



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1107571
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: _____



1107571

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: <input type="checkbox"/> Yes <input type="checkbox"/> No |
|----------------|-------|---------|------------|---|

| | |
|---|--|
| Date of First, Resumed Production, SWD or ENHR. | Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____ |
|---|--|

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

| | |
|-----------|--------------------------------|
| Form | ACO1 - Well Completion |
| Operator | Woolsey Operating Company, LLC |
| Well Name | ACHENBACH 1 |
| Doc ID | 1107571 |

Tops

| Name | Top | Datum |
|---------------|------|-------|
| CHASE | 1906 | -524 |
| ELGIN | 3691 | -2309 |
| HEEBNER | 3828 | -2446 |
| DOUGLAS | 3867 | -2485 |
| SWOPE LS | 4541 | -3159 |
| MISSISSIPPIAN | 4832 | -3450 |
| VIOLA | 5247 | -3865 |
| SIMPSON | 5337 | -3955 |

| | |
|-----------|--------------------------------|
| Form | ACO1 - Well Completion |
| Operator | Woolsey Operating Company, LLC |
| Well Name | ACHENBACH 1 |
| Doc ID | 1107571 |

Perforations

| Shots Per Foot | Perforation Record | Material Record | Depth |
|----------------|--|---|--------------|
| 4 | 5170-5184, 5210-5220 | 200 gal 10% MIRA acid | 5170-5210 OA |
| 2 | 5184-5210 | 58,000# 30/50 white sd, 8000# 16/30 brown sd, | |
| | | 2000# 16/30 super LC resin coated sd | 5170-5210 OA |
| | | CIBP TO ISOLATE MAQUOKETA-WOODFORD | 5100 |
| 4 | 4790-4798, 4906-4890, 4890-4870, 4870-4850 | | |
| 2 | 4836-4844 | 3550 gal 10% HCL acid | 4790-4850 OA |

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

January 11, 2013

DEAN PATTISSON
Woolsey Operating Company, LLC
125 N MARKET STE 1000
WICHITA, KS 67202-1729

Re: ACO1
API 15-007-23938-00-00
ACHENBACH 1
NW/4 Sec.14-35S-12W
Barber 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,
DEAN PATTISSON

ALLIED OIL & GAS SERVICES, LLC 053887

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT: Medicine Lodge, KS

| | | | | | | | |
|--|----------------|--|------------------|------------|----------------------|-----------------|------------|
| DATE <u>09-15-12</u> | SEC. <u>74</u> | TWP. <u>35s</u> | RANGE <u>12w</u> | CALLED OUT | ON LOCATION | JOB START | JOB FINISH |
| LEASE <u>Achenbach</u> WELL # <u>1</u> | | LOCATION <u>281 & Roundup Rd, 1/2 S, E/4</u> | | | COUNTY <u>Barber</u> | STATE <u>KS</u> | |
| OLD OR NEW (Circle one) | | | | | | | |

CONTRACTOR Fossil #2 OWNER Woolsey

TYPE OF JOB Surface
 HOLE SIZE 17 1/2 T.D. 240' CEMENT AMOUNT ORDERED 300sx class A + 3% cc + 2% gel
 CASING SIZE 13 3/8 DEPTH 229' + 10' x 8 1/2"

TUBING SIZE _____ DEPTH _____
 DRILL PIPE _____ DEPTH _____
 TOOL _____ DEPTH _____
 PRES. MAX 250 MINIMUM _____
 MEAS. LINE _____ SHOE JOINT N/A
 CEMENT LEFT IN CSG. 20' 1/2"
 PERFS. _____
 DISPLACEMENT 3 3/4 Bbls Fresh H₂O

EQUIPMENT
 PUMP TRUCK CEMENTER D. Felio
#561-265 HELPER S. Priddy
 BULK TRUCK
#381-250 DRIVER B. Book
 BULK TRUCK
 # _____ DRIVER _____

REMARKS:
See Job Log
Shut in - Cement Did Cure.
THX ☺

| | |
|--|-----------------------|
| SERVICE | |
| DEPTH OF JOB <u>230'</u> | |
| PUMP TRUCK CHARGE _____ | <u>1512.25</u> |
| EXTRA FOOTAGE _____ @ _____ | |
| MILEAGE <u>20</u> @ <u>7.70</u> | <u>154.00</u> |
| MANIFOLD <u>N/A</u> @ <u>N/A</u> | |
| <u>Light Vehicle</u> <u>20</u> @ <u>4.40</u> | <u>88.00</u> |
| HANDLING <u>324.7 f+3</u> @ <u>2.48</u> | <u>804.51</u> |
| MILEAGE <u>14.8 tons + 20.2 mi</u> | <u>769.60</u> |
| TOTAL | <u>7788.51</u> |

