



# MUSTANG

## ENERGY CORPORATION

Scale 1:240 Imperial

Well Name: DECHANT BROTHERS #2  
Surface Location: NE SW NW SW Sec. 2 - 20S - 22W  
Bottom Location:  
API: 15-135-259891-00-00  
License Number: 33922  
Spud Date: 9/29/2015 Time: 1:45 AM  
Region: NESS COUNTY KANSAS  
Drilling Completed: 10/5/2015 Time: 12:34 AM  
Surface Coordinates: 1870' FSL & 530' FWL  
Bottom Hole Coordinates:  
Ground Elevation: 2254.00ft  
K.B. Elevation: 2262.00ft  
Logged Interval: 0.00ft To: 0.00ft  
Total Depth: 4500.00ft  
Formation: BASIL PENNSYLVANIAN SAND  
Drilling Fluid Type: FRESH WATER / CHEMICAL GEL

### OPERATOR

Company: MUSTANG ENERGY CORPORATION  
Address: P.O. BOX 1121  
HAYS, KS 67601

Contact Geologist: ROD BRIN  
Contact Phone Nbr: (785) 623-0533  
Well Name: DECHANT BROTHERS #2  
Location: NE SW NW SW Sec. 2 - 20S - 22W  
API: 15-135-259891-00-00  
Pool:  
State: KANSAS  
Field: SCHWEIN NORTHEAST  
Country: USA

### SURFACE CO-ORDINATES

Well Type: Vertical  
Longitude: -99.7301393  
Latitude: 38.3396855  
N/S Co-ord: 1870' FSL  
E/W Co-ord: 530' FWL

### LOGGED BY



Company: BIG CREEK CONSULTING, INC.  
 Address: 1909 MAPLE  
 ELLIS, KS 67637

Phone Nbr: (785) 259-3737  
 Logged By: GEOLGIST

Name: JEFF LAWLER

**CONTRACTOR**

Contractor: DISCOVERY DRILLING  
 Rig #: 3  
 Rig Type: MUD ROTARY  
 Spud Date: 9/29/2015  
 TD Date: 10/5/2015  
 Rig Release:

Time: 1:45 AM  
 Time: 12:34 AM  
 Time:

**ELEVATIONS**

K.B. Elevation: 2262.00ft  
 K.B. to Ground: 8.00ft  
 Ground Elevation: 2254.00ft

**NOTES**

**WELL COMPARISON SHEET**

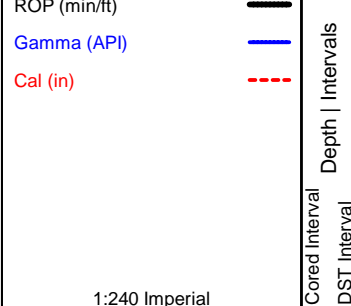
FORMATION	DECHANT BROTHERS #2				DECHANT BROTHERS #1				MUSTANG ENERGY CORP.				MUSTANG ENERGY CORP.				REACH PETR. GROUP				LEBEN DRILLING, INC. & SUNRAY			
	KB		GL		KB		GL		KB		GL		KB		GL		KB		GL		KB		GL	
	2262		2254		2257		2257		2265		2265		2285		2285		2274		2274		2274		2274	
	LOG TOPS		SAMPLE TOPS		LOGS		LOGS		LOGS		LOGS		LOGS		LOGS		LOGS		LOGS		LOGS		LOGS	
DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	LOG CORR.	SMPL. CORR.	DEPTH	DATUM	LOG CORR.	SMPL. CORR.	DEPTH	DATUM	LOG CORR.	SMPL. CORR.	DEPTH	DATUM	LOG CORR.	SMPL. CORR.	DEPTH	DATUM	LOG CORR.	SMPL. CORR.	
ANHYDRITE TOP		1503	759	1517	740		+ 19	1501	764		- 5	1516	769		- 10									
BASE		1538	724	1551	706		+ 18	1506	759		- 35													
HEEBNER SHALE		3758	-1496	3764	-1507		+ 11	3743	-1478		- 18	3762	-1477		- 19	3760	-1486		- 10					
TORONTO		3773	-1511					3762	-1497		- 14					3770	-1496		- 15					
LKC		3812	-1550	3813	-1556		+ 6	3793	-1528		- 22	3812	-1527		- 23	3850	-1576		+ 26					
MUNCIE CREEK		3970	-1708					3948	-1683		- 25													
STARK SHALE		4074	-1812					4051	-1786		- 26													
BKC		4131	-1869	4131	-1874		+ 5	4111	-1846		- 23	4159	-1874		+ 5									
PAWNEE		4244	-1982	4238	-1981		- 1	4226	-1961		- 21	4241	-1956		- 26									
FT. SCOTT		4313	-2051	4318	-2061		+ 10	4303	-2038		- 13	4321	-2036		- 15	4313	-2039		- 12					
CHEROKEE SHALE		4336	-2074	4343	-2086		+ 12	4326	-2061		- 13	4344	-2059		- 15	4337	-2063		- 11					
BASIL CHEROKEE SAND				4390	-2133			4362	-2097															
MISSISSIPPIAN		4437	-2175	4460	-2203		+ 28	4415	-2150		- 25													
MISSISSIPPIAN OSAGE												4420	-2135			4432	-2158							
GILMORE CITY		4490	-2228					4471	-2206		- 22					4558	-2284		+ 56					
VIOLA																4616	-2342							
SIMPSON																4774	-2500							
ARBuckle																4836	-2562							
TOTAL DEPTH		4500	-2238	4511	-2254		+ 16	4503	-2238		+ 0					4842	-2568		+ 330					

