

Covey

The Well Watchers

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

Well Name: TROMPETER #1 - 19
Location: Section 19 - Township 14 South - Range 34 West
Licence Number: 15-109-21,115. 0000 Region: Logan County, KS.
Spud Date: 24 July 2012 Drilling Completed:
Surface Coordinates: 2,785' FNL & 1,627' FEL , SE/4
(Approximately NE NE NW SE)
Bottom Hole
Coordinates:
Ground Elevation (ft): 3,170' K.B. Elevation (ft): 3,180'
Logged Interval (ft): 3,400' To: Total Depth (ft):
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: 3,180'

FORMATION TOPS

GL: 3,170'

Formation	Rotary Sample Depth (Datum)	E-log Depth (Datum)
Anhydrite	2,543' (+637')	
B / Anhydrite	2,562' (+618')	
Stotler	3,634' (-454')	
Topeka	3,756' (-576')	
Heebner Shale	3,985' (-805')	
Toronto	4,004' (-824')	
Lansing	4,035' (-855')	
Muncie Creek SH	4,195' (-1,015')	
Stark SH	4,387' (-1,107')	
B / KC	4,372' (-1,182')	
Marmaton	4,417' (-1,237')	
Pawnee LS	4,505' (-1,325')	
Cherokee Sh	4,588' (-1,408')	
'Johnson' Zone		
Morrow SH		
Sandstone		
Miss (Lithological)		

RTD: LTD: ATD: E-log is to rotary sample depth. Loggers: Log Tech - Hays, Kansas

DST #1 - LANSING 'B'

Rotary Depth: 4,070' - 4,085'
 Logger's Depth:
 IFP: 18# - 64# / 30"
 ISIP: 1,142# / 45"
 FFP: 67# - 155# / 60"
 FSIP: 1,141# / 90"
 MH: 1,925# - 1,927#

Recovery: 290' Salt Wtr + OIL scum
 Total Fluid: 260'
 IF: Weak 1/8 inch Blow built to 9 inches in 30minutes.
 ISI: No Blow back.
 FF: Weak Surface Blow in 3-1/4 inch built to BOB in 53 minutes.
 FSI: No Blow back.

Recovery Water: (17,500 ppm)
 System Water: (4,000 ppm)
 Recovery Water (Engineer):
 (14,000 ppm)
 Reported Rw = 0.28 ohms @ 78 deg F
 Diamond Testing ... Hosington KS.
 Sampler: NA

DST #2 - LANSING 'D'

Rotary Depth: 4,100' - 4,138'
 Logger's Depth:
 IFP: 16# - 25# / 30"
 ISIP: 1,059# / 30"
 FFP: 27# - 33# / 30"
 FSIP: 1,002# / 30"
 MH: 1,921# - 1,920#

Recovery: 25' GAS in Pipe
 15' G&W cut Muddy OIL (4%G,13%W,17%M,66%O)
 20' OIL c Mud (6%O,94%M)
 Total Fluid: 35'
 IF: Weak 1/8 inch Blow built to 1-1/4 inches.
 ISI: No Blow back.
 FF: Weak Surface Blow in 10 minutes increasing to 1/4 inch.
 FSI: No Blow back.

Recovery Water: (9,000 ppm)
 Recovery Water pH: 10.5
 System Water: (5,000 ppm)
 Recovery Water (Engineer): (NA)
 Reported Rw = 0.34 ohms @ 104 deg F
 Diamond Testing ... Hosington KS.
 Sampler: 12% OIL, 88%Mud

DST #3 - KC / PLEASANTON

Rotary Depth: 4,327' - 4,429'
 Logger's Depth:
 IFP: 123# - 542# / 30"
 ISIP: 1,315# / 45"
 FFP: 568# - 1,005# / 60"
 FSIP: 1,318# / 90"
 MH: 2,073# - 2,071#

Recovery: 45' Mud
 315' Watery Mud (50%W,50%M)
 189' Muddy Water (35%M,65%W)
 1,575' Water
 Total Fluid: 2,124'
 IF: Good 2 inch Blow built to BOB in 2-3/4 minutes.
 ISI: No Blow back.
 FF: Fair 1 inch Blow built to BOB in 3-3/4 minutes.
 FSI: No Blow back.

Recovery Water: (29,500 ppm)
 System Water: (6,000 ppm)
 Recovery Water (Engineer): NA
 Reported Rw =
 0.16 ohms @ 82 deg F
 Diamond Testing ... Hoisington, KS.
 Sampler: 100% Saltwater - few OIL spots

2012

DAILY DRILLING STATUS -- JULY

2012

12-1/4" Hole

24 July --- Spud @ 8:30pm.
 25 --- Drill to 270'.
 Run 8-5/8" casing (23#)
 Set casing @ 266'.
 Cemented w/ 225 sx Class A
 (2% Gel + 3% CC).
 [Consolidated]
 Cement did circulate.
 Plug down @ 2:30am.
 WOC.

7-7/8" Hole

25 July --- WOC.
 6:30am @ 270'.
 Under surface casing @ 11:15am.
 26 --- 6:30am @ 1,825'.
 27 --- 6:30am @ 2,880'.
 Displace Mud @ 3,414'.
 28 --- 6:30am @ 3,540'.
 29 --- Short Trip: 25 stands @ 3,970'.
 6:30am @ 4,028'. DST #1:
 Lansing 'B' (4,070'-4,085').
 30 --- Resumed Drilling @ 4:45am.
 6:30am @ 4,115'. DST #2:
 Lansing 'D' (4,100'-4,138')
 Resumed Drilling @ 8:50pm.
 31 --- 6:30am @ 4,245'. Start and

7-7/8" Hole

1 Aug --- 6:30am @ 4,429'.
 Finish DST #3: KC /
 Pleasanton (4,327'-4,429').
 Resume Drilling @ 1:15pm.
 2 --- Start and
 6:30am @ 4,608'. Finish
 DST #4: Cherokee LM
 (4,522'-4,608').
 Resume Drilling @
 3 --- 6:30am @

