



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1068588  
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<br>Recompletion Date | Date Reached TD | Completion Date or<br>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: \_\_\_\_\_

1068588

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<br><i>(Attach Additional Sheets)</i><br><br>Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No<br><br>Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No<br>Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No<br><br>List All E. Logs Run: _____ | <input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample<br><br>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<br><input type="checkbox"/> Protect Casing<br><input type="checkbox"/> Plug Back TD<br><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<br>Specify Footage of Each Interval Perforated | Acid, Fracture, Shot, Cement Squeeze Record<br><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:<br><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 |
|-----------------------------------|-----------|---------|-------------|---------------|---------|
|                                   |           |         |             |               |         |

|  |   |   |
|--|---|---|
| <b>DISPOSITION OF GAS:</b><br><input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease<br><i>(If vented, Submit ACO-18.)</i> | <b>METHOD OF COMPLETION:</b><br><input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled<br><i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____<br><i>(Submit ACO-4)</i> | <b>PRODUCTION INTERVAL:</b><br>_____<br>_____ |
|--|---|---|

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

January 19, 2012

Cassie Parks  
FIML Natural Resources, LLC  
410 17TH ST STE 900  
DENVER, CO 80202-4420

Re: ACO1  
API 15-171-20844-00-00  
Pfenninger 10B-30-1831  
SE/4 Sec.30-18S-31W  
Scott 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,  
Cassie Parks

24 S. Lincoln Street  
P.O. Box 31  
Russell, KS 67665-2906  
Voice: (817) 546-7282  
Fax: (817) 246-3361



## INVOICE

Invoice Number: 129082  
Invoice Date: Oct 30, 2011  
Page: 1

**Bill To:**  
FIML Natural Resources LLC  
410 17th St., Suite 900  
Denver, CO 80202

Federal Tax I.D.#: 20-5975804

Pfenniger 10B-30-1831

| Customer ID  | Well Name/# or Customer P.O. | Payment Terms |          |
|--------------|------------------------------|---------------|----------|
| FIML         | Pfenger#10B-30-1831          | Net 30 Days   |          |
| Job Location | Camp Location                | Service Date  | Due Date |
| KS1-01       | Oakley                       | Oct 30, 2011  | 11/29/11 |

| Quantity | Item        | Description               | Unit Price | Amount   |
|----------|-------------|---------------------------|------------|----------|
| 240.00   | MAT         | Class A Common            | 16.25      | 3,900.00 |
| 5.00     | MAT         | Gel                       | 21.25      | 106.25   |
| 9.00     | MAT         | Chloride                  | 58.20      | 523.80   |
| 254.00   | SER         | Handling                  | 2.25       | 571.50   |
| 55.00    | SER         | Mileage                   | 27.94      | 1,536.70 |
| 1.00     | SER         | Surface                   | 1,125.00   | 1,125.00 |
| 75.00    | SER         | Extra Footage             | 0.95       | 71.25    |
| 110.00   | SER         | Heavy Vehicle Mileage     | 7.00       | 770.00   |
| 1.00     | SER         | Manifold Head Rental      | 200.00     | 200.00   |
| 110.00   | SER         | Light Vehicle Mileage     | 4.00       | 440.00   |
| 3.00     | EQP         | 8 5/8 Centralizers        | 64.00      | 192.00   |
| 1.00     | EQP         | 8 5/8 Fiber Baffle Plates | 175.00     | 175.00   |
| 1.00     | EQP         | 8 5/8 Wooden Plug         | 82.00      | 82.00    |
| 1.00     | CEMENTER    | Terry Heinrich            |            |          |
| 1.00     | EQUIP OPER  | Darren Racette            |            |          |
| 1.00     | OPER ASSIST | Chris Helpingstine        |            |          |

|                        |                  |
|------------------------|------------------|
| Subtotal               | 9,693.50         |
| Sales Tax              | 363.47           |
| Total Invoice Amount   | 10,056.97        |
| Payment/Credit Applied |                  |
| <b>TOTAL</b>           | <b>10,056.97</b> |

ALL PRICES ARE NET, PAYABLE 30 DAYS FOLLOWING DATE OF INVOICE. 1 1/2% CHARGED THEREAFTER. IF ACCOUNT IS CURRENT, TAKE DISCOUNT OF

\$ 1938.70

ONLY IF PAID ON OR BEFORE  
Nov 24, 2011

Gary Duke

D11216

8100-145

Adam De Bl...

- 1938.70

8118.27

075

# ALLIED CEMENTING CO., LLC. 039869

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:

OKLEY

|   |                          |   |                  |             |                            |                          |                            |
|---|--------------------------|---|------------------|-------------|----------------------------|--------------------------|----------------------------|
| DATE <u>10-30-11</u>  | SEC <u>30</u>            | TWP <u>18S</u>                          | RANGE <u>31W</u> | CALLED OUT  | ON LOCATION <u>8:15 AM</u> | JOB START <u>1:30 AM</u> | JOB FINISH <u>12:00 PM</u> |
| LEASE <u>PEANUTS</u>  | WELL# <u>106-30-1831</u> | LOCATION <u>SCOTT CITY 6E-25-1/2E-N</u> |                  |             | COUNTY <u>SCOTT</u>        | STATE <u>KS</u>          |                            |
| OLD OR <input checked="" type="checkbox"/> NEW (Circle one) |                          |   |                  | <u>INTO</u> |                            |                          |                            |

CONTRACTOR H 2 DRILL RIG #1

TYPE OF JOB SURFACE

HOLE SIZE 12 1/4" T.D. 378'

CASING SIZE 8 5/8" DEPTH 375'

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT 40.37

CEMENT LEFT IN CSG. 40.37

PERFS.

DISPLACEMENT 21.31

OWNER SAME

CEMENT AMOUNT ORDERED

240 SKS COM 3% CC 2% GEL

|          |                        |                |                |
|----------|------------------------|----------------|----------------|
| COMMON   | <u>240 SKS</u>         | @ <u>16.25</u> | <u>3900.00</u> |
| POZMIX   |                        | @              |                |
| GEL      | <u>5 SKS</u>           | @ <u>21.25</u> | <u>106.25</u>  |
| CHLORIDE | <u>9 SKS</u>           | @ <u>53.25</u> | <u>479.25</u>  |
| ASC      |                        | @              |                |
|          |                        | @              |                |
|          |                        | @              |                |
|          |                        | @              |                |
|          |                        | @              |                |
|          |                        | @              |                |
|          |                        | @              |                |
|          |                        | @              |                |
| HANDLING | <u>254 SKS</u>         | @ <u>2.25</u>  | <u>571.50</u>  |
| MILEAGE  | <u>114 PER SK/MILE</u> |                | <u>1536.00</u> |
| TOTAL    |                        |                | <u>6633.75</u> |

EQUIPMENT

PUMP TRUCK CEMENTER TERRY

# 431 HELPER DARRIN

BULK TRUCK

# 347 DRIVER CHRIS

BULK TRUCK

# DRIVER

REMARKS:

RUN 9 JTS 8 5/8" CASING TO 375' Head on CASING + CORE IS MIN. MIX 240SKS COM 3% CC 2% GEL DISPLACE WITH 21.31 BAGS WATER Plug Landed AT 350 PSI. Circulate 10 BAGS CEMENT TO SET

THANK YOU

CHARGE TO: FIML

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

SERVICE

DEPTH OF JOB 375'

