



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

Well Name: KOEHN "C" #1-20
API: # 15 - 119 - 21,374 - 00 - 00
Location: SW-SW-NW of Sec. 20 - T. 30 S. - R. 30 W.
License Number: KCC # 5003
Spud Date: 09/22/2014
Surface Coordinates: SPOT: 2970' FSL & 2310' FEL

Region: MEADE CO., KS.
Drilling Completed: 09/30/2014

**Bottom Hole
Coordinates:**
Ground Elevation (ft): 2814' **K.B. Elevation (ft):** 2827'
Logged Interval (ft): **To:** **Total Depth (ft):** 5750'
Formation: MISSISSIPPIAN "ST. LOUIS"
Type of Drilling Fluid: CHEMICAL/POLYMER/GEL. & MUD DISPLACEMENT @ 3009'.

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

OPERATOR

Company: McCOY PETROLEUM CORPORATION KCC LIC. NO. # 5003
Address: 9342 E. CENTRAL
WICHITA, KANSAS 67206-2573

GEOLOGIST

Name: DAVID P. WILLIAMS, P.G.
Company: DW ENERGY, LLC (DWE)
Address: 312 N. BROADVIEW STREET
WICHITA, KANSAS 67208

CASING & DEVIATION

Surface Casing: Spud at 9:30 PM on 09/22/14. Drilled 12-1/4" to 1836'. Ran 43 joints of new 24#, 8-5/8" casing. Tallied 1818'. Set at 1832' KB. Welded straps on shoe, bottom 3 joints and top 2 joints. Tacked collars on the remainder. (5) Centralizers on joints 1-3-5-7-9. Float insert in top of 1st joint. Cemented with 675 sks 65/35, 6% Gel 3% CC & 1/4# FS Tailed with 200 skx Class A 3% CC, 3% Gel & 1/4# FS. Cement did circulate. Plug down at 3:00 PM on 09/24/14. Allied Cementing ticket #61593.


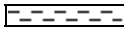

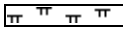

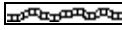




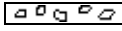







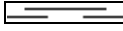




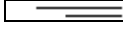
Deviation Sruvey Taken: @ 1836' = 1 1/4 degrees; @ 5366' = 1 3/4 degree;

DSTs











































































~~DST # 1~~ Interval: 5272'-5366'. Times: 5''-60''-90''-120'';
Blow: IF= Weak/1 3/4". No Blow Back During ISIP. FF= Weak Blow 2''/Died @ 44". No Blow Back During FSIP.
Recovery: 125' TF: 60' OCM (5% O & 95% M); 65' M (w/Tr. O) (100% M).
Pressures: IH=2717#; FH=2609#; IF=30-36#; FF=71-100#; ISIP =508#; FSIP=196#; Temp.=127 degrees F..

Comments

























ROCK TYPES

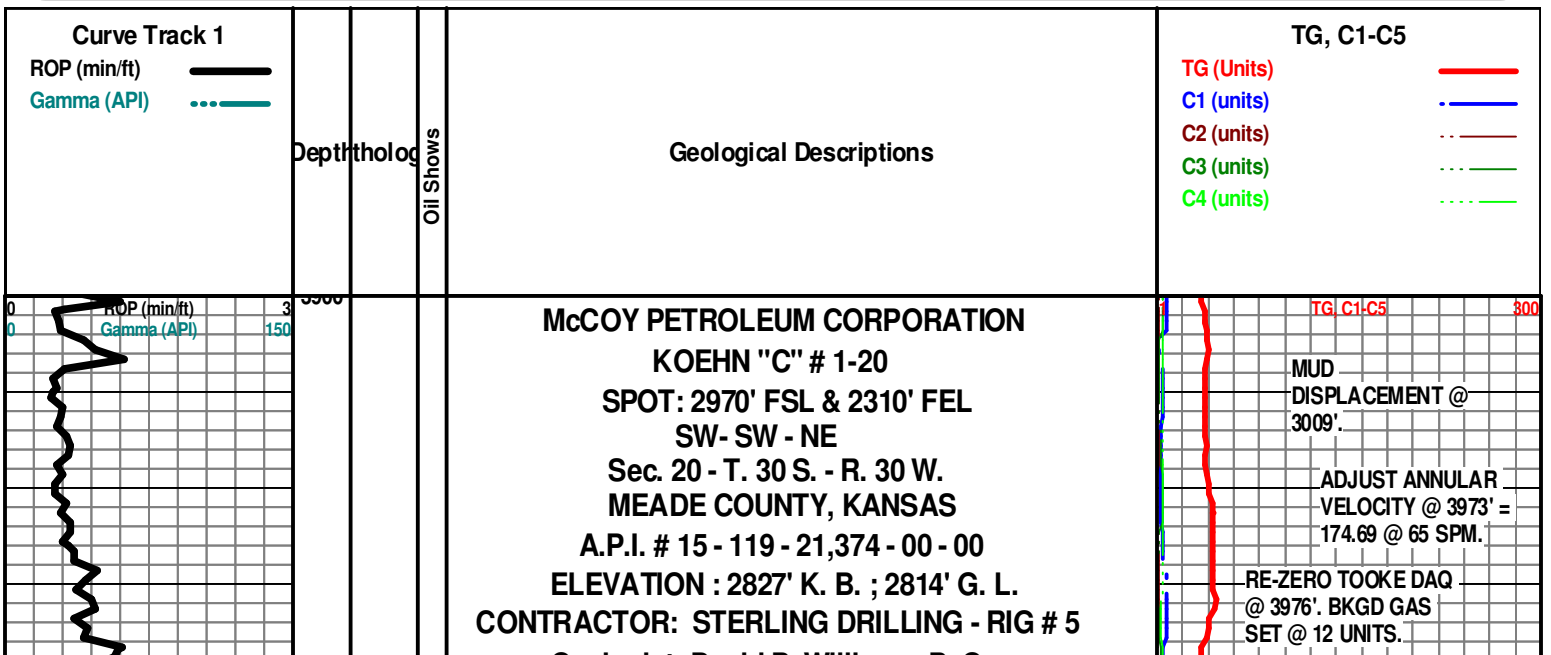
 Anhy	 Clyst	 Gry shale	 Mrlst	 Shgy
 Bent	 Coal	 Gyp	 Red shale	 Sltst
 Brec	 Congl	 Igne	 Salt	 Ss
 Carb sh	 Dol	 Lmst	 Shale	 Till
 Cht	 Grn sh	 Meta	 Shcol	

ACCESSORIES

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

OTHER SYMBOLS

POROSITY	 Vuggy	ROUNDING	 Even	EVENT
 Earthy		 Rounded	 Spotted	 Rft
 Fenest	SORTING	 Subrnd	 Ques	 Sidewall
 Fracture	 Well	 Subang	 Dead	
 Inter	 Moderate	 Angular		
 Moldic	 Poor		INTERVAL	
 Organic		OIL SHOW	 Dst	
 Pinpoint		 Gas show	 Dst_alt	



Geologist: David P. Williams, P. G.

