

#### Kansas Corporation Commission Oil & Gas Conservation Division

1049348

Form ACO-1

June 2009

Form Must Be Typed

Form must be Signed

All blanks must be Filled

# WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

| OPERATOR: License #  | API No. 15   |
|--|--|
| Name:  | Spot Description:  |
| Address 1:   | SecTwpS. R   |
| Address 2:   | Feet from North / South Line of Section  |
| City: State: Zip:+   | Feet from _ East / _ West Line of Section  |
| Contact Person:  | Footages Calculated from Nearest Outside Section Corner:   |
| Phone: ()  | □NE □NW □SE □SW  |
| CONTRACTOR: License #  | County:  |
| Name:  | Lease Name: Well #:  |
| Wellsite Geologist:  | Field Name:  |
| Purchaser:   | Producing Formation:   |
| Designate Type of Completion:  | Elevation: Ground: Kelly Bushing:  |
| New Well Re-Entry Workover   | Total Depth: Plug Back Total Depth:  |
| Oil WSW SWD SIOW Gas D&A ENHR SIGW OG GSW Temp. Abd. CM (Coal Bed Methane) Cathodic Other (Core, Expl., etc.): | 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: sx cmt |
| Operator:  |  |
| Well Name:   | Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)   |
| Original Comp. Date: Original Total Depth: Original Total Depth: Conv. to ENHR                                 | Chloride content: ppm Fluid volume: bbls  Dewatering method used:  |
| Plug Back: Plug Back Total Depth   | Location of fluid disposal if hauled offsite:  |
| Commingled Permit #:   | Operator Name:   |
| Dual Completion Permit #:  | Lease Name: License #:   |
| SWD Permit #:  | QuarterSec TwpS. R East West   |
| ENHR Permit #:   | County: Permit #:  |
| GSW Permit #:  |  |
| Spud Date or Date Reached TD Completion Date or Recompletion Date  Recompletion Date                           |  |

#### **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.

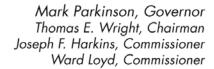
**Submitted Electronically** 

| KCC Office Use ONLY                |  |  |  |  |  |  |  |
|------------------------------------|--|--|--|--|--|--|--|
| Letter of Confidentiality Received |  |  |  |  |  |  |  |
| Date:                              |  |  |  |  |  |  |  |
| Confidential Release Date:         |  |  |  |  |  |  |  |
| ☐ Wireline Log Received            |  |  |  |  |  |  |  |
| Geologist Report Received          |  |  |  |  |  |  |  |
| UIC Distribution                   |  |  |  |  |  |  |  |
| ALT                                |  |  |  |  |  |  |  |

Side Two

1049348

| Operator Name:  |                          |  | Lease Nar    | me:         |           |                      | . Well #:        |                  |  |  |
|---|--------------------------|--|--------------|-------------|-----------|----------------------|------------------|------------------|--|--|
| Sec Twp   | S. R                     | East West  | County: _    |             |           |                      |                  |                  |  |  |
| INSTRUCTIONS: Show important tops and base 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. Attach complete copy of all Electric Wireline Logs surveyed. Attach final geological well site report. |                          |  |              |             |           |                      |                  |                  |  |  |
| Drill Stem Tests Taken (Attach Additional S   |                          | ☐ Yes ☐ No                                       |              | Log         | Formation | n (Top), Depth an    | d Datum          | Sample           |  |  |
| Samples Sent to Geol  | logical Survey           | Yes No   |              | Name        |           |                      | Тор              | Datum            |  |  |
| Cores Taken Electric Log Run Electric Log Submittee (If no, Submit Copy   | d Electronically         | Yes No Yes No Yes No                             |              |             |           |                      |                  |                  |  |  |
| List All E. Logs Run:   |                          |  |              |             |           |                      |                  |                  |  |  |
|   |                          |  |              |             |           |                      |                  |                  |  |  |
|   |                          | CASING<br>Report all strings set-                | RECORD [     | New         | Used      | on, etc.             |                  |                  |  |  |
| Purpose of String   | Size Hole                | Size Casing                                      | Weight       |             | Setting   | Type of              | # Sacks          | Type and Percent |  |  |
|   | Drilled                  | Set (In O.D.)                                    | Lbs. / Ft.   | •           | Depth     | Cement               | Used             | Additives        |  |  |
|   |                          |  |              |             |           |                      |                  |                  |  |  |
|   |                          |  |              |             |           |                      |                  |                  |  |  |
|   |                          |  |              |             |           |                      |                  |                  |  |  |
|   |                          | ADDITIONAL                                       | CEMENTING    | / SQUEEZ    | E RECORD  |                      |                  |                  |  |  |
| Purpose:  | Depth<br>Top Bottom      | Type of Cement                                   | # Sacks Us   | sed         |           | Type and F           | ercent Additives |                  |  |  |
| Perforate Protect Casing  |                          |  |              |             |           |                      |                  |                  |  |  |
| Plug Back TD Plug Off Zone  |                          |  |              |             |           |                      |                  |                  |  |  |
|   |                          |  |              |             |           |                      |                  |                  |  |  |
| Shots Per Foot  | PERFORATIO               | N RECORD - Bridge Plugotage of Each Interval Per | s Set/Type   |             |           | cture, Shot, Cement  |                  | d<br>Depth       |  |  |
|   | Ороскіў ГС               | olage of Each interval i er                      | ioratea      |             | (70)      | nount and rund of we | ichar Osca)      | Верит            |  |  |
|   |                          |  |              |             |           |                      |                  |                  |  |  |
|   |                          |  |              |             |           |                      |                  |                  |  |  |
|   |                          |  |              |             |           |                      |                  |                  |  |  |
|   |                          |  |              |             |           |                      |                  |                  |  |  |
|   |                          |  |              |             |           |                      |                  |                  |  |  |
| TUBING RECORD:  | Size:                    | Set At:  | Packer At:   | Lir         | ner Run:  | Yes No               |                  |                  |  |  |
| Date of First, Resumed  | Production, SWD or ENH   | R. Producing Met                                 | hod:         | Gas         | Lift 0    | ther (Explain)       |                  |                  |  |  |
| Estimated Production<br>Per 24 Hours  | Oil Bl                   | bls. Gas   | Mcf          | Water       | Bb        | ols. (               | Gas-Oil Ratio    | Gravity          |  |  |
| DISPOSITIO  |                          |  | METHOD OF CO | OMBI ETICI  | NI:       |                      | DRODUCTIO        | MINITEDVAL.      |  |  |
| Vented Sold   | ON OF GAS: Used on Lease | Open Hole  | METHOD OF CO | Dually Con  |           | nmingled             | PRODUCTIC        | ON INTERVAL:     |  |  |
| (If vented, Sub   |                          | Other (Specify)                                  |              | Submit ACO- |           | mit ACO-4)           |                  |                  |  |  |





January 14, 2011

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

Re: ACO1 API 15-171-20781-00-00 Long 5A-28-1831 NW/4 Sec.28-18S-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



PO BOX 31 Russell, KS 67665



Invoice Date:

OCT 22 2010

Page:

Oct 15, 2010 Invoice Number: (124899

(785) 483-3887 (785) 483-5566 Voice: Fax:

Bill To:

FIML Natural Resources LLC 410 I7th St., #900 Denver, CO 80202

Federal Tax I.D.#: 20-5975804

| Customer ID  | Well Name/# or Customer P.O. | Payment Terms | Terms    |
|--------------|------------------------------|---------------|----------|
| FIML         | Long #5-A 5.19-78-7831       | Net 30 Days   | Days     |
| Job Location | Camp Location                | Service Date  | Due Date |
| KS1-01       | Oakley                       | Oct 15, 2010  | 11/14/10 |

|   | Quantity   | Tem Tem | Description                       | Unit Price | Amount   |
|---|------------|---------|-----------------------------------|------------|----------|
|   | 240.00 MAT | MAT     | Class A Common                    | 15.45      | 3,708.00 |
|   | 5.00       | MAT     | Gel                               | 20.80      | 104.00   |
|   | 00.6       | MAT     | Chloride                          | 58.20      | 523.80   |
|   | 254.00 SER | SER     | Handling                          | 2.40       | 09.609   |
|   | 20.00      | SER     | Mileage 254 sx @.10 per sk per mi | 25.40      | 1,270.00 |
|   | 1.00       | SER     | Surface                           | 1,018.00   | 1,018.00 |
|   | 98.00      | SER     | Extra Footage                     | 0.85       | 83.30    |
|   | 20.00      | SER     | Pump Truck Mileage                | 7.00       | 350.00   |
|   |            | EQP     | 8.5/8 Baffle Plate                | 67.20      | 67.20    |
|   | 3.00       | EQP     | 8.5/8 Centralizer                 | 49.00      | 147.00   |
|   | 1.00       | EQP     | 8.5/8 Surface Plug                | 68.00      | 68.00    |
|   |            |         |                                   |            |          |
|   |            |         |                                   |            |          |
|   |            |         |                                   |            |          |
|   |            |         |                                   |            |          |
|   |            |         |                                   |            |          |
|   |            |         |                                   |            |          |
|   |            |         |                                   |            |          |
| _ |            |         |                                   |            |          |
|   |            |         |                                   |            |          |
|   |            |         |                                   |            |          |
|   |            |         |                                   |            |          |
| _ |            |         |                                   | -          |          |

ALL PRICES ARE NET, PAYABLE 30 DAYS FOLLOWING DATE OF INVOICE. 11/2% CHARGED THEREAFTER. IF ACCOUNT IS CURRENT, TAKE DISCOUNT OF

Subtotal

ONLY IF PAID ON OR BEFORE Nov 9, 2010

Payment/Credit Applied Total Invoice Amount Sales Tax TOTAL

8,286.01

7,948.90 337.11 8,286.01

1589,

6696.

