



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1106545
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

| | | |
|-----------------------------------|-----------------|---|
| Spud Date or Recompletion Date | Date Reached TD | Completion Date or Recompletion Date |
|-----------------------------------|-----------------|---|

API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1106545

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

| | |
|--|---|
| Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____ | <input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum |
|--|---|

| CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used | | | | | | | |
|---|-------------------|---------------------------|-------------------|---------------|----------------|--------------|----------------------------|
| Report all strings set-conductor, surface, intermediate, production, etc. | | | | | | | |
| Purpose of String | Size Hole Drilled | Size Casing Set (In O.D.) | Weight Lbs. / Ft. | Setting Depth | Type of Cement | # Sacks Used | Type and Percent Additives |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| ADDITIONAL CEMENTING / SQUEEZE RECORD | | | | |
|--|------------------|----------------|--------------|----------------------------|
| Purpose: | Depth Top Bottom | Type of Cement | # Sacks Used | Type and Percent Additives |
| <input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone | | | | |
| | | | | |

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

| Shots Per Foot | PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated | Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i> | Depth |
|----------------|---|--|-------|
| | | | |
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| | | | | |
|----------------|-------|---------|------------|---|
| TUBING RECORD: | Size: | Set At: | Packer At: | Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No |
|----------------|-------|---------|------------|---|

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

| Estimated Production Per 24 Hours | Oil Bbls. | Gas Mcf | Water Bbls. | Gas-Oil Ratio | Gravity |
|-----------------------------------|-----------|---------|-------------|---------------|---------|
| | | | | | |

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

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

January 03, 2013

Leon Rodak
Murfin Drilling Co., Inc.
250 N WATER STE 300
WICHITA, KS 67202-1216

Re: ACO1
API 15-153-20905-00-00
Kacirek 1-21
NE/4 Sec.21-02S-36W
Rawlins 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,
Leon Rodak

| MDCI Kacirek #1-21 1800' FNL 2310' FEL Sec. 21-2S-36W 3355' KB | | | | | TransWestern Frisbee #1-15 C SW NE Sec. 15-2S-36W 3334' KB | | | |
|--|------------|-------|-----|----------|--|-----|----------|-------|
| Formation | Sample top | Datum | Ref | Log tops | Datum | Ref | Log tops | Datum |
| Anhydrite | 3249 | +106 | -17 | 3247 | +108 | -15 | 3211 | +123 |
| B/Anhydrite | 3285 | +70 | -16 | 3286 | +69 | -17 | 3248 | +86 |
| Neva | 3736 | -381 | -5 | 3750 | -395 | -19 | 3710 | -376 |
| Topeka | 4101 | -746 | -22 | 4096 | -741 | -17 | 4058 | -724 |
| Heebner | 4264 | -909 | -27 | 4256 | -901 | -19 | 4216 | -882 |
| Lansing | 4315 | -960 | -24 | 4310 | -955 | -19 | 4270 | -936 |
| Stark | 4534 | -1179 | -20 | 4534 | -1179 | -30 | 4493 | -1149 |
| BKC | 4583 | -1228 | -20 | 4589 | -1234 | -26 | 4542 | -1208 |
| Pawnee | 4704 | -1349 | -17 | 4714 | -1359 | -27 | 4666 | -1332 |
| Cherokee | 4787 | -1432 | -24 | 4787 | -1432 | -24 | 4742 | -1408 |
| Mississippi | 4992 | -1637 | | 4995 | -1640 | | NDE | ----- |
| RTD | 5100 | -1745 | | | | | 4760 | |
| LTD | | | | 5105 | -1750 | | 4757 | |



GEOLOGISTS' REPORT

OPERATOR: MURFIN DRILLING COMPANY, INC.
LEASE: KACIREK # 1-21

LOCATION: 1800 FNL & 2310 FEL
SEC. 21 T19SP 2S RGE 36W
COUNTY: RAWLINS STATE: KANSAS
FIELD: WILDGAT

CONTRACTOR: Murfin Drilling Company FIG NO. 14
COMMENCED: 14 Sept. 2012 COMPLETED: 23 Sept. 2012
MUD DESIGNATED: 3435 MUD TYPE: Chemical
DRILLING METHOD: FROM SURFACE 8 5/8" @ 853
SAMPLES SAVED FROM: 3620 TO 5100
SAMPLES EXAMINED FROM: 3620 TO 5100

GEOLOGICAL SUPERVISION FROM: 3621 TO 5100
GEOLOGIST ON WELL: Paul Guizelmann

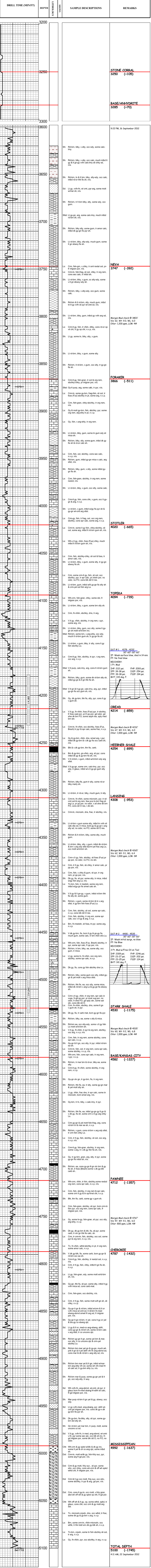
FORMATION NAME LOG TOP DATUM TOP DATUM
Stone Corral 3247 +108 3250 +105
Base/anhedrite 3286 +69 3285 +70
Foraker 3888 -513 3858 -503
Topeka 4096 -741 4101 -746
Oread 4217 -862 4221 -866
Lansing 4310 -955 4315 -960
Base/Kansas City 4589 -1224 4583 -1228
Cherokee 4787 -1432 4787 -1432
Mississippian 4995 -1637 4992 -1637
Total Depth 5105 -1750 5100 -1745

LOG TYPE: Micro-resistivity
CORRECTION: Dual Induction
CORRECTION: Comp. Neutron Density



Operator: MURFIN DRILLING COMPANY, INC.
Lease: KACIREK # 1-21
Location: 1800 FNL & 2310 FEL SEC. 21 T19SP 2S RGE 36W
County: RAWLINS State: KANSAS

| REMARKS | DEPTH | LOG | DESCRIPTION | REMARKS |
|--|-------|-----|-------------|---------|
| API 15-153-20905-00-00 Drilling Fluids: Morgan Mud, Inc. (David Lines, engineer) Drill Stem Testing: Trilobite Testing, Inc. (Mike Roberts, tester) Gas Trailer: No Gas Trailer Reserve Pit Chlorides: 1,000 PPM | | | | |



Operator: MURFIN DRILLING COMPANY, INC.
Lease: KACIREK # 1-21
Location: 1800 FNL & 2310 FEL SEC. 21 T19SP 2S RGE 36W
County: RAWLINS State: KANSAS



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company, Inc.**

250 N Water STE 300
Wichita KS 67202

ATTN: Paul Gunzelman

Kacirek #1 21

21-2s-36w Rawlins,KS

Start Date: 2012.09.18 @ 01:50:15

End Date: 2012.09.18 @ 08:28:38

Job Ticket #: 44435 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.09.25 @ 13:23:17



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Company, Inc.