PUMP TRUCK CHARGE 1125.00

EXTRA FOOTAGE 75' @ .95 71.25

MILEAGE 55 X 2 @ 7.00 385.00

MANIFOLD & HEAD @ 200.00

LEIGHT Vehicle 55' X 2 @ 4.00 220.00

TOTAL 2606.25

PLUG & FLOAT EQUIPMENT

3-CENTRALIZER 64.00 192.00

1-Fiber Bottle Plugs @ 1.75 1.75

1-Wooden Plug @ 82.00 82.00

TOTAL 449.00

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 Gary Dale

SIGNATURE [Signature]

SALES TAX (If Any) \_\_\_\_\_

TOTAL CHARGES \_\_\_\_\_

DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS



RECEIVED  
 NOV 21 2011  
 By 2347

## INVOICE

24 S. Lincoln Street  
 P.O. Box 31  
 Russell, KS 67665-2906  
 Voice: (817) 546-7282  
 Fax: (817) 246-3361

Invoice Number: 129252  
 Invoice Date: Nov 8, 2011  
 Page: 1

**Bill To:**  
 FIML Natural Resources LLC  
 410 17th St., Suite 900  
 Denver, CO 80202

Federal Tax I.D.#: 20-5975804

*Pfenninger 10B-30-1831*

| Customer ID  | Well Name# or Customer P.O. | Payment Terms |          |
|--------------|-----------------------------|---------------|----------|
| FIML         | Pfenninger10B-301881        | Net 30 Days   |          |
| Job Location | Camp Location               | Service Date  | Due Date |
| KS1-02       | Oakley                      | Nov 8, 2011   | 12/8/11  |

| Quantity | Item        | Description                    | Unit Price | Amount   |
|----------|-------------|--------------------------------|------------|----------|
| 50.00    | MAT         | Class A Lightweight            | 14.50      | 725.00   |
| 250.00   | MAT         | Gilsonite                      | 0.89       | 222.50   |
| 13.00    | MAT         | FloSeal                        | 2.70       | 35.10    |
| 748.00   | SER         | Handling                       | 2.25       | 1,683.00 |
| 55.00    | SER         | Mileage (Production Top Stage) | 82.28      | 4,525.40 |
| 1.00     | CEMENTER    | Terry Heinrich                 |            |          |
| 1.00     | EQUIP OPER  | Wayne McGhghy                  |            |          |
| 1.00     | OPER ASSIST | Tyler Flipse                   |            |          |
| 1.00     | OPER ASSIST | JR DeBusk                      |            |          |
| 1.00     | OPER ASSIST | Ethan Glassman                 |            |          |

*8300-118*  
*Adrian G. BM*

**D11216**

|                        |                 |
|------------------------|-----------------|
| Subtotal               | 7,191.00        |
| Sales Tax              | 71.73           |
| Total Invoice Amount   | 7,262.73        |
| Payment/Credit Applied |                 |
| <b>TOTAL</b>           | <b>7,262.73</b> |

ALL PRICES ARE NET, PAYABLE 30 DAYS FOLLOWING DATE OF INVOICE. 1 1/2% CHARGED THEREAFTER. IF ACCOUNT IS CURRENT, TAKE DISCOUNT OF

**\$ 1438.20**

ONLY IF PAID ON OR BEFORE  
**Dec 3, 2011**

*\* Gary Duke*

**7,262.73**  
*<1438.20>*  
**\$5824.53**

# ALLIED CEMENTING CO., LLC. 039874

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:  
DAKLEX

|                                |                       |  |              |            |                         |             |            |
|--------------------------------|-----------------------|--|--------------|------------|-------------------------|-------------|------------|
| DATE<br>11-8-11                | SEC.<br>30            | TWP.<br>185                              | RANGE<br>31W | CALLED OUT | ON LOCATION<br>12:00 AM | JOB START   | JOB FINISH |
| LEASE<br>P/LEASER              | WELL #<br>108-30-1831 | LOCATION<br>SCOTT COUNTY 6E-25 1/2 E-12D |              |            | COUNTY<br>SCOTT         | STATE<br>KS |            |
| OLD OR <u>NEW</u> (Circle one) |                       |  |              |            |                         |             |            |

CONTRACTOR H 2 AREA

TYPE OF JOB Production "TOP STAGE"

HOLE SIZE 7 7/8 T.D. 4800'

CASING SIZE 5 1/2" DEPTH 4793.09

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL D-U DEPTH 3003.71

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 39.75

PERFS.

DISPLACEMENT

OWNER SAME

CEMENT

AMOUNT ORDERED

640 SKS LITE 5" GELSONITE 1/4" FLO-SEAL

USED 50 SKS LITE 5" GELSONITE 1/4" FLO-SEAL

COMMON @ 14.50

POZMIX @

GEL @

CHLORIDE @

ASC @

EQUIPMENT

PUMP TRUCK CEMENTER TERRY

# 422 HELPER WAYNE

BULK TRUCK

# 394 DRIVER TYLER

BULK TRUCK

# 404 DRIVER IUDR

396 ETHAN

LITE 50 SKS @ 14.50 725.00

GELSONITE 250 @ .89 222.50

FLO-SEAL 13 @ 2.70 35.10

HANDLING 748 SKS @ 2.25 1683.00

MILEAGE 119 PER SK / MILE 4525.00

TOTAL 7191.00

REMARKS:

STAGE COLLAR WOULDNT OPEN.

PRESSURE UP TO 2000 PSI + 2100 PSI.

2200 PSI 2300 PSI WOULDNT OPEN

MEX 20SES MOUSE HOLE

MEX 30 SKS RAT HOLE

Decided NOT TO TRY TOP STAGE.

Plusard mouse hole + RAT HOLE WHILE WAITING

ON CAT.

THANK YOU

SERVICE

DEPTH OF JOB

PUMP TRUCK CHARGE N/C

EXTRA FOOTAGE @

MILEAGE @

MANIFOLD @

TOTAL N/C

CHARGE TO: FIMI

STREET

CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

@

@

@

@

TOTAL

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 Gary Job

SIGNATURE [Signature]

SALES TAX (If Any)

TOTAL CHARGES

DISCOUNT IF PAID IN 30 DAYS



24 S. Lincoln Street  
 P.O. Box 31  
 Russell, KS 67665-2906  
 Voice: (817) 546-7282  
 Fax: (817) 246-3361



# INVOICE

Invoice Number: 129250  
 Invoice Date: Nov 8, 2011  
 Page: 1

**Bill To:**

FIML Natural Resources LLC  
 410 17th St., Suite 900  
 Denver, CO 80202

Federal Tax I.D.#: 20-5975804

*Pfenninger 10B-30-1831*

| Customer ID  | Well Name# or Customer P.O. | Payment Terms |          |
|--------------|-----------------------------|---------------|----------|
| FIML         | Pfenninger10B-301881        | Net 30 Days   |          |
| Job Location | Camp Location               | Service Date  | Due Date |
| KS1-02       | Oakley                      | Nov 8, 2011   | 12/8/11  |