# CO., LLC. 035665 ALLIED CEMENTING

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:

| JOB START JOB FINISH   | ( )                          |                        | sks Com   | @ 51.45.3788.00<br>@ 20.80 104.00<br>@ 58.20 523.80 | @  | @ 200 350.00<br>@ 200 350.00<br>@                             |   | TOTAL 282,20   |
|------------------------|------------------------------|------------------------|---|---|--|---|---|--|
| CALLED OUT ON LOCATION | 4c.7 05 15                   |                        | CEMENT AMQUNT ORDERED 340 3 18CC 3189 9C  | COMMON 240 565  POZMIX GEL CHLORIDE 9 565 ASC       |  | DEPTH OF JOB PUMP TRUCK CHARGE EXTRA FOOTAGE MILEAGE MANIFOLD | PLUG&FLOA<br>8 5/8<br>1 gelfle plate<br>3 centralizers<br>1 serfaceplug | SALES TAX (If Any) TOTAL CHARGES DISCOUNT  |
| SEC. TWP, RANGE        | DATE 10-15-10 28 18 31 SCOTT | W. Circle one) E in to | CONTRACTOR MULF, M. Orilling Mig 2/  TYPE OF JOB SULFECE HOLE SIZE 12/4 T.D. 323  CASING SIZE 8 18 DEPTH 398' TUBING SIZE DEPTH TUBING SIZE DEPTH TUBING SIZE DEPTH | SET IN CSG. 42, AENT 22,                            | PUMP TRUCK CEMENTER Andrew  # 422 HELPER Layne  BULK TRUCK  # 354 DRIVER Hen  BULK TRUCK  # REMARKS: | Cement Did Circulate Thankyou CHARGE TO: FIML                 |   | 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. |

SIGNATURE





Oct 22, 2010 Invoice Number: 125002 Invoice Date: Page:

Voice: Fax:

(785) 483-3887 (785) 483-5566

FIML Natural Resources LLC 410 I7th St., #900 Denver, CO 80202 Bill To:

Federal Tax I.D.#: 20-5975804

| KS1-02        | Caney                             | Oct 22, 2010 | 01/12/11  |
|---------------|-----------------------------------|--------------|-----------|
| Quantity Item | n                                 | Unit Price   | Amount    |
| 7.00 MAT      | Gel                               | 20.80        | 145.60    |
| 395.00 MAT    | ASC Class A                       | 18.60        | 7,347.00  |
| 45.00 MAT     | Salt                              | 23.95        | 1,077.75  |
| 1,975.00 MAT  | Gilsonite                         | 0.89         | 1,757.75  |
| 99.00 MAT     | Flo Seal                          | 2.50         | 247.50    |
| 500.00 MAT    | WFR-2                             | 1.27         | 635.00    |
|               | Handling                          | 2.40         | 1,231.20  |
| 50.00 SER     | Mileage 513 sx @.10 per sk per mi | 51.30        | 2,565.00  |
| 1.00 SER      | Production Casing - Bottom Stage  | 2,185.00     | 2,185.00  |
| 50.00 SER     | Pump Truck Mileage                | 7.00         | 350.00    |
|               | 5.5 Sure Seal Float Shoe          | 349.00       | 349.00    |
| 1.00 EQP      | 5.5 Sure Seal Float Collar        | 418.00       | 418.00    |
| 1.00 EQP      | 5.5 D V Tool                      | 2,832.00     | 2,832.00  |
| 2.00 EQP      | 5.5 Basket                        | 161.00       | 322.00    |
| 25.00 EQP     | 5.5 Centralizer                   | 35.00        | 875.00    |
| 1.00 EQP      | 5.5 Lock Ring                     | 29.00        | 29.00     |
|               | 8200-118<br>Bangles               | D10121       |           |
|               | Subtotal                          |              | 22 366 RD |

ALL PRICES ARE NET, PAYABLE 30 DAYS FOLLOWING DATE OF INVOICE. 112% CHARGED THEREAFTER. IF ACCOUNT IS CURRENT, TAKE DISCOUNT OF

5417

ONLY IF PAID ON OR BEFORE Nov 16, 2010

23,537.40 1,170.60 23,537.40 22,366.80 Payment/Credit Applied Total Invoice Amount Sales Tax TOTAL Subtotal

4473.36 06%0 6

# 035592 CO., ALLIED CEMENTING

ederal Tax I.D.# 20-5975804

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

SERVICE POINT:

IF PAID IN 30 DAYS 10 るい S JOB FINISH 2185 63 いった d (0) STATE V 5 2 2 6 4798 PLUG & FLOAT EQUIPMENT TOTAL TOTAL TOTAL 20% JOB START doen't yo 0 (60 @ 2 3 @ **\** 6 SK Ø 0 0 0 99999 (8) (9) (8) (9) **©** @ 0 0 (8) S 004 181 @ (9) (9) SERVICE · lo esky wil ON LOCATION 543 1975 \*66 \* O. 39 844B PUMP TRUCK CHARGE v AMOUNT ORDERED SALES TAX (If Any) TOTAL CHARGES EXTRA FOOTAGE 500 cm DEPTH OF JOB \$ 1050H 30r HANDLING 646 5718 DISCOUNT MANIFOLD CHLORIDE MILEAGE COMMON MILEAGE CEMENT **POZMIX** OWNER CALLED OUT 34 9 ASC GEL 9 Drop bu Bom TERMS AND CONDITIONS" listed on the reverse side. 7 contractor. I have read and understand the "GENERAL The above work was @ 1200 You are hereby requested to rent cementing equipment Dieb done to satisfaction and supervision of owner agent or and furnish cementer and helper(s) to assist owner or \* P. A. 3 71.7 mc SHOE JOJNT 2 そしても ZIP LOCATION 29 こゆて RANGE 7,0 100 00 MINIMUM 5 DEPTH DEPTH DEPTH DEPTH 4 T.D. 2 B. C. C. C. EQUIPMENT REMARKS: contractor to do work as is listed. TWP. 内とより 183 0 To Allied Cementing Co., LLC. STATE 15.5 ARKO CEMENTER 0 SEC. P-8-DRIVER DRIVER HELPER OLD OR NEW Circle one) MEAS. LINE CEMENT LEFT IN CSG. 4 a PRINTED NAME DISPLACEMENT Jour A # 3/3 BULK TRUCK # 394 CONTRACTOR PUMP TRUCK **BULK TRUCK** TYPE OF JOB CHARGE TO: CASING SIZE TUBING SIZE SIGNATURE 4 06 0 DRILL PIPE HOLE SIZE PRES. MAX 23 7477 STREET Pluc CITY



ECEIVE! OCT 2 8 2010

Oct 23, 2010 125003 Invoice Number: Invoice Date:

> (785) 483-3887 Voice: Fax:

(785) 483-5566

Bill To:

FIML Natural Resources LLC 410 I7th St., #900 Denver, CO 80202

Federal Tax I.D.#: 20-5975804

Page:

| erms                         | ays               | Due Date      | 11/22/10     |
|------------------------------|-------------------|---------------|--------------|
| Payment Terms<br>Net 30 Days | Net 30 Days       | Service Date  | Oct 23, 2010 |
| Well Name# or Customer P.O.  | Long 5 A #28-1831 | Camp Location | Oakley       |
| Customer ID                  | FIML              | Job Location  | KS1-02       |

| ╛  |           |     |  | 0.02 (0.00) | 21 33    |
|----|-----------|-----|--|-------------|----------|
| 1. | Quantity  | 調   | Description                                | Unit Price  | Amount   |
|    | 586.00    | MAT | Lightweight Class A                        | 14.05       | 8,233.30 |
|    | 2,930.00  | MAT | Gilsonite                                  | 0.89        | 2,607.70 |
|    | 147.00    | MAT | Flo Seal                                   | 2.50        | 367.50   |
| _  | 691.00    | SER | Handling                                   | 2.40        | 1,658.40 |
|    | 50.00 SER | SER | Mileage 691 sx @.10 per sk per mi          | 69.10       | 3,455.00 |
|    | 1.00      | SER | Production Casing - Top Stage              | 1,185.00    | 1,185.00 |
|    |           |     | Sarb-118<br>Dem G. B.<br>Description Store |             |          |
|    |           |     |  |             |          |

ALL PRICES ARE NET, PAYABLE 30 DAYS FOLLOWING DATE OF INVOICE. 11/2% CHARGED THEREAFTER. IF ACCOUNT IS CURRENT, TAKE DISCOUNT OF

\$501 G

ONLY IF PAID ON OR BEFORE
Nov 17, 2010

18,325,12 18,325.12 818.22 17,506.90 3501. Payment/Credit Applied Total Invoice Amount Sales Tax Subtotal TOTAL

