



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1209580
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: _____

1209580

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: _____ _____ |
|--|---|---|

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025

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

No. 4294

Cell 785-324-1041

6-23-2010

| | | | | | | | |
|---|---------|-------------------------|----------|--|----------|-------------|----------------|
| Date | Sec. 34 | Twp. 9 | Range 24 | County Graham | State Ks | On Location | Finish 8:15 PM |
| Lease Herman Trust | | Well No. #4-34 | | Location Wakeeney, Ks N to Redline Rd, 6 1/2 W | | | |
| Contractor <u>Murfin Drilling Rig #16</u> | | | | Owner <u>S/S</u> | | | |
| Type Job <u>Surface</u> | | | | To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed. | | | |
| Hole Size <u>12 1/4"</u> | | T.D. <u>220'</u> | | Charge To <u>Phillips Exploration</u> | | | |
| Csg. <u>8 5/8" 23# New</u> | | Depth <u>219'</u> | | Street | | | |
| Tbg. Size | | Depth | | City | | | |
| Tool | | Depth | | State | | | |
| Cement Left in Csg. <u>15'</u> | | Shoe Joint <u>15'</u> | | The above was done to satisfaction and supervision of owner agent or contractor. | | | |
| Meas Line | | Displace <u>13 BBLs</u> | | Cement Amount Ordered <u>150 5x Common 3% CC 2% Gel</u> | | | |

EQUIPMENT

| | | | | |
|------------------|-----|----------------------------|----------|-------------------|
| Pumptrk <u>9</u> | No. | Cement Helper <u>Neale</u> | <u>3</u> | Common <u>150</u> |
| Bulktrk <u>8</u> | No. | Driver <u>Cisco</u> | <u>3</u> | Poz. Mix |
| Bulktrk pickup | No. | Driver <u>Pick</u> | <u>3</u> | Gel. <u>3</u> |

JOB SERVICES & REMARKS

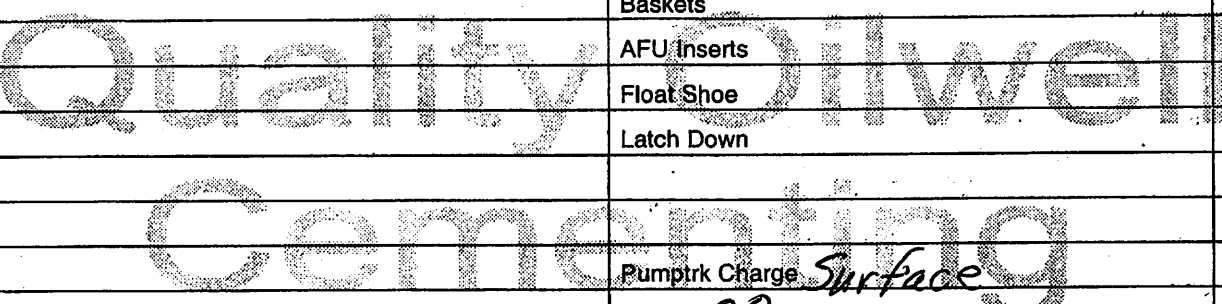
| | |
|--------------------------------------|-------------------------|
| Remarks: <u>Cement did Circulate</u> | Hulls |
| Rat Hole | Salt |
| Mouse Hole | Flowseal |
| Centralizers | Kol-Seal |
| Baskets | Mud CLR 48 |
| D/V or Port Collar | CFL-117 or CD110 CAF 38 |

Cement did Circulate
Used 8 5/8" Swedge

| | |
|---------|---------------------|
| Sand | Handling <u>158</u> |
| Mileage | |

FLOAT EQUIPMENT

| |
|-------------|
| Guide Shoe |
| Centralizer |
| Baskets |
| AFU Inserts |
| Float Shoe |
| Latch Down |



| |
|-------------------------------|
| Pumptrk Charge <u>Surface</u> |
| Mileage <u>38</u> |