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

- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Copper
- Ooliticastic
- 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

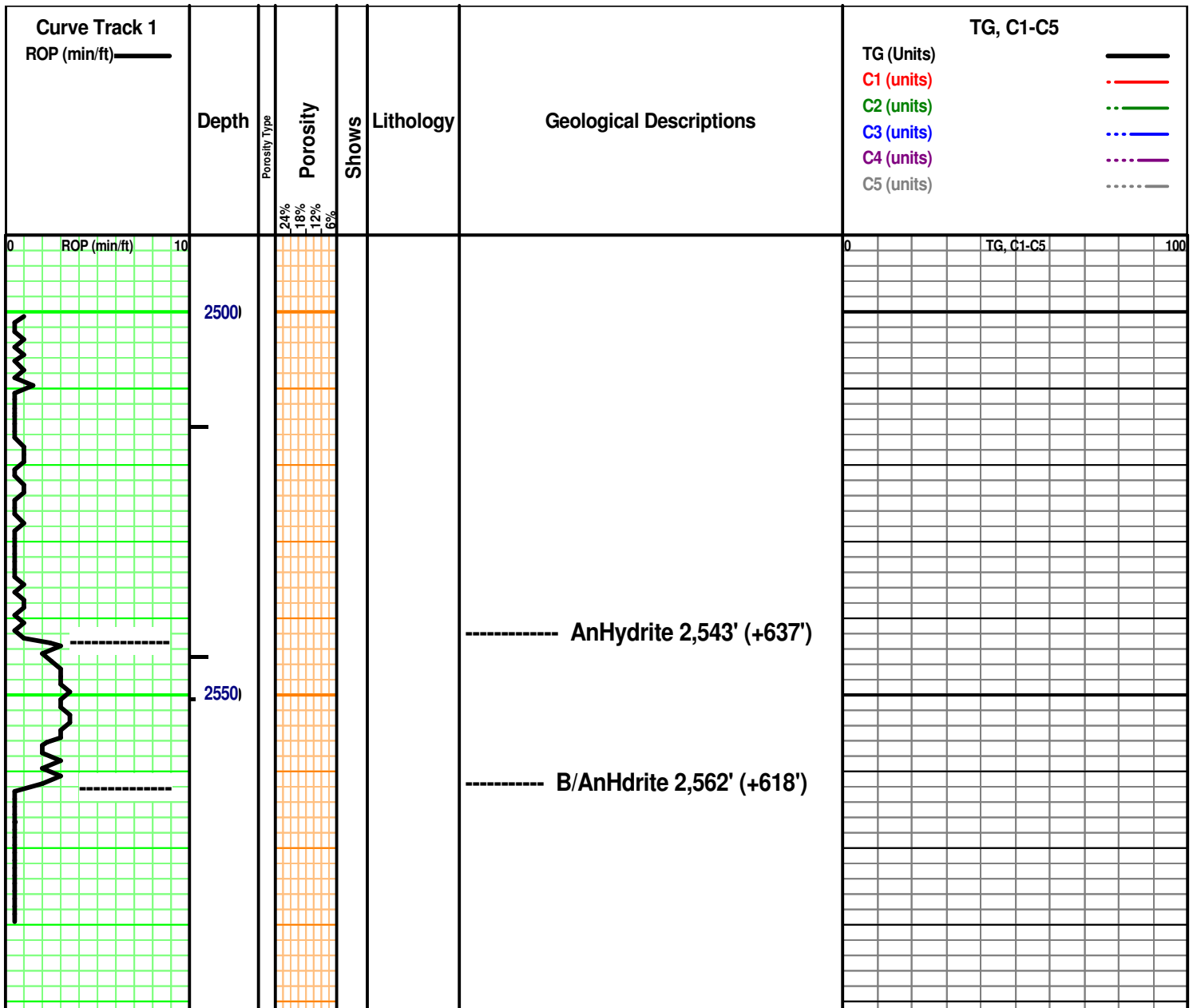
ACTIVITY

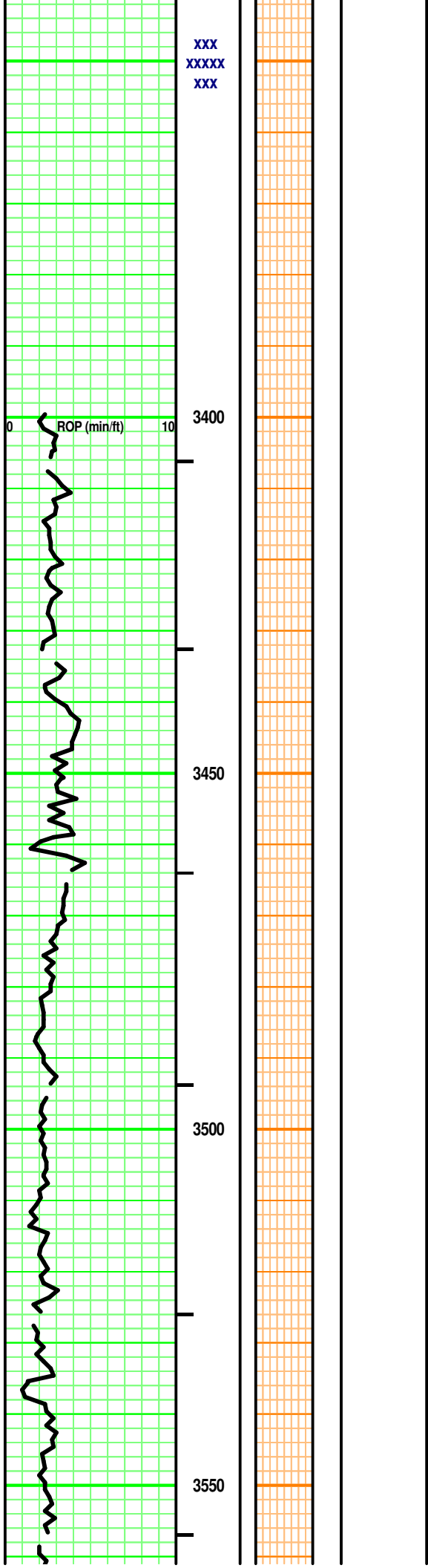
- Lost circluation
- Circulate for same

- Circulate for same
- Rtd
- Trip

- Connection
- Rft

- Sidewall





XXX
XXXXX
XXX

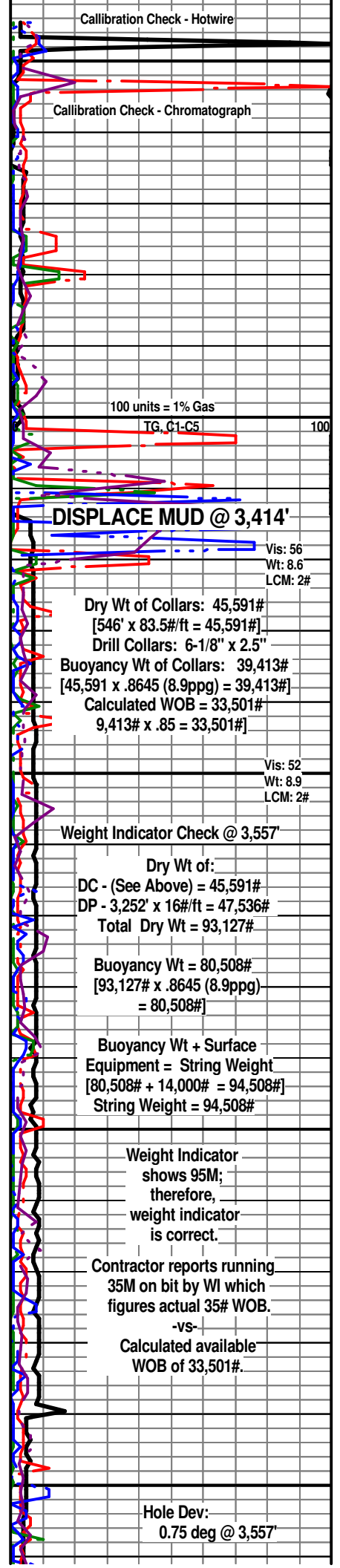
0 ROP (min/ft) 10

3400

3450

3500

3550



Calibration Check - Hotwire

Calibration Check - Chromatograph

100 units = 1% Gas

TG, C1-C5

100

DISPLACE MUD @ 3,414'

Vis: 56
Wt: 8.6
LCM: 2#

Dry Wt of Collars: 45,591#

[546' x 83.5#/ft = 45,591#]

Drill Collars: 6-1/8" x 2.5"

Buoyancy Wt of Collars: 39,413#

[45,591 x .8645 (8.9ppg) = 39,413#]

Calculated WOB = 33,501#

9,413# x .85 = 33,501#]

Vis: 52
Wt: 8.9
LCM: 2#

Weight Indicator Check @ 3,557'

Dry Wt of:

DC - (See Above) = 45,591#

DP - 3,252' x 16#/ft = 47,536#

Total Dry Wt = 93,127#

Buoyancy Wt = 80,508#

[93,127# x .8645 (8.9ppg)
= 80,508#]

Buoyancy Wt + Surface

Equipment = String Weight

[80,508# + 14,000# = 94,508#]

String Weight = 94,508#

Weight Indicator
shows 95M;
therefore,
weight indicator
is correct.

