



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

**Well Name:** SHIRLEY ANN 'A' #1-14  
**API:** 15-163-24,232-00-00  
**Location:** N2 - SE - SW of Sec. 14 - T 7 S. - R19 W.  
**License Number:** KCC #5003  
**Spud Date:** 07/19/2014  
**Surface Coordinates:** 990' FSL & 1980' FWL

**Region:** Rooks Co., KS  
**Drilling Completed:** 07/26/2014

**Bottom Hole  
Coordinates:**  
**Ground Elevation (ft):** 1922'                      **K.B. Elevation (ft):** 1927'  
**Logged Interval (ft):** 220'                      **To:** 3499'                      **Total Depth (ft):** 3500'  
**Formation:** ARBUCKLE  
**Type of Drilling Fluid:** Chemical/Polymer/Gel & Mud Displacement at 2688'.

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**OPERATOR**

**Company:** McCoy Petroleum Corporation, KCC License #5003  
**Address:** 9342 E. Central  
Wichita, KS 67206

**GEOLOGIST**

**Name:** David P. Williams, P.G., KSBTP #88  
**Company:** DW ENERGY, LLC (DWE)  
**Address:** 312 N. BROADVIEW STREET  
WICHITA, KANSAS 67208

**Casing & Deviation Survey's:**

Spud at 2:00 PM on 07/19/2014. Ran 5 joints of new 8-5/8" 23# surface casing. Tally 210.99'. Set at 219.99' KB. Welded straps on casing. Allied cemented with 165 sacks of Common with 2% Gel and 3% CC.. Cement did circulate to surface.

**DEVIATION SURVEY'S:** @ 220' = 1/2 degree; @ 3110' = 3/4 degree; @ 3500' = 1/2 degree.

## DSTs

~~DST # 1~~ Interval: 3043'- 3110'. Times: 5"-45"-45"-45".

Blow: IF=Weak/1/2". No Blow Back During ISIP. FF= No Blow (w/Slight Plugging/15"). No Blow Back During FSIP.

Recovery: 5' M (100%M).

Pressures: IH=1467#; FH=1410#; IF=22-23#; FF=27-38#; ISIP= 916#; FSIP=877#:TEMP.=101 degrees F..

~~DST #2~~ Interval: 3176'- 3240'. Times: 5"-60"-90"-120".

Blow: IF=Weak/2 1/2". No Blow Back During ISIP. FF= Good Blow/10.5". No Blow Back During FSIP.

Recovery: 120' TF: 10' GOCM (10% G & 20% O & 70% M); 110' WCM ( 80% W & 20% M).

Pressures: IH=1519#; FH=1517#; IF=23-28#; FF=34-101#; ISIP= 728#; FSIP=648#: TEMP.=101 degrees F.;

Chl.=9500 Ppm.;

API Rw=.521 @ 94 degrees. F..

~~DST #3~~ Interval: 3247'- 3344'. Times: 5"-60"-60"-60".

Blow: IF=Weak/1/4". No Blow Back During ISIP. FF= No Blow (Flushed Took & Surge-No Help). No Blow Back During FSIP.

Recovery: 3' M (100%M). Tool Plugged Both IF & FF.

Pressures: IH=1586#; FH=1505#; IF=39-30#; FF=172-71#; ISIP= 708#; FSIP=608#: TEMP.=101 degrees F..


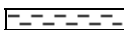

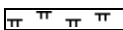
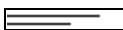
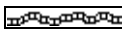




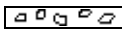


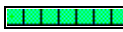




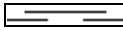

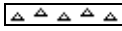


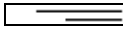

## Comments

After review of all geologic samples as examined, combined with the fluid and pressures results from all drill stem tests taken and analysis from the electric logs run, it was determined by all parties that production casing be run in order to further evaluate this well.

Respectfully submitted,

David P. Williams, P.G.

## ROCK TYPES

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

**ACCESSORIES**

- MINERAL**
- Anhy
  - Arggrn
  - Arg
  - Bent
  - Bit
  - Breclrag
  - Calc
  - Carb
  - Chtdk
  - Chtlit
  - Dol
  - Feldspar
  - Ferrpel
  - Ferr
  - Glau
  - Gyp

- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Stly
- Sil
- Sulphur
- Tuff

- FOSSIL**
- Algae

- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Fuss
- Gastro
- Oolite
- Oomold
- Ostra

- Pelec
- Pellet
- Pisolite
- Plant
- Strom

**STRINGER**

- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg

**TEXTURE**

- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

**OTHER SYMBOLS**

- POROSITY**
- Earthy
  - Fenest
  - Fracture
  - Inter
  - Moldic
  - Organic
  - Pinpoint

