



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

Well Name: CHESTER REXFORD #1-35 (NE)
API: #15-069-20,495-00-00
Location: SE-SE-NE 1/4 of SEC. 35 - 27 S.-30 W.
License Number: KCC #5316
Spud Date: 10/07/2015
Surface Coordinates: SPOT: 2310' FNL & 330' FEL

Region: GRAY CO., KS.
Drilling Completed: 10/23/2015

**Bottom Hole
Coordinates:**
Ground Elevation (ft): 2792' **K.B. Elevation (ft):** 2805'
Logged Interval (ft): 1829' **To:** 5450' **Total Depth (ft):** 5450'
Formation: MISSISSIPPAN "SALEM (SPERGEN)"
Type of Drilling Fluid: CHEMICAL/POLYMER/GEL. & MUD DISPLACEMENT @ 3183'.

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

OPERATOR

Company: Falcon Exploration, Inc.; KCC LIC. NO. # 5316
Address: 125 North Market Street, Ste. #1252
Wichita, Kansas 67202

GEOLOGIST

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

CASING & DEVIATION SURVEY'S

Surface Casing: Spud at 8:45 PM on 10/07/15. Drilled 12-1/4" hole to 1833'. Ran 43 joints of new 24#, 8-5/8" casing. Tallied 1810.29', set at 1828.79' KB. Welded straps on GS & bottom 3 joints, tacked all collars. Float insert in top of 1st collar. Baskets on #2 & #7. Centralizers (5) 1,3,12,25,33. Cemented with 400 sacks A-Con: 3% CC; 1/4# Poly, then tailed with 150 sks Common Class A; 2% CC, 1/4# poly. Plug down at 1:15 AM on 10/10/15. Basic Energy Services Ticket #06557. Cement did circulate to surface.

Deviation Survey's: @ 1833' = 1 degree; @ 3525' = 1 degree; @ 3525' = 1 degree; @ 4137' = 3/4 degree; @ 4845' = 1/2 degree;

DSTs

~~ DST #1 ~ Interval: 3449'-3525'. Times: 5"-90"-75"-120". Blow: IF= Fair Inc to BOB/5". No Blow Back During ISIP. FF= BOB/Instant & GTS/36". Fair Blowback During FSIP. Recovery: 65' Drilling Mud. Gas Gauge= @ 50"=5.89 Mcf; @ 60"=8.89 Mcf; @ 70"=8.89 Mcf (Gas Will Burn). Pressures: IH=1686#; FH=1671#; IF=66-64#; FF=69-75#; ISIP= 947#; FSIP=945#; Temp.=104 degrees F..

~~ DST # 2 ~ Interval: 3540'-3560'. Times: 5"-90"-18"-15" Blow: IF V. Weak Surface = 1/4"/ Died/4.5"; FF= No Blow-Flushed Tool @ 10" (Had Good Surge) & No Blow. Recovery: 0' Drilling Mud (Fluid At Top Of Tool). Pressures: IH=1685#; IH=1678#; IF=34-35#; FF=54-36#; ISIP= 54#; FSIP=38#; Temp.=101 degrees F..

~~ DST #3 ~ Interval: 4106'-4136'. Blow: 5"-90"-81"-150"; Blow: IF= Strong/ BOB /30" Sec. No Blow Back During ISIP. FF= Strong Blow BOB/GTS @ 8"(See Gas Gauge Below). Good Blow Back During FSIP. Rec: 850' TF: (700' Wtr) & 150' Drilling Mud. Pressures: IH=2045#; FH=2012#; IF=249-105#; FF=187-433#; ISIP=1230#; FSIP=1220#; Chl.=68,000 Ppm; Temp.=113 degrees F.; RW= 0.07 @ 113 degrees F.. FF Gas Gauge: @ 10"=21.95 Mcf; @ 20"=28.07 Mcf; @ 30"=34.36 Mcf; @ 40"=33.31 Mcf; @ 50"= 31.81 Mcf; @ 60"=28.07 Mcf; @ 70"=26.57 Mcf; Gas Will Burn (w/Blue FlameTip).

~~ DST # 4 ~ Interval: 4815'- 4845'. Times: 5"-60"-20"-20" Blow: IF V. Weak Surface = 1/4" Died/3"; FF= No Blow-Flushed Tool @ 10" (Twice w/Good Surges) & No Blow. Recovery: 5' Drilling Mud. Note: FF & FSIP Are INVALID (At End Of ISIP the DST Tool Was Over-Rotated Causing The Tool To Go Into FSIP Mode). Therefore, FF & FSIP Pressures Are Invalid. Pressures: IH=2402#; FH=2266#; IF=44-45#; FF=Invalid; ISIP= 1442#; FSIP= Invalid; Temp.=114 degrees F..


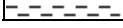

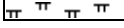
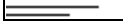
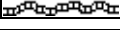




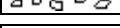



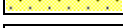
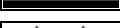


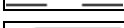
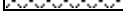
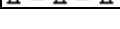


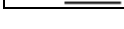
~~ DST # 5 ~ Interval: 5150'- 5251' Times: 5"-90"-30"-20" Blow: IF V. Weak Surface Blow; FF= No Blow-Flushed Tool @ 10" (w/Good Surge) & No Blow. Recovery: 30' Drilling Mud. Pressures: IH =2603#; FH=2548#; IF=80-82#; FF=86-96#; ISIP= 1602#; FSIP=1203#; Temp.=122 degrees F..

~~ DST #6 ~ Interval: 5150'- 5251'. Times: 5"-60"-20"-20". Blow: IF V. Weak Surface Blow/4.5" & Died; ISIP=No Blow Back. FF= No Blow-Flushed Tool @ 10" (w/Good Surge) & No Blow. FSIP=No Blow Back. Recovery: 15' Drilling Mud. Pressures: IH=2679#; FH=2662#; IF=43-44#; FF=46-49#; ISIP= 1570#; FSIP=1352#; Temp.=120 degrees F..

~~ DST # 7 ~ Interval: 5338'- 5278'. Times: 7"-90"-39"-20" Blow: IF V. Weak Surface Blow; ISIP= No Blow Back. FF= No Blow-Flushed Tool @ 10" (w/Good Surge) & No Blow. FSIP= No Blow Back. Recovery: 15' Drilling Mud. Pressures: IH= 2701#; FH= 2632#; IF=52-53#; FF=56-60#; ISIP=1671#; FSIP= 1176#; Temp.=123 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**
- Anhy
 - Arggrn
 - Arg
 - Bent
 - Bit
 - Breclfrag
 - Calc
 - Carb
 - Chtdk
 - Chtlt
 - Dol
 - Feldspar
 - Ferrpel
 - Ferr
 - Glau
 - Gyp

- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- 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

- Ø (porosity)
- Vuggy

- SORTING**
- Well
 - Moderate
 - Poor

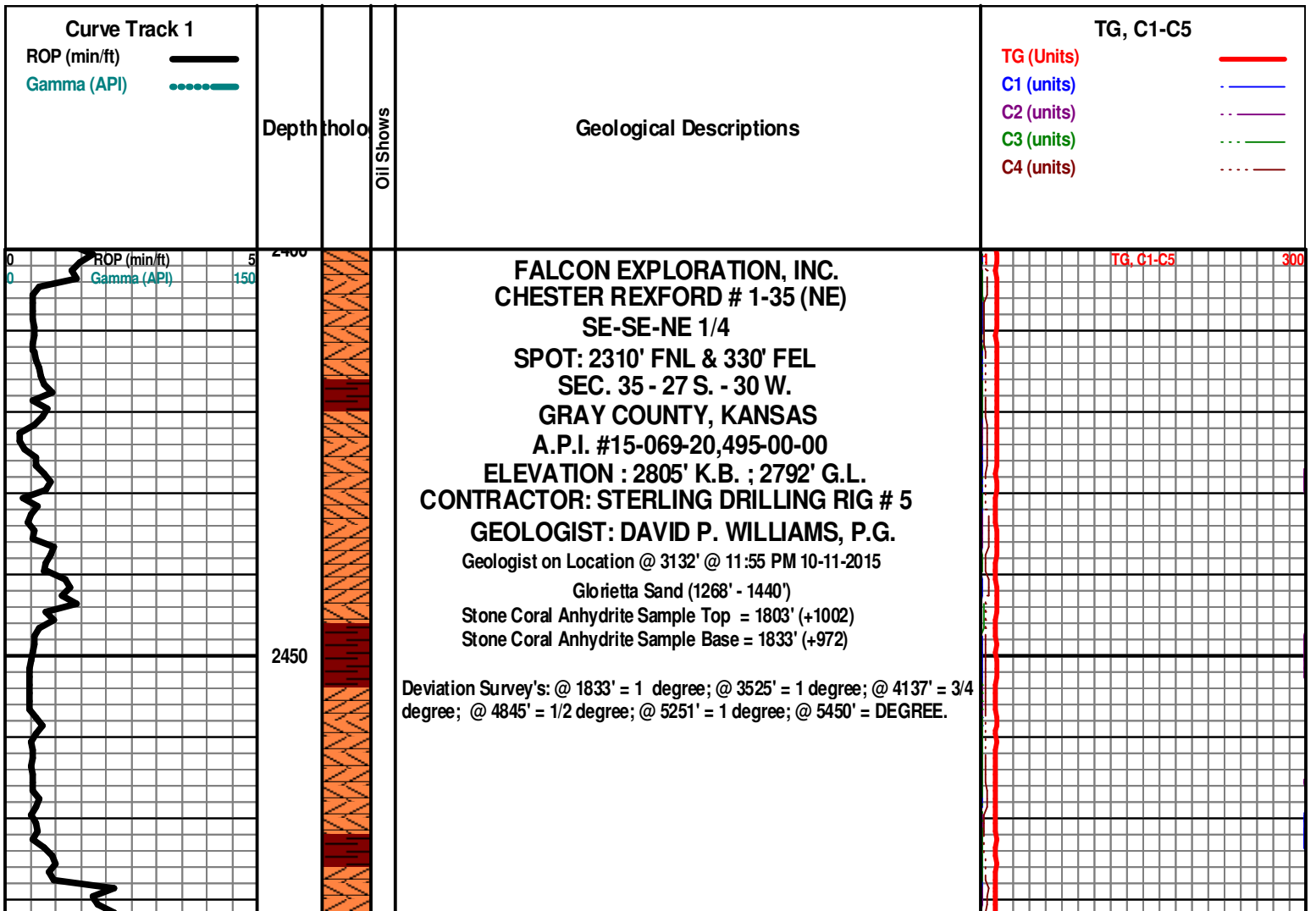
- ROUNDING**
- Rounded
 - Subrnd
 - Subang
 - Angular

- OIL SHOW**
- Gas show

- Even
- Spotted
- Ques
- Dead

- INTERVAL**
- Dst
 - Dst_alt

- EVENT**
- Rft
 - Sidewall



2500

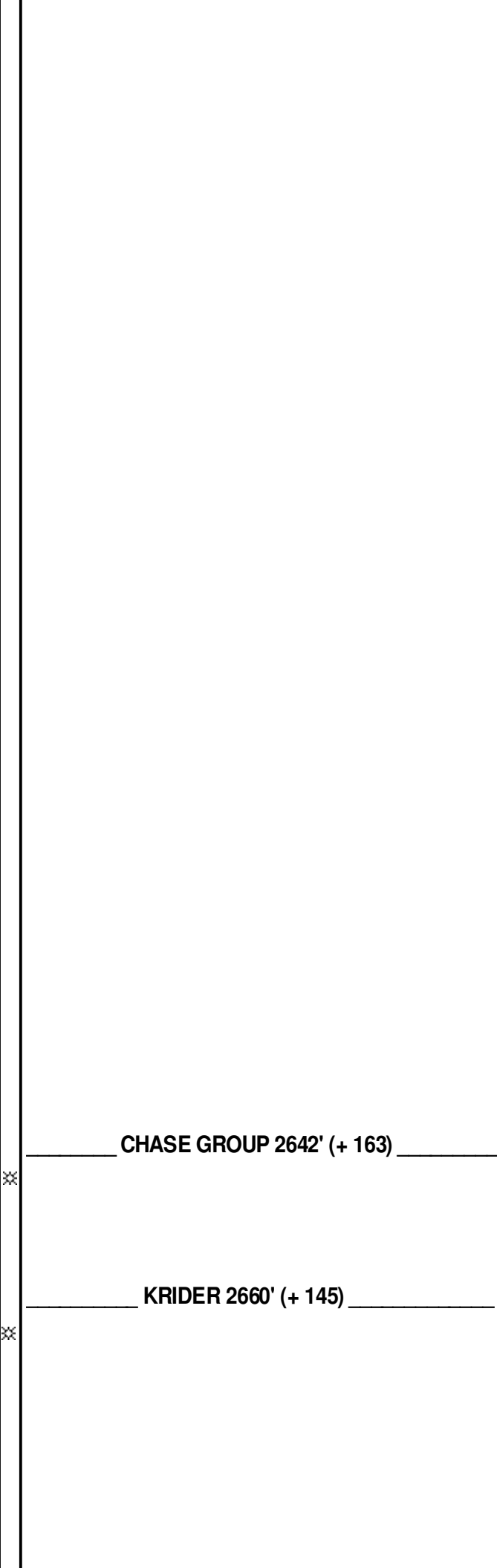
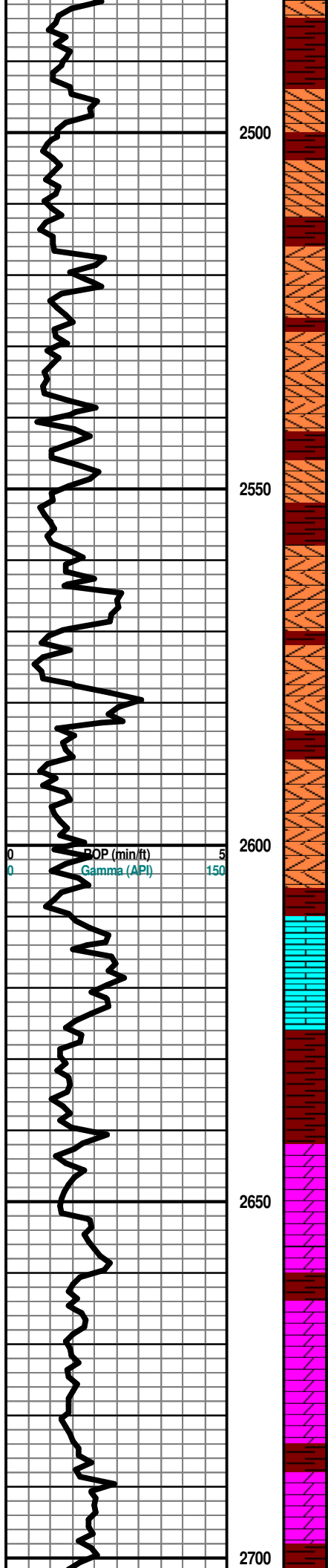
2550