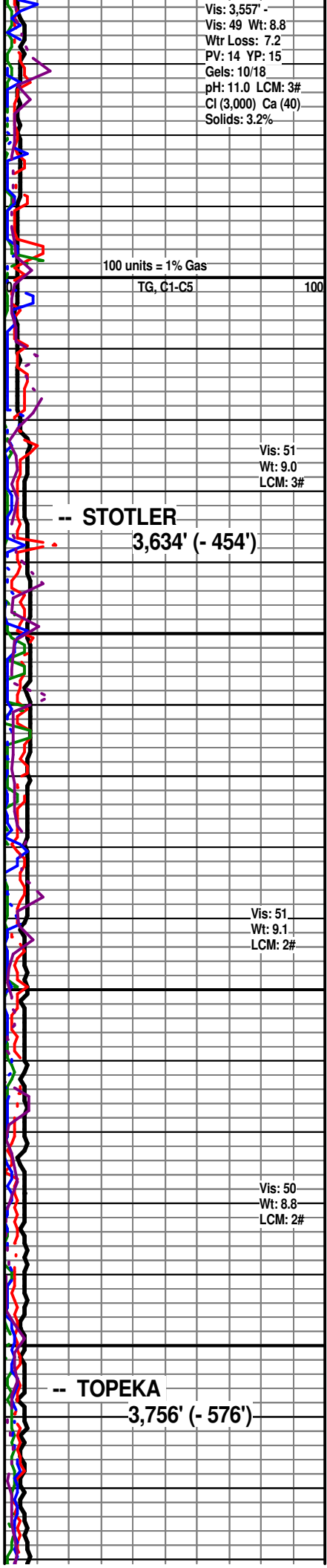
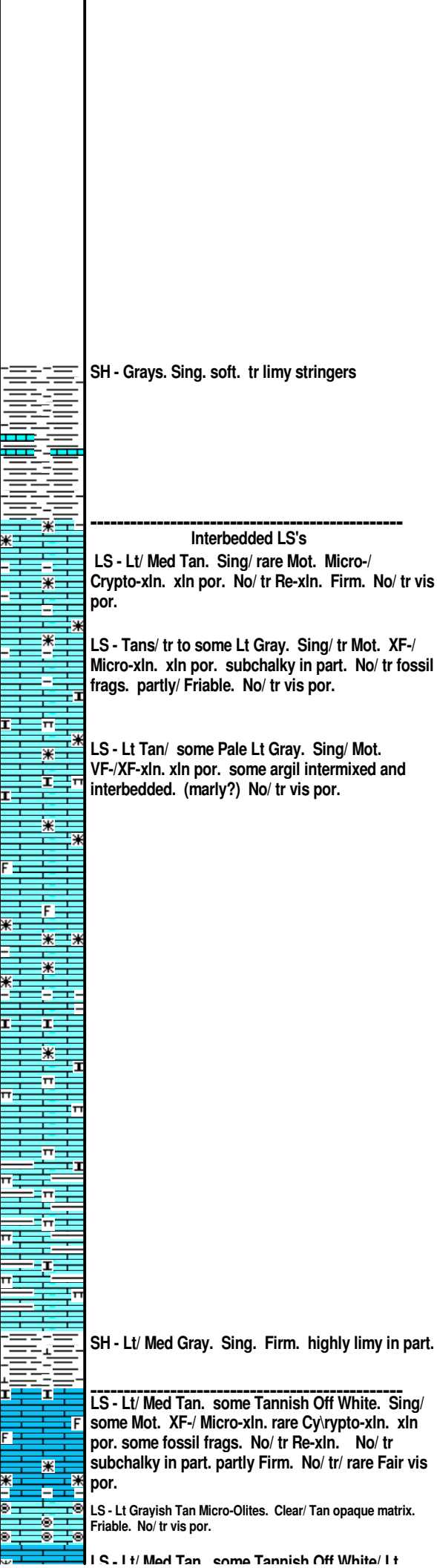
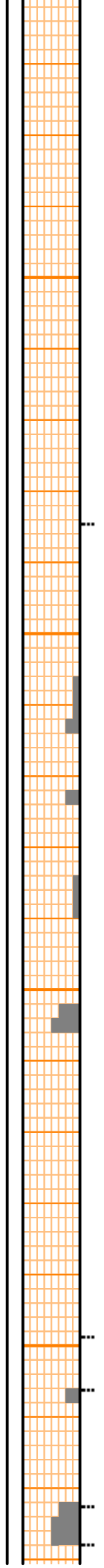
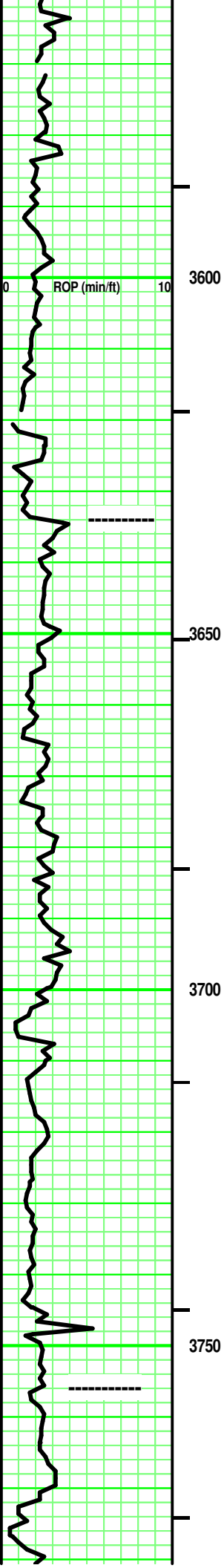
Contractor reports running
35M on bit by WI which
figures actual 35# WOB.

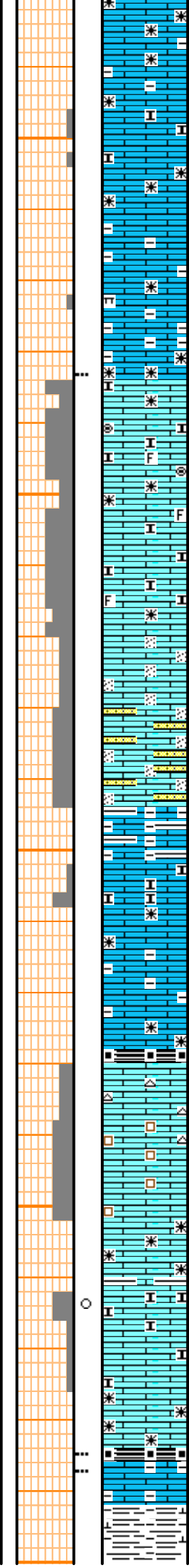
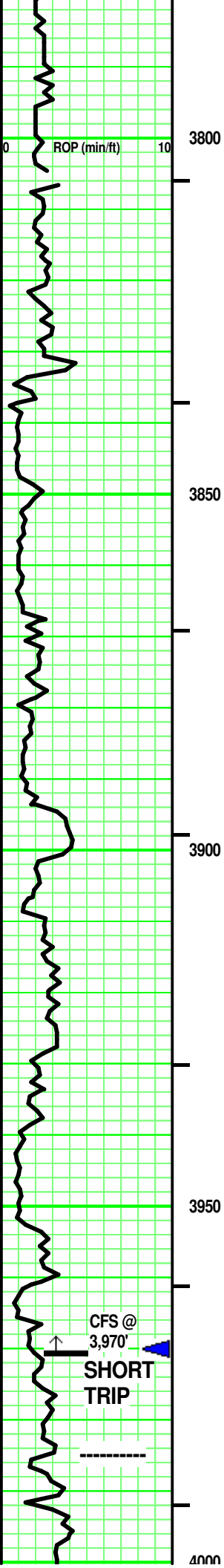
-vs-

Calculated available
WOB of 33,501#.

Hole Dev:
0.75 deg @ 3,557'

Vis: 3.557' -
Vis: 49 Wt: 8.8
Wtr Loss: 7.2
PV: 14 YP: 15
Gels: 10/18
pH: 11.0 LCM: 3#
Cl (3,000) Ca (40)
Solids: 3.2%





LS - Lt/ med Tan. some Tannish Off White/ Lt Gray. Sing/ some Mot. XF-/ Micro-xln. xln & tr part por. some fossil frags.. No/ tr subchalky in part. argil/ shaly interbedded/ intermixed in part. partly Firm. No/ tr/ rare Fair vis por.

LS - Tans/ some Off White & some Lt Gray. Sing/ Mot/ Mixed. some VF-/ mostly XF- & Micro-xln. xln & part por. No/ tr mixed: Micro-Olites / subchalky / silt sized SA qtz sand 'floating' in LS matrix / fossil frags. tr interbedded Lt Gray Shale. partly Friable. tr/ mostly Fair vis por.

