

Covey

The Well Watchers

Scale 1:240 (5"=100') Imperial

Well Name: GRASSLANDS #1
Location: Section 8 - Township 12 South - Range 32 West
Licence Number: 15-109-21,031. 0000 Region: Logan County, KS.
Spud Date: 7 September 2011 Drilling Completed: 17 September 2011
Surface Coordinates: 1,860' FNL & 1,220' FEL , NE/4
(Approximately SW NW SE NE)

Bottom Hole
Coordinates:
Ground Elevation (ft): 3,009 K.B. Elevation (ft): 3,019'
Logged Interval (ft): 3,600' To: 4,720' Total Depth (ft): 4,720'
Formation: Stotler -----> Miss (St. Louis)
Type of Drilling Fluid: Chemical; Low Solids (non-dispersed)

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

OPERATOR

Company: NEW GULF OPERATING, LLC.
Address: 6310 East 102nd Street
Tulsa, Oklahoma 74137
(918) 728-3020
POC Geologist:
Joe Baker

GEOLOGIST

Name: Curtis Covey
Company: COVEY - The Well Watchers
Address: 6548 Bedford Circle
Derby, Kansas 67037
Office: (316) 776 - 0367 Cell: (316) 258-9976

KB: 3,019'

FORMATION TOPS

GL: 3,009'

Formation	Rotary Sample Depth (Datum)	E-log Depth (Datum)
Anhydrite	2,541' (+478')	2,543' (+476')
B / Anhydrite	2,564' (+455')	2,564' (+455')
Stotler	3,622' (-603')	3,626' (-607')
Topeka	3,752' (-733')	3,754' (-735')
Heebner Shale	3,976' (-957')	3,978' (-959')
Lansing	4,027' (-1,008')	4,018' (-999')
Muncie Creek SH	NC	4,168' (-1,149')
Stark SH	NC	4,246' (-1,227')
B / KC	4,330' (-1,311')	4,332' (-1,313')
Pawnee LS	4,454' (-1,435')	4,460' (-1,441')
Cherokee Sh	4,535' (-1,516')	4,538' (-1,519')
'Johnson' Zone	4,568' (-1,549')	4,572' (-1,553')
Morrow SH	4,606' (-1,587')	4,610' (-1,621')
Miss (Erosional)	4,635' (-1,616')	4,640' (-1,621')
Miss (Lithological)	4,649' (-1,630')	4,654' (-1,635')

Loggers:

Superior Well Services - Hays, Kansas

RTD: 4,720' LTD: 4,724' ATD: 4,724'

E-log is 0' - 2' high to rotary sample depth, uphole.

E-log is 3' - 4' high to rotary sample depth, mid- & down hole sample logged interval.

DST #1 - LANSING

Rotary Depth: 4,070' - 4,126'
 Logger's Depth: 4,073' - 4,129'

Recovery: 690' Muddy Wtr (2%M, 98%W)
 Gas bubble in wtr - gone by grind
 Total Fluid: 690'

Recovery Water: (59,000 ppm)
 System Water: (2,400 ppm)

IFP: 23# - 134# / 30"
 ISIP: 1,137# / 45"
 FFP: 147# - 327# / 60"
 FSIP: 1,137# / 90"
 120 deg F
 MH: 1,964# - 1,962#

IF: BOB in 11 minutes.
 ISI: No Blow back.
 FF: BOB in 14.5 minutes.
 FSI: No Blow Back.

Recovery Water (Engineer):
 (51,000 ppm)
 Reported Rw =
 0.18 ohms @ 55 deg F

Diamond Testing ... Hoisington, KS.

DST #2 - 'JOHNSON' ZONE

Rotary Depth: 4,530' - 4,600'
 Logger's Depth: 4,534' - 4,604'

Recovery: 2,103' Muddy Water (2%M, 98%W)
 Gas bubble in wtr - gone by grind

Recovery Water: (29,000 ppm)
 System Water: (3,200 ppm)

IFP: 93# - 684# / 30"
 ISIP: 1,089# / 45"
 FFP: 700# - 958# / 63"
 FSIP: 1,088# / 45"
 115 deg F
 MH: 2,207# - 2,206#

IF: BOB in 2 minutes.
 ISI: No Blow back.
 FF: BOB in 2-1/4 minutes.
 FSI: No Blow Back.

Recovery Water (Engineer):
 (13,000 ppm)
 Reported Rw =
 0.29 ohms @ 59 deg F

Diamond Testing ... Hoisington, KS.

2011 DAILY DRILLING STATUS -- SEPTEMBER 2011

	12-1/4" Hole	7-7/8" Hole	7-7/8" Hole
7 Sept	--- Spud @ 6pm. Drill to 268'. Run 8-5/8" casing (23#) Set casing @ 267'.	8 Sept --- WOC. 6:30am @ 268'. Under surface casing @ 4:15pm.	15 Sept --- 6:30am @ 4,383'. Work on Mud Pump.
8	--- Cemented w/ 200 sx Class A (2% Gel + 3% CC). [Allied] Cement did circulate. Plug down @ 1:45am. WOC.	9 --- 6:30am @ 1,415'. 10 --- 6:30am @ 2,420'. 11 --- 6:30am @ 3,080'. Displace Mud @ 3,402'. 12 --- 6:30am @ 3,545'. 13 --- 6:30am @ 4,040'. Start and 14 --- Finish DST #1: Lansing (4,070'-4,126'). 6:30am @ 4,126'. Resumed Drilling @ 8:30am. Drill to 4,383' ... T/O 4 rows ... Work on Mud Pump.	16 --- Start 6:30am @ 4,600'. Finish DST #2: Johnson Zone (4,530'-4,600') Resumed Drilling @ 9:08am. 17 --- RTD *4,720') @ 3:30am. E-Log. [Superior Well Services]

HOLE DEVIATION 268' - 4,720')

DEPTH / TVD	--- INCLINATION	AZIMUTH	NORTH	SOUTH	EAST	WEST	DOGLEG deg/100'
268' /	--- 0.50 (Surface)						
1,197' /	--- 0.75						
2,191' /	--- 1.25						
3,191' /	--- 1.00						
4,122' /	--- 1.00 (DST #1)						
4,600' /	--- 1.00 (DST #2)						
4,720' /	--- 1.00 (RTD)						

STRAP @ DST #1

Board: 4,130.01'
 Strap: 4,137.37'
 Diff: 7.36'

CONTRACTOR

VAL Energy --- Rig #4

10,500 E. Berkeley Square Parkway, Suite 1000
Wichita, Kansas 67230
Office: (316) 636-2090

Rig #4 - (620) 617-2793

Larry Hinderliter - (620) 804-0097

Pump: National K-500A
6" x 15" @ 58 SPM.
800-950 PSI @ Standpipe.