CHARGE TO: Woolsey
 STREET _____
 CITY _____ STATE _____ ZIP _____

WELL FILL
 Regulatory Correspondence
 Drilling / Comp Workovers
 Tools / Meters Operations
 To: Allied Oil & Gas Services, LLC.
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Donald Boyd

SIGNATURE Donald Boyd
 SALES TAX (If Any) 45.00
 TOTAL CHARGES 9542.76
 DISCOUNT 25% IF PAID IN 30 DAYS
 net 7157.07
02385.69

PLUG & FLOAT EQUIPMENT

| | | |
|--------------|---|--|
| <u>None</u> | @ | |
| | @ | |
| | @ | |
| | @ | |
| | @ | |
| TOTAL | | |

ALLIED CEMENTING CO., LLC. 038079

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:
Medicine Lodge

| | | | | | | | |
|---|---------------|-----------------|--|---------------------------|----------------------------|------------------------|------------------------|
| DATE <i>9-28-12</i> | SEC <i>14</i> | TWP <i>3S</i> | RANGE <i>12W</i> | CALLED OUT <i>1:00 AM</i> | ON LOCATION <i>2:30 AM</i> | JOB START <i>11:30</i> | JOB FINISH <i>1:00</i> |
| LEASE <i>Achenbach</i> | | WELL # <i>1</i> | LOCATION <i>2810 Roundup Rd, 1/2 S E</i> | | COUNTY <i>Barber</i> | STATE <i>KS</i> | |
| OLD OR NEW (Circle one) <input checked="" type="checkbox"/> NEW | | | into | | | | |

| | |
|--------------------------------|--------------------------------|
| CONTRACTOR <i>Fossil #2</i> | OWNER <i>Woolsey Operating</i> |
| TYPE OF JOB <i>Production</i> | CEMENT |
| HOLE SIZE <i>7 7/8</i> | T.D. <i>5485</i> |
| CASING SIZE <i>5 1/2</i> | DEPTH <i>5342</i> |
| TUBING SIZE | DEPTH |
| DRILL PIPE | DEPTH |
| TOOL | DEPTH |
| PRES. MAX <i>1800</i> | MINIMUM |
| MEAS. LINE | SHOE JOINT <i>44</i> |
| CEMENT LEFT IN CSG. <i>44'</i> | |
| PERFS. | |
| DISPLACEMENT <i>126 1/2</i> | |

| | | |
|---|------------------------|----------------|
| AMOUNT ORDERED <i>90% x 60:40:40 age 1</i> | | |
| <i>100% x 60:40:40 + 10% app + 10% salt +</i> | | |
| <i>6# Kalscal + 8% FL-160 + 1/4# Plo sea</i> | | |
| COMMON <i>class H</i> | <i>100% @ 21.20</i> | <i>2120.00</i> |
| POZMIX | <i>36% @ 9.35</i> | <i>336.60</i> |
| OEL | <i>3% @ 23.40</i> | <i>70.20</i> |
| CHLORIDE | @ | |
| ASC | @ | |
| KOL | <i>12 Cals @ 34.90</i> | <i>418.80</i> |
| class H | <i>54% @ 17.90</i> | <i>966.60</i> |
| Salt | <i>11% @ 26.51</i> | <i>291.61</i> |
| Kalscal | <i>600# @ .98</i> | <i>588.00</i> |
| FL-160 | <i>75# @ 18.90</i> | <i>1417.50</i> |
| Plo sea | <i>25# @ 2.97</i> | <i>74.25</i> |
| Gyp seal | <i>10% @ 37.60</i> | <i>376.00</i> |
| HANDLING <i>231 ft³</i> | @ <i>2.40</i> | <i>554.40</i> |
| MILEAGE <i>9.8 mi</i> | @ <i>20.20</i> | <i>197.96</i> |
| | | <i>509.60</i> |
| | | <i>196</i> |
| | | <i>773.96</i> |
| | | <i>7734.28</i> |

| | |
|---|--------|
| EQUIPMENT | |
| PUMP TRUCK CEMENTER <i>Ron Gilley 1</i> | |
| # <i>548-545</i> HELPER <i>Eddie Piper 2</i> | |
| BULK TRUCK | |
| # <i>421-252</i> DRIVER <i>Brandon Barr 3</i> | |
| BULK TRUCK | |
| # | DRIVER |