LS - Tans/ some Off White/ tr/ Lt Gray at top. Sing/ some Mot. some VF-/ XF-/ Micro-xln. xln & part por. No/ tr Re-xln. argil/ shaly intermixed/ interbedded. some fossil frags. subchalky in part. partly Firm. No/ tr vis por.

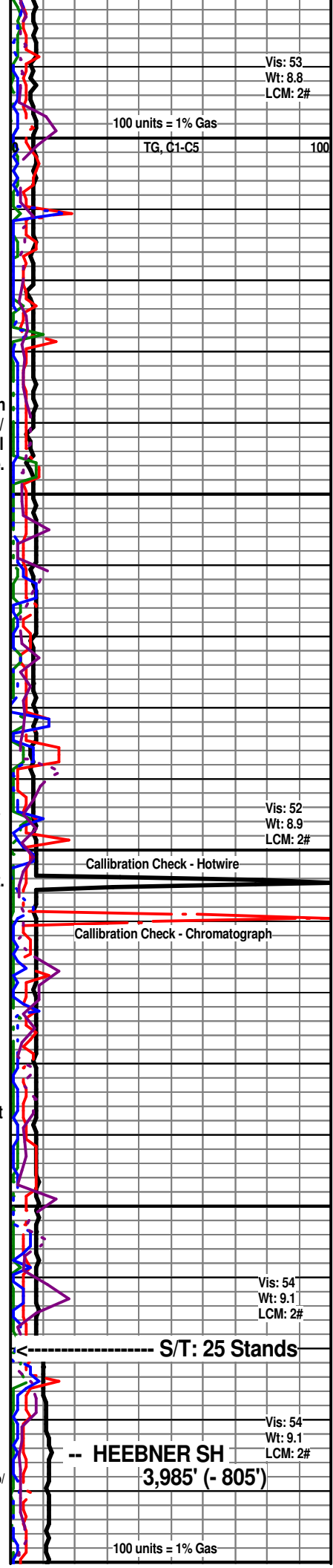
SH - Black. Sing. carb. tr fissile.

LS - Tans/ tr to some Off White. Sing/ some Mot. VF-/ XF-/ tr to some Micro-xln. xln, sucrosic & part por- Sing/ Mixed. No/ tr Re-xln. No/ some fossil frags. subchalky in part. tr shale interbedded/ tr mixed. [tr/ some CHERT - Clear/ Tan/ tr Off White. Mot. Transparent to semi-transparent. some Inclusions. No tripolitic.] partly friable to mostly Friable. No/ tr / some Fair vis por.

Add: LS - Lt Tan. Sing. Micro-xln. xln por. subchalky. Friable. No/ tr vis por. No odor. No/? dull yellow fluorescence. No free oil or gas. No/ few pcs: spotted Med Tan stain. No cut/ residual. No acid/ residual.

SH - Black. Sing. carb. soft.
LS - Lt Tan/ Tannish Gray. Sing. XF-xln. xln por. No/ tr argl. No/ tr vis por.