- Vuggy

- SORTING**
- Well
  - Moderate
  - Poor

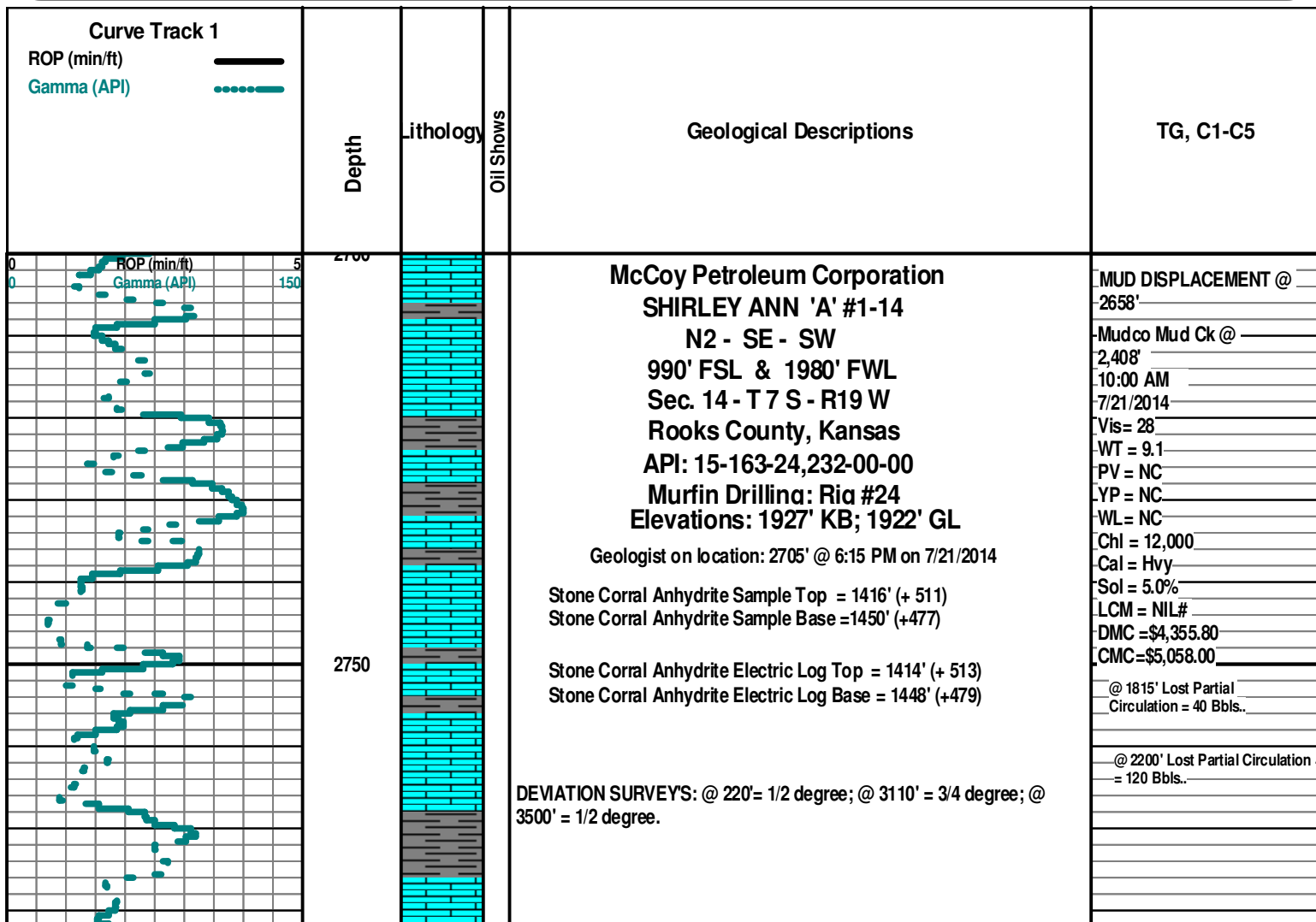
- ROUNDING**
- Rounded
  - Subrnd
  - Subang
  - Angular

- Even
- Spotted
- Ques
- Dead

- EVENT**
- Rft
  - Sidewall

- OIL SHOW**
- Gas show

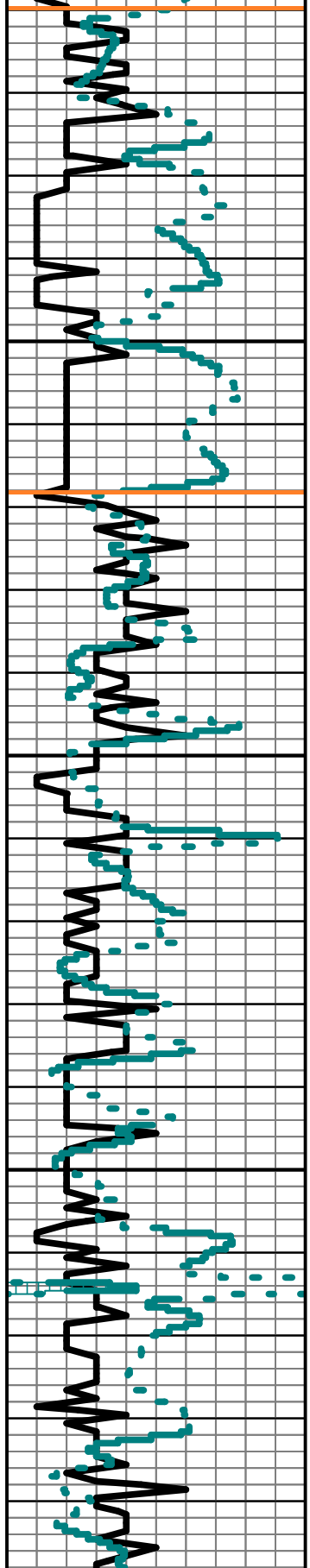
- INTERVAL**
- Dst
  - Dst\_alt



NOTE: ALL SAMPLES HAVE BEEN LAGGED TO DEPTH BY CALCULATED TIME.

