



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

Well Name: HWY 'A' # 2-25
API: #15-097-21815-00-00
Location: 80' S of N/2 - SW - NE - SE of Sec. 25 - T. 30 S. - R. 19 W.
License Number: KCC# 5003
Spud Date: 11/05/2014
Surface Coordinates: SPOT: 1900' FSL & 990' FEL

Region: IOWA CO., KS.
Drilling Completed: 11/12/2014

**Bottom Hole
Coordinates:**
Ground Elevation (ft): 2232' **K.B. Elevation (ft):** 2241'
Logged Interval (ft): 655' **To:** 5701' **Total Depth (ft):** 5201'
Formation: MISSISSIPPIAN
Type of Drilling Fluid: Chemical/Polymer/Gel & Starch

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

OPERATOR

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

GEOLOGIST

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

Casing & Deviation

Spud at 1:30 PM on 11/05/14. Drilled 12-1/4" hole to 656'. Ran 16 joints of new 23# 8-5/8" surface casing, Tallied 643', set at 655' KB. Welded straps on bottom 3 and top 2 joints. Tacked collars on remainder. Cemented with 200 sks Class A, 3% CC; 1/4# CF, tailed with 200 sks 60/40 POZ; 2% Gel; 3% CC; 1/4# CF. Plug down at 11:00 AM 11/06/14. Basic Services ticket #11826. Cement did circulate.

Deviation Survey's Taken: @ 655' = 1 degree; @ 5121' = 1/4 degree; @ 5200' = 3/4 degree.

DSTs

~~ DST # 1~~ Interval: 5090'-5121'. Times: 90"- 60";

Blow: IF=Strong/ BOB/20 Sec. & GTS @ 20" (See Gauge Report). No Blow Back During FSIP.

Recovery: 4723' GIP: 360' TF: 62' GOCM (5% G; 5% O; 90% M). 186' GMWCO (10% G; 72% O; 12% Wtr; 6% M). 114' GMOCW (20% G; 25% O; 30% Wtr; 25% M). 10" Wtr.

Pressures: IH=2612#; FH=2540#; IF=76-158#; FSIP=820#; T.= 118 degrees F. . Chl = 80,000 Ppm; RW = 25 @ 28 degrees F.,

Gas Gauge IF= @ 30"=140.5 Mcf; @ 40"=28.9 Mcf; @ 50" = TSTM.

Comments

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

Respectfully submitted,

David P. Williams, P. G. # 88 Kansas

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		Belm
	Arggrn		Bioclst
	Arg		Brach
	Bent		Bryozoa
	Bit		Cephal
	Brecfrag		Coral
	Calc		Crin
	Carb		Echin
	Chtdk		Fish
	Chtlt		Foram
	Dol		Fossil
	Feldspar		Fuss
	Ferrpel		Gastro
	Ferr		Oolite
	Glau		Oomold
	Gyp		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
			FOSSIL
			Algae
			Amph
			Hvymin
			Kaol
			Marl
			Minxl
			Nodule
			Phos
			Pyr
			Salt
			Sandy
			Silt
			Sil
			Sulphur
			Tuff

OTHER SYMBOLS

- POROSITY**
- E Earthy
 - F Fenest
 - F Fracture
 - X Inter
 - M Moldic
 - O Organic
 - P Pinpoint

- V Vuggy
- SORTING**
- W Well
 - M Moderate
 - P Poor

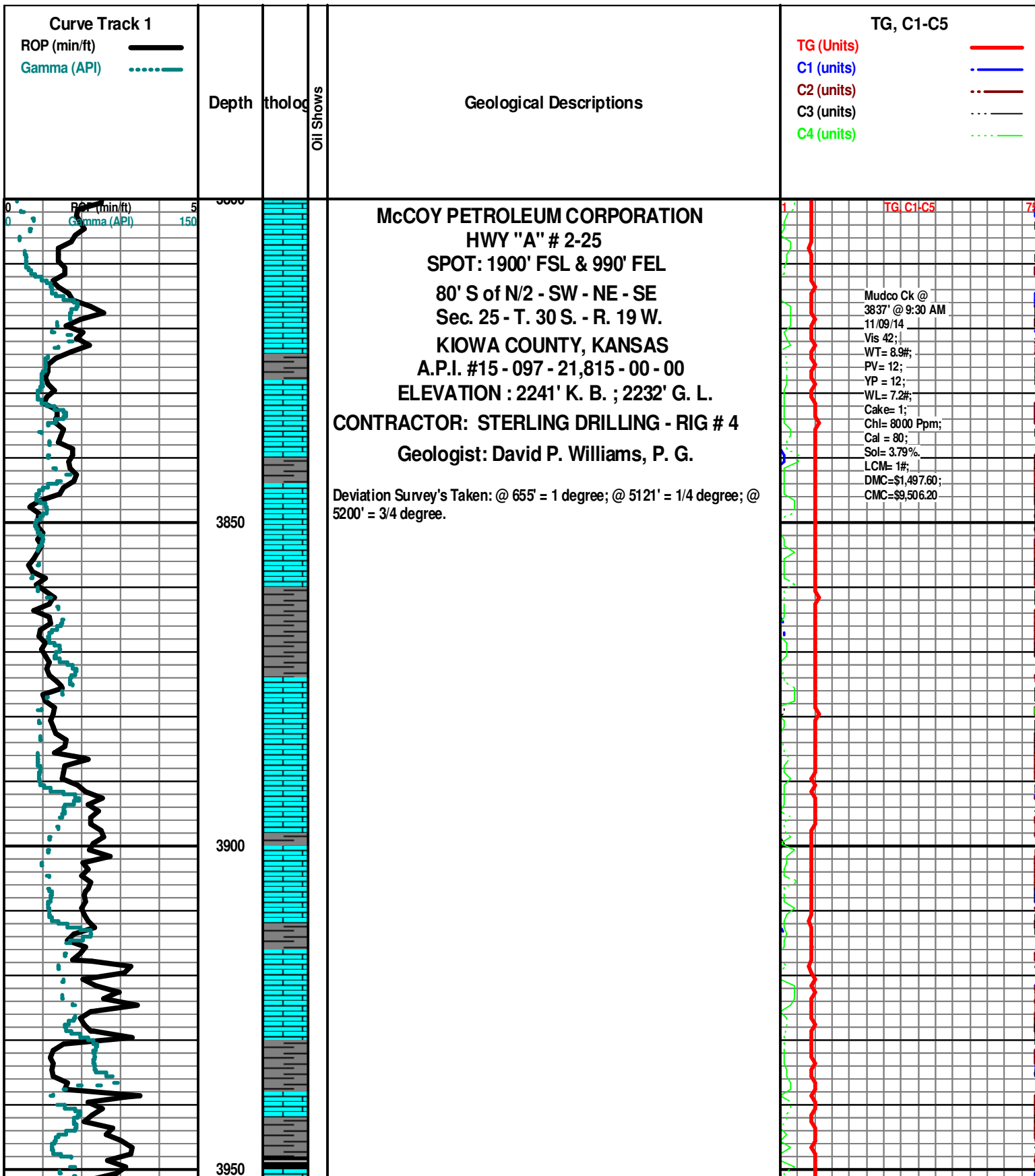
- ROUNDING**
- R Rounded
 - r Subrnd
 - a Subang
 - A Angular