**ROCK TYPES**

- Lmst fw7> shale, gry
- Carbon Sh shale, red
- Shcol

**OTHER SYMBOLS**

- MISC**
- Daily Report
- Digital Photo
- Document
- Folder
- Link
- Vertical Log File
- Horizontal Log File
- Core Log File
- Drill Cuttings Rpt
- DST**
- DST Int
- DST alt

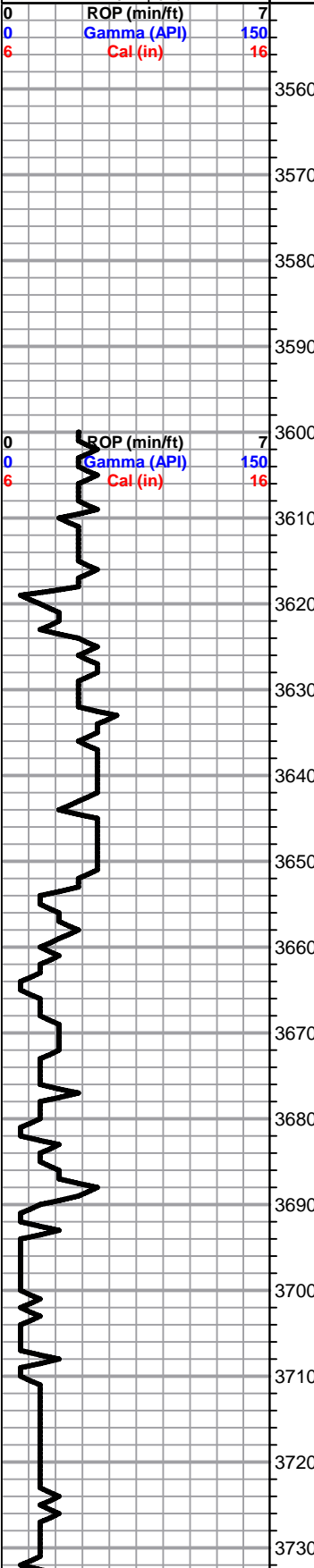


Lithology

Oil Show

Geological Descriptions

1:240 Imperial



DST

1:240 Imperial

**1' DRILL TIME THROUGH ANHYDRITE FROM 1480' - 1530'**  
**1' DRILL TIME FROM 3600' - RTD**  
**10' WET/DRY SAMPLES FROM 3650' - RTD**

**GEOLOGICAL SUPERVISION BY JEFF LAWLER FROM 3600' - RTD**

**8 5/8" SURFACE PIPE SET @ 221' SURVEY 3/4 dgr.**

**ANHYDRITE TOP 1503' (+759) E-LOG**  
**ANHYDRITE BASE 1538' (+724) E-LOG**

Lm- Tan Cream, VF-FXLN, fsl & oolitic, poorly dev. w/ dense XLN & micro XLN porosity, much loosely cemented mud supported matrix w/ no vis. porosity, barren