2600

2650

2700

ROP (min/ft) 5
Gamma (API) 150

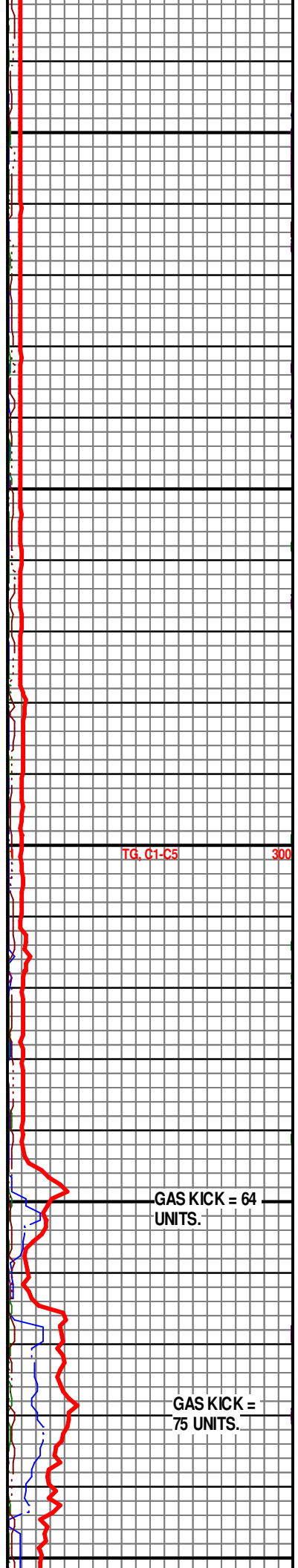


CHASE GROUP 2642' (+ 163)

KRIDER 2660' (+ 145)

✕

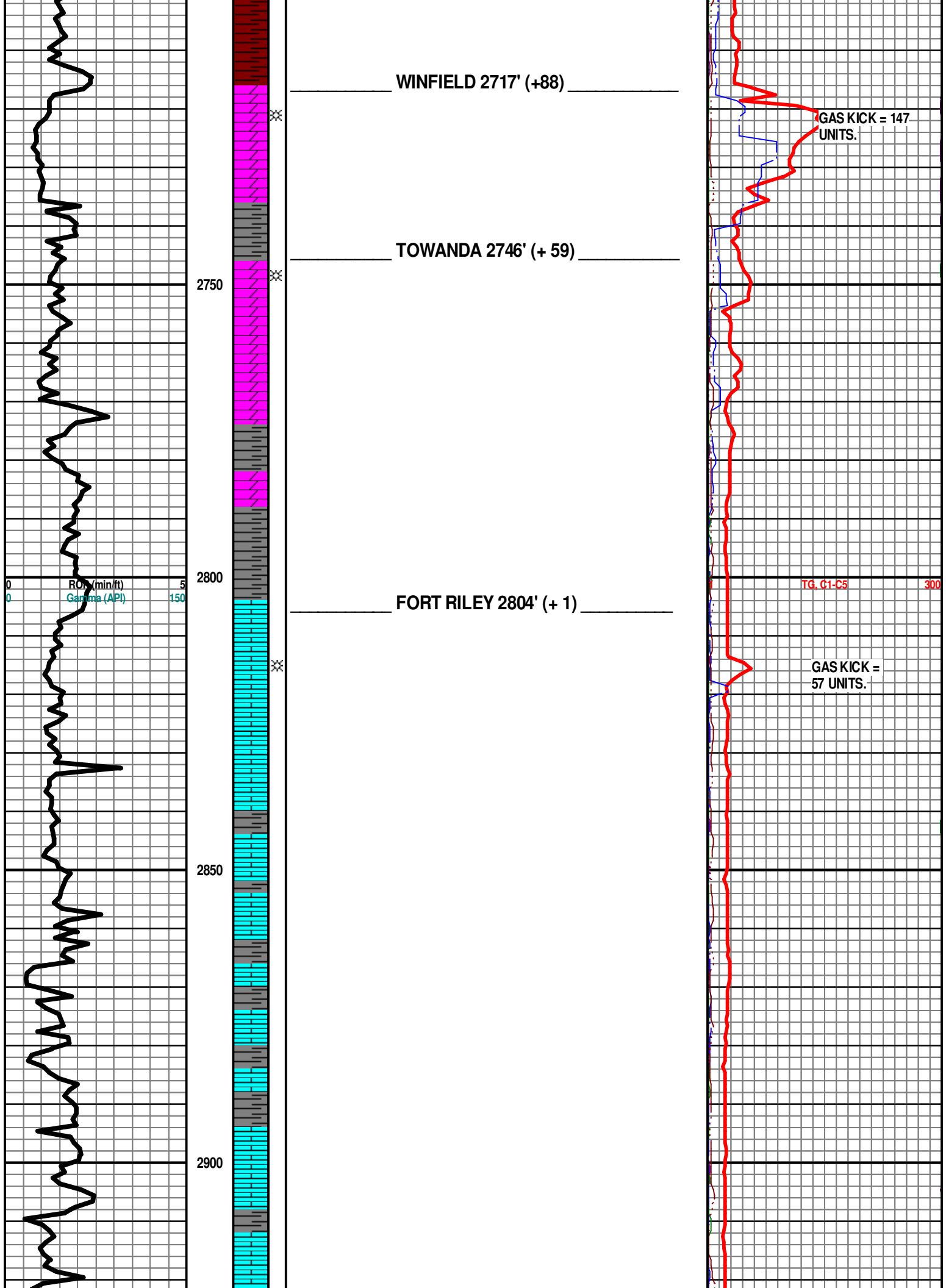
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TG, C1-C5 300

GAS KICK = 64 UNITS.

GAS KICK = 75 UNITS.



2950

3000

3050

3100

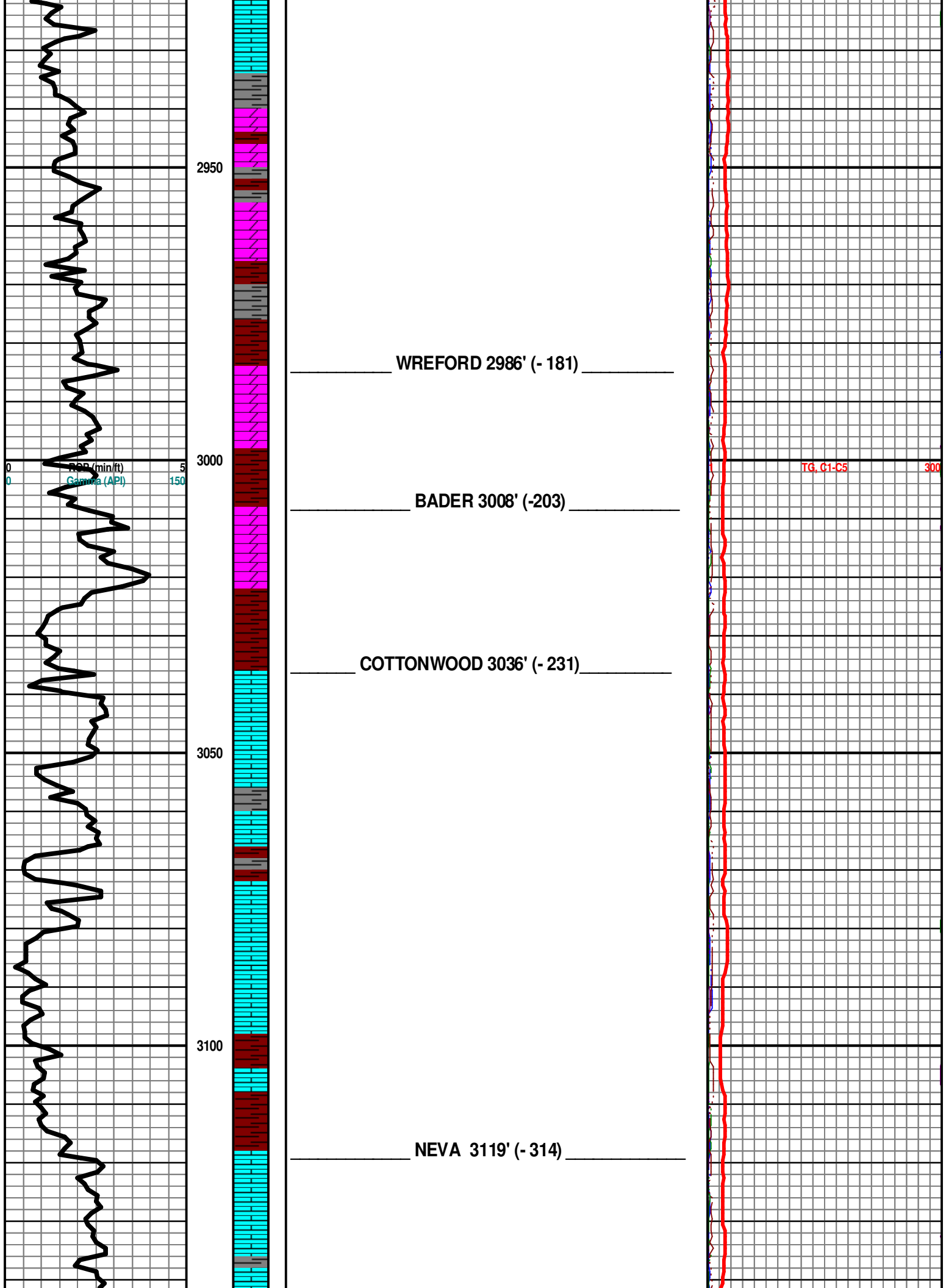
WREFORD 2986' (- 181)

BADER 3008' (-203)

COTTONWOOD 3036' (- 231)

NEVA 3119' (- 314)

TG, C1-C5 300



3150
3200
3250
3300
3350

RED EAGLE 3172' (- 367)

BASE COUNCIL GROVE 3204' (- 399)

FORAKER 3248' (- 443)

ADMIRE GROUP 3350' (- 545)

Displaced mud system at 3183'.

TG, C1-C5 300

Mudco Ck @
3405' @ 9:15 AM
10/12/15
Vis = 56;
WT = 8.7#;
PV = 17;
YP = 18;
WL = 8.0;
Cake = 1;
Chl = 3,400;
Cal = 20;
Sol = 2.7%
LCM = 2#;
DMC = \$3,972.48;
CMC = \$17,280.15

~ ~ DST # 1 ~ ~
Interval: 3449'-3525'
Times: 5'-90''-75''-120''

ROP (min/ft) 5
Gamma (API) 150

Scale Change
ROP (min/ft) 10
Gamma (API) 150

Note: All Samples Have Been Lagged To Depth By Calculated Time.

START 10' SAMPLE EXAMINATION AT 3400'.

Ls Wht-Crm-Gry MicroIn-FxIn Poor OOM Ø (w/Small OOL in pl) Poor Devel Chalky Cht Gry Op Shp Vit Fos (Crin) Chalk (Abd) Sh Gry-Char Soft No Odor No Flor No Stn NS

Ls Wht-Crm-Gry FxIn Med OOM Ø (w/Small Leached OOL in pl) Fair-Med Devel Cht Gry Op (w/Spicule Includ) Shp Vit Chalk (Abd) Sh Gry-Char Soft No Odor No Flor No Stn NS

Ls Crm-Tan MicroIn Dns Micrite Cht Gry Op (w/Spicule Includ) Shp Vit Chalk (Abd) Sh Gry-Char Soft No Odor No Flor No Stn NS

Ls Crm-Tan MicroIn-FxIn Dns Micrite Grad Poor IxIn Ø Cht Gry Op (w/Spicule Includ) Shp Vit Chalk (Abd) Sh Gry-Char Soft No Odor No Flor No Stn NS

Ls Crm-Tan MicroIn Dns Micrite Grad FxIn Poor OOM Ø (w/Poor Tr Leached OOL in pl) Poor Devel Cht Gry Op (w/Spicule Includ) Shp Vit Chalk (Abd) Sh Gry-Char Soft No Odor No Flor No Stn NS

Ls Crm-Tan-Lt Brn MicroIn Dns Micrite Grad FxIn Poor-Fair IxIn & OOM Ø (w/Tr Fair Leached OOL in pl) Fair Devel Fos (Fuss) Chalky Sh Gry-Char Soft No Odor No Flor No Stn NS

Ls Crm-Tan-Lt Brn MicroIn Dns Micrite Grad FxIn Poor IxIn & OOM Ø (w/Poor-Fair Leached OOL in pl) Poor Devel Chalky Sh Maroon (Wash Red)-Gry-Char Soft No Odor No Flor No Stn NS

ROOT SHALE 3456' (-651)

Sh Gry (V Abd)-Maroon (Wash Red) Soft Ls Crm-Tan-Lt Brn MicroIn Dns Micrite Chalky No Odor No Flor No Stn NS

Sh Gry (V Abd)-Maroon (Wash Red) Soft Ls Crm-Tan-Lt Brn MicroIn Dns Micrite Chalky No Odor No Flor No Stn NS

Sh Gry (V Abd)-Maroon (Wash Red) Soft Ls Crm-Tan-Lt Brn MicroIn Dns Micrite Chalky No Odor No Flor No Stn NS

Sh Gry (V Abd)-Maroon (Wash Red) Soft Ls Crm-Tan-Lt Brn MicroIn Dns Micrite Chalky No Odor No Flor No Stn NS

