



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1087023
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: _____

1087023

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 <i>(Attach Additional Sheets)</i> | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Log | Formation (Top), Depth and Datum | <input type="checkbox"/> Sample |
| Samples Sent to Geological Survey | <input type="checkbox"/> Yes <input type="checkbox"/> No | Name | Top | Datum |
| 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: | | | | |

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

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

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

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

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

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

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: 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 |
|-----------------------------------|-----------|---------|-------------|---------------|---------|
| | | | | | |

| | | |
|--|---|---|
| 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> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ | PRODUCTION INTERVAL: _____ _____ |
|--|---|---|

| | |
|-----------|--------------------------|
| Form | ACO1 - Well Completion |
| Operator | Falcon Exploration, Inc. |
| Well Name | GERALD JANTZ 1-26(NW) |
| Doc ID | 1087023 |

All Electric Logs Run

| |
|---------|
| |
| MEL |
| DIL |
| BHCS |
| CNL/CDL |



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Falcon Expl.
125 N Market Wichita Ks 67202
ATTN: Dave Williams

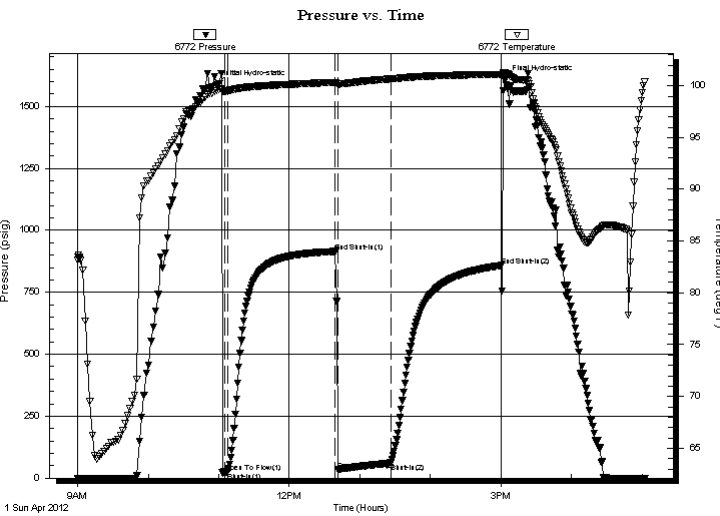
26/28/30
Gerald Jantz 1-26
Job Ticket: 41257 **DST#: 1**
Test Start: 2012.04.01 @ 09:00:00

GENERAL INFORMATION:

Formation: **Stotler**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:05:00
Time Test Ended: 17:02:30
Interval: 3443.00 ft (KB) To 3530.00 ft (KB) (TVD)
Total Depth: 3530.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Initial)
Tester: Harley Davidson
Unit No: 58
Reference Elevations: 2768.00 ft (KB)
2755.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6772 Inside
Press @ Run Depth: 61.62 psig @ 3444.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.04.01 End Date: 2012.04.01 Last Calib.: 2012.04.01
Start Time: 09:00:05 End Time: 17:02:29 Time On Btm: 2012.04.01 @ 10:58:30
Time Off Btm: 2012.04.01 @ 15:03:15

TEST COMMENT: IF- Weak building blow 2" into bucket.
IS- No blow back.
FF- Weak building blow 4" into bucket.
FS- No blow back.



| PRESSURE SUMMARY | | | |
|------------------|-----------------|--------------|----------------------|
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
| 0 | 1589.39 | 99.56 | Initial Hydro-static |
| 7 | 22.00 | 99.44 | Open To Flow (1) |
| 9 | 24.23 | 99.52 | Shut-In(1) |
| 101 | 914.71 | 100.34 | End Shut-In(1) |
| 103 | 33.76 | 100.17 | Open To Flow (2) |
| 148 | 61.62 | 100.65 | Shut-In(2) |
| 242 | 858.34 | 101.11 | End Shut-In(2) |
| 245 | 1606.62 | 101.22 | Final Hydro-static |

| Recovery | | |
|-------------|-------------|--------------|
| Length (ft) | Description | Volume (bbl) |
| 100.00 | 100% mud | 0.49 |
| | | |
| | | |
| | | |
| | | |

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Falcon Expl.
125 N Market Wichita Ks 67202
ATTN: Dave Williams

26/28/30
Gerald Jantz 1-26
Job Ticket: 41257 **DST#: 1**
Test Start: 2012.04.01 @ 09:00:00

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: 54.00 sec/qt | Cushion Volume: bbl | | |
| Water Loss: 8.18 in ³ | Gas Cushion Type: | | |
| Resistivity: ohm.m | Gas Cushion Pressure: psig | | |
| Salinity: 2500.00 ppm | | | |
| Filter Cake: inches | | | |

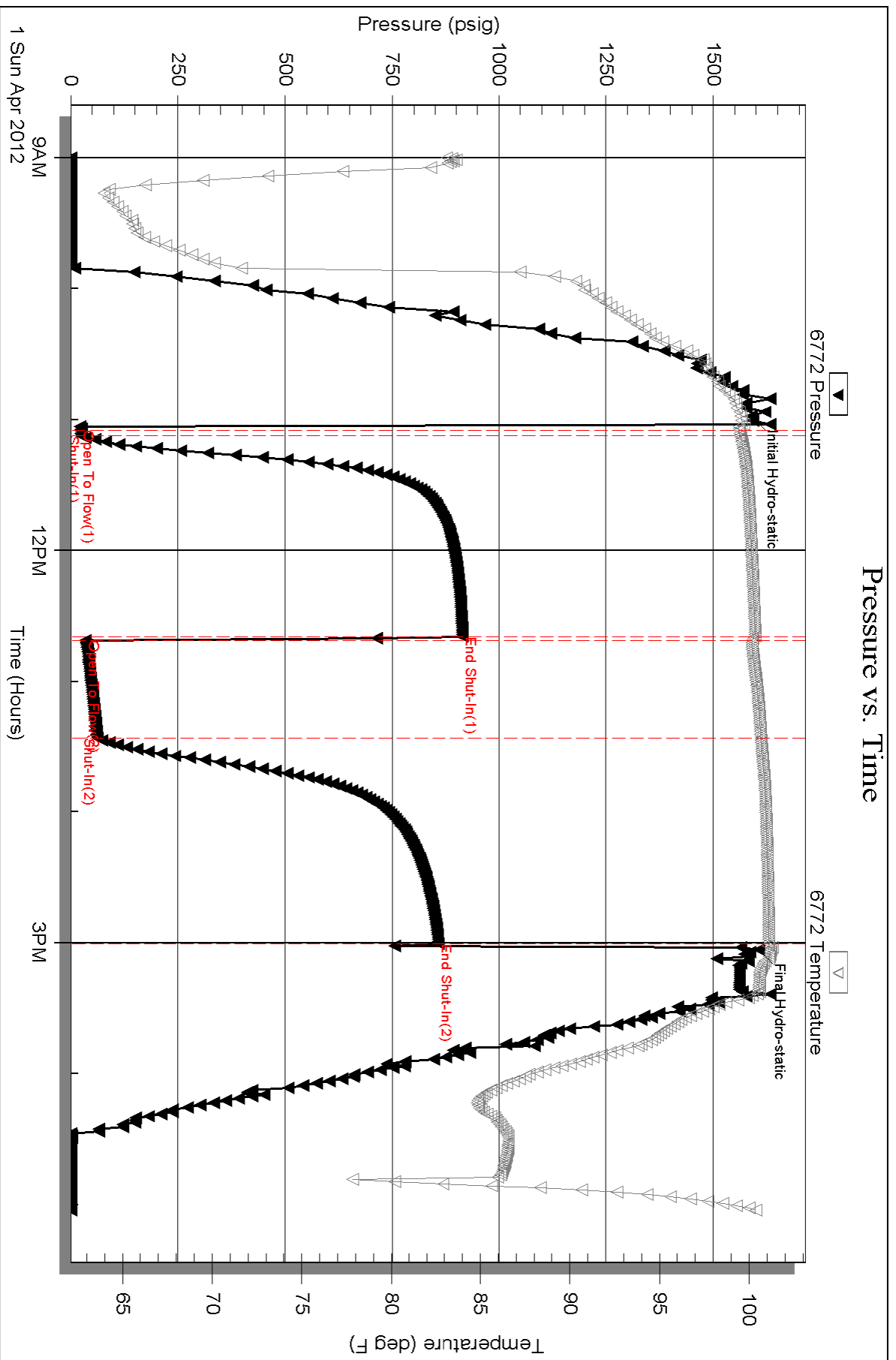
Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-------------|---------------|
| 100.00 | 100% mud | 0.492 |

Total Length: 100.00 ft Total Volume: 0.492 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Pressure vs. Time





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Falcon Expl.
125 N Market Wichita Ks 67202
ATTN: Dave Williams

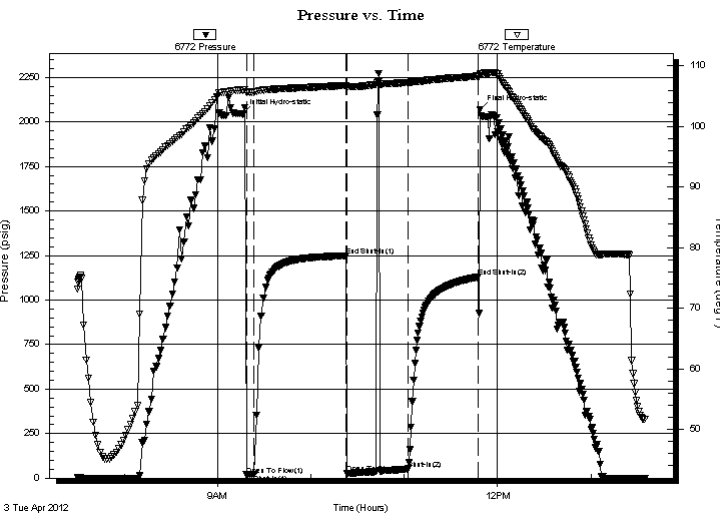
26/28/30
Gerald Jantz 1-26
Job Ticket: 41258 **DST#: 2**
Test Start: 2012.04.03 @ 07:30:00

GENERAL INFORMATION:

Formation: **Lansing A, B**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:18:30
Time Test Ended: 13:34:45
Interval: 4188.00 ft (KB) To 4245.00 ft (KB) (TVD)
Total Depth: 4245.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Initial)
Tester: Harley Davidson
Unit No: 58
Reference Elevations: 2768.00 ft (KB)
2755.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6772 Outside
Press @ Run Depth: 52.06 psig @ 4189.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.04.03 End Date: 2012.04.03 Last Calib.: 2012.04.03
Start Time: 07:30:05 End Time: 13:34:44 Time On Btm: 2012.04.03 @ 09:16:30
Time Off Btm: 2012.04.03 @ 11:48:45

TEST COMMENT: IF- Weak surface blow .
IS- No blow back.
FF- No blow .
FS- No blow back.



