



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

**Well Name:** MTPRC "B" # 3-22  
**Location:** C - N/2 - SE of Sec. 22 - T. 30 S. - R. 19 W.  
**License Number:** A.P.I. #15 - 097 - 21,792 - 00 - 00  
**Spud Date:** 05/24/2014  
**Surface Coordinates:** SPOT: 1980' FSL & 1320' FEL

**Region:** KIOWA CO., KS.  
**Drilling Completed:** 05/31/2014

**Bottom Hole Coordinates:**  
**Ground Elevation (ft):** 2230'      **K.B. Elevation (ft):** 2243'  
**Logged Interval (ft):** 641'      **To:** 5200'      **Total Depth (ft):** 5200'  
**Formation:** MISSISSIPPIAN "WARSAW"  
**Type of Drilling Fluid:** CHEMICAL/POLYMER/GEL WITH MUD DISPLACEMENT @ 3516'.  
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

**GEOLOGIST**

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

**Casing & Deviation Surveys:**

**First Surface Casing String:** Spud at 5:45 pm on 05/24/14. Drilled 17-1/2" hole to 241'. Ran 6 joints of 48# ; 13-3/8" surface casing. Tallied 221.67', set at 236.17' KB. Cut Texas shoe. Strapped bottom 3 joints. Tacked collars & pins. Cemented with 250 sks 60/40 POZ; 2% Gel; 3% CC; 1/4# CF. Cement did circulate. Plug down at 4:15 am on 05/25/14. Basic Energy Svcs Cementing ticket #10395.

**Second Casing String:** Drilled 12-1/4" hole to 645'. Ran 15 joints of new 24# 8-5/8" surface casing. Tallied 626.66'. Landed at 640.66' KB. Strapped guide shoe and bottom 3 joints, tacked collars on all, then welded collar on top 2 joints. Basket at 242'. Cemented with 170 sks ACON; 2% Gel, 3% CC, 1/4# CF & tailed with 150 sks: 60/40 POZ; 3% CC, 1/4# CF. Cement did circulate. Plug down at 12:00 am on 05/26/14. Basic Energy Svcs Cementing ticket #10396.

**Deviation Survey's Taken:** @ 241' = 1 degree; @ 645' = 1 degree; @ 5123' = 1 degree.

## DSTs

~~ DST # 1~~ (Mississippian Spergen) Interval: 5082-5123'.

Times: 5"- 60"- 90"- 120"; Blow: IF=Strong Blow BOB/1". BOB Blow Back on ISIP. FF= BOB with GTS @ 58" - TSTM. BOB Blow Back During FSIP.

Recovery: 4626' GIP: 433' TF: 433' GO (Sli Mud & Wtr Cut).

Pressures: IH =2466#; FH=2437#; IF=51-54#; FF=101-132#; ISIP=1245#; FSIP= False (Leak in SI Tool).

## Comments

### ROCK TYPES

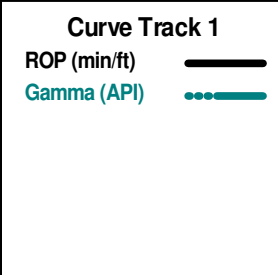
	Anhy		Clyst		Gry sh		Mrlst		Shgy
	Bent		Coal		Gyp		Red shale		Sltst
	Brec		Congl		Igne		Salt		Ss
	Carb sh		Dol		Lmst		Shale		Till
	Cht		Grn sh		Meta		Shcol		

### ACCESSORIES

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

### OTHER SYMBOLS

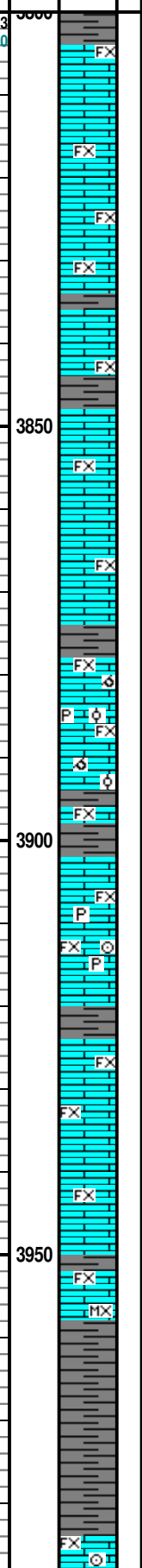
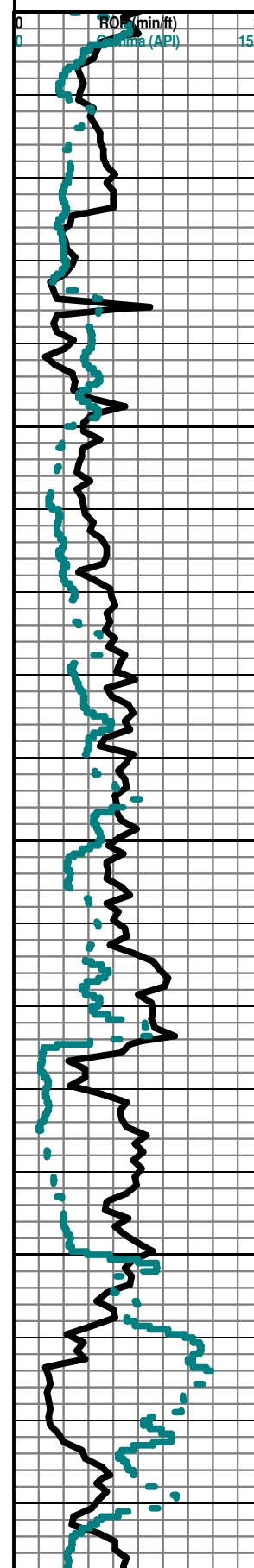
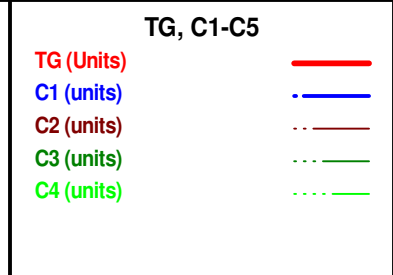
<b>POROSITY</b>					
	Earthy		Vuggy		Rounded
	Fenest				Subrnd
	Fracture	<b>SORTING</b>			Subang
	Inter		Well		Angular
	Moldic		Moderate		
	Organic		Poor	<b>OIL SHOW</b>	
	Pinpoint				Gas show
					Even
					Spotted
					Ques
					Dead
				<b>INTERVAL</b>	
					Dst
					Dst_alt
				<b>EVENT</b>	
			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