21-2s-36w Rawlins, KS

250 N Water STE 300
Wichita KS 67202

Kacirek #1 21

Job Ticket: 44435

DST#: 1

ATTN: Paul Gunzelman

Test Start: 2012.09.18 @ 01:50:15

GENERAL INFORMATION:

Formation: **Oread**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:47:38

Time Test Ended: 08:28:38

Test Type: Conventional Bottom Hole (Initial)

Tester: Mike Roberts

Unit No: 65

Interval: 4178.00 ft (KB) To 4232.00 ft (KB) (TVD)

Reference Elevations: 3355.00 ft (KB)

Total Depth: 4232.00 ft (KB) (TVD)

3345.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6668 Outside

Press @ Run Depth: 38.48 psig @ 4180.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.09.18

End Date: 2012.09.18

Last Calib.: 2012.09.18

Start Time: 13:50:15

End Time: 20:28:38

Time On Btm: 2012.09.18 @ 15:47:23

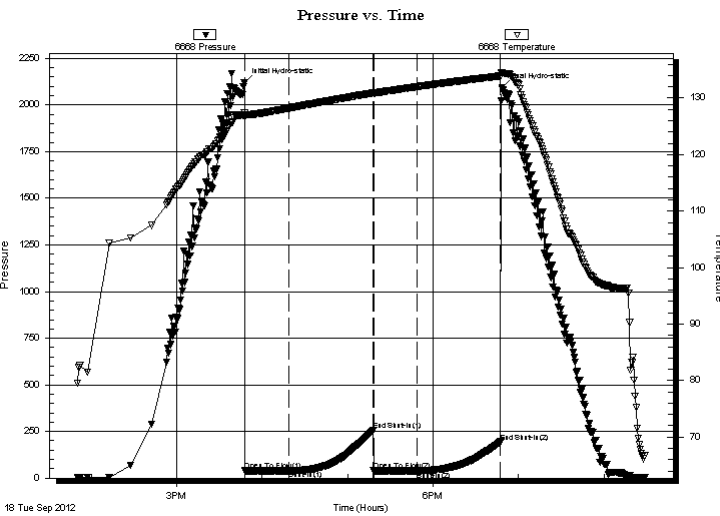
Time Off Btm: 2012.09.18 @ 18:48:23

TEST COMMENT: IF: Built to weak surface blow and died in 14 min.

IS: No return blow

FF: No blow

FS: No return blow



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2121.12 | 127.31 | Initial Hydro-static |
| 1 | 39.48 | 126.66 | Open To Flow (1) |
| 32 | 38.93 | 128.21 | Shut-In(1) |
| 91 | 254.35 | 130.90 | End Shut-In(1) |
| 91 | 39.52 | 130.83 | Open To Flow (2) |
| 122 | 38.48 | 132.01 | Shut-In(2) |
| 180 | 194.33 | 133.93 | End Shut-In(2) |
| 181 | 2093.57 | 134.45 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 1.00 | mud 100% m | 0.00 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Company, Inc.

21-2s-36w Rawlins, KS

250 N Water STE 300
Wichita KS 67202

Kacirek #1 21

Job Ticket: 44435

DST#: 1

ATTN: Paul Gunzelman

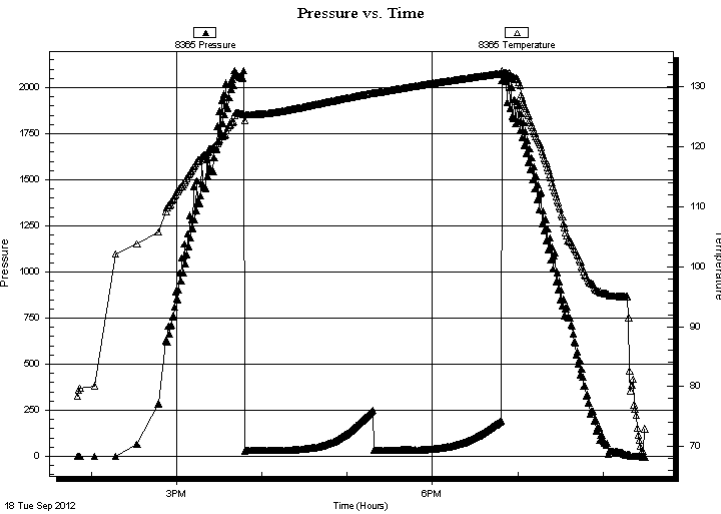
Test Start: 2012.09.18 @ 01:50:15

GENERAL INFORMATION:

Formation: **Oread**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 03:47:38
 Time Test Ended: 08:28:38
 Interval: **4178.00 ft (KB) To 4232.00 ft (KB) (TVD)**
 Total Depth: 4232.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Mike Roberts
 Unit No: 65
 Reference Elevations: 3355.00 ft (KB)
 3345.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8365 Inside
 Press @ Run Depth: psig @ 4180.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.09.18 End Date: 2012.09.18 Last Calib.: 2012.09.18
 Start Time: 13:50:15 End Time: 20:29:15 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF: Built to weak surface blow and died in 14 min.
 IS: No return blow
 FF: No blow
 FS: No return blow



PRESSURE SUMMARY

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

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 1.00 | mud 100% m | 0.00 |
| | | |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company, Inc.