X Signature Aug [Signature]

| |
|--------------|
| 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. 4300

| | | | | | | | | | | | | | | | |
|---------------------|------------------|------|----|------------|------------|-------|----|---|-----------------------------------|-------|----|-------------|--|--------|---------|
| Date | 6-28-2010 | Sec. | 34 | Twp. | 9 | Range | 24 | County | Graham | State | Ks | On Location | | Finish | 1:00 AM |
| Lease | Hecman trust | | | Well No. | 4-34 | | | Location | Wakeeny, Ks N to Red line Rd, 62W | | | | | | |
| Contractor | Mustin #16 | | | | | | | Owner | 5/5 | | | | | | |
| Type Job | Production (Top) | | | | | | | To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed. | | | | | | | |
| Hole Size | 7 7/8" | | | T.D. | 4150' | | | Charge To | Phillips exploration | | | | | | |
| Csg. | 5" 14# New | | | Depth | 4147.18' | | | Street | | | | | | | |
| Tbg. Size | | | | Depth | | | | City | State | | | | | | |
| Tool | DU Tool | | | Depth | 2181' | | | The above was done to satisfaction and supervision of owner agent or contractor. | | | | | | | |
| Cement Left in Csg. | ⓐ | | | Shoe Joint | | | | Cement Amount Ordered 400 sx QMDC 1/4 Flowseal | | | | | | | |
| Meas Line | | | | Displace | 53.25 BBLs | | | | | | | | | | |

EQUIPMENT

| | | | | | | | |
|----------------|---|-----|---------------|---------|---|----------|-----|
| Pumptrk | 5 | No. | Cement Helper | Brandon | 3 | Common | 400 |
| Bulktrk | 4 | No. | Driver | Rocky | 3 | Poz. Mix | |
| Bulktrk pickup | | No. | Driver | Rick | 3 | Gel. | |

JOB SERVICES & REMARKS

| | | | |
|--------------------|-----------------|---------|-------------------------|
| Remarks: | 30sx | | Hulls |
| Rat Hole | 30sx | 30sx | Salt |
| Mouse Hole | 15 sx | | Flowseal 100 |
| Centralizers | | | Kol-Seal |
| Baskets | | | Mud CLR 48 500 gal |
| D/V or Port Collar | 2181' | 48# JT. | CFL-117 or CD110 CAF 38 |

pipe on bottom, break Circulation pump 500 gal Mud Clear 48 pump 5 BBLs of water, plug Rat hole 30 sx, Mouse hole 15 sx Cement Casing with 355 sx Qm Dc, shut down wash up. Hook to casing and displaced with 53 1/2 BBLs of freshwater. Landel plug to 1200 #'s Released and held. 600 #/sq lift pressure

Cement did Circulate.

| | |
|------------------------|--|
| Handling | |
| Mileage | |
| FLOAT EQUIPMENT | |
| Guide Shoe | |
| Centralizer | |
| Baskets | |
| AFU Inserts | |
| Float Shoe | |
| Latch Down | |

X Signature *[Handwritten Signature]*

| | | | |
|----------------|--|--------------|--|
| Pumptrk Charge | | Tax | |
| Mileage | | 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. 4299

| | | | | | | | | | | | | | | | |
|-----------------------|----------------|------|----|------------|------|-------|---|----------|------------------------------------|-------|----|-------------|--|--------|---------|
| Date | 6-28-2010 | Sec. | 34 | Twp. | 9 | Range | 24 | County | Graham | State | Ks | On Location | | Finish | 9:00 PM |
| Lease | Herman Trust | | | Well No. | 4-34 | | | Location | Wakeeny, Ks - N to Redline Rd, G&W | | | | | | |
| Contractor | Murfin #16 | | | | | | | Owner | 5/5 | | | | | | |
| Type Job | Production | | | (Bottom) | | | To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed. | | | | | | | | |
| Hole Size | 7 7/8" | | | T.D. | | | 4130 | | | | | | | | |
| Csg. | 5 1/2" 14# New | | | Depth | | | 4147.18 | | | | | | | | |
| Tbg. Size | | | | Depth | | | | | | | | | | | |
| Tool | DU Tool | | | Depth | | | 2181' | | | | | | | | |
| Cement Left in Csg. | 16.94 | | | Shoe Joint | | | 16.94 | | | | | | | | |
| Meas Line | | | | Displace | | | 101 BBLs | | | | | | | | |
| Charge To | | | | | | | Phillips exploration | | | | | | | | |
| Cement Amount Ordered | | | | | | | 165 5X Quality Pac C | | | | | | | | |