Depth (ft)

Oil Shows

Geological Descriptions



**McCOY PETROLEUM CORPORATION**  
**MTPRC "B" # 3-22**  
**SPOT: 1980' FSL & 1320' FEL**  
**C - N/2 - SE**  
 Sec. 22 - T. 30 S. - R. 19 W.  
 KIOWA COUNTY, KANSAS  
 A.P.I. #15 - 097 - 21,792 - 00 - 00  
 ELEVATION : 2243' K. B. ; 2230' G. L.  
**CONTRACTOR: STERLING DRILLING - RIG # 5**  
**Geologist: David P. Williams, P. G.**

GEOLOGIST ON LOCATION: @ 9:20 PM on 5/27/14 @ 3381'.  
 Deviation Survey's Taken: @ 241' = 1 degree; @ 645' = 1 degree; @ 5123' = 1 degree.

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

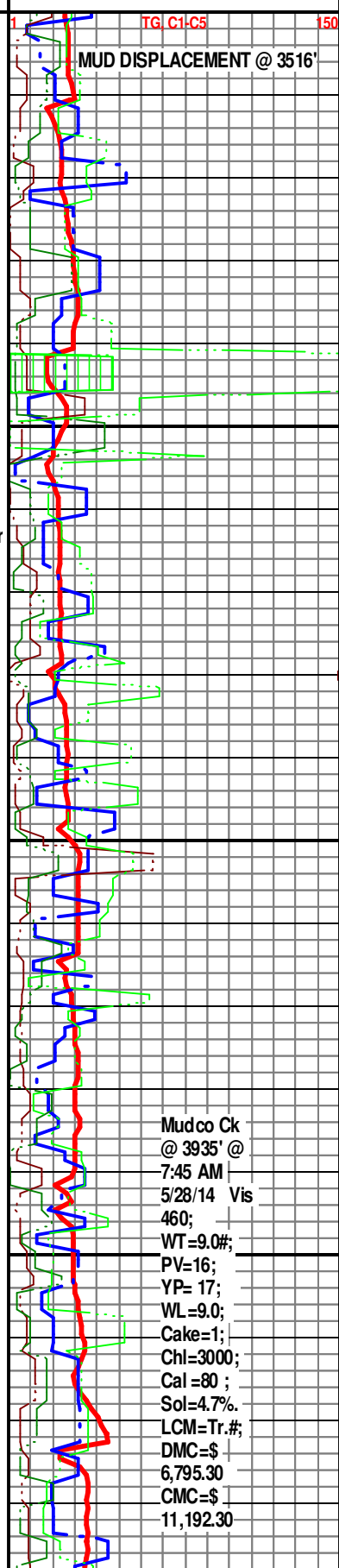
Begin 30' Kelly Down Sample Examination @ 3910'.

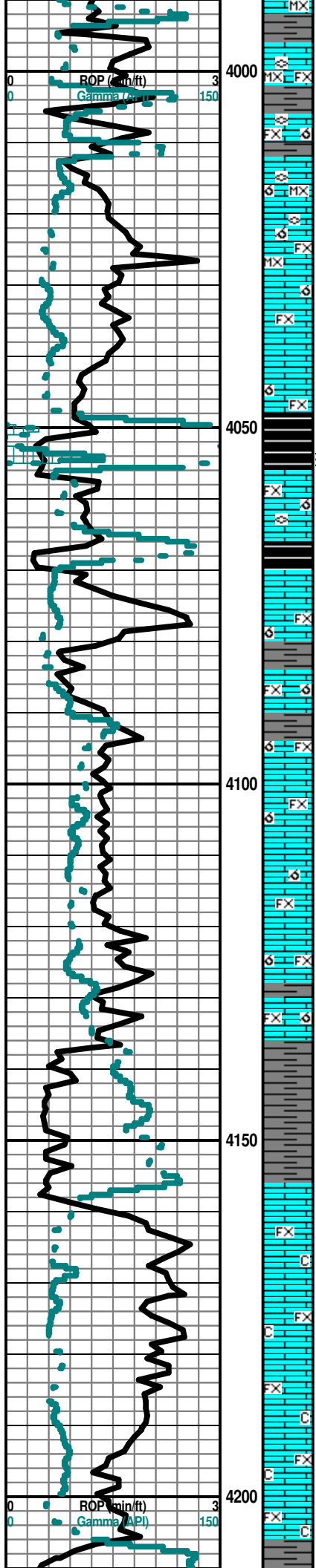
Ls Wht-Crm FxIn Dns Micrite Grad Poor Pin-Pt IxIn Por Sh Gry Soft No Odor  
 No Flor No Stn NS

Ls Wht -Crm FxIn Dns Micrite Grad Poor OOM (Small OOids) Por Poor  
 Dissolu Poor Leaching Sh Gry Soft No Odor No Flor No Stn NS

Ls Wht -Crm FxIn Dns Micrite Grad Poor OOM (Small OOids) Por Poor  
 Dissolu Poor Leaching Sh Gry Soft No Odor No Flor No Stn NS

Ls Wht-Gry-Crm FxIn-MicroIxIn Dns Micrite Grad Poor OOM Por Poor  
 Leaching Poor Develop Fos (Crin) Chalky Sh Gry Soft No Odor No Flor No  
 Stn NS





**LECOMPTON "B" 4012' (- 1769)**

Ls Wht-Gry-Crm FxIn-MicroxIn Dns Micrite Grad Poor-Fair OOM Por  
 Poor-Fair Vug Leaching (Tr Lg Vug) Poor-Fair Develop Fos (Fuss) Sh  
 Char-Gry Soft No Odor No Flor No Stn NS