21-2s-36w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Kacirek #1 21

Job Ticket: 44435

DST#: 1

ATTN: Paul Gunzelman

Test Start: 2012.09.18 @ 01:50:15

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3650.00 ft | Diameter: 3.80 inches | Volume: 51.20 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: 20000.00 lb |
| Drill Collar: | Length: 530.00 ft | Diameter: 2.25 inches | Volume: 2.61 bbl | Weight to Pull Loose: 90000.00 lb |
| | | | <u>Total Volume: 53.81 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 30.00 ft | | | String Weight: Initial 74000.00 lb |
| Depth to Top Packer: | 4178.00 ft | | | Final 74000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 54.00 ft | | | |
| Tool Length: | 82.00 ft | | | |
| Number of Packers: | 2 | Diameter: 6.75 inches | | |

Tool Comments:

Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|---------------------------|--------------|------------|----------|------------|-------------------------------|
| Change Over Sub | 1.00 | | | 4151.00 | |
| Shut In Tool | 5.00 | | | 4156.00 | |
| Hydraulic tool | 5.00 | | | 4161.00 | |
| Jars | 5.00 | | | 4166.00 | |
| Safety Joint | 3.00 | | | 4169.00 | |
| Packer | 5.00 | | | 4174.00 | 28.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4178.00 | |
| Stubb | 1.00 | | | 4179.00 | |
| Perforations | 1.00 | | | 4180.00 | |
| Recorder | 0.00 | 8365 | Inside | 4180.00 | |
| Recorder | 0.00 | 6668 | Outside | 4180.00 | |
| Change Over Sub | 1.00 | | | 4181.00 | |
| Drill Pipe | 32.00 | | | 4213.00 | |
| Change Over Sub | 1.00 | | | 4214.00 | |
| Perforations | 13.00 | | | 4227.00 | |
| Bullnose | 5.00 | | | 4232.00 | 54.00 Bottom Packers & Anchor |
| Total Tool Length: | 82.00 | | | | |



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company, Inc.

21-2s-36w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Kacirek #1 21

Job Ticket: 44435

DST#: 1

ATTN: Paul Gunzelman

Test Start: 2012.09.18 @ 01:50:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 67.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.97 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-------------|---------------|
| 1.00 | mud 100% m | 0.005 |

Total Length: 1.00 ft Total Volume: 0.005 bbl

Num Fluid Samples: 0

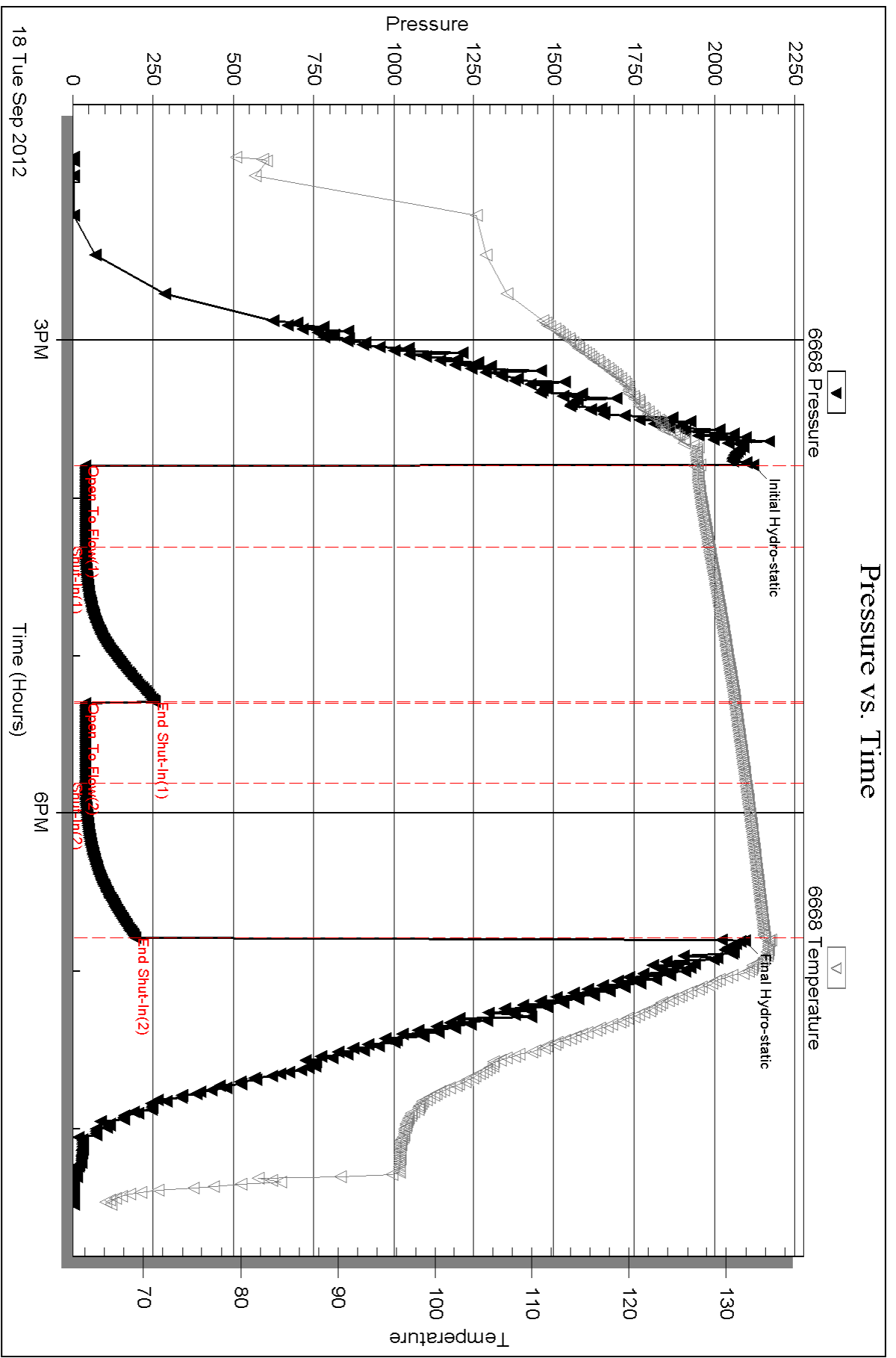
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