Geologist on location at 3804' @ 3:15 PM 9-26-14

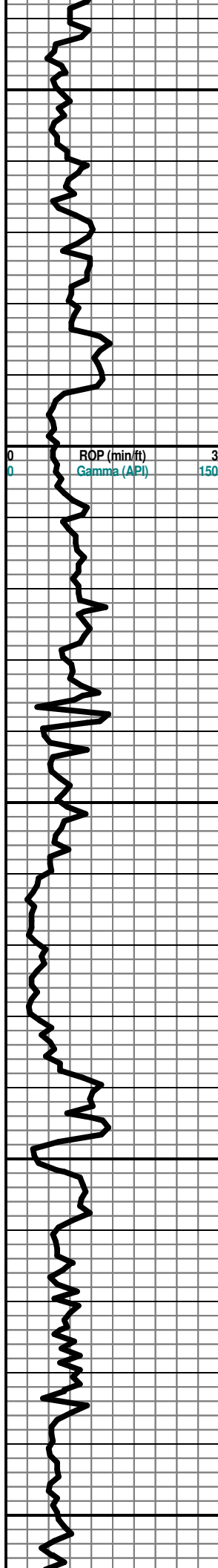
STONE CORRAL ANHYDRITE SAMPLE TOP = 1639' (+).

STONE CORRAL ANAYDRITE SAMPLE BASE = 1687' (+).

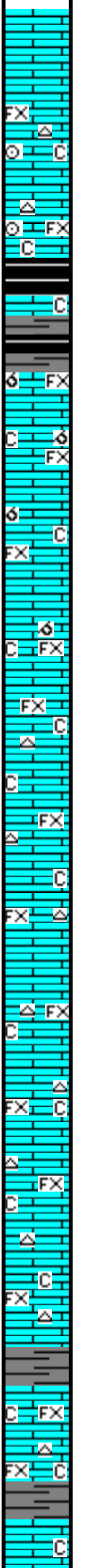
Deviation Survey's Taken: @ 1836' = 1 1/4 degrees; @ 5366' = 1 3/4 degree;
@ 5750' = degrees.

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

Begin 31' Sample Examination @ 4050'.



3950
4000
4050
4100
4150

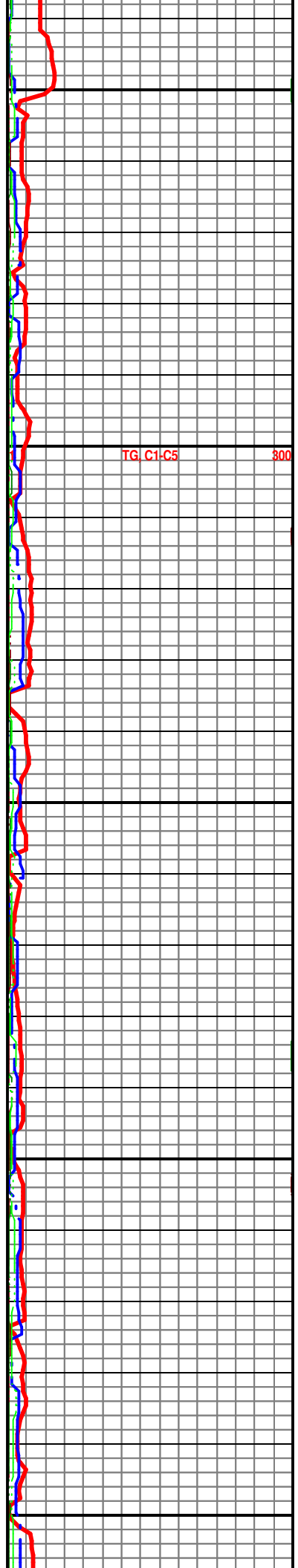


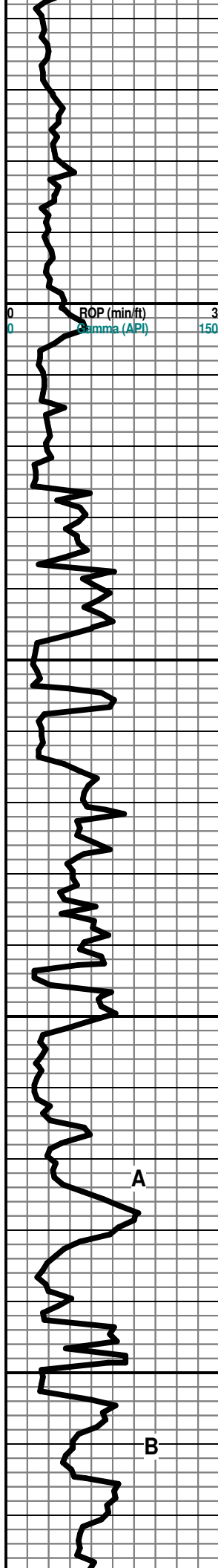
Ls Wht-Crm FxIn Poor OOM Por Poor Develop Poor Dissolu Poor Leaching
Grad Micrite Barren Cht Wht Op Shp Vit Fos (Crin) Chalk (V Abd)Sh
Char-Gry Soft No Odor No Stn No Flor NS

Ls Wht-Crm-Gry FxIn Med-Good OOM Por Poor Develop Fair Dissolu Fair
Leaching Grad Chalky (V Abd) Sh Char-Gry Soft No Odor No Stn No Flor NS

Ls Gry-Crm FxIn Poor OOM Por Poor Develop Poor Dissolu Poor Leaching
Grad Micrite Barren Cht Wht Op Shp Vit Chalk Sh Char-Gry Soft No Odor
No Stn No Flor NS

Ls Crm-Gry FxIn Micrite Barren Grad Poor Pin-Pt IxIn Por Grad Med-Good
OOM Por Cht Wht Op Shp Vit Chalk Sh Char-Gry Soft No Odor No Stn No
Flor NS





Ls Wht-Crm-Gry FxIn Micrite Barren Grad Poor Pin-Pt IxIn Por Grad
 Poor-Fair OOM Por Chalk Sh Char-Gry-Drk Gry Soft No Odor No Stn No Flor
 NS

Sh Blk Carb (w/GSG)-Char-Gry Fissil Ls Wht-Crm-Gry FxIn Dns Micrite
 Chalk No Odor No Stn No Flor NS

HEEBNER 4246' (- 1419)

Sh Blk Carb-Char-Gry (w/Pyr Inclus)-Maroon Soft-Fissil Ls Wht-Crm-Gry
 FxIn Dns Micrite Grad Pin-Pt IxIn Por Chalk No Odor No Stn No Flor NS