Uphole Hole:
WOB 35M @ 80 RPM.

After Mudup / Main Hole:
WOB 38M @ 75 RPM.

Drill Collars: 6-1/8" x 2.50" --- 524'. (83.5#/ft)
Dry Collar Weight: 45,754#
(@ 8.8 ppg / Buoyancy Factor 0.866)
Bouyancy Collar Weight: 37,891#
Design Factor: 15%, therefore:
available WOB is 32,207#
Drill Pipe: 4-1/2"XH. (16#/ft - used)

BIT RECORD

DATE	SIZE	TYPE	JET SIZE	DEPTH IN / OUT	CUM. FT.	HOURS	ROP
7 Sept 2011	12-1/4"	REED RR	3 / 15's	0' / 268'	268'	1.75	153.1
8 Sept 2011	7-7/8"	JZ QX-21S	13 - 14 - 13	268' / 4,600'	4,332'	109.50	39.6
16 Sept 2011	7-7/8"	JZ QX-29SX	13 - 14 - 13	4,600' / 4,720'	120'	5.25	22.9

ROCK TYPES

POROSITY

- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

LITHOLOGY

- Anhy
- Bent
- Brec
- Cht
- Clyst
- Coal
- Granite wash
- Congl
- Dol lmst
- Silty dol

- Calc dol
- Dol 2
- Dol
- Gyp
- Igne
- Lmst 2
- Lmst
- Meta
- Mrlst
- Salt
- Shale 3
- Shale
- Shcol
- Shgy
- Sltst
- Ss
- Till
- Ss 2

MINERAL

- Mica
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl

- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Copper
- Ooliticastic
- Ooloid
- Oolite
- Sucrosic
- Dark specks

STRINGER

- Calc dol
- Silty dol
- Anhy

- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Calc dol
- Sltstrg
- Ssstrg
- Chalk
- New symbol
- SHOW
- Oil
- Spotted
- Ques
- Dead
- Gas
- Oil/gas
- Bed contact

ACCESSORIES

FOSSIL

- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Spore
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro

- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom

MINERAL

- Mica
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Breclrag

- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos

- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Copper
- Ooliticastic
- Ooloid
- Oolite
- Sucrosic
- Dark specks

- STRINGER**
 Calc dol

- Silty dol
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Calc dol
- Sltstrg
- Ssstrg
- Chalk
- New symbol

OTHER SYMBOLS

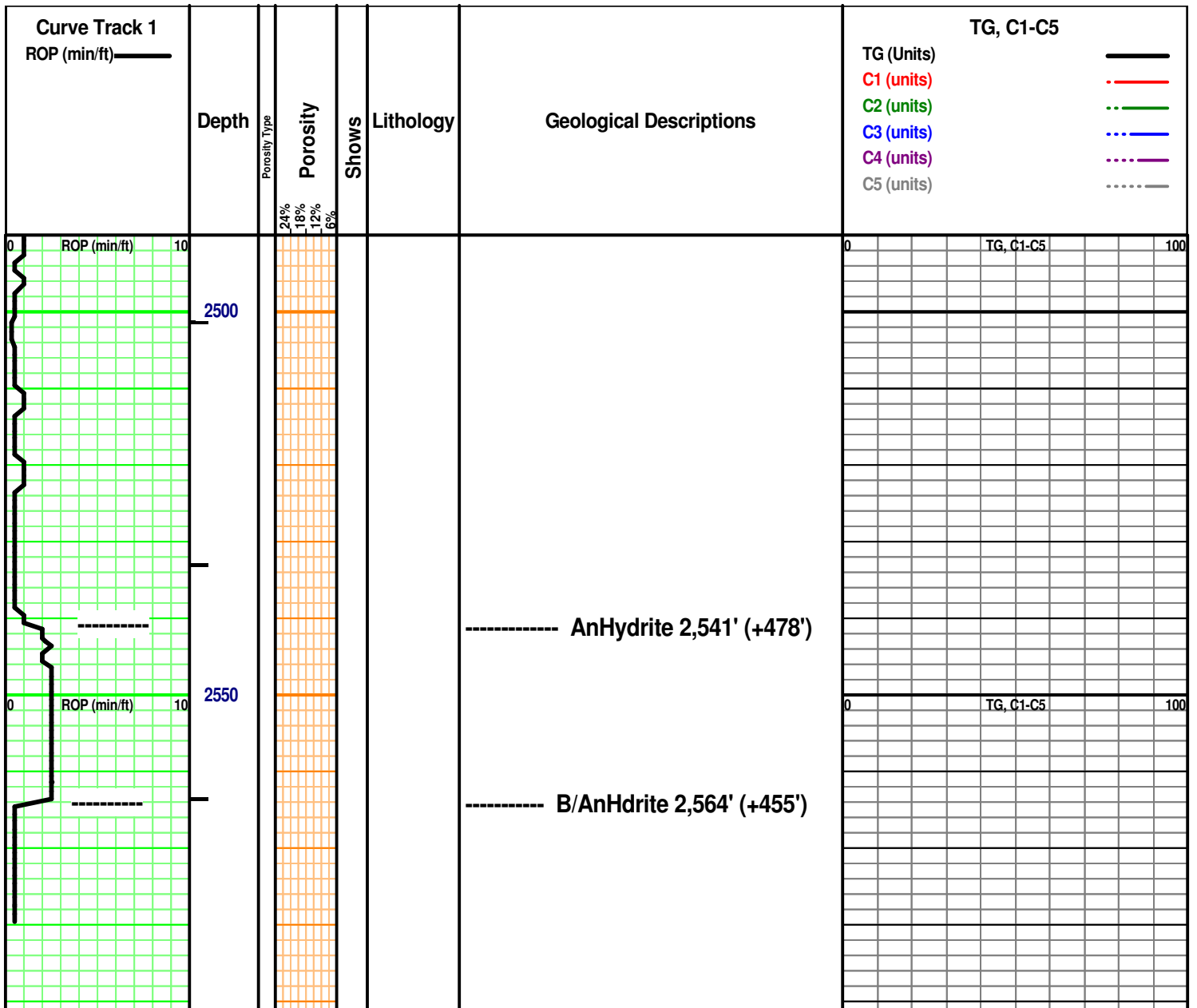
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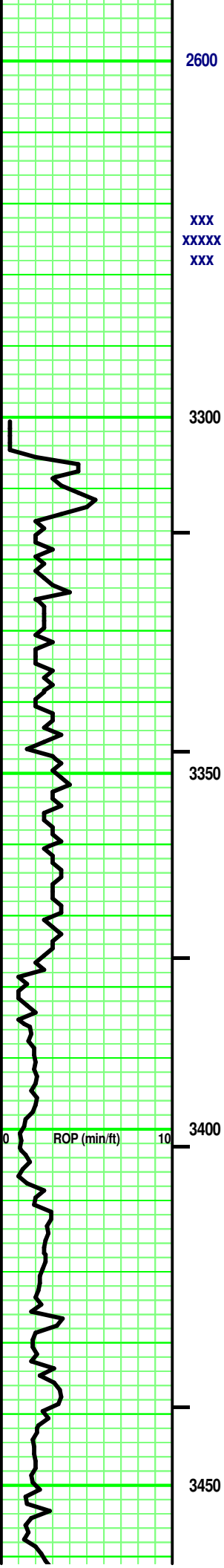
- Lost circluation
- Circulate for same