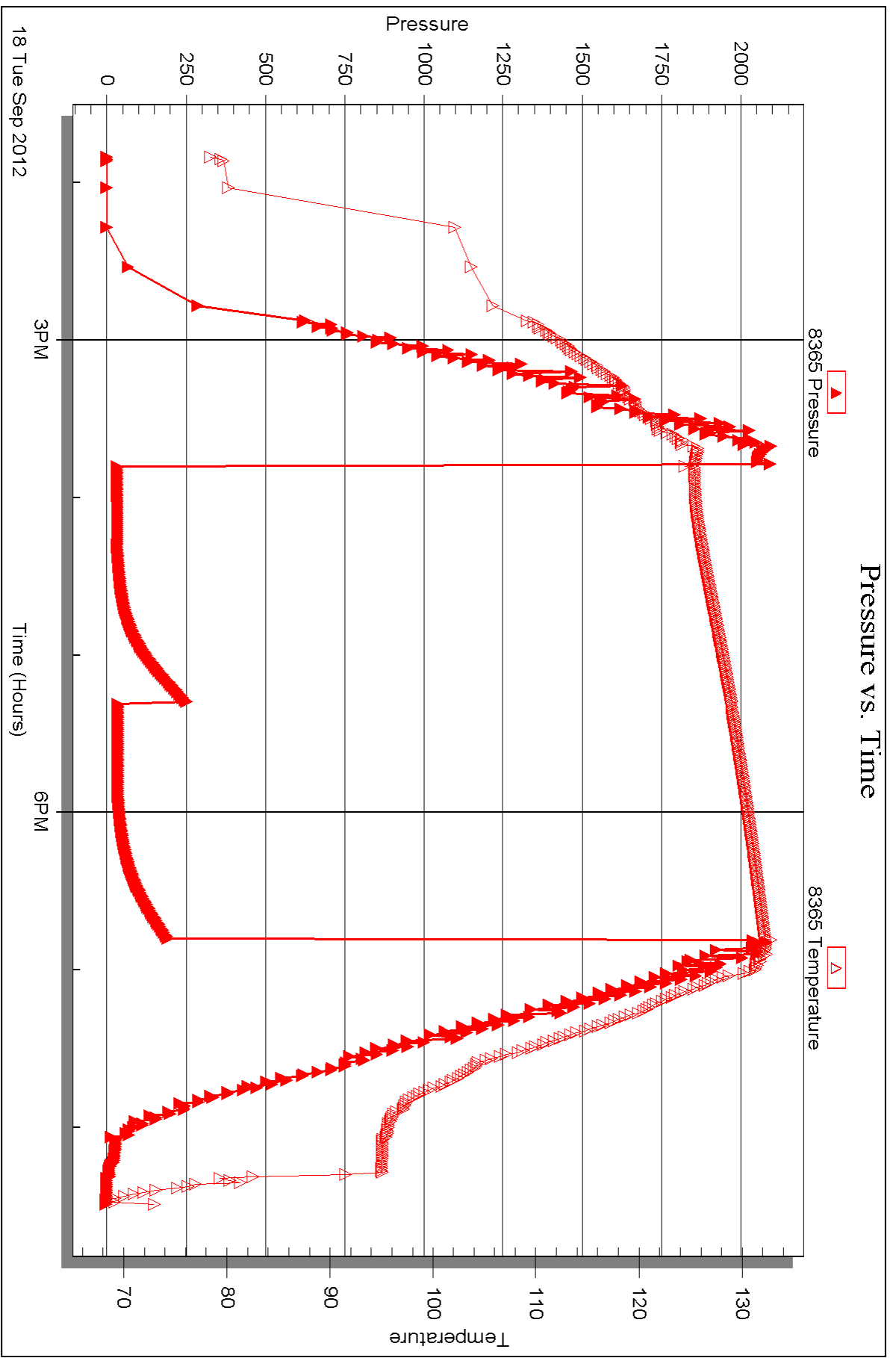
Serial #: 8365

Inside

Murfin Drilling Company, Inc.

Kacirek #1 21

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 44435

Printed: 2012.09.25 @ 13:23:22



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company, Inc.**

250 N Water STE 300
Wichita KS 67202

ATTN: Paul Gunzelman

Kacirek #1 21

21-2s-36w Rawlins,KS

Start Date: 2012.09.20 @ 05:53:15

End Date: 2012.09.20 @ 13:00:30

Job Ticket #: 44436 DST #: 2

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

Printed: 2012.09.25 @ 13:22:30



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Company, Inc.

21-2s-36w Rawlins, KS

250 N Water STE 300
Wichita KS 67202

Kacirek #1 21

Job Ticket: 44436

DST#: 2

ATTN: Paul Gunzelman

Test Start: 2012.09.20 @ 05:53:15

GENERAL INFORMATION:

Formation: **LKC J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:14:30

Time Test Ended: 13:00:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 65

Interval: 4490.00 ft (KB) To 4435.00 ft (KB) (TVD)

Reference Elevations: 3355.00 ft (KB)

Total Depth: 4535.00 ft (KB) (TVD)

3345.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6668 Outside

Press @ Run Depth: 25.84 psig @ 4492.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.09.20

End Date: 2012.09.20

Last Calib.: 2012.09.20

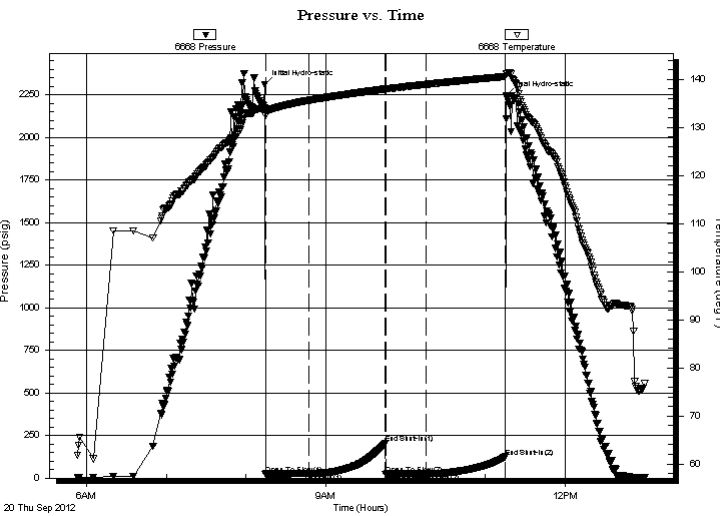
Start Time: 05:53:15

End Time: 13:00:30

Time On Btm: 2012.09.20 @ 08:14:15

Time Off Btm: 2012.09.20 @ 11:16:00

TEST COMMENT: IF: No blow
IS: No return blow
FF: No blow
FS: No return blow



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2309.67 | 134.03 | Initial Hydro-static |
| 1 | 23.25 | 132.45 | Open To Flow (1) |
| 33 | 27.08 | 135.64 | Shut-In(1) |
| 91 | 202.77 | 138.00 | End Shut-In(1) |
| 91 | 23.21 | 137.97 | Open To Flow (2) |
| 121 | 25.84 | 138.95 | Shut-In(2) |
| 181 | 124.49 | 140.63 | End Shut-In(2) |
| 182 | 2246.15 | 141.13 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|------------------------|--------------|
| 3.00 | mud w ith trace of oil | 0.01 |
| | | |
| | | |
| | | |
| | | |

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company, Inc.