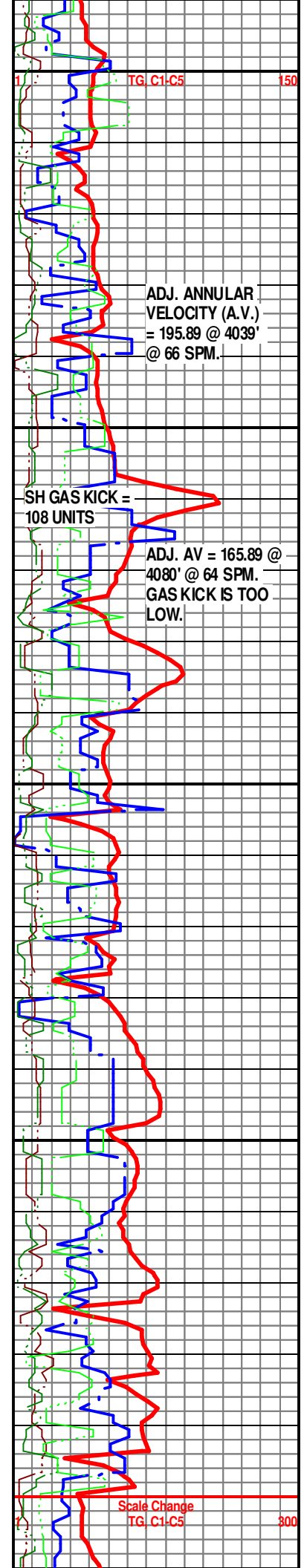
**QUEEN HILL SHALE 4049' (-1805)**

Sh Blk Carb-Char-Gry-Grn Fissil-Soft Ls Wht FxIn Micrite Grad Poor-Fair  
 OOM (Tr Lg Vug) Poor Develop Poor Leaching Fos (Fuss) No Odor No Flor  
 No Stn NS

Sh Blk Carb-Char-Gry-Grn Fissil-Soft Ls Wht FxIn Micrite Grad Poor-Fair  
 OOM (Tr Lg Vug) Poor Develop Poor Leaching No Odor No Flor No Stn NS

Ls Wht FxIn Micrite Grad Poor-Fair OOM (Tr Lg Vug) Poor Develop Poor  
 Leaching Sh Blk Carb-Char-Gry-Grn Fissil-Soft No Odor No Flor No Stn NS

Ls Wht-Crm FxIn Micrite Grad Poor lXIn Pin-Pt Por Chalky Sh Char-Gry  
 Fissil-Soft No Odor No Flor No Stn NS

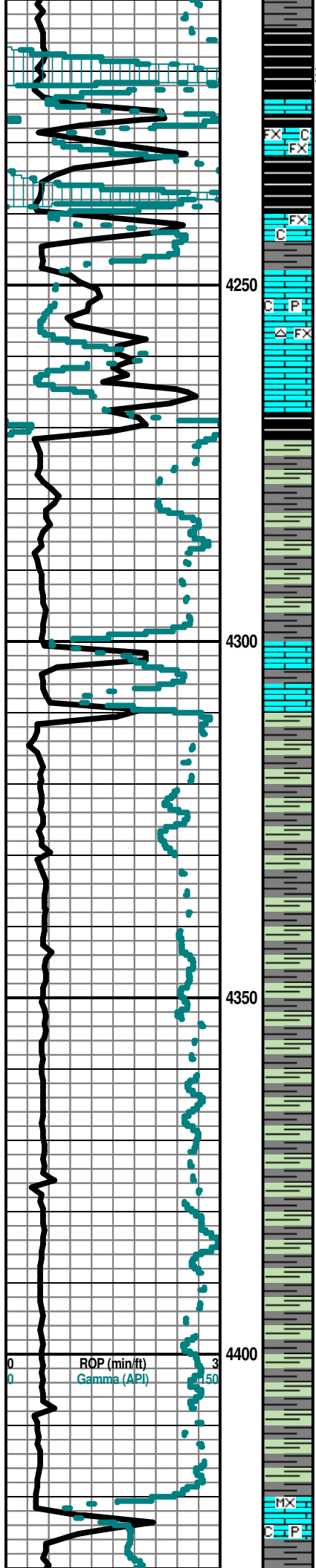


ADJ. ANNULAR  
 VELOCITY (A.V.)  
 = 195.89 @ 4039'  
 @ 66 SPM.

SH GAS KICK =  
 108 UNITS

ADJ. AV = 165.89 @  
 4080' @ 64 SPM.  
 GAS KICK IS TOO  
 LOW.

Scale Change  
 TG C1-C5 800



Sh Blk Carb-Char-Gry Fissil-Soft Ls Wht-Crm Fxln Micrite Grad Poor Ixln Pin-Pt Por Fos (Fuss) Chalky No Odor No Flor No Stn NS

HEEBNER 4232' (-1989)

LEVENWORTH 4240' (- 1997)

TORONTO 4247' (- 2004)

Ls Wht-Crm Fxln Micrite Grad Poor Ixln Pin-Pt Por Cht Wht-Gry Translu-Op Shp Vit Pyr Mass Fos (Fuss) Chalky Sh Blk Carb- Char- Gry Fissil-Soft No Odor No Flor No Stn NS

DOUGLAS 4268' (-2025)

Sh Char-Gry-Grn Fissil-Soft Ls Wht-Crm Fxln Micrite Grad Poor Ixln Pin-Pt Por No Odor No Flor No Stn NS

4250

4300

4350

4400

ROP (min/ft)  
Gamma (API)

Sh Char-Gry-Grn Fissil-Soft Ls Wht-Crm Fxln Micrite Grad Poor Ixln Pin-Pt Por Chalky No Odor No Flor No Stn NS

Sh Char-Gry-Grn Fissil-Soft Ls Wht-Crm Fxln Micrite Grad Poor Ixln Pin-Pt Por Qtz Ss Gry V-FGrn Well Sort Poor IGran Por Dns/ Friable (w/Pyr Includ & Carb Includ) No Odor No Flor No Stn NS

START 10' SAMPLES Wet & Dry @ 4330'

Sh Char-Gry-Grn Fissil-Soft Ls Wht-Crm Fxln Micrite Grad Poor Ixln Pin-Pt Por Qtz Ss Gry V-FGrn Well Sort Well Rd Poor IGran Por Dns/ Friable (w/Pyr/Micaceous & Carb Includ) No Odor No Flor No Stn NS

IATAN (BROWN LIME) 4420' (- 2177)

Ls Wht-Crm-Tan Fxln-Microxln Dns Micrite Grad Poor Ixln Por (w/Pyr Includ) Chalky Sh Gry-Char-Grn Soft-Fissil No Odor No Flor No Stn NS