| Quantity | Item        | Description                  | Unit Price | Amount   |
|----------|-------------|------------------------------|------------|----------|
| 6.00     | MAT         | Gel                          | 21.25      | 127.50   |
| 320.00   | MAT         | ASC                          | 19.00      | 6,080.00 |
| 1,600.00 | MAT         | Gilsonite                    | 0.89       | 1,424.00 |
| 30.00    | MAT         | Salt                         | 23.95      | 718.50   |
| 80.00    | MAT         | FloSeal                      | 2.70       | 216.00   |
| 500.00   | MAT         | WFR-2                        | 1.27       | 635.00   |
| 406.00   | SER         | Handling                     | 2.25       | 913.50   |
| 55.00    | SER         | Mileage                      | 44.66      | 2,456.30 |
| 1.00     | SER         | Production Bottom Stage      | 2,405.00   | 2,405.00 |
| 110.00   | SER         | Heavy Vehicle Mileage        | 7.00       | 770.00   |
| 1.00     | SER         | Manifold Head Rental         | 200.00     | 200.00   |
| 110.00   | SER         | Light Vehicle Mileage        | 4.00       | 440.00   |
| 1.00     | EQP         | 5 1/2 Superseal Float Shoe   | 520.00     | 520.00   |
| 1.00     | EQP         | 5 1/2 Superseal Float Collar | 620.00     | 620.00   |
| 25.00    | EQP         | 5 1/2 Centralizers           | 49.00      | 1,225.00 |
| 1.00     | EQP         | 5 1/2 Lock Ring              | 42.00      | 42.00    |
| 2.00     | EQP         | 5 1/2 Baskets                | 337.00     | 674.00   |
| 1.00     | EQP         | 5 1/2 Stage Collar           | 3,721.00   | 3,721.00 |
| 1.00     | CEMENTER    | Terry Heinrich               |            |          |
| 1.00     | EQUIP OPER  | Wayne McGhghy                |            |          |
| 1.00     | OPER ASSIST | Ethan Glassman               |            |          |

|                        |                  |
|------------------------|------------------|
| Subtotal               | Continued        |
| Sales Tax              | Continued        |
| Total Invoice Amount   | Continued        |
| Payment/Credit Applied |                  |
| <b>TOTAL</b>           | <b>Continued</b> |

ALL PRICES ARE NET, PAYABLE 30 DAYS FOLLOWING DATE OF INVOICE. 1 1/2% CHARGED THEREAFTER. IF ACCOUNT IS CURRENT, TAKE DISCOUNT OF

\$

ONLY IF PAID ON OR BEFORE  
 Dec 3, 2011





24 S. Lincoln Street  
 P.O. Box 31  
 Russell, KS 67665-2906  
 Voice: (817) 546-7282  
 Fax: (817) 246-3361

# INVOICE

Invoice Number: 129250  
 Invoice Date: Nov 8, 2011  
 Page: 2

**Bill To:**

FIML Natural Resources LLC  
 410 17th St, Suite 900  
 Denver, CO 80202

Federal Tax I.D.#: 20-5975804

| Customer ID  | Well Name# or Customer P.O. | Payment Terms |          |
|--------------|-----------------------------|---------------|----------|
| FIML         | Pfenninger10B-301881        | Net 30 Days   |          |
| Job Location | Camp Location               | Service Date  | Due Date |
| KS1-02       | Oakley                      | Nov 8, 2011   | 12/8/11  |

| Quantity | Item        | Description  | Unit Price | Amount |
|----------|-------------|--------------|------------|--------|
| 1.00     | OPER ASSIST | JR DeBusk    |            |        |
| 1.00     | OPER ASSIST | Tyler Flipse |            |        |

D11216

8300-118  
 Adam Q. BL

ALL PRICES ARE NET, PAYABLE  
 30 DAYS FOLLOWING DATE OF  
 INVOICE. 1.12% CHARGED  
 THEREAFTER. IF ACCOUNT IS  
 CURRENT, TAKE DISCOUNT OF

\$ 4637.56

ONLY IF PAID ON OR BEFORE  
 Dec 3, 2011

|                        |                  |
|------------------------|------------------|
| Subtotal               | 23,187.80        |
| Sales Tax              | 1,168.22         |
| Total Invoice Amount   | 24,356.02        |
| Payment/Credit Applied |                  |
| <b>TOTAL</b>           | <b>24,356.02</b> |

<4637.56

✓ \$19718.46





**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

Prepared For: **FIML Natural Resources, LLC**

410 17th St STE 900  
Denver CO 80202

ATTN: Jim Musgrove

**Pfeninnger #10-13**

**30 18s 31w Scott, KS**

Start Date: 2011.11.03 @ 14:42:00

End Date: 2011.11.03 @ 22:36:30

Job Ticket #. 45351      DST #: 1



Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

**ORIGINAL**

Printed: 2011.11.11 @ 10:10:03

FIML Natural Resources, LLC    30 18s 31w Scott, KS    Pfeninnger #10-13    DST # 1    LKC B    2011.11.03





**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

FIML Natural Resources, LLC

30 18s 31w Scott, KS

410 17th St STE 900  
Denver CO 80202

**Pfeninnger #10-13**

Job Ticket: 45351

DST#: 1

ATTN: Jim Musgrove

Test Start: 2011.11.03 @ 14:42:00

## GENERAL INFORMATION:

Formation: **LKC B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:24:45

Time Test Ended: 22:36:30

Interval: **3969.00 ft (KB) To 3998.00 ft (KB) (TVD)**

Total Depth: 4134.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Straddle (Initial)

Tester: Bradley Walter

Unit No: 40

Reference Elevations: 2995.00 ft (KB)

2983.00 ft (CF)

KB to GR/CF: 12.00 ft

**Serial #: 8652**

Inside

Press@RunDepth: 206.45 psig @ 3970.00 ft (KB)

Start Date: 2011.11.03

End Date: 2011.11.03

Start Time: 14:42:05

End Time: 22:36:29

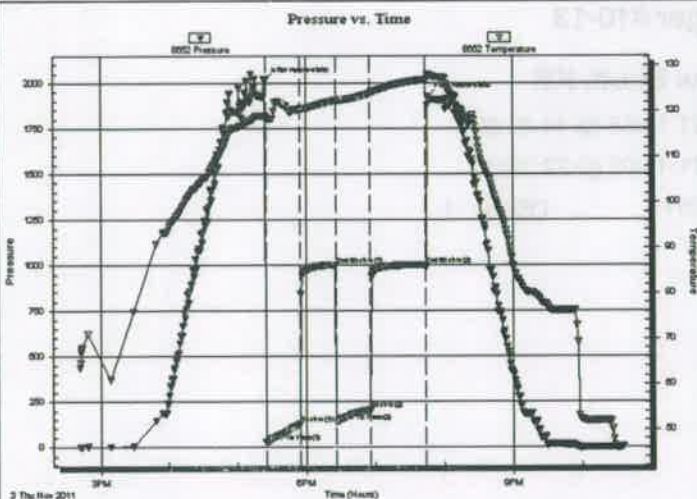
Capacity: 8000.00 psig

Last Calib.: 2011.11.03

Time On Btm: 2011.11.03 @ 17:24:30

Time Off Btm: 2011.11.03 @ 19:45:15

TEST COMMENT: IF: 9" blow.  
IS: No return.  
FF: 6" Blow  
FSI: No return.



## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 2013.65         | 119.02       | Initial Hydro-static |
| 1           | 26.46           | 118.35       | Open To Flow (1)     |
| 31          | 128.10          | 120.37       | Shut-In(1)           |
| 62          | 1002.13         | 122.47       | End Shut-In(1)       |
| 62          | 142.31          | 122.18       | Open To Flow (2)     |
| 92          | 206.45          | 123.96       | Shut-In(2)           |
| 139         | 1001.68         | 126.96       | End Shut-In(2)       |
| 141         | 1926.66         | 128.21       | Final Hydro-static   |

## Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 390.00      | mcw 20m 80w | 2.09         |
|             |             |              |
|             |             |              |
|             |             |              |
|             |             |              |

## Gas Rates

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







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

TOOL DIAGRAM

FIML Natural Resources, LLC

30 18s 31w Scott, KS

410 17th St STE 900  
Denver CO 80202

Pfeninnger #10-13

Job Ticket: 45351

DST#: 1

ATTN: Jim Musgrove

Test Start: 2011.11.03 @ 14:42:00

## Tool Information

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3611.00 ft | Diameter: 3.80 inches | Volume: 50.65 bbl              | Tool Weight: 1500.00 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: 371.00 ft  | Diameter: 2.25 inches | Volume: 1.82 bbl               | Weight to Pull Loose: 83000.00 lb  |
|                           |                    |                       | <b>Total Volume: 52.47 bbl</b> | Tool Chased: 0.00 ft               |
| Drill Pipe Above KB:      | 32.00 ft           |                       |                                | String Weight: Initial 72000.00 lb |
| Depth to Top Packer:      | 3969.00 ft         |                       |                                | Final 72000.00 lb                  |
| Depth to Bottom Packer:   | 3999.00 ft         |                       |                                |                                    |
| Interval between Packers: | 30.00 ft           |                       |                                |                                    |
| Tool Length:              | 181.00 ft          |                       |                                |                                    |
| Number of Packers:        | 3                  | Diameter: 6.75 inches |                                |                                    |

Tool Comments:

## Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                 |
|------------------|-------------|------------|----------|------------|--------------------------------|
| Shut In Tool     | 5.00        |            |          | 3955.00    |                                |
| Hydraulic tool   | 5.00        |            |          | 3960.00    |                                |
| Packer           | 5.00        |            |          | 3965.00    | 19.00 Bottom Of Top Packer     |
| Packer           | 4.00        |            |          | 3969.00    |                                |
| Stubb            | 1.00        |            |          | 3970.00    |                                |
| Recorder         | 0.00        | 8652       | Inside   | 3970.00    |                                |
| Recorder         | 0.00        | 8322       | Outside  | 3970.00    |                                |
| Perforations     | 26.00       |            |          | 3996.00    |                                |
| Blank Spacing    | 1.00        |            |          | 3997.00    |                                |
| Blank Off Sub    | 1.00        |            |          | 3998.00    |                                |
| Blank Spacing    | 1.00        |            |          | 3999.00    | 30.00 Tool Interval            |
| Packer           | 5.00        |            |          | 4004.00    |                                |
| Perforations     | 29.00       |            |          | 4033.00    |                                |
| Change Over Sub  | 1.00        |            |          | 4034.00    |                                |
| Recorder         | 0.00        | 8360       | Below    | 4034.00    |                                |
| Drill Pipe       | 93.00       |            |          | 4127.00    |                                |
| Change Over Sub  | 1.00        |            |          | 4128.00    |                                |
| Bullnose         | 3.00        |            |          | 4131.00    | 132.00 Bottom Packers & Anchor |

**Total Tool Length: 181.00**



**TRILOBITE TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

FIML Natural Resources, LLC

30 18s 31w Scott, KS

410 17th St STE 900  
Denver CO 80202

**Pfenninger #10-13**

Job Ticket: 45351

**DST#: 1**

ATTN: Jim Musgrove

Test Start: 2011.11.03 @ 14:42:00

**Mud and Cushion Information**

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 51.00 sec/qt  
Water Loss: 7.96 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 2000.00 ppm  
Filter Cake: 1.00 inches

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

Oil API: 0 deg API  
Water Salinity: 26000 ppm

**Recovery Information**

Recovery Table

| Length ft | Description | Volume bbl |
|-----------|-------------|------------|
| 390.00    | mcw 20m80w  | 2.091      |

Total Length: 390.00 ft      Total Volume: 2.091 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments: rw is .30 @ 60 = 26000ppm