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2044.16 | 106.03 | Initial Hydro-static |
| 2 | 18.27 | 105.69 | Open To Flow (1) |
| 7 | 22.46 | 105.67 | Shut-In(1) |
| 66 | 1248.43 | 106.77 | End Shut-In(1) |
| 67 | 24.88 | 106.56 | Open To Flow (2) |
| 106 | 52.06 | 107.25 | Shut-In(2) |
| 151 | 1128.23 | 108.32 | End Shut-In(2) |
| 153 | 2066.89 | 108.67 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 60.00 | 100% mud | 0.30 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Falcon Expl.
125 N Market Wichita Ks 67202
ATTN: Dave Williams

26/28/30
Gerald Jantz 1-26
Job Ticket: 41258 **DST#: 2**
Test Start: 2012.04.03 @ 07:30:00

Mud and Cushion Information

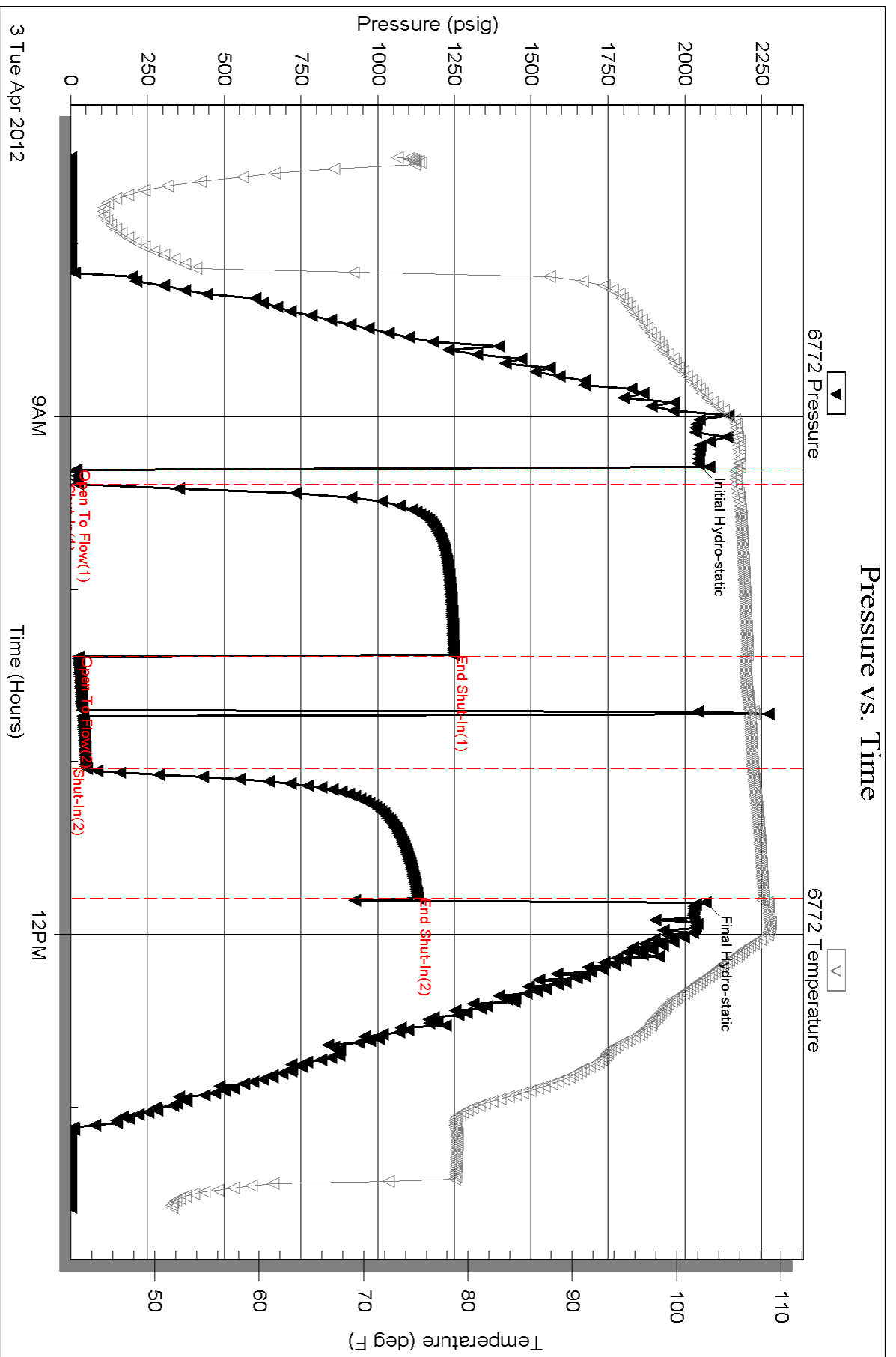
| | | | |
|----------------------------------|----------------------------|-----------------|---------|
| Mud Type: Gel Chem | Cushion Type: | Oil API: | deg API |
| Mud Weight: 9.00 lb/gal | Cushion Length: ft | Water Salinity: | ppm |
| Viscosity: 53.00 sec/qt | Cushion Volume: bbl | | |
| Water Loss: 9.18 in ³ | Gas Cushion Type: | | |
| Resistivity: ohm.m | Gas Cushion Pressure: psig | | |
| Salinity: 3300.00 ppm | | | |
| Filter Cake: inches | | | |

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-------------|---------------|
| 60.00 | 100% mud | 0.295 |

Total Length: 60.00 ft Total Volume: 0.295 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:



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

July 11, 2012

CYNDE WOLF
Falcon Exploration, Inc.
125 N MARKET STE 1252
WICHITA, KS 67202-1719

Re: ACO1
API 15-069-20368-00-00
GERALD JANTZ 1-26(NW)
NW/4 Sec.26-28S-30W
Gray 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,
CYNDE WOLF



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

Well Name: GERALD JANTZ #1-26 (NW)
Location: SE-SE-NW-NW 1/4
License Number: A.P.I. # 15-069-20368-00-00
Spud Date: 3/27/12
Surface Coordinates: 1024' FNL & 1121' FWL

Region: Gray Co., KS.
Drilling Completed: 4/4/12

Bottom Hole
Coordinates:
Ground Elevation (ft): 2755' K.B. Elevation (ft): 2768'
Logged Interval (ft): 1875' To: 4406' Total Depth (ft): 4400'
Formation: Lanssing
Type of Drilling Fluid: Chemical Mud

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

OPERATOR

Company: Falcon Exploration, Inc.
Address: 125 North Market Street, Ste. #1252
Wichita, Kansas 67202

GEOLOGIST

Name: David P. Williams
Company: DW Energy, LLC
Address: 312 North Broadview Street
Wichita, Kansas 67208

Casing & Deviation Survey's

Spud at 10:45 AM on 03/27/12. Drilled 12-1/4" to 1880'. Ran 46 joints of new 24#, 8-5/8" casing. Talled 1856'. Set at 1875' KB . Welded straps on GS & bottom 3 joints, then tack welded all collars. Float insert in 1st collar. Centralizers (3) 14-23-33. Baskets (3) 1-19-42. Cemented with 675 sks 65/35 Poz; 6% Gel; 3% CC, 1/4# FS.; Tailed wiith 150 sks Class A; 2% Ge; 3% CC. Cement did circulate to pit. Plug down at 5:45 AM on 03/29/12. Allied Cementing ticket #53375.

Deviation Survey's Taken: @ 1880'= 1/2 degree; @ @ 3530' = 3/4 degrees; @ 4245' = 1/2 degree; @ 4400' = 1 degree.

DSTs

DST # 1 3461'-3532'. Times: 5"- 90"- 45"- 90"; Blow: IF Weak 2" Surface Blow. FF Weak 2" Blow Sli Inc to 4". Recovery: 100' DM (100% M). Pressures: IH= 1589#; FH= 1606#; IF= 22-24#; FF= 34-62#; ISIP= 915#; FSIP= 858#. Temp= NC degrees F.

DST # 2 4188'-4245'. Times: 5"- 60"- 40"- 30"; Blow: IF= Weak 1/2" Surface Blow. FF= No Blow Flushed Tool @ 20"= No Blow. Recovery: 600' DM (100% M). Pressures: IH= 2044#; FH= 2067#; IF= 18-22#; FF= 25-52#; ISIP= 1248#; FSIP= 1128#; Temp= NC degrees F.

Comments

After review of all of the pertinent geological and structural data, drill test test recoveries and reservoir pressures including electric logs analyses, it was recommended by all parties to plug and abandoned this test well as a dry hole..

Respectfully submitted,

David P. Williams, P. G.

ROCK TYPES

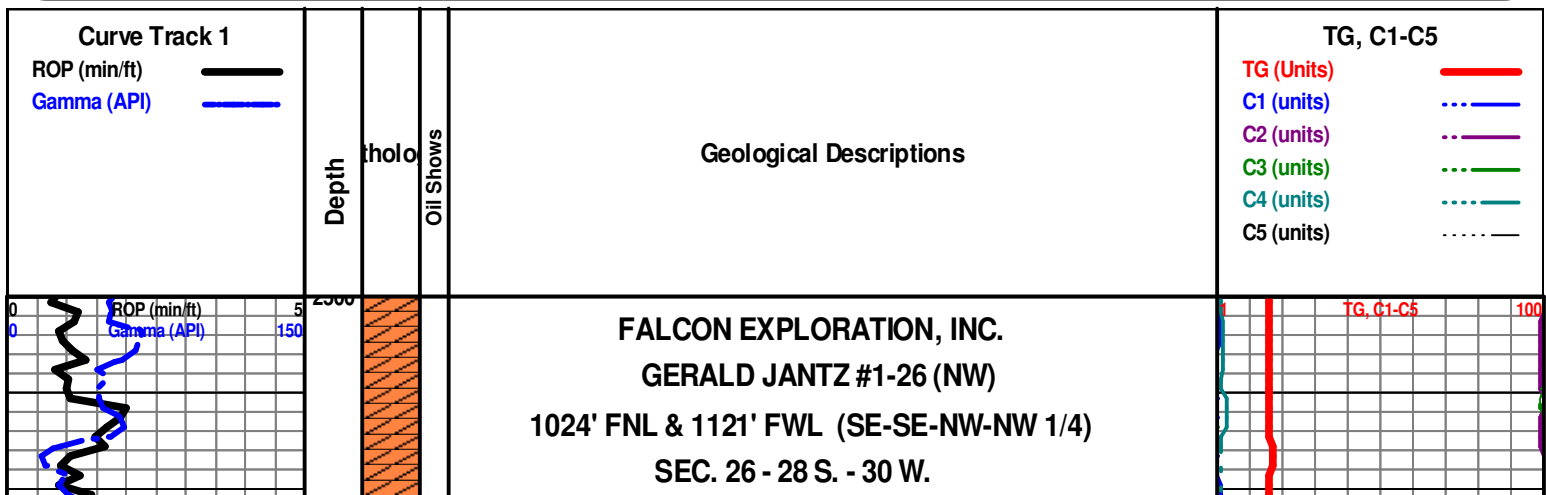
| | | | | | | | | | |
|--|---------|--|--------|--|-----------|--|-----------|--|-------|
| | Anhy | | Clyst | | Gry shale | | Mrlst | | Shgy |
| | Bent | | Coal | | Gyp | | Red shale | | Sltst |
| | Brec | | Congl | | Igne | | Salt | | Ss |
| | Carb sh | | Dol | | Lmst | | Shale | | Till |
| | Cht | | Grn sh | | Meta | | Shcol | | |