REMARKS:
See Cement log

Thx
WELL FILE

- Regulatory Correspondence
- Drig / Comp Workovers
- Tests / Meters Operations

CHARGE TO: *Woolsey Operating*

STREET _____

CITY _____ STATE _____ ZIP _____

| | |
|-----------------------------|-----------------------------|
| DEPTH OF JOB | <i>5485'</i> |
| PUMP TRUCK CHARGE | <i>3099.00</i> |
| EXTRA FOOTAGE | @ |
| MILEAGE <i>20</i> | @ <i>7.70</i> <i>154.00</i> |
| MANIFOLD <i>Headrental</i> | @ <i>275.00</i> |
| <i>Light Veh.</i> <i>20</i> | @ <i>4.40</i> <i>88.00</i> |
| | @ |
| TOTAL | <i>3616.25</i> |

| | |
|-------------------------------------|-------------------------------|
| <i>5 1/2</i> PLUG & FLOAT EQUIPMENT | |
| <i>1-AFU float shoe</i> | @ <i>636.48</i> |
| <i>1-latch Downplug Assy</i> | @ <i>324.00</i> |
| <i>11-turbolizers</i> | @ <i>93.60</i> <i>1029.60</i> |
| <i>28-Scratchers</i> | @ <i>88.90</i> <i>2489.16</i> |
| | @ |
| TOTAL | <i>4479.24</i> |

To Allied Cementing Co., LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME *X MIKE TARD*

SIGNATURE *X Mike Tard*

| | |
|-------------------------------|----------------------|
| SALES TAX (If Any) | |
| TOTAL CHARGES <i>15830.46</i> | <i>15869.66</i> |
| DISCOUNT <i>25 3752.61</i> | <i>1217.72</i> |
| | <i>14652.85</i> |
| | <i>Net 11,902.24</i> |

OCT 22 2012



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Woolsey Operating Co.
125 N.Market, Ste.1000
Wichita Ks.67202
ATTN: Scott Alberg

14-35s-12w Barber Ks.

Achenbach#1

Job Ticket: 49608

DST#: 1

Test Start: 2012.09.23 @ 00:02:23

GENERAL INFORMATION:

Formation: **Cherokee /Miss.**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 03:13:38
 Time Test Ended: 10:17:08
 Interval: **4740.00 ft (KB) To 4887.00 ft (KB) (TVD)**
 Total Depth: 4887.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Gary Pevoteaux
 Unit No: 56
 Reference Elevations: 1382.00 ft (KB)
 1374.00 ft (CF)
 KB to GR/CF: 8.00 ft

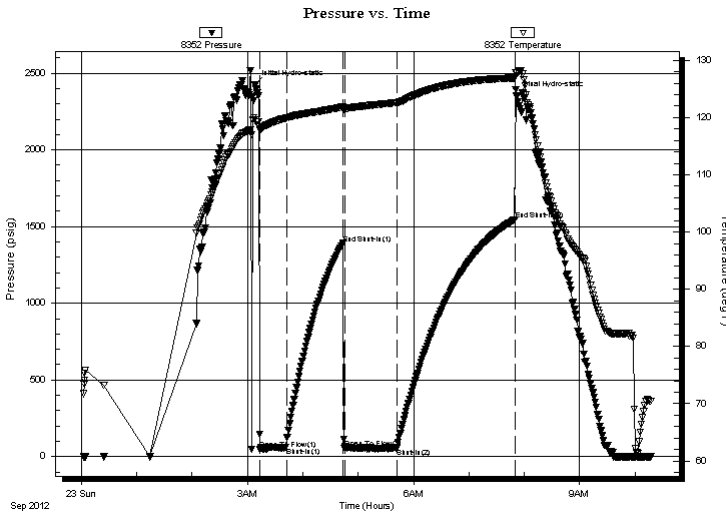
Serial #: 8352

Outside

Press @ Run Depth: 55.51 psig @ 4741.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.09.23 End Date: 2012.09.23 Last Calib.: 2012.09.23
 Start Time: 00:02:28 End Time: 10:17:08 Time On Btm: 2012.09.23 @ 03:08:08
 Time Off Btm: 2012.09.23 @ 07:51:23

TEST COMMENT: IF: Strong blow . B.O.B. in 5 mins.
 IS: No blow .
 FF: Strong blow . B.O.B. in 2 secs. GTS in 5 mins. (see gas flow report)
 FS: Weak blow . 1/4" or less.