21-2s-36w Rawlins, KS

250 N Water STE 300
Wichita KS 67202

Kacirek #1 21

Job Ticket: 44436

DST#: 2

ATTN: Paul Gunzelman

Test Start: 2012.09.20 @ 05:53:15

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3962.00 ft | Diameter: 3.80 inches | Volume: 55.58 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: 20000.00 lb |
| Drill Collar: | Length: 530.00 ft | Diameter: 2.25 inches | Volume: 2.61 bbl | Weight to Pull Loose: 90000.00 lb |
| | | | <u>Total Volume: 58.19 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 30.00 ft | | | String Weight: Initial 78000.00 lb |
| Depth to Top Packer: | 4490.00 ft | | | Final 78000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 45.00 ft | | | |
| Tool Length: | 73.00 ft | | | |
| Number of Packers: | 2 | Diameter: 6.75 inches | | |

Tool Comments:

Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|---------------------------|--------------|------------|----------|------------|-------------------------------|
| Change Over Sub | 1.00 | | | 4463.00 | |
| Shut In Tool | 5.00 | | | 4468.00 | |
| Hydraulic tool | 5.00 | | | 4473.00 | |
| Jars | 5.00 | | | 4478.00 | |
| Safety Joint | 3.00 | | | 4481.00 | |
| Packer | 5.00 | | | 4486.00 | 28.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4490.00 | |
| Stubb | 1.00 | | | 4491.00 | |
| Perforations | 1.00 | | | 4492.00 | |
| Recorder | 0.00 | 8365 | Inside | 4492.00 | |
| Recorder | 0.00 | 6668 | Outside | 4492.00 | |
| Change Over Sub | 1.00 | | | 4493.00 | |
| Drill Pipe | 32.00 | | | 4525.00 | |
| Change Over Sub | 1.00 | | | 4526.00 | |
| Perforations | 4.00 | | | 4530.00 | |
| Bullnose | 5.00 | | | 4535.00 | 45.00 Bottom Packers & Anchor |
| Total Tool Length: | 73.00 | | | | |



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company, Inc.

21-2s-36w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Kacirek #1 21

Job Ticket: 44436

DST#: 2

ATTN: Paul Gunzelman

Test Start: 2012.09.20 @ 05:53:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbbl |
|--------------|------------------------|----------------|
| 3.00 | mud w ith trace of oil | 0.015 |

Total Length: 3.00 ft Total Volume: 0.015 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

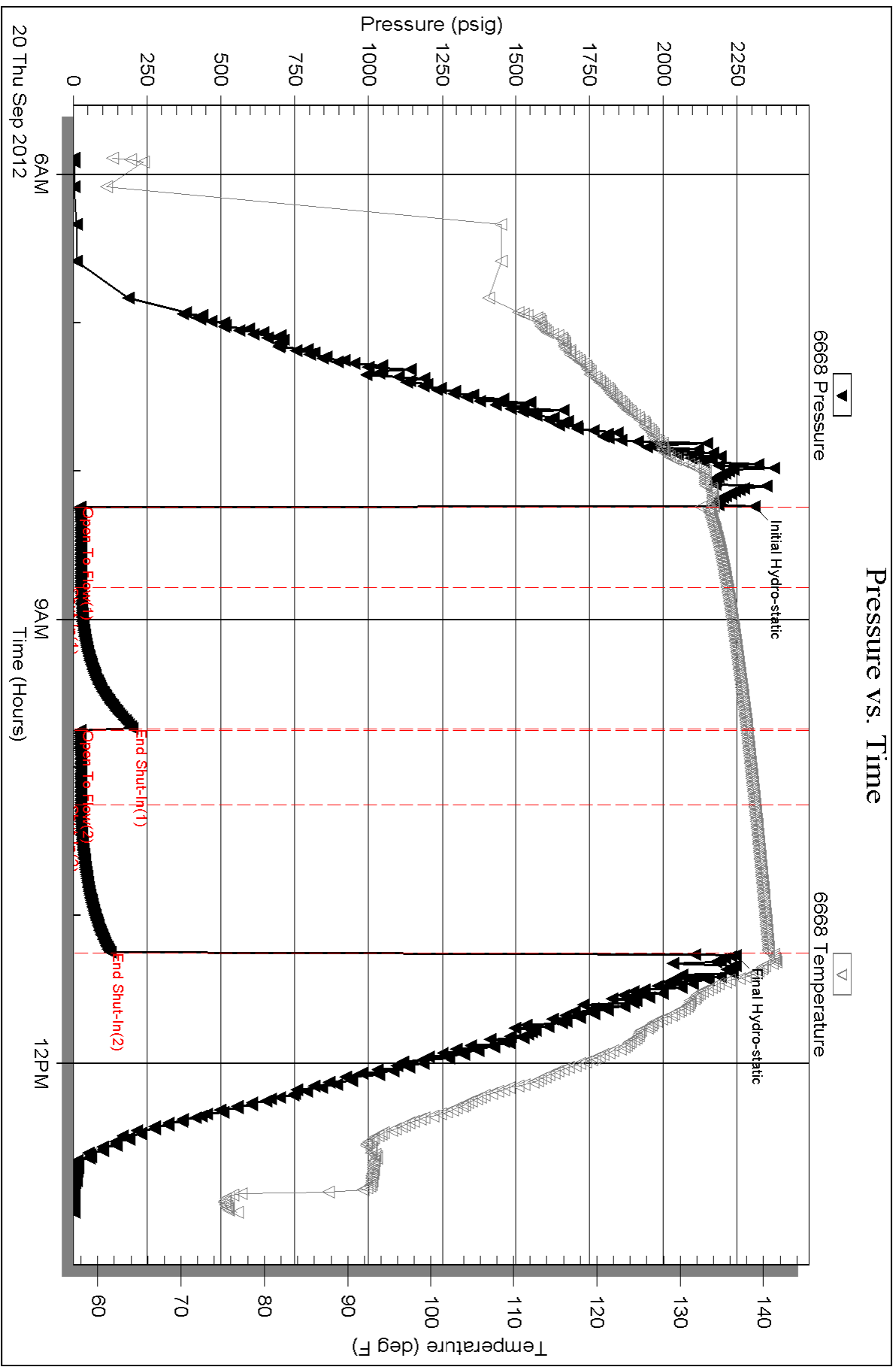
Recovery Comments:

Serial #: 6668

Outside Murfin Drilling Company, Inc.