ACCESSORIES

| | | | | | | | |
|----------------|----------|---------------|---------|------|---------|-----------------|----------------|
| MINERAL | | Hvymin | | Belm | | Pellet | TEXTURE |
| | Anhy | | Kaol | | Bioclst | | Boundst |
| | Arggrn | | Marl | | Brach | | Chalky |
| | Arg | | Minxl | | Bryozoa | | Cryxln |
| | Bent | | Nodule | | Cephal | STRINGER | Earthy |
| | Bit | | Phos | | Coral | | Finexln |
| | Brecfrag | | Pyr | | Crin | | Grainst |
| | Calc | | Salt | | Echin | | Lithogr |
| | Carb | | Sandy | | Fish | | Microxln |
| | Chtdk | | Silt | | Foram | | Mudst |
| | Chtlt | | Sil | | Fossil | | Packst |
| | Dol | | Sulphur | | Fuss | | Wackest |
| | Feldspar | FOSSIL | | | Gastro | | |
| | Ferrpel | | Algae | | Oolite | | |
| | Ferr | | Amph | | Oomold | | |
| | Glau | | | | Ostra | | |
| | Gyp | | | | Pelec | | |

OTHER SYMBOLS

| | | | | | | | | |
|-----------------|----------|----------------|-----------------|---------|-----------------|---------|--------------|----------|
| POROSITY | | Vuggy | ROUNDING | | Even | | Core | |
| | Earthy | SORTING | | Rounded | | Spotted | | |
| | Fenest | | | Subrnd | | Ques | EVENT | |
| | Fracture | | | Subang | | Dead | | Rft |
| | Inter | | | Angular | INTERVAL | | Dst_alt | |
| | Moldic | | | | | Dst | | Sidewall |
| | Organic | | | | | | | |
| | Pinpoint | | | | | | | |



GRAY COUNTY, KANSAS

A.P.I. #15-069-20368-00-00

ELEVATION : 2768' K.B. ; 2755' G.L.

Stone Coral Anhydrite Sample Top = 1662' (+ 1106) Base = 1780' (+988).

Deviation Survey's Taken: @ 1880' = 1/2 degree; @ @ 3530' = 3/4 degrees; @ 4245' = 1/2 degree; @ 4400' = 1 degree.

Geologist: David P. Williams on location @ 4:15 PM 3-30-12 @ 2600'

Note: All samples have been lagged to depth by calculated time.

Begin 20' Sample Examination @ 2600'.

Anhy/Gyp Abd AA Sh Red-Gry Abd AA Soft Tr Dolo Crm-Gry FxIn-Microxn Poor IxIn Por Grad Sli Ls Gry Sh Red-Gry Soft V Abd No Odor No Stn No Flor NS

Anhy/Gyp Abd AA Sh Red-Gry Abd AA Soft Tr Dolo Crm-Gry FxIn-Microxn Poor IxIn Por Grad Sli Ls Gry Sh Red-Gry Soft V Abd No Odor No Stn No Flor NS

CHASE GROUP 2639' (+129)

Dolo Gry-Crm FxIn-Microxn Poor IxIn Por Sh Red-Gry-Char Soft Abd No Odor No Stn No Flor NS

KRIDER 2666' (+ 102)

Dolo Gry-Crm FxIn-Microxn Poor IxIn Por Sh Red-Gry-Char Soft Abd No Odor No Stn No Flor NS

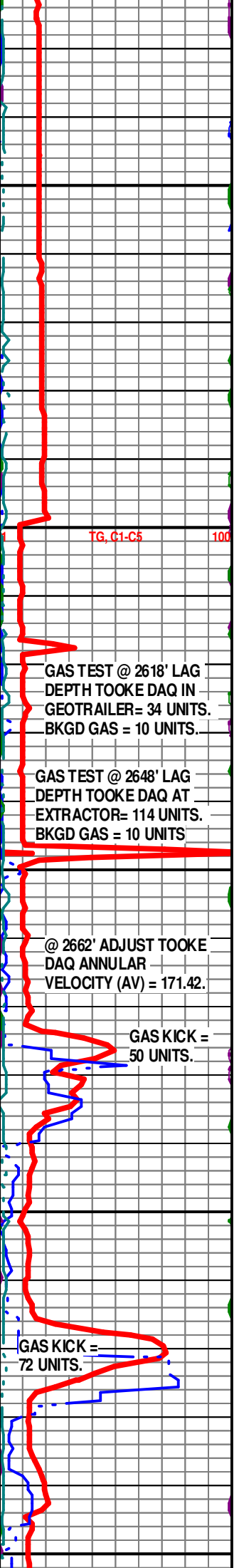
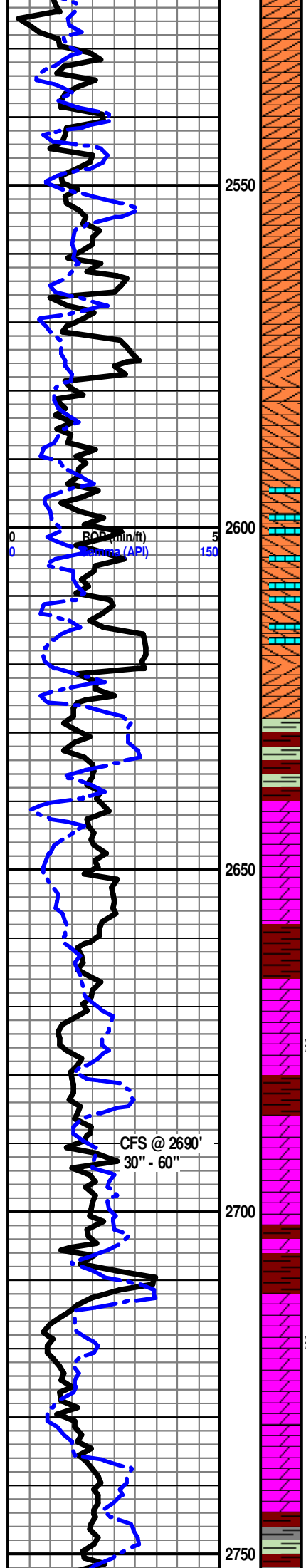
30" CFS @ 2690' Dolo Wht-Crm-Gry FxIn-Microxn Med IxIn Por w/Tr Vug IxIn Por Sh Red-Gry-Char Soft Abd No Odor No Stn Lt Grn Flor (Scat Throughout Spl) Fair-Med SG

60" CFS @ 2690' Dolo Wht-Crm-Gry FxIn-Microxn Med IxIn Por w/Tr Vug IxIn Por Sh Red-Gry-Char Soft Abd No Odor No Stn Lt Grn Flor (Scat Throughout Spl) Fair-Med SG

WINFIELD 2712' (+ 56)

Much Spl. Debris Sh Red-Grn Fissil-Soft V Abd (Spl Wash Red) Dolo Crm-Gry FxIn Poor IxIn Por No Odor No Stn No Flor NS

Much Spl. Debris Sh Red-Grn Fissil-Soft V Abd (Spl Wash Red) Dolo Crm-Gry FxIn Poor IxIn Por No Odor No Stn No Flor NS



TOWANDA 2765' (+ 3)

Dolo Crm-Gry FxIn Poor IxIn Por Sh Red-Grn Fissil-Soft V Abd (Spl Wash Red) No Odor No Stn No Flor NS

Dolo Crm-Gry FxIn Poor IxIn Por Sh Red-Grn Fissil-Soft V Abd (Spl Wash Red) No Odor No Stn No Flor NS

FORT RILEY 2810' (- 42)

Ls Crm-Gry FxIn Poor IxIn Por Grad Tr/Dolo AA Sh Red-Grn Fissil-Soft V Abd (Spl Wash Red) No Odor No Stn No Flor NS

Ls Crm-Gry FxIn Poor IxIn Por Grad Tr/Dolo AA Sh Red-Grn Fissil-Soft V Abd (Spl Wash Red) No Odor No Stn No Flor NS

Ls Crm-Gry FxIn Poor IxIn Por Grad Tr/Dolo AA Sh Red-Grn Fissil-Soft V Abd (Spl Wash Red) No Odor No Stn No Flor NS

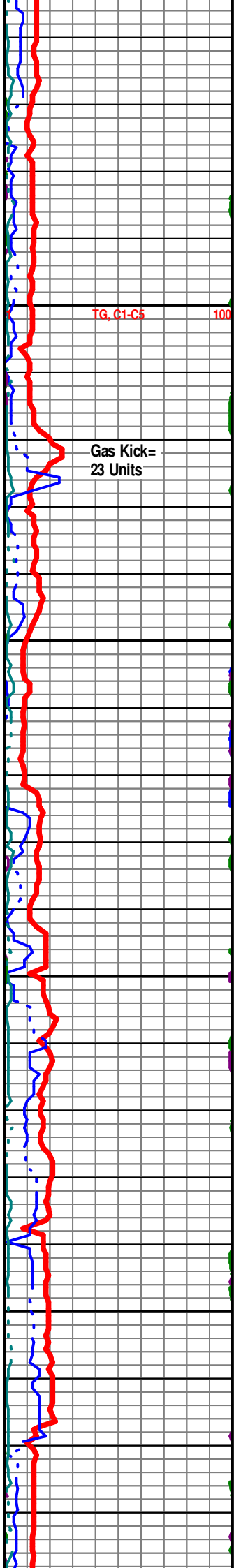
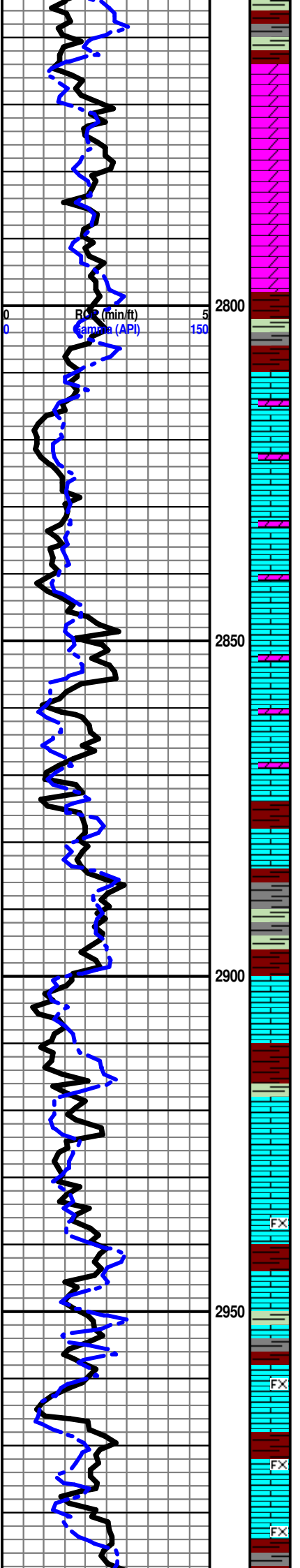
Ls Crm-Gry FxIn Poor IxIn Por Sh Red-Grn Fissil-Soft V Abd (Spl Wash Red) No Odor No Stn No Flor NS