STOTLER 3486' (-681)

30" CFS @ 3525' Ls Wht-Crm-Gry MicroIn Dns Micrite Grad FxIn Poor-Fair IxIn Ø Grad Fair OOM Ø (w/Small Leached OOids in pl) Poor-Fair Leaching Poor-Fair Develop Fair Dissolu Chalk Scat Flor (Lt Grn > 15% of Tray) Fos (Fuss) Sh Char-Gry-Red-No Odor No Stn NS

60" CFS @ 3525' Ls Wht-Crm-Gry MicroIn Dns Micrite Grad FxIn Poor-Fair IxIn Ø Grad Fair OOM Ø (w/Small Leached OOids in pl) Poor Leaching Poor Develop Poor Dissolu ? Frac Ø Cht Wht-Gry (w Spicule Includ) Chalk Scat Flor (Lt Grn > 20% of Tray) Sh Char-Gry-Red-No Odor No Stn SSG

TARKIO 3534' (-729)

30" CFS @ 3560' Ls Wht-Crm-Gry MicroIn Dns Micrite Grad FxIn Poor IxIn Ø ? Frac Ø Cht Gry Op Shp Vit Chalky Fos (Crin) Faint ? Scat Flor (Lt Grn > 10% of Tray) Sh Char-Gry Sli ? Odor No Stn SSG

60" CFS @ 3560' s Wht-Crm-Gry MicroIn Dns Micrite Grad FxIn Poor IxIn Ø ? Frac Ø Cht Gry Op Shp Vit Chalky Faint ? Scat Flor (Lt Grn > 10% of Tray) Sh Char-Gry Sli ? Odor No Stn SSG

Ls Crm-Tan MicroIn Dns Micrite Chalk (Abd) Sh Char-Grn-Gry Soft No Flor No Odor No Stn NS

Ls Crm-Tan MicroIn Dns Micrite Chalk (V Abd) Sh Char-Grn-Gry Soft No Flor No Odor No Stn NS

Ls Crm-Tan MicroIn Dns Micrite Cht Crm-Tan Op Shp Vit Chalk (Abd) Sh

Blow: IF= Fair Inc to BOB/5'. No Blow Back During ISIP. FF= BOB/Instant & GTS/36". Fair Blowback During FSIP. Recovery: 65' Drilling Mud.

Gas Gauges=

@ 50" = 5.89 Mcf;
@ 60" = 8.89 Mcf;
@ 70" = 8.89 Mcf;
(Gas Will Burn).

Pressures:

IH = 1686#;
FH = 1671#;
IF = 66-64#;
FF = 69-75#;
ISIP = 947#;
FSIP = 945#;
Temp. = 104 degrees F..

@ 3548' Re- Adjust Tooke Daq Sample Flow From DST # 1 (0-1500 Gas Units On (Main Flow= .5 on Sample Flow=1.0 on Dilution Flow) Back to Normal (0-500 Units=1.5 Sample Flow=0.0)

~DST # 2~

Interval: 3540' - 3560"
Times: 5"-90"-18"-15"
Blow: IF V. Weak
Surface = 1/4" Inc./
Died/4.5"; FF= No
Blow-Flushed Tool @ 10"
(Had Good Surge) & No Blow.
Recovery: 0' Drilling Mud (Fluid At Top Of Tool).

Pressures:

IH = 1685#;
FH = 1678#;
IF = 34-35#;
FF = 54-36#;
ISIP = 54#;
FSIP = 38#;
Temp. = 101 degrees F..

GAS BKGD = 48 UNITS.

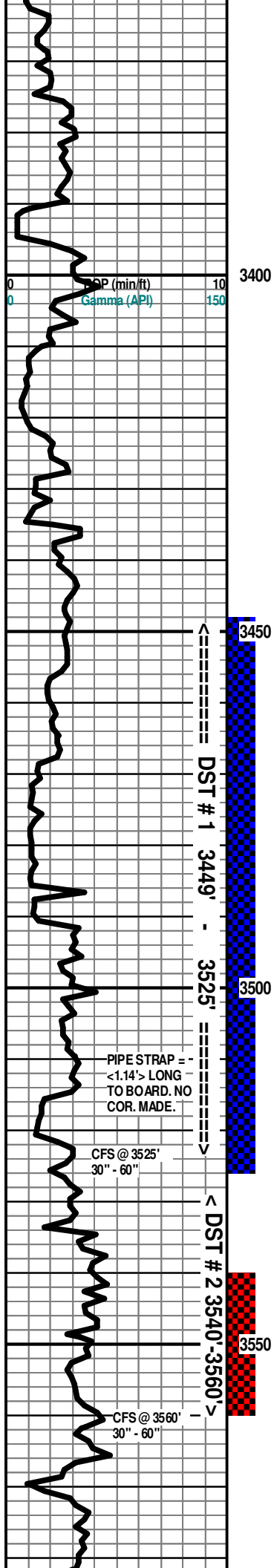
GAS KICK = 175 UNITS.

GAS KICK = 235 UNITS.

GAS KICK = 222 UNITS.

Mudco Ck @ 3560'

@ 12:20 PM
10/13/15
Vis = 68;
WT = 8.7#;
PV = 18;
YP = 20;



DP (min/ft) 10
Gamma (API) 150

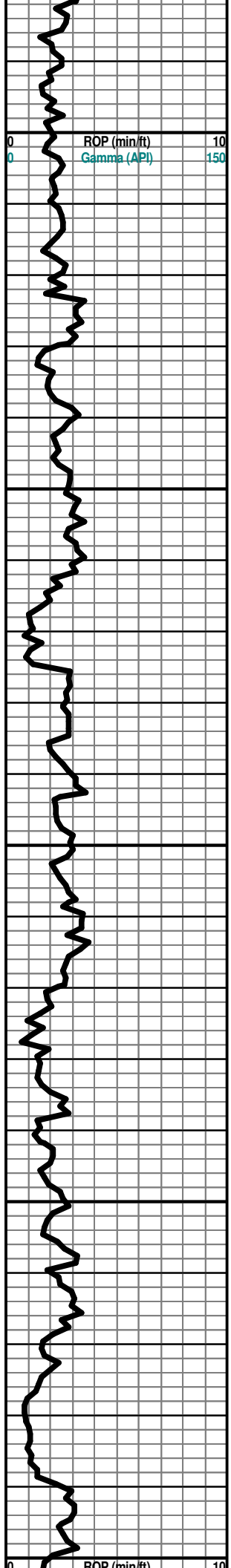
DST # 1 3449' - 3525'

DST # 2 3540' - 3560'

PIPE STRAP = <1.14'> LONG TO BOARD. NO COR. MADE.

CFS @ 3525' 30" - 60"

CFS @ 3560' 30" - 60"



Ls Crm-Tan MicroxIn Dns Micrite Cht Crm-Tan Op Shp Vit Chalk (Abd) Sh
Grn-Gry Soft No Flor No Odor No Stn NS

Ls Crm-Tan MicroxIn Dns Micrite Chalk (V Abd) Sh Char-Grn-Gry Soft No
Flor No Odor No Stn NS

Ls Wht-Crm-Tan MicroxIn Dns Micrite Grad FxIn Poor lxIn Ø Chalk (V Abd)
Sh Char-Grn-Gry Soft No Flor No Odor No Stn NS

Ls Wht-Crm-Tan MicroxIn Dns Micrite Grad FxIn Poor lxIn Ø Grad Poor
OOM Ø (Tr/Poor Leaching) Chalk (Abd) Sh Char-Grn-Gry Soft No Flor No
Odor No Stn NS

Ls Wht-Crm-Tan MicroxIn Dns Micrite Grad FxIn Poor lxIn Ø Chalk (Abd)
Sh Char-Grn-Gry Soft No Flor No Odor No Stn NS

Sh Char-Grn-Gry-Maroon Soft Ls Wht-Crm-Tan MicroxIn Dns Micrite Grad
FxIn Poor lxIn Ø Sh Char-Grn-Gry Soft No Flor No Odor No Stn NS

Ls Wht-Crm-Tan-Gry MicroxIn Dns Micrite Grad FxIn Poor lxIn Ø Chalk
(Abd) Sh Char-Grn-Gry Soft No Flor No Odor No Stn NS

Ls Wht-Crm-Tan MicroxIn Dns Micrite Grad FxIn Poor lxIn Ø Fos (Crin)
Chalk Sh Char-Grn-Gry Soft No Flor No Odor No Stn NS

Sh Char-Grn-Gry-Maroon Soft Ls Wht-Crm-Tan MicroxIn Dns Micrite Grad
FxIn Poor lxIn Ø Cht Wht-Gry Translu-Op Shp Vit (w/Fos Inclus) Fos (Crin)
Sh Char-Grn-Gry Soft No Flor No Odor No Stn NS

BERN 3672' (- 867)

Ls Crm-Gry MicroxIn Dns Micrite Grad FxIn Poor lxIn Ø Grad Poor OOM Ø
(Tr/V Poor Leaching) Chalk (Abd) Sh Char-Grn-Gry Soft No Flor No Odor
No Stn NS

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

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

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

Ls Wht-Crm-Tan MicroxIn Dns Micrite Grad FxIn Poor lxIn Ø Chalk Sh
Char-Grn-Gry Soft No Flor No Odor No Stn NS

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

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

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

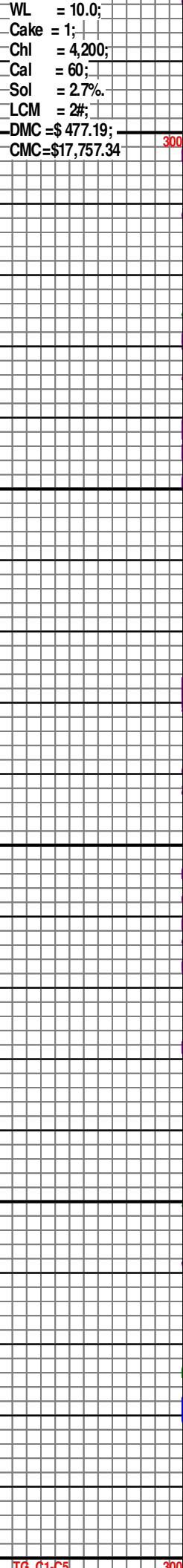
Ls Wht-Crm-Tan MicroxIn Dns Micrite Cht Tan Op Shp Vit Chalk Sh
Char-Grn-Gry Soft No Flor No Odor No Stn NS

TOPEKA 3767' (- 962)

Ls Wht-Crm MicroxIn Dns Micrite Grad FxIn Poor lxIn Ø Grad Poor
OOL/OOM Ø Poor Dissolu Cht Wht Op Shp Vit Chalk Sh Gry-Grn Fissil
Soft No Odor No Flor No Stn NS

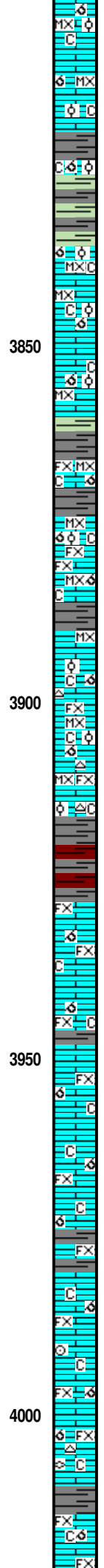
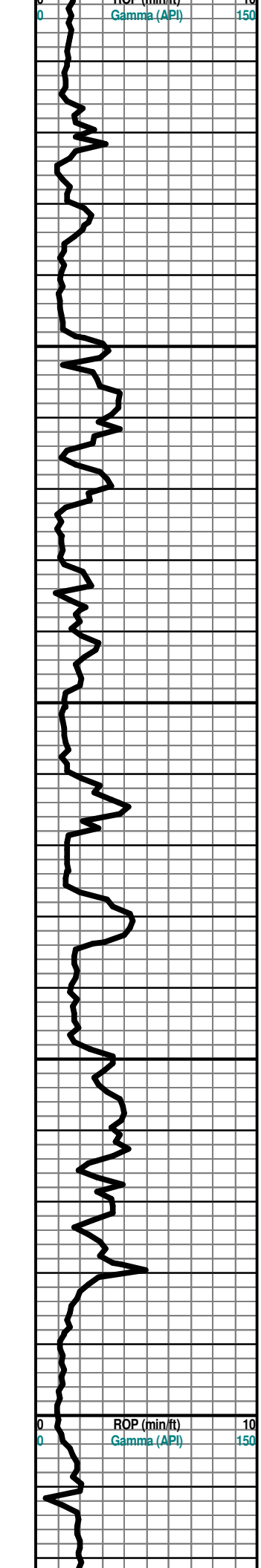
Ls Wht-Crm MicroxIn Dns Micrite Grad FxIn Poor lxIn Ø Grad Poor
OOL/OOM Ø Poor Dissolu Cht Wht Op Shp Chalk Vit Sh Gry-Grn Fissil
Soft No Odor No Flor No Stn NS

Ls Wht-Crm MicroxIn Dns Micrite Chalk Cht Wht Op Shp Vit Sh Gry-Grn
Fissil Soft No Odor No Flor No Stn NS



ROP (min/ft) 10
Gamma (API) 150

ROP (min/ft) 10
Gamma (API) 150



Ls Wht-Crm MicroxIn Dns Micrite Grad FxIn Poor IxIn Ø Grad Poor OOL/OOM Ø Poor Dissolu Chalk Cht Wht Op Shp Vit Sh Gry-Grn Fissil Soft No Odor No Flor No Stn NS

Ls Wht-Crm MicroxIn Dns Micrite Grad FxIn Poor IxIn Ø Grad Poor OOL/OOM Ø Poor Dissolu Chalk Cht Wht Op Shp Vit Sh Gry-Grn Fissil Soft No Odor No Flor No Stn NS

Sh Gry-Grn Fissil Soft Ls Wht-Crm MicroxIn Dns Micrite Grad FxIn Poor IxIn Ø Grad Poor OOL/OOM Ø Poor Dissolu Chalk Cht Wht Op Shp Vit No Odor No Flor No Stn NS