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2424.23 | 119.61 | Initial Hydro-static |
| 6 | 49.39 | 118.05 | Open To Flow (1) |
| 34 | 59.20 | 119.92 | Shut-In(1) |
| 96 | 1390.15 | 121.88 | End Shut-In(1) |
| 97 | 53.59 | 121.59 | Open To Flow (2) |
| 154 | 55.51 | 122.59 | Shut-In(2) |
| 282 | 1544.51 | 126.91 | End Shut-In(2) |
| 284 | 2354.47 | 127.76 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 110.00 | Drig.mud | 0.54 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

| | Choke (inches) | Pressure (psig) | Gas Rate (Mcf/d) |
|----------------|----------------|-----------------|------------------|
| First Gas Rate | 0.25 | 3.50 | 28.40 |
| Last Gas Rate | 0.25 | 2.00 | 26.02 |
| Max. Gas Rate | 0.25 | 3.50 | 28.40 |



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Co.
125 N. Market, Ste. 1000
Wichita Ks. 67202
ATTN: Scott Alberg

14-35s-12w Barber Ks.
Achenbach#1
Job Ticket: 49608 **DST#: 1**
Test Start: 2012.09.23 @ 00:02:23

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: | 4000 ppm |
| Viscosity: 49.00 sec/qt | Cushion Volume: bbl | | |
| Water Loss: 9.59 in ³ | Gas Cushion Type: | | |
| Resistivity: 0.00 ohm.m | Gas Cushion Pressure: psig | | |
| Salinity: 4000.00 ppm | | | |
| Filter Cake: 0.20 inches | | | |

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-------------|---------------|
| 110.00 | Drig.mud | 0.541 |

Total Length: 110.00 ft Total Volume: 0.541 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 1 Serial #: gp-1
 Laboratory Name: Caraway Laboratory Location: Liberal, KS
 Recovery Comments:



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

GAS RATES

Woolsey Operating Co.

14-35s-12w Barber Ks.