- Circulate for same
- Rtd
- Trip

- Connection
- Rft

- Sidewall





2600

XXX
XXXXX
XXX

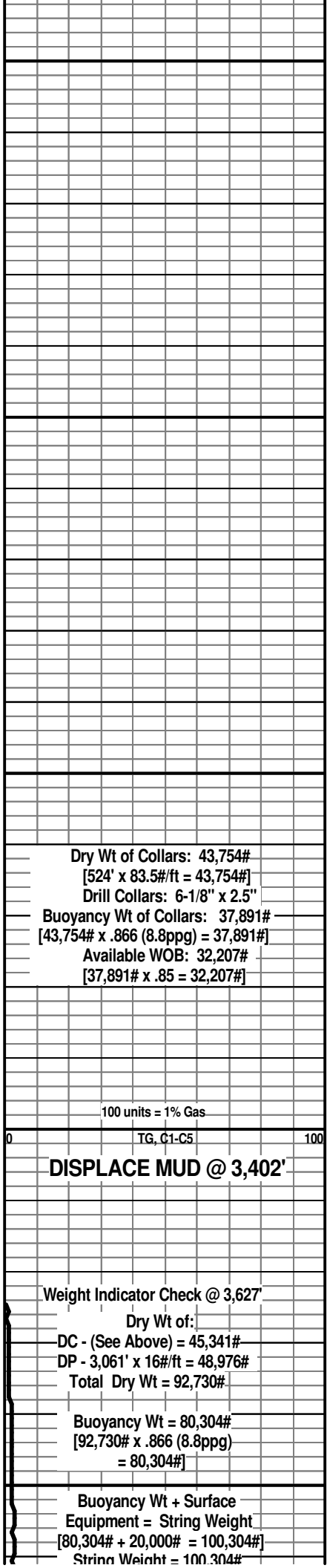
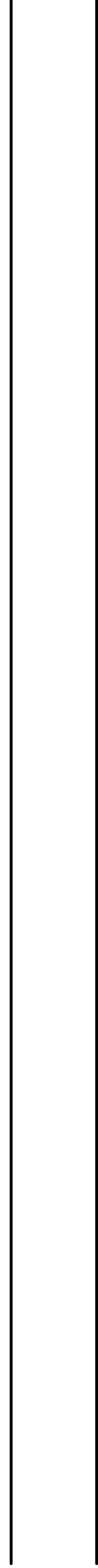
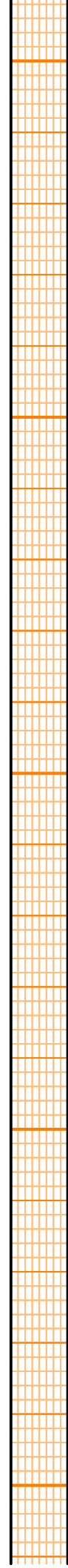
3300

3350

3400

3450

0 ROP (min/ft) 10



Dry Wt of Collars: 43,754#
 [524' x 83.5#/ft = 43,754#]
 Drill Collars: 6-1/8" x 2.5"
 Buoyancy Wt of Collars: 37,891#
 [43,754# x .866 (8.8ppg) = 37,891#]
 Available WOB: 32,207#
 [37,891# x .85 = 32,207#]

100 units = 1% Gas

TG, C1-C5

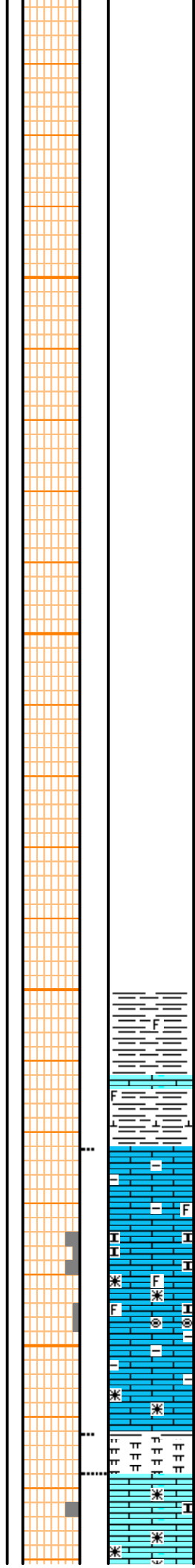
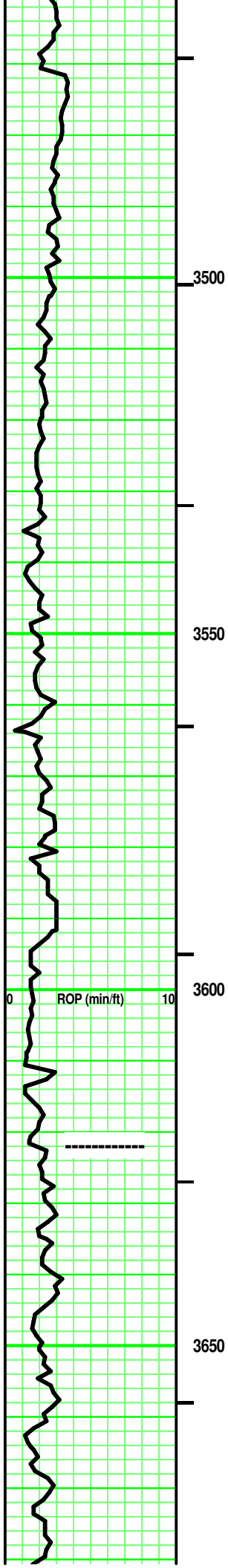
DISPLACE MUD @ 3,402'

