



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1078047
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: _____

1078047

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> <i>(Submit ACO-4)</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
Ward Loyd, Commissioner
Thomas E. Wright, Commissioner

Sam Brownback, Governor

April 04, 2012

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

Re: ACO1

Sec.-S-
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

LITHOLOGIC STRIP LOG
Wellbore Systems
Geological Interpretation
Measured Corral Log

Well Name: Corral #3
Geographic Location: 48.65137128 N, 109.123132 W
Latitude: 48.65137128 N
Longitude: 109.123132 W
Well ID: 788-020W
Disting. Co.: Garfield County, NB
Surface Coordinates: 1150' NTL, A, 2007' PNL
Disting. Co.: Garfield County, NB
Map Scale: 1:500
Map Datum: NAD 83
Type of Logging Fluid: Chemical Mud
Address by Mail: 3205 S. 200th Street, Suite 100, Edinburg, TX 79525

Operator: M&N
Address: PO Box 68
Fairfax, TX 75742

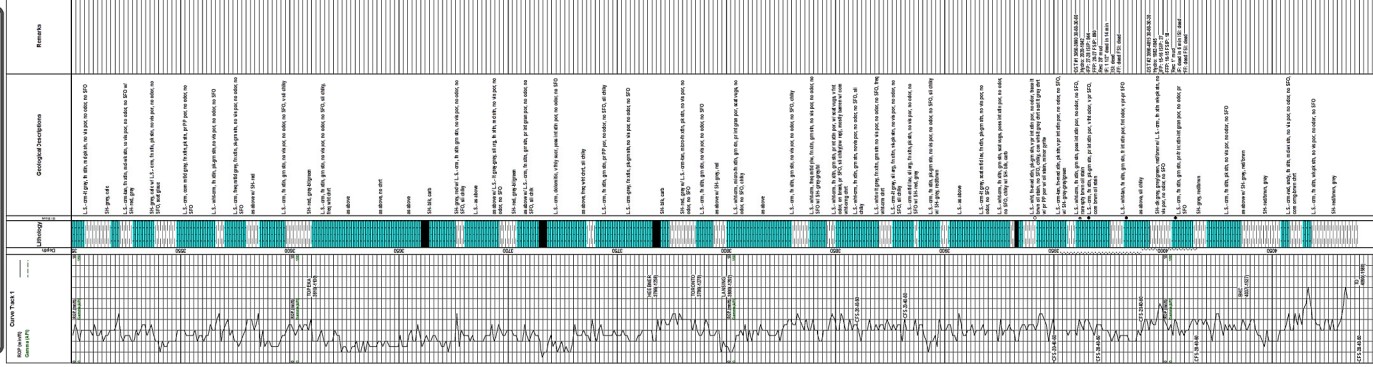
Geologist: Clayton Gibson
Address: 2014 N. 24th Street
Lubbock, TX 79401

Formation Type:
BIO (15)
SAND (33)
MUD (13)
MUD (23)
MUD (15)
MUD (15)
MUD (15)
MUD (15)
MUD (15)

DATE: 2010-08-24
WELL: 788-020W
DEPTH: 2778' - 2784'
WELL TYPE: U.S. Well, 10' - 14'

Comments:
Based upon examination of rock samples, DST results and logs, I recommend following:
ROCK TYPES: Sand, Silt, Mud, Clay, Chert, Gypsum, Calc, Dolomite
ACCESSIONS: Chert, Sand, Silt, Mud, Clay, Gypsum, Calc, Dolomite
MINERAL: Calc, Dolomite, Gypsum, Sand, Silt, Mud, Clay
PRIORITY: Sand, Silt, Mud, Clay, Gypsum, Calc, Dolomite

OTHER SYMBOLS: Sand, Silt, Mud, Clay, Gypsum, Calc, Dolomite
PROPERTY: Sand, Silt, Mud, Clay, Gypsum, Calc, Dolomite





DRILL STEM TEST REPORT

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

PO Box 86
Plainville KS 67663

ATTN: Clayton Erickson

Dinkel #3-1

3-9s-25w Graham,KS

Start Date: 2012.03.17 @ 06:30:00

End Date: 2012.03.17 @ 11:42:00

Job Ticket #: 47376 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.03.19 @ 16:37:50



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

H & C Oil Operations Inc

3-9s-25w Graham,KS

PO Box 86
Plainville KS 67663

Dinkel #3-1

Job Ticket: 47376

DST#: 1

ATTN: Clayton Erickson

Test Start: 2012.03.17 @ 06:30:00

GENERAL INFORMATION:

Formation: **LKC "I & J"**

Deviated: No Whipstock: 2510.00 ft (KB)

Time Tool Opened: 08:41:30

Time Test Ended: 11:42:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jim Svaty

Unit No: 61

Interval: 3950.00 ft (KB) To 3990.00 ft (KB) (TVD)

Reference Elevations: 2510.00 ft (KB)

Total Depth: 3990.00 ft (KB) (TVD)

2505.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8736 Inside

Press @ Run Depth: 28.94 psig @ 3955.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.03.17