Begin 10' Sample Examination at 2800'

ROP (min/ft)  
Gamma (API)



2800

Sh Gry Soft "Gummy" Ls Gry-Crm MicroxIn Dns Micrite Chalky No Odor No Flor No Stn NS

**HOWARD 2812' (- 885)**

Ls Crm-Wht-Gry MicroxIn Dns Micrite Fos (Crin, Fuss) Chalky Sh Gry (Abd)-Maroon "Gummy" Soft No Odor No Flor No Stn NS

Ls Crm-Wht-Gry MicroxIn Dns Micrite Fos (Brach, Crin) Chalky Sh Gry (Abd)-Maroon "Gummy" Soft No Odor No Flor No Stn NS

Sh Char-Gry- Maroon-Aqua-Yell Soft Ls Gry-Crm-Wht MicroxIn Dns Micrite Qtz SS Wht Well-Gry (w/ Carb Includ) Rd VFGrn Well Sort Fos (Crin, Fuss) Chalk (Abd) No Odor No Flor No Stn NS

Sh Char-Gry- Maroon-Aqua-Yell Soft Ls Gry-Crm-Wht MicroxIn Dns Micrite Qtz SS Wht Well-Gry (w/ Carb Includ) Rd VFGrn Well Sort Fos (Crin, Fuss) Chalk (Abd) No Odor No Flor No Stn NS

2850

Sh Gry Soft Ls Gry-Crm-Wht MicroxIn Dns Micrite Chalk (Abd) No Odor No Flor No Stn NS

Sh Gry Soft Ls Crm-Wht MicroxIn Dns Micrite Chalk (Abd) No Odor No Flor No Stn NS

**TOPEKA 2858' (- 931)**

Ls Crm-Gry MicroxIn Dns Micrite Chalky Sh Gry-Char-Aqua "Gummy" Soft No Odor No Flor No Stn NS

Ls Crm-Gry-Wht MicroxIn Dns Micrite Chalky Sh Gry-Char "Gummy" Soft-Fissil No Odor No Flor No Stn NS

Ls Crm-Gry-Wht MicroxIn Dns Micrite Chalky Sh Gry-Char "Gummy" Soft-Fissil No Odor No Flor No Stn NS

2900

Ls Crm-Tan-Wht MicroxIn Dns Micrite Grad Poor OOM Por (w/ Small OOids in pl) Poor Dissolu Chalky Sh Gry-Char "Gummy" Soft-Fissil No Odor No Flor No Stn NS

Ls Wht -Crm-Tan MicroxIn Dns Micrite Grad Poor Igran Por Chalky Sh Gry-Char Soft-Fissil No Odor No Flor No Stn NS

Ls Crm-Tan-Wht MicroxIn Dns Micrite Grad Poor Gran Por (w/Poor Igran Por) Sh Gry-Char "Gummy" Softl No Odor No Flor No Stn NS

Ls Crm-Tan-Gry MicroxIn Dns Micrite Chalky Sh Gry-Char-Blk Carb Soft-Fissil No Odor No Flor No Stn NS

Ls Crm-Tan-Wht MicroxIn Dns Micrite Grad Poor Igran Por Chalky Sh Gry-Char Soft-Fissil No Odor No Flor No Stn NS

2950

Ls Crm-Tan-Wht MicroxIn Dns Micrite Grad Poor Igran Por Chalky Sh Red-Gry-Char-Blk Carb (Wash Red) Soft-Fissil No Odor No Flor No Stn NS

Ls Crm-Tan-Wht MicroxIn Dns Micrite Grad Poor Igran Por Chalky Sh Red-Gry-Char Soft No Odor No Flor No Stn NS

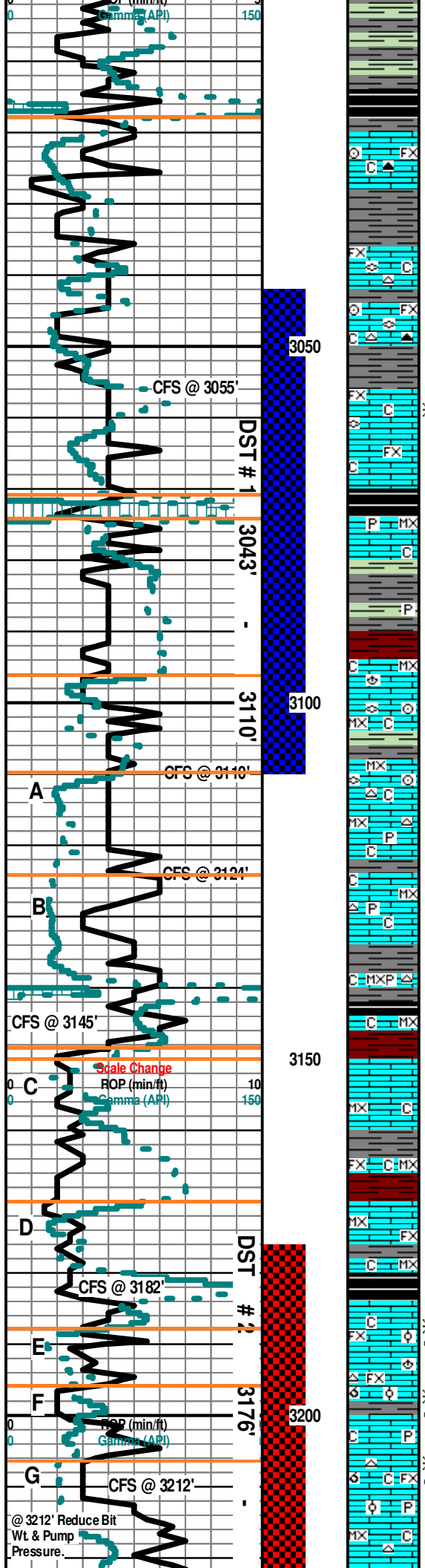
Ls Crm-Tan-Wht MicroxIn Dns Micrite Chalky Sh Gry-Char-Blk Carb Soft-Fissil No Odor No Flor No Stn NS

Ls Wht-Crm MicroxIn Dns Micrite Grad Poor OOM Por Poor Dissolu Poor Develop Barren Chalky Sh Gry-Char-Blk Carb Soft-Fissil No Odor Fair ? Min Flor No Stn NS