125 N. Market, Ste. 1000
Wichita Ks. 67202

Achenbach#1

Job Ticket: 49608

DST#: 1

ATTN: Scott Alberg

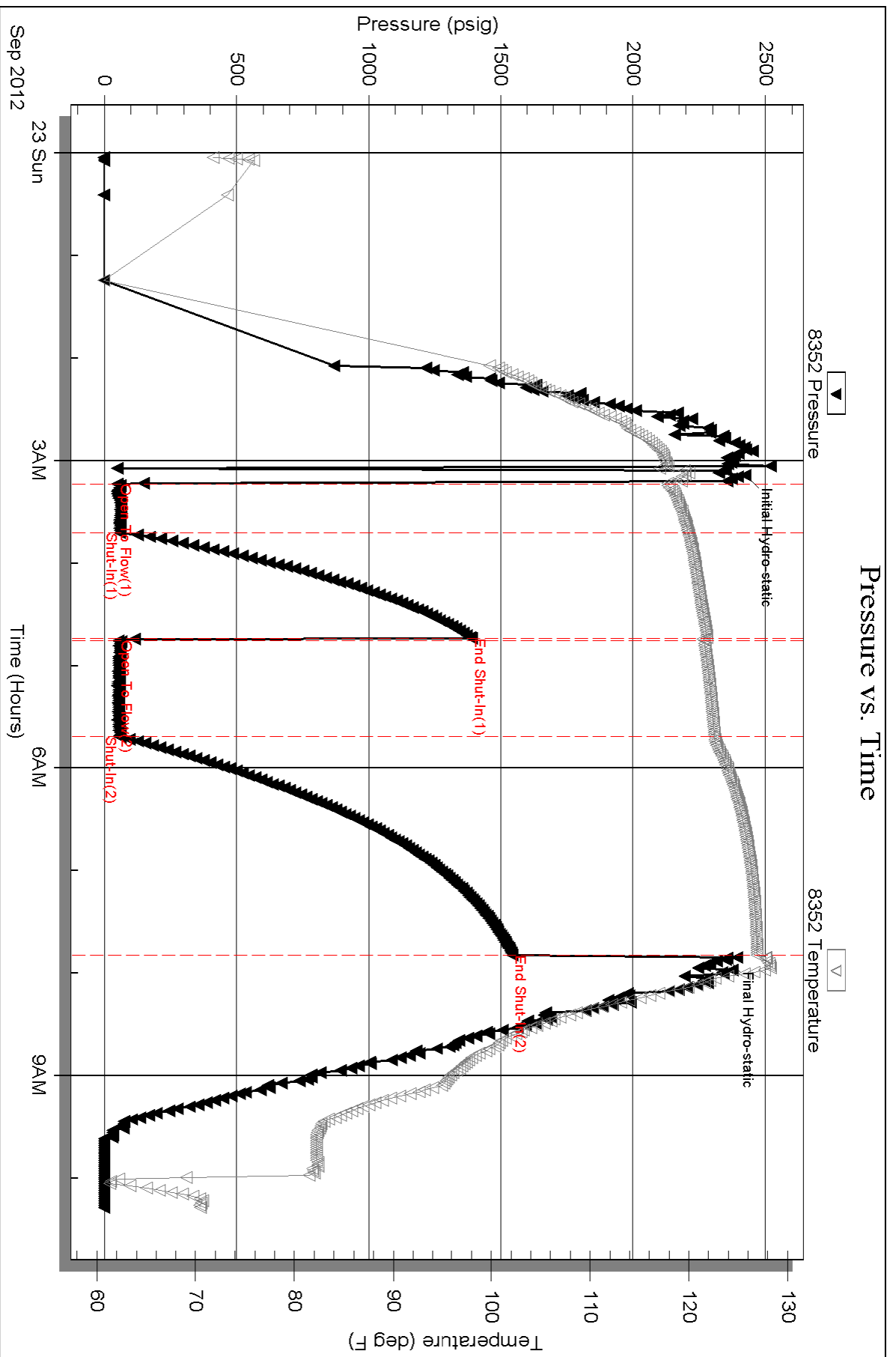
Test Start: 2012.09.23 @ 00:02:23

Gas Rates Information

Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

| Flow Period | Elapsed Time | Choke (inches) | Pressure (psig) | Gas Rate (Mcf/d) |
|-------------|--------------|----------------|-----------------|------------------|
| 2 | 10 | 0.25 | 3.50 | 28.40 |
| 2 | 20 | 0.25 | 3.00 | 27.60 |
| 2 | 30 | 0.25 | 3.00 | 27.60 |
| 2 | 40 | 0.25 | 2.00 | 26.02 |
| 2 | 50 | 0.25 | 2.00 | 26.02 |
| 2 | 60 | 0.25 | 2.00 | 26.02 |





**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Woolsey Operating Co.
125 N. Market, Ste. 1000
Wichita Ks. 67202
ATTN: Scott Alberg

14-35s-12w Barber Ks.

Achenbach#1

Job Ticket: 49609

DST#: 2

Test Start: 2012.09.23 @ 22:32:46

GENERAL INFORMATION:

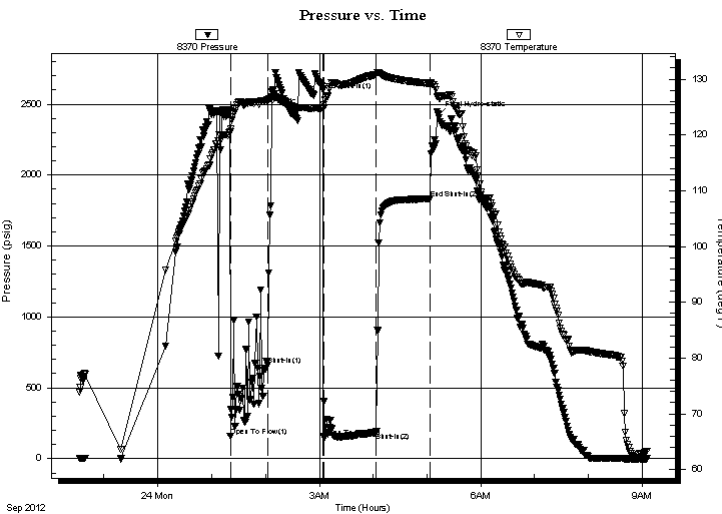
Formation: **Miss.**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 01:20:46
 Tester: Gary Pevoteaux
 Time Test Ended: 09:05:01
 Unit No: 56
 Interval: **4888.00 ft (KB) To 4922.00 ft (KB) (TVD)**
 Reference Elevations: 1382.00 ft (KB)
 Total Depth: 4922.00 ft (KB) (TVD)
 1374.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: KB to GR/CF: 8.00 ft