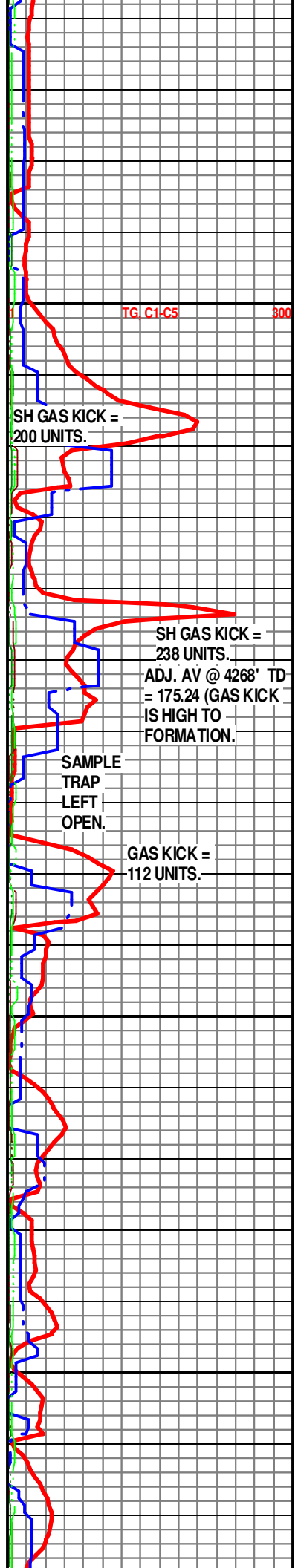
TORONTO 4268' (- 1441)

DOUGLAS 4284' (- 1457)
 Sh Char-Gry Soft-Fissil Ls Wht-Crm-Gry FxIn Dns Micrite Grad Pin-Pt IxIn
 Por Cht Wht Op Shp Vit Chalk No Odor No Stn No Flor NS

LANSING 4315' (- 1488)

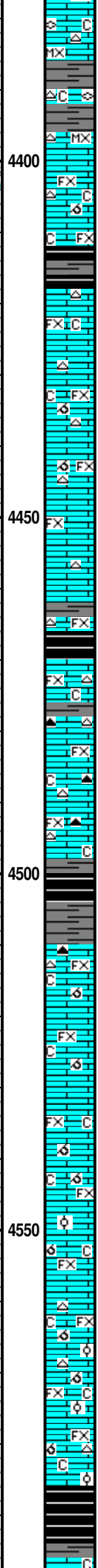
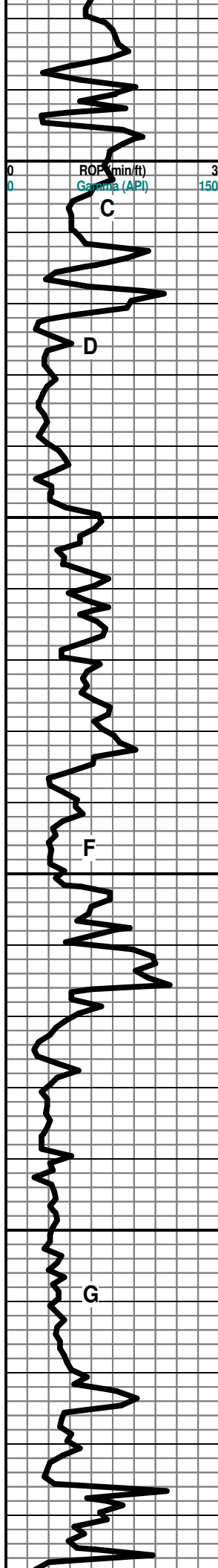
Sh Char-Gry Soft-Fissil Ls Wht-Crm-Tan-Gry (w/Pyr & Fos (Crin) Inclus)
 MicroIn Dns Micritic Barren Grad FxIn Poor Pin-Pt IxIn Por Barren Cht Wht
 Op Shp Vit Chalk No Odor No Stn No Flor

Ls Wht FxIn Micrite Barren Grad Poor Pin-Pt IxIn Por Fos (Brach w/Pyr
 Inclus) Cht Gry Op Shp Vit Chalk Sh Char-Gry-Blk Carb Fissil Soft No Odor
 No Stn No Flor NS



A

B



Sh Char-Gry Soft- Fissil Ls Wht-Crm MicroIn Dns Micrite Barren Grad Poor
 Ixln Por Cht Wht-Gry-Dk Gry Op Shp Vit Chalk Fos (Crin) No Odor No Stn No
 Flor NS

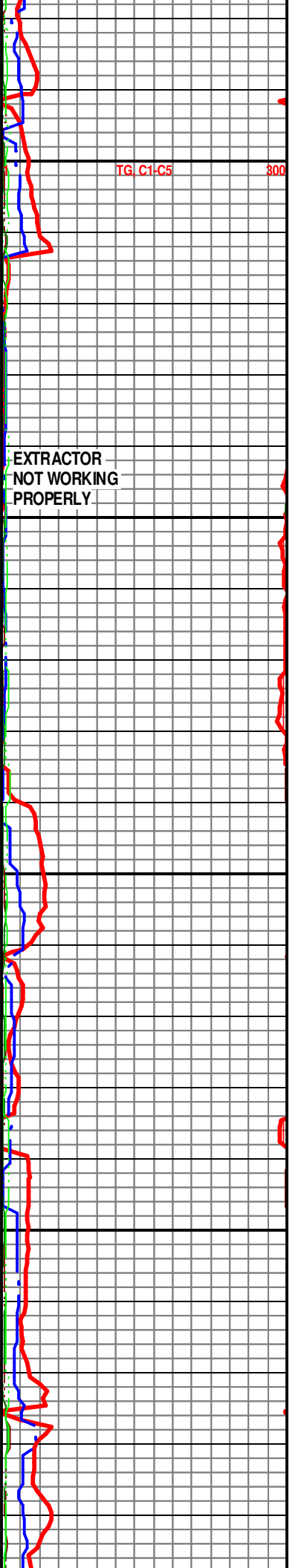
Ls Wht-Crm-Gry Fxln Micrite Barren Barren Cht Amber-Tan Translu Shp Vit
 Chalk (V Abd) Sh Char-Gry-Blk Carb Fissil-Soft No Odor No Stn No Flor NS

Ls Crm-Tan-Gry Fxln Dns Micrite Poor OOM Por Poor Develop Poor
 Leaching Grad PPT Ixln Por Barren Cht Wht Op Shp Vit Chalky (V Abd) Sh
 Blk Carb- Char- Gry No Odor No Flor No Stn NS

Ls Wht-Crm-Gry Fxln Dns Micrite Barren Cht Wht-Dk Gry Translu- Op Shp
 Vit Chalk (V Abd) Sh Char-Gry Fissil-Soft No Odor No Stn No Flor NS

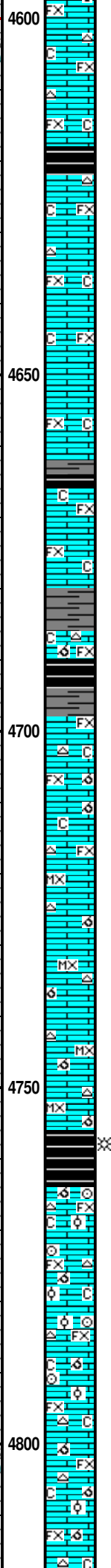
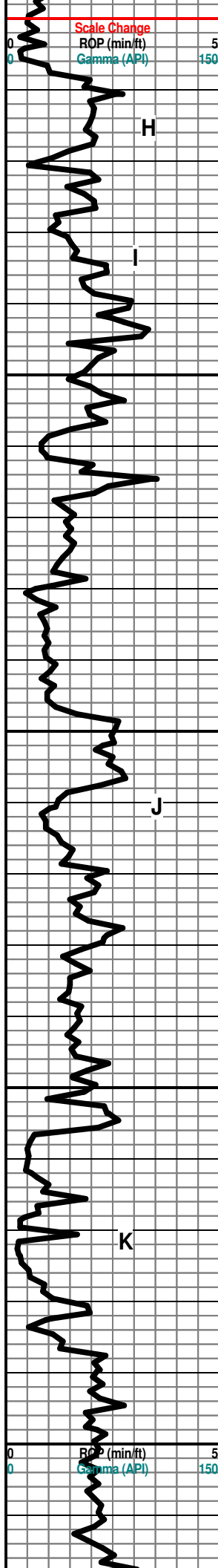
Ls Tan-Wht-Crm Fxln Med-Good OOM Por Poor-Fair InterOOM Vug Por
 Barren Chalk Abd Sh Blk Carb-Char-Gry Fissil-Soft No Odor No Stn No Flor
 NS