38 74 14,823.7

# CO., LLC. 035593 **ALLIED CEMENTING**

Federal Tax I.D.# 20-5975804

0 JOB FINISH 2607 185 683 1658 36 STATE 6 20(3 PLUG & FLOAT EQUIPMENT TOTAL TOTAL JOB START OAP V/2 SERVICE POINT: 000 COUNTY (8) 6 @ @ (8) 0 0 88888 **©** (8) (9) (9) (3) (9) (9) (9) (B) (9)  $\mathbf{v}$ SERVICE 2930 ON LOCATION ø MILEAGE 110 43 BY ONL PA 286 09 PUMP TRUCK CHARGE CORDERED **EXTRA FOOTAGE** G: 150%. YE DEPTH OF JOB \$ 10-5-4 HANDLING MANIFOLD CHLORIDE AMOUNT COMMON MILEAGE CEMENT ASC POZMIX CALLED OUT OWNER GEL IN A 432.70 Russ-4 0 V ZIP LOCATION SHOE JOINT RANGE DEPTH 3 アイドア DEPTH DEPTH DEPTH Brans P.O. BOX 31 RUSSELL, KANSAS 67665 6 T.D. EQUIPMENT REMARKS: Sorg Diap Done TWP. O STATE CEMENTER 1 Murch 345 SEC. HELPER DRIVER DRIVER OBB WELL# OLD OK NEW (Circle one) CEMENT LEFT IN CSG 0 PERFS. DISPLACEMENT CONTRACTOR TYPE OF JOB CASING SIZE TUBING SIZE DRILL PIPE PUMP TRUCK **BULK TRUCK** BULK TRUCK 2294 CHARGE TO: MEAS. LINE PRES. MAX HOLE SIZE 200 LEASE REMIT TO STREET 3746 CITY <u>1001</u> #

IF PAID IN 30 DAYS

TOTAL

SALES TAX (If Any)

"listed on the reverse side."

The above work was

You are hereby requested to rent cementing equipment

To Allied Cementing Co., LLC.

and furnish cementer and helper(s) to assist owner or

contractor to do work as is listed.

contractor. I have read and understand the "GENERAL

TERMS AND CONDITIONS

done to satisfaction and supervision of owner agent or

TOTAL CHARGES

DISCOUNT

3718

640

620

9

5

PRINTED NAME\_

SIGNATURE



# **DRILL STEM TEST REPORT**

Prepared For: FIML Natural Resources

Denver, CO 80202 410 17st Ste 900

ATTN: Gary Doke/ Jim Musgro

28-18-31 Scott, KS

Long 5A-28-1831

2010.10.19 @ 09:44:10 End Date: 2010.10.19 @ 02:23:16 Start Date:

DSL#: 1 10b Ticket #: 040261

ORIGINAL

ph: 785-625-4778 fax: 785-626-5620 PO Box 1733 Hays, KS 67601 Trilobite Testing, Inc

## DRILL STEM TEST REPORT

Long 5A-28-1831 FIME Natural Resources

01:44:60

2010.10.19

410 17st Ste 900

Denver, CO 80202





Start Time:

Serial #: 8373

ATTN: Gary Dokel Jim Musgrover, CO 80202 Test Start: 2010.10.19 @ 05:23:16

ft (KB)

#### GENERAL INFORMATION:

Whipstock: οN Deviated: DanisnsJ Formation:

Time Test Ended: 09:44:10 7ime Tool Opened: 04:14:56

4152.00 ft (KB) (TVD) Total Depth: 4107.00 ft (KB) To 4152.00 ft (KB) 3 00.7014 Interval:

Hole Diameter: 7.88 inchesHole Condition: Good

əpisul

2010.10.19 Start Date: 4108.00 ft (KB) @ gisq 77.8SS Press@RunDepth:

End Time: 91:52:20 End Date:

TEST COMMENT: IF: 1/4 blow BOB in 21 min.

FF: Surface blow BOB in 27 min. IS: No return.

00 29 0%56 **6**%5 of 78.0 m%04 40%0 10%0 40% 40% 40% 95 🙀 78.0 mcw trace of oil 60%w 40%m 124.00 17.1 m%01 w%09 lio to east warm 248.00 72.1 (ft) hypera Description Pressure (psig) Choke (inches) (ldd) emuloV Gas Rate (Mcf/d) Recovery Gas Rates Often Det aut G 130.25 Final Hydro-static 1978.54 184 19.606 131.56 End Shut-In(2) 183 130.15 | Shut-In(2) 77.922 121 (S) woll oT negO | 18.3S1 135.17 94 126.37 End Shut-In(1) 916.38 94 121.83 Shut-In(1) 144.28 15 041 (1) wolf oT negO | 33.711 24.25 118.58 Initial Hydro-static 2122.89 (4 geb) (bisd) (.niM) Temp Pressure Annotation əwiT PRESSURE SUMMARY Pressure vs. Time FS: No return.

04:71:70 @ 01.01.010S

11:41:40 @ 61.01.0102

KB to GB/CE:

32

Brandon Turley

Test Type: Conventional Bottom Hole

Reference Elevations:

Job Ticket: 040261

28-18-31 Scott, KS

2010.10.19

gizq 00.0008

11 00.01

2953.00 ft (CF)

2963.00 ft (KB)

I:#T&Q

Time Off Btm:

:mta no emiT

Unit No: Tester:

Last Calib.:

Capacity:

#### MARBAID JOOT

# DRILL STEM TEST REPORT

ESTING, INC FIML Natural Resources



28-18-31 Scott, KS Long 5A-28-1831

Denver, CO 80202 410 17st Ste 900

DST#:1 10b Ticket: 040261

Test Start: 2010.10.19 @ 02:23:16

ATTN: Gary Dokel Jim Musgrover, CO 80202

| Information | 100T |
|-------------|------|
|-------------|------|

|   |           |                     |           |            |          | Tool Comments:     |
|---|-----------|---------------------|-----------|------------|----------|--------------------|
|   |           | 6.75 inches         | Diameter: | 7          | :s:      | Number of Packe    |
|   |           |                     |           | ff 00.8a   |          | Tool Length:       |
|   |           |                     |           | £5.00 ft   | Packers: | Interval between   |
| di 00.000 <del>1</del> 50 lisnii              |           |                     |           | 11         | scker:   | Depth to Bottom F  |
| al 00.00008   String Weight: Initial 60.00008 |           |                     |           | #100.701A  | Ker:     | Depth to Top Pac   |
|   |           |                     |           | 13 00.ES   | :B:      | Drill Pipe Above k |
| ft 00.0 ft                                    | Idd 24.33 | :emuloV lstoT       |           |            | -        |                    |
| Weight to Pull Loose: 70000.00 lb             | 149 61.1  | 2.25 inches Volume: | Diameter: | 11 00.SAS  | reudtp:  | Drill Collar:      |
| Weight set on Packer: 30000.00 lb             | 1dd 00.0  | o.00 inches Volume: | Diameter: | JJ 00.0    | reud(µ:  | Heavy Wr. Pipe:    |
| Tool Weight: 1500.00 lb                       | 14.26 bbi | 3.80 inches Volume: | Diameter: | 3868.00 ft | reudth:  | Drill Pipe:        |
|   |           |                     |           |            |          |                    |
|   |           |                     |           |            | uc       | lool Informatic    |

| Accum. Length | Depth (ft) | Position | Serial No. | Length (ft) | Tool Description |
|---------------|------------|----------|------------|-------------|------------------|
|               |            |          |            |             |                  |

|                         |               |            |         |            | 00.39 | Total Tool Length: |
|-------------------------|---------------|------------|---------|------------|-------|--------------------|
| Bottom Packers & Anchor | 00.24         | 4152.00    |         |            | 6.00  | Bulinose           |
|                         |               | 00.7414    |         |            | 1.00  | Change Over Sub    |
|                         |               | 4146.00    |         |            | 32.00 | Prill Pipe         |
|                         |               | 4114.00    |         |            | 1.00  | Change Over Sub    |
|                         |               | 4113.00    |         |            | 9.00  | Perforations       |
|                         |               | 4108.00    | əbistuO | 6828       | 00.0  | Recorder           |
|                         |               | 00.8014    | əbiznl  | 8373       | 00.0  | Recorder           |
|                         |               | 4108.00    |         |            | ١.00  | qqniS              |
|                         |               | 00.7014    |         | _          | 00.₽  | Packer             |
| Bottom Of Top Packer    | 20.00         | 4103.00    | -       |            | 00.3  | Раскег             |
|                         |               | 00.8604    |         |            | 9.00  | Hydraulic tool     |
|                         |               | 4093.00    |         |            | 6.00  | Shut in Tool       |
|                         |               | 00.8804    |         |            | ١.00  | Stubb              |
|                         | รายการ ราบการ | (ar) undag | HODIEC  | 'ON INITIO | (a.)  |                    |

#### YAAMMUS GIUJ7

I:#ISO

# DRILL STEM TEST REPORT

FIML Natural Resources

410 17st Ste 900

ESTING, INC **BILOBITE** 



Long 5A-28-1831

Job Ticket: 040261 28-18-31 Scott, KS Denver, CO 80202

ATTN: Gary Doke/ Jim Musgrover, CO 80202

#### Mud and Cushion Information

32000 ppm PA geb 6S

Water Salinity: :PA IO

31:52:30 @ 61.01.0103 :: Jest Start:

ldd ij

gisq

Cushion Length: Cushion Type:

Gas Cushion Pressure: Gas Cushion Type: Cushion Volume:

⁵ni 39.7 59.00 sec/qt 1sg/dl 00.e Mud Type: Gel Chem

m.mdo 00.0

Resistivity: Water Loss: Viscosity:

Mud Weight:

1.00 inches Fifter Cake: mqq 00.002S Salinity:

Recovery Information

#### Recovery Table

| əmuloV<br>ldd  | Description                | Length<br>ft |
|----------------|----------------------------|--------------|
| 47 <u>2.</u> 1 | mcw trace of oil 90%w 10%m | 248.00       |
| 9£7.1          | mcw trace of oil 60%w 40%m | 124.00       |
| 078.0          | gocw m 10%g 10%o 40%w 40%m | 00.29        |
| 078.0          | 0%26 6%2 06                | 62.00        |

Total Volume:

1dd £27.4

Serial #:

Laboratory Location: Num Gas Bombs:

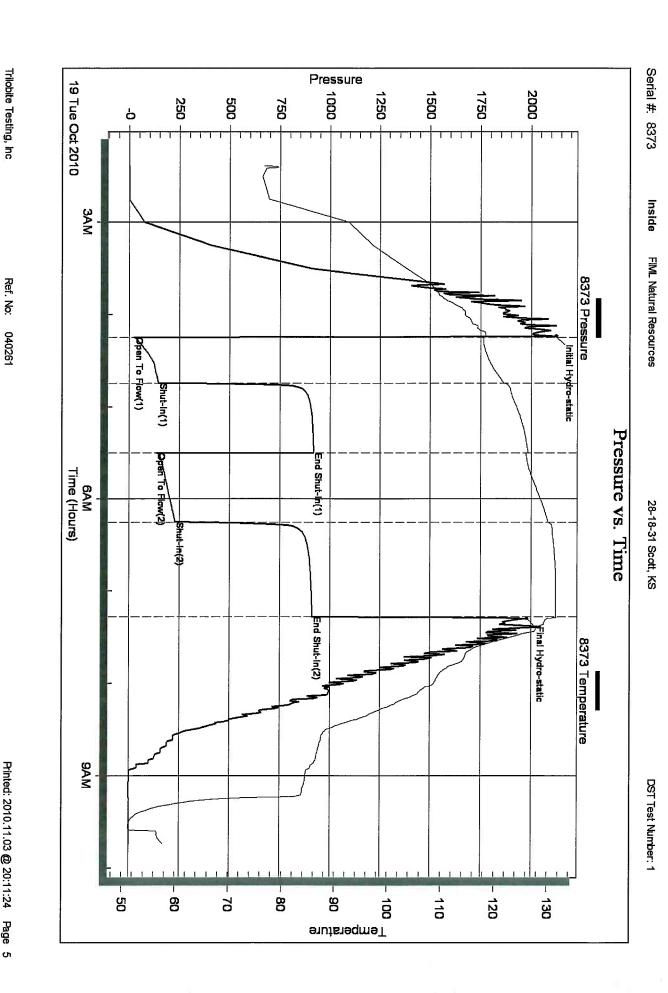
Num Fluid Samples: 0

Total Length:

Recovery Comments: 29@60=29 Laboratory Name:

30@53=32000

J100.884



Trilobite Testing, Inc

Printed: 2010.11.03 @ 20:11:24

Page 5

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# **DRILL STEM TEST REPORT**

Prepared For: FIML Natural Resources

Denver, CO 80202 410 17st Ste 900

ATTN: Gary Doke/ Jim Musgro

28-18-31 Scott, KS

Long 5A-28-1831

2010.10.20 @ 00:28:15 End Date: 13:55:81 @ 61.01.0102 :eisd hst2

DZL#: 5 10b Ticket #: 040262

ph: 785-625-4778 fax: 785-626-5620 PO Box 1733 Hays, KS 67601 Trilobite Testing, Inc

# DRILL STEM TEST REPORT

FIME Natural Resources

Denver, CO 80202

410 17st Ste 900

ft (KB)

ESTING, INC



Deviated:

Long 5A-28-1831

28-18-31 Scott, KS

Job Ticket: 040262

ATTN: Gary Dokel Jim Musgrover, CO 80202

GENERAL INFORMATION:

ŀΗ Formation:

81:11:02 :benedO looT emiT

Time Test Ended: 00:28:15

4165.00 ft (KB) To 4212.00 ft (KB) (TVD) interval:

4212.00 ff (KB) (TVD) Total Depth:

Whipstock:

episul

oΝ

7.88 inchesHole Condition: Good Hole Diameter:

2010.10.20 gizq 00.0008

11 00.01

DST#:2

2953.00 ft (CF) 2963.00 ft (KB)

10:62:22 @ 61.01.0102

2010.10.19 @ 20:10:16

KB P GENCE:

Brandon Turley

Test Type: Conventional Bottom Hole

Test Start: 2010.10.19 @ 18:33:51

Reference Bevations:

Time On Btm: Last Calib.: Capacity:

:oM JinU

Tester:

Time Off Btm:

31:82:00 2010.10.20

:emiT bri∃ End Date: 4166.00 ft (KB)

18:33:51 2010,10,19 @ gisq f8.2f2

FF: Surface blow BOB in 28 min.

Start Date: Press@RunDepth: Serial #: 8373

Start Time:

IS: No return. TEST COMMENT: IF: 1/4 blow BOB in 21 min.

FS: No return.

| Ches) Pressure (psig) Gas Rate (Mcfid)   | Growe (in   |  |   | Recovery   Pescription   Volume (bb)   1.88   1.8 |
|--|---|--|---|--|
| E SUMMARY Annotation Initial Hydro-static Shut-In(1) End Shut-In(1) Open To Flow (2) Shut-In(2) Frid Shut-In(2) Final Hydro-static | qməT<br>(7 gəb)<br>20.811<br>20.311<br>01.811<br>38.331<br>16.331<br>31.931 | Pressure<br>(psig)<br>2067.95<br>162.95<br>939.42<br>163.78<br>212.61<br>940.79<br>1979.69 | emiT<br>0 (.niM)<br>25<br>19<br>18<br>18<br>851 | STILIT   SV SINESSTY   STILIT   SV SINESSTY   STILIT   SV SINESSTY   S |

#### MARBAID JOOT

# DRILL STEM TEST REPORT

FIML Natural Resources

410 17st Ste 900 Denver, CO 80202

| ESTING, INC



78-18-31 2coff, KS
78-18-31 2coff, KS

Long 5A-28-1831

20 20 20 20

ATTM: Gary Doke\ Jim Musgrover, CO 80202 Test Start: 2010.10.19 @ 18:33:51

|                                    |           |                     |           |                      |          | Tool Comments:       |
|------------------------------------|-----------|---------------------|-----------|----------------------|----------|----------------------|
|                                    |           | 6.75 inches         | Diameter: | 7                    | rs:      | Number of Packe      |
|                                    |           |                     |           | # 00.78              |          | Tool Length:         |
|                                    |           |                     |           | 1₹ 00.Υ <del>↓</del> | Packers: | Interval betw een    |
|                                    |           |                     |           | 11                   | scker:   | Depth to Bottom      |
| di 00.00048 Isni7                  |           |                     |           | #165.00 ft           | Ker:     | Depth to Top Pac     |
| String Weight: Initial 60000.00 lb |           |                     |           | # 00.7S              |          | Prill Pipe Above I   |
| f) 00.0 bessrtO looT               | 1dd 28.88 | :emuloV lstoT       |           | 13 00 ZC             | .07      | Drill Dino A borro I |
| Weight to Pull Loose: 75000.00 lb  | 146 61.1  | 2.25 inches Volume: | Diameter: | 11 00.SAS            | reudth:  | Drill Collar:        |
| Weight set on Packer: 30000.00 lb  | 199 00.0  | 0.00 inches Volume: | Diameter: | <b>11 00.0</b>       | геидұр:  | Heavy Wt. Pipe:      |
| Tool Weight: :300.001              | 14d E1.33 | 3.80 inches Volume: | Diameter: | 3930.00 ft           | reuđtp:  | Drill Pipe:          |
|                                    |           |                     |           |                      | uc       | Tool Informatic      |

|                         |                |            |                |             | 00.78    | Total Tool Length: |
|-------------------------|----------------|------------|----------------|-------------|----------|--------------------|
| Bottom Packers & Anchor | 00.74          | 4212.00    |                |             | 6.00     | Bullnose           |
|                         |                | 4207.00    |                |             | ۱.00     | Change Over Sub    |
|                         |                | 4206.00    |                |             | 32.00    | Pipe               |
|                         |                | 4174.00    |                |             | ۱.00     | Change Over Sub    |
|                         |                | 4173.00    |                |             | 00.7     | Perforations       |
|                         |                | 4166.00    | <b>Outside</b> | 8289        | 00.0     | Recorder           |
|                         |                | 4166.00    | əbisnl         | <b>8373</b> | 00.0     | Recorder           |
|                         |                | 4166.00    |                |             | 00.1     | Stubb              |
|                         |                | 00.391₽    |                |             | 00.₽     | Раскег             |
| Bottom Of Top Packer    | 20.00          | 4161.00    |                |             | 6.00     | Раскег             |
|                         |                | 4126.00    |                |             | 6.00     | Hydraulic tool     |
|                         |                | 4151.00    |                |             | 6.00     | Shut in Tool       |
|                         |                | 4146.00    |                |             | 1.00     | Stubb              |
|                         | Accum. Lengths | Depth (ft) | Position       | Serial No.  | (դ) պֆնա | Tool Description   |