Serial #: 8652

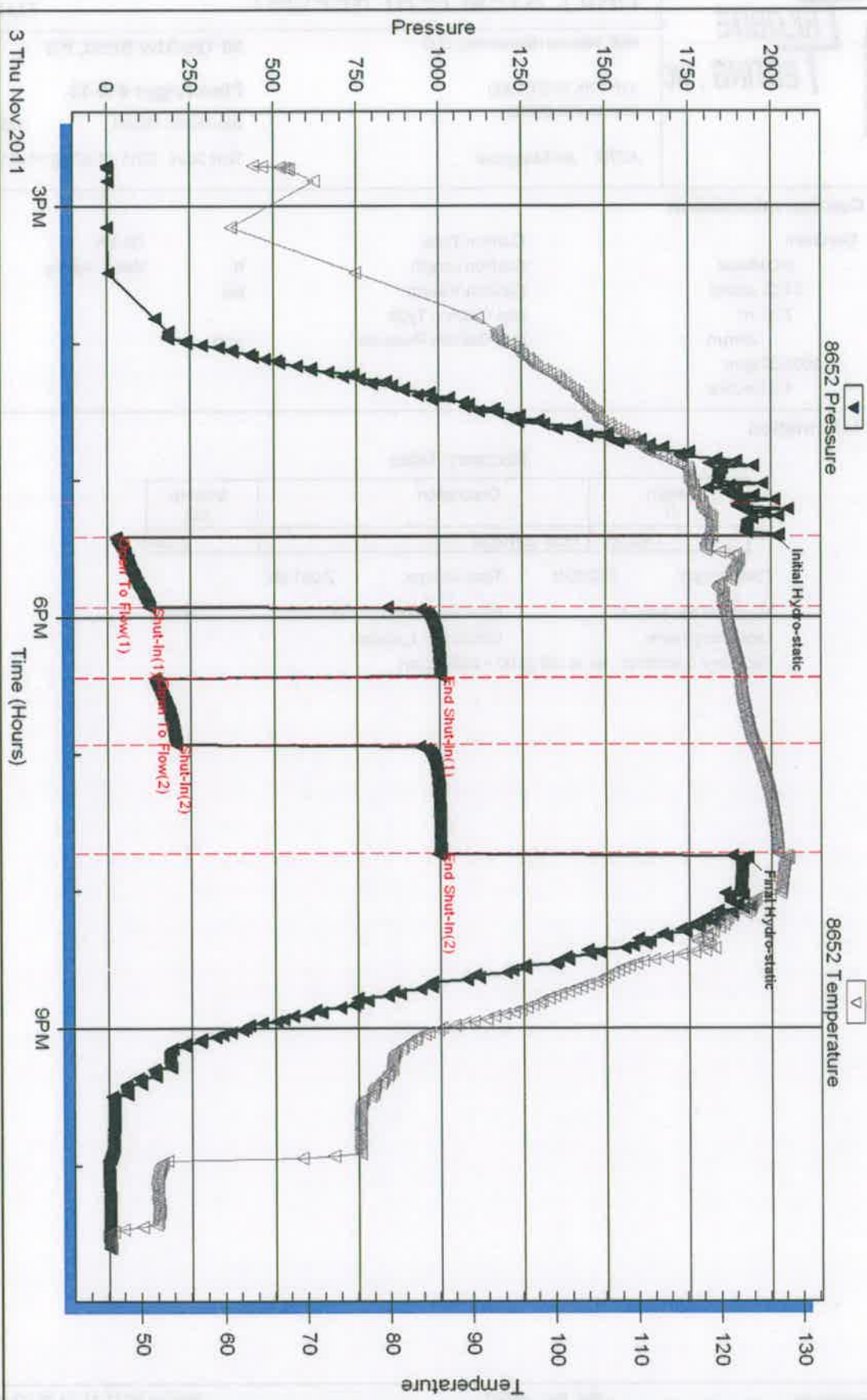
Inside

FML Natural Resources, LLC

Prelinger #10-13

DST Test Number: 1

### Pressure vs. Time



Trickle Testing, Inc

Ref. No: 45351

Printed: 2011.11.11 @ 10:10:04

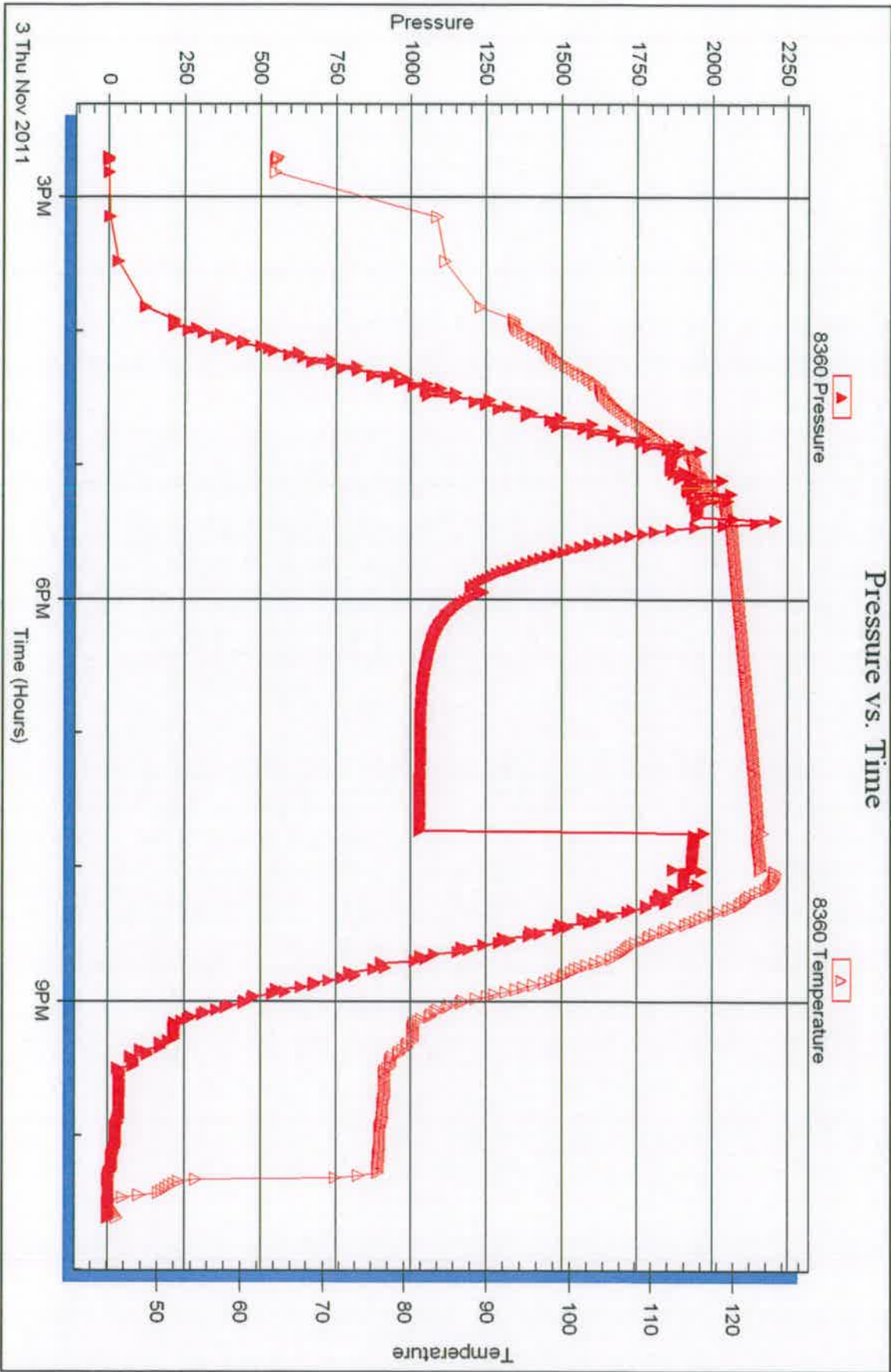


Serial #: 8360

Below (Stratfield) Natural Resources, LLC

Ferlinger #10-13

DST Test Number: 1





DRILL STEM TEST REPORT



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

Prepared For: **FIML Natural Resources, LLC**

410 17th St STE 900  
Denver CO 80202

ATTN: Jim Musgrove

**Pfeninnger #10-13**

**30 18s 31w Scott, KS**

Start Date: 2011.11.04 @ 13:20:00

End Date: 2011.11.04 @ 20:38:30

Job Ticket #: 45352      DST #: 2



Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

FIML Natural Resources, LLC    30 18s 31w Scott, KS    Pfeninnger #10-13    DST # 2    LKC J    2011.11.04



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

FIML Natural Resources, LLC  
410 17th St STE 900  
Denver CO 80202  
ATTN: Jim Musgrove

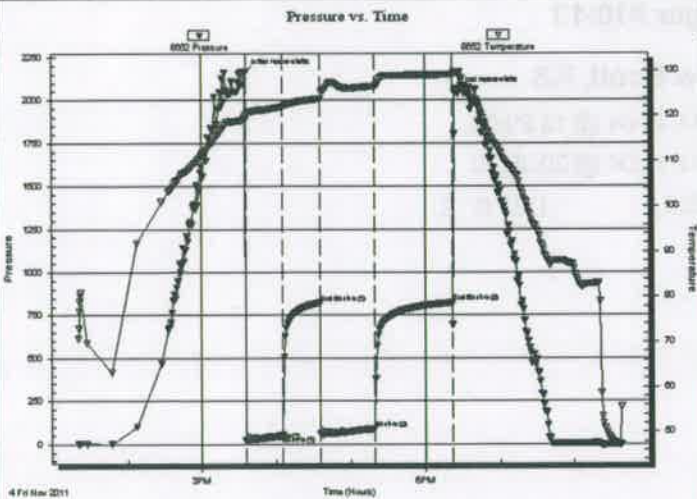
30 18s 31w Scott, KS  
**Pfenninger #10-13**  
Job Ticket: 45352      DST#: 2  
Test Start: 2011.11.04 @ 13:20:00

## GENERAL INFORMATION:

Formation: **LKC J**  
Deviated: No Whipstock:                      ft (KB)  
Time Tool Opened: 15:35:45  
Time Test Ended: 20:38:30  
Interval: **4217.00 ft (KB) To 4264.00 ft (KB) (TVD)**  
Total Depth: 4217.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Good  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Bradley Walter  
Unit No: 40  
Reference Elevations: 2995.00 ft (KB)  
2983.00 ft (CF)  
KB to GR/CF: 12.00 ft

**Serial #: 8652      Inside**  
Press@RunDepth: 90.07 psig @ 4218.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2011.11.04      End Date: 2011.11.04      Last Calib.: 2011.11.04  
Start Time: 13:20:05      End Time: 20:38:29      Time On Btm: 2011.11.04 @ 15:35:30  
Time Off Btm: 2011.11.04 @ 18:23:15

TEST COMMENT: IF: 2 1/2" blow.  
IS: No return  
FF: 1 1/2" blow.  
FSI: No return.