EQUIPMENT

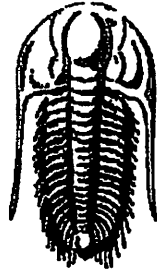
| | | | | | | |
|---------|----|-----|--------|---------|---|----------|
| Pumptrk | 5 | No. | Cement | Random | 4 | Common |
| Bulktrk | 10 | No. | Driver | Douglas | 4 | Poz. Mix |
| Bulktrk | up | No. | Driver | Rick | 4 | Gel. |

JOB SERVICES & REMARKS

| | |
|--|--------------------------|
| Remarks: | Hulls |
| Rat Hole | Will plug on top stage |
| Mouse Hole | See ticket #4380 |
| Centralizers | 3, 4, 5, 6, 7, 8, 10, 47 |
| Baskets | 13, 48 |
| D/V or Port Collar | 2181' DU Tool 48" JT |
| pipe on bottom, break circulation, run 165 5X | Sand |
| Quality Pac C | Handling 165 |
| pump 500 gal mud clear 48, pump 500 gal | Mileage |
| of freshwater, mix 165 5X Quality Pac C | FLOAT EQUIPMENT |
| shut down Released plan washup | Guide Shoe |
| and displaced with 914 BBLs of | Centralizer 8'-5 1/2" |
| freshwater + 54 BBLs of mud. | Baskets 2 - 5 1/2" |
| Land plug to 1250 #'s, Released and | AFU Inserts |
| held. Drop the Dart, wait 10 min. | Float Shoe 1 - 5 1/2" |
| and open tool, wash displacement | Latch Down |
| tanks clear, and Circulate 2 hrs 1- | DU Tool assy - 5 1/2" |
| with Rig pump. | Pumptrk Charge |
| lift PST 700# | Bottom Stage |
| | Mileage 38 |

X Signature *Paul R. Paulson*

Tax
Discount
Total Charge



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Phillips Exploration**

1601 Sagebrush
Wichita, KS 67230

ATTN: Jim Phillips

34-9s-24w Graham KS

Herman Tr 4-34

Start Date: 2010.06.26 @ 22:16:07

End Date: 2010.06.27 @ 04:11:01

Job Ticket #: 38957 DST #: 1

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2010.07.13 @ 10:01:20 Page 1

Phillips Exploration

Herman Tr 4-34

34-9s-24w Graham KS

DST # 1

36-70

2010.06.26



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Phillips Exploration

1601 Sagebrush
Wichita, KS 67230

ATTN: Jim Phillips

Herman Tr 4-34

34-9s-24w Graham KS

Job Ticket: 38957 DST#: 1

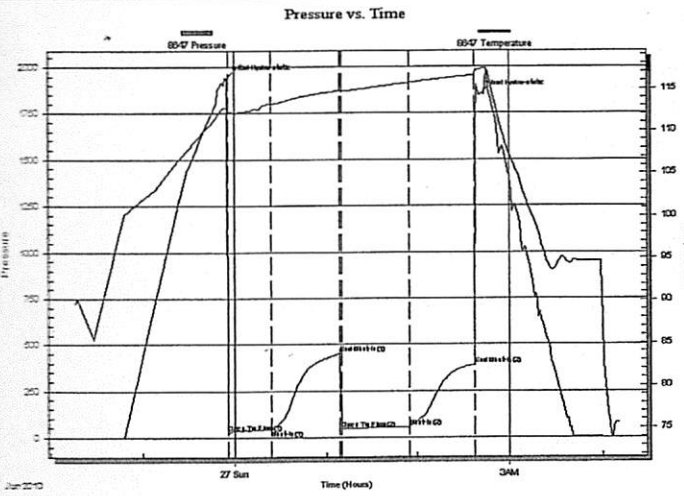
Test Start: 2010.06.26 @ 22:16:07

GENERAL INFORMATION:

Formation: 35-70
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 23:55:32
 Time Test Ended: 04:11:01
 Interval: 3840.00 ft (KB) To 3890.00 ft (KB) (TVD)
 Total Depth: 3890.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition:
 Test Type: Conventional Bottom Hole
 Tester: Brian Fairbank
 Unit No: 41
 Reference Elevations: 2505.00 ft (KB)
 2500.00 ft (CF)
 KB to GRVCF: 5.00 ft