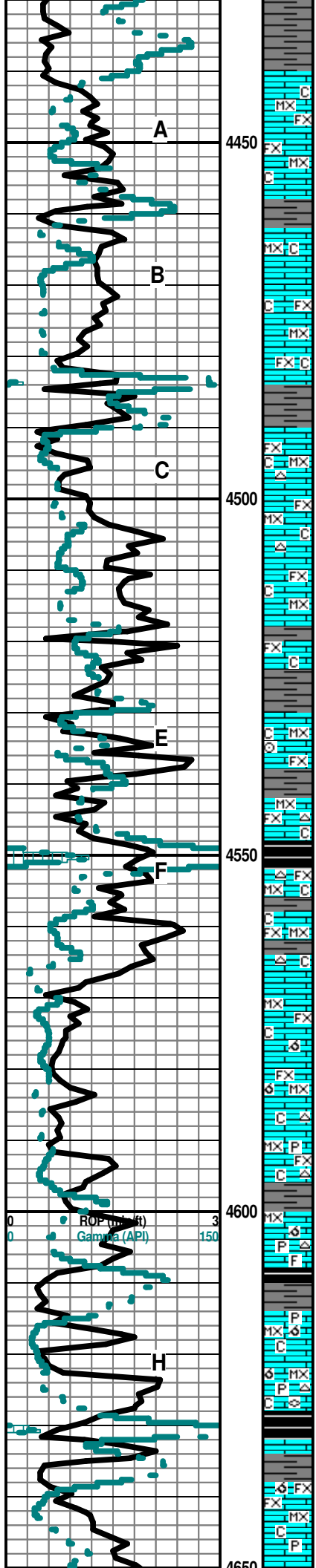
SH GAS KICK = 235 UNITS.

SH GAS KICK = 154 UNITS.

RECYCLE SH GAS KICK = 209 UNITS.

Scale Change  
TG C1.C5 150

TG C1.C5 150



Sh Gry-Char-Grn Soft-Fissil Ls Wht-Crm-Tan FxIn-MicroxIn Dns Micrite Grad Poor IxIn Por (w/Pyr Inclus) Chalky No Odor No Flor No Stn NS

**LANSING A 4440' (- 2197)**

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

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

**LANSING B 4462' (- 2219)**

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

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

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

Ls Wht-Crm-Tan-Gry FxIn-MicroxIn Dns Micrite Grad Poor IxIn Por Chalky Wht-Amber Translu Shp Vit Chalky Sh Gry-Char-Grn-Blk Carb Soft-Fissil No Odor No Flor No Stn NS

Ls Wht-Crm-Tan-Gry FxIn-MicroxIn Dns Micrite Grad Poor IxIn Por Chalky Wht-Amber Translu Shp Vit Chalky Sh Gry-Char-Grn-Blk Carb Soft-Fissil No Odor No Flor No Stn NS

Ls Wht-Crm-Tan-Gry FxIn-MicroxIn Dns Micrite Grad Poor IxIn Por Chalky Sh Gry-Char-Grn-Blk Carb Soft-Fissil No Odor No Flor No Stn NS

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

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

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

**LANSING "F" 4548' (- 2305)**

Ls Wht-Crm-Tan FxIn-MicroxIn Dns Micrite Grad Poor IxIn Pin-Pt Por Chalky Gry Op Shp Vit Chalky Sh Blk Carb-Gry-Char-Grn Soft-Fissil No Odor No Flor No Stn NS

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

Ls Wht-Crm-Lt Tan MicroxIn-FxIn Micritic Grad Poor-Fair OOM Por Poor InterOOM Por (Small OOids in pl) V Poor Leaching Poor Develop Chalky Wht-Gry Op Shp Vit Chalky Sh Char-Gry-Blk Carb Fissil No Odor No Flor No Stn NS

Ls Wht-Crm-Lt Tan MicroxIn-FxIn Micritic Grad Tr Poor OOM Por AA Chalky Lt Tan Op Shp Vit Chalky Sh Char- Gry- Grn- Blk Carb- Aqua Fissil No Odor No Flor No Stn NS

Ls Wht-Crm-Lt Tan MicroxIn-FxIn Micritic No Vis Por Chalky Lt Tan Op Shp Vit Pyr Mass Chalky Sh Char- Gry- Grn- Blk Carb Fissil No Odor No Flor No Stn NS

Ls Wht-Crm-Lt Tan MicroxIn-FxIn Micritic Grad Fair Inxn Por (w/Tr Lg Vugs) Grad Poor OOM Por Poor Dissolu Poor Leaching Barren Chalky (w/Fos Inclus) Op Shp Vit Pyr Mass Chalky Sh Char-Gry- Blk Carb Fissil No Odor No Flor No Stn NS

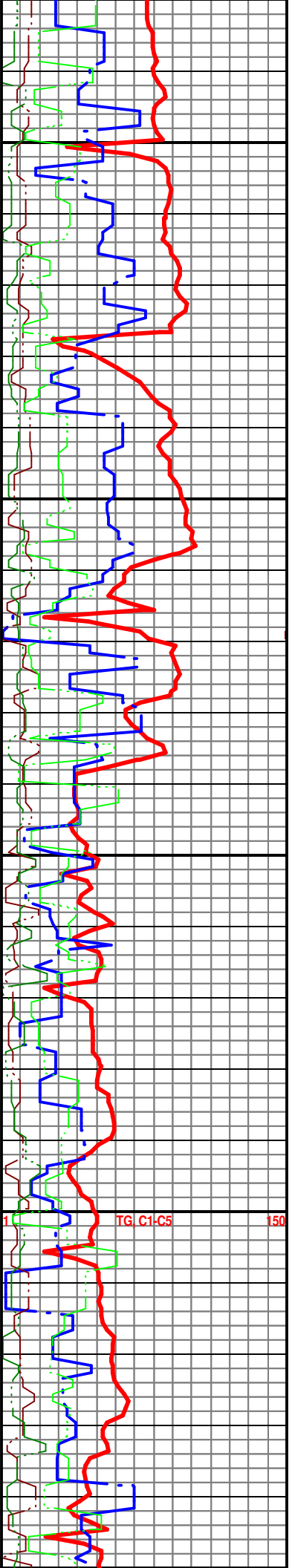
**KANSAS CITY "H" DRUM 4614' (-2371)**

Ls Wht-Crm MicroxIn-FxIn Micritic Grad Fair-Med OOM Por Poor InterOOM Por (Small OOids in pl) V Poor-Fair Leaching (Tr Fair Vug) Poor Develop Chalky Wht-Amber Translu-Op Shp Vit Chalky Pyr Mass Sh Char-Gry (w/Pyr Inclus) Fissil No Odor No Flor No Stn NS