Weight Indicator Check @ 3,627'

Dry Wt of:
 DC - (See Above) = 45,341#
 DP - 3,061' x 16#/ft = 48,976#
 Total Dry Wt = 92,730#

Buoyancy Wt = 80,304#
 [92,730# x .866 (8.8ppg)
 = 80,304#]

Buoyancy Wt + Surface
 Equipment = String Weight
 [80,304# + 20,000# = 100,304#]
 String Weight = 100,304#



Interbedded SH & LS

SH - Lt & Med Gray. tr Tannish Gray to rare Brownish Gray. tr limy streaks. some calc in part. rare fossil frag. soft.

LS - Tan/ tr Pale Gray, some Lt Gray. Sing. XF-/ Micro-xln. xln por. tr subchalky in part. tr argil in part. misc fossil frags & micro-Oolites. partly Firm. No/ tr vis por.

MARL - Grays. Hi argil/shaly at top. soft.

Interbedded SH & LS
 SH - Lt & Med Gray. tr/ some Tannish Gray. tr/ some limy streaks. some calc in part. soft.
 LS - Tans / tr Pale to Lt Grays. Sing. XF-/ some

Weight Indicator shows 100M; therefore, weight indicator is okay.

Vis: 56
 Wt: 8.6
 LCM: 1#

Contractor reports running 38M# on bit by WI and has actually 38M# WOB.
 -vs-
 Calculated available WOB of 32,207#.

Vis: 51
 Wt: 8.8
 LCM: 2#

How Wire Calibration Check

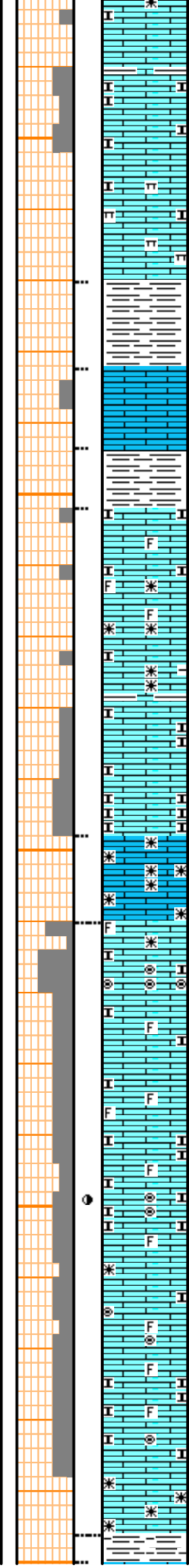
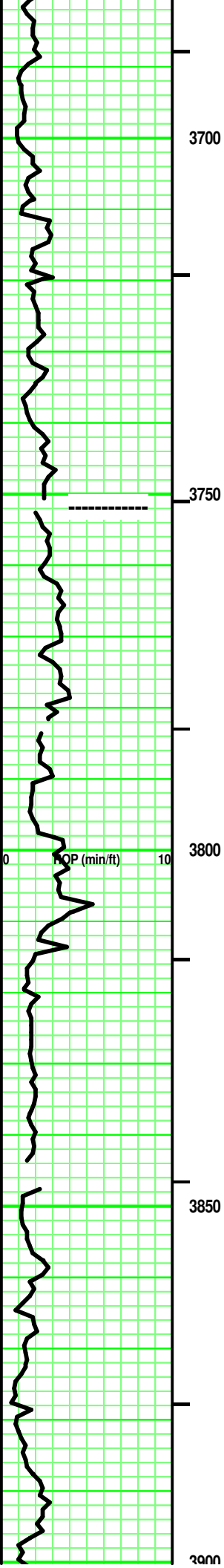
3,564' -
 Vis: 52 Wt: 8.8
 Wtr Loss: 7.6
 PV: 14 YP: 17
 Gels: 10/18
 pH: 11.0
 LCM: 2#
 Cl (60) Ca (tr)
 Solids: 3.1%

100 units = 1% Gas
 TG, C1-C5

Chromatograph Calibration Check

Vis: 53
 Wt: 8.7
 LCM: 2#

-- STOTLER
 3,622' (-603')



LS - Tans/ tr Pale to Lt Grays. Sing. XF/ some Micro-xln. xln por. rare Re-xln. tr argil in part. subchalky & marly in part and intermixed. No/ tr vis por.

SH - Lt/ Med Gray. Sing. highly limy (Tannish & Pale Gray) to LS stringers (Tan, Micro-xln).

LS - Grays/ Tans. Sing/ some to mostly Mot. XF-/ mostly Micro-xln. xln por. some to lots of subchalky/ chalky. tr/ fair fossil frags in part. some intermixed/ interbedded argil or shale (Med/Dark Gray). Firm. No/ tr vis por.

LS - Tans. Mot. XF-xln. xln por. Re-xln. Firm. No/ tr vis por.

Intermixed & Interbedded:
 LS - tr Pale/ mostly Lt/ rare Med Gray, Tans. tr Tannish Pale Gray. some Sing/ mostly Mot. VF-/ XF-/ Micro-xln. xln por. some subchalky/ marly. argil/shaly. rare/ tr fossil frags. partly Firm. No/ tr/ rare Fair vis por.

LS - Lt/ Med Tan. Sing. XF-/ Micro-xln. xln por. some Re-xln. some argil/shaly in part. Firm. No/ tr vis por.