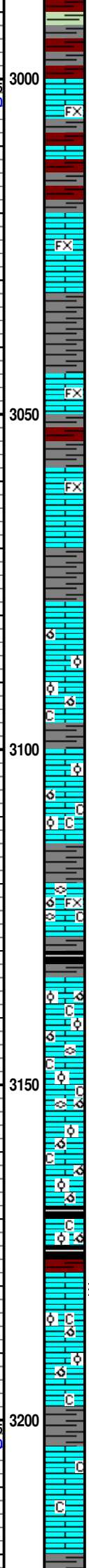
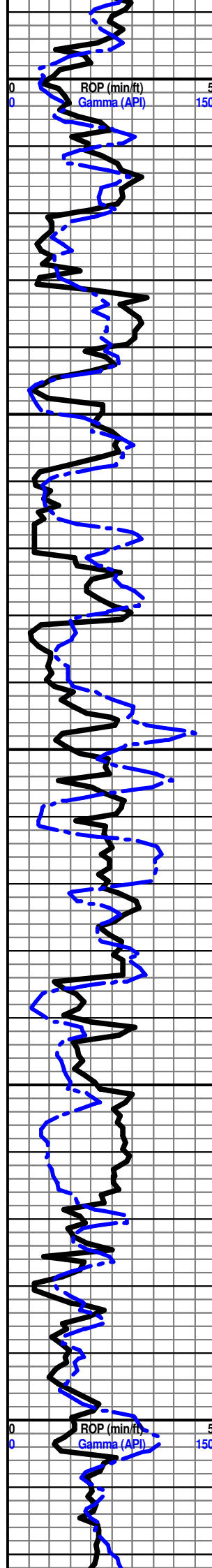
Ls Crm-Gry FxIn Poor IxIn Por Sh Red-Grn Fissil-Soft V Abd (Spl Wash Red) No Odor No Stn No Flor NS

LS Crm-Wht FxIn Poor IxIn Por Grad Sm Pin-Pt FxIn Por Inc Abd Sh Red-Char-Gry Soft Fissil AA No Odor No Flor No Stn No Flor NS

LS Crm-Wht FxIn Poor IxIn Por Grad Sm Pin-Pt FxIn Por Inc Abd Sh Red-Char-Gry-Grn Soft Fissil AA Cht Gry Op Shp Vit Chalk Wht No Odor No Flor No Stn No Flor NS

LS Crm-Wht FxIn Poor IxIn Por Grad Sm Pin-Pt FxIn Por Inc Abd Sh Red-Char-Grv-Grn-Aqua Soft Fissil Chalk Wht No Odor No Flor No Stn No Flor NS





LS Crm-Wht Fxln Poor Ixln Por Grad Sm Pin-Pt Fxln Por Inc Abd Sh
Red-Char-Gry-Grn-Aqua Soft Fissil Chalk Wht No Odor No Flor No Stn No Flor NS

LS Crm-Wht Fxln Poor Ixln Por Grad Sm Pin-Pt Fxln Por Inc Abd Sh
Red-Char-Gry-Grn-Aqua Soft Fissil Chalk Wht No Odor No Flor No Stn No Flor NS

LS Wht-Crm-Gry Fxln Poor Ixln Por Grad Sm Pin-Pt Fxln Por Grad Micritic Dsn
Barren Sh Red-Char-Gry-Grn Soft Fissil Inc Cht Gry Op Shp Vit Chalk Wht No
Odor No Flor No Stn No Flor NS

COTTONWOOD 3058' (- 290)

LS Wht-Crm-Gry Fxln Poor Ixln Por Grad Sm Pin-Pt Fxln Por Grad Micritic Dsn
Barren Sh Red-Char-Gry-Grn Soft Fissil Inc Chalk Wht No Odor No Flor No Stn No
Flor NS

LS Wht-Crm-Gry Poor OOM Por Fair InterOOM/OOL Por w/OOL in pl w/Poor
Leaching Poor Disolu Por Barren Grad Fxln Ixln Por Grad Sm Pin-Pt Fxln Por Grad
Micritic Dsn Barren Sh Red-Char-Grn Soft No Odor No Flor No Stn No Flor NS

NEVA 3100' (- 332)

LS Wht-Crm-Gry Poor OOM Por Fair InterOOM/OOL Por w/OOL in pl w/Poor
Leaching Poor Disolu Por Barren Grad Fxln Ixln Por Grad Sm Pin-Pt Fxln Por Grad
Micritic Dsn Barren Sh Red-Char-Grn Soft Fissil Dec Chalk Wht Soft Abd No Odor
No Flor No Stn No Flor NS

RED EAGLE 3135' (- 367)

LS Wht-Crm-Gry Poor OOM Por Fair InterOOM/OOL Por w/OOL in pl w/Poor
Leaching Poor Disolu Por Barren Grad Fxln Ixln Por Grad Sm Pin-Pt Fxln Por Grad
Micritic Dsn Barren Fos (Fuss) Sh Red-Char-Grn Soft Fissil Dec Chalk Wht Soft
Abd No Odor No Flor No Stn No Flor NS

LS Wht-Crm-Gry Poor OOM Por Fair InterOOM/OOL Por w/OOL in pl w/Poor
Leaching Poor Disolu Por Barren Grad Fxln Ixln Por Grad Sm Pin-Pt Fxln Por Grad
Micritic Dsn Barren Fos (Fuss) Sh Red-Char-Grn Soft Fissil Dec Chalk Wht Soft
Abd No Odor No Flor No Stn No Flor NS

DISPLACE MUD SYSTEM @ 3168'

LS Wht-Crm-Gry Fxln Poor Ixln Por Grad Sm Pin-Pt Fxln Porw/Tr Pyr Includ Grad
Poor OOM Por Poor InterOOM/OOL Por w/OOL (V Small) in pl w/Poor Leaching
Poor Disolu Por Barren Chalk Wht Soft Sh Red-Char-Gry-Grn Soft Fissil Inc No
Odor No Flor No Stn No Flor NS

LS Wht-Crm-Gry Fxln Ixln Por Grad Micritic Sh Gm-Red Soft Fissil Chalk Wht
Abd No Odor No Flor No Stn No Flor NS

TG, C1-C5 100

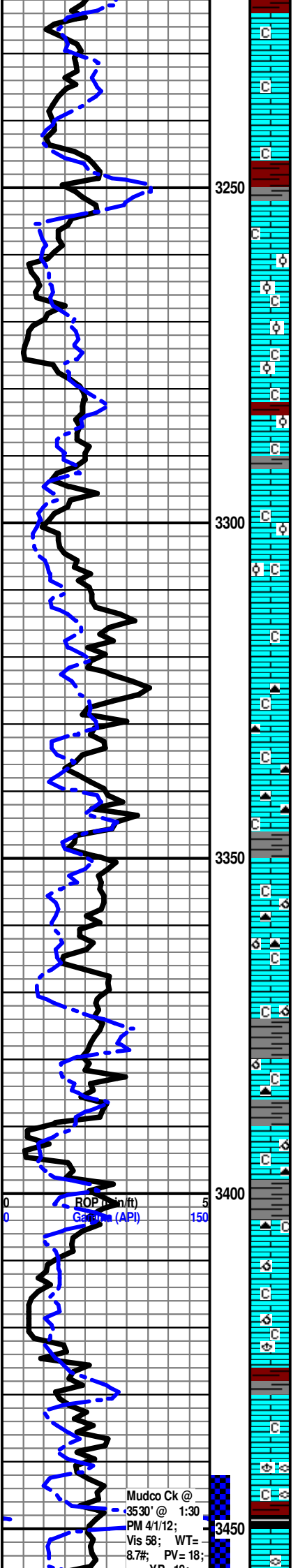
@ 3012' ADJUST
TOOKE DAQ AV =
167.62.

REZERO TOOKE
DAQ @ 3059'.
BKGD GAS = 10
UNITS.

Mudco Ck @
3054'
11:45 PM
3/31/12 Vis
30; WT= 2;
9.7; PV= 2;
YP= 3;
WL= NC;
Cake= NC;
Chl= 35000;
Cal= Hvy;
Sol= 8.0%.
LCM= Tr #;
DMC=\$
4941.05;
CMC=\$
10,992.55

SH GAS KICK =
47 UNITS.

TG, C1-C5 100



LS Wht-Crm-Gry FxIn IxIn Por Grad Micritic Sh Grn-Red Soft Fissil Chalk Wht Abd
No Odor No Flor No Stn No Flor NS

FORAKER 3254' (- 486)

LS Crm-Gry FxIn Poor IxIn Por Grad OOL Por Tr/OOM Por Poor Develop Poor
Leaching Soft Sh Grn-Red Soft Fissil Chalk Wht V Abd No Odor No Flor No Stn No
Flor NS

REZERO TOOKE
DAQ @ 3261'.
BKGD GAS = 12
UNITS.
@ 3263' ADJUST
TOOKE DAQ AV =
165.56.

LS Crm-Gry FxIn Poor IxIn Por Grad OOL Por Tr/OOM Por Poor Develop Poor
Leaching Soft Sh Grn-Red Soft Fissil Chalk Wht V Abd No Odor No Flor No Stn No
Flor NS

LS Wht-Crm-Gry FxIn IxIn Por Grad Micritic Tr/Glacu IncludSh Grn-Red Soft Fissil
Chalk Wht Abd No Odor No Flor No Stn No Flor NS

LS Wht-Crm-Gry FxIn IxIn Por Grad Micritic Tr/Glacu IncludSh Grn-Red Soft Fissil
Chalk Wht Abd No Odor No Flor No Stn No Flor NS

LS Wht-Crm-Gry FxIn IxIn Por Grad Micritic Cht Drk-Gry Op Shp Vit Sh Grn-Red
Soft Fissil Chalk Wht Abd No Odor No Flor No Stn No Flor NS

LS Wht-Crm-Gry FxIn IxIn Por Grad Micritic Dsn Barren Grad Tr/Poor OOM Por Poor InterOOM Por
Poor Leaching Poor Disolu Barren Dec Sh Grn-Red-Char Soft Fissil Cht Gry Op Shp Vit Chalk Wht
Abd No Odor No Flor No Stn Fair ? Min Flor (Lt Grn) NS

LS Wht-Crm-Gry FxIn IxIn Por Grad Micritic Dsn Barren Grad Tr/Poor OOM Por Poor InterOOM Por
Poor Leaching Poor Disolu Barren Dec Sh Grn-Red-Char Soft Fissil Cht Gry Op Shp Vit Chalk Wht
Abd No Odor No Flor No Stn Fair ? Min Flor (Lt Grn) NS

FALL CITY 3390' (- 622)