Ls Wht-Crm MicroxIn Dns Micrite Grad FxIn Poor IxIn Ø Grad Poor OOL/OOM Ø Poor Dissolu Cht Wht Op Shp Vit Chalk Sh Gry-Grn Fissil Soft No Odor No Flor No Stn NS

Ls Wht-Crm MicroxIn Dns Micrite Grad FxIn Poor IxIn Ø Grad Poor OOL/OOM Ø Poor Dissolu Cht Wht Op Shp Vit Chalk Sh Gry-Grn Fissil Soft No Odor No Flor No Stn NS

Ls Wht-Crm MicroxIn Dns Micrite Grad FxIn Poor IxIn Ø Grad Poor OOL/OOM Ø Poor Dissolu Cht Wht Op Shp Vit Chalk Sh Gry-Grn Fissil Soft No Odor No Flor No Stn NS

Ls Wht-Crm MicroxIn Dns Micrite Grad FxIn Poor IxIn Ø Grad Poor OOL/OOM Ø Poor Dissolu Cht Wht Op Shp Vit Chalk Sh Gry-Grn Fissil Soft No Odor No Flor No Stn NS

Ls Wht-Crm MicroxIn Dns Micrite Grad FxIn Poor IxIn Ø Grad Poor OOL/OOM Ø Poor Dissolu Cht Wht Op Shp Vit Chalk Sh Gry-Grn Fissil Soft No Odor No Flor No Stn NS

Ls Wht-Crm MicroxIn Dns Micrite Grad FxIn Poor IxIn Ø Grad Poor OOL/OOM Ø Poor Dissolu Cht Wht Op Shp Vit Chalk Sh Gry-Grn Fissil Soft No Odor No Flor No Stn NS

Sh Gry-Grn Fissil Soft Ls Wht-Crm MicroxIn Dns Micrite Grad FxIn Poor IxIn Ø Grad Poor OOL/OOM Ø Poor Dissolu Cht Wht Op Shp Vit Chalk No Odor No Flor No Stn NS

LeCOMPTON 3916' (- 1111)

Ls Wht FxIn Fair-Med IxIn Gran Por Grad Fair-Med OOM Ø (w/Poor-Fair Dis Poor Develop) Chalk Sh Red-Grn-Char Fissil Scat ? Min Flor (Dull Wht-Grn) No Odor NS

Ls Wht FxIn Fair-Med IxIn Gran Por Grad Fair-Med OOM Ø (w/Poor-Fair Dis Poor Develop) Chalk Sh Red-Grn-Char Fissil Scat ? Min Flor (Dull Wht-Grn) No Odor NS

Ls Wht FxIn Fair-Med IxIn Gran Por Grad Fair-Med OOM Ø (w/Poor-Fair Dis Poor Develop) Chalk Sh Red-Grn-Char Fissil Scat ? Min Flor (Dull Wht-Grn) No Odor NS

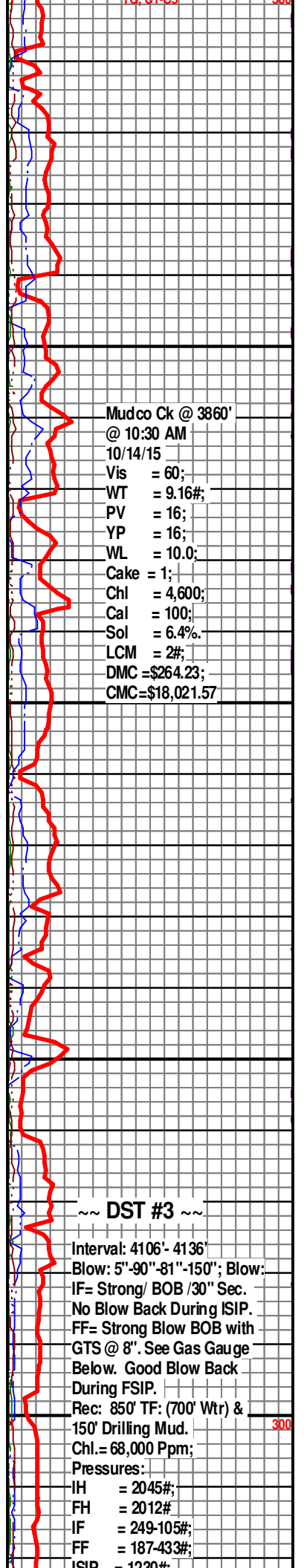
Ls Wht FxIn Fair-Med IxIn Gran Por Grad Fair-Med OOM Ø (w/Poor-Fair Dis Poor Develop) Chalk Sh Red-Grn-Char Fissil Scat ? Min Flor (Dull Wht-Grn) No Odor NS

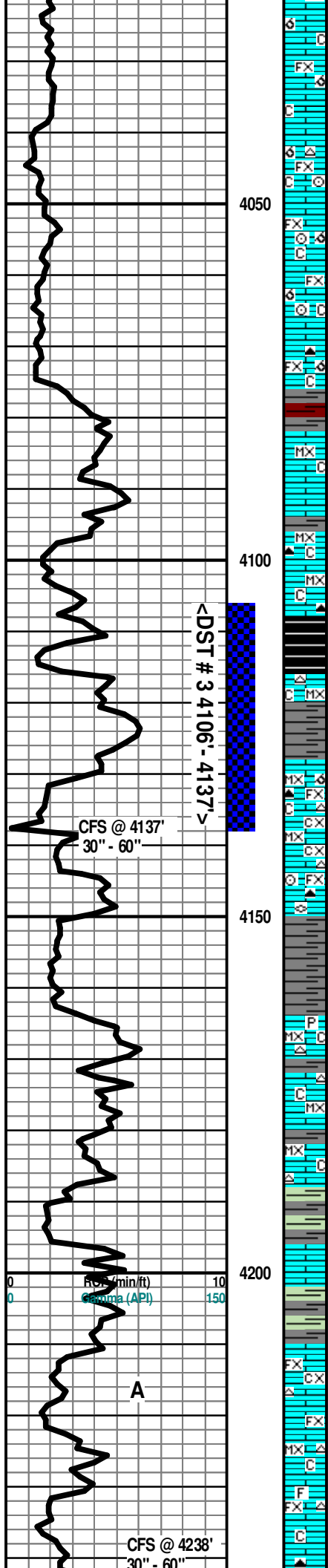
Ls Wht FxIn Fair-Med IxIn Gran Por Grad Fair-Med OOM Ø (w/Poor-Fair Dis Poor Develop) Chalk Sh Red-Grn-Char Fissil Scat ? Min Flor (Dull Wht-Grn) No Odor NS

Ls Crm-Tan FxIn Fair-Med IxIn Gran Por Grad Poor OOM Ø (w/Poor Disolu & Poor Develop) Fos (Crin) Chalk Sh Red-Char-Aqua Fissil No Flor No Odor NS

Ls Crm-Tan FxIn Fair-Med IxIn Gran Por Grad Poor OOM Ø (w/Poor Dis & Poor Develop) Cht Tan Op Shp Vit Fos (Fuss) Chalk Sh Red-Grn-Char Fissil No Flor No Odor NS

Ls Crm-Tan FxIn Fair-Med IxIn Gran Por Grad Poor-Fair OOM Ø (w/Poor Dissolu & Poor Develop) Cht Crm Op Shp Vit Chalk Sh Red-Gry-Char Fissil No Flor No Odor NS





Ls Crm-Tan FxIn Fair-Med IxIn Gran Por Grad Fair-Med OOM Ø
(w/Poor-Fair Dissolu & Poor Develop) Chalk Sh Red-Grn-Char Fissil No Flor No Odor NS

Ls Crm-Tan FxIn Fair-Med IxIn Gran Por Grad Fair-Med OOM Ø
(w/Poor-Fair Dissolu & Poor Develop) Chalk Sh Red-Grn-Char Fissil No Flor No Odor NS

Ls Crm-Tan FxIn Fair-Med IxIn Gran Por Grad Fair OOM Ø (w/Poor-Fair Dissolu & Poor Develop) Fos (Crin) Chalk Sh Red-Grn- Char Fissil No Flor No Odor NS

Ls Crm-Tan FxIn Fair-Med IxIn Gran Por Grad Fair OOM Ø (w/Poor-Fair Dissolu & Poor Develop) Fos (Crin) Chalk Sh Red-Grn- Char Fissil No Flor No Odor NS

Ls Crm-Tan FxIn Fair-Med IxIn Gran Por Grad Fair OOM Ø (w/Poor-Fair Dissolu & Poor Develop) Fos (Crin) Chalk Sh Red-Grn- Char Fissil No Flor No Odor NS

Sh Char-Gry Fissil (Abd) Ls Crm-Tan FxIn Fair IxIn Gran Grad Fair OOM Ø (w/Poor-Fair Dissolu & Poor Develop) Cht Drk Gry Op Shp Vit Chalk Fissil No Flor No Odor NS

Ls Crm-Tan MicroIn Dns Micrite Chalk Sh Red-Grn-Char Fissil No Flor No Odor NS

Ls Crm-Tan MicroIn Dns Micrite Cht Blk Op Shp Vit Chalk Sh Red-Grn-Char Fissil No Flor No Odor NS

Ls Crm-Tan MicroIn Dns Micrite Cht Blk Op Shp Vit Chalk Sh Red-Grn-Char Fissil Scat No Flor No Odor NS

HEEBNER 4108' (- 1303)

Sh Bk Carb Fissil (w/SSG) Ls AA Cht Drk Blk Op Shp Vit Fos (Crin) Chalk No Odor No Stn No Flor NS

30" CFS @ 4137' Ls Crm-Gry MicroIn Dns Micrite Cht Wht Translu-Op Shp Vit Chalk (V Abd-Gummy) Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS

TORONTO 4128' (-1323')

60" CFS @ 4137' Ls Wht-Crm MicroIn Dns Micrite Grad FxIn Fair-Med IxIn & OOM Ø (Tr/Small Vug Leaching in Dry Spls) (V Soft) Cht Wht-Drk Char Translu-Op Shp Vit Chalky Sh Blk Carb-Char-Gry Soft-Fissil No Odor No Stn Fair (Lt Grn Flor Flor (>30% (+/-) in Tray) ? SSG

Ls Wht-Crm MicroIn AA Grad FxIn Med IxIn (? Sucrosic) Ø (Soft) Cht Wht-Drk Char Op Shp Vit Fos (Crin, Fuss) Chalk Sh Char-Gry-Lt Aqua Soft-Fissil No Odor No Stn Fair No Flor NS

DOUGLAS 4150' (- 13)

Sh Char-Gry-Lt Aqua Soft-Fissil Ls Wht-Crm-Tan-Gry MicroIn AA Grad FxIn Med IxIn Ø AA Cht Wht-Blk Op Shp Vit Pyr Mass Fos (Brach) Chalk No Odor No Stn Fair No Flor NS

Sh Char-Grn/Gry-Lt Aqua Soft (Gummy)-Fissil Ls Wht-Crm-Tan- Gry MicroIn AA Cht Wht Op Shp Vit Pyr Mass Fos (Crin) Chalk No Odor No Stn Fair No Flor NS

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

Ls Crm-Tan-Gry MicroIn Dns Micrite Cht Wht-Tan Op Shp Vit Chalk Sh Char-Gry-Maroon Soft-Fissil No Odor No Stn No Flor NS

Sh Char-Gry Soft Fissil Ls Crm-Tan-Gry MicroIn Dns Micrite AA No Odor No Stn No Flor NS

IATAN 4196' (- 1391)

Sh Char-Gry Soft-Fissil Ls Crm-Gry MicroIn Dns Micrite Cht Drk Gry Op Shp Vit No Odor No Stn No Flor NS

LANSING 4210' (- 1405)

Ls Crm FxIn Poor-Fair IxIn Ø (w/Small Vug Leaching & Fos (Brach, Spicule) Inlus) (w/SSG (Under Heat in Wtr) Grad Poor OOL Ø (w/Small Ooids in pl) Poor Leaching Cht Wht-Tan Op Shp Vit Chalk Sh Char-Gry Soft-Fissil No Stn Fair Flor (> 20% in Tray-Lt Grn) ? Faint Odor SSG

30" CFS @ 4138' Ls Crm-Tan-Gry MicroIn Dns Micrite Grad FxIn Poor IxIn Ø Cht Wht-Tan-Gry Op Shp Vit Chalk Sh Char-Gry Soft-Fissil No Stn Fair ? Min Flor (> 15% in Tray-Lt Grn) ? Sli/No Odor NS

60" CFS @ 4138' Ls Crm FxIn Fair IxIn Ø (w/Small Vug & Fos Leaching) Fair IxIn Leaching (w/SSG When Broken Under Heat in Wtr) V Soft Cht Wht-Tan Op Shp Vit Chalk Sh Char-Gry Soft-Fissil No Stn Fair Flor (> 20% in Tray-Lt Grn) ? Sli/Faint Odor SSG

ISIP = 1230#;
FSIP = 1220#;
Temp.=113 degrees F..
RW= 0.07 @ 113 degrees F.

FF Gas Gauge:
@ 10" = 21.95 Mcf;
@ 20" = 28.07 Mcf;
@ 30" = 34.36 Mcf;
@ 40" = 33.31 Mcf;
@ 50" = 31.81 Mcf;
@ 60" = 28.07 Mcf;
@ 70" = 26.57 Mcf.

Gas Will Burn (w/ Blue Flame Tip).

Mudco Ck @ 4137' @ 11:45 AM 10/15/15 Vis = 54;
WT = 9.25#;
PV = 17;
YP = 17;
WL = 8.4;
Cake = 1;
Chl = 4,600 Ppm;
Cal = 20;
Sol = 6.4%..
LCM = 2#;
DMC =\$1,523.40;
CMC =\$19,523.97

SH GAS KICK = 125 UNITS.

GAS KICK = 113 UNITS.