Add: Tan. Sing. Chalky. tr Oolites frags. Friable. No/ tr vis por. Spotted Med Brown stain (along chalk fracture facies). Nothing else.

SH - Grays. Sing. tr calc to limy in part. some Firm. Blocky.

Add: VF Oolites/ Oolcasts. Clear/ Lt Tan, semitransparent Matrix.

SH - Med Gray. Sing. soft.

Vis: 54
 Wt: 8.8
 LCM: 3#

Vis: 54
 Wt: 8.8
 LCM: 2#

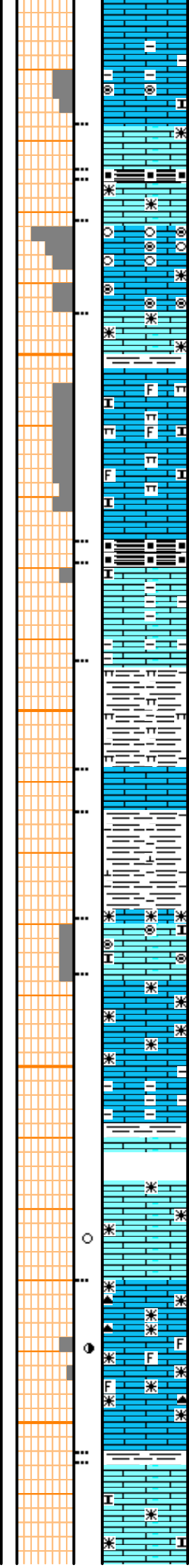
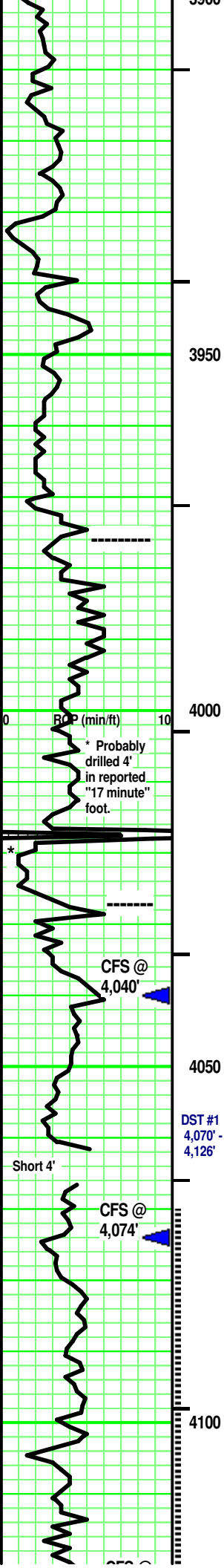
-- TOPEKA
3,752' (-733')

Vis: 54
 Wt: 8.8
 LCM: 2#

100 units = 1% Gas
 TG, C1-C5 100

Vis: 53
 Wt: 8.8
 LCM: 2#

Vis: 55
 Wt: 9.0
 LCM: 2#



LS - Tans/ tr Lt Gray. Sing. XF-/ some Micro-xln. xln por. tr Re-xln. some 'ghost' Micro-Oolites in subchalky matrix. Friable in part. mixture of No/ tr and Fair vis por.

LS (1) - Tan. Sing. Micro-xln. xln por. tr Re-xln. Firm. No/ tr vis por.

SH - Black. Sing. Carb. Soft. LS - similar to LS (1) above.

LS - Tan/ Tannish Off White tr XF/ mostly Micro-Oolites/ Micro-Oolitic. some fossil hash. Clear/ to semi-transparent matrix. Friable. Good vis por.

LS - Tan. Sing. Micro/ Crypto-xln. xln por. Dense. No vis por.

SH - Lt/ Med Gray. Sing. ductile to Firm.

LS - Tans/ some Pale Lt Gray, tr Off White. Sing/Mot. Micro-xln. xln & some part por. Subchalky. some fossil frags. some argil. tr marly in part. Friable. Tr/ Fair vis por.

SH - Black. Sing. Carb. Soft. LS - Lt Gray. Sing. Micro-xln. xln por. rare subchalky. No/ tr vis por.

SH - Med Gray. Sing. Hi marly. Firm. Massive.

LS - Off White/ Tan. Sing/ tr Mot. Micro- xln. xln por. mostly Firm. No/ tr vis por

SH - Lt Gray. Sing. tr calc.

LS - Off White/ Tan. Sing/ tr Mot. Micro-xln. xln & tr Vuggy por. [some VF Oolites in part, Off White. Clear/ Pale Tan, semitransparent Matrix. Friable. Tr vis por.] some Re-xln. rare subchalky in part. mostly Firm. No/ tr vis por.

LS - Tans/ tr Lt Gray with depth. Sing/ tr Mot. XF-/ some Micro-xln. xln por. tr Re-xln. Firm at top. No/ tr vis por.

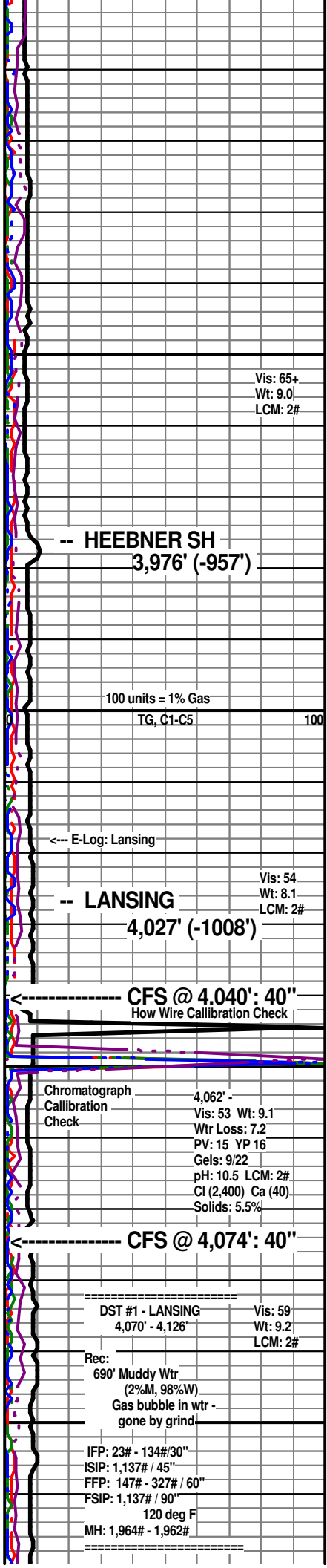
SH - Med Gray. Sing. tr calc.