Ls Wht -Crm-Tan FxIn Dns Micrite Grad Poor Igran Por Chalky Fos (Fuss) Sh Gry-Char Soft-Fissil No Odor No Flor No Stn NS

3000

Sh Grv/Grn Soft Ls Tan-Crm-Grv FxIn Dns Micrite Fos (Fuss) Abd Chalk



No Odor No Flor No Stn NS

Sh Gry/Grn Soft-Fissil Ls Tan-Crm-Gry FxIn Dns Micrite Cht Amber Translu Shp Vit Fos (Fuss) Abd Chalky No Odor No Flor No Stn NS

Sh Gry/Grn Soft Ls Tan-Crm-Gry FxIn Dns Micrite Cht Amber Translu Shp Vit Fos (Crin) Abd Chalky No Odor No Flor No Stn NS

Ls Gry-Tan-Crm FxIn Dns Micrite Fos (Fuss) VAbd Cht Wht Op Shp Vit Chalky Sh Gry Soft No Odor No Flor No Stn NS

30" CFS @ 3055' Ls Gry-Tan-Crm FxIn Dns Micrite Cht Wht Translu-Op (w/Fos (Crin) Includ) Chalky Fos (Fuss) Sh Gry Soft Faint Odor Sli ? Min Flor No Stn NS

60" CFS @ 3055' Ls Wht-Crm-Tan-Gry MicroxIn Dns Micrite Cht Wht-Drk Tan Op Shp Vit Fos (Crin, Fuss) V Chalky Sh Gry Soft Med-Good Odor Sli ? Min Flor No Stn NS

Ls Wht-Crm-Tan FxIn Dns Micrite Grad Fair-Med IxIn "Salt & Pepper" Por (w/Fos (Fuss) Includ) Fair Leaching Grad Small Vug IxIn Por (w/Fair-Med SG & SFO in Tray Drk Brn) Gas & Oil Do Not Flor) Sh Gry Soft-Fissil Good Odor Sli ? Min Flor Drk Brn Stn FSG & FSFO

**HEEBNER 3071' (- 1144)**

Sh Blk Carb Fissil Ls Wht-Crm-Tan-Gry MicroxIn Dns Micrite (w/Pyr Includ) Chalky ? Faint Odor No Stn No Flor NS

Sh Gry/Grn "V Gummy"-Tr Blk Carb Fissil Ls Wht-Crm-Tan MicroxIn Dns Micrite (w/Pyr Includ) Chalky ? Faint Odor No Stn No Flor NS

**TORONTO 3096' (- 1173)**

30" CFS @ 3110' Ls Wht-Crm-Tan MicroxIn Dns Micrite Fos (Brach) Pyr Mass Chalky Sh Gry/Grn Fissil No Odor No Stn No Flor NS

60" CFS @ 3110' Ls Wht-Crm-Tan MicroxIn Dns Micrite Fos (Crin, Fuss) Cht Wht Op Shp Vit Chalky Sh Gry/Grn Fissil No Stn Sli Odor No Flor NS

**LANSING 3110' (- 1183)**

30" CFS @ 3124' Ls Wht-Crm-Tan-Gry MicroxIn Dns Micrite Fos (Crin, Fuss) Cht Wht-Gry Translu-Op Shp Vit Chalky Sh Char-Gry/Grn Fissil No Stn No Odor Sli ? Min Flor (Dull Grn) NS

60" CFS @ 3124' Ls Wht-Crm-Tan-Gry MicroxIn Dns Micrite Cht Wht-Gry Translu-Op Shp Vit Pyr Mass Chalky Sh Char-Gry/Grn Fissil No Stn No Odor Sli ? Min Flor (Dull Gm) NS

30" CFS @ 3145' Ls Wht-Crm-Tan-Gry MicroxIn Dns Micrite Grad Poor IxIn Sli Vug Por (w/ 1 Pc ? Lt Brn Stn) Cht Wht-Gry Translu-Op Shp Vit Pyr Mass Chalky Sh Char-Gry/Grn Fissil No Stn No Odor Sli ? Min Flor (Dull Gm) NS

60" CFS @ 3145' Ls Wht-Crm-Tan-Gry MicroxIn Dns Micrite Cht Wht-Gry Translu-Op Shp Vit Pyr Mass Chalky Sh Char-Gry/Grn Fissil No Stn No Odor Sli ? Min Flor (Dull Gm) NS  
Sh Red-Maroon-Grn/Gry-Aqua Soft Abd (Wash Red) Ls Gry-Wht MicroxIn Dns Micrite Barren Chalky No Vis Por No Odor No Flor No Stn NS

Sh Red-Maroon-Grn/Gry-Aqua Soft Abd (Wash Red) Ls Gry-Wht MicroxIn Dns Micrite Barren Chalky No Vis Por No Odor No Flor No Stn NS

30" CFS @ 3182' Ls Wht-Crm-Tan FxIn-MicroxIn Dns Micrite Grad Poor IxIn Por Poor Leaching Chalky Sh Red-Char Soft No Odor No Flor No Stn NS

60" CFS @ 3182' Ls Wht-Crm-Tan FxIn-MicroxIn Dns Micrite Grad Poor IxIn Por Poor Leaching Chalky Sh Red-Char Soft No Odor No Flor No Stn NS

Ls Wht-Crm-Tan FxIn Fair-Med IxIn (w/Tr. Vug IxIn Por) Grad Fair OOL (w/Small-Med OOids in pl) Fair-Med Leaching (w/SSG & SSFO Under Wtr in Heat) Gas & Oil Do Not Flor Chalky Sh Red-Gry-Aqua Fair-Med Odor No Flor Sli Stn SSG & SSFO (in Tray)