? TRIP GAS

SH GAS KICK = 159 UNITS

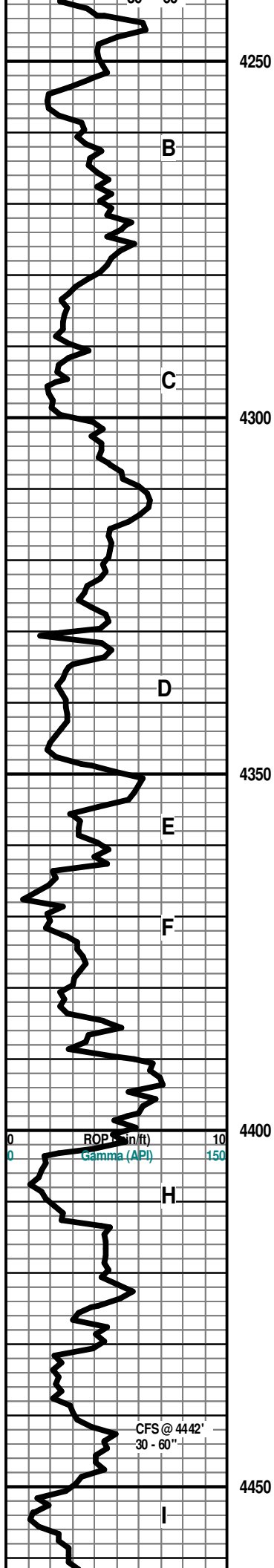
Scale Change
TG 01/05 150

BKGD GAS = 75 UNITS.

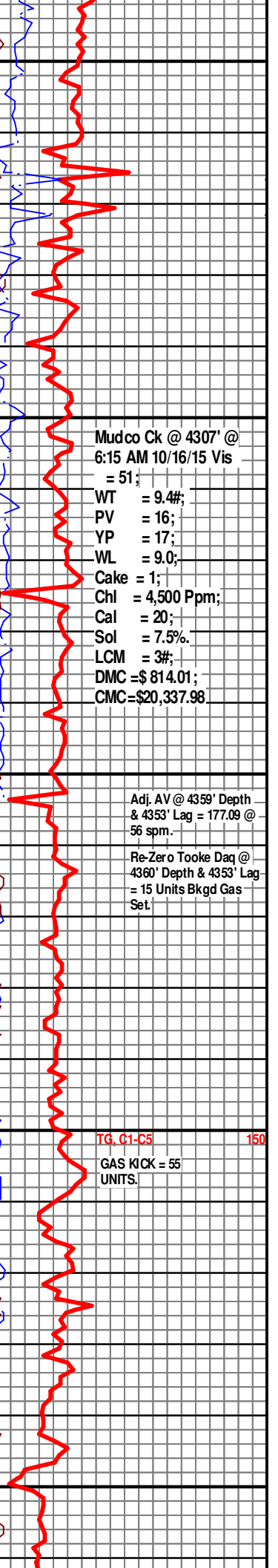
GAS KICK = 120 UNITS.

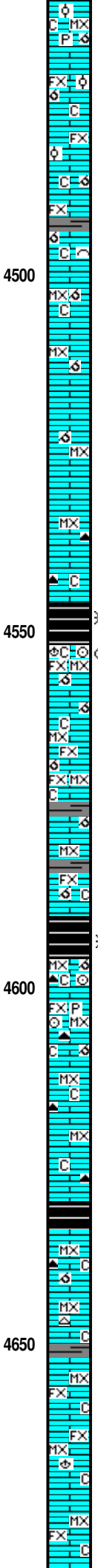
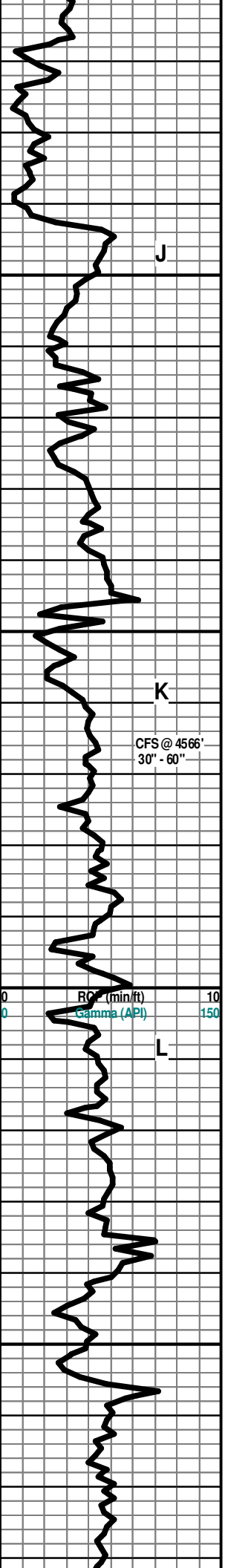
A

CFS @ 4238' 30" - 60"



4250
 B
 Ls Crm-Gry MicroIn Dns Micrtie Cht Gry Op Shp Vit Chalk Sh Blk Carb-Char-Gry Soft-Fissil No Odor No Stn No Flor NS
 Ls Wht-Crm MicroIn Dns Micrtie Cht Wht Op Shp Vit Chalk Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS
 Ls Crm-Tan MicroIn Dns Micrtie (w/ Secondary Calc Overgroth Inclus) Cht Wht Op Shp Vit Chalk Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS
 Chalk (V ABD) Ls Crm-Tan MicroIn Dns Micrtie Cht Wht-Gry (w/Fos Inclus) Op Shp Vit Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS
 C
 Ls Crm-Tan MicroIn Dns Micrtie Cht Wht-Lt Brn-Drk Gry-Blk Translu-Op Shp Vit Chalk Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS
 4300
 Ls Crm-Gry MicroIn Dns Micrtie Cht Wht-Drk Gry-Blk Op Shp Vit Chalk Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS
 Ls Wht-Crm MicroIn Dns Micrtie (w/Pyr Inclus) Cht Drk Gry-Blk Op Shp Vit Chalk Sh Char-Gry-Blk Carb (Tr) Soft-Fissil No Odor No Stn No Flor NS
 Ls Wht-Crm MicroIn Dns Micrtie Grad Poor OOM Ø (w/Fos (Crin) Inclus) Poor Leaching Poor Develop Cht Wht Op Shp Vit Chalk Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS
 Ls Wht-Crm Fxln Fair lxn Ø Cht Drk Gry-Blk (w/Fos (Fuss, Spicule) Op Shp Vit Chalk (Abd) Sh Char-Gry-Soft-Fissil No Odor No Stn No Flor NS
 D
 Ls Wht-Crm Fxln Fair lxn Ø Cht Drk Gry-Blk (w/Fos (Fuss, Spicule) Op Shp Vit Chalk (Abd) Sh Char-Gry-Soft-Fissil No Odor No Stn No Flor NS
 4350
 E
 Ls Wht-Crm MicroIn Dns Micrtie Grad Crm-Brn Fxln Med-Good OOM Ø Med-Good Vug Leaching Med-Good Develop Cht Lt Tan Op Shp Vit Chalk (Abd) Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS
 F
 Ls Wht-Crm MicroIn Dns Micrtie Grad Crm-Brn Fxln Med-Good OOM Ø Med-Good Vug Leaching Med-Good Develop Cht Wht-Gry Op Shp Vit Chalk (Abd) Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS
 Ls Wht-Crm Mostly MicroIn Dns Micrtie Grad Crm-Brn Fxln Med-Good OOM Ø Med-Good Vug Leaching Med-Good Develop Dec Cht Wht-Gry-Drk Brn Translu-Op Shp Vit Chalk (Abd) Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS
 Ls Wht-Crm Mostly MicroIn Dns Micrtie Grad Crm-Brn Fxln Med-Good OOM Ø Med-Good Vug Leaching Med-Good Develop Dec Cht Wht-Gry-Drk Brn Translu-Op Shp Vit Chalk (Abd) Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS
 4400
 H
 Ls Crm-Brn MicroIn Dns Micrtie Cht Wht-Gry-Drk Brn Translu-Op Shp Vit Chalk (Abd) Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS
 Ls Wht-Crm Fxln Good OOM Ø (w/Small-Med Ooids in pl) Med- Good Vug Leaching Med-Good Dissolu & Develop (w/Good Odor & SSG (On Frac) Cht Wht-Op Shp Vit Chalk (V Abd) Sh Char-Gry-Blk Carb Soft-Fissil No Flor No Stn SSG
 Ls Wht-Crm Fxln Good OOM Ø (w/Small-Med Ooids in pl) Med- Good Vug Leaching Med-Good Dissolu & Develop (w/Good Odor & ? SSG Cht Wht-Drk Gry Op Shp Vit Chalk (V Abd) Sh AA No Flor No Stn ? NS
 30" CFS @ 4442' Ls Wht-Crm Fxln Good OOM Ø (w/Med-Lg Ooids in pl) Med-Vug Leaching (Some Ooid w/No Leaching) Med Dissolu & Develop (w/Fair-Good Odor) Cht Wht-Drk Gry Op Shp Vit Chalk (V Abd) Sh AA No Flor No Stn ? NS
 60" CFS @ 4442' Ls Wht-Crm Mostly MicroIn Dns Micrtie Grad Crm-Brn Fxln Med-Good OOM Ø Med-Good Vug Leaching Med-Good Develop Dec Cht Wht-Gry-Drk Brn Translu-Op Shp Vit Chalk (V Abd) Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS
 4450
 I
 Ls Crm-Tan Mostly MicroIn Dns Micrtie (w/Pyr Inclus) Barren Chalk Sh Char-Gry Soft-Fissil ? Faint Odor No Stn No Flor NS
 Ls Wht-Crm MicroIn Dns Micrtie AA Grad Crm-Brn Fxln Med-Good OOM Ø Med-Good Vug Leaching Med-Good Develop Cht Wht-Gry-Drk Gry Translu-Op Shp Vit Fos (Crin) Chalk Sh Char-Gry-Blk Carb (Tr Only) Fissil ? Faint Odor No Stn No Flor NS
 Ls Crm-Tan-Lt Brn MicroIn Dns Micrtie AA Grad Crm-Brn Fxln Med-Good





Ls Crm-Tan Fxln Med-Good OOM Ø (w/Small-Med Ooids in pl) Med-Vug Leaching (Some Non Leached Ooids in pl) Med Develop Pyr Mass Chalk Sh Char-Gry Soft-Fissil ? Faint Odor No Stn No Flor NS

Ls Crm-Tan Fxln Med-Good OOM Ø (w/Small-Med Ooids in pl) Med-Good Vug Leaching Med-Good Develop Chalk (V Abd) Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS

Ls Crm-Tan Fxln Med-Good OOM Ø (w/Small-Med Ooids in pl) Med-Good Vug Leaching Med-Good Develop Chalk (V Abd) Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS

Ls Crm-Tan Brn Fxln Med-Good OOM Ø Med-Good Vug Leaching Med-Good Develop Grad Microxln Dns Micrtie Fos (Brach) Chalk Sh Char-Gry Fissil No Odor No Stn No Flor NS

Ls Crm-Tan Microxln Dns Micrtic Grad Fxln Med-Good OOM Ø AA (? Sluff) Chalk Sh Char-Gry Soft-Fissil ? Faint Odor No Stn No Flor NS

Ls Crm-Tan Microxln Dns Micrtic Grad Fxln Med-Good OOM Ø AA (? Sluff) Chalk Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS

Ls Crm-Tan Microxln Dns Micrtic Grad Fxln Med-Good OOM Ø AA (? Sluff) Chalk Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS

Ls Crm-Tan Microxln Dns Micrtic Cht Drk Gry Op Shp Vit Chalk Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS

STARK SHALE 4547' (- 1702)

Sh Bk Carb Fissil Ls Crm-Tan Microxln Dns Micrite Grad Fxln Fair-Med OOM Ø Cht Drk Gry Fos Crin Chalk ? Faint Odor No Flor No Stn NS

KANSAS CITY "SWOPE" (K) 4552' (- 1707)

30" CFS @ 4566' Ls Crm-Tan Microxln Dns Micrite (w/Pyr Includ) Grad Fxln Fair-Med OOM Ø (w/Tr Fair Vug Leaching & Fair Develop) Cht Gry Fos (Brach, Crin) Chalky Sh Bk Carb Fissil No Odor No Flor No Stn NS

60" CFS @ 4566' Ls Crm-Tan Microxln Dns Micrite (w/Pyr Includ) Fxln Fair-Med OOM Ø (Tr Only) Cht Gry Chalky Sh Bk Carb-Char Fissil No Odor No Flor No Stn NS

Ls Wht-Crm-Tan-Gry Microxln Dns Micrtic Grad Fxln Poor OOM Ø (w/Poor Leaching & Develop) Cht Gry Op Shp Vit Chalk (Abd) Sh Bk Carb-Char-Gry Soft-Fissil No Odor No Stn No Flor NS

Ls Wht-Crm-Tan Microxln Dns Micrtic (w/Pyr Includ) Grad Fxln Poor OOM Ø (w/Poor Leaching & Develop (Tr Only)) Cht Wht Translu-Op Shp Vit Chalk No Sh Present in Spl No Odor No Stn No Flor NS

HUSHPUCKNEY SHALE 4590' (- 1785)

KANSAS CITY "HERTHA" (L) 4596' (- 1791)

Sh Bk Carb Fissil Ls Crm-Tan Microxln Dns Micrite Grad Fxln Fair OOM Ø Cht Drk Gry Fos Crin Chalk No Odor No Flor No Stn NS

Ls Crm-Tan Microxln Dns Micrite (w/Pyr Includ) Grad Fxln Med -Good OOM Ø (w/Tr Good Vug Leaching & Good Develop) Cht Gry Op Shp Vit Fos (Crin) Chalky Sh Bk Carb-Char Fissil No Odor No Flor No Stn NS

Ls Wht-Crm-Gry Microxln Dns Micrite Cht Gry Op Shp Vit Chalky Sh Char Fissil No Odor No Flor No Stn NS

Ls Wht-Crm-Gry Microxln Dns Micrite Cht Drk Gry (Banded Wht & V Abd) Op Shp Vit Chalky Sh Bk Carb-Char Fissil No Odor No Flor No Stn NS