Sh- Black Maroon, fissile & carbonaceous, gritty & earthy

Lm- Cream Tan, VF-FXLN, dense, well cemented & poorly dev. oolitic Ls w/ dense micro XLN & XLN porosity, sctrd reXLN secondary porosity

Lm- Cream Buff, VFXLN, dense, well cemented & tight w/ min. vis. porosity

Lm- Cream Off White, FXLN, fsl & oolitic, mod. well dev. massive w/ dense XLN porosity, sctrd reXLN veins & secondary porosity, barren, much soft white chalk

Lm- A/A w/ black & gray fsl sl unconsolidated chert/cherty Ls w/o vis. porosity

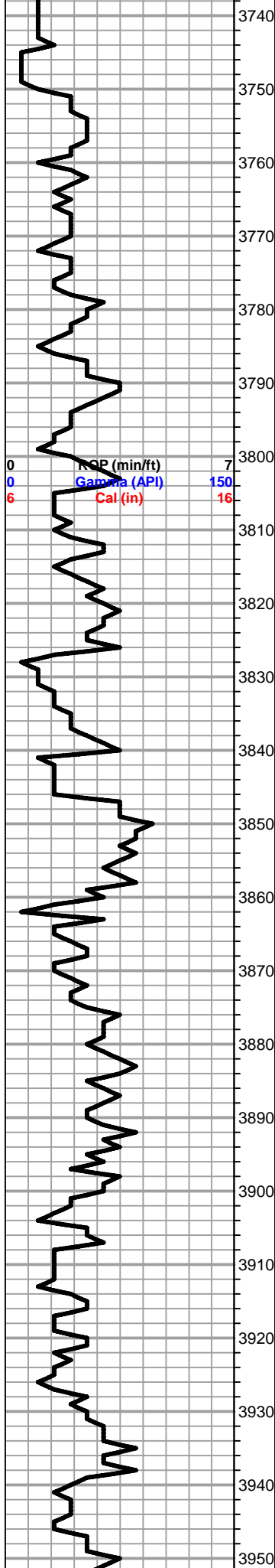
Lm- Cream Tan, FXLN, fsl w/ sctrd XLN porosity & few dense well cemented VFXLN w/ min. vis. porosity

Lm- Cream Off White, FXLN, fsl w/ sctrd XLN porosity, heavily mottled

Lm- Cream Buff, Vf Grn, dense, mud supported matrix & soft white chalk, sl unconsolidated, poor vis. porosity, barren

Lm- Cream Tan, Vf Grn VFXLN, dense tight mix of chalky mud supported matrix, loosely cemented & crumbly and poorly dev. sl fsl w/ sctrd XLN porosity, some soft white chalk

1:240 Imperial



Lm- Cream Off White, FXLN, fsl & few oomoldic pcs, mod. dev. w/ partial to full skeletal dissolution, poor intervugular connectivity, sctrd XLN porosity, barren

**HEEBNER 3758' (-1496) E-LOG** Sh- Black Gray Maroon, fissile & carbonaceous, silty & semi-calcareous, girty & earthy

**TORONTO 3773' (-1511) E-LOG** Lm- Gray Buff, VF-FXLN, dense, well cemented sl dolomitic Ls w/ sctrd micro to poor vis. porosity, some loosely cemented & chalky in part

Lm- Cream Off White, VF-FXLN, sl fsl, mostly tight & poorly dev. w/ micro XLN & XLN porosity, barren

**LKC 3812' (-1550) E-LOG** Lm- Cream Off White, FXLN, fsl, poorly dev., some loosely cemented & crumbly, poor vis. to sctrd XLN porosity, some soft white chalk

Lm- Cream, VFXLN, dense, well cemented tight w/ micro XLN porosity, vry clean & barren

Sh- Gray Mint Green, dense & waxy, soft & waxy

Lm- Tan Cream Off White, VF-FXLN, mix of tight, well cemented sl fsl w/ min. vis. porosity & mod. dev. semi-cherty Ls w/ sctrd ppt porosity, all vry clean & barren

Lm Cream Off White, FXLN, massive, fsl & oolitic w/ dense clear replacement cementation, dense XLN porosity, few pcs of fsl chert & much soft white chalk

Lm- Cream Off White, FXLN, oolitic, sctrd dev. w/ XLN & rare ppt inter oolite porosity, barren, much sctrd reXLN