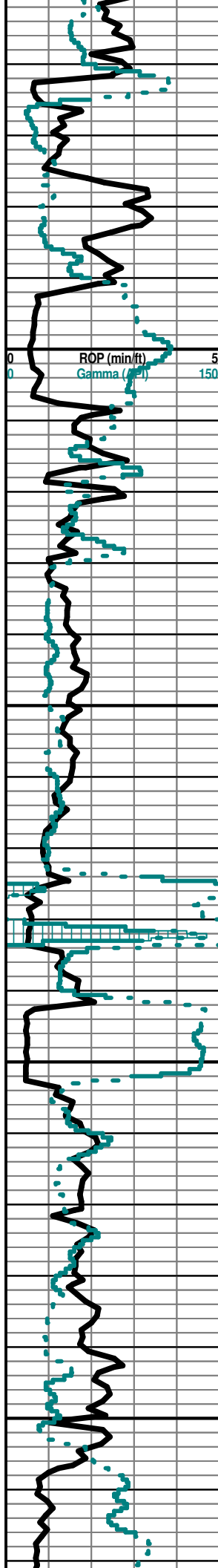
- Even
- Spotted
- Ques
- Dead

- EVENT**
- ▽ Rft
 - ▴ Sidewall

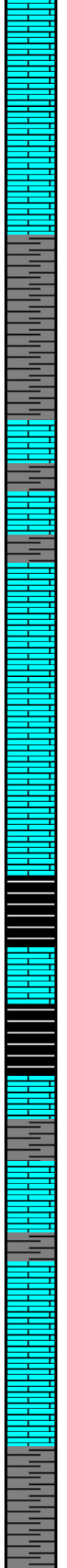
- OIL SHOW**
- X Gas show

- INTERVAL**
- Dst
 - Dst_alt



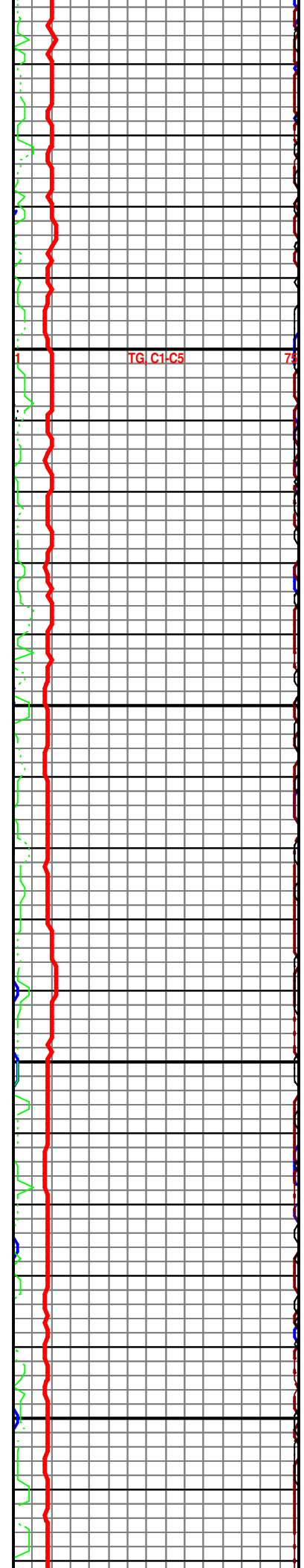


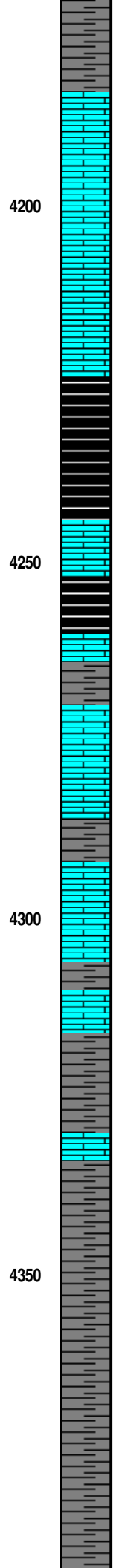
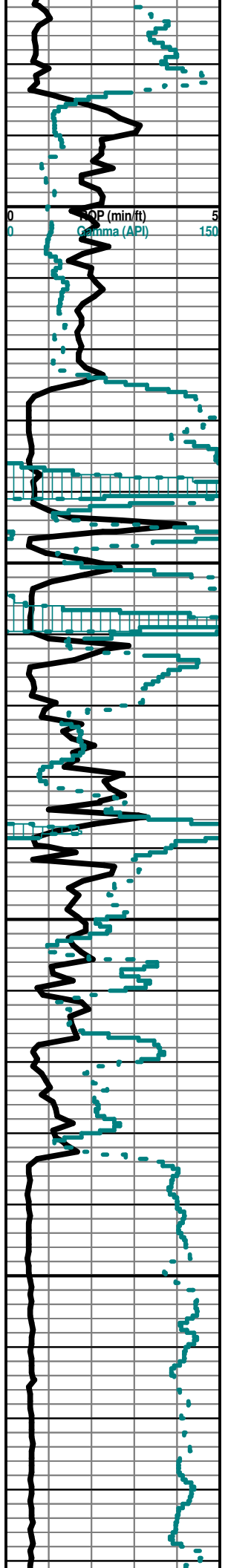
4000
4050
4100
4150