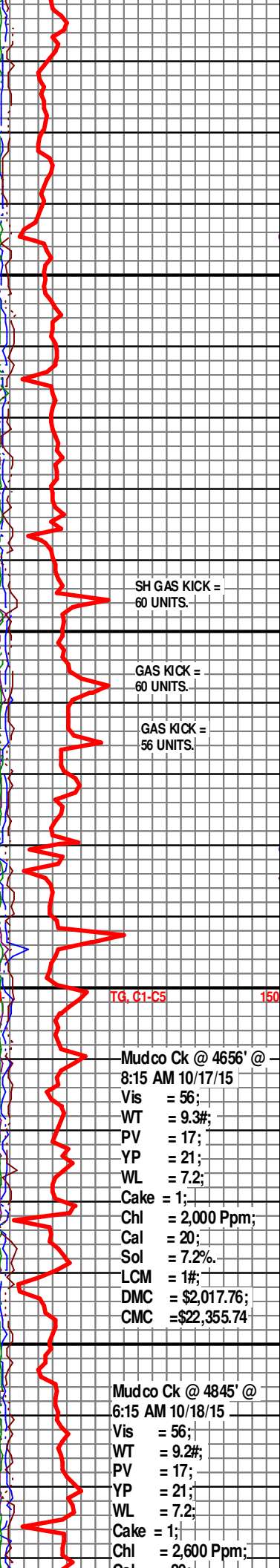
Ls Wht-Crm-Gry Microxln Dns Micrite Cht Drk Gry (Banded Wht & V Abd) Op Shp Vit Chalky Sh Bk Carb-Char Fissil No Odor No Flor No Stn NS

Ls Wht-Crm (Crm-Tan Banded) Mostly Microxln Dns Micrite (w/Pyr Includ) Grad Fxln Poor-Fair OOM Ø (w/Tr Poor Vug Leaching & Poor Develop) Cht Wht-Tan-Gry Op Shp Vit (w/Fos Includ) Chalky Sh Bk Carb-Char Fissil No Odor No Flor No Stn NS

Sh Char-Gry Soft-Fissil Ls Crm-Gry Microxln Dns Micrite Grad Fxln Gry Poor Ixln Ø Chalk No Odor No Stn No Flor NS

Ls Crm-Gry Microxln Dns Micrite Grad Fxln Gry Poor Ixln Ø Fos (Brach) Sh Char-Gry Soft-Fissil Chalk No Odor No Stn No Flor NS

Ls Crm-Gry Microxln Dns Micrite Grad Fxln Gry Poor Ixln Ø Chalk Sh Bk Carb- Char-Gry Soft-Fissil No Odor No Stn No Flor NS



CFS @ 4566' 30" - 60"

RO (min/ft) 10
Gamma (API) 150

TG, C1-C5 150

Mudco Ck @ 4656' @ 8:15 AM 10/17/15
Vis = 56;
WT = 9.3#;
PV = 17;
YP = 21;
WL = 7.2;
Cake = 1;
Chl = 2,000 Ppm;
Cal = 20;
Sol = 7.2%
LCM = 1#;
DMC = \$2,017.76;
CMC = \$22,355.74

Mudco Ck @ 4845' @ 6:15 AM 10/18/15
Vis = 56;
WT = 9.2#;
PV = 17;
YP = 21;
WL = 7.2;
Cake = 1;
Chl = 2,600 Ppm;
Cal = 20;
Sol = 7.2%
LCM = 1#;
DMC = \$2,017.76;
CMC = \$22,355.74

BASE KANSAS CITY 4684' (- 1879)

Sh Blk Carb- Char-Gry Soft-Fissil Ls Crm-Gry Microxln Dns Micrite Grad Fxln Gry Poor Ixln
Ø Chalk No Odor No Stn No Flor NS

Ls Crm-Gry Microxln Dns Micrite Sh Blk Carb- Char-Gry Chalk Soft-Fissil
No Odor No Stn No Flor NS

MARMATON 4700' (- 1895)

Ls Crm Microxln Dns Micrite Cht Wht-Gry Translu-Op Shp Vit Fos (Crin)
Chalk Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS

Ls Crm Microxln Dns Micrite Grad Fxln Poor Ixln Ø Cht Wht-Gry
Translu-Op Shp Vit Fos (Crin) Chalk Sh Blk-Carb-Char-Gry Soft- Fissil No
Odor No Stn No Flor NS

Ls Crm Microxln Dns Micrite Grad Fxln Poor Ixln Ø Cht Wht-Gry Translu-
Op Shp Vit Fos (Crin) Chalk Sh Blk-Carb-Char-Gry Soft- Fissil No Odor No
Stn No Flor NS

Ls Crm Microxln Dns Micrite (w/Pyr Includ) Cht Drk-Gry (? Blk) Op Shp Vit
Chalk Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS

Ls Crm Microxln Dns Micrite (w/Pyr Includ) Cht Drk-Gry (? Blk) Op Shp Vit
Chalk Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS

Ls Crm-Tan-Gry Microxln Dns Micrite Grad Fxln Poor Ixln Ø Cht Wht-Gry
Translu-Op Shp Vit Chalk Sh Char-Gry Soft-Fissil No Odor No Stn No Flor
NS

Ls Crm-Tan-Gry Microxln Dns Micrite Cht Wht-Gry Op Shp Vit Chalk Sh
Char-Gry Soft-Fissil No Odor No Stn No Flor NS

Ls Crm-Tan-Gry Microxln Dns Micrite Cht Wht-Gry Op Shp Vit Chalk Sh
Char-Gry Soft-Fissil No Odor No Stn No Flor NS

Ls Crm Microxln Dns Micrite Grad Fxln Poor Ixln Ø (Few Pelets) Cht
Wht-Gry Translu- Op Shp Vit Chalk Sh Blk-Carb-Char-Gry Soft- Fissil No
Odor No Stn No Flor NS

PAWNEE 4787' (- 1982)

30" CFS @ 4802' Ls Crm Microxln Dns Micrite Grad Fxln Poor OOM Ø (w/Small OOids in pl)
Poor Leaching & Poor Develop Cht Wht-Gry Op Shp Vit Fos (Brach) Chalk Sh
Blk-Carb-Char-Gry Soft- Fissil Faint Odor No Stn Sli Flor (Lt Grn) ? SSG

60" CFS @ 4802' Ls Crm Mostly Microxln Dns Micrite Grad Fxln Poor OOM Ø AA Chalk Sh
Blk-Carb-Char-Gry Soft- Fissil ? Faint Odor No Stn No Flor (Lt Grn) ? NS

30" CFS @ 4828' Ls Crm-Tan Microxln Dns Micrite Grad Fxln Poor OOM Ø (w/Small
Non-Leached Ooids in pl & Tr Sli Yug Leaching in Few Spl) Poor Develop Cht Wht (w/OOid
Includ)-Gry Op Shp Vit Chalk (Abd) Sh Blk-Carb (Abd w/SG)-Gry-Maroon Soft-Fissil ? Faint
Odor No Stn Sli ? Flor SG in Blk Sh NS

LABETTE SHALE 4816' (- 2011)

FORT SCOTT 4819' (- 2014)

60" CFS @ 4828' Ls Crm-Tan Microxln Dns Micrite Grad Fxln Poor Ixln Ppt Ø (w/Fos Includ)
Cht Wht-Drk Gry-(Blk) Op Shp Vit Pyr Mass Chalk Sh Blk-Carb (Tr Only w/SG) Fissil ? Faint
Odor No Stn ? Sli (Lt Grn Dull) Flor SG in Blk Sh

CHEROKEE SHALE 4835' (- 2830)

30" CFS @ 4845' Ls Wht-Crm-Tan Microxln Dns Micrite Grad Fxln Poor Ixln Ppt Ø Grad Poor
OOM Ø (w/Poor-Fair Yug Leaching) Cht-Tan-Wht-Drk Gry (w/Fos (V Abd Crin, Fuss Includ)
Translu-Op Shp Vit Fos (Columnar Coral V Abd) Chalk Sh Blk-Carb (w/SG) Soft-Fissil No
Odor No Stn Sli (Lt Grn Dull) ? Min Flor SG in Blk Sh

60" CFS @ 4845' Ls Wht Fxln Poor-Fair Sucrosic Ppt Ixln Ø (w/SSG Under Heat in Wtr) Ls
AA Cht AA Fos Abd AA Sli Flor (Lt Grn) No Stn No Odor SSG

Ls Gry-Crm Microxln Dns Micrite Chalk Sh Char-Gry-Blk Carb AA
Soft-Fissil No Odor No Stn No Flor NS

Ls Crm-Tan-Gry (w/Pyr Includ) Microxln Dns Micrite Cht Wht-Drk Gry
(w/Fos (Fuss) Includ Fos (Brach) Chalk Sh Char-Gry-Blk Carb AA
Soft-Fissil No Odor No Stn No Flor NS

SECOND CHEROKEE SHALE 4871' (- 2066)

Sh Blk Carb- Gry Soft-Fissil Ls Gry-Crm Microxln Dns Micrite Cht Gry Op
Shp Vit No Odor No Stn No Flor NS

Ls Crm Microxln Dns Micrite Cht Gry Op Shp Vit Sh Blk Carb- Gry
Soft-Fissil Fos (Brach, Columnar Coral) No Odor No Stn No Flor NS

Ls Wht-Crm Microxln Dns Micrite Cht Drk Gry Op Shp Vit Chalk Sh Blk
Carb- Gry Soft-Fissil No Odor No Stn No Flor NS

Ls Wht-Crm Microxln Dns Micrite Cht Drk Gry Op Shp Vit Chalk Sh Blk

Cal = 20;
Sol = 6.4%;
LCM = 2#;
DMC = \$1,509.10;
CMC = \$23,864.84

~ DST # 4 ~

Interval: 4815'- 4845'
Times: 5'-60"-20"-20"
Blow: IF V. Weak
Surface = 1/4" Died/3";
FF= No Blow-Flushed
Tool @ 10" (Twice
w/Good Surge) & No
Blow.
Recovery: 5' Drilling
Mud.
Note: FF & FSIP Are
INVALID (At End Of ISIP
The DST Tool Was
Over-Rotated Causing
The Tool To Go Into
FSIP
Mode). Therefore, FF &
FSIP Pressures Are
Invalid.
Pressures:
IH = 2402#;
FH = 2266#;
IF = 44-45#;
FF = 67-? #;
ISIP = 1442#;
FSIP = ? #;
Temp. = 114 degrees F..

SH GAS KICK =
57 UNITS.

GAS KICK = 60
UNITS.

TG, C1-C5 150

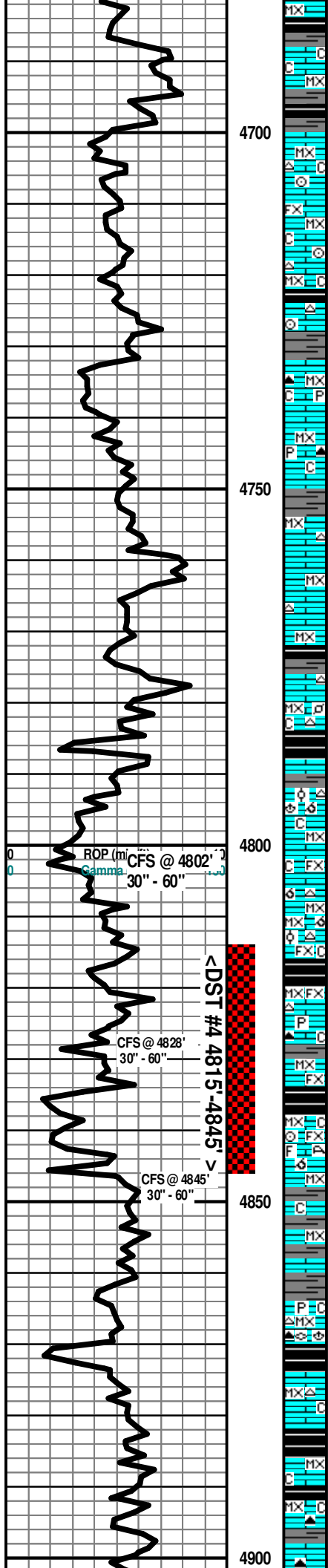
SH GAS KICK
=74 UNITS.

GAS KICK = 94
UNITS.

SH GAS KICK =
90 UNITS.

SH GAS KICK =
71 UNITS.

RE-ZERO TOOKE DAQ
@ 4890' dDEPTH & 4885'
LAG DEPTH. BKGD
GAS SET @ 15 UNITS.



