



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
- Conv. to GSW
- Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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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

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total 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

- Letter of Confidentiality Received  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



1057645

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ 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 Wire-line Logs surveyed. Attach final geological well site report.

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 Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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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
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR. \_\_\_\_\_ Producing Method:  Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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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: _____ _____
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Conservation Division  
Finney State Office Building  
130 S. Market, Rm. 2078  
Wichita, KS 67202-3802



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

Mark Sievers, Chairman  
Ward Loyd, Commissioner  
Thomas E. Wright, Commissioner

Sam Brownback, Governor

June 14, 2011

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

Re: ACO1  
API 15-039-21125-00-00  
Moore 'A' 1-21  
SE/4 Sec.21-01S-29W  
Decatur 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  
 Moore 'A' #1-21  
 1160' FSL 1620' FEL  
 Sec. 21-T1S-R29W  
 2732' KB

MDCI  
 Aschwege #1-20  
 SE NW SE  
 Sec. 20-T1S-R29W  
 2583' KB

Formation	Sample Top	Datum	Ref	Log tops	Datum	Ref	Log tops	Datum
Anhydrite	2415	+317	+15	2416	+316	+14	2281	+302
B/Anhydrite	2446	+286	+14	2447	+285	+13	2311	+272
Neva	3080	-348	+13	3082	-350	+11	2944	-361
Topeka	3470	-738	+10	3466	-734	+14	3331	-748
Heebner	3622	-890	+15	3624	-892	+13	3488	-905
Lansing	3654	-922	+25	3667	-935	+12	3530	-947
Lansing D	3700	-968	+21	3701	-969	+20	3572	-989
Lansing G	3752	-1020	+18	3756	-1024	+14	3621	-1038
Lansing H	3787	-1055	+20	3788	-1054	+21	3658	-1075
Stark	3838	-1106	+18	3840	-1108	+16	3707	-1124
BKC	3889	-1157	+25	3892	-1160	+22	3765	-1182
RTD	3965						3799	
LTD				3966	-1234		3798	



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc  
250 N. Water Suite 300  
Wichita, KS 67202  
ATTN: Paul Gunzelman

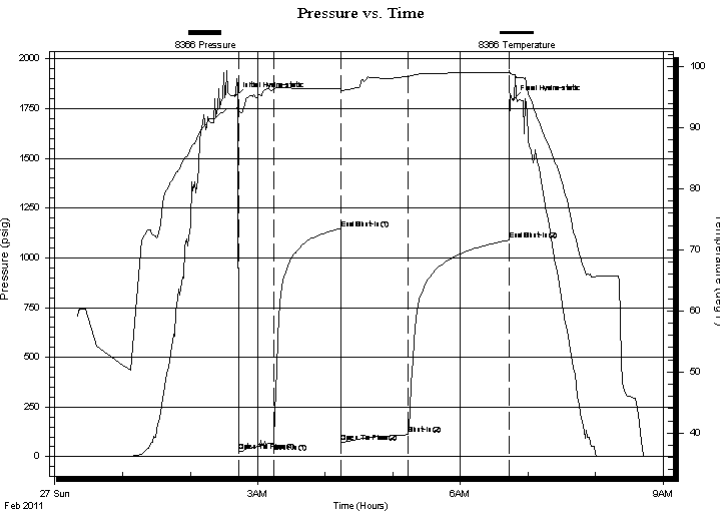
**Moore A #1-21**  
**21/1s/29w Decatur KS**  
Job Ticket: 040834 **DST#: 1**  
Test Start: 2011.02.27 @ 00:20:00

## GENERAL INFORMATION:

Formation: **LKC "A - G"**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 02:43:30  
Time Test Ended: 08:43:30  
Interval: **3667.00 ft (KB) To 3769.00 ft (KB) (TVD)**  
Total Depth: 3769.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole  
Tester: James Winder  
Unit No: 46  
Reference Elevations: 2732.00 ft (KB)  
2727.00 ft (CF)  
KB to GR/CF: 5.00 ft

**Serial #: 8366** **Inside**  
Press @ Run Depth: 111.16 psig @ 3668.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2011.02.27 End Date: 2011.02.27 Last Calib.: 2011.02.27  
Start Time: 00:20:05 End Time: 08:43:29 Time On Btm: 2011.02.27 @ 02:40:00  
Time Off Btm: 2011.02.27 @ 06:47:00

**TEST COMMENT:** IF: Blow built to 5"  
IS: Bled off, No blow back  
FF: Blow built to 5 1/4"  
FS: Bled off, No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1812.08	93.08	Initial Hydro-static
4	25.65	92.66	Open To Flow (1)
34	66.59	96.25	Shut-In(1)
94	1147.16	96.42	End Shut-In(1)
94	71.87	96.08	Open To Flow (2)
154	111.16	98.40	Shut-In(2)
243	1088.52	99.06	End Shut-In(2)
247	1794.65	98.69	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
176.00	MCW w/trace oil 68%w, 32%m	0.87
24.00	SOCWM 52%w, 46%w, 2%o	0.34

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co., Inc  
250 N. Water Suite 300  
Wichita, KS 67202  
ATTN: Paul Gunzelman

**Moore A #1-21**  
**21/1s/29w Decatur KS**  
Job Ticket: 040834      **DST#: 1**  
Test Start: 2011.02.27 @ 00:20:00

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.40 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1400.00 ppm			
Filter Cake: 2.00 inches			