End Date:

2012.03.17

Last Calib.:

2012.03.17

Start Time: 06:30:05

End Time:

13:18:59

Time On Btm:

2012.03.17 @ 08:41:00

Time Off Btm:

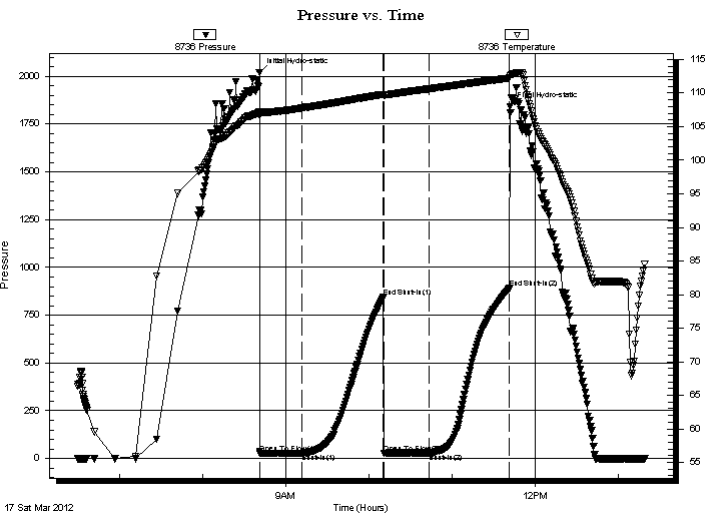
2012.03.17 @ 11:41:45

TEST COMMENT: 30-IFP- 1.5 in Blow Died in 14 min

60-ISIP- No Blow

30-FFP- No Blow

60-FSIP- No Blow



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2020.50 | 107.28 | Initial Hydro-static |
| 1 | 26.75 | 106.93 | Open To Flow (1) |
| 31 | 28.04 | 107.78 | Shut-In(1) |
| 90 | 844.12 | 109.81 | End Shut-In(1) |
| 90 | 28.24 | 109.65 | Open To Flow (2) |
| 123 | 28.94 | 110.63 | Shut-In(2) |
| 181 | 890.33 | 112.22 | End Shut-In(2) |
| 181 | 1842.55 | 112.56 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 28.00 | MUD | 0.39 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H & C Oil Operations Inc

3-9s-25w Graham,KS

PO Box 86
Plainville KS 67663

Dinkel #3-1

Job Ticket: 47376

DST#: 1

ATTN: Clayton Erickson

Test Start: 2012.03.17 @ 06:30:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3930.00 ft | Diameter: 3.80 inches | Volume: 55.13 bbl | Tool Weight: 2500.00 lb |
| Heavy Wt. Pipe: | Length: 0.00 ft | Diameter: 2.75 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: 74000.00 lb |
| | | | <u>Total Volume: 55.13 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 8.00 ft | | | String Weight: Initial 58000.00 lb |
| Depth to Top Packer: | 3950.00 ft | | | Final 59000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 40.00 ft | | | |
| Tool Length: | 68.00 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 | | | 3923.00 | |
| Shut In Tool | 5.00 | | Inside | 3928.00 | |
| Hydraulic tool | 5.00 | | | 3933.00 | |
| Jars | 5.00 | | | 3938.00 | |
| Safety Joint | 3.00 | | | 3941.00 | |
| Packer | 5.00 | | | 3946.00 | 28.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 3950.00 | |
| Stubb | 1.00 | | | 3951.00 | |
| Perforations | 3.00 | | | 3954.00 | |
| Change Over Sub | 1.00 | | | 3955.00 | |
| Recorder | 0.00 | 8736 | Inside | 3955.00 | |
| Recorder | 0.00 | 8166 | Outside | 3955.00 | |
| Blank Spacing | 31.00 | | | 3986.00 | |
| Change Over Sub | 1.00 | | | 3987.00 | |
| Bullnose | 3.00 | | | 3990.00 | 40.00 Bottom Packers & Anchor |

Total Tool Length: 68.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H & C Oil Operations Inc

3-9s-25w Graham,KS

PO Box 86
Plainville KS 67663

Dinkel #3-1

Job Ticket: 47376

DST#: 1

ATTN: Clayton Erickson

Test Start: 2012.03.17 @ 06:30:00

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: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.78 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 |
|--------------|-------------|---------------|
| 28.00 | MUD | 0.393 |

Total Length: 28.00 ft Total Volume: 0.393 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