Serial #: 8370

Inside

Press @ Run Depth: 183.65 psig @ 4889.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.09.23 End Date: 2012.09.24 Last Calib.: 2012.09.24
 Start Time: 22:32:51 End Time: 09:05:01 Time On Btm: 2012.09.24 @ 01:18:16
 Time Off Btm: 2012.09.24 @ 05:12:31

TEST COMMENT: IF: Weak surging blow . 1 - 2". 34 ft. of hard fill on btm. Tool sliding throughout open.
 IS: No blow . Tool sliding throughout ISIP.
 FF: Weak to fair blow . 1 - 6". Tool sliding for 1st 10 mins. of FFP.
 FS: No blow .



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2440.52 | 119.93 | Initial Hydro-static |
| 3 | 159.44 | 120.62 | Open To Flow (1) |
| 44 | 661.63 | 126.22 | Shut-In (1) |
| 106 | 2599.71 | 124.81 | End Shut-In (1) |
| 107 | 154.48 | 124.78 | Open To Flow (2) |
| 165 | 183.65 | 130.86 | Shut-In (2) |
| 226 | 1832.40 | 129.24 | End Shut-In (2) |
| 235 | 2422.00 | 126.91 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|------------------------------|--------------|
| 120.00 | GOCWM 34%g 3%o 20%w 43%m | 0.59 |
| 62.00 | GOCWM 23%g 3%o 13%w 61%m | 0.85 |
| 103.00 | Heavy gritty mud w/oil specs | 1.44 |
| | | |
| | | |

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Co.

14-35s-12w Barber Ks.

125 N.Market, Ste.1000
Wichita Ks.67202

Achenbach#1

Job Ticket: 49609

DST#: 2

ATTN: Scott Alberg

Test Start: 2012.09.23 @ 22:32:46

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:

24000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.18 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|------------------------------|---------------|
| 120.00 | GOCWM 34%g 3%o 20%w 43%m | 0.590 |
| 62.00 | GOCWM 23%g 3%o 13%w 61%m | 0.851 |
| 103.00 | Heavy gritty mud w/oil specs | 1.445 |