LS Wht-Crm-Gry FxIn IxIn Por Grad Micritic Dsn Barren Grad Tr/Poor OOM Por
Poor InterOOM Por Poor Leaching Poor Disolu Barren Dec Sh Grn-Red-Char Soft
Fissil Cht Gry Op Shp Vit Chalk Wht Abd No Odor No Flor No Stn Fair ? Min Flor
(Lt Grn) NS

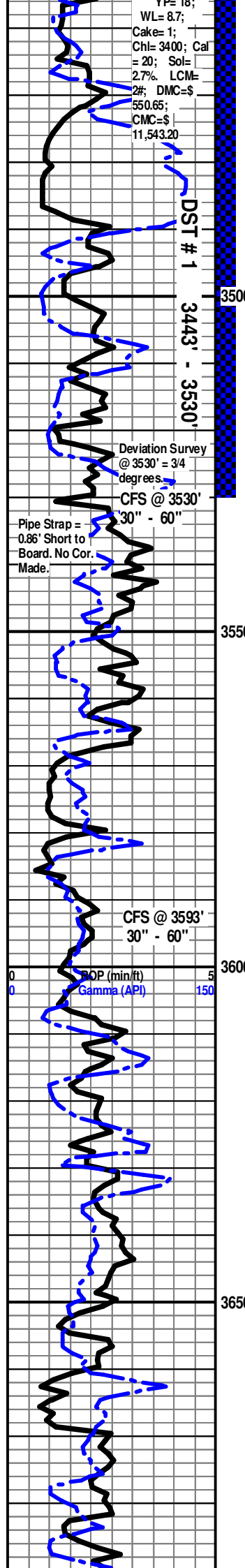
TG, C1-C5 100

LS Crm-Gry FxIn IxIn Por Micritic Dsn No Vis Por Barren Tr OOM Por AA Sh
Grn-Red Soft Fissil Dec Fos (Brach) Chalk Wht Abd No Odor No Flor No Stn Fair ?
Min Flor (Lt Grn) NS

LS Crm-Gry FxIn IxIn Por Micritic Dsn No Vis Por Barren Sh Grn-Red Soft Fissil
Dec Fos (Brach, Fuss) Chalk Wht Abd No Odor No Flor No Stn Fair ? Min Flor (Lt
Grn) NS

DST # 1 3461'-3532'.
Times: 5'- 90"- 45"- 90";
Blow: IF= Weak 2"
Surface Blow FF-

Begin 10' Sample Examination @ 3480'.



LS Crm-Gry FxIn IxIn Por Micritic Dsn No Vis Por Barren Sh Grn-Red Soft Fissil Dec Fos (Brach, Fuss) Chalk Wht Abd No Odor No Flor No Stn Fair ? Min Flor (Lt Grn) NS

ROOT SHALE 3468' (- 700)

Sh Red-Gry Fissil-Soft V Abd (Spl Wash Red) LS Crm-Gry FxIn Micritic AA Poor IxIn Por No Odor No Stn ? Min Flor AA NS

Sh Red-Gry Fissil-Soft V Abd (Spl Wash Red) LS Crm-Gry FxIn Micritic AA Poor IxIn Por No Odor No Stn ? Min Flor AA NS

STOTLER 3490' (- 722)

LS Wht-Crm-Gry MicroIxIn-FxIn IxIn Por Micritic Dsn Barren Tr/Fair-Med OOM Por w/OOL in pl (Small-Med) Poor-Fair InterOOM/OOL Por Fair Leaching Fair Disolu Sh Grn-Red Soft Chalk Wht Abd No Odor Fair Flor (Lt Grn-Wht) No Stn SSG

30" CFS @ 3530' LS Wht-Crm-Gry MicroIxIn-FxIn IxIn Por Micritic Dsn Barren Grad Tr/Fair OOM Por w/OOL (Small) in pl Fair InterOOM/OOL Por Fair Leaching Fair Disolu Sh Grn-Red Soft Fos (Brach) Chalk Wht Abd No Odor Med-Good Flor (Lt Wht in 65% of Spl) No Stn SSG

60" CFS @ 3530' LS Wht-Crm-Gry MicroIxIn-FxIn IxIn Por Micritic Dsn Barren Grad Tr/Fair OOM Por w/OOL (Small) in pl Fair InterOOM/OOL Por Fair Leaching Fair Disolu Sh Grn-Red Soft Fos Chalk Wht Abd No Odor Med-Good Flor (Lt Wht in 75% of Spl) No Stn SSG

LS Gry-Crm MicroIxIn-FxIn IxIn Por Micritic Dsn Barren Chalk Wht Abd Fos (Crin, Fuss) Sh Gry Soft No Odor Tr/ Min Flor (Lt Wht) No Stn NS

LS Wht-Crm-Gry MicroIxIn-FxIn IxIn Por Micritic Dsn Barren Chalk Wht V Abd Sh Gry Soft No Odor Min Flor (Lt Wht) AA No Stn NS

LS Wht-Crm-Gry MicroIxIn-FxIn IxIn Por Micritic Dsn Barren Chalk Wht V Abd Sh Gry-Char-Tr/Aqua Soft-Fissil No Odor ? Med Min Flor (Lt Wht) No Stn NS

TARKIO 3565' (- 797)

30" CFS @ 3593' Ls Wht-Crm FxIn IxIn Por Grad Fair OOM Porw/OOL in pl w/Fair-Med InterOOM Por Poor Leaching Poor Disolu Sh Grn-Red-Char Soft Fissil Cht Wht Op Shp Vit Chalk Wht Soft No Odor No Stn Med Flor (Lt Grn-Lt Wht-35% of Spl) NS

60" CFS @ 3593' Ls Wht-Crm FxIn IxIn Por Grad Fair OOM Porw/OOL in pl w/Fair-Med InterOOM Por Poor Leaching Poor Disolu Sh Grn-Red-Char Soft Fissil Cht Wht Op Shp Vit Chalk Wht Soft No Odor No Stn Med Flor (Lt Grn-Lt Wht-25% of Spl) Dec NS

Ls Wht-Gry MicroIxIn-FxIn IxIn Por Micritic Dsn Barren Chalk Wht V Abd Cht Crm-Gry Op Shp Fos (Fuss) Sh Gry-Char-Red Soft No Odor ? Med Min Flor (Lt Wht) No Stn NS

Ls Crm-Gry MicroIxIn-FxIn IxIn Por Micritic Dsn Barren Chalk Wht V Abd Cht Crm-Gry Op-Transl Shp Vit Fos (Crin, Fuss) Sh Gry-Char Soft No Odor ? Med Min Flor (Lt Wht) No Stn NS

Ls Wht-Crm-Gry MicroIxIn-FxIn IxIn Por Micritic Grad Poor Pin-Pt XIn Por Cht Gry Op-Shp-Vit Chalk Wht V Abd Sh Gry-Char-Blk Carb Fissil Soft No Odor ? Med Min Flor (Lt Wht) No Stn NS

Ls Wht-Gry MicroIxIn-FxIn IxIn Por Micritic Dsn Barren Chalk Wht Abd Cht Gry Op-Shp-Vit Sh Gry-Char-Brn Soft No Odor ? Med Min Flor Dec No Stn NS

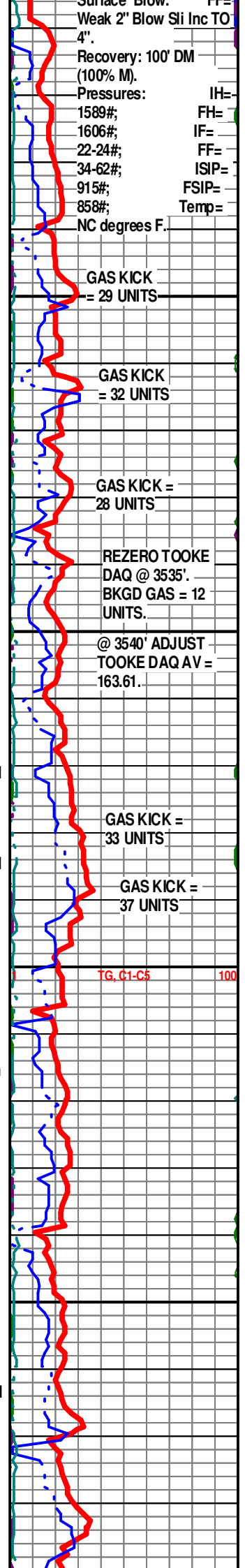
Ls Wht-Crm MicroIxIn-FxIn IxIn Por Micritic Dsn Barren Grad Tr/Poor OOM Por w/OOL (Small) in pl Poor InterOOM Por Poor Leaching Poor-No Disolu Sh Char-Brn Soft Fos (Crin) Chalk Wht Abd No Odor ? Min Flor (Dull Wht) Inc No Stn NS

Ls Wht-Gry FxIn IxIn Pin-Pt Por Mostly Micritic AA Dsn Barren Chalk Wht Abd Sh Gry-Char-Tr/ Blk-Carb FissilGry-Char Soft No Odor No Flor No Stn NS

Ls Wht-Crm-Gry FxIn IxIn Pin-Pt Por Mostly Micritic AA Dsn Barren Chalk Wht Abd Sh Char-Gry Fissi No Odor No Flor No Stn NS

Ls Wht-Crm-Gry FxIn Tr/Poor IxIn Por Mostly Micritic AA Dsn Barren Chalk Wht V Abd Cht-Wht-Tan Op Shp Vit Sh Gry-Char Soft No Odor No Flor No Stn NS

Ls Wht-Crm-Gry FxIn Tr/Poor IxIn Por Mostly Micritic AA Dsn Barren Chalk Wht Abd Sh Gry-Char Soft No Odor No Flor No Stn NS



BERN 3695' (- 927)

Ls Wht-Crm-Gry Fxln Tr/Poor lxln Por Mostly Micritic Granular Pin-Pt Por (Poor) Dsn Barren Cht Wht-Brn Op Shp Vit Chalk Wht-Brn Abd Sh Gry-Char Soft No Odor No Flor No Stn NS

Ls Wht-Crm-Gry Fxln Tr/Poor lxln Por Mostly Micritic AA Dsn Barren Chalk Wht V Abd Sh Gry-Char Soft No Odor No Flor No Stn NS

Ls Wht-Crm Fxln Tr/Poor lxln Por Mostly Micritic AA Dsn Barren Chalk Wht Abd Fos (Fuss Sh Tr/ Char-Red Soft No Odor No Flor No Stn NS

Ls Wht-Crm Fxln Tr/Poor lxln Por Mostly Micritic AA Dsn Barren Chalk Wht Abd Cht Amber-Gry Transl-Op Shp Vit w/Fos (Fuss) Includ Sh Tr/ Char-Grn-Aqua Soft No Odor No Flor No Stn NS

Ls Wht-Crm Fxln Tr/Poor lxln Por Mostly Micritic AA Dsn Barren Chalk Wht Abd Char-Grn-Aqua Red Soft No Odor No Flor No Stn NS

Ls Wht-Crm Fxln Tr/Poor lxln Por Mostly Micritic AA Dsn Barren Chalk Wht Abd Cht Amber-Gry Transl-Op Shp Vit Sh Tr/ Char-Red Soft No Odor No Flor No Stn NS