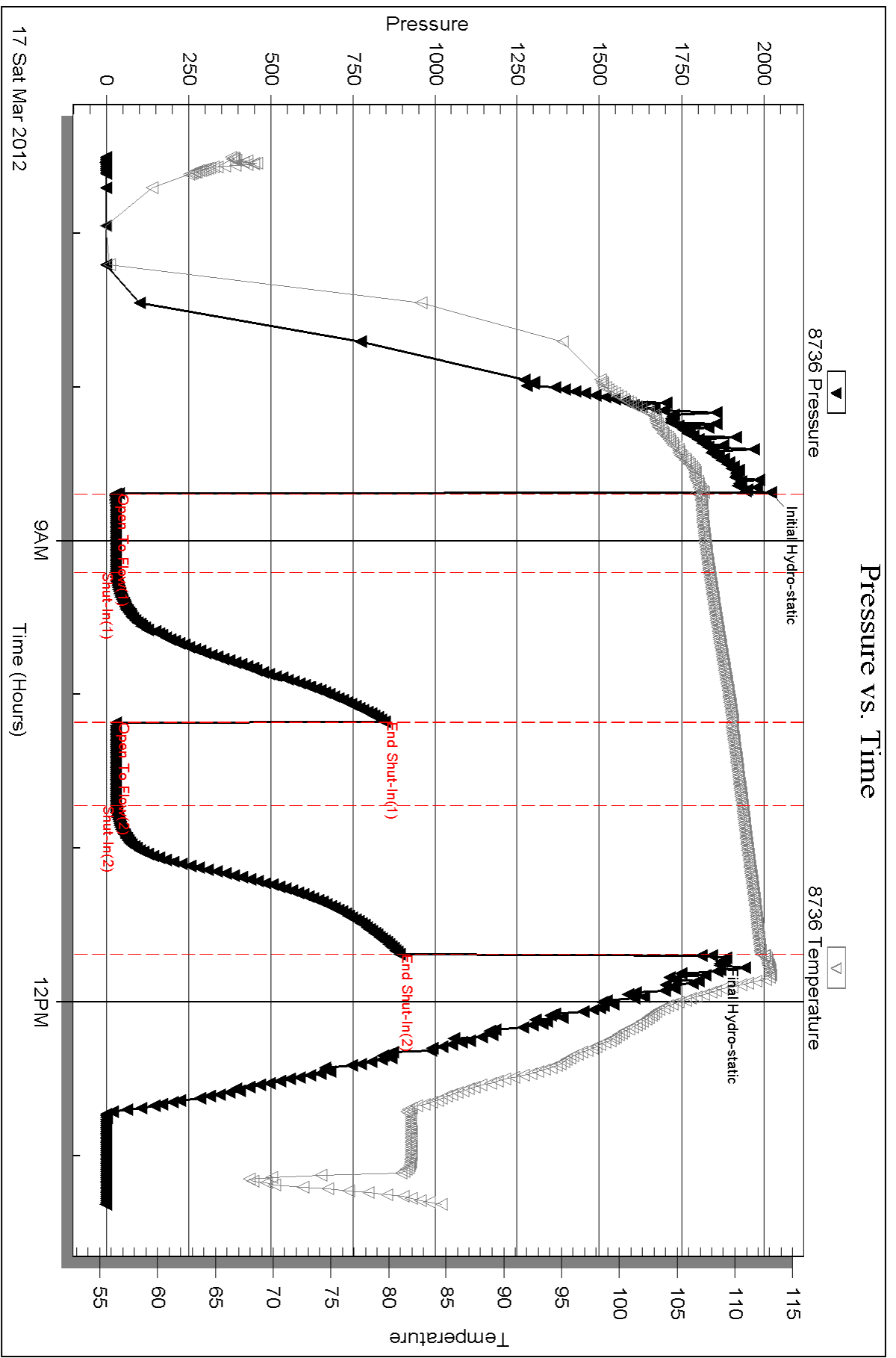
Serial #: 8736

Inside

H & C Oil Operations Inc

Dnkel #3-1

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 47376

Printed: 2012.03.19 @ 16:37:52



DRILL STEM TEST REPORT

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

PO Box 86
Plainville KS 67663

ATTN: Clayton Erickson

Dinkel #3-1

3-9s-25w Graham,KS

Start Date: 2012.03.17 @ 20:15:00

End Date: 2012.03.18 @ 03:11:30

Job Ticket #: 47377 DST #: 2

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

Printed: 2012.03.19 @ 16:37:39

H & C Oil Operations Inc
3-9s-25w Graham,KS
Dinkel #3-1
DST # 2
LKC "K"
2012.03.17



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H & C Oil Operations Inc
 PO Box 86
 Plainville KS 67663
 ATTN: Clayton Erickson

3-9s-25w Graham, KS
Dinkel #3-1
 Job Ticket: 47377 **DST#: 2**
 Test Start: 2012.03.17 @ 20:15:00

GENERAL INFORMATION:

Formation: **LKC "K"**
 Deviated: **No** Whipstock: **2510.00 ft (KB)**
 Time Tool Opened: **22:40:00**
 Time Test Ended: **03:11:30**
 Test Type: **Conventional Bottom Hole (Reset)**
 Tester: **Jim Svaty**
 Unit No: **61**
 Interval: **3990.00 ft (KB) To 4015.00 ft (KB) (TVD)**
 Reference Elevations: **2510.00 ft (KB)**
4015.00 ft (KB) (TVD)
2505.00 ft (CF)
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**
 KB to GR/CF: **5.00 ft**