Total Length: 285.00 ft Total Volume: 2.886 bbl

Num Fluid Samples: 0

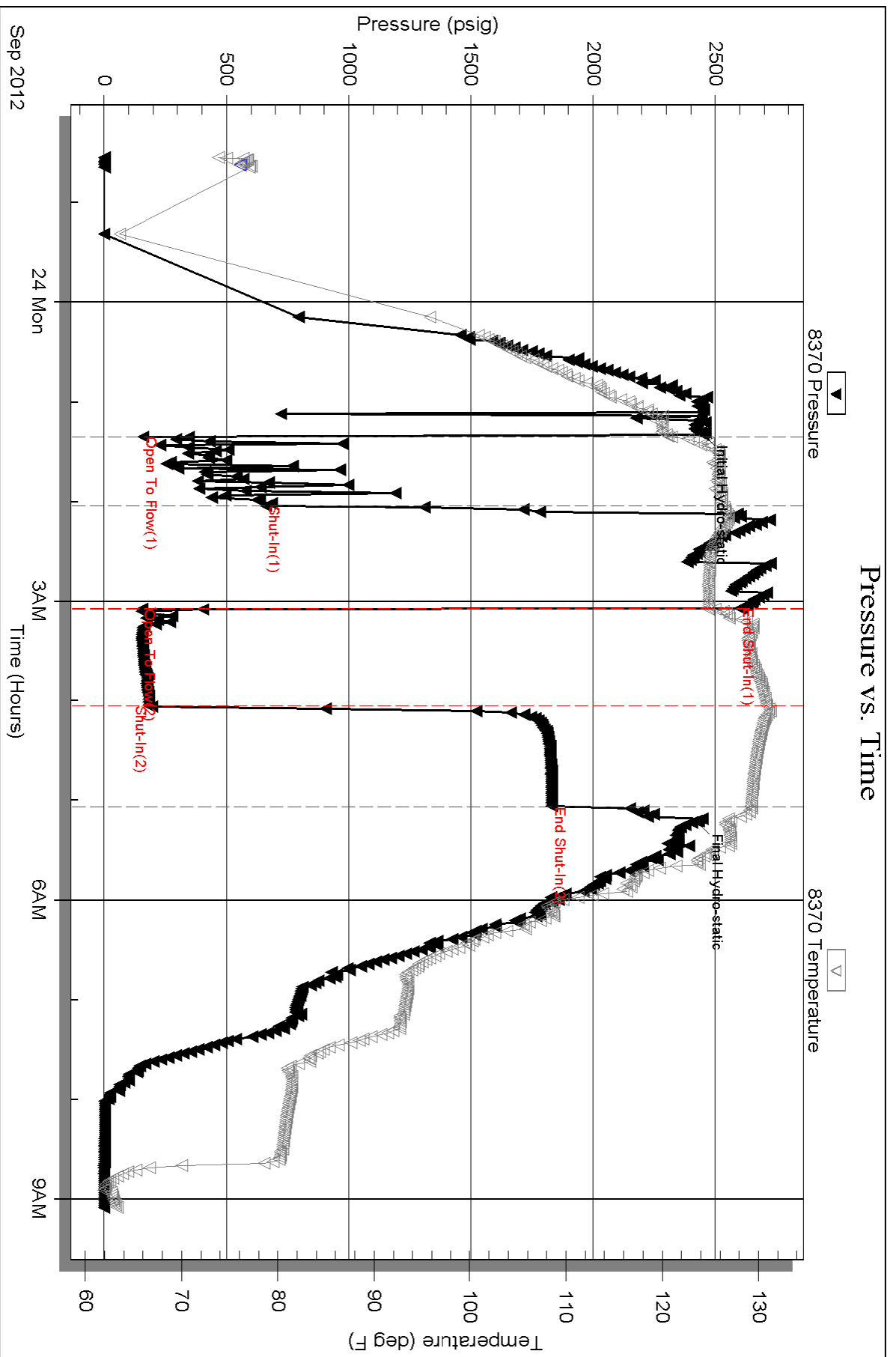
Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments: Rw .35@ 63 deg.



Woolsey Operating Company, LLC

Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: Achenbach 1
 License Number: API 15-007-23938-00-00
 Spud Date: September 15, 2012
 Surface Coordinates: 66°0' FNL, 44°0' FWL Section 14-Twp 35 South - Rge 12 West
 Bottom Hole Coordinates: Vertical Hole

Location: Barber County, Kansas
 Drilling Completed: September 27, 2012

Ground Elevation (ft): 1374
 Logged Interval (ft): 4000
 Formation: McLish Shale
 Type of Drilling Fluid: Chemical Mud

K.B. Elevation (ft): 1382
 Total Depth (ft): 5485

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Woolsey Operating Company, LLC
 Address: 125 N. Market, Suite 1000
 Wichita, KS 67202

GEOLOGIST

Name: W. Scott Alberg
 Company: Alberg Petroleum, LLC
 Address: 609 Meadowlark Lane
 Pratt, Kansas 67124

FORMATION TOPS

| SAMPLE TOPS | LOG TOPS | |
|-------------------|------------|------------|
| STARK | 4548(3166) | 4530(3148) |
| HUSHPUCKNEY SHALE | 4583(3199) | 4564(3182) |
| BVC | 4623(3247) | 4612(3230) |
| PANINEE | 4730(3348) | 4720(3338) |
| CHEROKEE GROUP | 4780(3388) | 4764(3382) |
| MISSISSIPPIAN | 4850(3468) | 4820(3430) |
| KINDERHOOK SHALE | 5194(3722) | 5287(3705) |
| WOODFORD SHALE | 5181(3719) | 5183(3721) |
| VIOLA | 5228(3846) | 5214(3828) |
| SIMPSON GROUP | 5355(3973) | 5330(3954) |
| SIMPSON WILCOX | 5378(3996) | 5358(3976) |
| MCLISH SHALE | 5453(4072) | 5438(4046) |
| RTD | 5485(4103) | 5488(4086) |
| LTD | | |

NOTE: ALL SAMPLE TOPS WERE APPROXIMATELY 17' LOW TO LOG TOPS.
 LTD WAS 17' HIGH TO RTD.