Ls Wht-Crm-Gry Fxln Poor lxln Por Mostly Micritic Dsn Barren Chalk Wht Abd Cht Wht Op Shp Vit Sh Blk Carb-Char-Grn Fissil Soft No Odor No Flor No Stn NS

TOPEKA 3770' (- 1002)

Ls Wht-Crm-Gry Fxln Poor lxln Por Mostly Micritic Dsn Barren Chalk Wht Abd Cht Wht Op Shp Vit Sh Char-Grn Fissil Soft No Odor No Flor No Stn NS

Ls Wht-Crm-Gry Fxln Poor lxln Por Mostly Micritic Dsn Barren Chalk Wht Abd Cht Wht Op Shp Vit Sh Blk Carb-Char-Grn Fissil Soft No Odor No Flor No Stn NS

Ls Wht-Crm-Gry Fxln Poor lxln Por Mostly Micritic Dsn Barren Chalk Wht Abd Cht Wht-Gry Op Shp Vit Fos (Fuss) Sh Blk Carb-Char Fissil Soft No Odor No Flor No Stn NS

Ls Wht w/Pyr Includ-Crm Fxln Poor lxln Por Mostly Micritic Dsn Barren Chalk Wht Abd Cht Wht-Gry Op Shp Vit Sh Char-Red Fissil Soft No Odor No Flor No Stn NS

Ls Wht-Crm Fxln Poor lxln Por Mostly Micritic Dsn Barren Chalk Wht V Abd Cht Wht-Gry Transl- Op Shp Vit Sh Char-Red Fissil Soft No Odor No Flor No Stn NS

Ls Wht-Crm Fxln Poor lxln Por Mostly Micritic Dsn Barren Chalk Wht V Abd Cht Wht-Gry Transl- Op Shp Vit Sh Char-Gry-Red Fissil Soft No Odor No Flor No Stn NS

Ls Wht-Crm Fxln Poor lxln Por Mostly Micritic Dsn Barren Chalk Wht V Abd Cht Smoky Drk Gry Transl- Op Shp Vit Sh Char-Gry-Red Fissil Soft No Odor No Flor No Stn NS

Ls Wht-Crm-Gry Fxln Poor lxln Por Mostly Micritic Dsn Barren Chalk Wht Abd Sh Char Fissil No Odor No Flor No Stn NS

Ls Wht-Crm-Gry Fxln Poor lxln Por Mostly Micritic Dsn Barren Chalk Wht Abd Sh Char Fissil No Odor No Flor No Stn NS

Ls Wht-Crm-Gry Fxln Poor lxln Por Mostly Micritic Dsn Barren Fos (Fuss) Chalk Wht Abd Sh Char-Grn Fissil No Odor No Flor No Stn NS

Ls Wht-Crm Fxln Poor lxln Por Mostly Micritic Dsn Barren Chalk Wht V Abd Cht Drk-Gry Transl-Op Shp Vit Fos (Fuss) Sh Char-Grn Fissil Soft No Odor No Flor No Stn NS

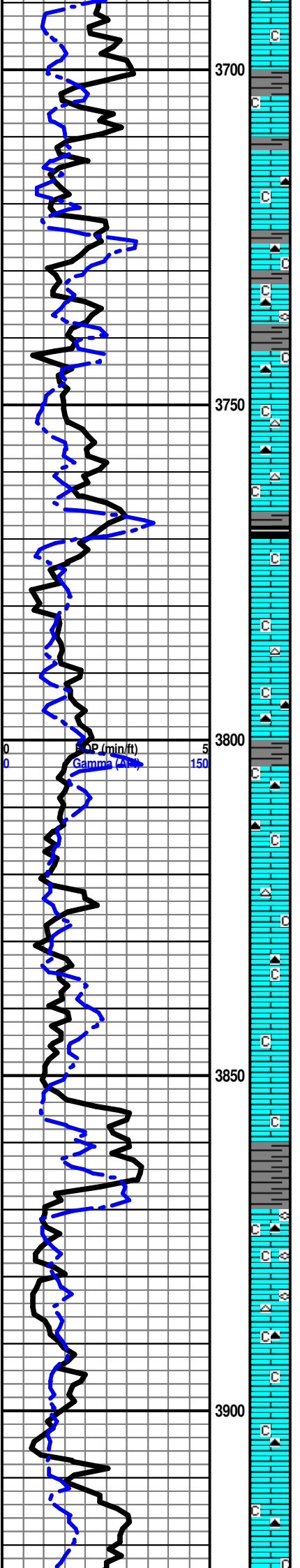
Ls Wht-Crm Fxln Poor lxln Por Mostly Micritic Dsn Barren Chalk Wht V Abd Cht Tan- Drk Gry Transl-Op Shp Vit Fos (Fuss) Sh Char-Grn Fissil Soft No Odor No Flor No Stn NS

Ls Wht-Crm MicroIn-Fxln lxln Por Micritic Dsn Barren Grad Tr/Poor OOM Por Poor InterOOM Por Poor Leaching Poor-No Disolu Sh Char- Soft Chalk Wht Abd No Odor No Flor No Stn NS

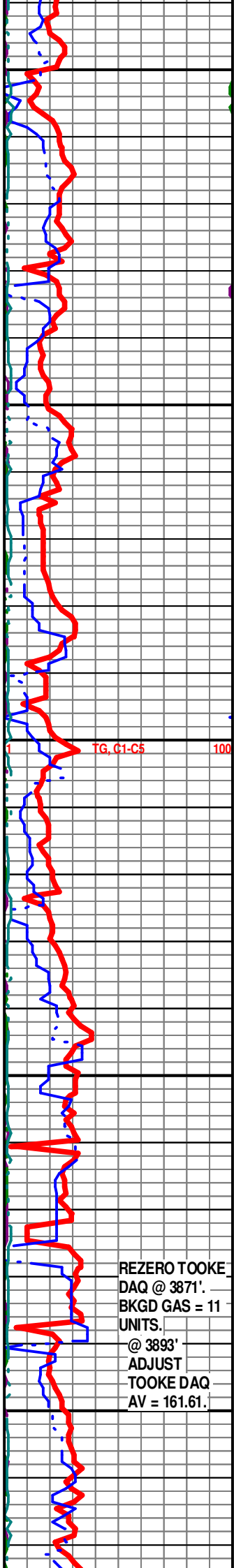
Ls Wht-Crm Fxln Poor lxln Por Mostly Micritic Dsn Barren Chalk Wht V Abd Cht Tan- Drk Gry Transl-Op Shp Vit Sh Char-Grn Fissil Soft No Odor No Flor No Stn NS

Ls Wht-Gry Fxln Poor lxln Por Mostly Micritic Dsn Barren Chalk Wht V Abd Cht Tan- Drk Gry Transl-Op Shp Vit Sh Char-Grn Fissil Soft No Odor No Flor No Stn NS

Ls Wht-Gry Fxln Poor lxln Por Mostly Micritic Dsn Barren Chalk Wht V Abd Cht Tan- Drk Gry Transl-Op Shp Vit Sh Char-Grn Fissil Soft No Odor No Flor No Stn NS



3700
3750
3800
3850
3900



REZERO TOOKE
DAQ @ 3871'.
BKGD GAS = 11
UNITS.
@ 3893'
ADJUST
TOOKE DAQ
AV = 161.61.

1an-Drk Gry Transl-Op Shp Vit Sh Char-Red Fissil Soft No Odor No Flor No Stn NS

Ls Wht-Gry FxIn Poor IxIn Por Mostly Micritic Dsn Barren Chalk Wht V Abd Cht Gry-Drk Gry Op Shp Vit Sh Char-Red Fissil Soft No Odor No Flor No Stn NS

LeCOMPTON 3946' (- 1178)

Ls Wht-Gry FxIn Poor IxIn Por Mostly Micritic Dsn Barren Chalk Wht V Abd Cht Gry-Drk Gry Op Shp Vit Sh Char-Gry Fissil Soft No Odor No Flor No Stn NS

LS Wht-Gry FxIn Poor IxIn Por Mostly Micritic Dsn Barren Chalk Wht Abd Cht Wht-Gry-Drk Gry Op Shp Vit Sh Char Fissil No Odor No Flor No Stn NS

LS Wht-Gry FxIn Poor IxIn Por Mostly Micritic Dsn Barren Chalk Wht Abd Cht Wht-Gry-Drk Gry Op Shp Vit Fos (Fuss) Sh Blk Carb-Char Fissil No Odor No Flor No Stn NS

LS Wht-Gry FxIn Poor IxIn Por Mostly Micritic Dsn Barren Chalk Wht Abd Cht Wht-Gry-Drk Gry Op Shp Vit Fos (Fuss) Sh Char Fissil No Odor No Flor No Stn NS

LS Wht-Crm-Gry FxIn Poor-Fair IxIn Por Grad Tr/OOL Por w/ OOL in pl Poor Develop Poor Dissolu Poor Leaching Chalk Wht Abd Cht Wht w/Fos (Fuss Includ) Op Shp Vit Fos (Fuss) Sh Char-Red Fissil No Odor No Flor No Stn NS

LS Wht-Gry FxIn Poor IxIn Por Mostly Micritic Dsn Barren Chalk Wht Abd Cht Wht-Drk Gry Op Shp Vit Sh Char Fissil No Odor No Flor No Stn NS

LS Wht-Crm-Gry FxIn Poor IxIn Por Mostly Micritic Dsn Barren Chalk Wht Abd Sh Blk Carb-Char Fissil No Odor No Flor No Stn NS

LS Wht-Crm-Gry FxIn Poor IxIn Por Mostly Micritic Dsn Barren Chalk Wht Abd Sh Blk Carb-Char Fissil No Odor No Flor No Stn NS

LS Crm-Wht FxIn Poor-Fair IxIn Cht Blk-Wht Op Shp Vit Sh Blk Carb - Char Fissil No Odor No Flor No Stn NS

Sh Blk Carb-Char Fissil FSG Ls Crm-Wht-Gry FxIn Dns Micrite Poor IxIn Por Chalk Wht Soft Cht Wht Transl-Op Shp Vit Fos (Fuss) No Odor No Stn No Flor FSG (in Sh Blk Carb)

Ls Crm-Gry FxIn Poor-Fair IxIn Por Chalk Wht Soft Abd Cht Blk-Tan Op Shp Vit Sh Char-Grn Fissil No Odor No Stn No Flor NS

Ls Crm-Wht FxIn Grad Poor IxIn Por Grad Tr/OOM Por w/ OOL (Small) in pl Poor Develop Poor Dissolu Poor Leaching Chalk Wht Abd Cht Blk-Tan Op Shp Vit Fos (Crin) Sh Char Fissil No Odor No Flor No Stn NS

Ls Crm-Wht FxIn Grad Poor IxIn Por Grad Tr/OOM Por w/ OOL (Small) in pl Poor Develop Poor Dissolu Poor Leaching Chalk Wht Abd Cht Blk-Tan Op Shp Vit Fos (Crin) Sh Char Fissil No Odor No Flor No Stn NS