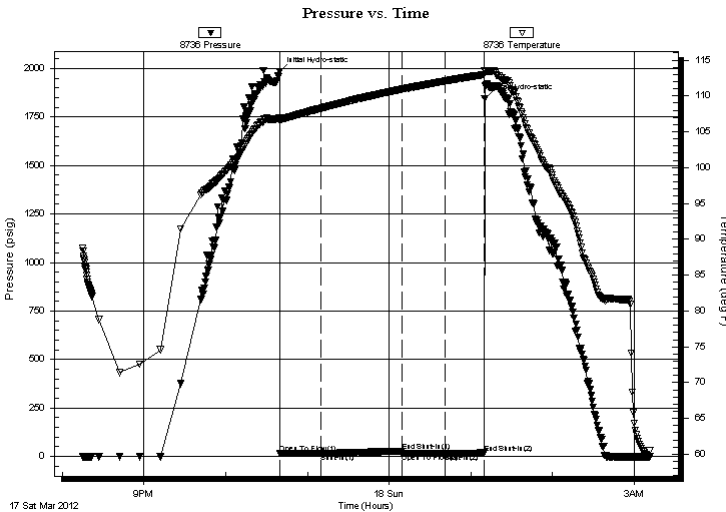
Serial #: 8736

Inside

Press @ Run Depth: **15.59 psig @ 3991.00 ft (KB)** Capacity: **8000.00 psig**
 Start Date: **2012.03.17** End Date: **2012.03.18** Last Calib.: **2012.03.18**
 Start Time: **20:15:05** End Time: **03:11:29** Time On Btm: **2012.03.17 @ 22:39:45**
 Time Off Btm: **2012.03.18 @ 01:10:15**

TEST COMMENT: 30-IFP- Surface Blow Died in 6 min
 60-ISIP- No Blow
 30-FFP- No Blow
 30-FSIP- No Blow

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1982.50 | 106.94 | Initial Hydro-static |
| 1 | 15.32 | 106.47 | Open To Flow (1) |
| 31 | 16.30 | 108.27 | Shut-In(1) |
| 90 | 27.53 | 110.93 | End Shut-In(1) |
| 90 | 15.91 | 110.95 | Open To Flow (2) |
| 121 | 15.59 | 112.06 | Shut-In(2) |
| 151 | 18.68 | 112.99 | End Shut-In(2) |
| 151 | 1845.09 | 113.56 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 1.00 | MUD | 0.01 |
| | | |
| | | |
| | | |
| | | |

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

H & C Oil Operations Inc

3-9s-25w Graham,KS

PO Box 86
Plainville KS 67663

Dinkel #3-1

ATTN: Clayton Erickson

Job Ticket: 47377

DST#: 2

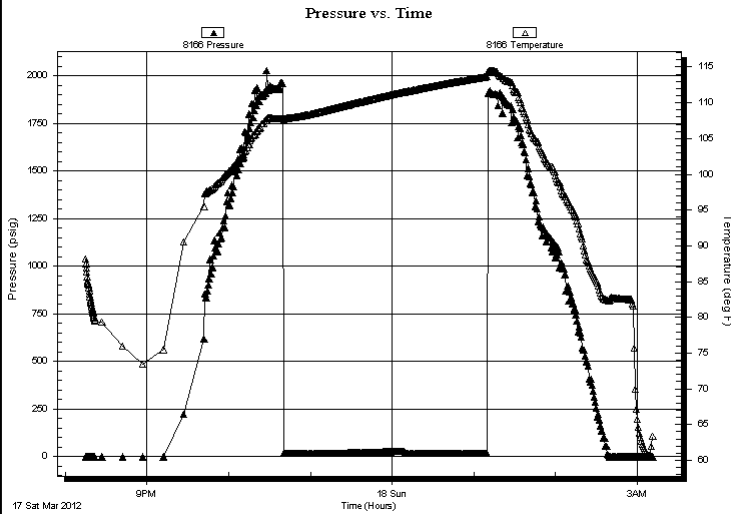
Test Start: 2012.03.17 @ 20:15:00

GENERAL INFORMATION:

Formation: **LKC "K"**
Deviated: No Whipstock: 2510.00 ft (KB)
Time Tool Opened: 22:40:00
Time Test Ended: 03:11:30
Interval: **3990.00 ft (KB) To 4015.00 ft (KB) (TVD)**
Total Depth: 4015.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Reset)
Tester: Jim Svaty
Unit No: 61
Reference Elevations: 2510.00 ft (KB)
2505.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8166 Outside
Press @ Run Depth: psig @ 3991.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.03.17 End Date: 2012.03.18 Last Calib.: 2012.03.18
Start Time: 20:15:05 End Time: 03:11:44 Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IFP- Surface Blow Died in 6 min
60-ISIP- No Blow
30-FFP- No Blow
30-FSIP- No Blow



PRESSURE SUMMARY

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

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 1.00 | MUD | 0.01 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H & C Oil Operations Inc