## PRESSURE SUMMARY

| Time (Mn.) | Pressure (psig) | Temp (deg F) | Annotation           |
|------------|-----------------|--------------|----------------------|
| 0          | 2158.63         | 120.12       | Initial Hydro-static |
| 1          | 20.98           | 119.29       | Open To Flow (1)     |
| 30         | 48.59           | 122.05       | Shut-In(1)           |
| 60         | 823.20          | 123.75       | End Shut-In(1)       |
| 61         | 56.71           | 123.58       | Open To Flow (2)     |
| 105        | 90.07           | 126.56       | Shut-In(2)           |
| 166        | 823.62          | 129.08       | End Shut-In(2)       |
| 168        | 2050.90         | 129.39       | Final Hydro-static   |

## Recovery

| Length (ft) | Description              | Volume (bbl) |
|-------------|--------------------------|--------------|
| 120.00      | w cm 45w 55m (oil spots) | 0.59         |
|             |                          |              |
|             |                          |              |
|             |                          |              |
|             |                          |              |

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

TOOL DIAGRAM

FIML Natural Resources, LLC

30 18s 31w Scott, KS

410 17th St STE 900  
Denver CO 80202

Pfenninger #10-13

Job Ticket: 45352

DST#: 2

ATTN: Jim Musgrove

Test Start: 2011.11.04 @ 13:20:00

## Tool Information

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3831.00 ft | Diameter: 3.80 inches | Volume: 53.74 bbl              | Tool Weight: 1500.00 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: 371.00 ft  | Diameter: 2.25 inches | Volume: 1.82 bbl               | Weight to Pull Loose: 100000.0 lb  |
|                           |                    |                       | <b>Total Volume: 55.56 bbl</b> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 6.00 ft            |                       |                                | String Weight: Initial 70000.00 lb |
| Depth to Top Packer:      | 4217.00 ft         |                       |                                | Final 70000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 47.00 ft           |                       |                                |                                    |
| Tool Length:              | 68.00 ft           |                       |                                |                                    |
| Number of Packers:        | 3                  | Diameter: 6.75 inches |                                |                                    |

Tool Comments:

## Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                |
|------------------|-------------|------------|----------|------------|-------------------------------|
| Change Over Sub  | 1.00        |            |          | 4197.00    |                               |
| Shut In Tool     | 5.00        |            |          | 4202.00    |                               |
| Hydraulic tool   | 5.00        |            |          | 4207.00    |                               |
| Packer           | 5.00        |            |          | 4212.00    | 21.00 Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 4217.00    |                               |
| Stubb            | 1.00        |            |          | 4218.00    |                               |
| Recorder         | 0.00        | 8360       | Outside  | 4218.00    |                               |
| Recorder         | 0.00        | 8322       | Inside   | 4218.00    |                               |
| Perforations     | 10.00       |            |          | 4228.00    |                               |
| Change Over Sub  | 1.00        |            |          | 4229.00    |                               |
| Drill Pipe       | 31.00       |            |          | 4260.00    |                               |
| Change Over Sub  | 1.00        |            |          | 4261.00    |                               |
| Bullnose         | 3.00        |            |          | 4264.00    | 47.00 Bottom Packers & Anchor |

**Total Tool Length: 68.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

FIML Natural Resources, LLC

30 18s 31w Scott, KS

410 17th St STE 900  
Denver CO 80202

**Pfeninnger #10-13**

Job Ticket: 45352

DST#: 2

ATTN: Jim Musgrove

Test Start: 2011.11.04 @ 13:20:00

**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: 17000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.56 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4200.00 ppm

Filter Cake: 1.00 inches

**Recovery Information**

Recovery Table

| Length<br>ft | Description              | Volume<br>bbl |
|--------------|--------------------------|---------------|
| 120.00       | w cm 45w 55m (oil spots) | 0.590         |

Total Length: 120.00 ft

Total Volume: 0.590 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is .45 @ 60 = 17000ppm

Serial #: 8652

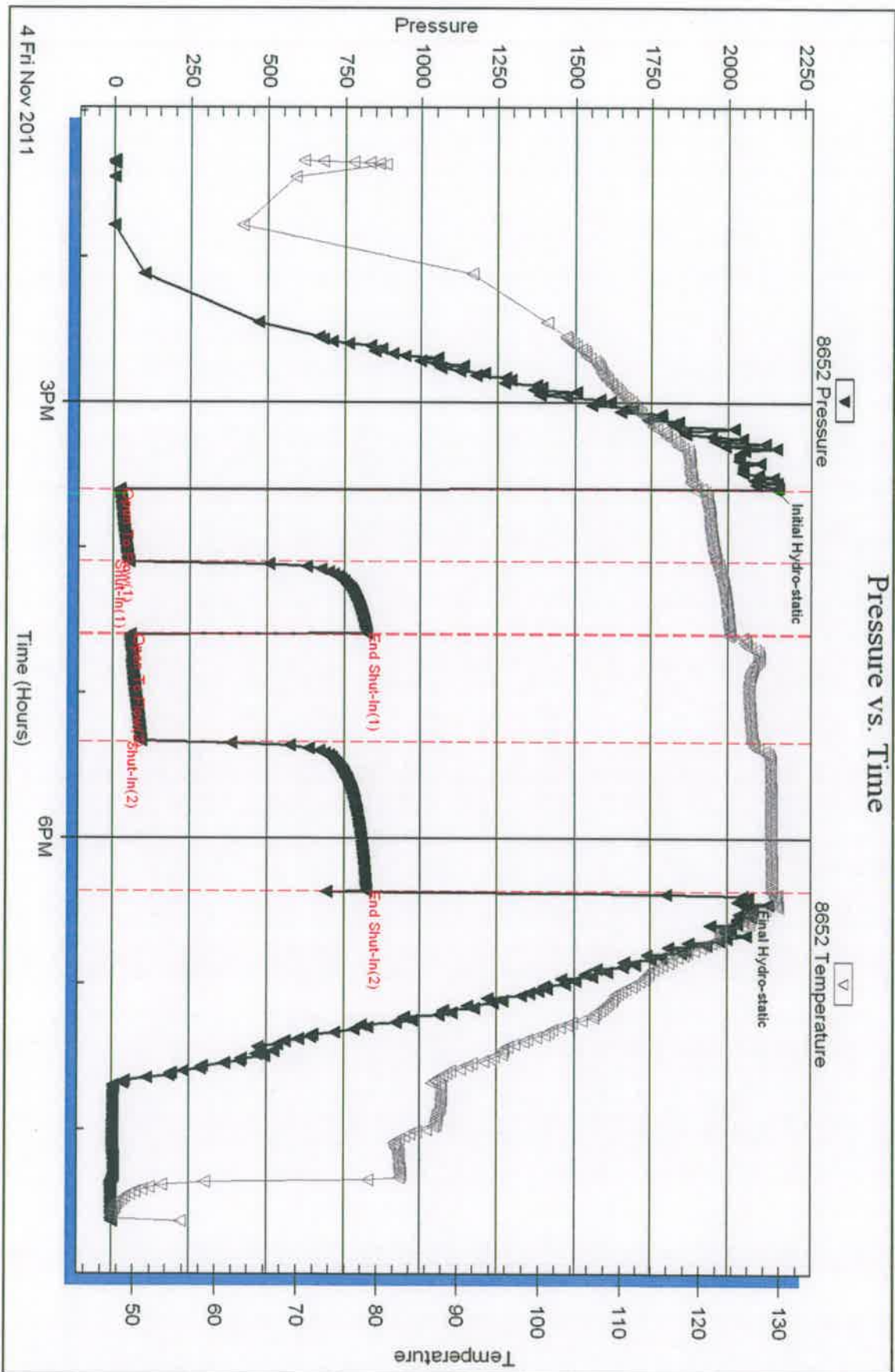
Inside

FIM Natural Resources, LLC

Perlinger #10-13

DST Test Number: 2

### Pressure vs. Time









**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

Prepared For: **FIML Natural Resources, LLC**

410 17th St STE 900  
Denver CO 80202

ATTN: Jim Musgrove

**Pfeninnger #10-13**

**30 18s 31w Scott, KS**

Start Date: 2011.11.05 @ 14:14:00

End Date: 2011.11.06 @ 00:04:15

Job Ticket #: 45353      DST #: 3



Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2011.11.11 @ 10:13:41

FIML Natural Resources, LLC    30 18s 31w Scott, KS    Pfeninnger #10-13    DST # 3    Marnaton    2011.11.05