Serial #: 8647 Inside
 Press@RunDepth: 54.97 psig @ 3849.00 ft (KB)
 Start Date: 2010.06.26 End Date: 2010.06.27
 Start Time: 22:16:07 End Time: 04:11:01
 Capacity: 8000.00 psig
 Last Calib.: 2010.06.27
 Time On Btm: 2010.06.26 @ 23:54:32
 Time Off Btm: 2010.06.27 @ 02:41:01

TEST COMMENT: IFP - weak to fair blow 1/2" - 5 1/2"
 ISI - no blow back
 FFP - no blow 4 min. - 4"
 FSI - no blow back



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1935.82 | 112.76 | Initial Hydro-static |
| 1 | 29.01 | 112.33 | Open To Flow (1) |
| 30 | 42.53 | 113.13 | Shut-In(1) |
| 75 | 452.72 | 114.78 | End Shut-In(1) |
| 76 | 44.18 | 114.70 | Open To Flow (2) |
| 120 | 54.97 | 115.72 | Shut-In(2) |
| 163 | 390.61 | 116.58 | End Shut-In(2) |
| 167 | 1847.82 | 117.27 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-----------------------|--------------|
| 15.00 | SOCWM 5%O, 25%W, 70%M | 0.07 |
| 64.00 | HOCM 30%O, 70%M | 0.76 |
| 1.00 | MCO 65%O, 35%M | 0.01 |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Phillips Exploration

Herman Tr 4-34

1601 Sagebrush
Wichita, KS 67230

34-9s-24w Graham KS

Job Ticket: 38957

DST#: 1

ATTN: Jim Phillips

Test Start: 2010.06.26 @ 22:16:07

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|-------------------------|-----------------------------------|
| Drill Pipe: | Length: 3805.00 ft | Diameter: 3.80 inches | Volume: 53.37 bbl | Tool Weight: 2500.00 lb |
| Heavy Wt. Pipe: | Length: 0.00 ft | Diameter: 0.00 inches | Volume: 0.00 bbl | Weight set on Packer: 25000.00 lb |
| Drill Collar: | Length: 30.00 ft | Diameter: 2.25 inches | Volume: 0.15 bbl | Weight to Pull Loose: 55000.00 lb |
| | | | Total Volume: 53.52 bbl | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 17.00 ft | | | |
| Depth to Top Packer: | 3840.00 ft | | | |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 50.00 ft | | | |
| Tool Length: | 72.00 ft | | | |
| Number of Packers: | 2 | Diameter: 6.75 inches | | |

Tool Comments:

Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|------------------|-------------|------------|----------|------------|-------------------------------|
| Shut In Tool | 5.00 | | | 3823.00 | |
| Hydraulic tool | 5.00 | | | 3828.00 | |
| Safety Joint | 2.00 | | | 3830.00 | |
| Packer | 5.00 | | | 3835.00 | 22.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 3840.00 | |
| Stubb | 1.00 | | | 3841.00 | |
| Perforations | 7.00 | | | 3848.00 | |
| Change Over Sub | 1.00 | | | 3849.00 | |
| Recorder | 0.00 | 8647 | inside | 3849.00 | |
| Recorder | 0.00 | 8371 | Outside | 3849.00 | |
| Blank Spacing | 32.00 | | | 3881.00 | |
| Change Over Sub | 1.00 | | | 3882.00 | |
| Perforations | 5.00 | | | 3887.00 | |
| Bullnose | 3.00 | | | 3890.00 | 50.00 Bottom Packers & Anchor |

Total Tool Length: 72.00



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Phillips Exploration

Herman Tr 4-34

1601 Sagebrush
Wichita, KS 67230

34-9s-24w Graham KS

Job Ticket: 38957

DST#: 1

ATTN: Jim Phillips

Test Start: 2010.06.26 @ 22:16:07

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 51.00 sec/qt
Water Loss: 8.75 in³
Resistivity: ohm.m
Salinity: 1800.00 ppm
Filter Cake: inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: deg API
Water Salinity: 31000 ppm

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|-----------|-----------------------|------------|
| 15.00 | SOCVM 5%O, 25%W, 70%M | 0.074 |
| 64.00 | HOCM 30%O, 70%M | 0.761 |
| 1.00 | MCO 65%O, 35%M | 0.014 |

Total Length: 80.00 ft Total Volume: 0.849 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .246 @ 74F = 31000 chlorides