3-9s-25w Graham,KS

PO Box 86
Plainville KS 67663

Dinkel #3-1

Job Ticket: 47377

DST#: 2

ATTN: Clayton Erickson

Test Start: 2012.03.17 @ 20:15:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3993.00 ft | Diameter: 3.80 inches | Volume: 56.01 bbl | Tool Weight: 2500.00 lb |
| Heavy Wt. Pipe: | Length: 0.00 ft | Diameter: 2.75 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: 62000.00 lb |
| | | | <u>Total Volume: 56.01 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 31.00 ft | | | String Weight: Initial 59000.00 lb |
| Depth to Top Packer: | 3990.00 ft | | | Final 59000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 25.00 ft | | | |
| Tool Length: | 53.00 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 | | | 3963.00 | |
| Shut In Tool | 5.00 | | Inside | 3968.00 | |
| Hydraulic tool | 5.00 | | | 3973.00 | |
| Jars | 5.00 | | | 3978.00 | |
| Safety Joint | 3.00 | | | 3981.00 | |
| Packer | 5.00 | | | 3986.00 | 28.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 3990.00 | |
| Stubb | 1.00 | | | 3991.00 | |
| Recorder | 0.00 | 8736 | Inside | 3991.00 | |
| Recorder | 0.00 | 8166 | Outside | 3991.00 | |
| Perforations | 21.00 | | | 4012.00 | |
| Bullnose | 3.00 | | | 4015.00 | 25.00 Bottom Packers & Anchor |

Total Tool Length: 53.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H & C Oil Operations Inc

3-9s-25w Graham,KS

PO Box 86
Plainville KS 67663

Dinkel #3-1

Job Ticket: 47377

DST#: 2

ATTN: Clayton Erickson

Test Start: 2012.03.17 @ 20:15:00

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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.19 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 |
|--------------|-------------|---------------|
| 1.00 | MUD | 0.014 |

Total Length: 1.00 ft Total Volume: 0.014 bbl

Num Fluid Samples: 0

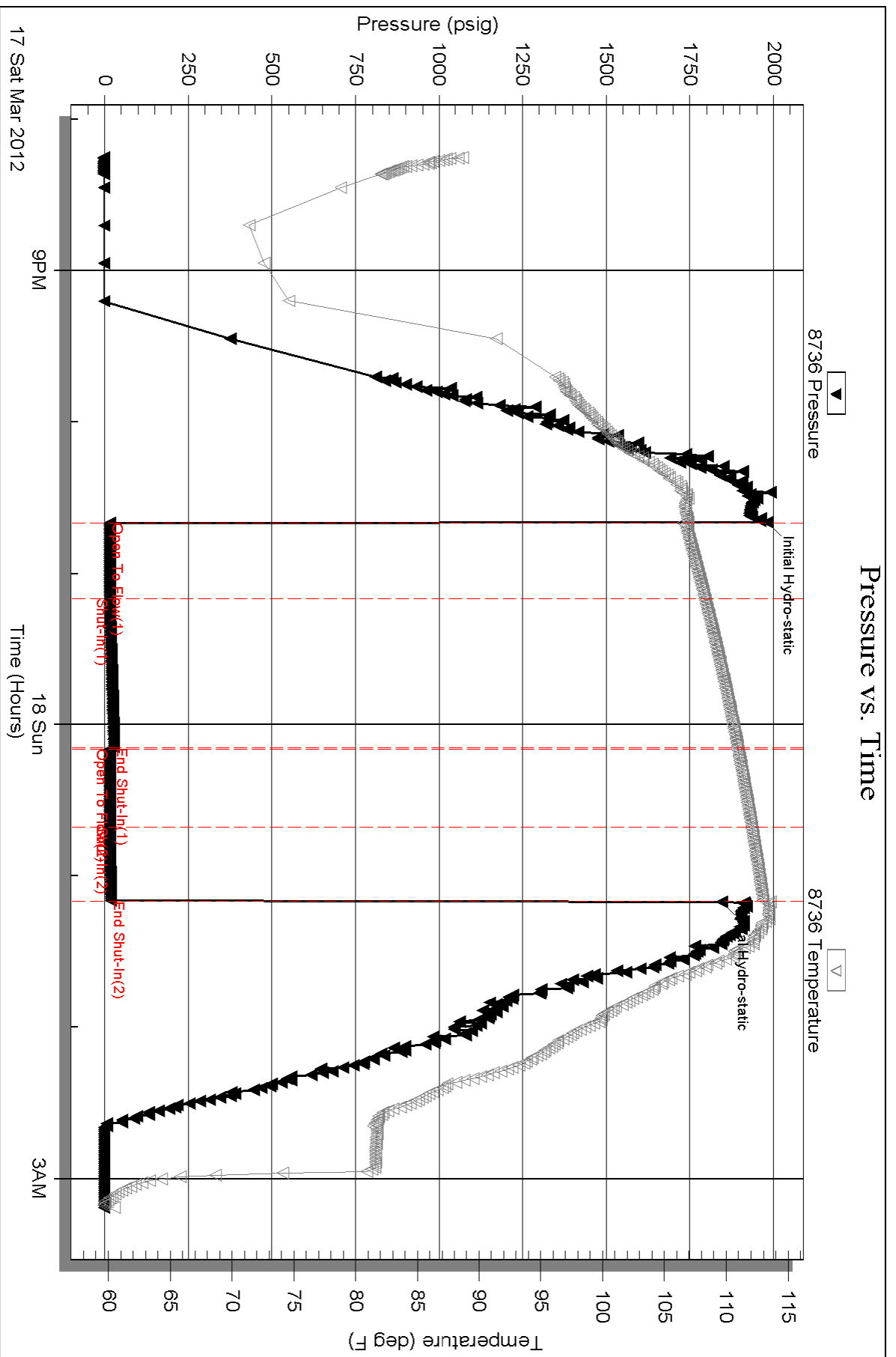
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