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

FIML Natural Resources, LLC

30 18s 31w Scott, KS

410 17th St STE 900  
Denver CO 80202

**Pfeninnger #10-13**

Job Ticket: 45353

DST#: 3

ATTN: Jim Musgrove

Test Start: 2011.11.05 @ 14:14:00

## GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:28:00

Time Test Ended: 00:04:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 40

Interval: 4305.00 ft (KB) To 4406.00 ft (KB) (TVD)

Total Depth: 4406.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2995.00 ft (KB)

2983.00 ft (CF)

KB to GR/CF: 12.00 ft

**Serial #: 8652**

**Inside**

Press@RunDepth: 801.19 psig @ 4306.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.11.05 End Date: 2011.11.06

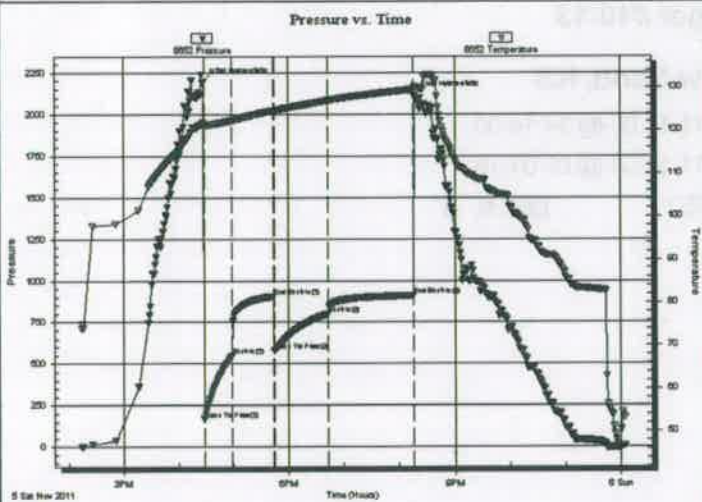
Last Calib.: 2011.11.05

Start Time: 14:14:05 End Time: 00:04:15

Time On Btm: 2011.11.05 @ 16:27:30

Time Off Btm: 2011.11.05 @ 20:17:00

**TEST COMMENT:** IF: BOB @ 30 seconds.  
IS: BOB @ 13 minutes.  
FF: BOB @ 90 seconds.  
FS: 7" return blow.



## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 2194.52         | 121.86       | Initial Hydro-static |
| 1           | 167.36          | 121.25       | Open To Flow (1)     |
| 31          | 548.30          | 122.28       | Shut-In(1)           |
| 76          | 906.14          | 124.60       | End Shut-In(1)       |
| 77          | 578.92          | 124.53       | Open To Flow (2)     |
| 136         | 801.19          | 126.97       | Shut-In(2)           |
| 228         | 908.96          | 129.54       | End Shut-In(2)       |
| 230         | 2115.59         | 130.04       | Final Hydro-static   |

## Recovery

| Length (ft) | Description            | Volume (bbl) |
|-------------|------------------------|--------------|
| 370.00      | gow cm 20g 20o 30w 30m | 1.82         |
| 940.00      | gmco 15g 5m 80o        | 13.18        |
| 760.00      | go 40g 60o             | 10.66        |
|             |                        |              |
|             |                        |              |

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

FIML Natural Resources, LLC

30 18s 31w Scott, KS

410 17th St STE 900  
Denver CO 80202

Pfeninnger #10-13

Job Ticket: 45353

DST#: 3

ATTN: Jim Musgrove

Test Start: 2011.11.05 @ 14:14:00

## Tool Information

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3925.00 ft | Diameter: 3.80 inches | Volume: 55.06 bbl              | Tool Weight: 1500.00 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: 371.00 ft  | Diameter: 2.25 inches | Volume: 1.82 bbl               | Weight to Pull Loose: 87000.00 lb  |
|                           |                    |                       | <b>Total Volume: 56.88 bbl</b> | Tool Chased: 0.00 ft               |
| Drill Pipe Above KB:      | 12.00 ft           |                       |                                | String Weight: Initial 74000.00 lb |
| Depth to Top Packer:      | 4305.00 ft         |                       |                                | Final 78000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 101.00 ft          |                       |                                |                                    |
| Tool Length:              | 122.00 ft          |                       |                                |                                    |
| Number of Packers:        | 3                  | Diameter: 6.75 inches |                                |                                    |

Tool Comments:

## Tool Description

| Tool Description          | Length (ft)   | Serial No. | Position | Depth (ft) | Accum. Lengths                 |
|---------------------------|---------------|------------|----------|------------|--------------------------------|
| Change Over Sub           | 1.00          |            |          | 4285.00    |                                |
| Shut In Tool              | 5.00          |            |          | 4290.00    |                                |
| Hydraulic tool            | 5.00          |            |          | 4295.00    |                                |
| Packer                    | 5.00          |            |          | 4300.00    | 21.00 Bottom Of Top Packer     |
| Packer                    | 5.00          |            |          | 4305.00    |                                |
| Stubb                     | 1.00          |            |          | 4306.00    |                                |
| Recorder                  | 0.00          | 8360       | Outside  | 4306.00    |                                |
| Recorder                  | 0.00          | 8652       | Inside   | 4306.00    |                                |
| Perforations              | 32.00         |            |          | 4338.00    |                                |
| Change Over Sub           | 1.00          |            |          | 4339.00    |                                |
| Drill Pipe                | 63.00         |            |          | 4402.00    |                                |
| Change Over Sub           | 1.00          |            |          | 4403.00    |                                |
| Bullnose                  | 3.00          |            |          | 4406.00    | 101.00 Bottom Packers & Anchor |
| <b>Total Tool Length:</b> | <b>122.00</b> |            |          |            |                                |



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

FIML Natural Resources, LLC

30 18s 31w Scott, KS

410 17th St STE 900  
Denver CO 80202

**Pfeninnger #10-13**

Job Ticket: 45353

DST#: 3

ATTN: Jim Musgrove

Test Start: 2011.11.05 @ 14:14:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

31 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5400.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

| Length<br>ft | Description            | Volume<br>bbl |
|--------------|------------------------|---------------|
| 370.00       | gow cm 20g 20o 30w 30m | 1.820         |
| 940.00       | gmco 15g 5m 80o        | 13.177        |
| 760.00       | go 40g 60o             | 10.661        |