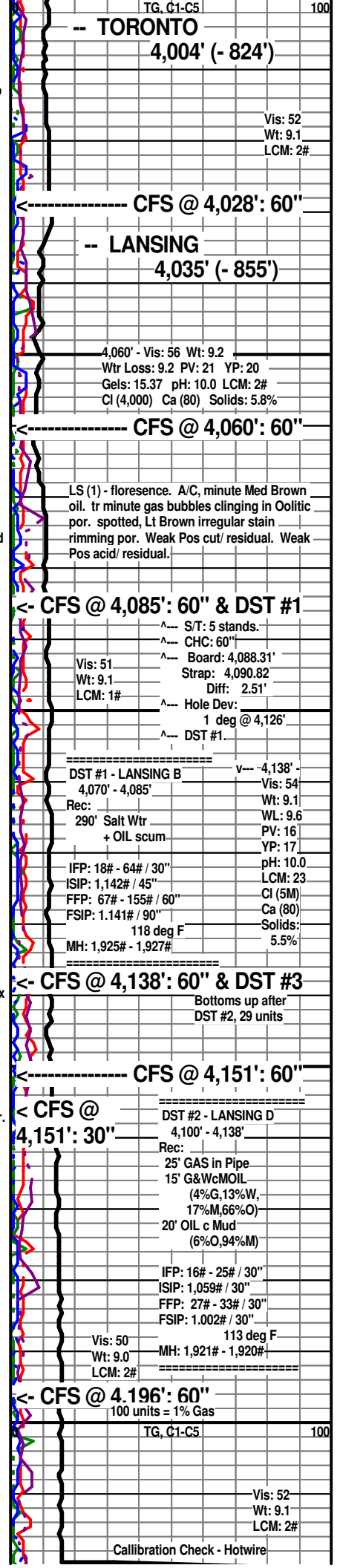
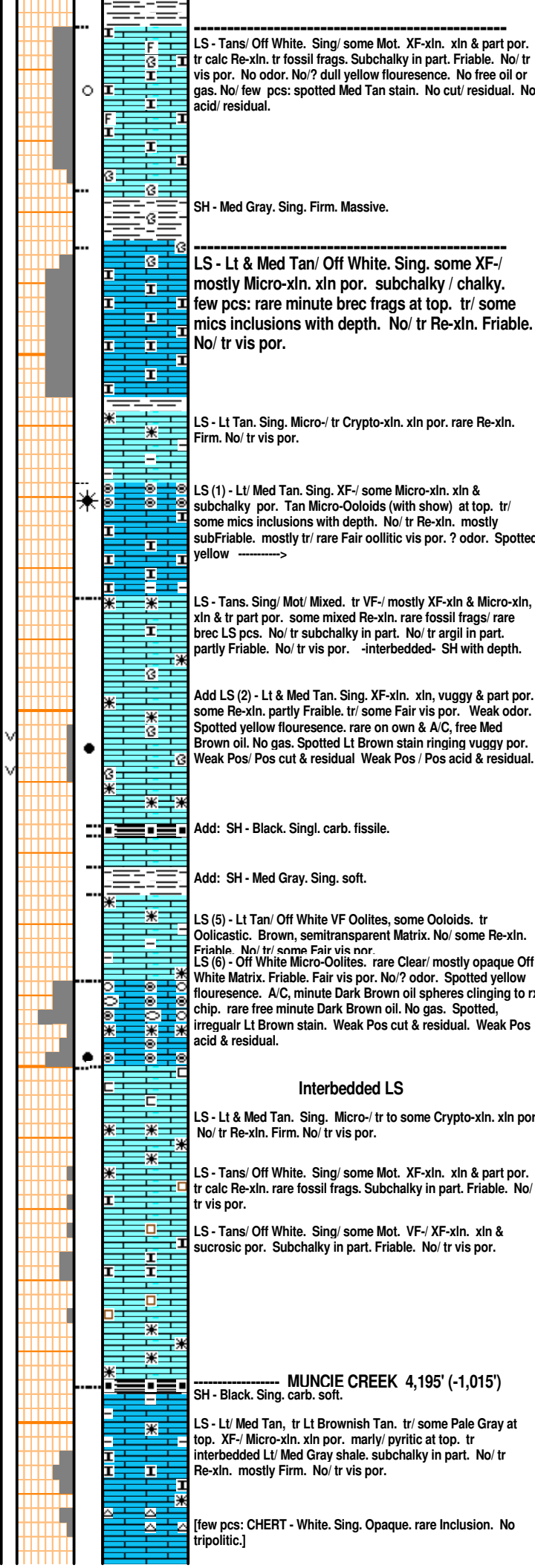
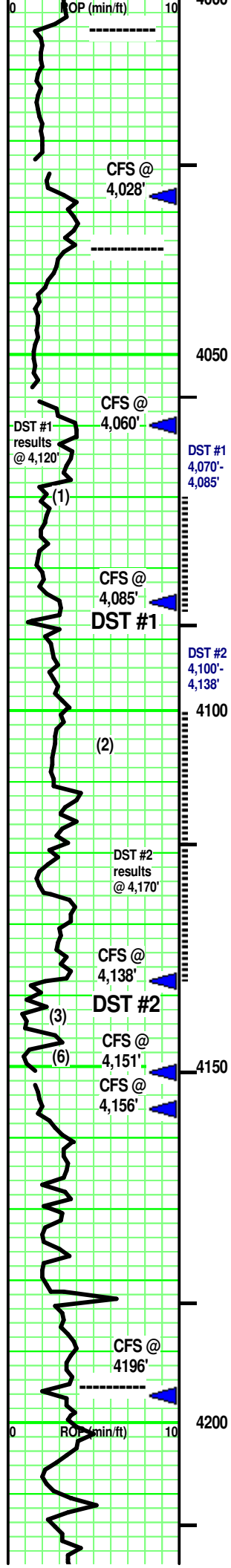
SH - Med Gray/ Tannish Gray. Sing. highly limy with depth.

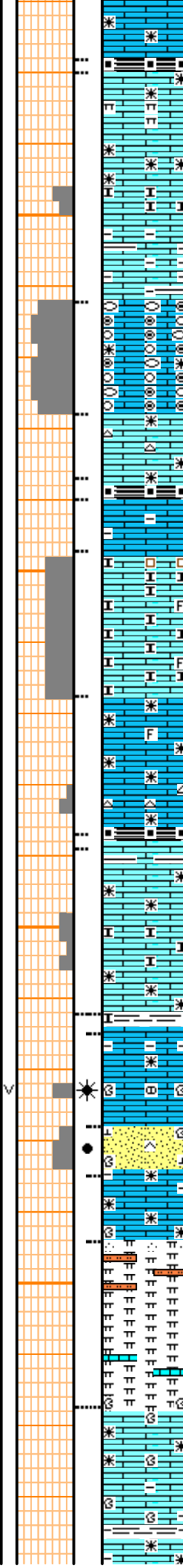
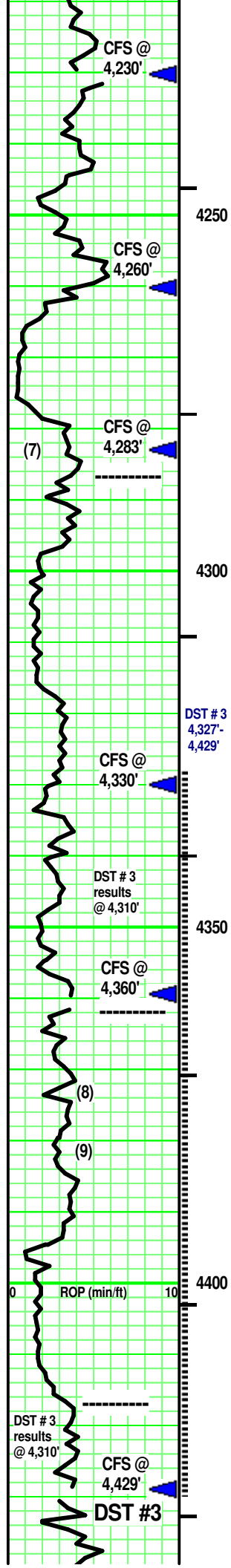


CFS @ 3,970'

SHORT TRIP

HEEBNER SH
3,985' (- 805')





SH - Black. Sing. carb. soft.
 LS - Tannish Gray/ Tans/ Lt & tr Med Gray. tr Brown. Sing/ tr Mot. XF-/ Micro-xln/ rare Crypto-xln.. xln & rare/tr xln por. argil/ shaly in part. tr/ some marly & subchalky in part. No/ tr Re-xln. mostly Firm. No/ tr vis por.

LS - Lt/ some Med Tan. rare Grayish Tan. VF Oolites, VF/ Micro-Ooloids & Oolcasts. semi-transparent calc matrix. tr Re-xln. in part. Friable. tr/ Fair & Good vis por. some spotted yellow fluorescence. No odor. No free oil or gas. No stain. No cut, acid & residual.