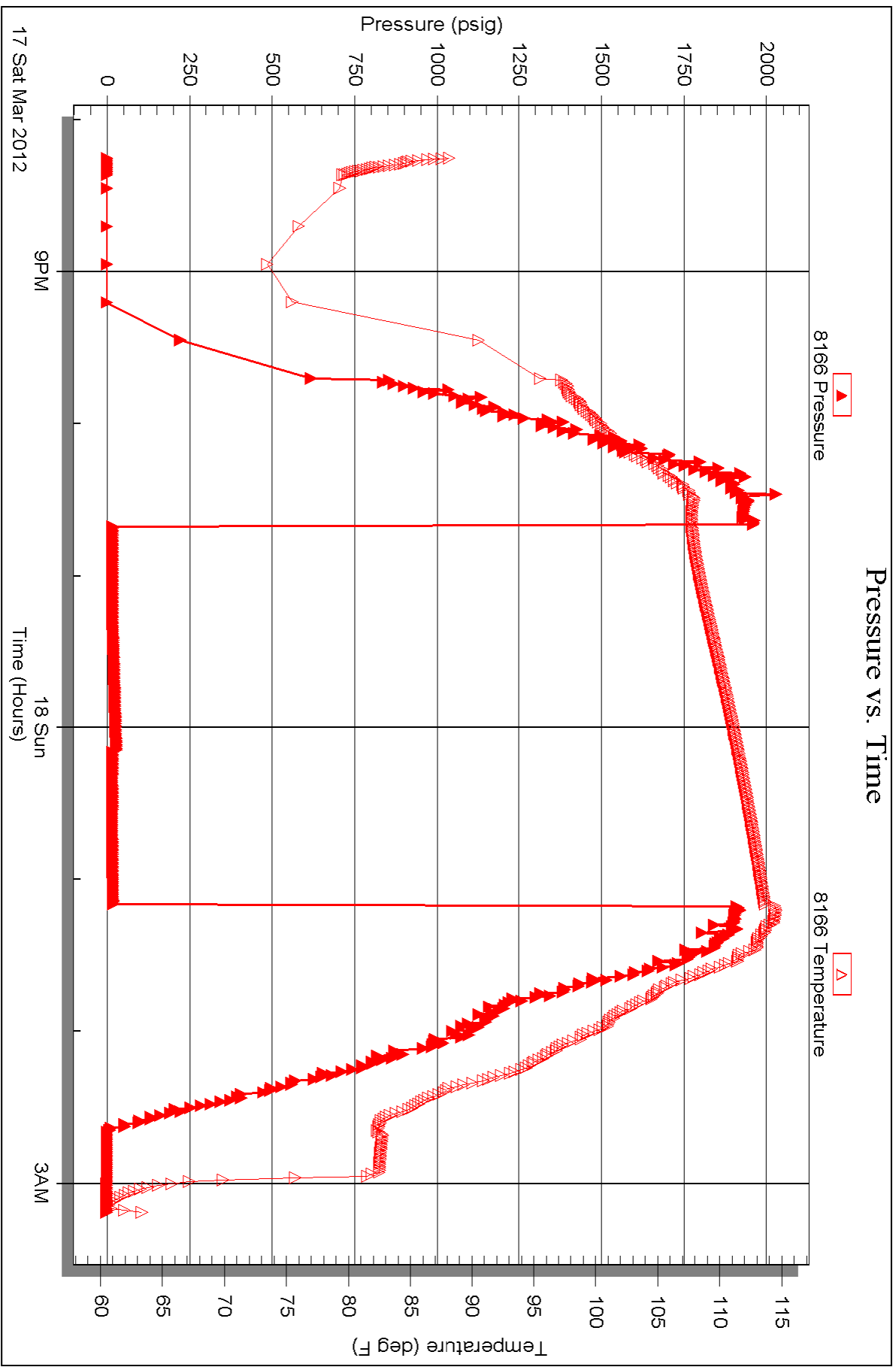


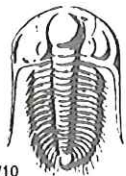
Serial #: 8166

Outside H & C Oil Operations Inc

Dnkel #3-1

DST Test Number: 2





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
MAR 19 2012

Test Ticket

NO. 47376

4/10

BY: _____

Well Name & No. Dinkel # 3-1 Test No. 1 Date 3-17-12
 Company H & C Oil Operation Inc Elevation 2510 KB 2505 GL
 Address P.O. Box 86 Plainville KS. 67663
 Co. Rep / Geo. CLAYTON ERICKSON Rig American Eagle #3
 Location: Sec. 3 Twp. 9S Rge. 25W Co. Graham State KS