Ls Crm-Gry FxIn Poor-Fair IxIn Por Chalk Wht Soft Abd Tr/Cht Wht-Tan (Banded) Op Shp Vit Sh Char-Grn Fissil No Odor No Stn No Flor NS

Ls Gry-Crm FxIn Dns Micrite Poor-No Vis IxIn Por Chalk Wht Soft Sh Blk Carb-Char-Red Fissil No Odor No Stn No Flor NS

Sh Blk Carb-Char-Grn Fissil Tr/Sli SG Ls Crm-Wht-Gry FxIn Dns Micrite Poor IxIn Por Tr OOM Por AA Chalk Wht Soft Cht Wht Transl-Op Shp Vit Fos (Crin) No Odor No Stn No Flor NS

Ls Gry-Crm FxIn Dns Micrite Poor-No Vis IxIn Por Chalk Wht Soft Sh Blk Carb-Char-Red Fissil No Odor No Stn No Flor NS

HEEBNER 4110' (- 1342)

Sh Blk Carb-Char-Grn Fissil F-G SG Ls Crm FxIn Dns Micrite Poor IxIn Por Chalk Wht Soft Cht Wht Transl-Op Shp Vit Fos (Fuss) No Odor No Stn No Flor FSG (in Sh Blk Carb)

TORONTO 4130' (- 1362)

Ls Wht-Crm MicroIn-FxIn Poor-Fair IxIn Por Cht Wht-Gry Op Shp Vit Chalk Wht Soft Abd Sh Blk Carb-Char AA Fissil No Odor No Stn Ls w/Tr ? Min Flor (< 5% Spl) No Vis Show ? Gas Kick ? SSG

DOUGLAS 4146' (- 1378)

Sh Char-Gry-Grn Soft-Fissil Ls Crm-Wht-Gry FxIn Dns Micrite Poor IxIn Por Chalk Wht Soft Abd No Odor No Stn No Flor No Odor No Stn NS

Ls Crm-Wht-Gry FxIn Dns Micrite Poor IxIn Por Chalk Wht Soft Abd Sh

Mudco Ck @

3999' @

12:45 PM

4/2/12;

Vis 53; WT =

9.1#; PV =

18; YP =

18; WL =

9.2; Cake =

1; Chl = 3300;

Cal = 20;

Sol = 5.6%.

LCM = 2#;

DMC = \$

1138.00;

CMC = \$

12,681.20

TG, C1 SH GAS KICK = 53 UNITS.

SH GAS KICK = 46 UNITS.

Scale Change TG, C1-C5 150

SH GAS KICK = 141 UNITS.

GAS KICK = 97 UNITS.

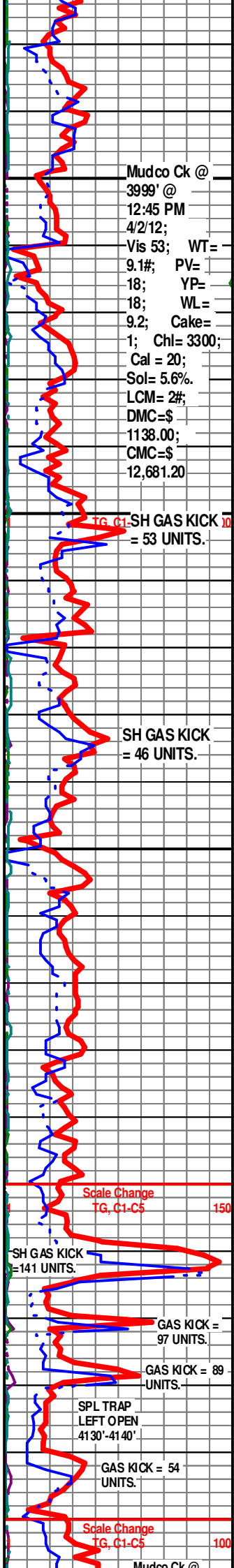
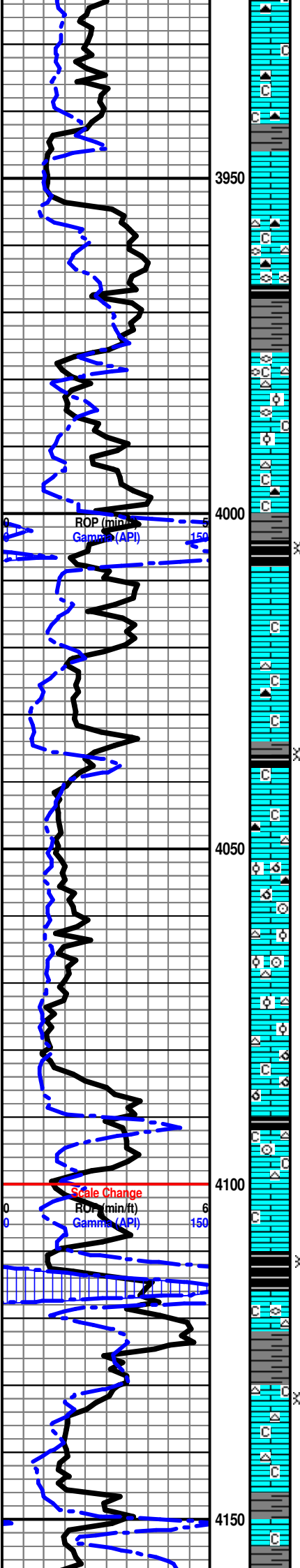
GAS KICK = 89 UNITS.

SPL TRAP LEFT OPEN 4130'-4140'

GAS KICK = 54 UNITS.

Scale Change TG, C1-C5 100

Mudco Ck @



Char-Gry-Grn Soft-Fissil Cht Drk-Gry Op Shp Vit No Odor No Stn No Flor NS

Ls Wht-Crm MicroIn-FxIn Poor-Fair IxIn Por Cht Wht Op Shp Vit Chalk Wht Soft Abd Sh Char-Gry-Grn Tr/Blk Carb Aa Fissil No Odor No Stn No Flor NS

Ls Wht-Crm MicroIn-FxIn Poor-Fair IxIn Por Cht Wht-Tan Op Shp Vit Chalk Wht Soft Abd Sh Char-Gry-Grn Tr/Blk Carb Fissil No Odor No Stn No Flor NS

Ls Wht-Crm MicroIn-FxIn Poor-Fair IxIn Por Cht Wht-Tan Op Shp Vit Chalk Wht Soft Abd Sh Char-Gry-Grn Tr/Blk Carb Fissil No Odor No Stn No Flor NS

Ls Crm-Gry MicroIn-FxIn Poor-Fair IxIn Por Grad Tr OOM Poor Develop Poor Leach Cht Wht-Gry Op Shp Vit Chalk Wht Soft Abd Sh Char-Gry w/Pyr Includ Fissil No Odor No Stn Sli ? Min Flor NS

IATAN "BROWN LIME" 4202' (- 1434)

30" CFS @ 4227' Ls Wht-Gry MicroIn-FxIn Micritic Fair Stn Flor (Lt Grn-Wht of Spl through Tray 50%) Cht Wht Op Shp Vit Abd Chalk Wht Soft Sh Char-Gry-Grn Fissil No Odor Fair ? Scat Min Flor No Stn NS

LANSING 4218' (-1450)

60" CFS @ 4227' Ls Wht MicroIn-FxIn Micritic Grad OOL Fair InterOOL Por w/OOL in pl Tr/Scat Leaching Por Barren Fair Stn Flor (Lt Grn-Wht of Spl through Tray 80%) Cht Wht-Gry Op Shp Vit Abd Chalk Wht Soft Sh Char-Gry-Grn Fissil No Odor Fair Scat ? Min Flor ? Stn NS

30" CFS @ 4245' Ls Wht MicroIn-FxIn Micritic w/Calc Xls Includ Grad OOL Fair InterOOL Por w/OOL in pl Tr/Scat Leaching Por Barren Fair Stn Flor (Lt Grn-Wht of Spl through Tray 60%) Cht Wht-Gry Op Shp Vit V Abd Chalk Wht Soft Sh Char-Gry-Grn Fissil No Odor Fair Scat ? Min Flor ? Stn NS

60" CFS @ 4245' Ls Wht MicroIn-FxIn Micritic Grad OOL AA Fair InterOOL Por w/OOL in pl Tr/Scat Leaching Por Barren Fair Stn Flor (Lt Grn-Wht of Spl through Tray 20%) Cht Wht-Gry-Amber Translu-Op Shp Vit V Abd Chalk Wht Soft Sh Char-Gry-Grn Fissil No Odor Fair Scat ? Min Flor ? Stn NS

Ls Crm-Gry MicroIn-FxIn Poor IxIn Por Grad Micritic Chalk Wht Soft V ABD Cht Wht Op Shp Vit Dec Sh Char-Gry Fissil No Odor No Stn ? Sli Min Flor Dec AA NS

Ls Crm-Gry MicroIn-FxIn Poor IxIn Por Grad Micritic Chalk Wht Soft Sh Char-Gry Fissil No Odor No Stn ? Sli Min Flor Dec AA NS

Ls Crm-Tan-Gry MicroIn-FxIn Poor IxIn Por Grad Micritic Chalk Wht Soft V Abd Fos (Crin, Brach) Sh Char-Gry Fissil No Odor No Stn ? Sli Min Flor Dec AA NS

Ls Crm-Tan MicroIn-FxIn Poor IxIn Por Grad Micritic w/ Pry Includ Grad Tr/Poor OOL Por Poor InterOOL Por w/ Small Ooids in pl Chalk Wht Soft V Abd Sh Char-Gry Fissil No Odor No Stn ? Sli Min Flor Dec AA NS

Chalk Wht Soft V Abd (60% of Spl) Ls Crm-Tan MicroIn-FxIn Poor IxIn Por Grad Micritic Grad Tr/Poor OOL Por Poor InterOOL Por w/ Small Ooids in pl Cht Wht-Gry p Vis Shp Sh Char-Gry-Grn Fissil No Odor No Stn ? V Sli Min Flor NS

Chalk Wht Soft V Abd (60% of Spl) Ls Crm-Tan MicroIn-FxIn Poor IxIn Por Grad Micritic Cht Wht-Gry p Vis Shp Sh Char-Gry-Grn Fissil No Odor No Stn ? V Sli Min Flor NS

Ls Wht-Crm MicroIn-FxIn Poor IxIn Por Grad Micritic Grad Tr/Poor OOL Por Poor InterOOL Por w/ Small Ooids in pl Cht Wht w/Fos(Fuss) Includ Op Shp Vit Chalk Wht Soft Sh Char-Gry Fissil No Odor No Stn ? Sli Min Flor NS

Ls Gry-Crm MicroIn-FxIn Poor IxIn Por Grad Micritic Cht Wht-Gry Op Shp Vit Chalk Wht Soft Sh Char-Gry Fissil No Odor No Stn Tr ? Min Flor NS

Ls Crm-Gry MicroIn-FxIn Poor IxIn Por Grad Micritic Cht Tan-Gry Op Shp Vit Chalk Wht Soft Sh Char-Gry Fissil No Odor No Stn ? Sli Min Flor Sh Char-Gry Fissi I No Odor No Stn ? Sli Min NS