LS (7) - Brownish Tan/ Lt Brown/ Tan. Sing. XF-/ Micro-xln. xln por. some Re-xln. Firm. No/ tr vis por. CHERT - rare Blue Gray/ White. Mot. Opaque. no/ tr pyritic. No tripolitic. No/ tr Inclusions.

STARK SH 4,387' (-1,107')
 SH - Black. Sing. carb. soft.
 LS - similar to (7) above.

LS - Tans/ some Off White. Sing/ tr Mot. Micro-xln. xln & some intermixed sucrosic por. Subchalky/ Chalky with rare inclusions. Friable. No/ tr vis por.

LS - Tans/ tr Off White. Sing/ some Mot. VF-/ XF-xln. xln por. No/ tr Re-xln. No/ rare fossil frag. [CHERT - White/ Lt Blue Gray. Sing/ rare Mot. Opaque. no/ tr pyritic. No tripolitic. No/ tr Inclusions.] Friable. No/ tr vis por.

SH - Black. Sing. carb. fissile.
 LS - Tans/ some Grays/ tr to some Off White. few pcs: Lt/ Med Brown at depth. Sing/ Mot. XF-/ Micro-xln. xln & part por. No/ tr Re-xln. argil/ shaly brec frags & pcs. No/ tr subchalky. No/ rare fossil frags. partly Firm. No/ vis por.

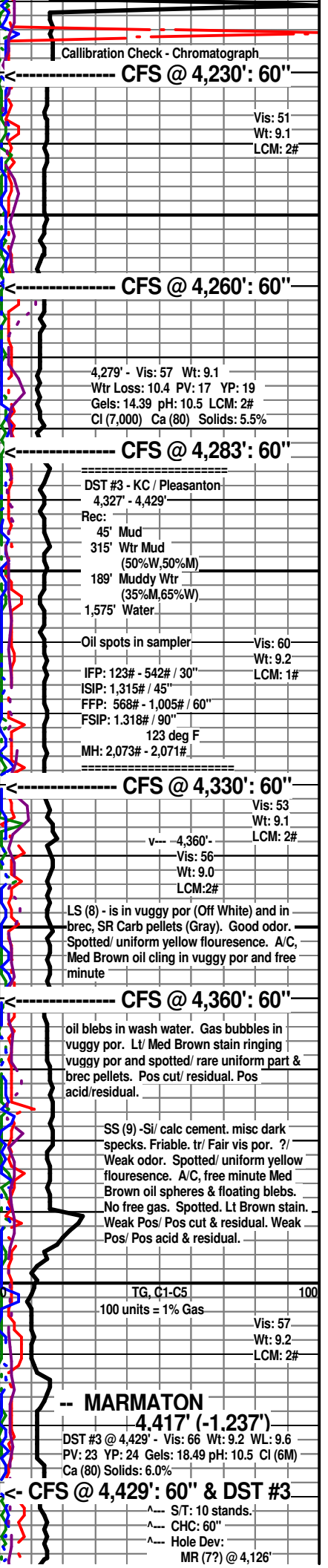
B / KC 4,372' (-1,182')
 Interbedded LS, SS, Marl & SH
 LS (8) - Tans/ Lt Gray/ Pale Grayish Off White. Sing/ tr Mot. VF-/ XF-/ Micro-xln. xln, part & vuggy por. some Re-xln. tr argil in part. No/ tr brec frags. mostly Firm. No/ tr vis por. 4,400' Sample - Show -->

SS (9) - Clear/ Lt Brown/ Blue Green/ Tan. Mot Silt/ tr VF qtz grains. SA/ SR. highly sort. mod sph. Point/ 'floating' grain contact. mixture of suture & point grain contact. Vitreous/ Frosted luster. ----->

LS - similar to (8) above.
 Marl/ Siltstone - Off White/ Reddish hue Off White. silt sized, SA qtz grains floating in marl matrix. Highly limy with depth.

Interbedded LS & SH
 LS - Tans/ some Pale Lt Gray, Off White. some Sing/ mostly Mot. XF-/ Micro-xln, few pc: Crypto-xln. xln por. No/ tr Re-xln. Firm. No/ tr vis por.

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



Calibration Check - Chromatograph
 CFS @ 4,230': 60"
 Vis: 51
 Wt: 9.1
 LCM: 2#

CFS @ 4,260': 60"
 4,279' - Vis: 57 Wt: 9.1
 Wtr Loss: 10.4 PV: 17 YP: 19
 Gels: 14.39 pH: 10.5 LCM: 2#
 Cl (7,000) Ca (80) Solids: 5.5%

CFS @ 4,283': 60"
 DST #3 - KC / Pleasanton
 4,327' - 4,429'
 Rec:
 45' Mud
 315' Wtr Mud (50%W,50%M)
 189' Muddy Wtr (35%M,65%W)
 1,575' Water
 Oil spots in sampler - Vis: 60
 Wt: 9.2
 LCM: 1#
 IFP: 123# - 542# / 30"
 ISIP: 1,315# / 45"
 FFP: 568# - 1,005# / 60"
 FSIP: 1,318# / 90"
 123 deg F
 MH: 2,073# - 2,071#

CFS @ 4,330': 60"
 Vis: 53
 Wt: 9.1
 LCM: 2#
 v-- 4,360'-
 Vis: 56
 Wt: 9.0
 LCM: 2#