30" CFS @ 3212' Ls Wht-Crm FxIn Med-Good "Salt & Pepper" Pin-Pt IxIn Por (w/Vug IxIn) Grad Fair OOL/OOM Por (w/Small OOids in pl) Fair-Med Leaching (w/GSG & Lt-Drk Brn Stn GSFO Under Wtr in Heat) Gas & Oil Do Flor Cht Wht Op Shp Vit Fos (Brach) Pyr Mass Chalky Sh AA Good Odor Med Flor (Lt Grn) GSG & GSFO

60" CFS @ 3212' Ls Wht-Crm FxIn Med-Good "Salt & Pepper" Pin-Pt IxIn Por (w/Vug IxIn) Grad Fair OOL/OOM Por (w/Small OOids in pl) Fair-Med Leaching (w/GSG & Lt-Drk Brn Stn GSFO Under Wtr in Heat) Gas & Oil Do Flor Cht Wht Op Shp Vit Pyr Mass Chalky Sh AA Good Odor Med Flor (Lt Grn) GSG & GSFO

Ls Wht-Crm-Tan-Gry MicroxIn Dns Micrite Cht Wht Op Shp Vit Pyr Mass Chalky Sh Char-Gry- Aqua Soft-Fissil (Abd LCM) Fair Flor No Stn Faint Odor NS

9:38 AM	7/22/2014
Vis= 45	
WT= 8.8	
PV = 11	
YP = 18	
WL= 8.0	
Chl = 7,100	
Cal = 20	
Sol = 3.3%	
LCM = 2#	
DMC=\$4,771.05	
CMC=\$9,829.05	

@ 3032' Lost Partial Circulation=100 Bbls. Mud During Short Trip, & TOH & TIH. Attempt to Raise Vis & LCM= 4#.

**~DST # 1~**

Interval: 3043' - 3110'  
Times: 5"-45"-45"-45"  
Blow: IF=Weak/1/2". No Blow Back During ISIP. FF= No Blow (w/Slight Plugging/15"). No Blow Back During FSIP.  
Recovery: 5' M(100%M).

Pressures:

IH = 1467#;
FH = 1410#;
IF = 22-23#;
FF = 27-38#;
ISIP = 916#;
FSIP = 877#;
TEMP. = 101 degrees F..

Pipe Strap= <1.17"> Long to Board. No Correction. Made.

@ 3125' Reduce Weight On Bit = 30,000# & Pump Press. To 600# (Due To Continuing Partial Loss of Returns). LCM Inc= 8#.

Mudco Mud Ck @ 3,182' @ 9:00 AM
7/23/2014
Vis= 47
WT = 8.8
PV = 13
YP = 18
WL= 6.8
Chl = 7,500
Cal = Tr.
Sol = 3.3%
LCM = 5#
DMC=\$4,114.80
CMC=\$13,943.95

@ 3182' Mix 40 Sxs. Barr Mud & Pit Mud to Inc. Mud Weight. Reduce Weight On Bit = 28,000# & Pump Press. To 500-550## (Due To

@ 3212' Continuing Partial Loss of Returns). Mix 40 Bbls. Barr Mud to Inc. Weight. LCM Inc= 12#. Loss Mud = 560 Bbls Total.

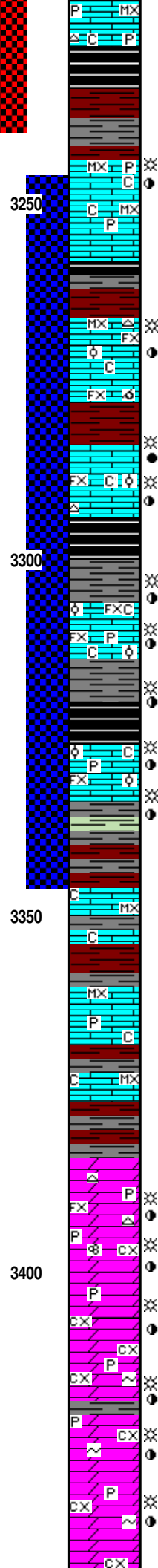
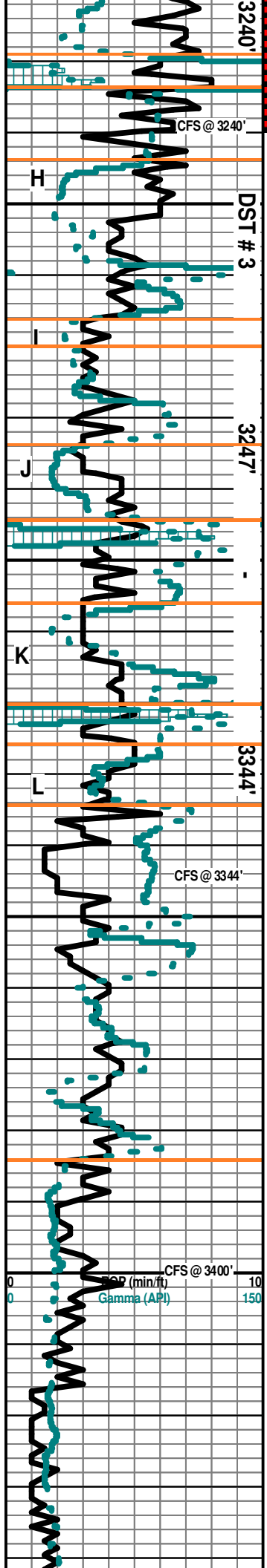
Mudco Mud Ck @ 3,212' @ 10:25 PM 7/23/2014
Vis= 60+
WT = 8.9
PV = 16
YP = 39
WL= 7.6
Chl = 1,400
Cal = Tr.
Sol = 4.3%
LCM = 24#
DMC=\$6,795.40
CMC=\$20,739.35

**~DST #2~**

Interval: 3176' - 3240'  
Times: 5"-60"-90"-120".