Carb- Gry Soft-Fissil No Odor No Stn No Flor NS

ATOKA 4910' (- 2105)

Sh Blk Carb- Gry Soft-Fissil Ls Wht-Crm MicroxIn Dns Micrite Cht Drk Gry Op Shp Vit Chalk No Odor No Stn No Flor NS

Ls Wht-Crm MicroxIn Dns Micrite Cht Drk Gry Op Shp Vit Chalk Sh Blk Carb- Gry Soft-Fissil No Odor No Stn No Flor NS

Sh Char-Gry Soft-Fissil Ls Wht-Crm MicroxIn Dns Micrite Cht Wht-Drk Gry (w/Fos (Spicule w/Pyr) Includ) Op Shp Vit Chalk No Odor No Stn No Flor NS

Ls Wht-Crm MicroxIn Dns Micrite Cht Tan-Gry Op Shp Vit Sh Char-Gry Soft-Fissil Fos (Brach, Columnar Coral) No Odor No Stn No Flor NS

4950

Ls Wht-Crm MicroxIn Dns Micrite Cht Wht-Amber-Tan-Gry Op Shp Vit Sh Blk Carb-Char-Gry Soft-Fissil No Odor No Stn No Flor NS

Ls Wht-Crm MicroxIn Dns Micrite Cht Tan-Gry-Drk-Gry/Blk Op Shp Vit Sh Char-Gry Soft-Fissil Fos (Fussl) No Odor No Stn No Flor NS

Ls Wht-Crm MicroxIn Dns Micrite Cht Wht-Amber-Tan-Gry Op Shp Vit Sh Char-Gry-Blk Carb Soft-Fissil No Odor No Stn No Flor NS

Ls Wht-Crm-Gry MicroxIn Dns Micrite Cht Tan-Gry Op Shp Vit Fos (Columnar Coral) Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS

Ls Wht-Crm-Gry MicroxIn Dns Micrite Cht Tan-Amber-Drk Gry Op Shp Vit Fos (Crin) Sh Char-Gry-Blk Carb Soft-Fissil No Odor No Stn No Flor NS

5000

Ls Wht-Crm-Gry MicroxIn Dns Micrite Cht Tan-Amber Op Shp Vit Fos (Brach) Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS

Ls Wht-Crm-Gry MicroxIn Dns Micrite Cht Tan-Amber Op Shp Vit Fos (Brach) Sh Char-Gry-Blk Carb Soft-Fissil No Odor No Stn No Flor NS

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

MORROW SHALE 5029' (- 2224)

Sh Char-Gry-Drab Grn-Blk Carb Soft-Fissil Ls Crm-Tan-Brn MicroxIn Dns Micrite Grad Tan FxIn Poor OOM Ø (w/OOL in pl) Poor Dissolu Poor Develop (Tr Only) Cht Tan Op Shp Vit Chalk No Odor No Stn No Flor NS

5050

30" CFS Qtz Ss Wht-Grn/Lt Aqia VFGrn Well-Sort Well-Rd/Sub-Rd Good I Gran Ø Friable Lt CaCO3 Cmt Matrix Barren Ls Crm - Brn MicroxIn Dns Micrite (w/Fos (Crin) Includ) Chalk Sh Char-Grn/Gry-Lt Aqua No Odor No Stn No Flor NS

60" & 75" CFS Qtz Ss Wht-Grn/Lt Aqia VFGrn Well-Sort Well-Rd/Sub-Rd Good I Gran Ø Friable Lt CaCO3 Cmt Matrix Barren Ls Crm - Brn MicroxIn Dns Micrite (w/Fos (Crin) Includ) Chalk Sh Lt Aqua-Char-Grn/Gry No Odor No Stn No Flor NS

CFS @ 5057'
30" 60: 75"

Sh Varicolored Maroon-Drab Grn-Char-Olive-Blk Carb Soft-Fissil (Wash Red) Qtz Ss Wht AA Ls AA No Odor No Stn No Flor NS

Sh Varicolored Maroon-Drab Grn-Char-Olive-Blk Carb Soft-Fissil (Wash Red) Qtz Ss Wht AA Ls AA Cht Drk Gry/Blk Op Shp Vit No Odor No Stn No Flor NS

Sh Varicolored Maroon-Drab Grn-Char-Olive-Blk Carb Soft-Fissil (Wash Red) Qtz Ss Wht AA Ls AA Cht-Red-Drk Gry/Blk Op Shp No Odor No Stn No Flor NS

MISSISSIPPIAN "STE. GEN" 5082' (- 2277)

Ls Wht-Crm FxIn Poor "Sandy Ls" (w/Small Qtz Ss Includ VFGrn Ang-Sub Ang Includ fL=125-177 Microns= 3.0-2.25 Ø) Barren Ls Crm MicroxIn Dns Micrite Chalky Cht Wht-Tan-Red-Org Op Shp Vit Sh Maroon-Char-Gry- Drab Grn AA Soft-Fissil No Odor No Stn No Flor NS

Ls Wht-Crm FxIn Poor "Sandy Ls" (w/Small Qtz Ss Includ VFGrn Ang-Sub Ang Includ fL=125-177 Microns= 3.0-2.25 Ø) Barren Ls Crm MicroxIn Dns Micrite Chalky Cht Crm-Tan-Drk Gry/Blk Op Shp Vit Sh Maroon-Char-Gry- Drab Grn AA Soft-Fissil No Odor No Stn No Flor NS

5100

Ls Wht-Crm FxIn Poor "Sandy Ls" (w/Small Qtz Ss Includ VFGrn Ang-Sub Ang Includ fL=125-177 Microns= 3.0-2.25 Ø) Barren Ls Crm MicroxIn Dns Micrite Chalky Cht Tan-Drk Gry/Blk Translu-Op Shp Vit Sh Maroon-Char-Gry- Drab Grn AA Soft-Fissil No Odor No Stn No Flor NS

Ls Wht-Crm FxIn Poor "Sandy Ls" (w/Small Qtz Ss Includ VFGrn Ang-Sub Ang Includ fL=125-177 Microns= 3.0-2.25 Ø) Barren Ls Crm MicroxIn Dns Micrite Chalky Cht Tan-Pink Op Shp Vit Sh Maroon-Char-Gry- Drab Grn AA Soft-Fissil No Odor No Stn No Flor NS

Ls Wht-Crm FxIn Poor "Sandy Ls" (w/Small Qtz Ss Includ VFGrn Ang-Sub Ang Includ fL=125-177 Microns= 3.0-2.25 Ø) Barren Ls Crm MicroxIn Dns Micrite Chalky Cht Tan-Pink Op Shp Vit Sh Maroon-Char-Gry- Drab Grn AA Soft-Fissil No Odor No Stn No Flor NS

Mudco Ck @ 4985' @

6:30 AM 10/19/15

Vis = 55;

WT = 9.3#;

PV = 16;

YP = 20;

WL = 7.2;

Cake = 1;

Chl = 3,500 Ppm;

Cal = 40;

Sol = 6.4%.

LCM = 2#;

DMC = \$129.28;

CMC = \$23,994.12

TG, C1-C5 150

SH GAS KICK = 63 UNITS.

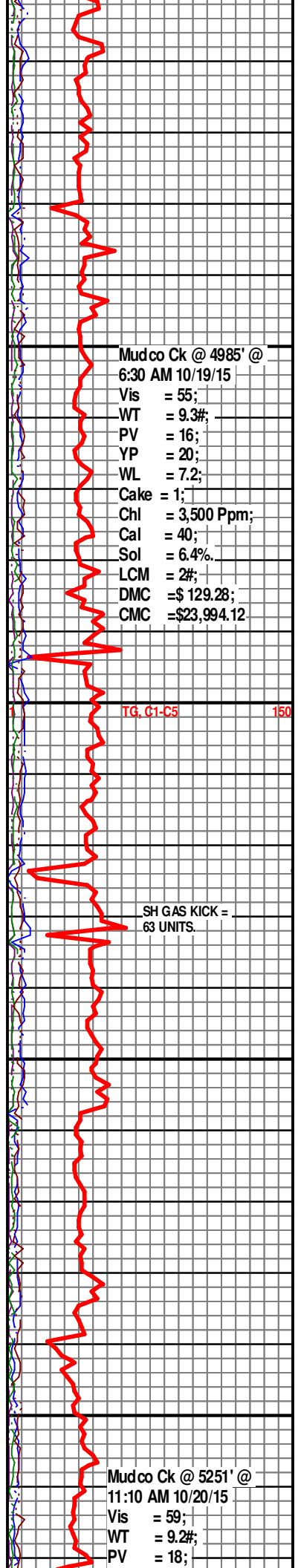
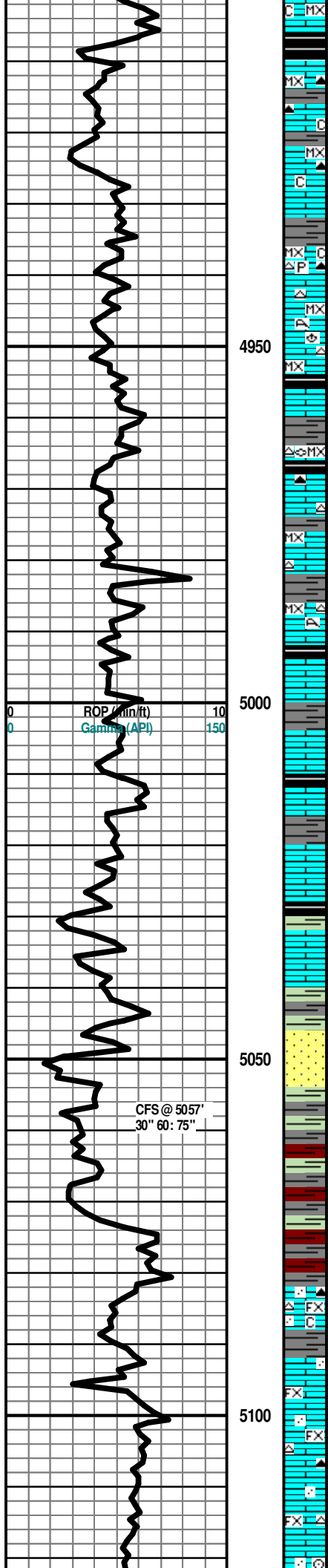
Mudco Ck @ 5251' @

11:10 AM 10/20/15

Vis = 59;

WT = 9.2#;

PV = 18;



Ls Wht-Crm FxIn Poor "Sandy Ls" (w/Small Qtz Ss Includ VFGm Ang-Sub Ang Includ fL=125-177 Microns= 3.0-2.25 Ø) Barren Ls Crm MicroxIn Dns Micrite Grad FxIn (w/Tr Poor lXIn Ø (w/Small Ooids in pl) No/Poor Leaching Chaky Cht Wht-Tan-Gry-Peach (w/Ooids in pl & /Lt Red-Clear Banding) Translu-Op Shp Vit Fos (Crim, Fuss) Pyr Mass Sh Maroon-Char-Gry- Drab Grn AA Soft-Fissil No Odor No Stn No Flor NS

Ls Wht-Crm FxIn Poor "Sandy Ls" (w/Small Qtz Ss Includ VFGm Ang-Sub Ang Includ fL=125-177 Microns= 3.0-2.25 Ø) Barren Ls Crm MicroxIn Dns Micrite Grad FxIn (w/Tr Poor lXIn Ø (w/Small Ooids in pl) No/Poor Leaching Chaky Cht Wht-Tan-Gry-Peach (w/Ooids in pl & /Lt Red-Clear Banding) Translu-Op Shp Vit Fos (Crim, Fuss) Pyr Mass Sh Maroon-Char-Gry- Drab Grn AA Soft-Fissil No Odor No Stn No Flor NS

Ls Wht-Crm FxIn Poor "Sandy Ls" (w/Small Qtz Ss Includ VFGm Ang-Sub Ang Includ fL=125-177 Microns= 3.0-2.25 Ø) Barren Ls Crm MicroxIn Dns Micrite Grad FxIn (w/Tr Poor lXIn Ø (w/Small Ooids in pl) No/Poor Leaching Chaky Cht Wht-Gry Op Shp Vit Sh Char-Gry Soft-Fissil No Odor No Stn No Flor NS

Ls Wht-Crm FxIn Poor "Sandy Ls" (w/Small Qtz Ss Includ VFGm Ang-Sub Ang Includ fL=125-177 Microns= 3.0-2.25 Ø) AA Grad FxIn Poor lXIn OOL Ø (w/Small-Med Ooids in pl) No/Poor Leaching Chaky Cht Wht-Clear-Red-Org Banded Translu-Op Shp Vit Sh AA No Odor No Stn No Flor NS

Ls Wht-Crm FxIn Poor "Sandy Ls" (w/Small Qtz Ss Includ VFGm Ang-Sub Ang Includ fL=125-177 Microns= 3.0-2.25 Ø) AA Grad FxIn Poor lXIn OOL Ø (w/Small-Med Ooids in pl) No/Poor Leaching Chaky Cht Wht-Clear-Red-Org Banded Translu-Op Shp Vit Fos (Crim) Pyr Mass Sh AA No Odor No Stn No Flor NS

MISS. ST. LOUIS 5160' (- 2355)

Ls Wht-Gry MicroxIn Dns Poor lXIn Ø Grad FxIn Poor-Fair OOL Ø (w/Small-Med Ooids in pl) Poor InterOOL Ø Poor/No Leaching Poor Develop Friable Barren Chalky Cht Wht-Clear-Red/Org Banded Translu-Op Shp Vit Fos (Crim) Pyr Mass Sh AA No Odor No Stn No Flor NS

30" CFS @ 5196' Ls Wht-Gry MicroxIn Dns Poor lXIn Ø Grad FxIn Poor-Fair OOL Ø (w/Small-Med Ooids in pl) Poor InterOOL Ø Poor/No Leaching Poor Develop Friable Barren Chalky Cht Wht- Clear-Red/Org Banded Translu-Op Shp Vit Fos (Crim) Pyr Mass Sh AA No Odor No Stn No Flor NS

60" & 90" CFS @ 5196' Ls AA Cht AA Sh AA No Odor No Stn No Flor NS
Ls Wht-Gry MicroxIn Dns Poor lXIn Ø Grad FxIn Poor-Fair OOL Ø (w/Small-Med Ooids in pl) Poor InterOOL Ø Poor/No Leaching Poor Develop Friable Barren Chalky (Abd & Inc) Cht Wht- Clear- Red/Org Banded Translu-Op Shp Vit Fos (Crim) Pyr Mass Sh AA No Odor No Stn No Flor NS

Ls Wht-Gry MicroxIn Dns Poor lXIn Ø Grad FxIn Poor-Fair OOL Ø (w/Small-Med Ooids in pl) Poor InterOOL Ø Poor/No Leaching Poor Develop Friable Barren Chalky (Abd & Inc) Cht Wht- Clear- Red/Org Banded Translu-Op Shp Vit Fos (Crim) Sh AA No Odor No Stn No Flor NS

Ls Wht-Gry MicroxIn Dns Poor lXIn Ø Grad FxIn Poor-Fair OOL Ø (w/Small-Med Ooids in pl) Poor InterOOL Ø Poor/No Leaching Poor Develop Friable Barren Chalky Cht Clear- Red/Org Banded Translu-Op Shp Vit Fos (Fuss) Pyr Mass Sh Blk Carb-Char-Gry Fissil No Odor No Stn No Flor NS

30" CFS @ 5251' Ls Wht-Gry MicroxIn Dns Poor lXIn Ø Grad FxIn Poor-Fair OOL Ø (w/Small-Med Ooids in pl) Poor InterOOL Ø Poor/No Leaching Poor Develop Friable Barren Chalky Cht Clear-Gry-Drk Gry (Blk)-Red/Org/Peach Banded Translu-Op Shp Vit Fos (Bry, Fuss) Pyr Mass Sh Blk Carb-Char-Gry Fissil No Odor No Stn No Flor NS