Sh Blk Carb-Char-Gry Fissil-Soft Ls Wht-Crm-Tan Fxln Dns Micrite Grad
 Med-Good OOM Por (w/Med-Lg OOids in pl) Barren Med- Good
 InterOOM/OOL Por Good Dissolu Poor InterCap Conn Cht Wht Op Shp Vit
 Chalk (V Abd) No Odor No Flor No Stn NS



EXTRACTOR
 NOT WORKING
 PROPERLY

TG C1-C5 800



LANSING "G" 4608' (- 1781)

Ls Wht-Crm FxIn Dns Micrite Poor lxIn Por Barren Grad Med OOM Por AA
 Barren Cht Wht-Gry Translu-Op Shp Vit Chalk Sh Blk Carb-Char-Gry
 Fissil-Soft No Odor No Flor No Stn NS

Ls Crm-Tan FxIn Dns Micrite Poor lxIn Por Barren Grad Med OOM Por AA
 Barren Cht Wht-Gry Translu-Op Shp Vit Chalk V Abd Sh Blk Carb-Char Soft
 No Odor No Flor No Stn NS

Ls Wht-Crm-Tan FxIn Poor OOM Por Poor InterOOM Por Poor Dissolu Poor
 Leaching Cht Wht-Gry Op Shp Vit Chalky Sh Char-Gry Fissil No Odor No
 Flor No Stn NS

Ls Wht-Crm MicroxIn Dns Micrite Cht Gry Translu-Op Shp Vit Sh Char- Gry
 Soft No Odor No Stn No Flor NS

STARK SHALE 4756' (- 1929)

KANSAS CITY "SWOPE" 4764' (- 1937)

Ls Wht-Crm FxIn Med-Good OOM Por (w/Small OOids in pl) Med-Good
 Leaching Med Develop Barren Grad MicroxIn Dns Micrite Cht Gry Op Shp
 Vit Fos (Crin) Chalk (Abd) Sh Blk Carb- Char-Gry Fissil No Odor No Stn No
 Flor NS

HUSHPUCKNEY SHALE 4818' (- 1991)

TG C1:C5 800

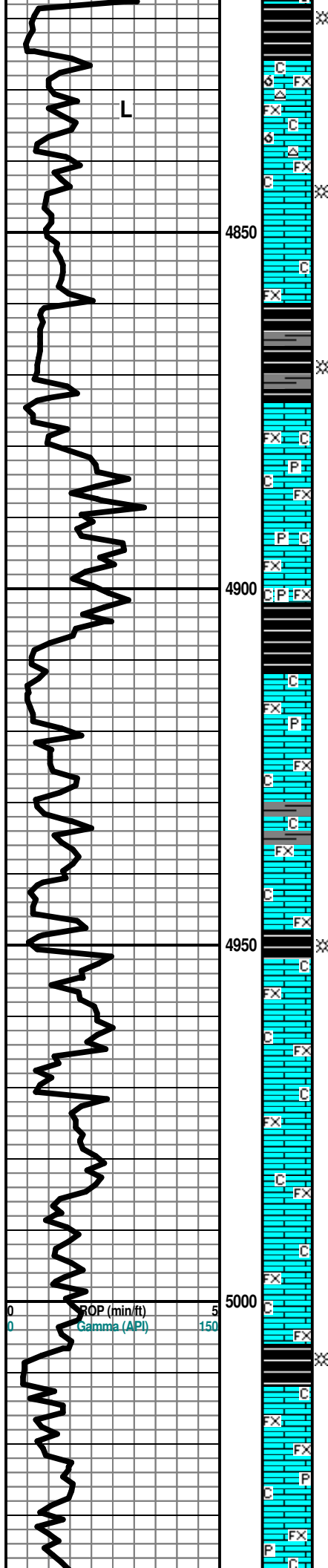
EXTRACTOR NOT
 WORKING
 PROPERLY

SH GAS
 KICK =
 203
 UNITS.

Mudco Ck @
 4751' @ 10:40 AM
 9/27/14
 Vis 74;
 WT = 9.2#;
 PV = 20;
 YP = 23;
 WL = 9.6#;
 Cake = 1;
 Chl = 2100 Ppm;
 Cal = 20;
 Sol = 6.3%
 LCM = 4.5#;
 DMC = \$3,485.90;
 CMC = \$17,020.65.

TG C1:C5 800

SH GAS KICK = 83



KANSAS CITY "HERTHA (L)" 4825' (- 1998)

KANSAS CITY "HERTHA Ø" 4830' (-2003)

Sh Blk Carb-Char-Gry Fissil-Soft Ls Wht-Crm-Gry FxIn Dns Mostly Micrite
 Poor IxIn Por Barren Grad Fair-Med OOM Por Poor-Fair InterOOM Por Poor
 Leaching Fair Develop AA Cht Wht -Gry Translu-Op Shp Vit Chalky No Odor
 No Flor No Stn NS

SH GAS KICK =
125 UNITS.

BASE KANSAS CITY 4860' (- 2033)

Sh Char-Gry-Blk Carb Fissil Ls Wht-Crm-Gry FxIn Micritic Barren Chalky (V
 Abd) No Odor No Flor No Stn NS

SH GAS KICK =
139 UNITS.

SH GAS KICK =
141 UNITS.

MARMATON 4912' (- 2085)

Ls Crm-Wht-Tan FxIn Poor IxIn Por Micritic (w/Pyr Includ) Dns Barren Chalk
 Sh Char-Gry Soft-Fissil No Odor No Flor No Stn NS

MARMATON "B" 4951' (- 2124)

Ls Wht-Tan-Gry FxIn Poor IxIn Por Micritic Dns Barren Grad FxIn Chalk Sh
 Char-Gry Soft-Fissil No Odor Sli ? Min Flor No Stn NS

GAS KICK =
194 UNITS.