LECOMPTON "B" 4033' (-1791)

QUEEN HILL SHALE 4074' (-1833)





4200

4250

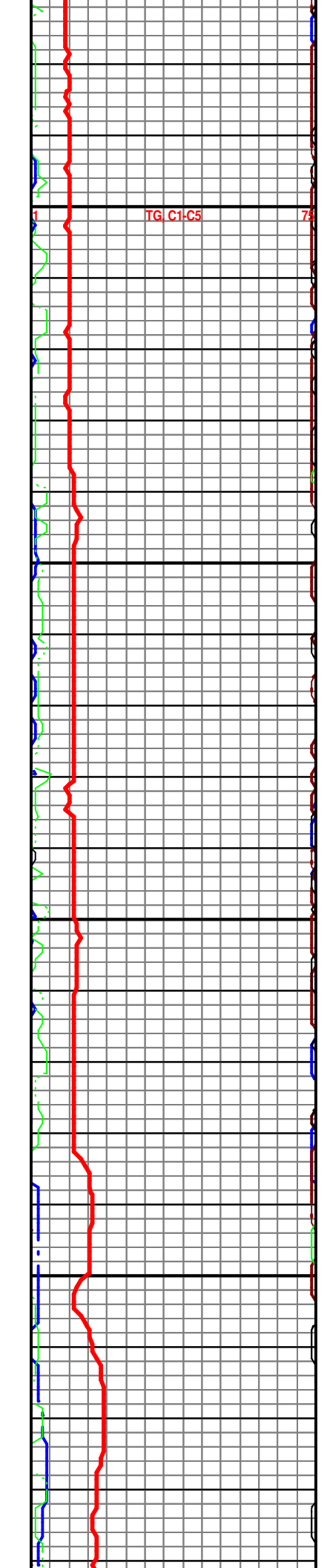
4300

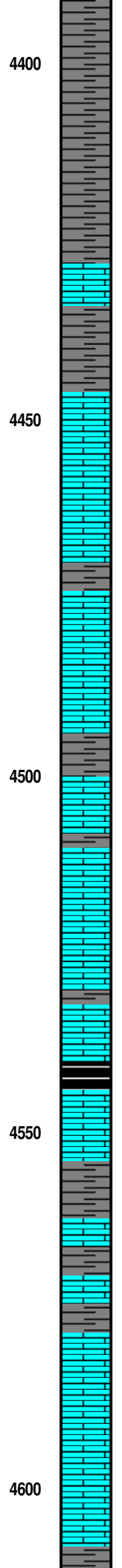
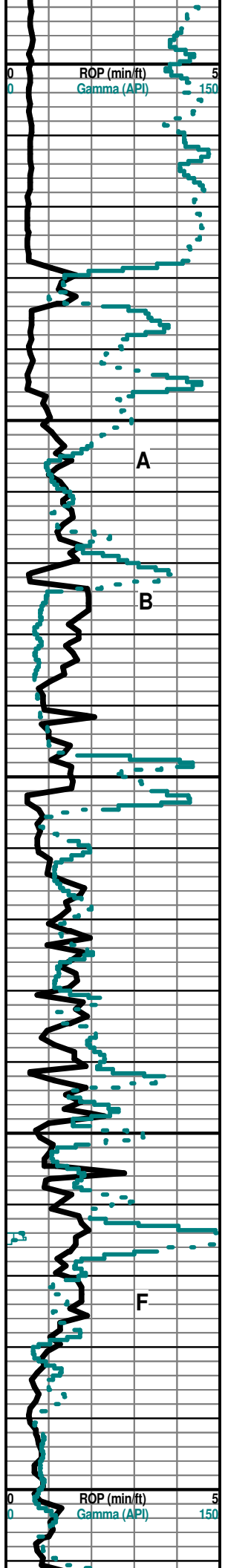
4350

HEEBNER 4252' (- 2011)

TORONTO 4270' (- 2029)

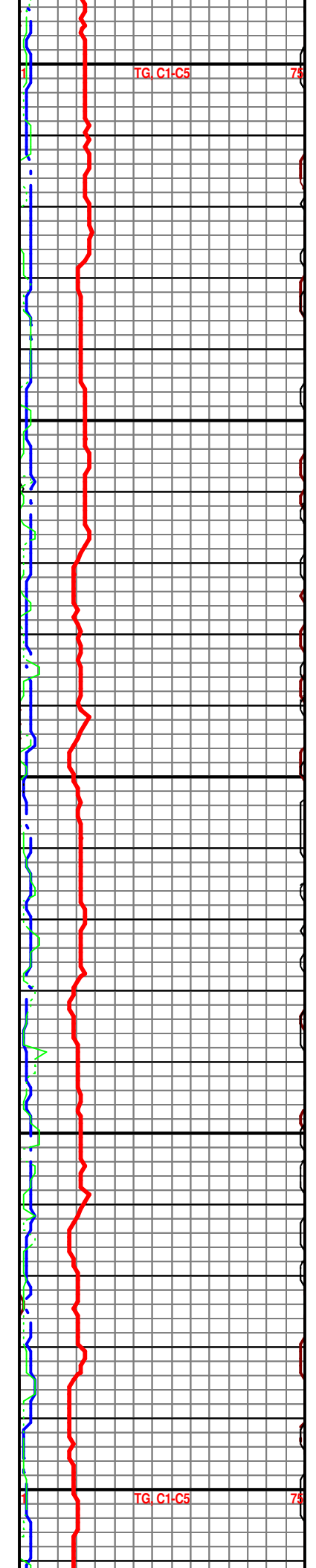
DOUGLAS 4334' (- 2093)