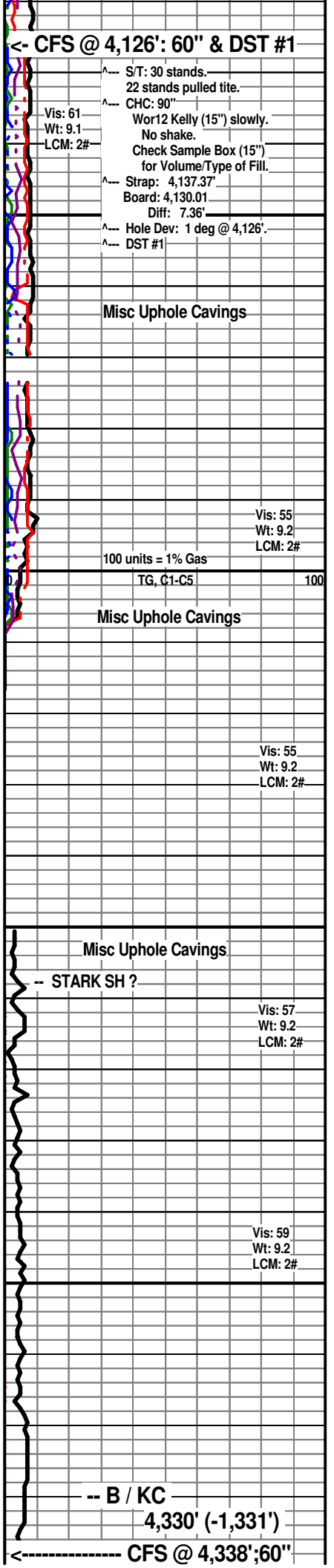
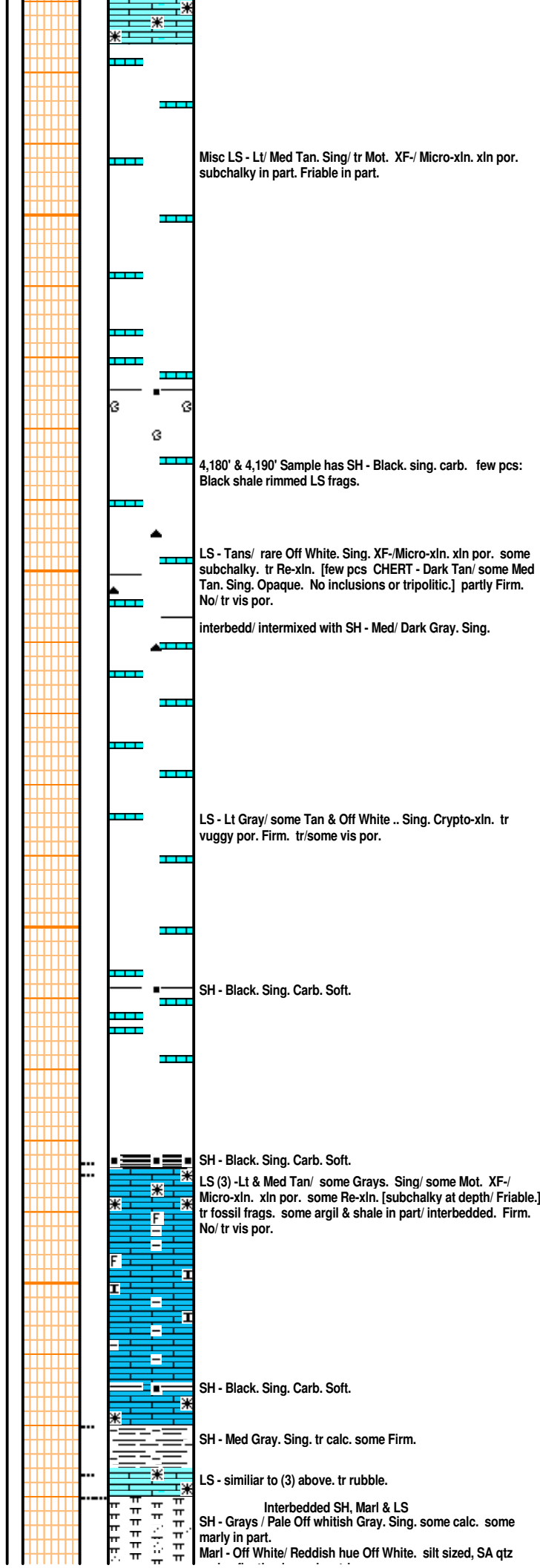
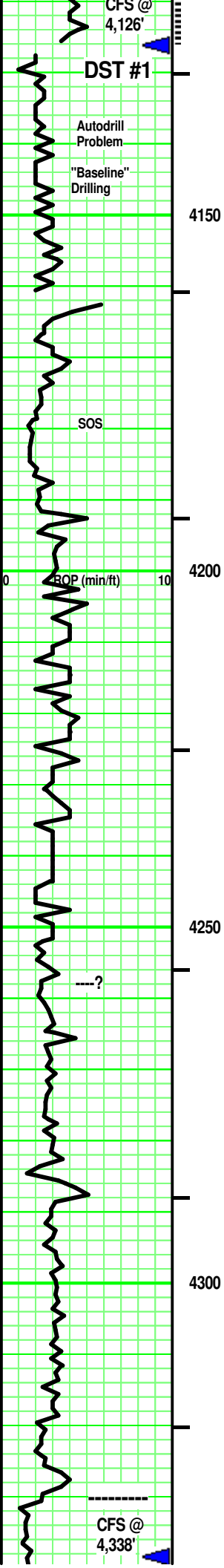
3 pcs: LS - Tan. Sing. Micro-xln. xln & rare vuggy calc filled por. tr Re-xln. Firm. No/ tr vis por. tr/ some spotted Lt/Med Brown stain rimming vuggy por. Nothing else.