#### **FLUID SUMMARY**

# DRILL STEM TEST REPORT

FIML Natural Resources

410 17st Ste 900 Penver, CO 80202

RILOBITE INC. INC

28-18-31 Scott, KS

Job Ticket: 040262

Long 5A-28-1831

ATTN: Gary Dokel Jim Musgrover, CO 80202

Mud and Cushion Information

Oil API: 0 deg API 38000 ppm Alater Salinity:

DST#:2

Water Salinity:

Test Start: 2010.10.19 @ 18:33:51

Gushion Type: ft Cushion Volume: bbl

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal Viscosity: 68.00 sec/qt Water Loss: 16.73 in³

Resistivity: 0.00 ohm.m Salinity: 3800.00 ppm Filter Cake: 2.00 inches

Recovery Information

Recovery Table

| 088.f         | m%09 w%0⊁m⊃w  | 134.00       |
|---------------|---------------|--------------|
| 2,144         | m%01 w%06 wom | 310.00       |
| əmuloV<br>Idd | Description   | Length<br>ft |

Total Volume:

bisd

4.024 bbl

Serial #:

Num Gas Bombs: 0 Laboratory Location: Num Fluid Samples: 0 Laboratory Name:

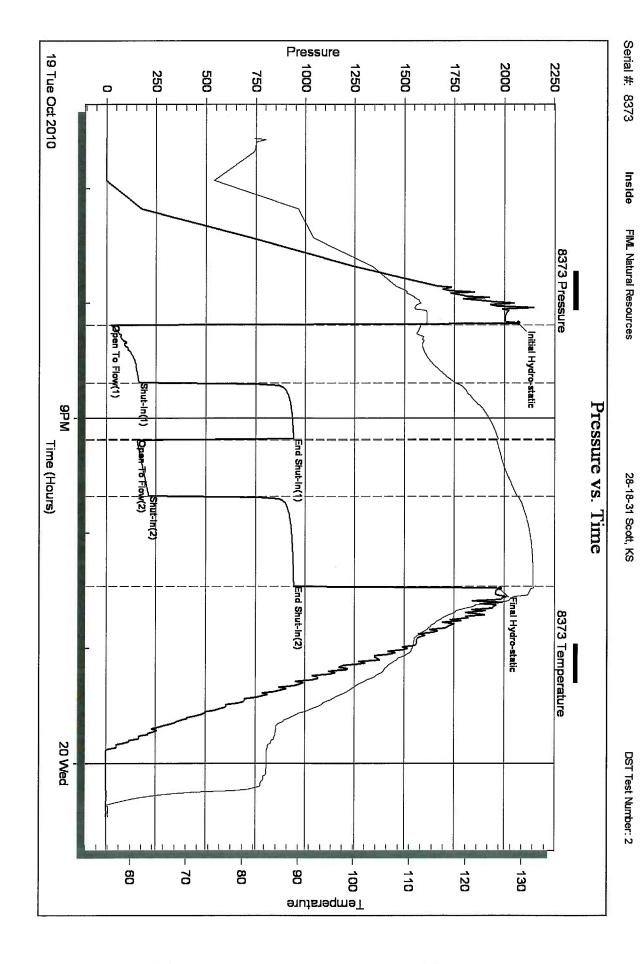
Total Length:

Recovery Comments: .27@51=38000

# 00.ppp







28-18-31 Scott, KS

J&K



# DRILL STEM TEST REPORT

Prepared For: FIML Natural Resources

Denver, CO 80202 410 17st Ste 900

ATTN: Gary Doke/ Jim Musgro

28-18-31 Scoff, KS

Long 5A-28-1831

75:71:71 @ 02.01.0102 End Date: Start Date: 2010.10.20 @ 11:01:13

Job Ticket #: 040263

DST#: 3

PO Box 1733 Hays, KS 67601 Trilobite Testing, Inc

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

# DRILL STEM TEST REPORT

FIML Natural Resources

410 17st Ste 900

ft (KB)

ESTING , INC



28-18-31 Scott, KS Long 5A-28-1831

Job Ticket: 040263

Denver, CO 80202

ATTM: Gary Dokel Jim Musgrover, CO 80202

GENERAL INFORMATION:

J&K Formation:

Time Tool Opened: 12:27:53 ON Deviated:

\tag{5.71:\tag{7.13}} Time Test Ended: \tag{7.17:37}

4286.00 ft (KB) (TVD) Total Depth: 4222.00 ft (KB) To 4286.00 ft (KB) Interval:

Hole Diameter:

7.88 inchesHole Condition: Good

End Time:

End Date:

4223.00 ft (KB)

@ gisq 33.154 əpisul Press@RunDepth: Serial #: 8373

Start Time: Start Date:

IS: Surface blow built to 1 in 30 min. TEST COMMENT: IF: BOB in 5 min.

FS: Surface blow built to 1/2 in 45 min. .nim 7 ni 808 wold 4/1:374

11:01:13

2010.10.20

Whipstock:

# PRESSURE SUMMARY

KB to GB/CE:

32

Brandon Turley

Test Type: Conventional Bottom Hole

Test Start: 2010.10.20 @ 11:01:13

Reference Elevations:

2010.10.20 @ 14:43:53

2010.10.20 @ 12:26:53

2010.10.20

gizq 00.0008

11 00.01

2953.00 ft (CF)

2963.00 ft (KB)

DST#: 3

| Final Hydro-static   | 37.4E1  | 2144.40  | 137             |
|----------------------|---------|----------|-----------------|
| End Shut-In(2)       | 134.40  | 76.116   | 13Y             |
| Shut-In(2)           | 136.26  | 99.1EÞ   | 16              |
| Open To Flow (2)     | 131.95  | 290.20   | 19              |
| (r)nl-tudS bn∃       | 132.11  | 614.63   | 19              |
| (t)n(t)              | 135.04  | 283.55   | 31              |
| Open To Flow (1)     | 120.32  | 26.0⊅    | ı               |
| Initial Hydro-static | 18.811  | 2152.93  | 0               |
|                      | (4 geb) | (ɓịsd)   | (.n <b>i</b> M) |
| noitstonnA           | qməT    | Pressure | əmiT            |
|                      |         |          |                 |

Time Off Btm:

Time On Btm:

:oM JinU

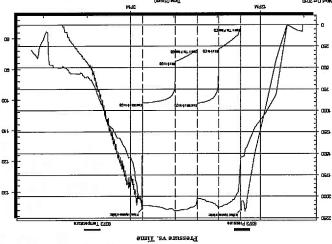
Tester:

Last Calib.:

Capacity:

12:11:11

2010.10.20



| Gas Rate (Mcf/d) | Pressure (psig) | (serloni) eylorlO |  |
|------------------|-----------------|-------------------|--|
|                  |                 |                   |  |

#### Recovery

| 00.0         | 217 GIP                   | 00.0         |
|--------------|---------------------------|--------------|
| 78.0         | 0%06 6%0t ob              | 00.29        |
| 2,17         | gocmw 10%g 30%o 40%w 20%m | 155.00       |
| 3£.₽         | aocum 30%g 20%o 45%m 5%m  | 00.018       |
| 2.93         | mcw trace of oil 95%w 5%m | 00.998       |
| (ldd) emuloV | Description               | (ii) ritgnad |
|              | (101000) 1                |              |

#### **MARBAID JOOT**

### DRILL STEM TEST REPORT

FIML Natural Resources

ESTING , INC



DST#:3 28-18-31 Scott, KS

Test Start: 2010.10.20 @ 11:01:13

10b Ticket: 040263

Long 5A-28-1831

00.49

Denver, CO 80202 410 17st Ste 900

ATTN: Gary Dokel Jim Musgrover, CO 80202

|                                     |           | 6.75 inches          | Diameter: | 7          | Kers:       | Number of Pack     |
|-------------------------------------|-----------|----------------------|-----------|------------|-------------|--------------------|
|                                     |           |                      |           | J1 00.48   |             | Tool Length:       |
|                                     |           |                      |           | ff 00.4a   | en Packers: | Interval betw ee   |
| ar coronoca imilir                  |           |                      |           | 11         | n Packer:   | Depth to Botton    |
| di 00.00068 Ilanii                  |           |                      |           | 4222.00 ft | acker:      | Depth to Top Pa    |
| String Weight: Initial 60000.00 lb  |           |                      |           | 32.00 ft   | -           | Drill Pipe Above   |
| ft 00.0 bessch looT                 | 199 61.73 | :emuloV lsfoT        |           | 33 00 8    | P KB∙       | avod A edia Ilia() |
| dl 00.00008 :esoo_l lluq ot jhtgieW | 1.19 bbl  | :S.Z5 inches Volume: | Diameter: | 242.00 ft  | reudth:     | Drill Collar:      |
| Weight set on Packer: 30000.00 lb   | 1dd 00.0  | 0.00 inches Volume:  | Dismeter: | £ 00.0     | : reudth:   | Heavy Wt. Pipe     |
| di 00.0081 ::hdejehV looT           | 1dd 00.88 | 3.80 inches Volume:  | Diameter: | 3992.00 ft | reudth:     | Drill Pipe:        |

Total Tool Length:

Tool Comments:

**Tool Description** 

Bullnose

Change Over Sub

|                      |       | 4280.00 |                |                       | 32.00 | Drill Pipe      |
|----------------------|-------|---------|----------------|-----------------------|-------|-----------------|
|                      |       | 4248.00 |                |                       | 00.1  | Change Over Sub |
|                      |       | 4247.00 |                |                       | 24.00 | Perforations    |
|                      |       | 4223.00 | <b>Outside</b> | 8289                  | 00.0  | Recorder        |
|                      |       | 4223.00 | əbisnl         | <b>£</b> 7 <b>£</b> 8 | 00.0  | Recorder        |
|                      |       | 4223.00 |                |                       | 00.1  | Stubb           |
|                      |       | 4222.00 |                |                       | 00.₽  | Раскег          |
| Bottom Of Top Packer | 20.00 | 4218.00 |                |                       | 90.8  | Раскег          |
|                      |       | 4213.00 |                |                       | 6.00  | Hydraulic tool  |
|                      |       | 4208.00 |                |                       | 6.00  | Shut in Tool    |
|                      |       | 4203.00 |                |                       | 1.00  | Stubb           |

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

4286.00

4281.00

Bottom Packers & Anchor

84.00

00.8

1.00

#### YAAMMUS GIUJT

# **DRILL STEM TEST REPORT**

FIML Natural Resources

410 17st Ste 900

ESTING, INC **BILOBITE** 



DST#: 3

Job Ticket: 040263 28-18-31 Scott, KS

Long 5A-28-1831

gisq

Denver, CO 80202

ATTN: Gary Doke/ Jim Musgrover, CO 80202

#### Mud and Cushion Information

37000 ppmMA gəb 7S

Water Salinity: :FIA IIO

Test Start: 2010.10.20 @ 11:01:13

Iqq IJ

Cushion Volume: Cushion Length: Cushion Type:

Gas Cushion Type:

Gas Cushion Pressure:

⁵ni 88.9 fp\cos 00.89 9.00 lb/gal

Resistivity: Water Loss: Viscosity:

Mud Weight:

Mud Type: Gel Chem

2.00 inches mqq 00.00S4 m.mdo 00.0

Filter Cake: Salinity:

#### Recovery Information

#### Recovery Table

| 000.0         | S17 GP                    | 00.0         |
|---------------|---------------------------|--------------|
| 078.0         | 0%06 6%01 og              | 00.28        |
| 2.174         | gocmw 10%g 30%o 40%w 20%m | 155.00       |
| 846.4         | gocmw 30%g 20%o 45%w 5%m  | 310.00       |
| 2.930         | mcw trace of oil 95%w 5%m | 366.00       |
| emuloV<br>Idd | Description               | Length<br>ft |

10.322 bbl

Serial #:

Vum Gas Bombs: Total Volume:

Laboratory Location:

#100.668

Num Fluid Samples: 0 Total Length:

Recovery Comments: 29@80=27 Laboratory Name:

0007E=88@91.





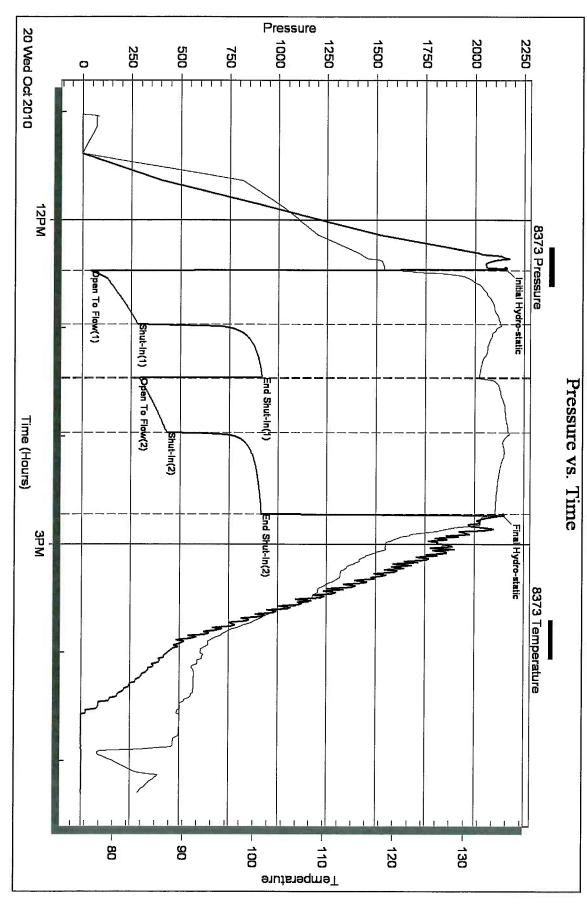


Serial #: 8373

Inside

FIML Natural Resources







### DRILL STEM TEST REPORT

FIML Natural Resources Prepared For:

Denver, CO 80202 410 17st Ste 900

ATTM: Gary Doke/ Jim Musgro

28-18-31 Scott, KS

Long 5A-28-1831

2010.10.22 @ 04:11:33 End Date: 2010.10.21 @ 21:26:39 Start Date:

DST#: 4 Job Ticket #: 040264

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

# DRILL STEM TEST REPORT

Long 5A-28-1831

FIML Natural Resources

tt (KB)

:emiT bn∃

End Date:

4575.00 ft (KB)

ESTING, INC

10b Ticket: 040264

28-18-31 Scott, KS

Unit No:

Tester:

Time Off Btm:

Time On Btm:

Last Calib.:

Capacity:

04:11:33

2010.10.22

Denver, CO 80202 410 17st Ste 900

ATTN: Gary Doke/ Jim Musgrover, CO 80202

#### GENERAL INFORMATION:

Miss Spergen

Deviated: Formation:

Time Tool Opened: 23:12:34

Time Test Ended: 04:11:33

Hole Diameter: 4604.00 ft (KB) (TVD) Total Depth: 4574.00 ft (KB) To 4604.00 ft (KB) (TVD) Interval:

Whipstock:

7.88 inchesHole Condition: Good

əpisul Serial #: 8373

 @ gisq \( \cdot \) Press@RunDepth:

oΝ

21:26:39 12.01.0102

Start Time: Start Date:

IS: Weak surface blow died in 15 min. TEST COMMENT: IF: 1/4 blow BOB in 24 min.

FS: Surface blow built to 8 in 60 min. .nim et ni BOB wold かい :FF: 1/4

| setes                | <b>63</b> 3   |                      |            |             |                    | Viery                | DO9A             |          |
|----------------------|---------------|----------------------|------------|-------------|--------------------|----------------------|------------------|----------|
|                      |               |                      |            |             | MAE                | (enoH) smiT          | 22 FH            | 000000   |
|                      |               |                      |            | ro -        | 1 1                | छमन्। <b>छमन्।</b> च | C C MATOR        |          |
|                      |               |                      |            | α-          |                    |                      |                  |          |
| Final Hydro-static   | 24.9E1        | 2225.42              | <b>491</b> | œ -         | \ \                | } /                  |                  | 1        |
| End Shut-In(2)       | 91.981        | 19.4101              | 991        | £ 00 -      | Satistics Contract |                      |                  |          |
| Shut-In(2)           | 135.60        | 75.331               | 901        | Temperature |                    | made on the          | 1                | Pressure |
| Open To Flow (2)     | 131.97        | 120.25               | 19         | E 00+       | <b>X</b> \         | 1 1                  | ili   <i>17</i>  | - 3      |
| End Shut-In(1)       | 132.36        | 09. <del>1</del> 601 | 19         | Ott -       |                    |                      | !   !   /        | 000      |
| Shut-In(1)           | 130.07        | 73.911               | 31         |             |                    | 1                    | $ \cdot \cdot $  | 1 1      |
| Open To Flow(1)      | 120.84        | 21.08                | Į.         | 021 -       | <b>\</b>           |                      | 11 //            | 0002     |
| Initial Hydro-static | 121.52        | 89.325.2             | 0          | 0E1 -       | - A                |                      | 1 / /            | - """    |
|                      | (4 geb)       | (gisq)               | (.niM)     |             | जीवी स्थापित अस    |                      | 1                | 4        |
| noitstonnA           | qməT          | Pressure             | əmiT       | DH -        | authingmaT ENE8    |                      | Mark wheel takes |          |
| E SUMMARY            | <b>SESSUR</b> | ld                   |            |             |                    | emiT .ev ewee        | Pre-             |          |

|                  | 65.             | מפי עמו        |   |              |
|------------------|-----------------|----------------|---|--------------|
| Gas Rate (Mcf/d) | Pressure (psig) | Choke (inches) |   | Volume (bbl) |
|                  |                 |                |   | 0.30         |
|                  |                 |                |   | 19.0         |
|                  |                 |                |   | 98.0         |
|                  |                 |                |   | 18.1         |
|                  |                 |                | 1 |              |

| 62.00       |
|-------------|
| 124.00      |
| 00.29       |
| րength (ft) |
|             |

0%96 b%g ob

377GP

Ref. No: 040264

30%m

00.0

2010.10.22 @ 01:58:48

2010.10.21 @ 23:11:49

KB P GENCE:

32

Brandon Turley

Test Type: Conventional Bottom Hole

Test Start: 2010.10.21 @ 21:26:39

Reference Elevations:

2010.10.22

giaq 00.0008

10.00 ft

2953.00 ft (CF)

2963.00 ft (KB)