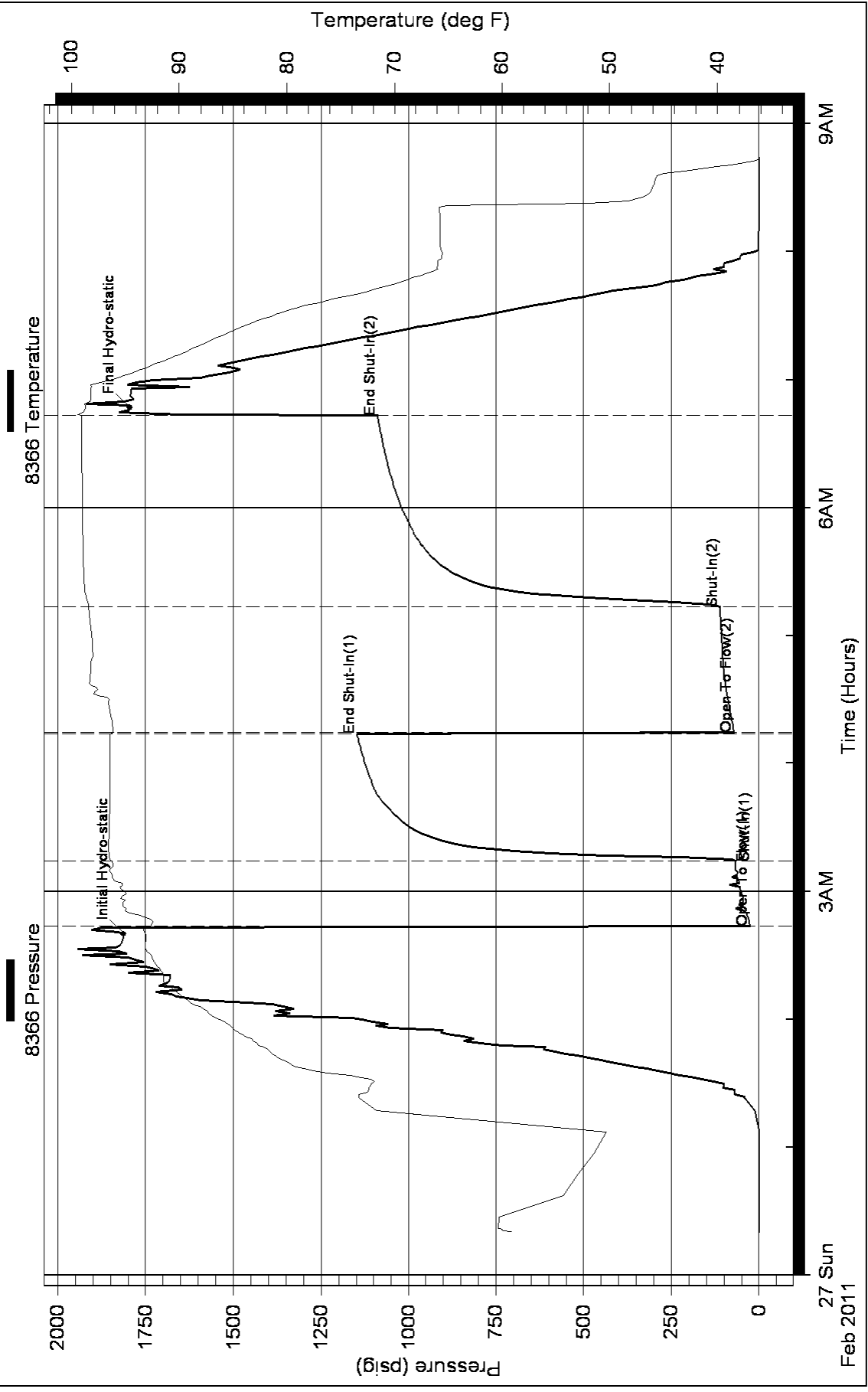
## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
176.00	MCW w/trace oil 68%w , 32%m	0.866
24.00	SOCWM 52%m, 46%w , 2%o	0.337

Total Length: 200.00 ft      Total Volume: 1.203 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments: RW= .172 ohms @ 61.9 deg F  
 Chlorides = 50,000 ppm

### Pressure vs. Time





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc  
250 N. Water Suite 300  
Wichita, KS 67202  
ATTN: Paul Gunzelman

**Moore A #1-21**  
**21/1s/29w Decatur KS**  
Job Ticket: 040835 **DST#: 2**  
Test Start: 2011.02.27 @ 23:37:00

## GENERAL INFORMATION:

Formation: **LKC "J - K"**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 01:47:00  
Time Test Ended: 06:15:00  
Interval: **3798.00 ft (KB) To 3870.00 ft (KB) (TVD)**  
Total Depth: 3870.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole  
Tester: James Winder  
Unit No: 46  
Reference Elevations: 2732.00 ft (KB)  
2727.00 ft (CF)  
KB to GR/CF: 5.00 ft

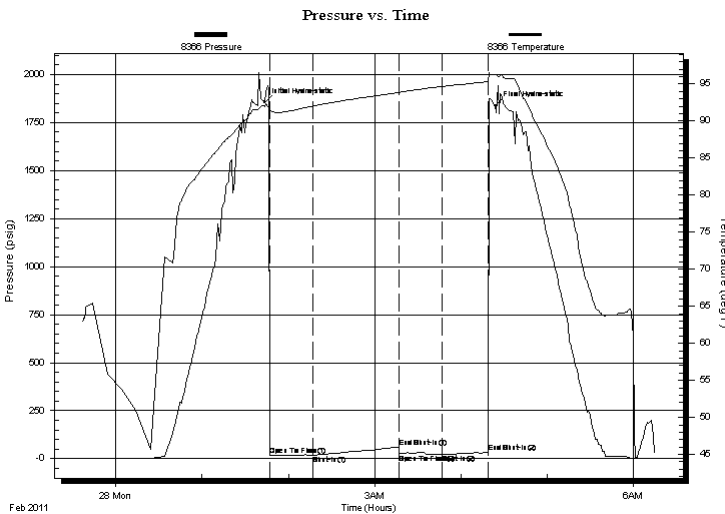
## Serial #: 8366

Inside

Press@RunDepth: 21.91 psig @ 3799.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2011.02.27 End Date: 2011.02.28 Last Calib.: 2011.02.28  
Start Time: 23:37:05 End Time: 06:14:59 Time On Btm: 2011.02.28 @ 01:43:30  
Time Off Btm: 2011.02.28 @ 04:24:00