Ls Wht-Gry FxIn Poor IxIn Pin-Pt Por Micritic Dns Barren Chalk Sh Char-Gry
 Soft-Fissil No Odor Sli ? Min Flor No Stn NS

BANDERA SHALE 5006' (- 2179)

Scale Change
1200

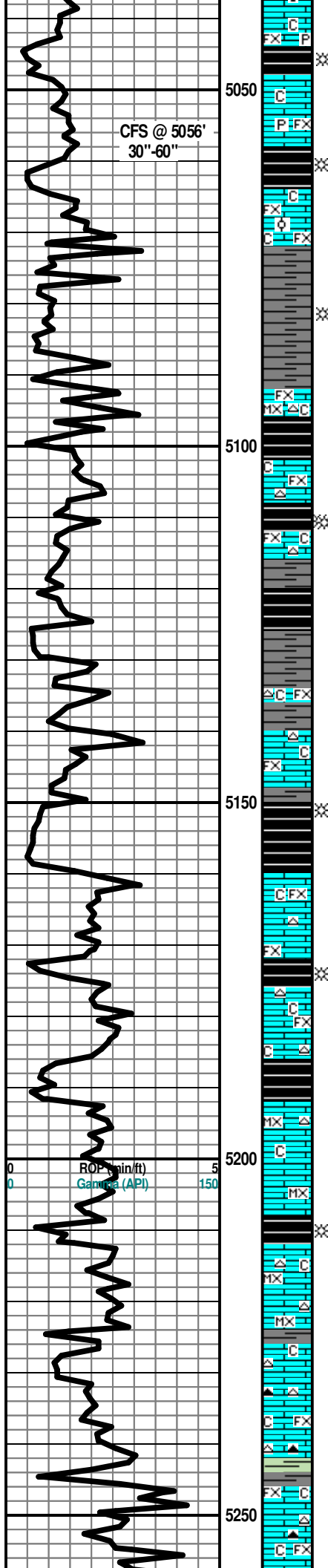
SH GAS KICK =
1015 UNITS

PAWNEE 5012' (- 2185)

30" CFS @ 5056' Ls Wht-Gry FxIn Poor IxIn Pin-Pt Por Micritic Dns Barren
 Chalk Sh Char-Gry Soft-Fissil No Odor Sli ? Min Flor No Stn NS

SH GAS KICK =
363 UNITS

SH GAS KICK =



CFS @ 5056'
30"-60"

ROP (min/ft)
Gamma (API)

LABETTE SHALE 5044' (- 2217)
FORT SCOTT 5048' (-2221)
 60" CFS @ 5056' Ls Wht-Gry FxIn Poor IxIn Pin-Pt Por Micritic Dns Barren Grad Poor IxIn PPT Por Chalk Pyr Mass Sh Blk Carb-Char-Gry Soft-Fissil No Odor Sli ? Min Flor No Stn NS

CHEROKEE SHALE 5058' (- 2231)

SECOND CHEROKEE SHALE 5096' (- 2269)
 Sh Blk Carb-Char-Gry Fissil Ls Crm-Tan MicroIn-FxIn Poor IxIn Por Micritic Dns Barren Grad Poor OOL Por (w Small OOids in pl) Cht Wht Op Shp Vit Chalk Sh Char-Gry Fissil No Odor No Flor No Stn NS

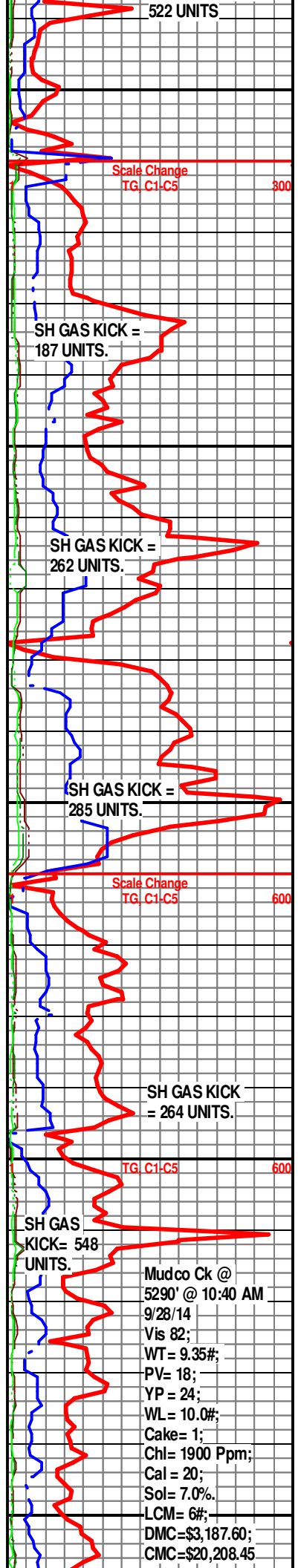
Ls Wht-Crm FxIn Poor IxIn Por Micritic Dns Barren Grad Poor PPT IxIn Por Cht Wht-Gry Translu Shp Vit Chalky (V Abd) Sh Blk Carb-Gry Fissil No Odor No Flor No Stn NS

THIRD CHEROKEE SHALE 5146' (- 2319)

Ls Crm-Wht-Tan FxIn Poor IxIn Por Micritic Dns Barren Cht Wht Translu-Op Shp Vit Chalk (V Abd) Sh Blk Carb-Gry Fissil No Odor No Flor No Stn NS

Sh Blk Carb-Char-Gry Fissi Ls Crm-Gry-Wht MicroIn Poor IxIn Por Micritic Dns Barren Chalk Cht-Gry Op Shp Vit I No Odor No Flor No Stn NS

Ls Crm-Wht-Tan FxIn Poor IxIn Por Micritic Dns Barren Chalk Cht Drk



522 UNITS

Scale Change
TG C1-C5

300

SH GAS KICK =
187 UNITS.

SH GAS KICK =
262 UNITS.

SH GAS KICK =
285 UNITS.

Scale Change
TG C1-C5

600

SH GAS KICK
= 264 UNITS.

TG C1-C5

600

SH GAS
KICK= 548
UNITS.

Mudco Ck @
5290' @ 10:40 AM
9/28/14
Vis 82;
WT= 9.35#;
PV= 18;
YP= 24;
WL= 10.0#;
Cake= 1;
Chl= 1900 Ppm;
Cal= 20;
Sol= 7.0%
LCM= 6#;
DMC=\$3,187.60;
CMC=\$20,208.45

Blk-Wht-Fos (Crin) Inclns Op Shp Vit Sh Char-Gry-Tr Blk Carb Fissil No Odor No Flor No Stn NS

Begin 10' Sample Examination @ 5300'.