Kacirek #1 21

DST Test Number: 2



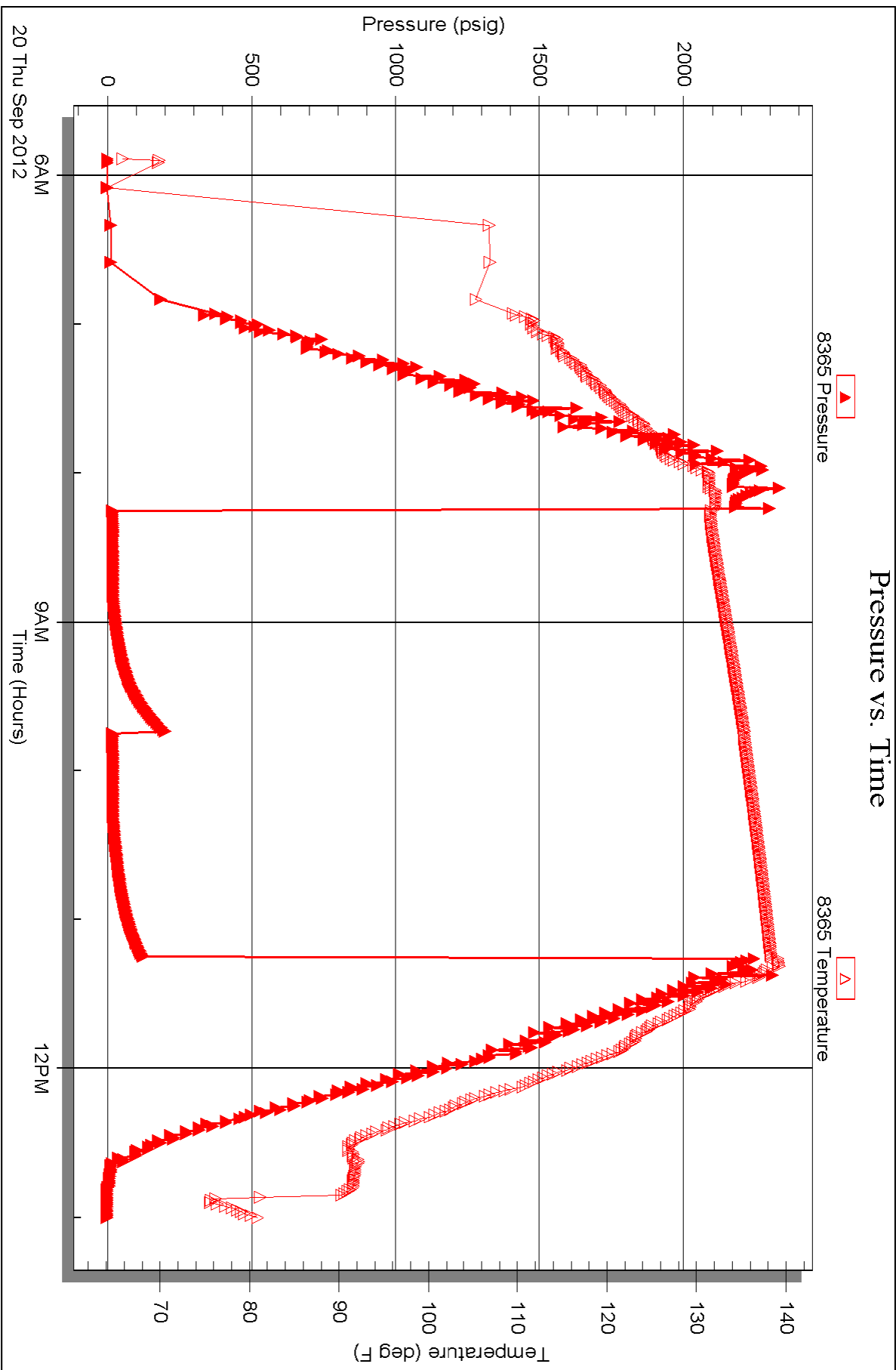
Serial #: 8365

Inside

Murfin Drilling Company, Inc.

Kacirek #1 21

DST Test Number: 2





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

3.03 TOP 3:48
3:44
Test Ticket
BOTTOM
NO. 44435

Well Name & No. Kacirek 1-21 Test No. 1 Date 9-18-12
 Company Murfin Drilling Company Inc Elevation 3355 KB 3345 GL
 Address 250 N. Water STE 300 Wichita KS 67202
 Co. Rep / Geo. Paul Gunzelman Rig Murfin 14
 Location: Sec. 21 Twp. 25 Rge. 36w Co. Rawlins State KS

Interval Tested 4178-4232 Zone Tested Oread
 Anchor Length 54 Drill Pipe Run 3650 Mud Wt. 9.3
 Top Packer Depth 4174 Drill Collars Run 530 Vis 67
 Bottom Packer Depth 4178 Wt. Pipe Run Ø WL 6.0
 Total Depth 4232 Chlorides 1000 ppm System LCM 4
 Blow Description IF: Built to weak surface Blow & Died in 14 Min.
Is: NO Return Blow
FF: NO Blow
FS: NO Return Blow

| Rec | Feet of | %gas | %oil | %water | %mud |
|-----|---------|------|------|--------|------|
| 1 | MUD | | | 100% | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Rec Total 1 BHT 134 Gravity API RW @ °F Chlorides ppm

(A) Initial Hydrostatic 2121 Test 1250 T-On Location 12:30
 (B) First Initial Flow 39 Jars 250 T-Started 1:50 KS TIME
 (C) First Final Flow 38 Safety Joint 75 T-Open 15:47 10 TIME
 (D) Initial Shut-In 254 Circ Sub NC T-Pulled 18:47
 (E) Second Initial Flow 39 Hourly Standby T-Out 20:28
 (F) Second Final Flow 38 Mileage 252 RT 88rt 136.40 Comments
 (G) Final Shut-In 194 Sampler
 (H) Final Hydrostatic 2093 Straddle Ruined Shale Packer
 Shale Packer Ruined Packer
 Extra Packer Extra Copies
 Extra Recorder Sub Total 0
 Day Standby Total 1711.40
 Accessibility MP/DST Disc't

Sub Total 1711.40

Approved By Paul Gunzelman Our Representative [Signature]

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



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

~~1100204~~ - 3.38 top N-21326
N21333 - 3.34 BTM

Test Ticket

NO. 44436

Well Name & No. Kalirek 1-21 Test No. 2 Date 9-20-12
 Company Murfin Drilling Company Inc Elevation 3355 KB 3345 GL
 Address 200 N. Water STE 300 Wichita KS 67202
 Co. Rep / Geo. Paul Gunzelman Rig Murfin 20
 Location: Sec. 21 Twp. 2S Rge. 36W Co. Rawlins State KS