Interval Tested 3950 - 3990 Zone Tested LKC "I & J"
 Anchor Length 40' Drill Pipe Run 3930 Mud Wt. 8.9
 Top Packer Depth ~~3950~~ 3945 Drill Collars Run 0 Vis 59
 Bottom Packer Depth 3950 Wt. Pipe Run 0 WL 5.8
 Total Depth 3990 Chlorides 500 ppm System LCM 2
 Blow Description 30-IFP - 1.5IN Blow Died in 14min.
60-ISIP - No Blow
30-FEP - No Blow
60-FSIP - No Blow

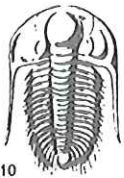
| Rec | Feet of | %gas | %oil | %water | %mud |
|-----------|------------|------|------|------------|------|
| <u>28</u> | <u>MUD</u> | | | <u>100</u> | |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |
| Rec | Feet of | %gas | %oil | %water | %mud |

Rec Total _____ BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2020 Test 1125' T-On Location 04:30
 (B) First Initial Flow 27-27 Jars 250' T-Started 06:30
 (C) First Final Flow 28 Safety Joint 75' T-Open 08:42
 (D) Initial Shut-In 844 Circ Sub _____ T-Pulled 11:42
 (E) Second Initial Flow 28 Hourly Standby _____ T-Out 13:20
 (F) Second Final Flow 27 Mileage 19 x 2 38RT 53.20 Comments _____
 (G) Final Shut-In 890 Sampler _____
 (H) Final Hydrostatic 1842 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1503.20
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1503.20

Approved By _____ Our Representative

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.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
MAR 19 2012

Test Ticket

NO. 47377

4/10

BY: _____

Well Name & No. Dinkel # 3-1 Test No. 2 Date 3-17-12
 Company H & C Oil Operation Inc Elevation 2510 KB 2505 GL
 Address P.O. Box 86 Plainville Ks 67663
 Co. Rep / Geo. CLAYTON ERICKSON Rig AMERICAN EAGLE #3
 Location: Sec. 3 Twp. 9^s Rge. 25^w Co. GRAHAM State KS

Interval Tested 3990 - 4015 Zone Tested LKC "K"
 Anchor Length 25 Drill Pipe Run 3993 Mud Wt. 9.1
 Top Packer Depth 3985 Drill Collars Run 0 Vis 56
 Bottom Packer Depth 3990 Wt. Pipe Run 0 WL 6.2
 Total Depth 4015 Chlorides 500 ppm System LCM 2
 Blow Description 30-IFP- SURFACE Blow DIED in 6min.
60-ISIP- No Blow
30-FFP- No Blow
30-FSIP- No Blow

| Rec | Feet of | %gas | %oil | %water | %mud |
|----------|------------|------|------|------------|------|
| <u>1</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 1 BHT 113 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

| | | |
|-------------------------------------|---|--|
| (A) Initial Hydrostatic <u>1982</u> | <input checked="" type="checkbox"/> Test <u>1225</u> | T-On Location <u>19:35</u> |
| (B) First Initial Flow <u>15</u> | <input checked="" type="checkbox"/> Jars <u>250</u> | T-Started <u>20:15</u> |
| (C) First Final Flow <u>16</u> | <input checked="" type="checkbox"/> Safety Joint <u>75</u> | T-Open <u>22:40</u> |
| (D) Initial Shut-In <u>27</u> | <input type="checkbox"/> Circ Sub _____ | T-Pulled <u>01:10</u> |
| (E) Second Initial Flow <u>16</u> | <input type="checkbox"/> Hourly Standby _____ | T-Out <u>03:12</u> |
| (F) Second Final Flow <u>15</u> | <input checked="" type="checkbox"/> Mileage <u>38RT 53.20</u> | Comments _____ |
| (G) Final Shut-In <u>18</u> | <input type="checkbox"/> Sampler _____ | |
| (H) Final Hydrostatic <u>1845</u> | <input type="checkbox"/> Straddle _____ | <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>60</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>30</u> | <input type="checkbox"/> Day Standby _____ | Total <u>11603.20</u> |
| | <input type="checkbox"/> Accessibility _____ | MP/DST Disc't _____ |
| | Sub Total <u>11603.20</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.