ATOKA SHALE 5274' (- 2447)

30" CFS @ 5290' Sh Blk Carb-Char-Gry Fissil Ls Wht-Crm-Gry Microxln-FxlN Dns Micrite (w/Pyr Inclns) Grad Poor PPT lXln Por (w/Fos (Crin) Inclns) Cht Blk Op Shp Vit Chalky No Odor No Flor No Stn NS

60" CFS @ 5290' Sh Blk Carb-Char-Gry Fissil Ls Wht-Crm-Gry Microxln-FxlN Dns Micrite (w/Pyr Inclns) Grad Poor PPT lXln Por (w/Fos (Crin) Inclns) Cht Blk Op Shp Vit Chalky No Odor No Flor No Stn NS

Sh Blk Carb-Char-Gry (w/Pyr Inclns) Fissil Ls Crm FxlN PPT lXln Por No Flor No Stn No Odor NS

Sh Blk Carb-Char-Gry-Grn/Aqua (w/Pyr Inclns) Fissil Ls Crm FxlN PPT lXln Por No Flor No Stn No Odor NS

Sh Blk Carb-Char-Grn/Gry Fissil Ls Crm FxlN PPT lXln Por Qtz Ss Gry (w/Carb Inclns) Sub Ang Poor lGran Por (Hvy CaCO3) Matrix Cht Drk Blk-Drk Gry Op Shp Vi Pyr Mass No Flor No Stn No Odor NS

MORROW SHALE 5320' (- 2493)

MISSISSIPPIAN CHESTER 5326' (- 2499)

30" CFS @ 5340' Sh Blk Carb-Char-Gry (w/Pyr Inclns) Fissil Ls Crm FxlN PPT lXln Por (w/SSG) Qtz Ss Drk Gry (w/Carb Inclns) Sub Ang Poor lGran Por (Hvy CaCO3) Matrix Cht Drk Blk-Drk Gry Op Shp Vit No Flor No Stn No Odor SSG

60" CFS @ 5340' Ls Crm FxlN PPT lXln Por (w/SSG) Qtz Ss Drk Gry AA (Tr Only) Sh Blk Carb-Char-Gry (w/Pyr Inclns) Fissil Sli ? Flor No Stn No Odor SSG

30" CFS @ 5366' Ls Wht-Crm-Tan FxlN Sli Sucrosic & Banded Fos (Coral, Spic Inclns) Crm/Brn PPT lXln Por (w/Pyr Inclns & FSG when Broken in Wtr & SSO Tr) Both Gas & Oil Do Not Flor Cht Wht-Op Shp Vit Qtz Ss Wht-Gry (w/Aqua Matrix-Tr Only) Barren Sh Blk Carb-Char-Gry Fissil Sli ? Flor No Stn Fair Odor FSG & SSO

60" CFS @ 5366' Ls Wht-Crm-Tan-Gry FxlN Banded Fos (Bry, Crin, Coral, Spic Inclns) Crm/Brn PPT lXln Por (w/MSG when Broken in Wtr w/SSO) AA Cht Wht-Op Shp Vit Barren Sh Blk Carb-Char-Gry Fissil Sli ? Flor No Stn Fair Inc Odor FSG & SSO

30" CFS @ 5386' Sh Blk Carb-Char-Gry (V Abd) Ls Wht-Crm-Tan- Gry Microxln Fos (Bry, Crin, Coral, Spic Inclns) Dec PPT lXln Por Cht Wht-Op Shp Vit Barren No Flor No Stn No Odor NS

60" CFS @ 5386' Ls Wht-Crm-Tan-Gry Microxln Fos (Bry, Crin, Coral, Spic Inclns) Dec PPT lXln Por Cht Wht-Op Shp Vit Barren Sh Blk Carb-Char-Gry (V Abd) Fissil No Flor No Stn No Odor NS

Ls Wht-FxlN Dns Micrite Grad Fair Pin-Pt lXln Por (w/Pyr Inclns) Fos (Crin) Pyr Mass Abd Sh Char-Gry- Drab Grn-Blk Carb Fissil No Odor No Flor NS

30" CFS @ 5430' Ls Wht-FxlN Dns Micrite Grad Fair Pin-Pt lXln Por (w/Pyr Inclns) Pyr Mass Abd Sh Char-Gry- Drab Grn-Blk Carb Fissil No Odor No Flor NS

60" CFS @ 5430' Ls Wht-FxlN Dns Micrite Grad Fair Pin-Pt lXln Por (w/Pyr Inclns) Pyr Mass Abd Sh Char-Gry- Drab Grn-Blk Carb Fissil No Odor No Flor NS

Ls Wht-FxlN Dns Micrite Grad Fair Pin-Pt lXln Por (w/Pyr Inclns) Pyr Mass Abd Sh Char-Gry- Drab Grn-Blk Carb Fissil No Odor No Flor NS

Sh Vari-Colored Aqua-Maroon-Yell-Purp-Char-Blk Carb Soft-Fissil Abd Ls Wht-Crm FxlN Micrite Grad Fair lXln Por Barren Cht Amber Translu Vit Shp No Odor No Stn No Flor

Sh Vari-Colored Aqua-Maroon-Yell-Purp-Char-Blk Carb Soft-Fissil Abd Ls Wht-Crm FxlN Micrite Grad Fair lXln Por Barren Cht Amber Translu Vit Shp No Odor No Stn No Flor NS

Sh Vari-Colored Red-Maroon-Char-Aqua-Grn/Gry Soft-Fissil (Wash Red) V Abd Ls AA FxlN-Microxln Dns Micrite Barren Chalk No Odor No Stn No Flor NS

Sh Vari-Colored Red-Maroon-Char-Aqua-Grn/Gry Soft-Fissil (Wash Red) V Abd Ls AA FxlN-Microxln Dns Micrite Barren Chalk No Odor No Stn No Flor NS

~DST # 1~

Interval: 5272'-5366';
Times: 5"-60"-90"-120";
Blow: IF= Weak/1 3/4". No Blow Back During ISIP.
FF= Weak Blow 2"/Died in 44". No Blow Back During FSIP.
Recovery: 125' TF: 60' OCM (5% O & 95% M); 65' M (w/Tr O) (100% M).

Scale Change
TG, C1C5 900

Pressures:

IH = 2717#;
FH = 2609#;
IF = 30-36#;
FF = 71-100#;
ISIP = 508#;
FSIP = 196#;
Temp. = 127 degrees F.

GAS KICK = 382 UNITS.

GAS KICK = 469 UNITS.

GAS KICK = 839 UNITS.

PIPE STRAP = <1.66"> SHORT TO BOARD.

GAS KICK = 450 UNITS.

REPAIR MOTOR @ 5378'.

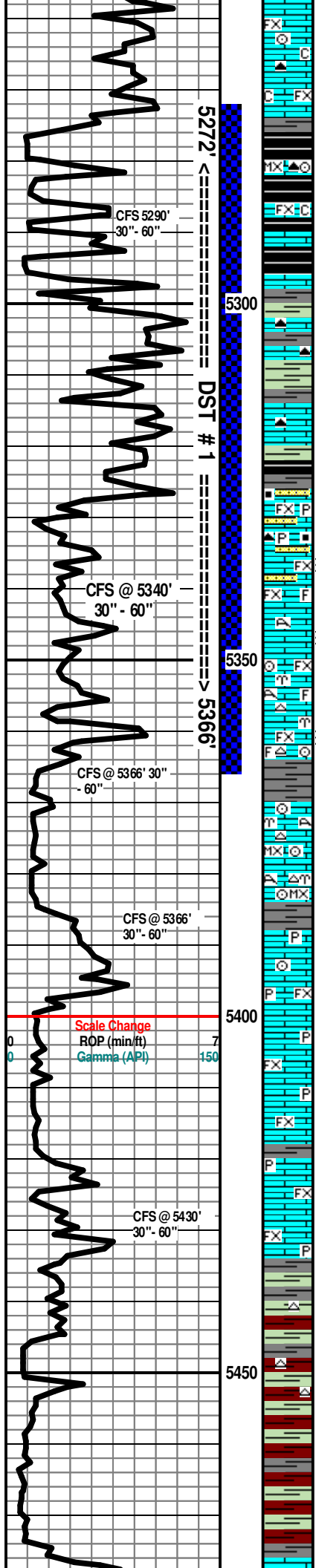
Scale Change
TG, C1C5 600

GAS KICK = 376 UNITS.

