing Rig American Eagle #3
 Location: Sec. 18 Twp. 6S Rge. 23 W Co. Graham State KS

Interval Tested 3710-3736 Zone Tested 4K "C"
 Anchor Length 26 Drill Pipe Run 3711 Mud Wt. 89
 Top Packer Depth 3706 Drill Collars Run 0 Vis 5.6
 Bottom Packer Depth 3710 Wt. Pipe Run 0 WL 7.2
 Total Depth 3736 Chlorides 1500 ppm System LCM 4#

Blow Description IF - BoB in 8 min
ISF - no Return
FF - BoB in 9 min
FISF - no Return

| Rec | Feet of | %gas | %oil | %water | %mud |
|------------|------------------|------|-----------|------------|------|
| <u>378</u> | <u>MW</u> | | <u>60</u> | <u>40</u> | |
| <u>567</u> | <u>MW</u> | | <u>98</u> | <u>2</u> | |
| <u>5</u> | <u>Heavy Mud</u> | | | <u>100</u> | |
| | | | | | |
| | | | | | |

Rec Total 950 BHT 117 Gravity - API RW 16 @ 57 °F Chlorides 50,000 ppm

(A) Initial Hydrostatic 1825 Test 1150 T-On Location 10:10 AM
 (B) First Initial Flow 27 Jars _____ T-Started 10:35 AM
 (C) First Final Flow 244 Safety Joint _____ T-Open 1:00 PM
 (D) Initial Shut-In 1250 Circ Sub N/C T-Pulled 3:00 PM
 (E) Second Initial Flow 250 Hourly Standby _____ T-Out 5:00 PM
 (F) Second Final Flow 428 Mileage 130RT 201.50
 (G) Final Shut-In 1247 Sampler _____
 (H) Final Hydrostatic 1819 Straddle _____

Initial Open 30 Ruined Shale Packer _____
 Initial Shut-In 30 Ruined Packer _____
 Final Flow 30 Extra Packer _____
 Final Shut-In 30 Extra Recorder _____
 Sub Total 0
 Total 1351.50
 MP/DST Disc't _____
 Sub Total 1351.50

Approved By _____ Our Representative [Signature]

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.

QUALITY OILWELL 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. 6520

| | | | | | | | | | | | | | | |
|--------------------------------------|-------------------|--------|----|------|---|-------|----|--------|---------|-------|----|-------------|---------|--------|
| Date | 2-13-13 | Sec. | 18 | Twp. | 6 | Range | 23 | County | Coxsack | State | KS | On Location | 11:45pm | Finish |
| Lease | Campbell | | | | | | | | | | | | | |
| Contractor | American Eng'g #3 | | | | | | | | | | | | | |
| Type Job | Surface | | | | | | | | | | | | | |
| Hole Size | 12 1/4 | | | | | | | | | | | | | |
| Csg. | 8 5/8 | | | | | | | | | | | | | |
| Tbg. Size | | | | | | | | | | | | | | |
| Tool | | | | | | | | | | | | | | |
| Cement Left in Csg. | 15' | | | | | | | | | | | | | |
| Meas Line | Displace 166.136 | | | | | | | | | | | | | |
| EQUIPMENT | | | | | | | | | | | | | | |
| Pumptrk | No. | Cement | | | | | | | | | | | | |
| | 9 | Helper | | | | | | | | | | | | |
| Bulktrk | No. | Driver | | | | | | | | | | | | |
| | 14 | Driver | | | | | | | | | | | | |
| | | Driver | | | | | | | | | | | | |
| | | Driver | | | | | | | | | | | | |
| JOB SERVICES & REMARKS | | | | | | | | | | | | | | |
| Remarks: | | | | | | | | | | | | | | |
| Rat Hole | | | | | | | | | | | | | | |
| Mouse Hole | | | | | | | | | | | | | | |
| Centralizers | | | | | | | | | | | | | | |
| Baskets | | | | | | | | | | | | | | |
| D/V or Port Collar | | | | | | | | | | | | | | |
| 8 5/8 on bottom. E3 + Spulation. Mix | | | | | | | | | | | | | | |
| 16.5 skt Dispac. Cement | | | | | | | | | | | | | | |
| Circulated | | | | | | | | | | | | | | |
| FLOAT EQUIPMENT | | | | | | | | | | | | | | |
| Guide Shoe | | | | | | | | | | | | | | |
| Centralizer | | | | | | | | | | | | | | |
| Baskets | | | | | | | | | | | | | | |
| AFU Inserts | | | | | | | | | | | | | | |
| Float Shoe | | | | | | | | | | | | | | |
| Latch Down | | | | | | | | | | | | | | |
| Pumptrk Charge | Surface | | | | | | | | | | | | | |
| Mileage | 43 | | | | | | | | | | | | | |
| Tax | | | | | | | | | | | | | | |
| Discount | | | | | | | | | | | | | | |
| Total Charge | | | | | | | | | | | | | | |
| Signature <i>Charles Ramsey</i> | | | | | | | | | | | | | | |