Sh- Maroon Gray Lm Green, gritty & earthy, dense & waxy, silty & soft

Lm- Cream Off White, FXLN, massive, oolitic/oomoldic, poor vugular dev. dense XLN porosity & clear replacement cementation, barren

Lm- Cream, VF-FXLN, dense, well cemented, fsl & poorly dev. w/ sctrd XLN porosity & med XLN reXLN secondary porosity, barren

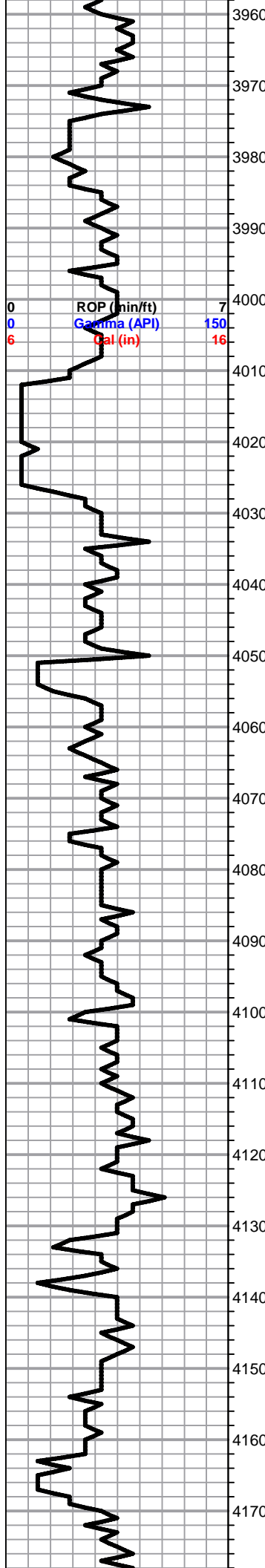
Lm- Cream Tan, FXLN, fsl & oolitic w/ sctrd clear replacement cementation, XLN porosity, barren, some loosely cemented & chalky in part

Lm- Cream Off White, VF-FXLN, mix of massive oolitic Ls w/ mostly clear replacement cementation & fsl near porcelain like cherty Ls w/o vis. porosity, barren

Lm- Cream Off White, VFXLN, dense, well cemented, poorly dev. & mostly tight w/ sctrd reXLN, XLN porosity,

Lm- A/A w/ much soft white chalk

Lm- Cream Buff, FXLN, fsl & sl oolitic, poorly dev. w/ sctrd XLN porosity, vry clean &



barren

Sh- Black Brown, fissile & carbonaceous, gritty & earthy

Sh- Maroon Gray Lm Green, gritty & earthy, silty & fsl, dense & waxy

Lm- Gray Buff, FXLN, dense, well cemented, poorly cemented & mostly tight w/ sctrd XLN porosity

Chert- Golden Brown, fsl fresh bedded vitreous chert w/o vis. porosity

Lm- Cream Off White, VFXLN Vf Grn, dense tight mix of gritty dolomitic Ls w/ micro XLN porosity & soft white chalk

Lm- Cream, FXLN, mod. dev. oolitic/oomoldic w/ sctrd vugular porosity, sctrd partial to full skeletal dissolution, no inter vugular connectivity, barren

Lm- Tan Cream, VF-FXLN, dense, well cemented, poorly dev. sl oolitic Ls w/ micro XLN porosity, tight

Sh- Gray Maroon, dense & waxy, gritty & earthy

Lm- Cream Off White, FXLN, oolitic/oomoldic, sctrd partial skeletal dissolution & partial vugular porosity, several pcs of golden brown & white fresh bedded chert w/o vis. porosity

Lm- Tan Cream, VFXLN, dense, well cemented, tight w/ min. vis. porosity

**STARK SHALE 4074' (-1512) E-LOG** Sh- Black Gray Maroon, fissile & carbonaceous, silty & gritty, gritty & earthy

Lm- Gray Buff, VFXLN, dense, mostly tight & well cemented, some sl fsl & trashy, all w/ poor vis. porosity, barren

Lm- A/A w/ some sl chalky in part, poor vis. porosity

Sh- Black Gray Maroon, fissile & carbonaceous, dense & waxy

Lm- Cream Off White, VF-FXLN, dense, sl fsl, poorly dev. w/ sctrd XLN porosity, some chalky in part and some soft white chalk