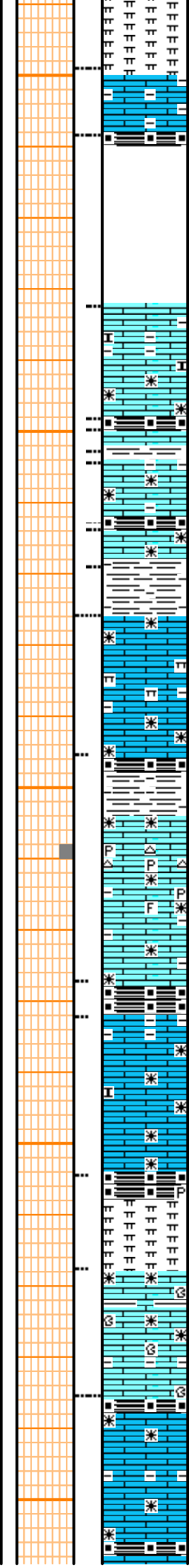
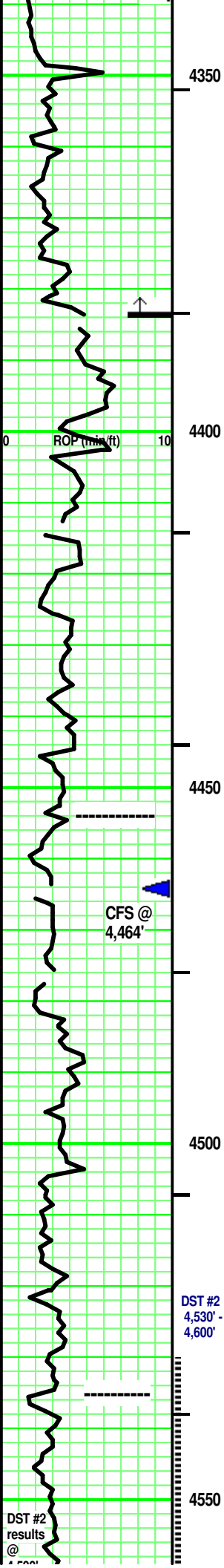
LS - Tan. Sing. XF-xln. xln and some XF vuggy por. some minute Re-xln. [tr/ some CHERT - Gray/ Dark Tan. Sing. Opaque. tr misc inclusions. No tripolitic.] some fossil frags. mostly Firm. tr/ fair vuggy por in part. Faint odor. rare/ Spotted yellow fluorescence. A/C, rare minute Dark Brown free oil spheres floating on wash water. rare gas bubble cling to rx chip. Spotted Med Brown stain. Pos cut/ residual. Pos acid/ residual. rare/ tr Black tarry oil on chert frac face.

SH - Med/ Dark Gray. Sing. Massive. soft.

LS - Lt & Med Tan. Sing/ Mot. XF-/ Micro-xln. xln & particle por. tr Re-xln. rare subchalky in part. Firm. No/ tr vis por. No odo







grains floating in marl matrix.
 LS - Tans/ Grays. Sing/ some Mot. XF-/ Micro-xln. xln por. some Re-xln. tr fossil frags. some argil in part/ interbedded. Firm. No/ tr vis por.

LS - Tans/ Lt Gray. Sing/ some Mot. XF-/ Micro-xln. xln por. some Re-xln. tr argil in part. Firm. No/ tr vis por.

SH - Black. Sing. Carb. Soft.

Interbedded LS & SH

LS - Tans/ Lt & Gray. Sing/ some Mot. tr XF-/ mostly Micro-xln. xln por. some Re-xln. tr argil/shaly in part. tr fossil frags in part. subchalky (marly). Firm in part. No/ tr vis por.

SH - Black. Sing. carb. tr fissile.

SH - Grays. some Bluish Gray. some highly limy/ LS streaks.

LS - Tans/ some Grays. Sing/ some Mot. tr XF-/ mostly Micro-xln. xln por. some Re-xln. tr argil/shaly in part. subchalky (marly). Firm at top. No/ tr vis por.

LS - Tans/ some Lt Gray. Sing/ Mot. XF-/ some Micro-xln. xln & part por. tr Re-xln. [some Chert - Silvery Whitish Gray/ Off White/ rare Tan. Mot. misc minute Off White fossil inclusions. No tripolitic/ 'fresh'.] mostly Firm. tr ls 'rubble'. tr argil. minute pyritic xtals. No/ tr vis por.

SH - Black. Sing. carb. tr fissile.

LS - Tans/ some Off White. Sing/ tr Mot. XF-xln/ Micro-xln. xln por. tr Re-xln. subchalky in part. some argil. Friable at break. mostly No/ tr vis por

SH - Black. Sing. carb. tr pyritic soft

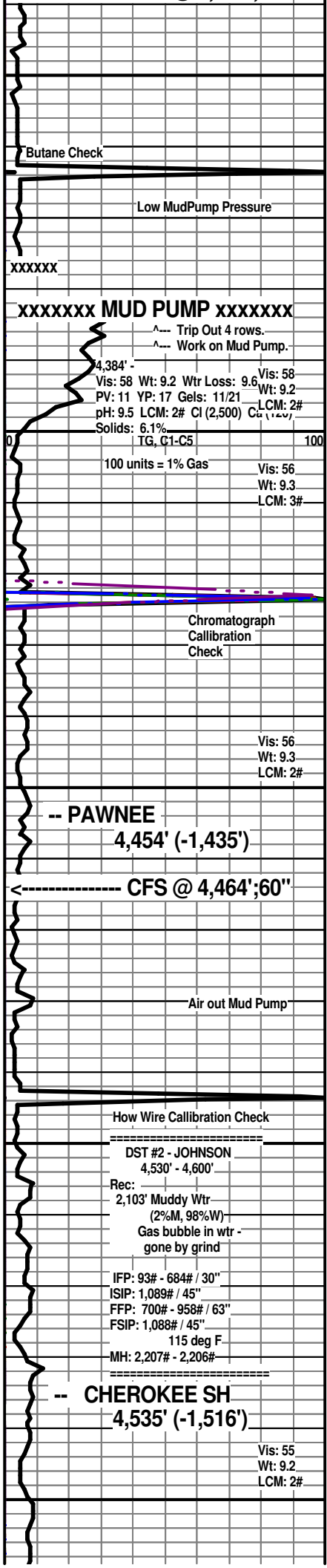
MARL - Lt/ Med Gray. Sing. soft. tr misc LS frags.