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

Charge To
NAC

Street
City
State

The above was done to satisfaction and supervision of owner agent or contractor.
Cement Amount Ordered 165 Com 30611 206661

Common 165
Poz. Mix
Gel. 3
Calcium 5

Hulls
Salt
Flowseal
Kol-Seal
Mud CLR 48
CFL-117 or CD110 CAF 38
Sand
Handling 123
Mileage

Guide Shoe
Centralizer
Baskets
AFU Inserts
Float Shoe
Latch Down

Pumptrk Charge
Mileage

Tax
Discount
Total Charge

QUALITY OILWELL 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. 6522

| | | | | | | | | |
|-----------------------------------|--|--------|---------------|----|--|----|-------------|---------|
| Date | 2-21-13 | 18 | 4 | 23 | Graham | KS | On Location | 12:30AM |
| Lease | Campbell | | Well No. 18-2 | | Location Hill City 2100 Rd SW Ks State | | Owner | |
| Contractor | American Energy #3 | | | | | | | |
| Type Job | Pumpjack Plug | | | | | | | |
| Hole Size | 7 7/8 | | | | | | | |
| Csg. | T.D. 3926 | | | | | | | |
| Tbg. Size | Depth | | | | | | | |
| Tool | Depth | | | | | | | |
| Cement Left in Csg. | Shoe Joint | | | | | | | |
| Meas Line | Displace | | | | | | | |
| EQUIPMENT | | | | | | | | |
| Pumptrk | No. 9 | Cement | 1/4 Flow | | | | | |
| Bulktrk | No. 14 | Helper | Common 1/2 3 | | | | | |
| Bulktrk | No. 14 | Driver | Poz. Mix 82 | | | | | |
| Bulktrk | No. 14 | Driver | Gel. ? | | | | | |
| Bulktrk | No. 14 | Driver | Calcium | | | | | |
| JOB SERVICES & REMARKS | | | | | | | | |
| Remarks: | The above was done to satisfaction and supervision of owner agent or contractor. | | | | | | | |
| Rat Hole | 30SK | | | | | | | |
| Mouse Hole | 50A | | | | | | | |
| Centralizers | Mud CLR 48 | | | | | | | |
| Baskets | CFL-117 or CD110 CAF 38 | | | | | | | |
| DM or Port Collar | Sand | | | | | | | |
| | Handling 212 | | | | | | | |
| | Mileage | | | | | | | |
| | FLOAT EQUIPMENT | | | | | | | |
| | Guide Shoe | | | | | | | |
| | Centralizer | | | | | | | |
| | Baskets | | | | | | | |
| | AFU Inserts | | | | | | | |
| | Float Shoe 8 1/2 wooden plug | | | | | | | |
| | Latch Down | | | | | | | |
| | Pumptrk Charge | | | | | | | |
| | Mileage 43 | | | | | | | |
| | Tax | | | | | | | |
| | Discount | | | | | | | |
| | Total Charge | | | | | | | |

X Signature *Robert H. ...*