@ 3212' Reduce Bit Wt & Pump Pressure.





Ls Wht-Crm-Tan-Gry Microxln Dns Micrite Cht Wht Op Shp Vit Pyr Mass Chalky Sh Char-Gry- Aqua Soft-Fissil (Abd LCM) Fair Flor No Stn Faint Odor NS

**MUNCIE CREEK 3229' (- 1302)**

30" CFS @ 3240' Sh Blk Carb-Gry-Aqua-Maroon Soft-Fissil (Abd LCM) No Odor No Stn No Flor NS

60" CFS @ 3240' Sh Blk Carb-Gry-Aqua-Maroon Soft-Fissil (Abd LCM) No Odor No Stn No Flor NS

Ls Wht-Crm-Tan- Gry Microxln-Fxln Dns Micrite Grad Fair Pin-Pt Ixln Por (w/SSG & SSFO) Pyr Mass Faint Odor Fair Flor SSG & SSFO

Ls Wht-Tan-Gry Microxln Dns Micrite Barren Cht Wht-Gry Translu-Op Shp Vit Pyr Mass Chalky Sh Gry "Gummy" Soft No Odor No Stn Faint Flor NS

Ls Wht-Tan-Gry Microxln Dns Micrite Barren Cht Wht-Gry Translu-Op Shp Vit Pyr Mass Chalky Sh Gry "Gummy"-Blk Carb Soft-Fissil No Odor No Stn Faint Flor NS

Ls Wht-Crm Fxln Med-Good OOL Vug Por (w/Med-Lg OOids in pl) Med-Good Dissolu (w/GSG & SFO) Fair-Med Odor Good Stn Sat (2 Pcs w/ Lt Brn Stn) Gas & Oil Do Not Flor Chalky Sh AA SG & SFO

Ls Wht-Crm Fxln Med OOL/OOM Vug Por (w/Med OOids in pl) Med-Good Vug Dissolu (w/SG & SO) Fair Odor Good Pyr Mass Chalky Sh Red Soft (Wash Red) Gas & Oil Do Not Flor Faint Odor Sil Sat Stn (Lt Brn) SG & SFO

Ls Wht-Crm Fxln Med-Good OOL Vug Por (w/Med-Lg OOids in pl) Med Dissolu (w/SG & SO) Poor-Fair Odor ) Sh Char-Gry Soft-Fissil Gas & Oil Do Not Flor Faint Odor Sil Stn (Lt Brn) SSG & SSO

**STARK 3294' (- 1369)**

Sh Blk Carb-Gry Fissil Ls Wht-Crm Fxln Fair Ixln Pin-Pt Sil Vug Por (w/SSG & SSFO) Cht Wht Op Shp Vit Pyr Mass Fair-Med Odor Gas & Oil Do Not Flor Fair Stn (Lt Brn) SSG & SFO

Ls Wht-Crm Fxln Poor-Fair Ixln Pin-Pt "Salt & Pepper" (w/Tr Smal Vug) Ixln Por (w/SSG & SSO) Grad Fair-Med OOL Porwhen Broken (w/Small-Med OOids in pl) Fair-Med Dissolu Soft Friable (w/Med SG & SO Pyr Mass Chalky Sh Gry Fissil Faint-Fair Odor (Gas & Oil Do Not Flor) Sil Scat Flor (Lt Grn) Fair InterOOLStn (Lt Brn w/Lt Brn Stn) Fair SG & SO

Ls Wht-Crm Fxln Fair Ixln Pin-Pt "Salt & Pepper" (w/Tr Small Ixln Vug) Por (w/SG & SFO) Grad Med-Good OOL Por (w/Small OOids in pl) Med Dissolu Pyr AA Chalky Sh AA Fairmt Odor Sil Scat Flor (Lt Grn) Fair Stn SG & SFO

**HUSHPUCKNEY 3320' (- 1393)**

30" CFS @ 3344' Ls Wht-Crm Fxln Fair Ixln Pin-Pt "Salt & Pepper" (w/Tr Small-Med Vug) Por (w/SG & SFO) Grad Med OOL Por (w/Small-Med OOids in pl) Med-Good Dissolu Pyr Mass Chalky Sh Char-Gry Soft Fissil Faint Odor Sil Scat Flor (Lt Grn) Fair InterOOL Stn (Lt Brn w/Tr Gillsonitic "Dead" Blk Stn) FSG & FSFO

**BASE KANSAS CITY 3334' (- 1407)**

60" CFS @ 3344' Ls Wht-Crm Fxln Fair Ixln Pin-Pt "Salt & Pepper" (w/Tr Small-Med Vug) Por (w/SG & SFO) Grad Med OOL Por (w/Small-Med OOids in pl) Med-Good Dissolu Pyr Mass Chalky Sh Char-Gry Soft Fissil Faint Odor Sil Scat Flor (Lt Grn) Fair InterOOL Stn (Lt Brn w/Tr Gillsonitic "Dead" Blk Stn) FSG & FSFO

Ls Wht-Crm Microxln Dns Micrite Barren Grad Poor Ixln Por ChalkySh Gry-Red (Abd) Fissil No Odor No Stn No Flor NS

Ls Wht-Crm Microxln Dns Micrite Barren Grad Poor Ixln Por Chalky Pyr Mass Sh Gry-Red Fissil No Odor No Stn No Flor NS

Sh Gry-Red Fissil Ls Wht-Crm Microxln Dns Micrite Barren Grad Poor Ixln Por Pyr Mass Chalky No Odor No Stn No Flor NS