60" CFS @ 5251' Ls Wht-Gry MicroxIn Dns Poor lXIn Ø Grad FxIn Poor-Fair OOL Ø (w/Small-Med Ooids in pl) Poor InterOOL Ø Poor/No Leaching Poor Develop Friable Barren Chalky Cht Wht-Clear-Gry-Drk Gry (Blk)-Org/Peach Banded Translu-Op Shp Vit Fos (Fuss) Pyr Mass Sh Blk Carb-Char-Gry Fissil No Odor No Stn No Flor NS

Ls Crm FxIn Poor-Fair lXIn Sucrosic Ppt Ø (w/Chlorite? Glacu Includ) Barren Grad MicroxIn Dans Micrite Cht Wht-Clear/Red.Org-Peach-Gry Translu-Op Shp Vit Chalky Sh AA No Odor No Stn No Flor NS

Ls Crm-Gry FxIn Poor-Fair lXIn Sucrosic Ppt Ø (w/Chlorite? Glacu Includ) Barren Grad MicroxIn Dans Micrite Cht Wht-Clear/Red.Org-Peach-Gry Translu-Op Shp Vit Chalky Sh AA No Odor No Stn No Flor NS

Ls Gry-Crm FxIn Poor-Fair lXIn Sucrosic Ppt Ø (w/Chlorite? Glacu Includ) Barren Grad MicroxIn Dans Micrite Cht Wht-Clear/Red.Org-Peach-Smoky Gry Translu-Op Shp Vit Chalky Sh AA No Odor No Stn No Flor NS

Ls Crm FxIn Poor lXIn Sucrosic Ppt Ø Grad Poor-Fair OOL Ø (w/Small-Med (Mostly Med) Ooids in pl) Poor-Fair Ooid Leaching (w/SSG "Under Heat in Wtr & Upon Break w/Sli "Dead" Drk Brn "Salt & Pepper" Stn < 5% in Tray) Gas Does Not Flor Cht Wht-Clear Trip-Smoky Gry Op Shp Vit Chalky No Odor No Flor SSG & Show "Dead" Oil

30" CFS @ 5295' Ls Crm-Gry FxIn Poor lXIn Sucrosic Ppt Ø Grad Tr Poor-Fair OOL Ø (w/Small-Med (Mostly Med) Ooids in pl) Poor-Fair Ooid Leaching Drk Brn Stn (Tr Only 3 Pcs) AA Cht Wht-Clear-Red AA Fos (Columnar Coral) Sh Char-Gry-Aqua Fissil No Odor No Flor NS

60" & 90" CFS @ 5295' Ls Crm-Tan-Gry MicroxIn Dns Micrite Grad FxIn lXIn Sucrosic Ppt Ø Grad Tr Poor OOL Ø AA Poor Ooid Leaching Cht Wht (w/Pyr Includ)-Smoky Gry Op AA Chalk Sh Char-Drab Grn Fissil No Odor No Flor No Stn NS

Ls Crm-Tan MicroxIn Dns Micrite Grad Crm-Lt Brn FxIn Poor-Fair Sucrosic lXIn Ppt Ø Barren Cht Wht-Clear-Amber-Gry Translu-Op Shp Vit Chalky Sh Blk Carb-Aqua-Lt Grn Fissil No Odor No Stn No Flor NS

Ls Crm-Tan MicroxIn Dns Micrite Grad Crm-Lt Brn FxIn Poor-Fair Sucrosic lXIn Ppt Ø Barren Cht Wht-Clear-Amber-Gry Translu-Op Shp Vit Chalky Sh Blk Carb-Aqua-Lt Grn Fissil No Odor No Stn No Flor NS

Ls Crm-Tan MicroxIn Dns Micrite Grad Crm-Lt Brn FxIn Poor-Fair Sucrosic lXIn Ppt Ø Barren Cht Wht-Clear-Amber-Gry Translu-Op Shp Vit Fos (Bry) Chalky Sh Blk Carb-Aqua-Lt Grn Fissil No Odor No Stn No Flor NS

Ls Crm-Tan MicroxIn Dns Micrite Grad Crm-Lt Brn FxIn Poor-Fair Sucrosic lXIn Ppt Ø (w/3 Pcs w/Lt Brn Scat Stn NSG/NSO) Cht Wht-Clear-Amber-Gry Translu-Op Shp Vit Fos (Bry)

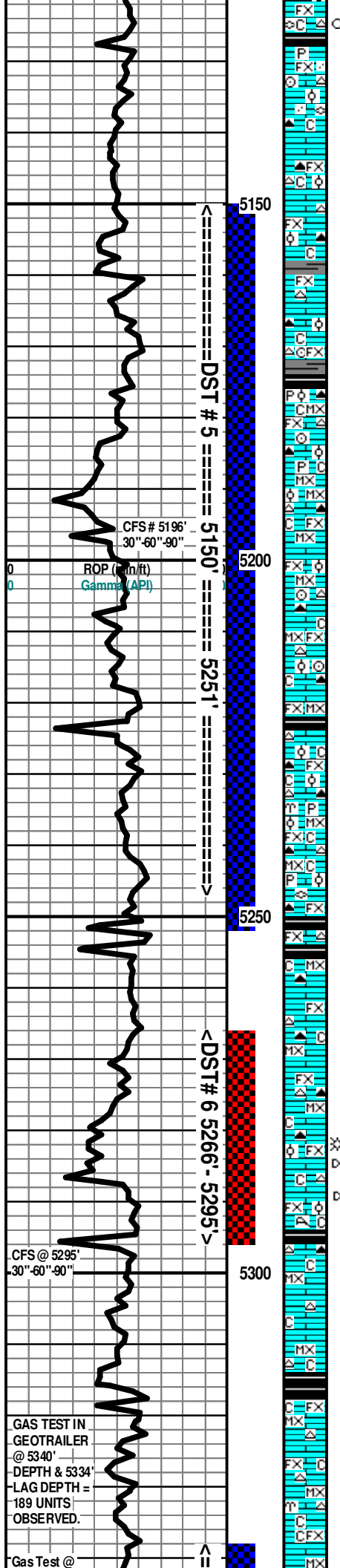
YP = 19;
WL = 8.4;
Cake = 1;
Chl = 2,400 Ppm;
Cal = 20;
Sol = 6.4%
LCM = 2#;
DMC = \$ 1,181.33;
CMC = \$25,175.45

~ DST # 6 ~
Interval: 5150' - 5251'.
Times: 5'-60'-20'-20"
Blow: IF V. Weak
Surface Blow/4.5' & Died; ISIP= No Blow
Back. FF= No
Blow-Flushed Tool @ 10" (w/Good Surge) & No Blow. FSIP= No Blow
Back.
Recovery: 15' Drilling Mud.
Pressures:
IH = 2679#;
FH = 2662#;
IF = 43-44#;
FF = 46-49#;
ISIP = 1570#;
FSIP = 1352#;
Temp. = 120 degrees F..

Mudco Ck @ 5295' @ 8:55 AM 10/21/15
Vis = 59;
WT = 9.2#;
PV = 18;
YP = 19;
WL = 8.4;
Cake = 1;
Chl = 1,200 Ppm;
Cal = 20;
Sol = 6.4%
LCM = 4#;
DMC = \$ 322.78;
CMC = \$25,498.23.

Mudco Ck @ 5378' @ 9:45 AM 10/22/15
GAS KICK = 35 UNITS
GAS KICK = 36 UNITS
GAS KICK = 30 UNITS
Vis = 51;
WT = 9.05#;
PV = 15;
YP = 16;
WL = 8.8;
Cake = 1;
Chl = 1,900 Ppm;
Cal = 20;
Sol = 4.9%
LCM = 3#;
DMC = \$ 145.97;
CMC = \$25,644.20.

~ DST # 7 ~
Interval: 5338' - 5278'.
Times: 7'-90'-39'-20"
Blow: IF V. Weak Surface Blow; ISIP= No Blow
Back. FF= No
Blow-Flushed Tool @ 10" (w/Good Surge) & No Blow. FSIP= No Blow
Back.
Recovery: 15' Drilling Mud.
Pressures:
IH = 2701#;
FH = 2632#;
IF = 52-53#;
FF = 56-60#;



5150

5200

5250

5300

DST # 5
DST # 6

CFS # 5196'
30"-60"-90"

CFS @ 5295'
30"-60"-90"

GAS TEST IN GEOTRAILER @ 5340' DEPTH & 5334' LAG DEPTH = 189 UNITS OBSERVED.

Gas Test @

BKGD GAS = 29 UNITS.

GAS KICK = 40 UNITS.

GAS KICK = 40 UNITS.

GAS KICK = 35 UNITS

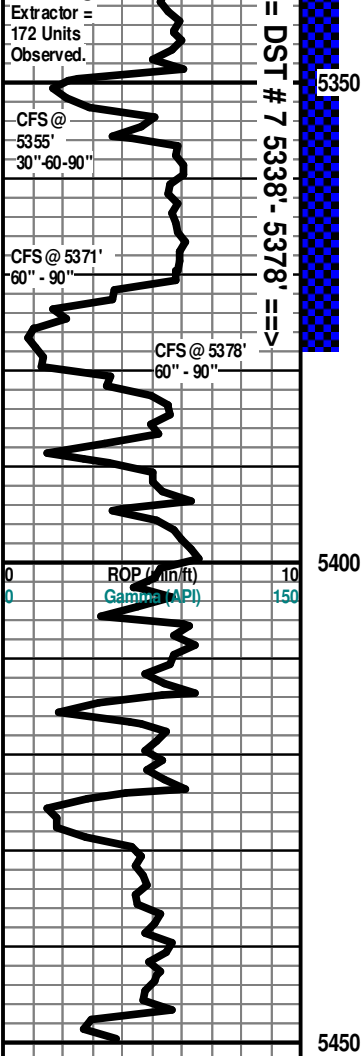
GAS KICK = 36 UNITS

GAS KICK = 30 UNITS

Scale Change TG, C1-C5

150

75



Chalky Sh Aqua-Lt Grn Fissil No Odor No Stn No Flor NS

MISSISSIPPIAN "SALEM" 5349' (- 2544)

30" CFS @ 5355' Ls AA Grad Dolo Wht-Crm Microxln (w/Pyr Inklus) Dns Micrite Fair-Med ? Min Flor (Lt Grn) Cht Wht-Clear-Lt-Smoky Gry Clear-Op Shp Calcite (Clear) Chalky Sh Blk Carb-Gry Soft-Fissil No Odor No Stn NSO & ? SG

60" & 90" CFS @ 5355' Ls/Dolo Wht-Crm Microxln (w/Pyr Inklus) Dns Micrite Grad Fair OOL Ø (w Small-Med Ooids in pl) Tr/Poor Leaching Poor Devekop Chalky Fair ? Min Flor (Lt Grn) Cht Wht-Clear-Lt-Smoky Gry Clear-Op Shp Sh Gry Soft-Fissil No Odor No Stn NSO & ? SG

60" & 90" CFS @ 5371' Ls/Dolo Wht-Crm AA Chalky Fair ? Min Flor (Lt Grn) Cht AA Sh AA No Odor No Stn NSO & / SG

60" & 90" CFS @ 5378' Ls/Dolo Wht-Crm Microxln Dns Micrite Grad Poor-Fair lxn Sucrosic Ø Grad Poor-Fair OOL Ø (w Small-Med Ooids in pl) Tr/Poor Leaching Poor Devekop (? 3 Pcs w/Sil ? "Dead" Brn Stn) Chalky ? Min Flor (Lt Grn) Cht Wht-Peach Translu-Op Shp Fos (Brach) Sh Grn/Gry Fissil No Odor No Stn NSO & ? SG

Dolo/Ls Crm-Tan Microxln Dns Micrite Cht Wh Translu-Op Shp Vit Sh Gry-Aqua Soft-Fissil No Odor No Stn No Flor NS

Dolo/Ls Crm-Tan Microxln Dns Micrite Cht Wh Translu-Op Shp Vit Fos (Crin) Sh Maroon-Aqua-Gry-Olive Soft-Fissil No Odor No Stn No Flor NS

Sh Maroon-Aqua-Gry-Char-Blk Carb Soft-Fissil Dolo/Ls Crm-Tan Microxln Dns Micrite Cht Wh Translu-Op Shp Vit No Odor No Stn No Flor NS

Dolo/Ls Crm-Tan Microxln Dns Micrite Cht Wh Translu-Op Shp Vit Sh Gry-Aqua Soft-Fissil No Odor No Stn No Flor NS

Dolo/Ls Crm-Tan Microxln Dns Micrite Cht Wh-Clear Translu-Op Vit Chalky Sh Gry-Aqua Soft-Fissil No Odor No Stn No Flor NS

Sh Maroon-Aqua-Gry-Char-Blk Carb-Purple Soft-Fissil Dolo/Ls Wht-Crm-Tan-Lt Brn Microxln Dns Micrite (w/Pyr Inklus) Grad Fxln Poor-Fair Sucrosic Ø Cht Wh Translu-Op Shp Vit Chalky No Odor No Stn No Flor NS

Sh Maroon-Aqua-Gry-Char-Blk Carb-Purple Soft-Fissil Dolo/Ls Wht-Crm-Tan-Lt Brn Microxln Dns Micrite (w/Pyr Inklus) Grad Fxln Poor-Fair Sucrosic Ø Cht Wh Translu-Op Shp Vit Chalky No Odor No Stn No Flor NS

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

Geologist left Location @ : P.M. on 10/23/2015

ISIP = 1671#;
FSIP = 1176#;
Temp. = 123 degrees F...

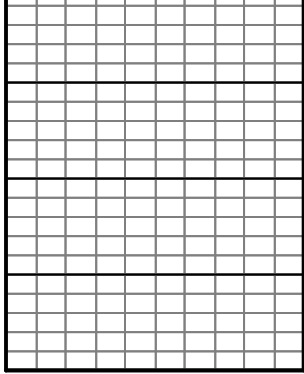
GAS KICK = 32 UNITS.

GAS KICK = 39 UNITS

GAS KICK = 44 UNITS

GAS KICK = 32 UNITS

TG, C1-C5 75



5600