Interval Tested 4490-4535 Zone Tested LKC J
 Anchor Length 45 Drill Pipe Run 3962 Mud Wt. 9.1
 Top Packer Depth 4486 Drill Collars Run 530 Vis 62
 Bottom Packer Depth 4490 Wt. Pipe Run Ø WL 6.4
 Total Depth 4535 Chlorides 1000 ppm System LCM 3
 Blow Description IF: No Blow
IS: No Return Blow
FF: No Blow
FS: No Return Blow

| Rec | Feet of | %gas | %oil | %water | %mud |
|----------|--------------------------------------|------|------|------------|------|
| <u>3</u> | <u>Feet of mud with trace of oil</u> | | | <u>100</u> | |
| | <u>Feet of Free oil on tool</u> | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Rec Total 3 BHT 141 Gravity — API RW — @ — °F Chlorides — ppm

| | | |
|-------------------------------------|---|--|
| (A) Initial Hydrostatic <u>2309</u> | <input checked="" type="checkbox"/> Test 1250 | T-On Location <u>04:30</u> |
| (B) First Initial Flow <u>23</u> | <input checked="" type="checkbox"/> Jars 250 | T-Started <u>05:53</u> |
| (C) First Final Flow <u>27</u> | <input checked="" type="checkbox"/> Safety Joint <u>NC</u> | T-Open <u>08:15</u> |
| (D) Initial Shut-In <u>202</u> | <input checked="" type="checkbox"/> Circ Sub <u>NC</u> | T-Pulled <u>11:15</u> |
| (E) Second Initial Flow <u>23</u> | <input type="checkbox"/> Hourly Standby | T-Out <u>13:00</u> |
| (F) Second Final Flow <u>25</u> | <input checked="" type="checkbox"/> Mileage <u>136.40</u> | Comments |
| (G) Final Shut-In <u>124</u> | <input type="checkbox"/> Sampler | |
| (H) Final Hydrostatic <u>2246</u> | <input type="checkbox"/> Straddle | <input type="checkbox"/> Ruined Shale Packer |
| | <input type="checkbox"/> Shale Packer | <input type="checkbox"/> Ruined Packer |
| Initial Open <u>30</u> | <input type="checkbox"/> Extra Packer | <input type="checkbox"/> Extra Copies |
| Initial Shut-In <u>60</u> | <input type="checkbox"/> Extra Recorder | Sub Total <u>0</u> |
| Final Flow <u>30</u> | <input checked="" type="checkbox"/> Day Standby <u>Plus standby for</u> | Total <u>1636.40</u> |
| Final Shut-In <u>60</u> | <input type="checkbox"/> Accessibility <u>Waiting on DST</u> | MP/DST Disc't |
| | Sub Total <u>1636.40</u> #3 | |

Approved By Paul Gunzelman Our Representative Mike Rohde

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.



*acct.
Prod-LizH*

INVOICE

PO Box 93999
Southlake, TX 76092

Invoice Number: 132754

PROD COPY

Invoice Date: Sep 14, 2012

Voice: (817) 546-7282
Fax: (817) 246-3361

Page: 1



Bill To:
Murfin Drlg. Co., Inc.
250 N. Water
STE #300
Wichita, KS 67202

| Customer ID | Well Name/# or Customer P.O. | Payment Terms | |
|--------------|------------------------------|---------------|----------|
| Murfin | Kacirek # 1-21 | Net 30 Days | |
| Job Location | Camp Location | Service Date | Due Date |
| KS1-01 | Oakley | Sep 14, 2012 | 10/14/12 |

| Quantity | Item | Description | Unit Price | Amount |
|----------|-------------|-----------------------|------------|----------|
| 310.00 | MAT | Class A Common | 17.90 | 5,549.00 |
| 11.00 | MAT | Chloride | 64.00 | 704.00 |
| 325.50 | SER | Cubic Feet | 2.48 | 807.24 |
| 1,050.00 | SER | TOn milles | 2.60 | 2,730.00 |
| 1.00 | SER | Surface | 1,512.25 | 1,512.25 |
| 70.00 | SER | Heavy Vehicle Mileage | 7.70 | 539.00 |
| 1.00 | SER | Manifold Head Rental | 275.00 | 275.00 |
| 70.00 | SER | Light Vehicle Mileage | 4.40 | 308.00 |
| 1.00 | CEMENTER | Andrew Forslund | | |
| 1.00 | EQUIP OPER | Dane Retzloff | | |
| 1.00 | OPER ASSIST | DJ Gray | | |

| Account | Rig | W | L | No. | Amount | Association |
|--------------|-----------|--------------|-------------|-----|----------------|-----------------------------|
| <i>FD203</i> | | | | | <i>8330.80</i> | <i>Coment S. Csg. #1-21</i> |
| | <i>3.</i> | <i>4230.</i> | <i>0001</i> | | | |

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

\$ 4597.06

ONLY IF PAID ON OR BEFORE
Oct 9, 2012

| | |
|------------------------|------------------|
| Subtotal | 12,424.49 |
| Sales Tax | 503.37 |
| Total Invoice Amount | 12,927.86 |
| Payment/Credit Applied | |
| TOTAL | 12,927.86 |

(4597.06)

8330.80

ALLIED OIL & GAS SERVICES, LLC 056742

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:

Oakley

| | | | | | | | |
|--------------------------------|--------------------|-----------------------------------|-----------------------|-----------------|-------------|--------------------------|---------------------------|
| DATE <u>9-14-12</u> | SEC <u>21</u> | TWP. <u>23</u> | RANGE <u>36W</u> | CALLED OUT | ON LOCATION | JOB START <u>11:00pm</u> | JOB FINISH <u>11:30pm</u> |
| LEASE <u>Kacirek</u> | WELL # <u>1-21</u> | LOCATION <u>McDonald 5N 1/4 E</u> | COUNTY <u>Rawlins</u> | STATE <u>KS</u> | | | |
| OLD OR <u>NEW</u> (Circle one) | | <u>into</u> | | | | | |

CONTRACTOR Murfin 14
 TYPE OF JOB Surface
 HOLE SIZE 12 1/4 T.D. 365'
 CASING SIZE 8 3/8 DEPTH 365'
 TUBING SIZE DEPTH
 DRILL PIPE DEPTH
 TOOL DEPTH
 PRES. MAX MINIMUM
 MEAS. LINE SHOE JOINT
 CEMENT LEFT IN CSG. 15'
 PERFS.
 DISPLACEMENT 28.29 BBL
 EQUIPMENT

OWNER same
 CEMENT
 AMOUNT ORDERED 310 sks corn
390cc
 COMMON 310 sks @ 17.90 5,549.00
 POZMIX @
 GEL @
 CHLORIDE 11 sks @ 64.00 704.00
 ASC @
 @
 @
 @
 @
 @
 @