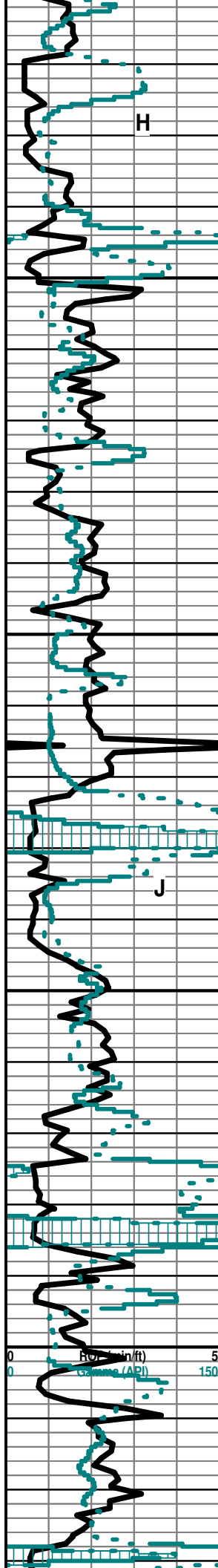




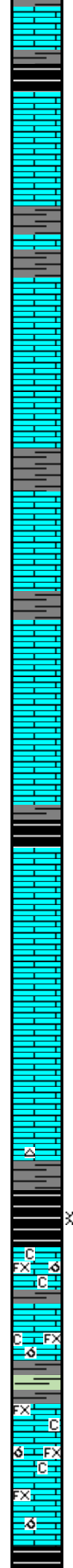
IATAN (BROWN LIME) 4428' (- 2187)

LANSING 4446' (- 2205)





4650
4700
4750
4800



Geologist on location @ (4842') 1:40 PM 11-10-14
 All samples have been lagged to depth by calculated time.
 Begin 10' Sample Examination @ 4800'.

STARK SHALE 4774' (- 2533)
 Sh Blk Carb (w/? SSG)-Char-Gry Fissil Ls Lt Tan-Wht FxIn Mostly Micrite Grad Fair Pin-Pt
 IxIn Por Grad Fair Vug Leached OOM Por Cht Tan Op Shp Vit No Odor No Stn No Flor
 SSG in Blk Sh

KANSAS CITY "SWOPE" 4786' (- 2545)
 Ls Wht-Lt Tan-Crm-Gry FxIn Mostly Micrite Dns Grad Fair Ppt IxIn Por Grad
 Grad Med-Good Vug OOM Por Med-Good Leaching Barren Chalk Sh
 Char-Gry-Blk Carb Fissil No Odor No Stn No Flor NS

Ls Lt Tan-Crm-Gry FxIn Mostly Micrite Dns Grad Fair Ppt IxIn Por Grad
 Med-Good Vug OOM Por AA Med Leaching Barren Chalk Sh
 Char-Gry-Blk Carb Fissil No Odor No Stn No Flor NS

Ls Lt Tan-Crm-Gry FxIn Mostly Micrite Dns Grad Fair Ppt IxIn Por Grad
 Med-Good Vug OOM Por Med-Good Leaching Barren Chalk Sh
 Char-Gry-Blk Carb Fissil No Odor No Stn No Flor NS

HUSHPUCKNEY SHALE 4828' (- 2587)
 Sh Blk Carb Fissil No Odor No Stn No Flor NS

Mudco Ck @
 4715' @ 9:45 AM
 11/10/14
 Vis 40;
 WT= 9.5+##;
 PV= 8;
 YP= 24;
 WL= 17.6#;
 Cake= 2;
 Chl= 13000 Ppm;
 Cal = 360;
 Sol= 7.9%
 LCM= 0#;
 DMC=\$8,302.40;
 CMC=\$17,808.60

TG C1-C5 75

KANSAS CITY "HERTHA" 4834' (-2593)

Ls Tan-Crm-Gry FxIn Mostly Micrite Dns Barren Chalk Sh Char-Gry-Blk Carb-Aqua Fissil No Odor No Stn No Flor NS

Ls Wht-Crm-Gry FxIn Mostly Micrite Dns Grad Poor Ppt IxIn Por Cht Wht-Smokey Gry Op Shp Vit Chalk Sh Char-Gry-Aqua Fissil No Odor No Stn No Flor NS

Ls Wht-Crm-Tan FxIn Mostly Micrite Dns Barren Grad Poor IxIn Por Cht Wht (w/Fos (Spicule Includ) Op Shp Vit Chalk Sh Char- Gry- Aqua Fissil No Odor No Stn No Flor NS

Ls Wht-Crm-Tan FxIn Mostly Micrite Dns Barren Grad Poor IxIn Por Cht Gry Op Shp Vit Chalk Sh Char-Gry-Aqua Fissil No Odor No Stn No Flor NS

Ls Wht-Crm-Tan FxIn Mostly Micrite Dns Barren Grad Poor IxIn Por Cht Gry Op Shp Vit Chalk Sh Char-Gry-Aqua Fissil No Odor No Stn No Flor NS

Sh Blk Carb (w/GSG)-Char-Gry-Lt Brn Carb Fissil Ls Wht-Crm- Gry MicroxIn Dns Micrite Cht Wht Op Shp Vit Chalky No Odor No Stn No Flor NS

Ls Wht-Crm MicroxIn Dns Micrite Grad Poor Ppt IxIn Por Barren Cht Wht Op Shp Vit Chalky Sh Blk Carb-Gry-Lt Brn- Aqua/Grn-Red Soft-Fissil No Odor No Stn No Flor NS