Lm- A/A

**BKC 4131' (-1869) E-LOG** Sh- Black Maroon Gray Brown, dense & carbonaceous, gritty & earthy, semi-waxy & pebbly, gritty & earthy

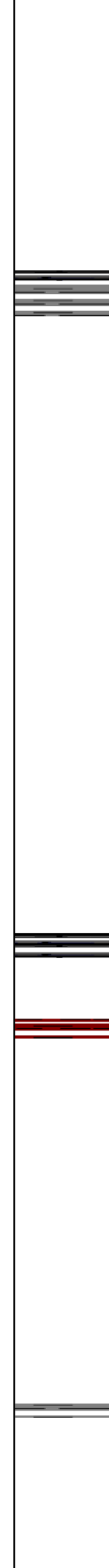
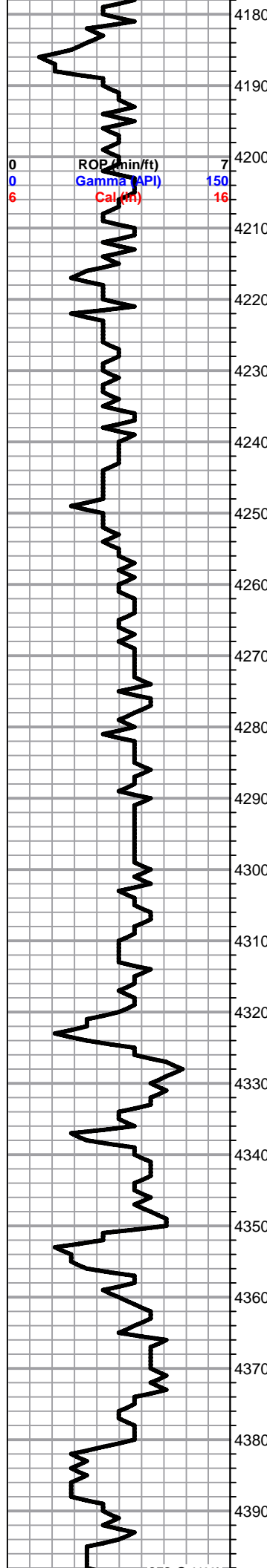
Lm- Tan Cream, FXLN, fsl, poorly dev., loosely cemented & crumbly w/ dense XLN porosity, some sl chalky in part

Sh- Maroon Gray, gritty & earthy, blocky & waxy

Lm- Off White, Vf Grn, dense, soft chalky & crumbly

Sh- Lt Gray, crumbly, sl pebbly, calcareous

Lm- Cream Buff. VFXLN. dense. well cemented & tight w/ min. vis. porositv



Sh- Gray Lm Green, dense & waxy, soft slivers

Sh- Gray Lm Green Maroon, silty & calcareous, arenaceous, pebbly & waxy, gritty & earthy

Lm- Cream Tan, VF-FXLN, mostly tight, sctrd to dense XLN porosity, some soft & chalky

Lm- A/A

Sh- Black Gray, waxy & carbonaceous, crumbly & arenaceous

Lm- Buff Cream, VFXLN, dense, well cemented & tight w/ min. vis. porosity, vry clean

**PAWNEE 4244' (-1982) E-LOG** Lm- Off White, Vf Grn, dense, loosely cemented mud supported matrix, vry clean & poor vis. porosity

Lm- Buff Cream, VFXLN, A/A w/ dense tight well cemented w/ min. vis. porosity

Lm- Buff, VFXLN, dense, well cemented, tight w/ min. vis. porosity

Lm- A/A

Lm- A/A w/ some soft loosely cemented buff/gray siltstone w/o vis. porosity

Lm- A/A

Sh- Black, fissile & carbonaceous

**FT SCOTT 4313' (-2051) E-LOG** Lm- Buff Cream, VFXLN, dense, well cemented & tight w/ poor vis. porosity, some soft white chalk

Lm- A/A, barren & tight

**CHEROKEE SHALE 4336' (-2074) E-LOG** Sh- Black Gray Maroon, fissile & carbonaceous, gummy argillaceous clumps, gritty & earthy