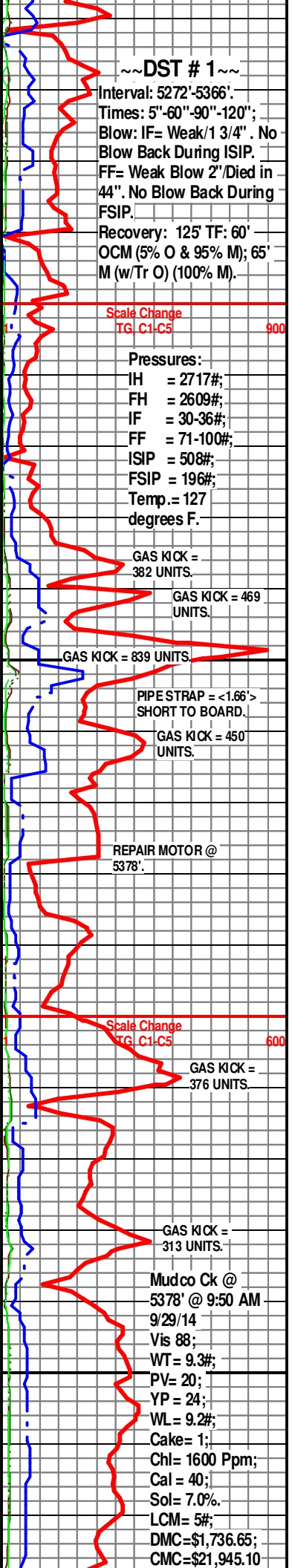
GAS KICK = 313 UNITS.

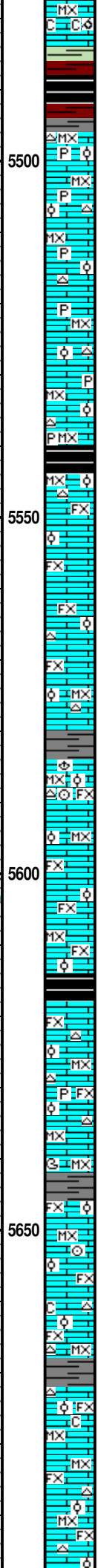
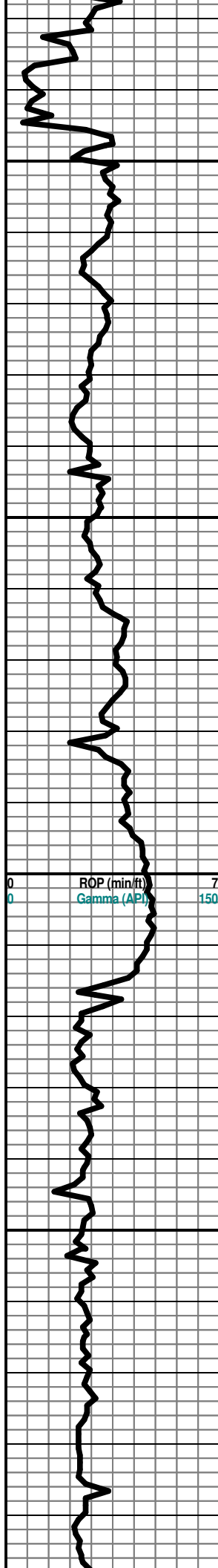
Mudco Ck @ 5378' @ 9:50 AM 9/29/14

Vis 88;
WT = 9.3#;
PV = 20;
YP = 24;
WL = 9.2#;
Cake = 1;
Chl = 1600 Ppm;
Cal = 40;
Sol = 7.0%.
LCM = 5#;
DMC = \$1,736.65;
CMC = \$21,945.10



Log text describing geological formations: ATOKA SHALE 5274' (- 2447), MORROW SHALE 5320' (- 2493), MISSISSIPPIAN CHESTER 5326' (- 2499). Includes detailed lithology and sample descriptions.





NS
Sh Vari-Colored Red-Maroon-Char-Aqua-Grn/Gry Soft-Fissil (Wash Red) V
Abd Ls AA FxIn-MicroxIn Dns Micrite Grad Poor OOM Por Poor Dissolu
Poor Develop Barren Chalk No Odor No Stn No Flor NS

MISSISSIPPIAN "STE. GEN" 5496' (- 2669)

Ls Wht FxIn-MicroxIn Dns Micrite Grad Fair OOL (w/Small OOids in pl)
"Sandy OOL Ls" Barren Chalk Cht Wht Op Shp Vit Pyr Mass Sh
Vari-Colored Red- Maroon-Char-Aqua-Grn/Gry-Yell-Purple Soft-Fissil V Abd
No Stn No Flor NS

Ls Wht FxIn-MicroxIn Dns Micrite Grad Fair OOL (w/Small OOids in pl)
"Sandy OOL Ls" Barren Chalk Cht Wht Op Shp Vit Pyr Mass Sh
Vari-Colored Red-Maroon-Char-Aqua-Grn/Gry-Yell-Purple Soft-Fissil V Abd
No Stn No Flor NS

Ls Wht FxIn-MicroxIn Dns Micrite Grad Fair OOL Por AA Barren Chalk Cht
Wht Op Shp Vit Pyr Mass Sh Vari-Colored Red-
Maroon-Char-Aqua-Grn/Gry-Yell-Purple Soft-Fissil V Abd No Stn No Flor NS

Ls Wht FxIn-MicroxIn Dns Micrite Grad Fair OOL Por AA Barren Chalk Cht
Wht Op Shp Vit Pyr Mass Sh Vari-Colored
Red-Maroon-Char-Aqua-Grn/Gry-Yell-Purple Soft-Fissil V Abd No Stn No
Flor NS

Ls Wht FxIn-MicroxIn Dns Micrite Grad Fair OOL AA Barren Chalk Cht Wht
Op Shp Vit Pyr Mass Sh Vari-Colored Red-
Maroon-Char-Aqua-Grn/Gry-Yell-Purple Soft-Fissil V Abd No Stn No Flor NS

Ls Wht-Lt Brn FxIn Dns Micrite Grad Poor OOL Por Cht Gry Translu-Op Shp
Vit Chalk Sh Varicolored Soft- Fissil No Odor No Flor No Stn NS

Ls Wht-Lt Brn FxIn Dns Micrite Grad Poor OOL Por Cht Gry Translu-Op Shp
Vit Chalk Sh Varicolored Soft- Fissil No Odor No Flor No Stn NS

Ls Wht-Crm-Lt Gry MicroxIn-FxIn Poor IxIn Por Dns Micrite Grad Poor
InterOOL Por (w/V Small OOids in pl) Friable Cht Aqua-Gry Op Shp Vit Sh
Char-Blk Carb-Lt Gry-Aqua Fissil No Odor No Stn No Flor NS