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. 5473

| | | | | | | | | | | | | | | | |
|------------------------|--|----------|-----------------------|------|---|----------|--|--------|--------|-------|----|-------------|--|--------|---------|
| Date | 3-19-12 | Sec. | 3 | Twp. | 9 | Range | 25 | County | Graham | State | Ks | On Location | | Finish | 6:00 AM |
| Lease | Dinkel | Well No. | 3-1 | | | Location | Wakeney Ks - 10 to Redline Rd, w owner to 140 Rd, 410, 2 w, n/ Into | | | | | | | | |
| Contractor | American Eagle #3 | | | | | | | | | | | | | | |
| Type Job | Plug | | | | | | | | | | | | | | |
| Hole Size | 7 7/8" | | | | | | | | | | | | | | |
| Csg. | T.D. 4076' | | | | | | | | | | | | | | |
| Tbg. Size | 4 1/2" D.P. | | | | | | | | | | | | | | |
| Tool | Depth 2200' | | | | | | | | | | | | | | |
| Cement Left in Csg. | Shoe Joint | | | | | | | | | | | | | | |
| Meas Line | Displace H2O/mud | | | | | | | | | | | | | | |
| EQUIPMENT | | | | | | | | | | | | | | | |
| Pumptrk | 15 | No. | Cementer Helper Cisto | | | | | | | | | | | | |
| Bulktrk | 8 | No. | Driver Cody | | | | | | | | | | | | |
| Bulktrk | p.u. | No. | Driver Rick | | | | | | | | | | | | |
| JOB SERVICES & REMARKS | | | | | | | | | | | | | | | |
| Remarks: | The above was done to satisfaction and supervision of owner agent or contractor. | | | | | | | | | | | | | | |
| Rat Hole | 30 SX | | | | | | | | | | | | | | |
| Mouse Hole | Flowseal 50# | | | | | | | | | | | | | | |
| Centralizers | Kol-Seal | | | | | | | | | | | | | | |
| Baskets | Mud CLR 48 | | | | | | | | | | | | | | |
| D/V or Port Collar | CFL-117 or CD110 CAF 38 | | | | | | | | | | | | | | |
| | 2200' - 25 SX | | | | | | | | | | | | | | |
| | 1350' - 100 SX | | | | | | | | | | | | | | |
| | 325' - 40 SX | | | | | | | | | | | | | | |
| | 40' - 10 SX w/ plug | | | | | | | | | | | | | | |
| | Rathole - 30 SX | | | | | | | | | | | | | | |
| | Cement did Circulate. | | | | | | | | | | | | | | |
| | FLOAT EQUIPMENT | | | | | | | | | | | | | | |
| | Guide Shoe | | | | | | | | | | | | | | |
| | Centralizer | | | | | | | | | | | | | | |
| | Baskets | | | | | | | | | | | | | | |
| | AFU Inserts | | | | | | | | | | | | | | |
| | Float Shoe | | | | | | | | | | | | | | |
| | Latch Down | | | | | | | | | | | | | | |
| | 1 - Dry hole plug | | | | | | | | | | | | | | |
| | Pumptrk Charge plug | | | | | | | | | | | | | | |
| | Mileage 32 | | | | | | | | | | | | | | |
| | Tax | | | | | | | | | | | | | | |
| | Discount | | | | | | | | | | | | | | |
| | Total Charge | | | | | | | | | | | | | | |

X Signature *Quayford*

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025

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

No. 648

Cell 785-324-1041

| | | | | | | | | | |
|------------------------|--|------------------------|------|------|-------|---------|-------|-------------|--------|
| Date | 3-11-12 | Sec. | | Twp. | Range | County | State | On Location | Finish |
| Lease | Dinkel | Well No. | 3-1 | | | Cochran | Ks | | 2:30am |
| Contractor | American Eagle #3 | | | | | | | | |
| Type Job | Surface | | | | | | | | Unto |
| Hole Size | 12 1/4 | T.D. | 271 | | | | | | |
| Csg. | 8 5/8 | Depth | 271 | | | | | | |
| Tbg. Size | | Depth | | | | | | | |
| Tool | | Depth | | | | | | | |
| Cement Left in Csg. | LS | Shoe Joint | | | | | | | |
| Meas Line | | Displace | 163c | | | | | | |
| EQUIPMENT | | | | | | | | | |
| Pumptrk | 5 No. | Cementer | SN.9 | | | | | | |
| | | Helper | Cody | | | | | | |
| Bulktrk | No. | Driver | | | | | | | |
| Bulktrk | 8 No. | Driver | Daug | | | | | | |
| | | Driver | | | | | | | |
| JOB SERVICES & REMARKS | | | | | | | | | |
| Remarks: | 8 5/8 on bottom. Fst Circulation. Cement Circulated! | | | | | | | | |
| Rat Hole | | | | | | | | | |
| Mouse Hole | | | | | | | | | |
| Centralizers | | | | | | | | | |
| Baskets | | | | | | | | | |
| D/V or Port Collar | | | | | | | | | |
| | | FLOAT EQUIPMENT | | | | | | | |
| | | Guide Shoe | | | | | | | |
| | | Centralizer | | | | | | | |
| | | Baskets | | | | | | | |
| | | AFU Inserts | | | | | | | |
| | | Float Shoe | | | | | | | |
| | | Latch Down | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | Pumptrk Charge Surface | | | | | | | |
| | | Mileage 27 | | | | | | | |
| | | | | | | | | | |
| | | Tax | | | | | | | |
| | | Discount | | | | | | | |
| | | Total Charge | | | | | | | |

X Signature 