Ls Wht-Crm MicroxIn Dns Micrite Grad Poor Ppt IxIn Por Barren Cht Wht Op Shp Vit Chalky Sh Blk Carb-Gry-Lt Brn- Aqua/Grn-Red Soft-Fissil No Odor No Stn No Flor NS

Ls Wht-Crm MicroxIn Dns Micrite Grad Poor Ppt IxIn Por Barren Cht Wht Op Shp Vit Chalky Sh Blk Carb-Gry-Lt Brn- Aqua/Grn-Red Soft-Fissil No Odor No Stn No Flor NS

MARMATON 4918' (- 2677)

Sh Blk Carb-Char-Gry-Lt Brn-Aqua/Grn-Red Soft-Fissil Ls Wht-Crm FxIn Micrite Grad Fair-Med Ppt IxIn Por Barren Grad Fair-Med OOM Por Med Leaching Barren Chalky No Odor No Stn Sli ? Min Flor (3 Pcs) NS

Ls Wht MicroxIn-FxIn Dns Micrite Grad Ppt IxIn Por Grad Poor OOM (w/Small Ooids in pl) Por (w/SSG (Under Wtr with Heat) Poor InterOOM/OOL Por Poor-Fair Leaching Fair Develop Por Sh Blk Carb-Char-Gry Fissil No Odor No Stn Scatt Flor (Lt Grn) ? Faint Odor SSG

Ls Wht MicroxIn-FxIn Dns Micrite No Vis Por Chalk Abd Sh Blk Carb-Char-Gry Fissil No Odor No Stn No Flor NS

Ls Wht MicroxIn-FxIn Dns Micrite No Vis Por Chalk Abd Sh Blk Carb-Char-Gry Fissil No Odor No Stn No Flor NS

Ls Wht MicroxIn-FxIn Dns Micrite No Vis Por Chalk Abd Sh Blk Carb-Char-Grv Fissil No Odor No Stn No Flor NS

PAWNEE 4966' (- 2725)

Ls Wht MicroxIn-FxIn Dns Micrite No Vis Por Grad Poor Pin-Pt IxIn Por Barren Chalk V Abd Sh Blk Carb-Char-Gry Fissil AA No Odor No Stn No Flor NS

Ls Wht MicroxIn-FxIn Dns Micrite No Vis Por Barren Chalk V Abd Pyr Mass Sh Blk Carb-Char-Gry Fissil AA No Odor No Stn No Flor NS

30" CFS @ 5010' Sh Blk Carb-Char Fissil Ls Wht-Lt Tan MicroxIn-FxIn Dns Micrite Grad Med OOM Por Barren Med Leaching Cht Wht-Crm Op Shp Vit Chalky No Odor No Stn No Flor NS

60" CFS @ 5010' Sh Blk Carb-Char Fissil Ls Wht-Lt Tan MicroxIn-FxIn Dns Micrite Cht Wht-Crm Op Shp Vit Pyr Mass Chalky No Odor No Stn No Flor NS

CHEROKEE SHALE 5010' (-2767)

75" CFS @ 5010' Sh Blk Carb-Char (w/Pyr Includ) Fissil Ls Wht-Lt Tan MicroxIn-FxIn Dns Micrite Grad Med OOM Por Barren Med Leaching Cht Wht-Crm Op Shp Vit Pyr Mass Chalky No Odor No Stn No Flor NS

Ls Wht-Lt Tan MicroxIn-FxIn Dns Micrite Cht Wht-Crm Op Shp Vit Chalky Sh Blk Carb-Char Fissil No Odor No Stn No Flor NS

Sh Char-Gry-Drab Grn-Aqua Fissil Ls Wht-Lt Tan MicroxIn-FxIn Dns Micrite (w/Pyr Includ) Grad Poor IxIn Pin-Pt Por Barren No Odor No Stn No Flor NS

Sh Char-Gry-Drab Grn-Aqua Fissil Ls Wht-Lt Tan MicroxIn-FxIn Dns Micrite (w/Pyr Includ) Grad Poor IxIn Pin-Pt Por Barren No Odor No Stn No Flor NS

Sh Blk Carb-Char-Gry-Drab Grn-Aqua Fissil Ls Wht-Lt Tan MicroxIn -FxIn Dns Micrite (w/Pyr Includ) Grad Poor IxIn Pin-Pt Por Barren No Odor No Stn No Flor NS

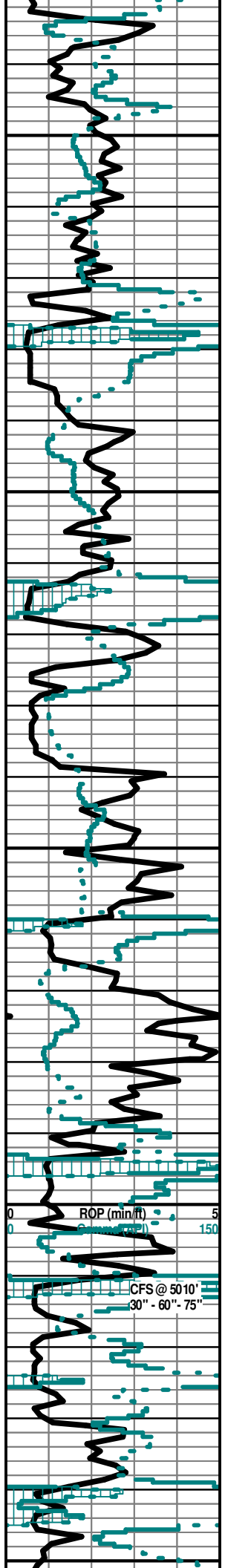
ADJ. ANNULAR VELOCITY (AV) @ 4949' @ 69 SPM = 181.66

RE-ZERO TOOKE DAQ @ 4949'. BKGD GAS SET AT 11 UNITS.