Ls Wht-Crm-Lt Gry MicroxIn-FxIn Poor IxIn Por Dns Micrite Grad Poor InterOOL Por AA Cht
Aqua-Gry Translu-Op Shp Vit Fos (Brach, Crin) Sh Char-Blk Carb-Lt Gry-Aqua Fissil No Odor
No Stn No Flor NS

Ls Wht-Crm-Lt Gry MicroxIn-FxIn Poor IxIn Por Dns Micrite Grad Poor
InterOOL Por Friable Sh Char-Blk Carb-Lt Gry-Aqua Fissil No Odor No Stn
No Flor NS

Ls Wht-Crm-Lt Gry MicroxIn-FxIn Poor IxIn Por Dns Micrite Grad Poor
InterOOL Por Friable Sh Char-Blk Carb-Lt Gry-Aqua Fissil No Odor No Stn
No Flor NS

Ls Wht-Crm-Lt Gry MicroxIn-FxIn Poor IxIn Por Dns Micrite Grad Poor InterOOL Por Friable
"Sandy OOL Ls" Sh Char-Blk Carb-Lt Gry-Aqua Fissil No Odor No Stn No Flor NS

MISS. "ST. LOUIS" POROSITY 5617' (- 2790)

Ls Wht-Lt Gry MicroxIn-FxIn Poor IxIn Por Dns Micrite Grad Poor InterOOL Por (w/Small-Med
OOids in pl) Friable Cht Gry Op Shp Vit Sh Char-Blk Carb-Gry- Maroon Soft-Fissil No Odor No
Stn No Flor NS

Ls Wht-Crm-Lt Gry MicroxIn-FxIn Poor IxIn Por Dns Micrite Grad Poor InterOOL Por AA
Friable Cht Wht-Clear Translu-Op Shp Vit Pyr Mass Sh Char-Blk Carb- Gry-Maroon Fissil No
Odor No Stn No Flor NS

Ls Wht-Gry MicroxIn-FxIn Poor IxIn Por Dns Mostly Micrite Grad Poor
InterOOL Por AA Friable Cht Wht (w/Tan OOid Includ) Op Shp Vit Fos
(Coral) Sh Char-Blk Carb-Gry-Aqua-Maroon Fissil No Odor No Stn No Flor
NS

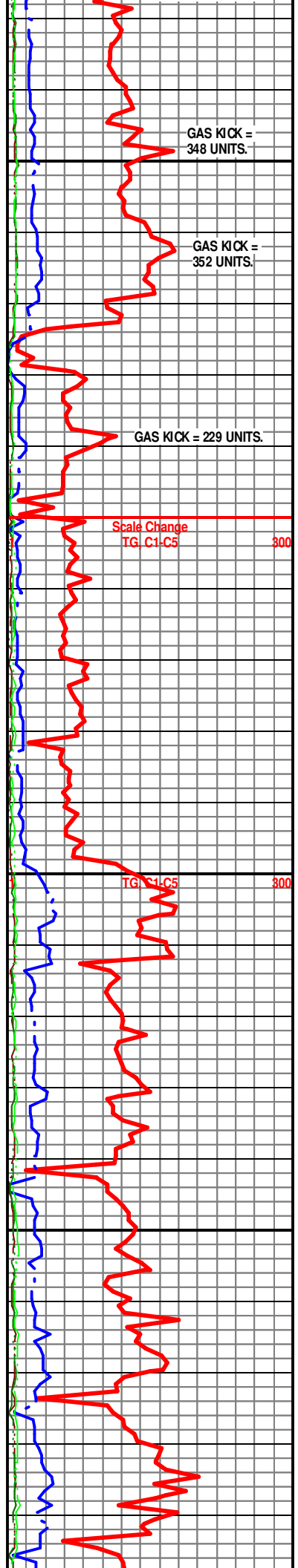
Ls Wht-Gry MicroxIn-FxIn Poor IxIn Por Dns Micrite Grad Poor InterOOL Por AA Friable Cht
Wht-Peach Translu-Op Shp Vit Fos (Crin) Sh Char-Blk Carb-Gry Fissil No Odor No Stn No Flor
NS

Ls Wht-Gry MicroxIn-FxIn Poor IxIn Por Dns Micrite Grad Poor InterOOL Por
AA Friable Cht Wht-Clear Translu-Op Shp Vit Chalky Sh Char-Blk
Carb-Aqua-Olive- Maroon Fissil No Odor No Stn No Flor NS

Ls Wht-Tan-Gry MicroxIn-FxIn Poor IxIn Por Dns Micrite Grad Poor InterOOL Por AA Friable
Cht Wht-Clear Translu-Op Shp Vit Chalky Sh Char-Blk Carb- Aqua-Olive- Maroon Fissil No
Odor No Stn No Flor NS

Ls Wht-Tan (w/Pyr Includ)-Gry MicroxIn-FxIn Poor IxIn Por Dns Micrite Grad
Poor InterOOL Por AA Friable Cht Wht-Clear Translu Shp Vit Sh Char-Blk
Carb- Aqua-Maroon Fissil No Odor No Stn No Flor NS

Ls Wht-Gry MicroxIn-FxIn Poor IxIn Por Dns Micrite Grad Poor InterOOL Por AA Friable Grad
Poor IxIn Por Cht Clear Transp-Pink Op Shp Vit Sh Char-Blk Carb-Gry-Aqua-Maroon Fissil No
Odor No Stn No Flor NS



5700

5750

5800



Ls Wht-Gry MicroxIn-FxIn Poor IxIn Por Dns Micrite Grad Poor InterOOL Por
 AA Friable Grad Poor IxIn Por Cht Wht-Pink Op Shp Vit Sh Char-Blk
 Carb-Gry- Aqua-Maroon Fissil No Odor No Stn No Flor NS

Ls Wht-Crm MicroxIn-FxIn Poor IxIn Por Dns Micrite Grad Poor InterOOL
 Por AA Friable Grad Poor IxIn Por Cht Wht-Peach Op Shp Chalky Vit Sh
 Char-Blk Carb-Gry-Aqua Fissil No Odor No Stn No Flor NS

30" CFS @ 5750' Ls Wht-Crm MicroxIn-FxIn Poor IxIn Por Dns Micrite Grad
 Poor InterOOL Por AA Friable Grad Poor IxIn Por Cht Wht-Peach Op Shp
 Chalky Vit Sh Char-Blk Carb-Gry-Aqua Fissil No Odor No Stn No Flor NS

60" CFS @ 5750' Ls Wht-Crm MicroxIn-FxIn Poor IxIn Por Dns Micrite Grad
 Poor InterOOL/OOM Por Poor Develop Poor Leaching (med OOids in pl)
 Grad Poor IxIn Por Cht Wht-Peach Op Shp Chalky Vit Sh Char-Blk
 Carb-Gry-Aqua Fissil No Odor No Stn No Flor NS

Electric Logs Run: By Weatherford Logging: Dual Induction;
 Compensated Density-Neutron; Sonic; & Microresistivity Logs

Geologist Left Location At: : P M on 9/30/2014

CFS @ 5750'
 30" - 60"

R.T.D. = 5750' (-2923)

L.T.D. =