Ls Microxln Dns Micrite (w/Pyr Incls) Baren Poor Ixln Por Chalky Sh Varicolored Red-Maroon-Char-Gry-Aqua Soft-Fissil No Odor Scat ? Min Flor (Dull Lt Grn) No Stn NS

**ARBUCKLE 3384' (- 1457)**

Dolo Tan-Crm-Wht Fxln Dns Micrite Grad Poor-Fair Ixln Pin-Pt "Salt & Pepper Ixln Por" (w/Tr. Gillsonitic Stn) Grad Poor-Fair Sucrosic Por (w/SSG & SSO) Cht Wht-Yell Banded Translu-Op Shp Vit Pyr Mass Sh Red-Aqua-Char Soft-Fissil Faint Odor Sil ? Flor (Dull Lt Grn) Drk Blk Stn SSG & SSO

30" CFS @ 3400' Dolo Tan-Crm-Wht Fxln Fair-Med Pin-Pt "Salt & Pepper Ixln Por" Grad Fair-Med Sucrosic Por (w/Gillsonitic Stn & w/SG & SFO) (Drk Blk Both Gas & Oil Do Not Flor) Cht Wht Op Shp Vit Pyr Mass Fos (Globigerina) Sh Aqua-Char Soft-Fissil Fair Odor No Flor (Lt Grn) Drk Blk Stn FSG & SFO

60" CFS @ 3400' Dolo Wht-Tan Fxln Med-Good Sucrosic "Rhombic" Ixln Por (w/Gillsonitic Stn & w/SG & GSFO AA) Friable Pyr Mass Sh Aqua-Char Soft-Fissil Med Odor No Flor Drk Blk Stn GSG & GSFO

Dolo Wht-Tan Fxln Med-Good Sucrosic "Rhombic" Ixln Por (w/Med-Lg Vugs w/Gillsonitic Stn & GSG & GSFO AA) Friable Pyr Mass Sh Blk Carb-Aqua AA Med Dec Odor No Flor Drk Blk Stn GSG & GSFO

Dolo Wht-Tan M-Xln Med-Good Sucrosic "Rhombic" Ixln Por (w/Med-Lg Vugs w/ Pyr & Glacu ? (Aqua) Incls (Abd) w/Gillsonitic Stn & GSG & GSFO (30% of Tray) Friable Pyr Mass Sh AA Good Inc-Strong Odor No Flor Drk Blk Stn GSG & GSFO

Dolo Wht-Tan M-Lg Xln Good Sucrosic "Rhombic" Ixln Por (w/Med-Lg Vugs w/ Pyr & Glacu ? (Aqua) Incls (Abd) & w/Gillsonitic Stn & GSG & GSFO (40% of Tray) Friable Pyr Mass Strong Inc Odor No Flor Drk Blk Stn Abd SFO in Tray GSG & GSFO

Dolo Wht-Tan M-Lg Xln Good Sucrosic "Rhombic" Ixln Por (w/Med-Lg Vugs w/ Pyr & Glacu ? (Aqua) Incls (Abd) & w/Gillsonitic Stn & GSG & GSFO (50% of Tray) Friable Pyr Mass Hvy Strong Odor No Flor Drk Blk Stn Abd SFO in Tray GSG & GSFO

Blow: IF=Weak/2 1/2'. No Blow Back During ISIP. FF= Good Blow/10.5'. No Blow Back During FSIP.

Recovery: 120' TF: 10' GOCM (10% G & 20% O & 70% M); 110' WCM (80% W & 20% M).

Pressures:  
 IH = 1519#;  
 FH = 1517#;  
 IF = 23-28#;  
 FF = 34-101#;  
 ISIP = 728#;  
 FSIP = 648#;  
 TEMP. = 101 degrees F.;  
 Chl. = 9500 Ppm.;  
 API Rw =.521 @ 94 degrees F..

Mudco Mud Ck @ 3,240' @ 8:55 AM 7/24/2014  
 Vis= 58  
 WT = 9.1  
 PV = 12  
 YP = 29  
 WL= 7.6  
 Chl = 3,300  
 Cal = Tr.  
 Sol = 5.6%  
 LCM = 18#  
 DMC=\$4,503.43  
 CMC=\$25,242.75