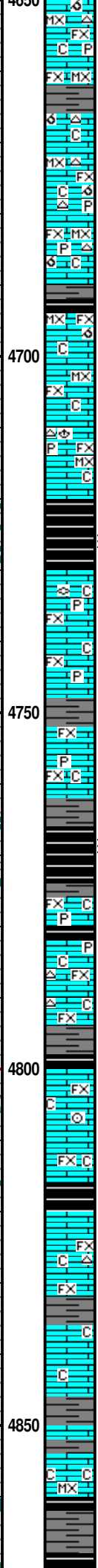
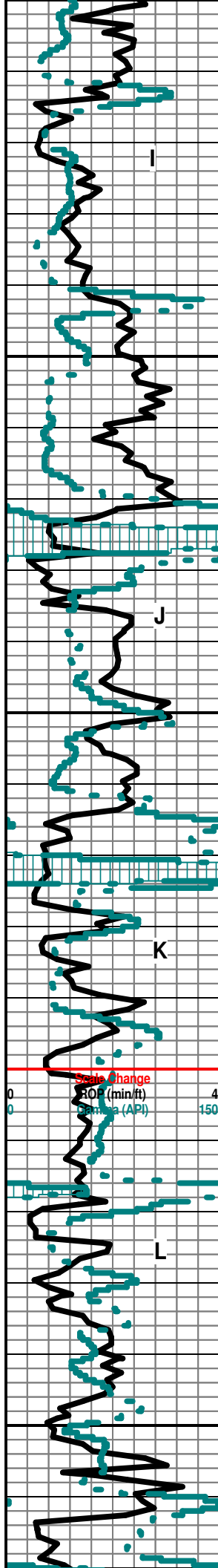
Ls Wht-Crm-Lt Tan MicroxIn-FxIn Micritic (w/Pyr Inclus) Grad Fair-Med OOM Por Poor InterOOM Por V Poor-Fair Leaching (Tr Fair-Med Vug) Poor Develop Pyr Mass Foss (Fuss) Chalky Sh Blk Carb-Char- Gry- Grn Fissil No Odor No Flor No Stn NS

Ls Wht-Crm-Lt Tan MicroxIn-FxIn Micritic Fair OOM Por Poor - Fair InterOOM Por Poor-Fair Leaching Poor Develop Dec Chalky Sh Blk Carb- Char- Gry- Grn- Aqua Fissil No Odor No Flor No Stn NS

Ls Wht-Crm-Lt Tan MicroxIn-FxIn Mostly Micrite Tr Fair OOM Por Poor- Fair InterOOM Por Poor-Fair Leaching Poor Develop Dec AA Chalky Sh Blk Carb -Char-Gry (w/Pyr Inclus)-Grn-Aqua Fissil No Odor No Flor No Stn NS







Ls Wht-Crm-Lt Tan Microxln-Fxn Mostly Micrite Tr Poor OOM Por AA Cht-Amber-Lt Brn Op Shp Vit Chalky Pyr Mass Sh Char-Gry Fissil No Odor No Stn No Flor NS

Ls Wht-Crm-Lt Tan Microxln-Fxn Mostly Micrite Grad Fair OOM Por Poor-Fair InterOOM Por Poor-Fair Leaching Poor Develop Cht Wht Op Shp Vit Chalky Sh Char-Gry Fissil No Odor No Stn No Flor NS

Ls Wht-Crm-Lt Tan Microxln-Fxn Mostly Micrite Grad Fair OOM Por Poor-Fair InterOOM Por Poor-Fair Leaching Poor Develop Cht Wht Op Shp Vit Chalky Sh Char-Gry (w/Pyr Inclus)-Aqua Fissil No Odor No Stn No Flor NS

Ls Wht-Crm-Lt Tan Microxln-Fxn Mostly Micrite Grad Fair OOM Por Poor-Fair InterOOM Por Poor-Fair Leaching Poor Develop Cht Wht Op Shp Vit Chalky Sh Char-Gry (w/Pyr Inclus)-Aqua Fissil No Odor No Stn No Flor NS

Sh Blk Carb-Char-Gry (w/Pyr Inclus) Fissil Ls Wht-Crm-Lt Tan Microxln-Fxn Mostly Micrite Grad Fair OOM Por Poor-Fair InterOOM Por Poor-Fair Leaching Poor Develop Chalky No Odor No Stn No Flor NS

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

Ls Crm-Lt Tan-Wht Microxln-Fxn Mostly Micrite Fair-Med Ixln Por Cht Wht-Gry Translu-Op Shp Vit Foss (Brach) Chalky Sh Blk Carb-Char-Gry (w/Pyr Inclus) Fissil No Odor No Stn No Flor NS

Sh Blk Carb (w/Pyr Inclus) Char-Gry (w/Pyr Inclus) Fissil (w/FSG) Ls Crm-Lt Tan-Wht Microxln-Fxn Mostly Micrite Cht Wht-Gry Op Shp Vit Chalky No Odor No Stn No Flor SG in Blk Carb Sh

**KANSAS CITY "J" DENNNIS 4736' (- 2493)**

Ls Lt Tan-Wht VFxn Mostly Micrite Barren Chalky Foss (Fuss) Chalky Sh Blk Carb (w/Pyr Inclus & FSG AA)-Char-Gry (w/Pyr Inclus) Fissil No Odor No Stn No Flor NS

Ls Lt Tan-Wht VFxn Mostly Micrite Grad Fair Pin-Pt Ixln Por Cht Wht-Gry Op Shp Vit Pyr Mass Chalky Sh Blk Carb (w/Pyr Inclus & FSG AA)-Char-Gry (w/Pyr Inclus) Fissil No Odor No Stn No Flor NS

Ls Lt Tan-Wht VFxn Mostly Micrite Grad Poor-Fair Pin-Pt Ixln Por Cht Wht-Gry Op Shp Vit Chalky Sh Blk Carb (w/Pyr Inclus & ? SSG) Char-Gry (w/Pyr Inclus) Fissil No Odor No Stn No Flor NS

**STARK SHALE 4762' (- 2519)**

Sh Blk Carb-Char-Gry Fissil (w/SG Abd in Blk Sh) Ls Lt Tan-Wht Fxn Mostly Micrite Grad Fair Pin-Pt Ixln Por No Vis Por Chalky No Odor No Stn No Flor NS

**KANSAS CITY "K" SWOPE 4775' (-2532)**

Ls Lt Tan-Wht Fxn Mostly Micrite Grad Fair Pin-Pt Ixln Por Inc No Vis Por Cht Wht Op Shp Vit Chalky Pyr Mass Sh Blk Carb- Char- Gry- Aqua Fissil No Odor No Stn No Flor NS