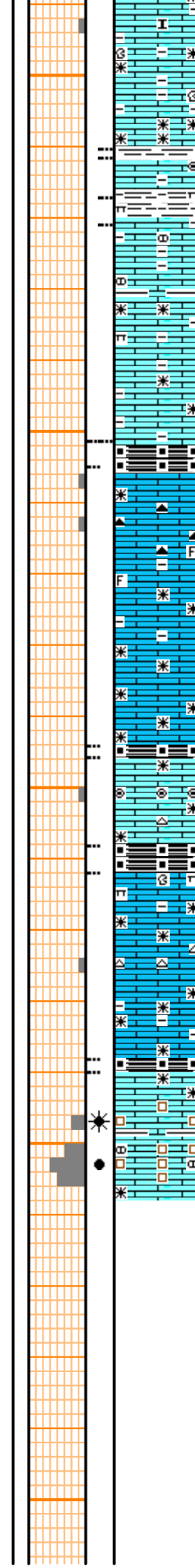
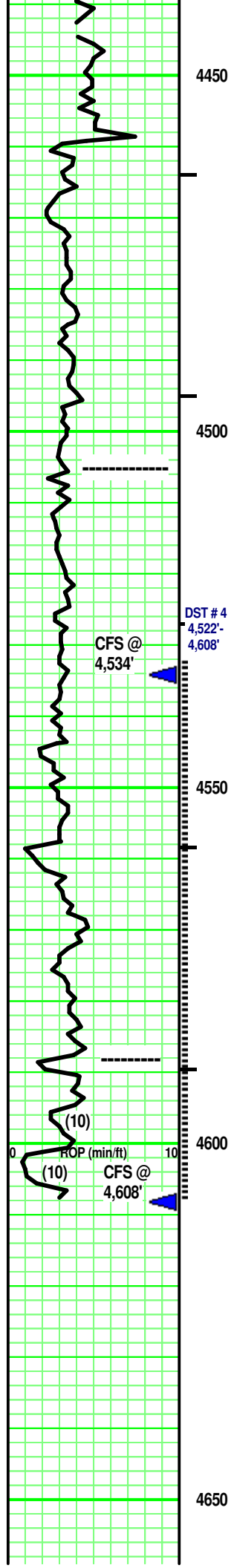
LS (8) - is in vuggy por (Off White) and in brec, SR Carb pellets (Gray). Good odor. Spotted/ uniform yellow fluorescence. A/C, Med Brown oil cling in vuggy por and free minute

CFS @ 4,360': 60"
 oil blebs in wash water. Gas bubbles in vuggy por. Lt/ Med Brown stain ringing vuggy por and spotted/ rare uniform part & brec pellets. Pos cut/ residual. Pos acid/residual.

SS (9) -Si/ calc cement. misc dark specks. Friable. tr/ Fair vis por. ? Weak odor. Spotted/ uniform yellow fluorescence. A/C, free minute Med Brown oil spheres & floating blebs. No free gas. Spotted. Lt Brown stain. Weak Pos/ Pos cut & residual. Weak Pos/ Pos acid & residual.

TG, C1-C5 100
 100 units = 1% Gas
 Vis: 57
 Wt: 9.2
 LCM: 2#

MARMATON
 4,417' (-1,237')
 DST #3 @ 4,429' - Vis: 66 Wt: 9.2 WL: 9.6
 PV: 23 YP: 24 Gels: 18.49 pH: 10.5 Cl (6M)
 Ca (80) Solids: 6.0%
 CFS @ 4,429': 60" & DST #3
 S/T: 10 stands.
 CHC: 60"
 Hole Dev:
 MR (??) @ 4,126'



SH - Lt/ Med Gray. tr Silvery Gray. Sing. No/ some very silty & carb flecks.

Vis: 62
Wt: 9.0
LCM: 2#

LS - Tans/ Grays. Sing/ Mot. tr XR-/ mostly Micro- some Crypto-xln. xln & rare vuggy por. No/ rare Re-xln. tr/ some calc brecc/nodules in part. Firm. No/ tr vis por Med Brown carb flecks in rare vuggy por.

Tan Oolites
Silvery Gray SH

Vis: 58
Wt: 9.0+
LCM: 2#

SH - Black. Sing. carb. tr fissile.

LS - Tans/ some Lt & Med Gray. Sing/ Mot. XF-/ some Micro-xln. xln & part por. tr Re-xln. [some Chert - Off White/ Pale Grayish Tan. Mot. few pcs: Blue gray/ White. Mot. highly fossil inclusions. All chert is Semi-transparent. No tripolitic/ 'fresh'.] few pcs: Tan Micro-Oolite 'hash'. mostly Firm. tr argil. No/ tr vis por.

-- PAWNEE
4,505' (-1,325')

DST # 4
4,522'-
4,608'

CFS @ 4,534': 60"

SH - Black. Sing. carb. tr pyritic soft

Vis: 57
Wt: 9.0
LCM: 2#

LS - Tan/ Pale Lt Gray/ some Off White. Sing/ some Mot. XF-/ Micro-xln. xln por. tr Re-xln. [rare pcs: Lt Gray/ mostly Tan F/VF Oolites & Ooloids in Re-xln, clear, calc matrix. No vis por.]

Vis: 55
Wt: 9.1
LCM: 2#

SH - Black. Sing. carb. tr pyritic soft

LS - Lt & Med Tan/ some Off White. Sing. XF-xln/ Micro-xln. xln & part por. tr Re-xln. some interbedded SH - Lt/ tr Med Gray. Sing. tr calc. Firm. No/ tr vis por.

4,580' Sample had Faint odor. No sample show.

- CHEROKEE SH
4,588' (-1,408')

100 units = 1% Gas

Vis: 52
Wt: 9.1
LCM: 2#

0 10

TG, C1-C5 100

CFS @ 4,608': 60"

SH (10) - Black. Sing. carb. soft. Interbedded SH & LS
LS (10) - Off White/ Pale Lt Tan. Sing. VF-xln. xln, part & Sucrosic por. some Re-xln. tr LS Micro- nodules. No/ rare minute black specks. Friable. tr/ Fair vis por. ?/ Fair odor. Spotted/ rare uniform yellow fluorescence. On own, rare minute gas bubble clinging to rx chip. A/C, Spotted, irregular minute Dark Brown oil spheres clinging to rx chip. Spotted, irregular Lt/Med Brown stain. Weak Pos/ Pos cut & residual. Weak Pos/ Pos acid & residual.

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

SH - Black. Sing. carb. soft. tr/ some Dark & V Dark Gray. Sing. rare 'rip-up clasts'.