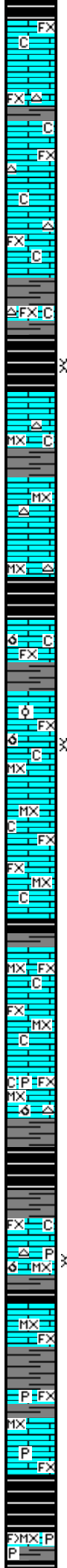
GAS KICK = 45 UNITS.

TG C1-C5 SH GAS KICK = 27 UNITS.

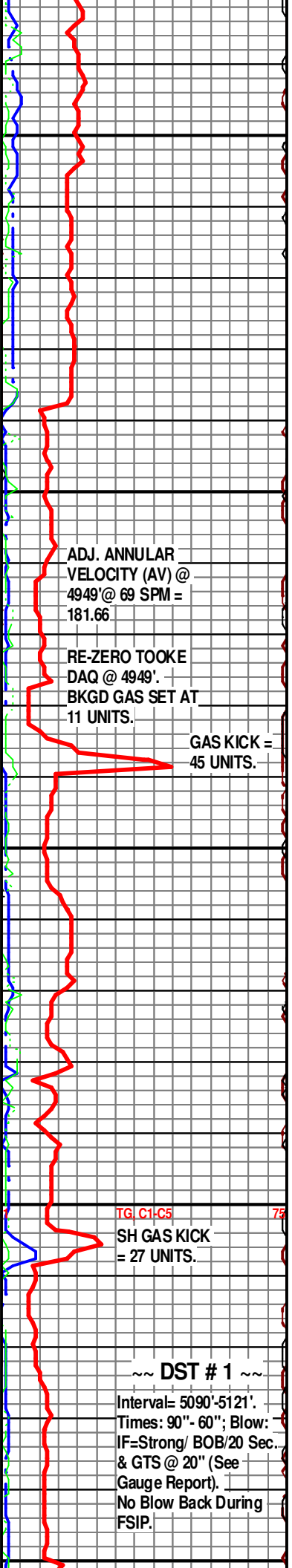
~ DST # 1 ~ Interval= 5090'-5121'. Times= 90"- 60"; Blow: IF=Strong/ BOB/20 Sec. & GTS @ 20" (See Gauge Report). No Blow Back During FSIP.