Ls Wht-Crm-Gry MicroIn-FxIn Poor IxIn Por Micritic Grad Poor OOL Por w/OOL in pl (V Small Ooids) Granular w/Poor Dissolu Poor Develop Cht Wht-Gry Banded Op Shp Vit Chalk Wht Soft Fos (Brach, Crin) Sh Blk Carb-Char-Gry Fissil No Odor No Stn ? Sli Min Flor NS

Ls Crm-Wht MicroIn-FxIn Poor IxIn Por Grad Poor OOM Por w/OOL in pl (Small-Med Ooids) Poor Dissolu Poor Develop Cht Wht Op Shp Vit Chalk Wht Soft V Abd Sh Char-Gry Fissil No Odor No Stn No Flor

Ls Crm-Wht MicroIn-FxIn Poor IxIn Por Grad Poor OOM Por w/OOL in pl (Small-Med Ooids) Poor Dissolu Poor Develop Cht Wht Op Shp Vit Chalk Wht Soft V Abd Sh Char-Gry Fissil No Odor No Stn No Flor

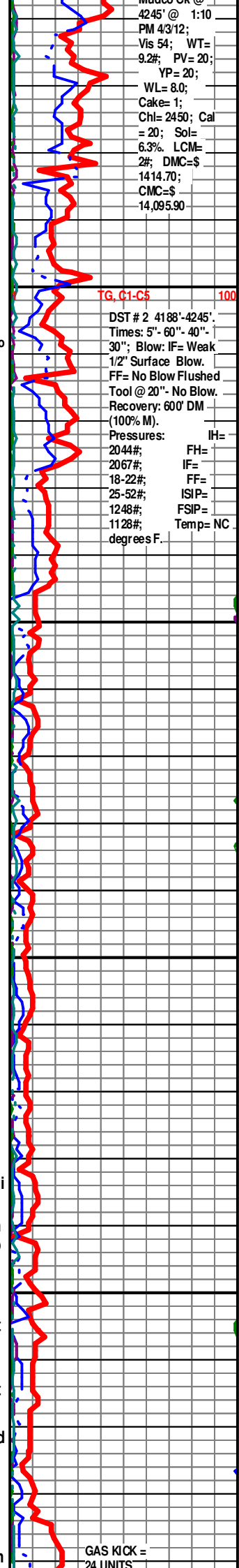
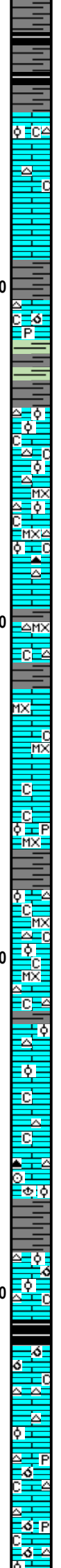
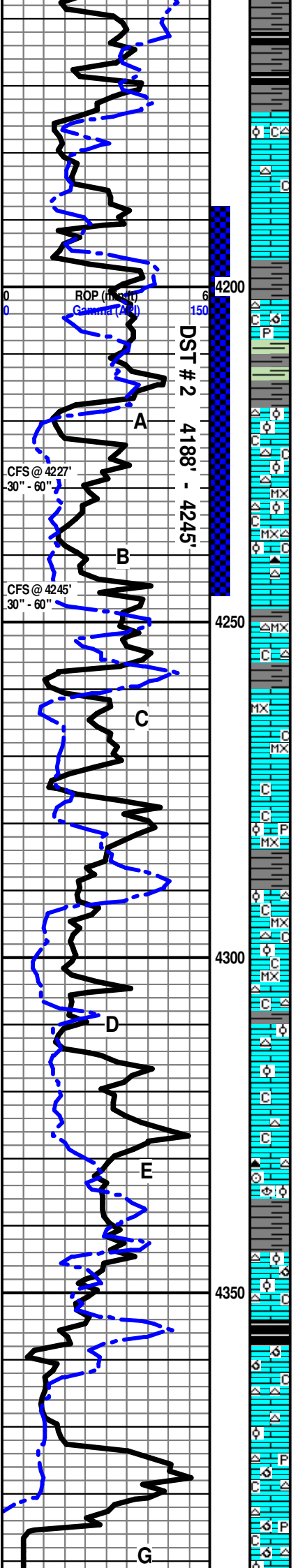
30" CFS @ 4400' Ls Wht-Crm-Gry MicroIn Poor IxIn Por Micritic w/Pyr Includ Grad OOL Por w/OOL (Small-Med Ooids w/Ctr's Fill w/? Drk-Gry Calcite? Includ) in pl Poor Inter-OOM/OOL Por Poor Develop Poor Leaching Cht Wht Op Shp Vit Fos (Crin) Sh Char-Gry-Maroon Fissil No Odor No Flor No Stn NS

60" CFS @ 4400' Ls Wht-Crm-Gry MicroIn Poor IxIn Por Micritic w/Pyr Includ Grad OOL Por w/OOL (Small-Med Ooids w/Ctr's Fill w/? Drk-Gry Calcite? Includ) in

4245' @ 1:10
PM 4/3/12;
Vis 54; WT=
9.2#; PV= 20;
YP= 20;
WL= 80;
Cake= 1;
Chl= 2450; Cal
= 20; Sol=
6.3%; LCM=
2#; DMC=\$
1414.70;
CMC=\$
14,095.90

TG, C1-C5 100
DST # 2 4188'-4245'.
Times: 5" - 60" - 40"
30"; Blow: IF= Weak
1/2" Surface Blow.
FF= No Blow Flushed
Tool @ 20" - No Blow.
Recovery: 60' DM
(100% M).
Pressures: IH=
2044#; FH=
2067#; IF=
18-22#; FF=
25-52#; ISIP=
1248#; FSIP=
1128#; Temp= NC
degrees F.

GAS KICK =
24 UNITS



pl Poor Inter-OOL/OOL Por Poor Develop Poor Leaching Cht Wht Op Shp Vit Fos
(Crin) Sh Char-Gry-Maroon Fissil No Odor No Flor No Stn NS

0 0
ROP (CFS @4400' 6
Gamir 30" - 60" 150
R.T.D. = 4400' (- 1632)
L.T.D. = ' (-
4400
4450
4500

ELECTRIC LOGS By LOGTECH, INC.: DUAL COMP. POROSITY; DUAL
INDUCTION; BOREHOLE COMPENSATED SONIC; MICRORESISTIVITY.

Geologist Left Location at 12:00 P.M. on 4-4-12

1 TG, C1-C5 100

ALLIED OIL & GAS SERVICES, LLC 053375

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:
LIBERAL

| | | | | | | | |
|---------------------------|----------------|--------------------|-------------------|--|-------------|--------------------------|---------------------------|
| DATE <u>3/29/12</u> | SEC. <u>26</u> | TWP. <u>28 S</u> | RANGE <u>30 W</u> | CALLED OUT | ON LOCATION | JOB START <u>5:00 Am</u> | JOB FINISH <u>6:00 Am</u> |
| LEASE <u>GERALD JAMES</u> | | WELL # <u>1-26</u> | | LOCATION <u>VELOCITY COPPERMAN, KS</u> | | COUNTY <u>GRAY</u> | STATE <u>KS</u> |
| OLD OR NEW (Circle one) | | | | | | | |

| | |
|--|-------------------------|
| CONTRACTOR <u>STERLING RIG 5</u> | OWNER |
| TYPE OF JOB <u>SURFACE</u> | |
| HOLE SIZE <u>12 1/4</u> | T.D. <u>18</u> |
| CASING SIZE <u>8 5/8</u> | DEPTH <u>1875.3</u> |
| TUBING SIZE | DEPTH |
| DRILL PIPE | DEPTH |
| TOOL | DEPTH |
| PRES. MAX <u>1000</u> | MINIMUM <u>500</u> |
| MEAS. LINE <u>5</u> | SHOE JOINT <u>40-12</u> |
| CEMENT LEFT IN CSG. | |
| PERFS. | |
| DISPLACEMENT <u>116.7 BBL H₂O</u> | |
| EQUIPMENT | |
| PUMP TRUCK CEMENTER <u>KENNY</u> | |
| # <u>531-541</u> HELPER <u>KENNY</u> | |
| BULK TRUCK | |
| # <u>470-528</u> DRIVER <u>RUEBEN</u> | |
| BULK TRUCK | |
| # <u>472-467</u> DRIVER <u>JEREMIAH</u> | |
| REMARKS: | |

| | |
|---|--------------------------------|
| CEMENT | |
| AMOUNT ORDERED <u>675 sk 65 ps 62 gal 37 cc</u> | |
| <u>1/4 Flo</u> | |
| <u>150 sk Class A 37 cc 7% gel</u> | |
| COMMON <u>150 sk</u> | @ <u>16.25</u> <u>2437.50</u> |
| POZMIX | @ |
| GEL <u>3.5k</u> | @ <u>21.25</u> <u>6375</u> |
| CHLORIDE <u>27</u> | @ <u>58.20</u> <u>1571.40</u> |
| ASC | @ |
| <u>Light weight 675</u> | @ <u>15.00</u> <u>10125.00</u> |
| <u>Flo seal 169</u> | @ <u>2.70</u> <u>456.30</u> |
| <u>Suger 150</u> | @ <u>1.75</u> <u>87.50</u> |
| HANDLING <u>855</u> | @ <u>2.25</u> <u>1923.75</u> |
| MILEAGE | <u>4702.50</u> |
| TOTAL <u>21367.70</u> | |

THANK YOU

| | |
|---------------------------|-------------------------------|
| SERVICE | |
| DEPTH OF JOB | <u>1880</u> |
| PUMP TRUCK CHARGE | <u>1925.00</u> |
| EXTRA FOOTAGE | @ |
| MILEAGE <u>100</u> | @ <u>7.00</u> <u>700.00</u> |
| MANIFOLD <u>1</u> | @ <u>200.00</u> <u>200.00</u> |
| <u>Light VMileage 100</u> | @ <u>4.00</u> <u>400.00</u> |
| TOTAL <u>3225.00</u> | |

CHARGE TO: FRICON EXPLORATION
STREET _____
CITY _____ STATE _____ ZIP _____

| | |
|--------------------------|-------------------------------|
| PLUG & FLOAT EQUIPMENT | |
| <u>Guide Shoe 1</u> | @ <u>404.00</u> <u>404.00</u> |
| <u>AFU Insert 1</u> | @ <u>238.00</u> <u>238.00</u> |
| <u>Centralizer's 3</u> | @ <u>67.00</u> <u>201.00</u> |
| <u>Basket's 3</u> | @ <u>314.00</u> <u>942.00</u> |
| <u>Top Rubber Plug 1</u> | @ <u>101.00</u> <u>101.00</u> |
| TOTAL <u>1886.00</u> | |

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.

SALES TAX (If Any) _____
TOTAL CHARGES \$26,478.70
DISCOUNT \$20,076.30 IF PAID IN 30 DAYS

PRINTED NAME Leon Kuhn
SIGNATURE Leon Kuhn