**~DST #3~**

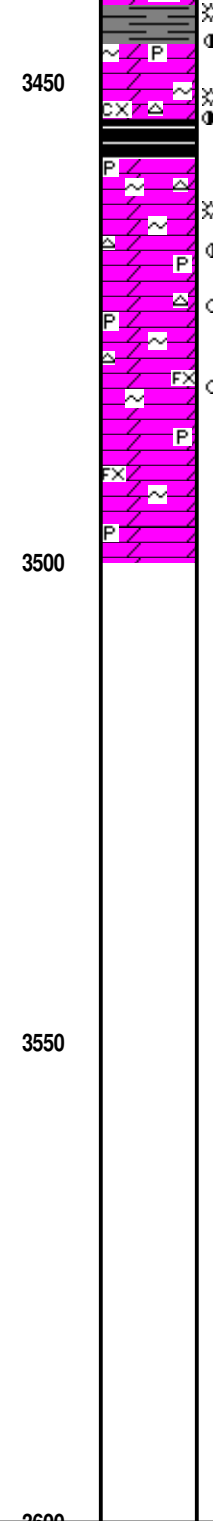
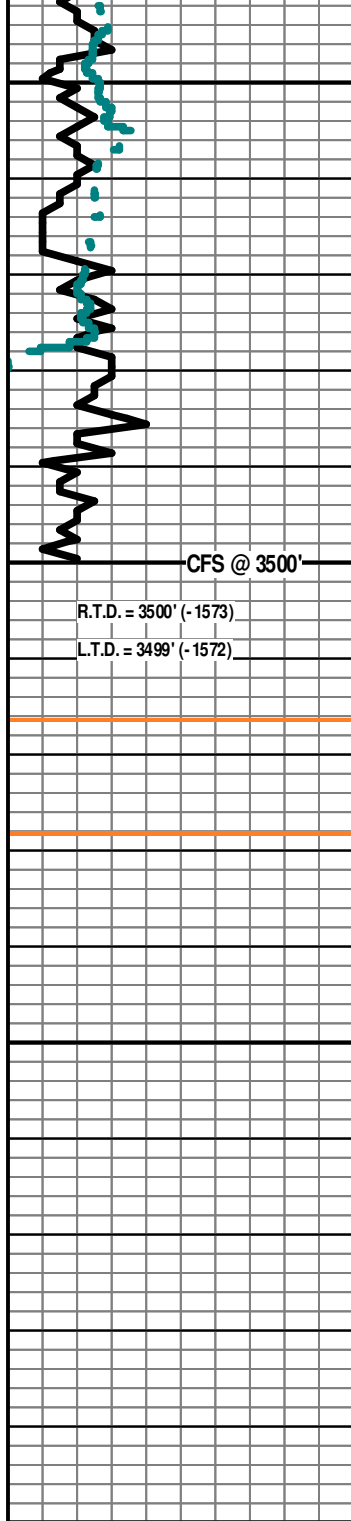
Interval: 3247' - 3344'.  
 Times: 5"-60"-60"-60".

Blow: IF=Weak/1/4". No Blow Back During ISIP. FF= No Blow (Flushed Took & Surge-No Help). No Blow Back During FSIP.

Recovery: 3' M (100%M).  
 Tool Plugged Both IF & FF.

Pressures:  
 IH = 1586#;  
 FH = 1505#;  
 IF = 39-30#;  
 FF = 172-71#;  
 ISIP = 708#;  
 FSIP = 608#;  
 TEMP. = 101 degrees F..

Mudco Mud Ck @ 3,344' @ 7:50 AM 7/25/2014  
 Vis= 56  
 WT = 9.0  
 PV = 11  
 YP = 29  
 WL= 10.0  
 Chl = 4,200  
 Cal = 20  
 Sol = 4.8%  
 LCM = 16#  
 DMC=\$9,975.30  
 CMC=\$35,218.05



Dolo Wht-Tan M-Lg Xln Good Sucrosic "Rhombic" lxn Por (w/Med-Lg Vugs w/ Pyr & Glacu ? (Aqua) Inklus (Abd) & w/Gillsonitic Stn & GSG & GSFO (40% of Tray) Friable Pyr Mass Hvy Strong Odor No Flor Drk Blk Stn Abd SFO in Tray GSG & GSFO  
 Dolo Wht-Tan-Yell M-Lg Xln Good Sucrosic "Lg Rhombic" lxn Por (w/Lg Vugs (Good Dissolu) w/ Pyr & Glacu ? (Aqua) Inklus (Abd) & w/Gillsonitic Stn & SG & SFO (5% of Tray) Friable Cht Yell-Org Translu-Op Shp Vit Pyr Mass Med Dec Odor No Flor Drk Blk Stn SSFO in Tray SG & SFO  
 Dolo Wht-Tan-Yell M-Lg Xln Good Sucrosic "Lg Rhombic" lxn Por (w/Lg Vugs (Good Dissolu) w/ Pyr & Glacu ? (Aqua) Inklus (Abd) & w/Gillsonitic Stn & SG & SFO (5% of Tray) Friable Cht Yell-Org Translu-Op Shp Vit Pyr Mass Med Dec Odor No Flor Drk Blk Stn SSFO in Tray SG & SFO  
 Dolo Wht-Tan-Yell Mxn Good Sucrosic "Lg Rhombic" lxn Por Dec (w/Lg Vugs (Good Dissolu) w/ Pyr & Glacu ? (Aqua) Inklus (Abd) & w/Gillsonitic Stn & SG & SFO (5% of Tray) Friable Cht Yell-Org Translu-Op Shp Vit Pyr Mass Med Dec Odor No Flor Drk Blk Stn SSFO in Tray SG & SFO  
 30" CFS @ 3450' Dolo Wht-Tan-Maroon Fxln Poor Sucrosic lxn Por w/Glacu ? (Aqua) Inklus & w Tr/Gillsonitic Stn (few Pcs (<5% of Tray) & VSSG & VSO Faint Odor No Flor Tr/Drk Blk Stn ? NS  
 60" CFS @ 3450' Dolo Wht-Tan-Maroon Fxln Poor Sucrosic lxn Por w/Glacu ? (Aqua) Inklus & w Tr/Gillsonitic Stn (few Pcs (<5% of Tray) & VSSG & VSO Faint Odor No Flor Tr/Drk Blk Stn ? NS

Mudco Mud Ck @ 3,500'  
 @ 9:00 AM 7/26/2014  
 Vis= 52  
 WT = 9.0  
 PV = 14  
 YP = 21  
 WL= 11.6  
 Chl = 5,300  
 Cal = Tr.  
 Sol = 4.7%  
 LCM = 14#  
 DMC=\$1,928.05  
 CMC=\$37,146.10

Electric Logs Run By Pioneer Logging: Dual Induction; Dual Compensated Porosity & Microresistivity Logs.  
 Geologist Left Location at: 7:30 PM on 07/26/2014

3450  
 CFS @ 3500'  
 3500  
 3550  
 3600

R.T.D. = 3500' (-1573)  
 L.T.D. = 3499' (-1572)