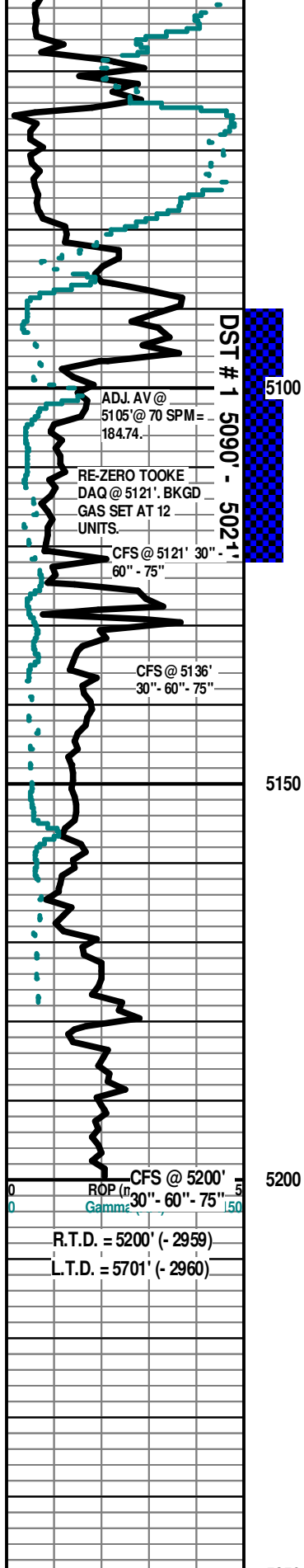


4850
4900
4950
5000
5050



Ls Tan-Crm-Gry FxIn Mostly Micrite Dns Barren Chalk Sh Char-Gry-Blk Carb-Aqua Fissil No Odor No Stn No Flor NS
Ls Wht-Crm-Gry FxIn Mostly Micrite Dns Grad Poor Ppt IxIn Por Cht Wht-Smokey Gry Op Shp Vit Chalk Sh Char-Gry-Aqua Fissil No Odor No Stn No Flor NS
Ls Wht-Crm-Tan FxIn Mostly Micrite Dns Barren Grad Poor IxIn Por Cht Wht (w/Fos (Spicule Includ) Op Shp Vit Chalk Sh Char- Gry- Aqua Fissil No Odor No Stn No Flor NS
Ls Wht-Crm-Tan FxIn Mostly Micrite Dns Barren Grad Poor IxIn Por Cht Gry Op Shp Vit Chalk Sh Char-Gry-Aqua Fissil No Odor No Stn No Flor NS
Ls Wht-Crm-Tan FxIn Mostly Micrite Dns Barren Grad Poor IxIn Por Cht Gry Op Shp Vit Chalk Sh Char-Gry-Aqua Fissil No Odor No Stn No Flor NS
Sh Blk Carb (w/GSG)-Char-Gry-Lt Brn Carb Fissil Ls Wht-Crm- Gry MicroxIn Dns Micrite Cht Wht Op Shp Vit Chalky No Odor No Stn No Flor NS
Ls Wht-Crm MicroxIn Dns Micrite Grad Poor Ppt IxIn Por Barren Cht Wht Op Shp Vit Chalky Sh Blk Carb-Gry-Lt Brn- Aqua/Grn-Red Soft-Fissil No Odor No Stn No Flor NS
Ls Wht-Crm MicroxIn Dns Micrite Grad Poor Ppt IxIn Por Barren Cht Wht Op Shp Vit Chalky Sh Blk Carb-Gry-Lt Brn- Aqua/Grn-Red Soft-Fissil No Odor No Stn No Flor NS
Ls Wht-Crm MicroxIn Dns Micrite Grad Poor Ppt IxIn Por Barren Cht Wht Op Shp Vit Chalky Sh Blk Carb-Gry-Lt Brn- Aqua/Grn-Red Soft-Fissil No Odor No Stn No Flor NS
MARMATON 4918' (- 2677)
Sh Blk Carb-Char-Gry-Lt Brn-Aqua/Grn-Red Soft-Fissil Ls Wht-Crm FxIn Micrite Grad Fair-Med Ppt IxIn Por Barren Grad Fair-Med OOM Por Med Leaching Barren Chalky No Odor No Stn Sli ? Min Flor (3 Pcs) NS
Ls Wht MicroxIn-FxIn Dns Micrite Grad Ppt IxIn Por Grad Poor OOM (w/Small Ooids in pl) Por (w/SSG (Under Wtr with Heat) Poor InterOOM/OOL Por Poor-Fair Leaching Fair Develop Por Sh Blk Carb-Char-Gry Fissil No Odor No Stn Scatt Flor (Lt Grn) ? Faint Odor SSG
Ls Wht MicroxIn-FxIn Dns Micrite No Vis Por Chalk Abd Sh Blk Carb-Char-Gry Fissil No Odor No Stn No Flor NS
Ls Wht MicroxIn-FxIn Dns Micrite No Vis Por Chalk Abd Sh Blk Carb-Char-Gry Fissil No Odor No Stn No Flor NS
Ls Wht MicroxIn-FxIn Dns Micrite No Vis Por Chalk Abd Sh Blk Carb-Char-Grv Fissil No Odor No Stn No Flor NS
PAWNEE 4966' (- 2725)
Ls Wht MicroxIn-FxIn Dns Micrite No Vis Por Grad Poor Pin-Pt IxIn Por Barren Chalk V Abd Sh Blk Carb-Char-Gry Fissil AA No Odor No Stn No Flor NS
Ls Wht MicroxIn-FxIn Dns Micrite No Vis Por Barren Chalk V Abd Pyr Mass Sh Blk Carb-Char-Gry Fissil AA No Odor No Stn No Flor NS
30" CFS @ 5010' Sh Blk Carb-Char Fissil Ls Wht-Lt Tan MicroxIn-FxIn Dns Micrite Grad Med OOM Por Barren Med Leaching Cht Wht-Crm Op Shp Vit Chalky No Odor No Stn No Flor NS
60" CFS @ 5010' Sh Blk Carb-Char Fissil Ls Wht-Lt Tan MicroxIn-FxIn Dns Micrite Cht Wht-Crm Op Shp Vit Pyr Mass Chalky No Odor No Stn No Flor NS
CHEROKEE SHALE 5010' (-2767)
75" CFS @ 5010' Sh Blk Carb-Char (w/Pyr Includ) Fissil Ls Wht-Lt Tan MicroxIn-FxIn Dns Micrite Grad Med OOM Por Barren Med Leaching Cht Wht-Crm Op Shp Vit Pyr Mass Chalky No Odor No Stn No Flor NS
Ls Wht-Lt Tan MicroxIn-FxIn Dns Micrite Cht Wht-Crm Op Shp Vit Chalky Sh Blk Carb-Char Fissil No Odor No Stn No Flor NS
Sh Char-Gry-Drab Grn-Aqua Fissil Ls Wht-Lt Tan MicroxIn-FxIn Dns Micrite (w/Pyr Includ) Grad Poor IxIn Pin-Pt Por Barren No Odor No Stn No Flor NS
Sh Char-Gry-Drab Grn-Aqua Fissil Ls Wht-Lt Tan MicroxIn-FxIn Dns Micrite (w/Pyr Includ) Grad Poor IxIn Pin-Pt Por Barren No Odor No Stn No Flor NS
Sh Blk Carb-Char-Gry-Drab Grn-Aqua Fissil Ls Wht-Lt Tan MicroxIn -FxIn Dns Micrite (w/Pyr Includ) Grad Poor IxIn Pin-Pt Por Barren No Odor No Stn No Flor NS





Sh Blk Carb-Char-Gry-Drab Grn-Aqua Fissil Ls Wht-Lt Tan Microxln
 -Fxn Dns Micrite (w/Pyr Inklus) Grad Poor Ixln Pin-Pt Por Barren No
 Odor No Stn No Flor NS

Sh Blk Carb-Char-Gry-Drab Grn-Aqua Fissil Ls Wht-Lt Tan Microxln
 -Fxn Dns Micrite (w/Pyr Inklus) Grad Poor Ixln Pin-Pt Por Barren No
 Odor No Stn No Flor NS

MISSISSIPPIAN 5082' (- 2841)

Ls Wht-Crm-Lt Tan Microxln-Fxln Micritic Grad Poor-Fair Pin-Pt Ixln Por
 Cht Wht- Peach-Org Trip Op Shp Vit Chalky Sh Vari- colored
 Char-Gry-Drab Grn-Aqua-Olive Soft-Fissil ? Sli Odor No Flor NS

SALEM (SPERGEN) 5102' (- 2861)

30" CFS @ 5010' Ls/Dolo Wht-Crm-Lt Tan Microxln-Fxln Poor Ppt Ixln Por (w/SSG & Pyr
 Inklus) Sli Scat Lt Brn Stn On Edges (3 Pcs) Shale Char-Gry- Aqua Soft-Fissil No Odor No
 Flor NS

SALEM (SPERGEN) Ø 5111' (- 2870)

60" CFS @ 5121' Ls/Dolo Wht-Crm-Lt Tan Microxln-Fxln Micritic (w/Pyr Inklus) Grad
 Poor-Fair Ppt Ixln Por (w/Tr Fos Ixln Por & Gillsonitic "Dead" Drk Blk Alspate Inklus
 (w/SSG & SO w/ Broken Under Heat in Wtr) Cht Tan Op Shp Vit Fos (Crin, Fuss) Chalky
 Sh Char-Gry-Aqua Fissil No Odor ? Sli Flor Tr Drk-Lt Brn Stn SSG & SSO