7:#LSO

00.0

129.00

#### **TOOL DIAGRAM**

# **DRILL STEM TEST REPORT**

FIML Natural Resources

410 17st Ste 900

Denver, CO 80202

ESTING , INC



DST#:4 10b Ticket: 040264

28-18-31 Scott, KS

Long 5A-28-1831

Test Start: 2010.10.21 @ 12:26:39 ATTN: Gary Dokel Jim Musgrover, CO 80202

|                                   |           |                     |           |                      | Tool Comments:            |
|-----------------------------------|-----------|---------------------|-----------|----------------------|---------------------------|
|                                   |           | eedoni 37.8         | Diameter: | 2                    | Number of Packers:        |
|                                   |           |                     |           | 11 00.03             | Tool Length:              |
|                                   |           |                     |           | 30.00 ft             | luterval between Packers: |
| al co.coopo — Ibili I             |           |                     |           | 11                   | Debth to Bottom Packer:   |
| di 00.00048 Isni-i                |           |                     |           | # 00.4724            | Depth to Top Packer:      |
| String Weight: Initial 62000.00   |           |                     |           | 11 00.8 <sub>£</sub> | Drill Pipe Above KB:      |
| 100.0 based looT                  | 1dd 40.Sa | :emuloV istoT       |           |                      |                           |
| Weight to Pull Loose: 75000.00 lb | 149 61.1  | 2,25 inches Volume: | Diameter: | 242.00 ft            | Drill Collar: Length:     |
| Weight set on Packer: 30000.00 lb | 1dd 00.0  | 0.00 inches Volume: | Diameter: | £ 00.0               | Heavy Wt. Fipe: Length:   |
| Tool Weight: 1500.00 lb           | ldd 38.09 | 3.80 inches Volume: | Diameter: | ₹338.00 €            | Duill Fipe: Length:       |
|                                   |           |                     |           |                      | Tool Information          |
|                                   |           |                     |           |                      |                           |

|                         | Accum. Lengths | Depth (ft)<br>4555.00 | Position | Serial No. | ength (ft) | Tool Description L |
|-------------------------|----------------|-----------------------|----------|------------|------------|--------------------|
|                         |                | 00.0984               |          |            | 6.00       | Shut in Tool       |
|                         |                | 4265.00               |          |            | 9.00       | Hydraulic tool     |
| Bottom Of Top Packer    | 20.00          | 00.07∂ <del>p</del>   |          |            | 00.3       | Раскег             |
|                         |                | 00.4724               |          |            | 4.00       | ьчскет.            |
|                         |                | 4575.00               |          |            | 1.00       | qqnjS              |
|                         |                | 00.8784               | əpisul   | 8373       | 00.0       | Recorder           |
|                         |                | 4675.00               | əbisinO  | 8289       | 00.0       | Recorder           |
|                         |                | 00.6684               |          |            | 24.00      | Perforations       |
| Bottom Packers & Anchor | 30.00          | 4604.00               |          |            | 6.00       | Bullnose           |
|                         |                |                       |          |            | 90.03      | Total Tool Length: |

#### **YAAMMUS GIUJ7**

p:#LSQ

mqq 0

RA geb 08

# DRILL STEM TEST REPORT

FIME Natural Resources

ESTING, INC RILOBITE



Long 5A-28-1831

28-18-31 Scott, KS

Job Ticket: 040264

Water Salinity:

:MA IiO

Test Start: 201.0102 @ 21:26:39

bisd

Iqq

Denver, CO 80202 009 at 312 1014

ATTN: Gary Dokel Jim Musgrover, CO 80202

# Mud and Cushion Information

Mud Type: Gel Chem

Water Loss: eni TT.01 Viscosity: 58.00 sec/qt 9:00 lb/gal Mud Weight:

Fifter Cake: 1.00 inches Salinity: mqq 00.003£ Resistivity: m.mdo 00.0

Recovery Information

#### Recovery Table

Gas Cushion Pressure:

Gas Cushion Type:

:emulo V nointen

Cushion Length:

Cushion Type:

| əmuloV<br>Idd | Description                | Length<br>ft |
|---------------|----------------------------|--------------|
| 305.0         | w mcgo 20%g 40%o 10%w 30%m | 00.29        |
| 016.0         | gocm 5%g 25%o 70%m         | 124.00       |
| 098.0         | gocm 5%g 45%o 50%m         | 62.00        |
| 018.1         | მა <u>2</u> %მ გ2%ი        | 129.00       |
| 000.0         | qi577£                     | 00.0         |

3.085 bbl

Serial #:

Num Gas Bombs: Total Volume:

Laboratory Location:

Num Fluid Samples: 0

**377.00 ft** 

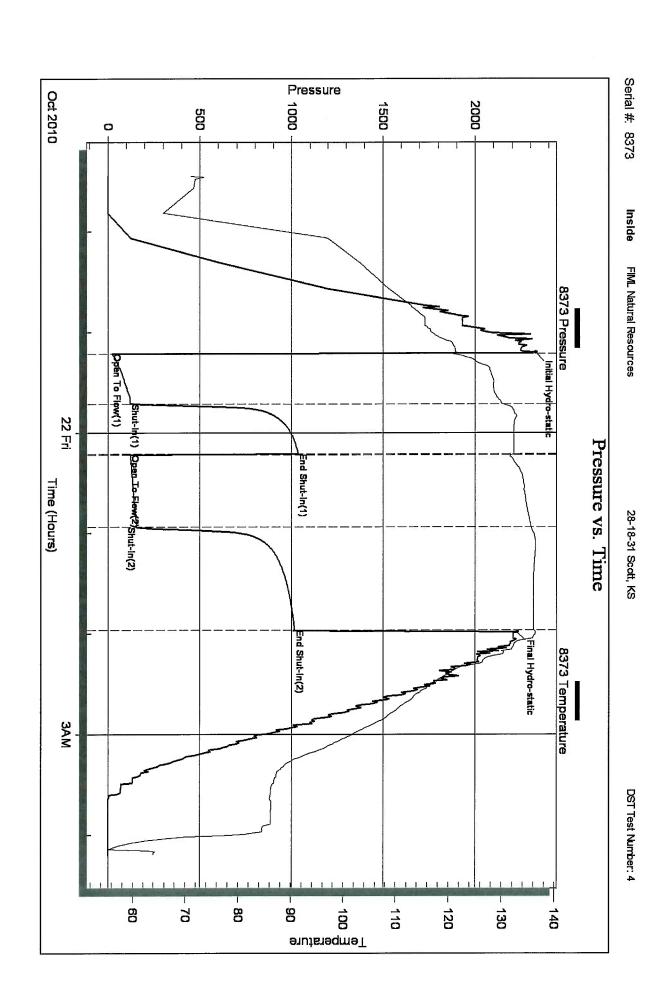
Recovery Comments: 30@60=30 Laboratory Name:

Total Length:

Printed: 2010.11.03 @ 20:13:19 Page 4

Ref. No: 040264

Trilobite Testing, Inc



Trilobite Testing, Inc

Ref. No: 040264

Printed: 2010.11.03 @ 20:13:19 Page 5

# Test Ticket

NO. 040261

| 18: No return.                            |
|---|
| 15 54 Lace 610W BOB in                    |
| ISIND VATURU                              |
| w Description If it alos in II min        |
| al Depth Chlorides 2500 p                 |
| tom Packer Depth 4/0 7 Wt. Pipe Run       |
| Packer Depth 4/02 Drill Collars Run       |
| 3982 nuR eqi'l llind CA hor Length        |
| PY(2019) bested 4014 bested bested bested |
| ocation: Sec. 28 Twp. 78 Rge. 3/ Co.      |
| O. Rep / Geo. 6974 DOKZ Jim Musgram Aig   |
| 8 00 12000 100 145 45 45 Menus 100 Beside |
| Ompany FIML MOTURA) Resources Elevation   |
| Vell Name & No. Long 5A-28-1831 Test No.  |
| P.O. Box 1733 • Hays, Kansas 67601        |
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|   |
| TRICOBITE SECENTE                         |
|   |