Ls Lt Tan-Wht Fxn Mostly Micrite Dns Grad Fair Pin-Pt Ixln Por Cht Gry-Wht Op Shp Vit Chalky Sh Char-Gry-Blk Carb Fissil No Odor No Stn No Flor NS

Sh Blk Carb -Char-Gry Fissil Ls Lt Tan-Wht-Gry Fxn Micrite Dns Grad Fair Pin-Pt Ixln Por Fos (Crin) Chalk No Odor No Stn No Flor NS

Ls Lt Tan-Wht-Gry Fxn Mostly Micrite Dns Grad Fair Pin-Pt Ixln Por Chalk Sh Char-Gry-Blk Carb Fissil No Odor No Stn No Flor NS

**HUSHPUCKNEY 4815' (- 2572)**

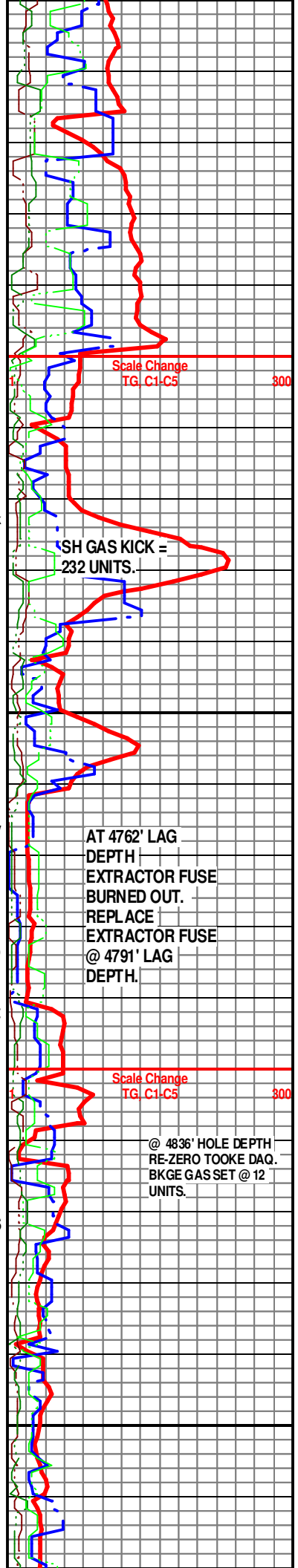
Sh Blk Carb-Char-Gry Fissil Ls Wht-Crm-Gry-Lt Tan Fxn Dns Grad Poor Pin-Pt Ixln Por Cht Amber Translu Shp Vit Chalk No Odor No Stn No Flor NS

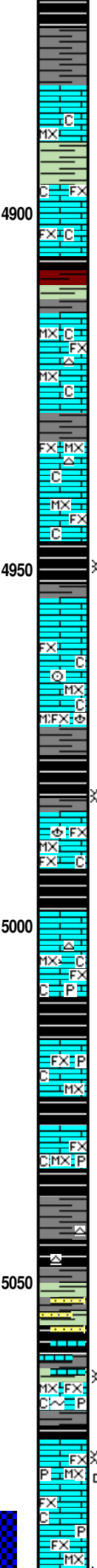
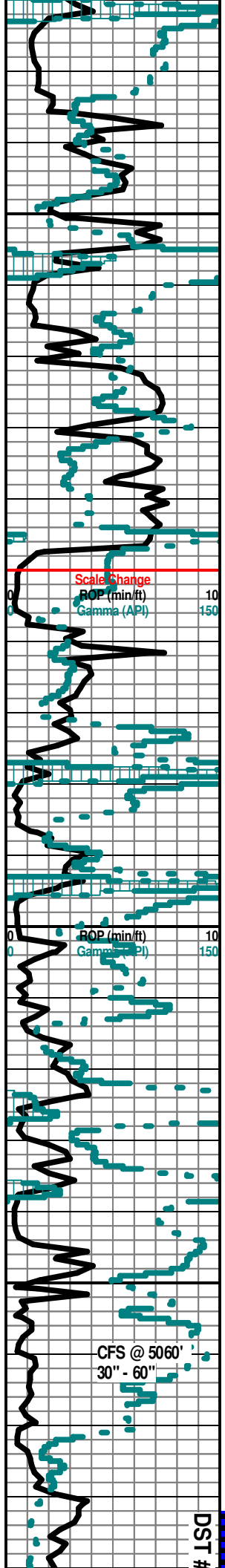
Sh Blk Carb-Char-Gry-Aqua Fissil Ls Wht-Crm-Gry-Lt Tan Fxn Dns Grad Poor Pin-Pt Ixln Por Chalk No Odor No Stn No Flor NS

Ls Wht-Gry-Lt Tan Fxn Mostly Micrite Dns Grad Poor Pin-Pt Ixln Por Chalk Sh Char-Gry Fissil No Odor No Stn No Flor NS

Sh Char-Gry-Grn/Aqua Fissil Ls Crm-Wht Microxln Dns Micrite Chalky No Odor No Stn No Flor NS

Sh Blk Carb-Char-Gry-Lt Brn Carb Fissil Ls Gry-Crm-Wht Microxln Dns Micrite Chalky No Odor No Stn No Flor NS





Sh Char-Gry-Grn/Aqua-Blk Carb Fissil Ls Crm-Wht MicroIn Dns Micrite Chalky No Odor No Stn No Flor NS

Sh Char-Gry-Grn/Aqua-Blk Carb Fissil Ls Crm-Wht MicroIn Dns Micrite Chalky No Odor No Stn No Flor NS

Ls Wht-Crm FxIn Micrite Grad Fair-Med Pin-Pt IxIn Por Barren Chalky Sh Blk Carb-Gry-Lt Brn-Aqua/Grn-Red Soft-Fissil No Odor No Stn No Flor NS

Sh Blk Carb-Gry-Lt Brn-Aqua/Grn Soft-Fissil Ls Wht-Crm FxIn Micrite Grad Fair-Med Pin-Pt IxIn Por Barren Chalky No Odor No Stn No Flor NS

Sh Blk Carb-Gry-Lt Brn-Aqua/Grn-Red Soft-Fissil Ls Wht-Crm FxIn Micrite Grad Fair-Med Pin-Pt IxIn Por Barren Chalky No Odor No Stn No Flor NS