TEST COMMENT: IF: Blow built to about 1/2", slow ly died back to 1/4" at close  
IS: Bled off, No blow back  
FF: No blow  
FS: No blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1854.61	92.00	Initial Hydro-static
4	18.06	91.47	Open To Flow (1)
34	19.31	92.02	Shut-In(1)
93	61.34	93.84	End Shut-In(1)
94	24.79	93.85	Open To Flow (2)
123	21.91	94.67	Shut-In(2)
155	32.19	95.31	End Shut-In(2)
161	1836.07	96.33	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
4.00	Mud 100%	0.02

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co., Inc  
250 N. Water Suite 300  
Wichita, KS 67202  
ATTN: Paul Gunzelman

**Moore A #1-21**  
**21/1s/29w Decatur KS**  
Job Ticket: 040835 **DST#: 2**  
Test Start: 2011.02.27 @ 23:37:00

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 60.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.80 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: 2.00 inches			

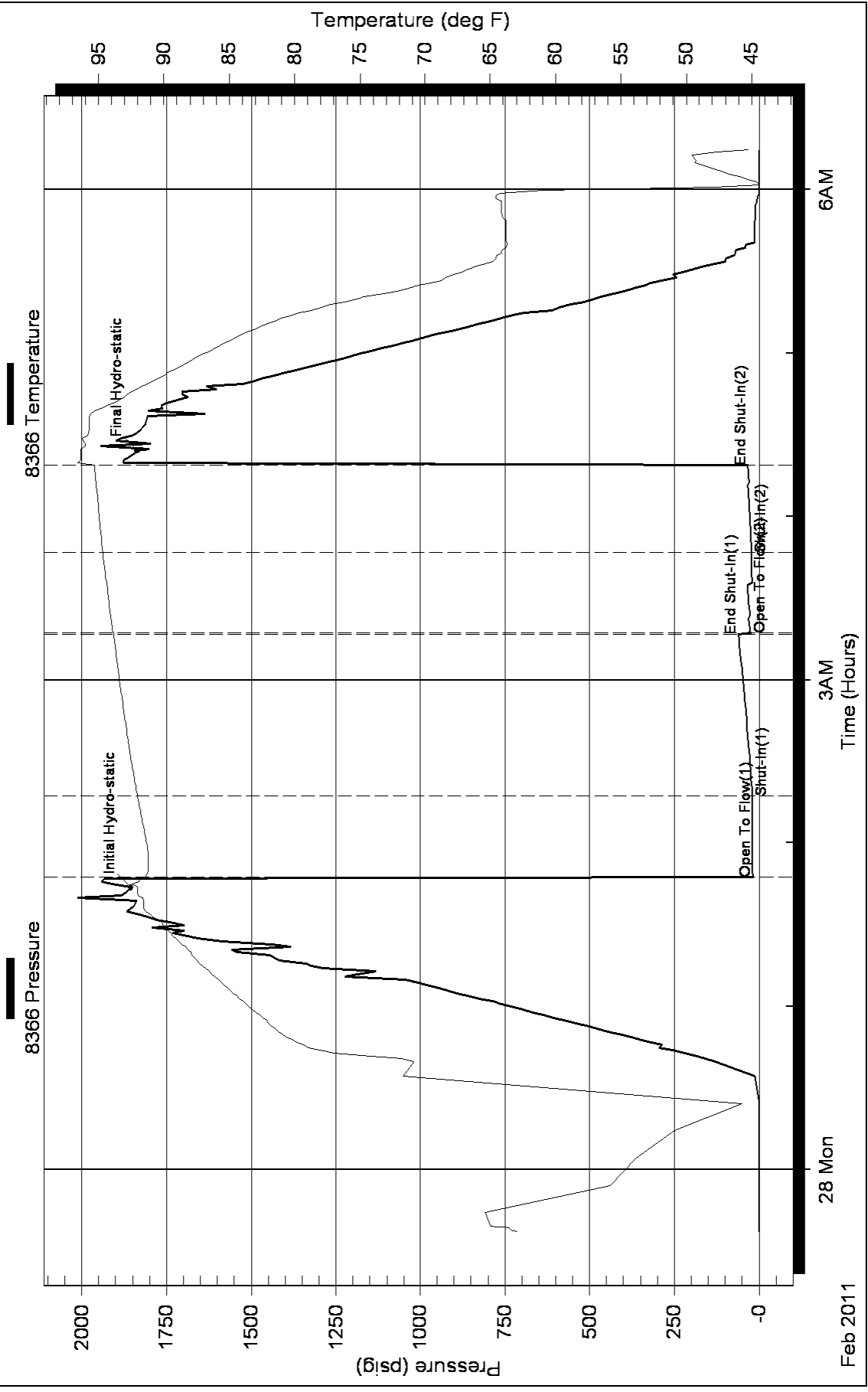
## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
4.00	Mud 100%	0.020

Total Length: 4.00 ft      Total Volume: 0.020 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

### Pressure vs. Time





PO BOX 31 Russell, KS 67665

LIZ  
Acct.