Chert/Lm- Semi-Translucent Golden Brown, sl fsl fresh bedded vitreous chert w/o vis. porosity, few pcs of unconsolidated arenaceous Ls spkld w/ glauconite, loosely cemented & crumbly, barren

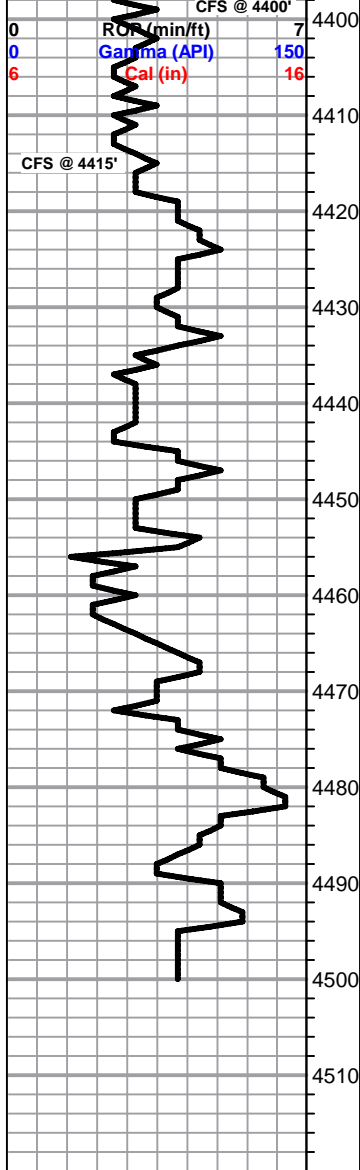
Sh- Gray, silty & soft, few calcareous pcs.

Lm- Tan Buff, VFXLN, dense, well cemented, tight w/ min. vis. porosity

Lm/Dol- mix of FXLN, sl fsl, poorly dev. w/ dense XLN porosity & spkld w/ pyrite, several pcs of VFXLN dolomitic Ls, well cemented w/ XLN porosity, barren, sl influx of white fresh bedded chert

Sh- Gray Maroon Black, argillaceous clumps & fsl carboaceous trashy shale

**4400' CFS 20"** - Cherty Congl- mustard yllw mix of fresh bedded & detritial white & yllw chert, arenaceous shale & (1 PCS) arenaceous Ls, mod. well cemented, dense XLN & sctrd fn ppt porosity, DRK STN, NSFO, NO ODR, BRT FLOR & IMMEDIATE STRM WET CUT



4400' 40" - Chert- Mustard Yellow/White, massive detrital chert, gritty no vis. porosity, few pcs w/ sl trace of Ca/Mg cementation, barren  
 60" - Chert- A/A  
 4415' 20" - Lm- Cream Off White, VF-FXLN, sl fsl, poorly dev. & loosely cemented, dense XLN porosity, some crumbly & chalky in part, barren  
 4415' 40" - Sh- Maroon Gray, argillaceous clumps, gritty & earthy, unconsolidated, pebbly and straighted  
 Lm Conglomerate- Buff w/ Red Shale, unconsolidated loosely cemented & crumbly w/ shale veins  
 Lm- Cream Off White Yellow, unconsolidated w/ some detrital chert incursions, some loosely cemented & crumbly, dense XLN porosity, some chalky arenaceous Ls w/ consistent intergranular porosity, all barren, unconsolidated & pebbly shale  
**MISSISSIPPIAN 4437' (-2175) E-LOG** Dolomite/Chert- Buff VFXLN, dense, well cemented dolomite w/ consistent XLN porosity, some sl chalky in part, vitreous fresh bedded off white chert w/o vis. porosity  
 Chert- White Salmon & Translucent, vitreous fresh bedded fsl chert w/o vis. porosity, several pcs of VFXLN dolomitic chert/cherty dolomite w/ micro XLN porosity, barren  
 Chert- Translucent White Salmon Mustard Yellow, vitreous fresh bedded, some fsl, no vis. porosity  
 Chert- A/A w/ white cream VFXLN dolomitic chert w/ poor vis. porosity, all vry clean and barren  
**GILMORE CITY 4490' (-2228)** Chert- Bone White, massive tripolitic chert w/ no vis. porosity, clena & barren

**RTD 4500' (-2238) LTD @ 12:34 10/4/2015**

SHORT TRIP  
 CTCH  
 SURVEY  
 TOH FOR LOG