**MARMATON 4914' (- 2671)**

Ls Wht MicroIn-FxIn Dns Micrite Grad Poor Pin-Pt IxIn Por (w/Tr Glacu Includ) Por Cht Amber-Clear-Wht Translu-Op Shp Vit Chalky Sh Blk Carb-Char-Gry-Grn/Aqua Fissil No Odor No Stn No Flor NS

Ls Wht-Tan MicroIn-FxIn Dns Micrite Grad Poor Pin-Pt IxIn Por Cht Wht-Gry Translu-Op Shp Vit Chalky Sh Blk Carb-Char-Gry-Grn/Aqua Fissil No Odor No Stn No Flor NS

Ls Wht-Tan MicroIn-FxIn Dns Micrite Grad Poor Pin-Pt IxIn Por Cht Wht-Gry Translu-Op Shp Vit Chalky Tr Calcite-Clear Sh Blk Carb-Char-Gry-Grn/Aqua Fissil No Odor No Stn No Flor NS

**PAWNEE 4953' (- 2710)**

Sh Blk Carb-Gry Fissil Ls Wht-Crm FxIn Micrite Grad Fair-Med Pin-Pt IxIn Por Barren Chalky No Odor No Stn No Flor NS

Ls Wht MicroIn-FxIn Dns Micrite No Vis Por Grad Poor Pin-Pt IxIn Por Barren Fos (Crin) Chalk Sh Blk Carb-Char-Gry Fissil No Odor No Stn No Flor NS

Ls Wht MicroIn-FxIn Dns Micrite No Vis Por Grad Poor Pin-Pt IxIn Por Barren Fos (Brach) Chalk Sh Blk Carb-Char-Grn/Gry Fissil No Odor No Stn No Flor NS

**FORT SCOTT 4984' (- 2741)**

Sh Blk Carb-Char-Brn-Aqua Fissil Ls Wht-Lt Tan MicroIn-FxIn Dns Micrite Grad Poor Pin-Pt Por Fos (Brach) Chalky No Odor No Stn No Flor NS

**CHEROKEE SHALE 4992' (- 2749)**

Sh Blk Carb-Char Fissil Ls Wht-Lt Tan MicroIn-FxIn Dns Micrite Chalky No Odor No Stn No Flor NS

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

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

30" CFS @ 5025' Sh Blk Carb-Char-Gry-Drab Grn-Aqua Fissil Ls Wht-Lt Tan MicroIn-FxIn Dns Micrite Grad Poor IxIn Pin-Pt Por Barren Cht Wht-Gry Op Shp Vit No Odor No Stn No Flor NS

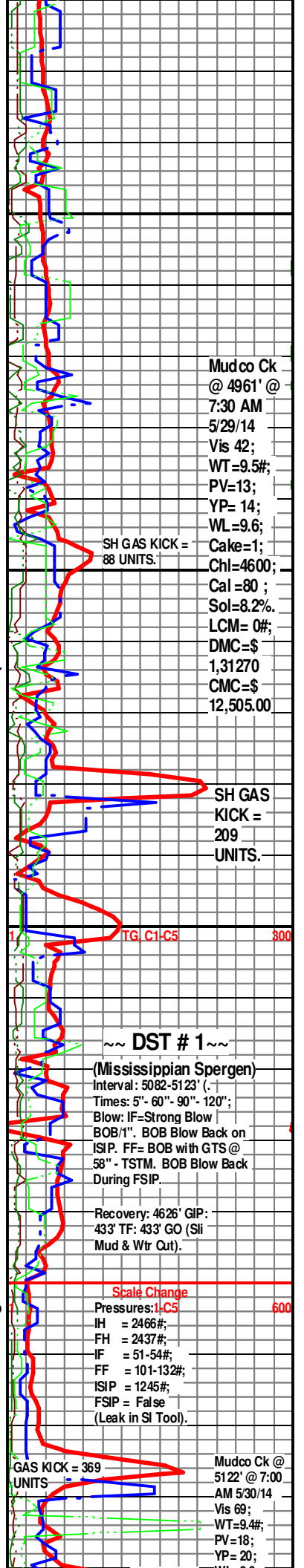
60" CFS @ 5025' Sh Varicolored Blk Carb-Char-Gry-Drab Grn-Aqua Yell-Purp Fissil Ls Wht-Lt Tan MicroIn-FxIn Dns Micrite Grad Poor IxIn Pin-Pt Por Barren Cht Wht-Yell (w/Fos Includ) Op Shp Vit No Odor No Stn No Flor NS

Ls Wht MicroIn-FxIn Micritic Grad Fair Pin-Pt IxIn Por (w/SG) Grad Dolo Crm-Tan Med-Lg IxIn Por Poor IxIn Por "Tite" (w/VSSG) Cht Crm-Tan-Drk Gry (w/Peach & Org Includ) Op Shp Vit (w/SG) Chalky Tr Qtz Ss Wht (w/Hvy CaCO3 Cmt & Glacu Includ) Poor Igran Por Sh Varicolored Blk Carb (w/Pyr Includ) Char-Gry-Drab Grn-Aqua Soft-Fissil No Odor ? V Sli Flor (Lt Grn) Sli SG

**MISSISSIPPIAN 5072' (- 2829)**

Ls Wht MicroIn-FxIn Fair Pin-Pt IxIn Por (w/SG & "Dead" Oil Stn (Drk Blk Gilsonitic Residue)) Cht Crm-Org Op Shp Vit Chalk Abd Tr Qtz Ss Wht AA Sh Varicolored Dec Blk Carb (w/Pyr Includ) Char-Gry-Drab Grn-Aqua Soft-Fissil No Odor ? V Sli Flor (Lt Grn in Chalky Ls) Sli SG

Ls Wht MicroIn-FxIn Fair Pin-Pt IxIn Por (w/SG & "Dead" Oil Stn (Drk Blk Gilsonitic Residue)) Cht Crm-Org Op Shp Vit Chalk Abd Tr Qtz Ss Wht AA Sh Varicolored Dec Blk Carb (w/Pyr Includ) Char-Gry-Drab Grn-Aqua Soft-Fissil No Odor ? V Sli Flor (Lt Grn in Chalky Ls) Sli SG



Mudco Ck @ 4961' @ 7:30 AM 5/29/14 Vis 42; WT=9.5#; PV=13; YP= 14; WL=9.6; Cake=1; Cht=4600; Cal =80 ; Sol=8.2%; LCM= 0#; DMC=\$ 1,31270 CMC=\$ 12,505.00