# INVOICE

Invoice Number: 126302

Invoice Date: Feb 22, 2011

Page: 1

**PROD COPY**

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

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

Federal Tax I.D.#: 20-5975804

*operator pay  
MDC  
Bn*

Customer ID	Well Name# or Customer P.O.	Payment Terms	
Murfin	Moore A #1-21	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Feb 22, 2011	3/24/11

Quantity	Item	Description	Unit Price	Amount
200.00	MAT	Class A Common	15.45	3,090.00
7.00	MAT	Chloride	58.20	407.40
207.00	SER	Handling	2.40	496.80
55.00	SER	Mileage 207 sx @ .10 per sk per mi	20.70	1,138.50
1.00	SER	Surface	1,018.00	1,018.00
55.00	SER	Pump Truck Mileage	7.00	385.00

Account	Unit	Qty	No.	Description

*Bonus 008 20 3863 4791.01 Cement S. Co. (2287.50)*

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

\$ *2287.50*

ONLY IF PAID ON OR BEFORE  
Mar 19, 2011

Subtotal	6,535.70
Sales Tax	255.31
Total Invoice Amount	6,791.01
Payment/Credit Applied	
<b>TOTAL</b>	<b>6,791.01</b>

*net - 2287.50  
4503.51*

# ALLIED CEMENTING CO., LLC. 040882

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:

Cathey, KS

DATE <u>2-22-11</u>	SEC. <u>21</u>	TWP. <u>15</u>	RANGE <u>29W</u>	CALLED OUT	ON LOCATION <u>6:00pm</u>	JOB START <u>6:30pm</u>	JOB FINISH <u>7:00pm</u>
LEASE <u>MOORE</u>	WELL# <u>1-21</u>		LOCATION <u>Cedar Bluffs, KS</u>		COUNTY <u>Decatur</u>	STATE <u>KS</u>	
OLD OR <input checked="" type="checkbox"/> NEW (Circle one)			<u>wt 5 + wt 5 + wt 5 in</u>				

CONTRACTOR Murfin #8  
 TYPE OF JOB Surface  
 HOLE SIZE 12 1/4 T.D. 263'  
 CASING SIZE 8 1/2 23# DEPTH 263'  
 TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_  
 PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_  
 MEAS. LINE \_\_\_\_\_ SHOE JOINT \_\_\_\_\_  
 CEMENT LEFT IN CSG. 15'  
 PERFS. \_\_\_\_\_  
 DISPLACEMENT 15.7

**EQUIPMENT**

PUMP TRUCK CEMENTER Fuzz  
 # 431 HELPER Darrin  
 BULK TRUCK \_\_\_\_\_  
 # 404 DRIVER Jerry  
 BULK TRUCK \_\_\_\_\_  
 # \_\_\_\_\_ DRIVER \_\_\_\_\_

**REMARKS:**

cement did circulate  
Approx 7 BALS  
Job complete @ 7:00pm  
Thanks Fuzz & crew

CHARGE TO: Murfin Dals  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

OWNER \_\_\_\_\_  
 CEMENT AMOUNT ORDERED 200 com 390c  
 COMMON 200 @ 15 45 3090<sup>00</sup>  
 POZMIX \_\_\_\_\_ @ \_\_\_\_\_  
 GEL \_\_\_\_\_ @ \_\_\_\_\_  
 CHLORIDE 7 @ 58<sup>20</sup> 407<sup>40</sup>  
 ASC \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 HANDLING 207 @ 2<sup>40</sup> 496<sup>80</sup>  
 MILEAGE 1045K mile 1138<sup>30</sup>  
 TOTAL 5132<sup>20</sup>

**SERVICE**

DEPTH OF JOB 263'  
 PUMP TRUCK CHARGE \_\_\_\_\_ 1018<sup>00</sup>  
 EXTRA FOOTAGE \_\_\_\_\_ @ \_\_\_\_\_  
 MILEAGE 55 @ 7<sup>00</sup> 385<sup>00</sup>  
 MANIFOLD \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 TOTAL 1403<sup>00</sup>

**PLUG & FLOAT EQUIPMENT**

\_\_\_\_\_  
 @ \_\_\_\_\_  
 @ \_\_\_\_\_  
 @ \_\_\_\_\_  
 @ \_\_\_\_\_  
 @ \_\_\_\_\_  
 TOTAL \_\_\_\_\_

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES \_\_\_\_\_  
 DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

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

PRINTED NAME Rodney Farr  
 SIGNATURE Rodney Farr



24 S. Lincoln Street  
P.O. Box 31  
Russell, KS 67665-2906

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

LIZ  
Acct.

# INVOICE

Invoice Number: 126402

Invoice Date: Mar 1, 2011

Page:

PROD COPY

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

Federal Tax I.D.#: 20-5975804

*Handwritten initials*

Customer ID	Well Name# or Customer P.O.	Payment Terms	
Murfin	Moore A #1-21 <i>moc</i>	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-03	Oakley	Mar 1, 2011	3/31/11

Quantity	Item	Description	Unit Price	Amount
132.00	MAT	Class A Common	15.45	2,039.40
88.00	MAT	Pozmix	8.00	704.00
8.00	MAT	Gel	20.80	166.40
55.00	MAT	Flo Seal	2.50	137.50
228.00	SER	Handling	2.40	547.20
55.00	SER	Mileage 228 sx @ .10 per sk per mi	22.80	1,254.00
1.00	SER	Plug to Abandon	1,185.00	1,185.00
55.00	SER	Pump truck mileage	7.00	385.00
1.00	EQP	8.5/8 Dry Hole Plug	40.00	40.00
<i>03600 008 W 3863 6929.97 (2260.47)</i>			<i>PTA</i>	

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

**\$ 2260.47**

ONLY IF PAID ON OR BEFORE  
**Mar 26, 2011**

Subtotal	6,458.50
Sales Tax	471.47
Total Invoice Amount	6,929.97
Payment/Credit Applied	
<b>TOTAL</b>	<b>6,929.97</b>

*- 2260.47*  
*4669.50*

# ALLIED CEMENTING CO., LLC. 039783

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:

OAKLEY

DATE <u>3-1-11</u>	SEC. <u>21</u>	TWP. <u>15</u>	RANGE <u>29W</u>	CALLED OUT	ON LOCATION <u>7:00 AM</u>	JOB START <u>10:00 AM</u>	JOB FINISH <u>10:30 AM</u>
MOORE "A" LEASE	WELL# <u>1-21</u>	LOCATION <u>cedar Bluffs, ks w+s+w</u>		COUNTY <u>DECATUR</u>	STATE <u>KS</u>		
OLD OR <input checked="" type="checkbox"/> NEW (Circle one)				<u>+s+w into</u>			

CONTRACTOR <u>MURFEN DRUG REG #8</u>	OWNER <u>same</u>
TYPE OF JOB <u>PTA</u>	
HOLE SIZE <u>7 7/8"</u>	T.D. <u>3956'</u>
CASING SIZE	DEPTH
TUBING SIZE	DEPTH
DRILL PIPE <u>4 1/2"</u>	DEPTH <u>2430'</u>
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT
CEMENT LEFT IN CSG.	
PERFS.	
DISPLACEMENT	

CEMENT AMOUNT ORDERED  
220 SKS 60/40 P02-4#921 1/4" P/O-SEAL

COMMON	<u>132 SK</u>	@ <u>15.75</u>	<u>2039.40</u>
POZMIX	<u>88 SKS</u>	@ <u>8.00</u>	<u>704.00</u>
GEL	<u>8 SKS</u>	@ <u>20.80</u>	<u>166.40</u>
CHLORIDE		@	
ASC		@	

**EQUIPMENT**

PUMP TRUCK	CEMENTER	<u>TERRY</u>
<u>#423-281</u>	HELPER	<u>LARENCE</u>
BULK TRUCK		
<u>#394</u>	DRIVER	<u>WELL</u>
BULK TRUCK		
<u>#</u>	DRIVER	

<u>P/O-SEAL 55</u>	@ <u>2.50</u>	<u>132.50</u>
HANDLING <u>228 SKS</u>	@ <u>2.40</u>	<u>547.20</u>
MILEAGE <u>104 PER SKI MILE</u>		<u>1254.48</u>
TOTAL		<u>4848.58</u>

REMARKS:

25 SKS AT 2430'  
100 SKS AT 1680'  
40 SKS AT 310'  
40 SKS AT 40'  
30 SKS RAT HOLE  
15 SKS MOUSE HOLE

THANK YOU

CHARGE TO: MURFEN DRUG, Co.  
STREET \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

SERVICE

DEPTH OF JOB	<u>2430'</u>	
PUMP TRUCK CHARGE		<u>1185.00</u>
EXTRA FOOTAGE	@	
MILEAGE <u>55</u>	@ <u>7.00</u>	<u>385.00</u>
MANIFOLD	@	
<u>PICK-UP MILEAGE 55</u>	@ <u>0.00</u>	<u>N/C</u>
TOTAL		<u>1570.00</u>

PLUG & FLOAT EQUIPMENT

<u>1-DRY Hole plug</u>	@ <u>40.00</u>	<u>40.00</u>
	@	
	@	
	@	
	@	
TOTAL		<u>40.00</u>

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

PRINTED NAME Robert Farr  
SIGNATURE Robert Farr

SALES TAX (If Any) \_\_\_\_\_  
TOTAL CHARGES \_\_\_\_\_  
DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS



## GEOLOGIST'S REPORT

OPERATOR **MURFIN DRILLING COMPANY, INC.**

LEASE **MOORE "A" # 1-21**

LOCATION **1160 FSL & 1620 FEL**

SEC. **21** TWS **1S** RGE **29W**

COUNTY **DECATUR** STATE **KANSAS**

FIELD **WILDCAT**

CONTRACTOR Murfin Drilling Company RIG NO. 8

COMMENCED 22 Feb. 2011 COMPLETED 1 March 2011

MUD DISPLACED 2877 MUD TYPE Chemical

DRILLING TIME KEPT FROM 3000 TO 3965

SAMPLES SAVED FROM 3000 TO 3965

SAMPLES EXAMINED FROM 3000 TO 3965

GEOLOGICAL SUPERVISION FROM 3065 TO 3965

GEOLOGIST ON WELL Paul Gunzelman

### ELEVATIONS

KB **2732 Ft.**

GL **2727 Ft.**

ALL MEASUREMENTS FROM K.B.

### CASING RECORD

Conductor None

Surface 8 5/8" @ 263'

Production None

### ELECTRICAL SURVEYS:

**Log-Tech, Inc.**

Comp. Neutron Density

Dual Induction

Micro-resistivity

Comp. Sonic

21

FORMATION NAME	LOG DATUM		SAMPLE DATUM	
	TOP	DATUM	TOP	DATUM
Stone Corral	2416	+316	2415	+317
Base/Anhydrite	2447	+285	2446	+286
Neva	3082	-350	3080	-348
Foraker	3204	-472	3200	-468
Topoka	3466	-734	3470	-738
Heebner Shale	3624	-892	3622	-890
Lansing	3667	-935	3665	-933
Stark Shale	3840	-1108	3838	-1106
Base/Kansas City	3892	-1160	3889	-1157
Total Depth	3966	-1234	3965	-1233