Total Length: 2070.00 ft

Total Volume: 25.658 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



Serial #: 8652

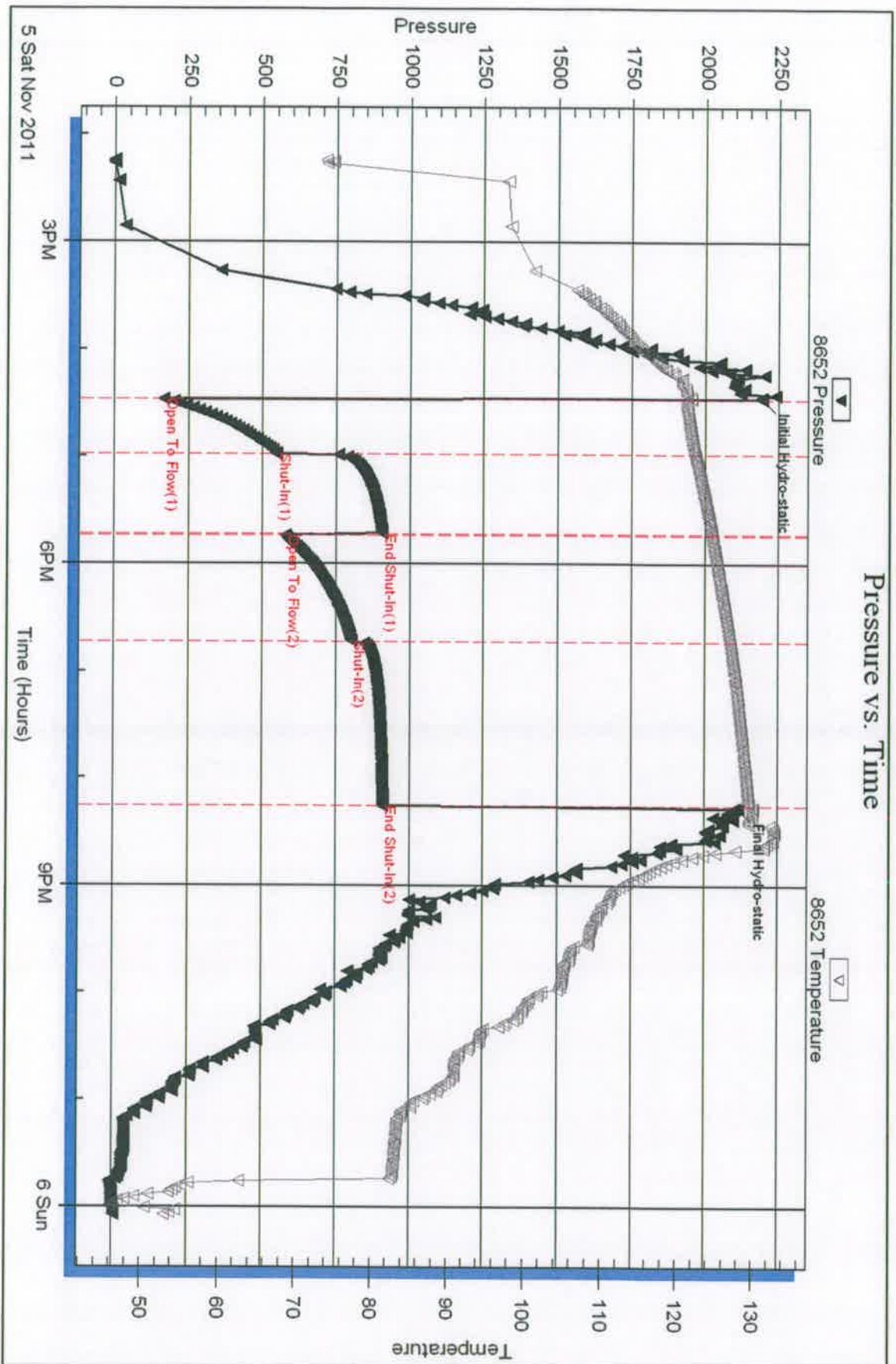
Inside

FML Natural Resources, LLC

Freninger #10-13

DST Test Number: 3

### Pressure vs. Time



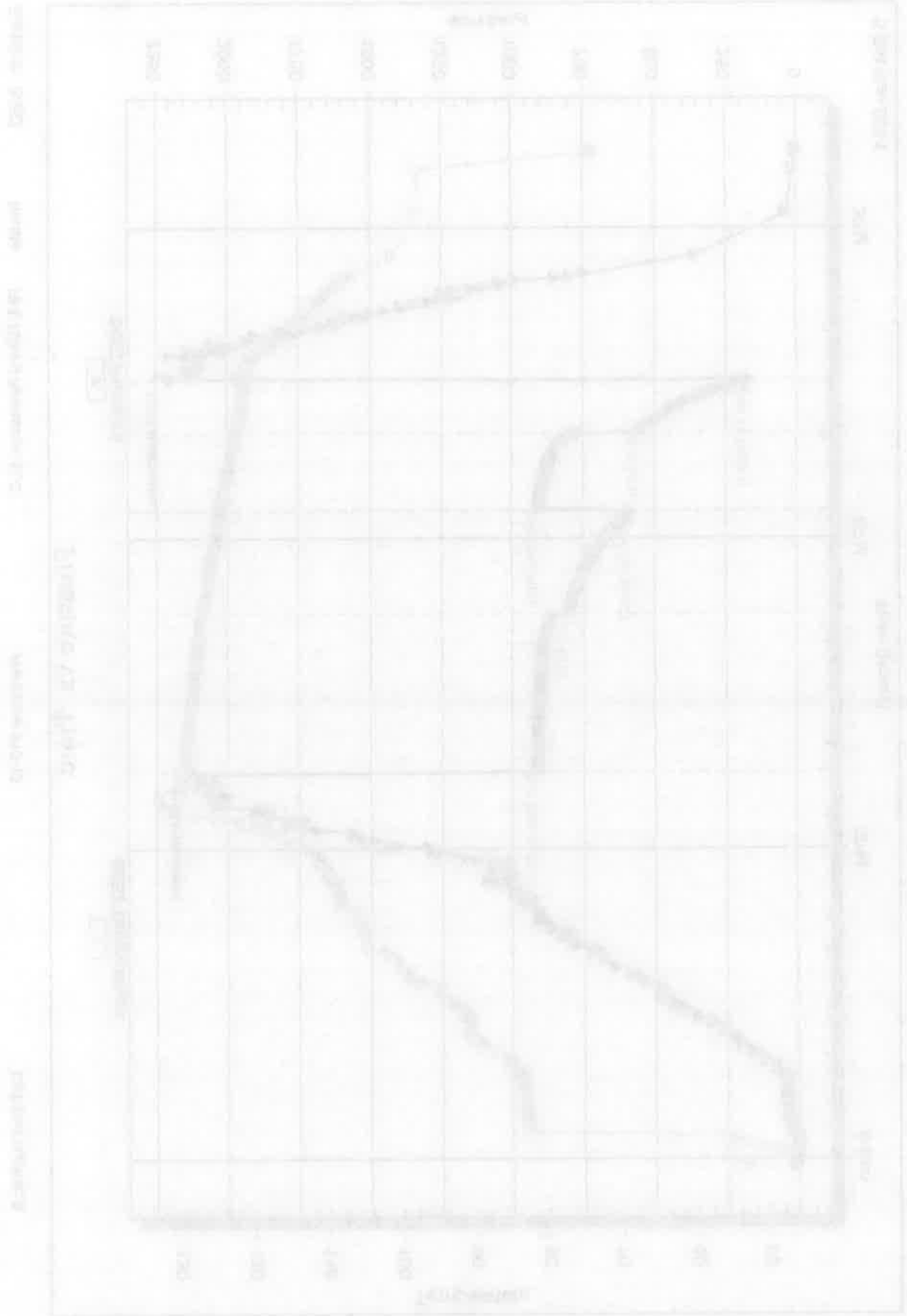


Figure 1: Comparison of Temperature vs. Time for two different conditions.