PUMP TRUCK CEMENTER Andrew Feishank
 # 431 HELPER Dane Retzlaff
 BULK TRUCK
 # 54 DRIVER omar (TWS)
 BULK TRUCK
 # DRIVER

HANDLING 325.5 cu/ft @ 2.48 807.24
 MILEAGE 2.68 Toyota 15.00/ton 2730.00
 TOTAL 9790.24

REMARKS:

Cement did circulate
Thank you

SERVICE

DEPTH OF JOB 365'
 PUMP TRUCK CHARGE 1512.25
 EXTRA FOOTAGE @
 MILEAGE 70 miles @ 7.70 539.00
 MANIFOLD head @ 225.00
Light vehicle @ 4.40 308.00
 @

CHARGE TO: Murfin
 STREET
 CITY STATE ZIP

TOTAL 2634.25

PLUG & FLOAT EQUIPMENT

@
 @
 @
 @
 @

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

TOTAL

SALES TAX (If Any) 503.37
 TOTAL CHARGES 12,424.49
 DISCOUNT IF PAID IN 30 DAYS

PRINTED NAME Craig Uhrich
 SIGNATURE Craig Uhrich

3790
D 4597.00

INVOICE

PO Box 93999
Southlake, TX 76092

Invoice Number: 132802

Invoice Date: Sep 22, 2012

Voice: (817) 546-7282
Fax: (817) 246-3361

Page: 1



| |
|---|
| Bill To: |
| Murfin Drlg. Co., Inc. 250 N. Water STE #300 Wichita, KS 67202 |

Racirek

| Customer ID | Well Name/# or Customer P.O. | Payment Terms | |
|--------------|---------------------------------|---------------|----------|
| Murfin | <i>Racirek</i> Racirek #1-21 | Net 30 Days | |
| Job Location | Camp Location | Service Date | Due Date |
| KS1-03 | Oakley | Sep 22, 2012 | 10/22/12 |

| Quantity | Item | Description | Unit Price | Amount |
|----------|-------------|-----------------------|------------|----------|
| 130.00 | MAT | Class A Common | 17.90 | 2,327.00 |
| 90.00 | MAT | Pozmix | 9.35 | 841.50 |
| 7.00 | MAT | Gel | 23.40 | 163.80 |
| 55.00 | MAT | Flo Seal | 2.97 | 163.35 |
| 236.28 | SER | Cubic Feet | 2.48 | 585.97 |
| 689.50 | SER | Ton Mileage | 2.60 | 1,792.70 |
| 1.00 | SER | Plug to Abandon | 1,250.00 | 1,250.00 |
| 70.00 | SER | Pump Truck Mileage | 7.70 | 539.00 |
| 70.00 | SER | Light Vehicle Mileage | 4.40 | 308.00 |
| 1.00 | EQP | 8.5/8 Plug | 107.64 | 107.64 |
| 1.00 | CEMENTER | Darren Racette | | |
| 1.00 | EQUIP OPER | Tyler Flipse | | |
| 1.00 | OPER ASSIST | Brandon Wilkinson | | |

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

\$ 2787.24

ONLY IF PAID ON OR BEFORE
Oct 17, 2012

| | |
|------------------------|-----------------|
| Subtotal | 8,078.96 |
| Sales Tax | 650.36 |
| Total Invoice Amount | 8,729.32 |
| Payment/Credit Applied | |
| TOTAL | 8,729.32 |

OKD

ALLIED OIL & GAS SERVICES, LLC 056693

Federal Tax I.D.# 20-5976804

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

SERVICE POINT:
Orkney

| | | | | | | | |
|---|--------------------|----------------------------------|-----------------|------------|-----------------------|------------------------|-------------------------|
| DATE <i>9-22-12</i> | SEC. <i>21</i> | TWP. <i>25</i> | RANGE <i>36</i> | CALLED OUT | ON LOCATION | JOB START <i>10:00</i> | JOB FINISH <i>11:00</i> |
| LEASE <i>Kacirek</i> | WELL # <i>1-21</i> | LOCATION <i>McDonald 5N 1/4E</i> | | | COUNTY <i>Kawthns</i> | STATE | |
| OLD OR <input checked="" type="checkbox"/> NEW (Circle one) | | | | Slnto | | | |

CONTRACTOR *Murfin #11*

TYPE OF JOB *PTA*

HOLE SIZE *7 7/8* T.D. *5100*

CASINO SIZE DEPTH

TUBING SIZE DEPTH

DRILL PIPE *4 1/2* DEPTH *3265*

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG.

PERFS.

DISPLACEMENT *42.87*

EQUIPMENT

PUMP TRUCK CEMENTER *Darren Racette 1*

423-281 HELPER *Tyler Flipse 2*

BULK TRUCK

347 DRIVER *Brandon Wilkison 3*

BULK TRUCK

DRIVER

OWNER *Same*

CEMENT

AMOUNT ORDERED *220 SKs 6 1/4 4% Gel 1/4" Flo*

COMMON *130 SKs @ \$17.22 = \$2237.00*

POZMIX *90 SKs @ \$9.35 = \$841.50*

ORL *7 SKs @ \$23.42 = \$163.99*

CHLORIDE @

ASC @

Flo seal 55" @ \$2.92 = \$163.35

HANDLING *236.08 4% x @ \$2.48 = \$585.97*

MILEAGE *9.85 x 70 x @ \$2.62 = \$1792.70*

TOTAL *\$5874.32*

REMARKS:

Mix 25 SKs Cement 3265'

Mix 100 SKs Cement 2500'

Mix 40 SKs Cement 410'

Mix 10 SKs Cement 40'

Plug Mousehole 15 SKs Cement

Plug Rathole 30 SKs Cement

Frank Yarn

CHARGE TO: *Murfin*

STREET _____

CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB *3265'*

PUMP TRUCK CHARGE *\$1250.00*

EXTRA FOOTAGE @

MILEAGE *70 @ \$7.70 = \$539.00*

MANIFOLD @

LV mileage @ \$4.42 = \$308.00

TOTAL *\$2097.00*

PLUG & FLOAT EQUIPMENT

Plug @ \$107.64

TOTAL *\$107.64*

To: Allied Oil & Gas Services, LLC.

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

PRINTED NAME *Greg Mark*

SIGNATURE *Greg Mark*

SALES TAX (If Any) *650.35*

TOTAL CHARGES *2,078.96*

DISCOUNT *2,787.24* IF PAID IN 30 DAYS

34.50

8.05
all