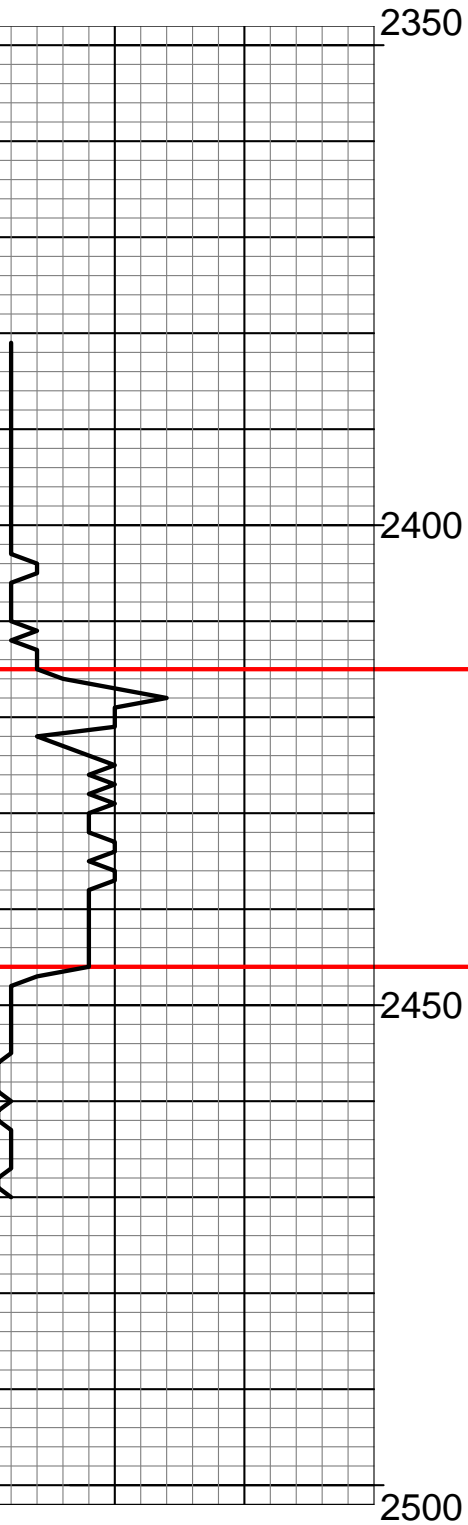
### REMARKS

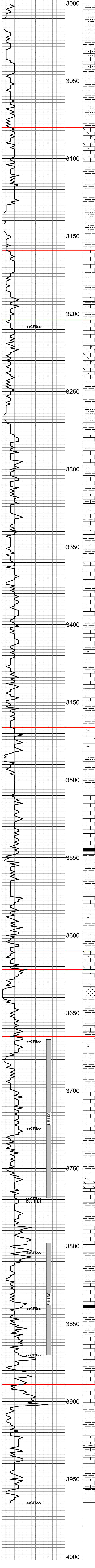
API 15-039-21125-00-00  
 Drilling Fluids: Morgan Mud, Inc. (David Lines, engineer)  
 Drill Stem Testing: Trilobite Testing, Inc. (James Winder, tester)  
 Gas Trailer: No Gas Trailer  
 Reserve Pit Chlorides:

REMARKS	SAMPLE DESCRIPTIONS	SHOWS	LITHOLOGY	DEPTH	DRILL TIME (MIN/FT)
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**STONE CORRAL**  
2415 (+317)