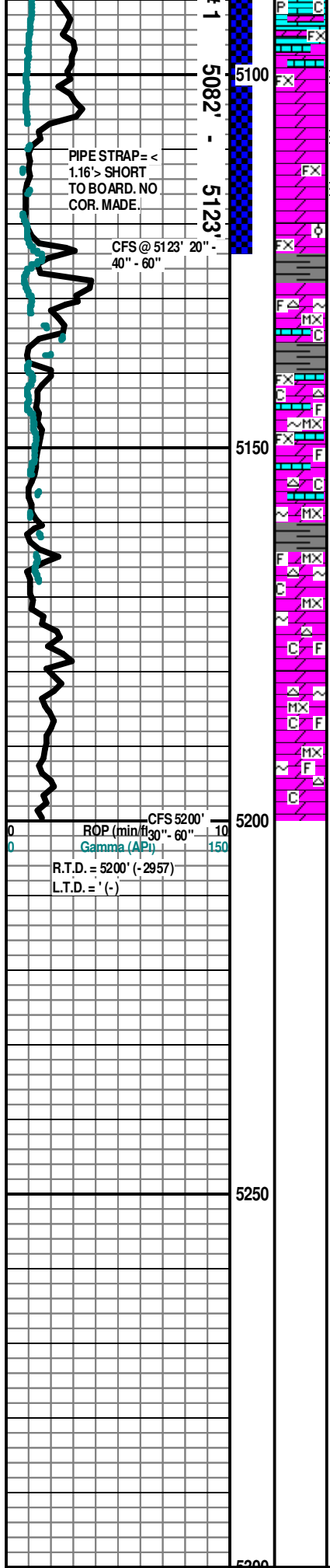
SH GAS KICK = 209 UNITS.

~ ~ DST # 1 ~ ~  
 (Mississippian Spergen)  
 Interval: 5082-5123' (.  
 Times: 5"- 60"- 90"- 120";  
 Blow: IF=Strong Blow  
 BOB/1". BOB Blow Back on  
 ISIP. FF= BOB with GTS @  
 58" - TSTM. BOB Blow Back  
 During FSIP.  
 Recovery: 4626' GIP :  
 433' TF: 433' GO (Sli  
 Mud & Wtr Out).

Scale Change  
 Pressures: 1,CS 600  
 IH = 2466#;  
 FH = 2437#;  
 IF = 51-54#;  
 FF = 101-132#;  
 ISIP = 1245#;  
 FSIP = False  
 (Leak in SI Tool).

Mudco Ck @ 5122' @ 7:00 AM 5/30/14 Vis 69; WT=9.4#; PV=18; YP= 20;





**SALEM (SPERGEN) 5196' (- 2853)**  
 20" CFS @ 5123' Dolo/Ls Wht-Crm-Tan FxIn Med-Good Pin-Pt IxIn "Salt & Pepper" Sucrosic Por (w/GSG & Tr SSO) (w/Gilisonitic Drk Blk Residue) Good Inc Odor (Both Gas & Oil Do Flor Lt Grn & Oil is Transp/Clear) Fair Scat Drk Blk Stn Med Flor (25% of Tray) Med-Good SG & SSO

**SALEM (SPERGEN) Ø 5106' (- 2863)**  
 40" CFS @ 5123' Dolo/Ls Tan-Crm-Wht FxIn Med-Good Pin-Pt IxIn "Salt & Pepper" Sucrosic Por (w/GSG & SFO) Soft Strong Odor (Both Gas & Oil Do Flor (Lt Grn) & Oil is Transp/Clear/Lt Brn) Good Scat Lt Brn Stn Med-Good Flor (60% of Tray) Good SG & SFO

60" CFS @ 5123' Dolo/Ls Tan-Crm-Wht FxIn Poor OOL Por (w/Small OOL in pl) No-Poor Dissolu Med-Good Pin-Pt IxIn "Salt & Pepper" Sucrosic Por (w/GSG & GSFO) Soft Strong Odor (Both Gas & Oil Do Flor (Lt Grn) & Oil is Transp/Clear/ Lt Brn) Good Scat Lt Brn Stn Med-Good Flor (80% of Tray) Good SG & GSFO

**MISS. WARSAW 5142' (- 2899)**  
 Dolo/Ls Crm-Tan-Lt Gry-Gry FxIn-MicroIn Dns Micritic Grad Poor-Fair Pin-Pt IxIn Gran Por (w/Glacu Inklus) Cht Wht (w/Fos Inklus) Translu-Op Shp Vit Chalk Sh Blk Carb-Char-Gry Fissil No Odor No Flor No Stn NS

Dolo/Ls Lt Gry-Gry-Crm-Tan FxIn-MicroIn Dns Micritic Grad Poor-Fair Pin-Pt IxIn Gran Por (w/Glacu Inklus) Cht Wht (w/Fos Inklus) Translu-Op Shp Vit Chalk Sh Char-Gry-Blk Carb Fissil No Odor No Flor No Stn NS

Dolo/Ls Lt Gry-Gry-Crm-Tan FxIn-MicroIn Dns Micritic Grad Poor Pin-Pt IxIn Por (w/Glacu Inklus) Cht Wht-Yell Translu-Op Shp Vit ChalkSh Char-Gry-Blk Carb Fissil No Odor No Flor No Stn NS

Dolo Gry-Crm MicroIn Dns Micritic Grad Poor Pin-Pt IxIn Por (w/Glacu Inklus) Cht Wht-Gry (w/Fos Inklus) Translu-Op Chalky Sh Char-Gry Fissil No Odor No Flor No Stn NS

30" CFS @ 5200' Dolo Lt Gry-Gry-Crm MicroIn Dns Micritic Grad Poor-Fair Pin-Pt IxIn Granular Por (w/Glacu Inklus) Cht Wht-Translu (w Fos Inklus) Chalk Sh Char-Gry-Blk Carb-Maroon Fissil No Odor No Flor No Stn NS

60" CFS @ 5200' Dolo Lt Gry-Gry-Crm MicroIn Dns Micritic Grad Poor-Fair Pin-Pt IxIn Granular Por (w/Glacu Inklus) Cht Wht-Translu (w Fos Inklus) Chalk Sh Char-Gry-Blk Carb-Maroon Fissil No Odor No Flor No Stn NS

Weatherford Electric Wireline Logs Run : Dual Induction, Compensated Density-Neutron Logs & Microresistivity.

Geologist left Location at: 12:15 PM on 5/31/2014