COMMENTS

Surface Casing: Set 8 joints 13 3/8" at 239'(tally 229.28') with 300 sxs Class A, 2% gel, 3% cc, plug down at 4:00 am, September 16, 2012. Cement dtd Circulate.
 Production Casing: 5 1/2" Casing Run
 Deviation Surveys: 1/4 - 239', 1/2 - 947', 1/4 - 1547', 1/4 = 2049', 3/4 - 2549', 3/4 - 3054', 1/4 - 3560', 3/4 - 4095', 1 1/4 - 4598', 1 3/4 - 4887', 1 - 5485'.
 Contractor Bit Record: 1 - 17 1/2" out at 245'
 2 - 7 7/8" out at 5180'.
 3 - 7 7/8" out at 5485'.

Pipe Strap Board 4911.78'
 Strap 4902.89'
 Strap 8.89' Short to Board.

Gas Detector: Woolsey Operating Company, Trailer #1
 Mud System: Mud Co, Brad Boltz, Eng
 DSTs: Triolite Testing, Two DST's Ran. Logged by Superior Well Services, Inc LTD 5468'.

DSTs

DST #1 4740 to 4887' Times 30-60-60-120 Cherokee-Mississippi
 1st Opening - Strong Blow, BOB 5 Min, no blow back
 2nd Opening - Strong Blow, BOB 2 seconds, CTS 5 min, 1/4" blow back
 Recovery: GTS 5 Min
 10 min - 28.4 MCF 40 min - 26 MCF
 20 min - 27.6 MCF 50 min - 26 MCF
 30 min - 27.6 MCF 60 min - 26 MCF

Fluid Recovery: 110' Drilling Mud, Temp 127 degrees.

IFP 49-59#
 FFP 54-56#
 ISIP 1390#
 FSP 1545#
 IHP 2424#
 FHP 2354#

DST #2 4888-4922 Times 45-60-60-60 Mississippi
 1st Opening - Weak Blow, 1-2 inches, tool slipping to bottom, no blow back.
 2nd Opening - Weak Blow, built to 6", tool sld for first 10 minutes, no blow back.
 Recovery:
 103' Heavy Gritty Mud w/ few oil specs.
 62' GOCWM (23% g, 3% O, 13% W, 61% M)
 120' GOCWM (34% g, 3% O, 20% W, 43% M)
 Temp 129 degrees. Chlorides 24,000 ppm
 IFP - Not Valid
 FFP - 154-184#
 ISIP - Not Valid
 FSP 1832#
 IHP - 2441#
 FHP - 2422#

NOTE: Test Tool started hitting fill approximately 34' off bottom. Final flow and final shut in approximately 1-2' off bottom. Test tool had a large amount of cuttings in tool.

CREWS

Fossil Drilling Rig #2
 Tool Pusher - Bob Sanders
 Drillers - Days - Kerry Clark
 Evening - Jeffrey Kramer
 Morning - Jeff Logue
 Relief - Mike Gilmore

ROCK TYPES

| | | | | | | | | | | | | | | | | | |
|------|-------|----------|----------|-----|-----|----------|------|-------|------|-------|------|----|----------|--------|-------|--------|-------|
| Anyh | Congl | Sdy dolo | Shy dolo | Dol | Syp | Sdy lmst | Lmst | Mrlst | Salt | Shale | Slst | Ss | Black sh | Gry sh | Shale | Shstst | Sstsh |
|------|-------|----------|----------|-----|-----|----------|------|-------|------|-------|------|----|----------|--------|-------|--------|-------|

ACCESSORIES

| | | | |
|---------|----------|----------|----------|
| MINERAL | Chlorite | Pelec | Grysl |
| Anyh | Dol | Pellet | Grysl |
| Arg | Sand | Pisolite | Lms |
| Bent | Sily | Plant | Sandylms |
| Bit | | Strom | Sh |
| Brcfrag | | Fuss | Sstsn |
| Calc | | Oomoldic | |
| Carb | | | |
| Chdk | | | |
| Chit | | | |
| Dol | | | |
| Ferrpel | | | |
| Ferr | | | |
| Glau | | | |
| Gyp | | | |
| Mat | | | |
| Nodule | | | |
| Phos | | | |
| Pyr | | | |
| Salt | | | |
| Sandy | | | |
| Silt | | | |