**BASE/ANHYDRITE**  
2446 (+286)





Sh: Lt rd-brn, v.sft & gum.  
Stst: Rd-brn & crm, arg-shly, some sdy, cons intbd lt rd-brn gum sh.  
Sh: Lt rd-brn, v.gum, some dk rd-brn shly Ls, tr slty.  
Ls: Crm, gran, chky, v.sly, cons crm lmy sltst, some mott w/rd-brn sh, gd intgran por, n/s.  
Sh: Rd-brn & lt rd-brn, tr rd-or, blkly gum, some sly, tr v.arg Ls, n/s.  
Sh: Lt rd-brn, v.sft & gum, some lt gy-gn sli arg sltst.  
Sh: Lt rd-brn, v.gum, some slty.  
Ls: Wh-crm, gran-frag, ool, v.chky, bcm fxln & dns, n/s.  
Ls: Crm, tr crm-tn, gran, dol, some spr calc, fr-gd intgran por, n/s.  
Ls: Trn-lt brn, fxln, tr ool, bcm lt gy-brn, tr yel, fxln-gran, arg, some slty, intbd gy fis-blky calc sli pyr sh, n.v.p.  
Sh: Rd-brn & lt rd-brn, blkly, gum some slty.  
Stst: Lt gy, v.glauc, some sdy, bcm lt gy & lt yel vgt sli calc sltst, occ rd-brn v.arg sdy sltst, much rd-brn & lt rd-brn v.gum sh.  
Sh: Lt rd-brn tr lt gy & gn-gy, v.gum tr slty.  
Ls: Crm, gran-med gran, v.chky, tr amor calc, n/s.  
Ls: Crm-gy, fxln-gran, mott w/dk gy sh inc, tr silic, r.bm op foss cht, bcm gy fxln arg shly dns Ls, n/s.  
Sh: Lt gy, blkly, gum occ slty, tr mica, cons carb mat.  
Sh: Lt gy tr crm & gy-gn, v.gum, occ slty, intbd wh & lt gn slty arg v.chky Ls, n/s.  
Ls: Crm-tn mott w/dk gy sh, fxln, cons lt gn & blu-gn v.gum sh.  
Ls: Crm, gran-frag, v.chky & gum, sli dol, tr amor calc, fr intgran por, n/s.  
Ls: Crm-tn, fxln, smwt dol, tr spr calc, bcm crm & dk gy mott frag, sli loss (Fus) cons dk gy sh inc, some gy & dk gy intbd sh.  
Ls: Gy, fxln-gran, arg, cons chk, some org rem, much dk gy sh, tr lt gy op frs cht, n/s.  
Ls: Crm & crm-tn, vfnly gran, dol, some mott w/gy sh, fr intgran por, n/s.  
Sh: Gy, fis, calc, sli mica, cons carb mat, some slty, bcm v.lt rd-brn & gum.  
Sh: Rd-brn & lt rd-brn, blkly, sty, occ sdy, much gum, tr calc-lmy.  
Sh: Lt gy-gn & v.lt gn, gum, sft, intbd crm gran-frag ool sbchky Ls, n.v.p.  
Ls: Gy, tr crm-gy, v.fnly gran, slty, arg-shly, tr mica, bcm crm gran v.chky, intbd gy & lt gy fis sh, n/s.  
Ls: Crm, frag, ool, chky, some lt gy-gy & yel arg gran Ls, much rd-or & lt rd-brn gum sh, n/s.  
Sh: Rd-brn mar & purp, blkly, slty, some purp & dk rd-brn shly ool Ls.  
Ls: Crm-tn, some lt gy-gn & yel, fn-vfxln, tr chk, occ arg-shly, gen dns, n/s.  
Ls: Yel tn & gn-gy, frag, ool, arg, intbd gy-gn & lt gy fis sh.  
Sh: Rd-brn & lt rd-or, blkly, slty, some gum, intbd rd-brn & yel v.arg Ls.  
Ls: Trn-lt gy, v.fn gran, dol, tr org rem, sli chky, pr intgran por, n/s.  
Ls: Gy, fxln, cons org rem, arg, dns, n/s.  
Sh: Gy & gn-gy, fis, some gum, bcm rd-brn gum, tr calc-lmy.  
Ls: Crm-lt gy, tr yel, fxln, chky, glauc, some org rem, occ arg, n.v.p.  
Sh: Lt gy, some lt rd-brn, v.gum.  
Ls: Crm-lt gy, fxln, glauc, tr org rem, sbchky, some arg, n/s.  
Ls: Crm, fxln, sbchky, foss (Fus) intbd lt gn & gy-gn fis sh, n/s.  
Sh: Lt rd-brn sft, v.gum.  
Ls: Wh-crm, fxln, chky, tr org rem, occ amor calc, fr pp por, n/s.  
Sh: Lt rd-brn & rd-brn, blkly, occ lmy, much gum intbd crm yel & rd-brn mott xln-frag Ls, n/s.  
Sh: Rd-brn, blkly, some slty, cons lt rd-brn & lt gy v.gum sh.  
Ls: Crm, fxln, ool, cons sec calc, occ mott w/rd-brn sh, n.v.p, n/s.  
Ls: Crm, fxln-frag, ool, sbchky, tr glauc, n/s.  
Stst: Crm, calc-lmy, occ sdy some sbchky, bcm pnk lt rd-brn & rd-brn arg-shly sltst.  
Sh: Lt rd-brn v.gum, tr blu-gn thk fis sh.  
Sh: Lt rd-brn, v.gum, tr slty.  
Ls: Crm, fn-vfxln, tr spr calc, r.org rem, some sbchky, n.v.p.  
Ls: Wh-crm, fn-vfxln, sbchky, tr org rem, some spr calc, n.v.p, n/s.  
Ls: Crm, tr crm-tn, fn-vfxln, tr org rem, cons spr calc, some sbchky, n/s.  
Ls: Crm-tn, fxln, sbchky, cons spr calc, tr org rem, bcm tn-lt brn fn-vfxln smwt arg & dns, n/s.  
Sh: Dk gy-brn & dk gy, fis, some carb, bcm v.lt rd-brn & lt gy v.gum, w/brn gran arg Ls, n/s.  
Sh: Lt rd-brn, sft, v.gum, some rd-brn blkly sly sh & gy-gn fis sli calc.  
Ls: Crm-lt gy, fxln, tr ool & org rem, some spr calc, occ sbchky, bcm arg, n.v.p.  
Sh: Lt rd-brn, v.gum.  
Ls: Wh, fxln-frag, ool, v.chky, some sec calc, pr intool por, n/s.  
Sh: Rd-brn, gum, occ dk rd-brn v.arg sltst.  
Ls: Crm-lt gy, fxln, cons chky, sli ool, bcm wh-crm fxln-gran dol, sli pyr, occ amor calc, fr pp & intgran por, n/s.  
Sh: V.dk gy, fis, much carb mat, bcm dk gy fis sli pyr & rd-brn blkly ea occ gum.  
Sd: Lt gy, vfn-fn ang-sbrnd wl-cmt clus, some gy sh inc, pr intgran por, n/s.  
Sh: Lt rd-brn v.gum rd-brn silky ea occ slty & gy-gn fis pyr sh.  
Ls: Crm, fn-vfxln, tr org rem & spr calc, occ sbchky, some v.lt gn & pnk arg Ls, n.v.p, n/s.  
Ls: Crm, v.fxln dns, tr ool, bcm v.lt gy & slty, some arg, n/s.  
Sh: V.lt gy, fn-vfxln, ool, sbchky, occ spr calc, tr pyr, pr intool por, no odor, no FO, spty dk brn stn, tr blk tar O.  
Sh: Rd-brn, blkly ea, some gum, cons gy-gn crm yel & rd-brn mott arg-shly frac Ls.  
Sh: Rd-brn, thk fis, ea, some lt rd-brn gum, tr v.dk gy thn fis carb sh.  
Ls: Crm-lt gy, fn-vfxln, occ sbchky, pr pp por, no odor, no FO, lt brn absat stn, some gy-gn arg & dns.  
Ls: V.lt gy, fxln-frag, sli ool, no FO, spr calc, pr intool & pp por, v.sli odor, no FO, spty lt stn, bcm v.fxln dns.  
Sh: Gn & gy-gy, fis, pyr, occ calc.  
Ls: Crm & lt gy-gn, fn-vfxln, dns, some sbchky, n/s.  
Sh: V.dk gy-blk, thn fis, carb.  
Sh: Rd-brn, lt brn & rd-or, blkly, ea, some slty, much gum.  
Sh: Rd-brn, blkly, slty, w/lt rd-or v.gum sh.  
Dol: Crm & lt gy, mott w/rd-brn sh, gran, tr spr calc & pyr, fr intgran por, n/s.  
Ls: Lt gy & gn-gy, some crm-gy, vfxln, sbchky, occ arg, tr pyr, dns, n/s.  
Ls: Crm, tr v.lt gy, fxln, sbchky, r.spr calc, n.v.p.  
Sh: Rd-brn, thk fis-blk, ea, some slty, occ tn & rd-brn Ls pel, cons lt rd-or gum sh.  
Ls: Crm, fn-vfxln, some sbchky, tr org rem & glauc, occ lt gy & lt gy-gn fxln arg Ls, n.v.p.  
Ls: Crm, fxln, occ vfxln, some sbchky, sli foss (Fus) tr pyr, gy-gn & lt gn intbd sh, n.v.p.  
Sh: Lt gy-gn, fis, calc-lmy, tr org rem, r.pyr.  
Sh: Rd-brn, thk fis, ea, some gy-gn fis sh.  
Ls: Lt gy & gy-gn, vfxln sli arg, tr foss (Brach) dns, bcm crm fn-vfxln sbchky, tr pyr, pr pp por, v.faint odor, no FO, v.lt spty stn & edge stn, tr blk asph res.  
Crm, vfxln, dns, tr sbchky, occ spr calc, r.org rem, n/s.  
Sh: Dk gy, fis, cons carb mat.  
Sh: Rd-brn, blkly some rd-brn arg sltst & lt rd-brn dns arg Ls, intbd lt glm & gy-gn fis sh.  
Ls: V.lt gy, some yel & lt gn, fn-vfxln, much mott w/rd-brn sh, frac, tr pyr, dns n/s.  
Ls: Wh-crm, vfxln, tr microxln, sbchky, r.org rem, dns, tr pr pp por, v.sli odor (crush) no FO, tr spty stn.  
Sh: Lt rd-brn & lt brn, v.gum.  
Ls: Crm, fn-vfxln, ool, wl-cmt, sbchky-chky, r.pyr, some lt gn fis calc sh, n.v.p, n/s.  
Sh: Dk gy, thn fis, cons carb mat, bcm rd-brn ea, some v.glauc sltst & crm vfxln dns Ls.  
Sh: Rd-brn, some rd-or & brn thk fis, ea, occ sdy, tr crm yel & rd-brn arg Ls.  
Sh: Rd-brn, some brn mar & purp, occ slty, tr gum.  
Ls: Crm & yel mott, fxln-frag, ool, tr org rem, some spr calc, bcm lt gy gran slty, occ v.arg, tr pyr, n.v.p, n/s.  
Sh: Rd-brn, tr rd-or & purp, occ slty, tr org rem, intbd gy-gn & gn fis occ slty sli pyr sh, some yel & crm mott Ls.  
Ls: Crm lt gy yel some gn, gran, slty, occ mott w/rd-brn sh, some crm fxln dns Ls, cons rd-brn blkly sh, some gum.