| fered or sustained, directly or indirectly, through the use of its r whom the test is made. | test is made, or for any loss suf<br>e paid for at cost by the party fo | s modw for the one for whom a<br>cr dsmaged in the hole shall b | id of the property or pers<br>s of any test, tools lost o | ible for damaged of any kir<br>inion conce <mark>r</mark> ning the result | rilobite Testing Inc. shall not be ils<br>quipment, or its statements or op |
|---|---|---|---|---|---|
|   | Representative  |   |   | / Ino   | Approved By   |
|   |   | CRI IstoT du  | s /   | ) /   | 1/  |
| h'psi Disc't  |   | Accessibility   |   | $\mathcal{L}$   | nl-tud2 lsni  |
| Total IstoT   |   | Day Standby   |   |   | wol7 Isni   |
| Sub Total   |   | Extra Recorder  |   |   | nl-tude latin   |
| Extra Copies  |   | Extra Packer  | <u> </u>  |   | nego isain  |
| ☐ Ruined Packer   |   | ] Сраје Раскет  |   |   | 98  |
| ☐ Ruined Shale Packer   |   | 2traddle  |   |   | H) Final Hydrostatic  |
|   |   | J Sampler   |   | 2461  |   |
|   | 00107   |   |   | 696   | nl-turk2 linal (2)  |
| Соттепта  | 00.52   | Mileage 20 -  |   | 977   | (F) Second Final Flow   |
| 05:6 Ino-1  |   | Hourly Standby  |   | 581   | E) Second Initial Flow  |
| 71:7 bəlluq-T   | 7/1   | Circ Sub  |   | 9/6   | nl-tud2 laitial (d)   |
| HI'H undO-T   |   | InioL yfety Loint   |   | hh/   | (C) First Final Flow  |
| F.Started betraft-T   |   | alars   |   | 42  | (B) First Initial Flow  |
| T-On Location   | 90.5  | IgaT L  |   | 2212  | (A) Initial Hydrostatic   |
| 53 °F Chlorides   | <u> </u>  | Navity Z givs   | 1 <u>3/</u> Gr  | TH8   | Rec Total   |
| water %   | %das  |   |   | Feet of   | ЭеР   |
| burn% % lio%  | % das   | 1000  | 21217   | Feet of MCK   | BHZ DAR   |
| water 70 %mud   | %das  | 112 70 0  | 2617 (  | Feet of MCW   | Hec /24   |
| O woil 40 water 46 kmuc   | )/ seb% o/  | 710 10  | met 1   | Feet of   | <u>79</u> рөД   |
| S woil swater smuc  | % seg% <b>2</b>   |   | wpg   | Feet of 900   | 7 <i>9</i> ၁ə႘  |
|   |   | *4  | MAN   | ON:5  | 7   |
| 'W'W L  | Z V! S  | 108/ CMO)   | 9 0007  | 250C11  | 7   |
|   |   |   | UINTZ   | 1 90/35   | 7   |
|   | JI min,   | 130Bl in  | m0/9  | 4/ 17   | Blow Description  |
| System LCM  | s wdd OOS   | Chlorides   | 7016  | 9 12-   | Total Depth   |
|   | 903   | Wt. Pipe Run  | 1016  |   | Bottom Packer Depth_  |
| siV ————————————————————————————————————  | 711   | Drill Collars Run   | 7011  |   | Top Packer Depth  |
| 6-3 NAA DDIAL   | 0000  | Drill Pipe Run  | CUM   |   | Anchor Length   |
| 618 1W build  | 9/82  | DetseT enoZ   | 7014  |   | וווופו אמו ופפופת   |
|   |   |   | レタババ  |   | 7/7   |
| State //  | 200/00  | / <b>G</b> -96  | H 0/  | - OwT   | Location: Sec.  |

Priogram.

Test Ticket

per OVICE

| 696                                     |  |  |  |
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# Test Ticket

'ON

040262

| 4932-92 STORING  | <b>マ</b> ノフ             | Wold legid bacoog (3)   |
|--|-------------------------|-------------------------|
| Hourly Standby   | £5                      | (E) Second Initial Flow |
| Olic Sub   | 68                      | Al-tud2 leitinl (0)     |
| Injob ytels C  | 7                       | (C) First Final Flow    |
| alst [   | 17                      | (B) First Initial Flow  |
| 1891 [189]   | 4902                    | (A) Initial Hydrostatic |
| WAINY WAINA WINE   | BHT 132 Gr              | Rec Total               |
| seg%   |                         | Rec Feet of             |
| se6%   |                         | Rec Feet of             |
| seg%   |                         | Peet of                 |
| S86%   | McM                     | Hect of Feet of         |
| SB6%   | Mom                     | Rec /34 Feet of         |
| ***  | No return               | 150                     |
| 8/00 BOB 10 28   | 1545tags                | 11                      |
| -  | Usnfal ON               | :57                     |
| 10 min 12 ni 80  | d wold 1/1:             | Blow Description        |
| Chlorides 3 800 ppm Sy                                   | 7174                    | Total Depth             |
| Wt. Pipe Run   | 5914                    | Bottom Packer Depth     |
| Drill Collars Run  | 0914                    | Top Packer Depth        |
| OFPE nuñ eqi9 llind                                      | 44                      | Anchor Length           |
| TPH befred Foroz   | TITH                    | Interval Tested         |
| ge. 9/ Co. 5007  | A O V GWT               | Location: Sec.          |
| 6iA 51076 SMM M  | 11C - 2X901 A           | Co. Rep / Geo.          |
|  | 906245 45               | A471 0/4 sserbbA        |
| 36 Z notisual 2 30 Z J J J J J J J J J J J J J J J J J J |                         | Company + 1/1/L         |
| ON IseT  | -82- HS 64              | Well Name & No.         |
| 120/   | -80 0-                  |                         |
| i0979 sesna  | P.O. Box 1733 • Hays, K |                         |
| OCT 2 5 2010   | ESTING INC.             |                         |
| OMOC # G TOO   | ורספוער                 | AI (T)                  |
| DECEINEL   |                         |                         |
|  |                         |                         |

Our Representative Approved By Sub Total f'osid T2d/9M □ Accessibility Final Shut-In Total □ Day Standby 0981 Final Flow\_ Sub Total Ø □ Extra Recorder Initial Shut-In □ Extra Copies □ Extra Packer Initial Open 🚣 ☐ Ruined Packer ☐ Shale Packer ☐ Ruined Shale Packer ☐ Straddle (H) Final Hydrostatic 🗖 Sampler (G) Final Shut-In MIIIE3GE Comments JuO-T bəllu9-T T-Open\_ T-Started T-On Location F Chlorides mdd рпш% %water 10% lio% pnu% %water 10% pnu% %water рпш% 10% %water lio% pnu% %water **FCW** məts/ SiV Mud Wt State פר KB Date

Trilobite Testing Inc. spall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

Our Representative Approved By 1980L Sub Total f'osid TSG\9M ☐ Accessibility Final Shut-In Total 1920\_ Day Standby Wol7 Isni7 Sub Total □ Extra Recorder Initial Shut-In □ Extra Copies ☐ Extra Packer Initial Open 0 ☐ Ruined Packer ☐ Shale Packer Ruined Shale Packer ☐ Straddle (H) Final Hydrostatic ☐ Sampler (G) Final Shut-In Mileage (F) Second Final Flow Comments Hourly Standby 062 (E) Second Initial Flow **JuO-T** 07:41 du2 orio Sub (D) Initial Shut-In bellu9-T In Safety Joint (C) First Final Flow \_neqO-T 🗖 Jars (B) First Initial Flow T-Started ah T-On Location tseT 🔼 (A) Initial Hydrostatic 90'577 SS . Chlorides wdd Gravity WR I9A **TH8** Rec Total 110% seb% Feet of pnu% %water Rec Teet of /NC W pnu% %water 110% %das Rec WM 206 to 1997 pnu% %water 110% %das Rec 05 Гес рпш% %water %वेषञ 110% 0 lio% 06 Feet of %das Rec pnu% %water Blow Description ppm System Total Depth **TCW** Chlorides Bottom Packer Depth Wt. Pipe Run siV Drill Collars Run Top Packer Depth Drill Pipe Run Anchor Length Mud Wt. **Detable Tested** Interval Tested 17000 .qwI Rge. Location: Sec. State Co. Pig Co. Rep / Geo. Address 20708 Elevation Company פר .oM tseT Well Name & No. 01-02-01 P.O. Box 1733 • Hays, Kansas 67601 070583 ON. OCT 2 5 2010

Test Ticket

ESTING INC.

RILOBITL

Trilobite Testing Inc. shall not be liable for damaged of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made, or to sale ments or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

A GIRON 10 mm 30 mm 40 mm 20 

# Test Ticket

NLOZ

Elevation

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

Sub Total

Accessibility
 □

Day Standby

Extra Packer

☐ Shale Packer

☐ Straddle

🗖 Sampler

agsəliM 🔼

☐ Hourly Standby

Circ Sub

In Safety Joint

ars 🗖

test 🔼

Gravity

☐ Extra Recorder

1950

Approved By

Final Shut-In

Initial Shut-In

Initial Open

(H) Final Hydrostatic

(F) Second Final Flow

(E) Second Initial Flow

(G) Final Shut-In

(D) Initial Shut-In

(C) First Final Flow

(B) First Initial Flow

(A) Initial Hydrostatic

Rec Total

Rec

Rec

Hec

Rec

Rec

Blow Description

52

Feet of WMC90

Feet of

Feet of

Feet of

Feet of

Wol7 Isni7

Our Representative

00.5Z

**WAIGA** 

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J'osiG TSG\9M

☐ Extra Copies

☐ Ruined Packer

Buined Shale Packer

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Total

Sub Total

Comments

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T-On Location

°F Chlorides

**TCW** 

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| 79 | 75         | 170   | .01 |
|----|------------|-------|-----|
| 70 | $C \cup C$ | J 7 U | NO. |

Date

| Chlorides 3500         | h994                   | Total Depth           |
|------------------------|------------------------|-----------------------|
| Wt. Pipe Run           | 4654                   | Bottom Packer Depth   |
| Drill Collars Run      | 695H                   | Top Packer Depth      |
| Drill Pipe Run         | 08                     | Anchor Length         |
| Sected Desired Desired | h09h                   | WA 24 betseT isvnefri |
| ge. 31 Co.             | PA                     | Location: Sec. 28     |
| PIR SUNDENIL           | Doke John              | Co. Rep / Geo. 697 /  |
| Denver 60 80.          | 1 906 2+5 +5           | Adress 416 Ab         |
| Elevatio               | 1 1-6577-60/           | Company FIML          |
| .0N tesT 1E81-         | 87-45 60               | Well Name & No.       |
| 10979 sesna            | O. Box 1733 • Hays, Ka | 01/6                  |
| n n                    | ESLING INC.            |                       |
| 001255 2010            | TIBOTI                 |                       |
| DECEIVE                | 72.00 11               |                       |
|                        |                        |                       |

FEFTWO