LS - Tan/ Pale Lt Gray/ some Off White. Sing/ tr Mot. XF-/ Micro-xln. xln por. tr Re-xln. tr argil in part. [some LS& Argil frags - Med/ Dark Tan, Dark Gray. VF/ XF. SA.] Firm. No/ tr vis por.

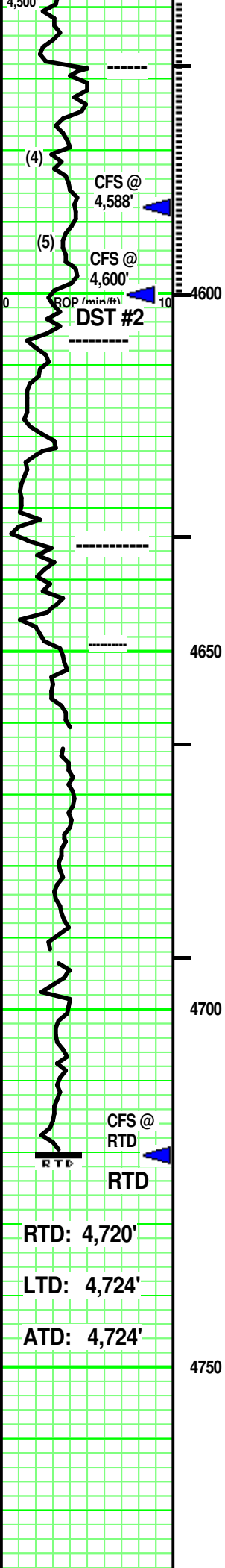
Interbedded SH & LS

SH - Black. Sing. carb. soft.

LS - Tan/ Pale Lt Gray/ rare Off White. Sing/ tr Mot. XF-/ Micro-xln. xln por. tr Re-xln. tr argil in part. [some LS& Argil frags - Med/ Dark Tan, Dark Gray. VF/ XF. SA.] Firm. No/ tr vis por.



DST #2
 results
 @ 4,530'



LS (4) - Med/ Dark Tan, rare Lt Brown in part. Lt Tan at top. some Lt Gray. Sing/ tr Mot. XF-/ mostly Micro- & tr Crypto-xln. xln & some vuggy, irregular por. some subeuhedral xtals. Re-xln. some fossil frags. soem interbedded Gray shale. mostly Firm. tr/ Fair, some Good vis por. Good odor. Spotted/ Uniform Med Yellow floures ence. ----->

few pcs: LS (5) - similar to (4) above. irregular, spotted vuggy por. No/? odor. Spotted Yellow flouresence. No free oil or gas. Spotted Med Brown stain. Weak Pos cut/ residual. Weak Pos acid/ residual.

MORROW SH 4,606' (-1,587')
Interbedded SH, Siltstone
SH - Black. Sing. carb. soft. tr pyritic. Grays. Sing. some limy/ LS streaks. soft.
Siltstone - Green Blue/ Green/ Lt & Med Gray/ Greenish Gray/ some Yellow, Blue. Sing/ Mot. [some limy (tan, tannish Gray.) some sandy in part. rare, minute pyrite. rare plant part.

MISS 4,635' (-1,616')
LS - Lt/Med Tan, some Off White. Sing. Micro-/ some Crypto-xln. xln por. Re-xln. tr/some F sized, SR, mod sph. vitreous qtz grains floating in LS matrix. tr White subchalky in part. mostly Firm. No/ tr vis por.

LS - Lt/Med Tan, some Lt Gray, some Off White. Sing. mostly XF- & Micro-/ rare Crypto-xln. xln por. Re-xln. misc calc nodules (VF/Micro, SR calc). few pcs: Tan Micro-Oolites in Clear/ semitransparent Tan matrix. rare/ tr SR, subsph. vitreous qtz grains floating in LS matrix. rare/ tr Green glauc VF, A grain or stain. Firm. No/ tr vis por.

Add interbedded with depth: tr CHERT - Off White/ some Tan. Mot. semitransparent to opaque. some White inclusions. No tripolitic.

LS - Tans/ tr Grays. Mot. Micro-/ tr Crypto-xln. xln & part por. some Re-xln. tr dolomitic in part. tr subnodules in part. Firm. No/ tr vis por.

JOHNSON ZONE
4,568' (-1,549')
LS (4) - On own & after crushing, rare minute gas bubbles. tr free Med Brown oil clinging to rx chip and floating on wash water. Spotted Lt Brown stain. Pos cut/ residual. Pos acid/ residual

CFS @ 4,588': 60"

Vis: 56
Wt: 9.3+
LCM: 2#

CFS @ 4,600': 60" & DST #2

100 units = 1% Gas
S/T: 10 stands.
CHC: 75"

Wor12 Kelly (15") slowly.
No shake.
Check Sample Box (15") for Volume/Type of Fill.
DST #2.

DST #2 @ 4,600' -
Vis: 56 Wt: 9.3
Wtr Loss: 8.8
PV: 15 YP: 19
Gels: 13/29
pH: 9.5 LCM: 2#
Cl (3,200) Ca (80)
Solids: 6.6%

Cavings ----->

Vis: 60
Wt: 9.3
LCM: 2#

Vis: 55
Wt: 9.3
LCM: 2#

E-log @ 4,720' -
Vis: 55 Wt: 9.3
Wtr Loss: 8.8
PV: 13 YP: 17
Gels: 11/20 LCM: 2#
Cl (3,400) Ca (60)
Solids: 6.4%

XXXXXXXX RTD XXXXXXXX

CFS @ RTD: 60"
S/T: 10 stands.
CHC: 60"

Work Kelly (15") slowly.
No shake.
Check Sample Box (15") for Volume/Type of Fill.
Hole Dev: 1 deg @ RTD.
E-LOG

Superior Well Services

GRASSLANDS #1
1,860' FNL & 1,220' FEL 8-T12S-R32W
Logan County, Kansas

Wellsite Geologist:
Curtis Covey
COVEY - The Well Watchers

Well Number: 1,123

NEW GULF OPERATING, LLC.
Tulsa, Oklahoma