NEVA

3080 (-348)

Morgan Mud check @ 3120'  
Vis: 74, Wt: 8.8, WL: 6.4  
Chlor: 800 ppm, LCM: 8#

RED EAGLE

3159 (-427)

FORAKER

3204 (-472)

TOPEKA

3466 (-734)

OREAD

3610 (-878)

HEEBNER SHALE

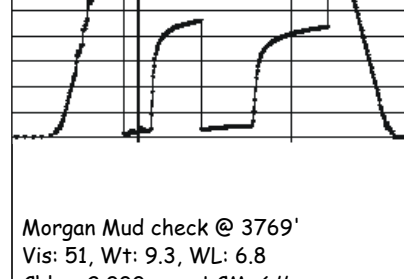
3622 (-890)

Morgan Mud check @ 3664'  
Vis: 69, Wt: 9.1, WL: 6.4  
Chlor: 1,400 ppm, LCM: 6#

LANSING

3665 (-933)

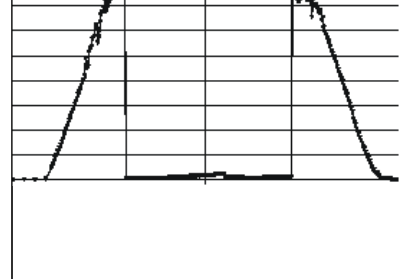
DST # 1 3667 - 3769  
30"-60"-60"-90"  
IF: Fair blow incr. to 5 inches  
FF: Fair blow incr. to 5 1/2 inches  
RECOVERY:  
24 Ft. Sil. Oil & Wtr Cut Mud  
(2%Oil, 46%Wtr)  
176 Ft. Muddy Water w/tr Oil  
(Chlor: 50,000 ppm.)  
IHP: 1812 psi. FHP: 1795 psi.  
IFP: 26-67 psi. ISIP: 1147 psi.  
FFP: 72-11 psi. FSIIP: 1089 psi.  
BHT: 99 deg. F.



Morgan Mud check @ 3769'  
Vis: 51, Wt: 9.3, WL: 6.8  
Chlor: 2,000 ppm, LCM: 6#

DST # 2

DST # 2 3798 - 3870  
30"-60"-30"-30"  
IF: Weak 1/2" blow  
FF: No blow  
RECOVERY  
4 Ft. Mud  
IHP: 1855 psi. FHP: 1836 psi.  
IFP: 18-19 psi. ISIP: 61 psi.  
FFP: 25-22 psi. FSIIP: 32 psi.  
BHT: 95 deg. F.



Morgan Mud check @ 3870'  
Vis: 50, Wt: 9.2, WL: 6.4  
Chlor: 2,000 ppm, LCM: 6#

BASE/KANSAS CITY

3889 (-1157)

Trip @ 3903' to replace bit nozzles.

TOTAL DEPTH

3965 (-1233)

6:40 PM, 28 February 2011

Operator: MURFIN DRILLING COMPANY, INC.  
Lease: MOORE "A" # 1-21  
Location: 1160 FSL & 1620 FEL SEC. 21 TWSP 1S RGE 29W  
County: DECATUR State: KANSAS