75" CFS @ 5121' Dolo/Ls Lt Tan-Crm Fxln Fair-Med Sucrosic Ixln Por (w/Med Vug
 Leached Por (w/SG & SO)) Gas & Oil (Lt Brn) Do Flor (Lt Grn) Cht Tan-Lt Red (w/Tr Vug
 Leaching & Fos (Spicule) Inklus) Op Shp Vit Fos (Fuss) Chalky Sh AA Varicolored Faint
 Inc Odor Sli Flor (Lt Grn) Lt Brn Stn SG & SSO

60" CFS @ 5136' Dolo Crm-Lt Tan (w/Tr Glacu Inklus) Fxln Med-Good Sucrosic Ixln Por
 (w/GSG & GFSo in Heat Under Wtr) Good Sat Stn (Lt Brn) Good Scat Flor (Lt Grn) Fair
 Odor Cht Wht Op Shp Vit Sh Varicolored AA GSG & GSO

75" CFS @ 5136' Chalk Wht (V Abd) Sh AA Dolo AA Fair Odor SSG & SSO AA
 Dolo Gry-Tan-Crm (w/Chlorite/Glacu Inklus) Fxln Med-Good Pin-Pt Ixln Grad Small-Med
 Sucrosic Ixln Por (w/MSG & SFO) Faint Dec Odor Sli Scat Flor (Lt Grn) Cht AA Med SG &
 SFO

Dolo Gry-Tan-Crm (w/Chlorite/Glacu Inklus) Fxln Med-Good Ppt Ixln
 Grad Small-Med Sucrosic Ixln Por (w/SG & SO) Faint Dec Odor Sli Scat
 Flor (Lt Grn) Cht AA Med SG & SFO

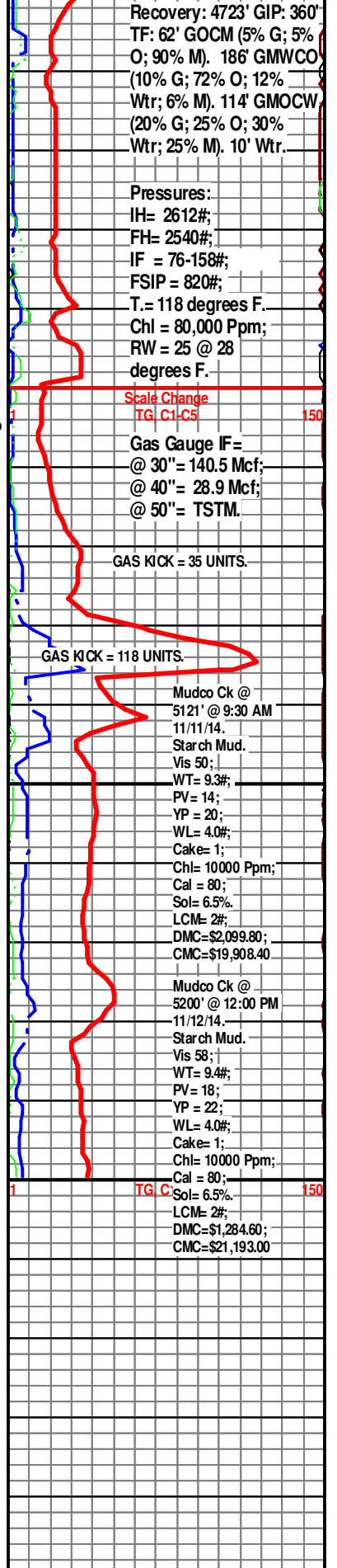
30" CFS @ 5200' Dolo Gry-Tan-Crm (w/Chlorite/Glacu Inklus) Fxln
 Med-Good Ppt Ixln Grad Small-Med Sucrosic Ixln Por No Odor No Flor
 No Stn NS

60" CFS @ 5200' Dolo Gry-Tan-Crm (w/Chlorite/Glacu Inklus) Fxln
 Med-Good Ppt Ixln Grad Small-Med Sucrosic Ixln Por No Odor No Flor
 No Stn NS

75" CFS @ 5200' Dolo Gry-Tan-Crm (w/Chlorite/Glacu Inklus) Fxln
 Med-Good Ppt Ixln Grad Small-Med Sucrosic Ixln Por No Odor No Flor
 No Stn NS

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

Geologist Left Location At: 8:00 PM on 11/12/2014



Recovery: 4723' GIP: 360'
 TF: 62' GOCM (5% G; 5%
 O; 90% M). 186' GMWCO
 (10% G; 72% O; 12%
 Wtr; 6% M). 114' GMOCW
 (20% G; 25% O; 30%
 Wtr; 25% M). 10' Wtr.

Pressures:
 IH= 2612#;
 FH= 2540#;
 IF = 76-158#;
 FSIP = 820#;
 T. = 118 degrees F.
 Chl = 80,000 Ppm;
 RW = 25 @ 28
 degrees F.

Scale Change
 TG C1C5 150

Gas Gauge IF =
 @ 30" = 140.5 Mcf;
 @ 40" = 28.9 Mcf;
 @ 50" = TSTM.

GAS KICK = 35 UNITS.

GAS KICK = 118 UNITS.

Mudco Ck @
 5121' @ 9:30 AM
 11/11/14.
 Starch Mud.
 Vis 50;
 WT= 9.3#;
 PV= 14;
 YP = 20;
 WL= 4.0#;
 Cake= 1;
 Chl= 10000 Ppm;
 Cal = 80;
 Sol= 6.5%.
 LCM= 2#;
 DMC=\$2,099.80;
 CMC=\$19,908.40

Mudco Ck @
 5200' @ 12:00 PM
 11/12/14.
 Starch Mud.
 Vis 58;
 WT= 9.4#;
 PV= 18;
 YP = 22;
 WL= 4.0#;
 Cake= 1;
 Chl= 10000 Ppm;
 Cal = 80;
 Sol= 6.5%.
 LCM= 2#;
 DMC=\$1,284.60;
 CMC=\$21,193.00