KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1054664

Form ACO-1
June 2009
Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 34162
Name: New Gulf Operating LLC
Address 1: 6310 E. 102nd St.
Address 2:
City: TULSA State: OK Zip: 74137 + __ __ __ __
Contact Person: Wink Kopczynski
Phone: (918) 728-3020
CONTRACTOR: License # 5822
Name: Val Energy, Inc.
Wellsite Geologist: Curtis Covey
Purchaser:

Designate Type of Completion:

- [x] New Well
- [ ] Re-Entry
- [ ] Workover

- [x] Oil
- [ ] WSW
- [ ] SWD
- [ ] SIOW
- [ ] Gas
- [ ] D&A
- [ ] ENHR
- [ ] SIGW
- [ ] OG
- [ ] GSW
- [ ] Temp. Abd.
- [ ] CM *(Coal Bed Methane)*
- [ ] Cathodic
- [ ] Other *(Core, Expl., etc.)*:

If Workover/Re-entry: Old Well Info as follows:

Operator:
Well Name:
Original Comp. Date: Original Total Depth:

- [ ] Deepening
- [ ] Re-perf.
- [ ] Conv. to ENHR
- [ ] Conv. to SWD
- [ ] Conv. to GSW
- [ ] Plug Back: Plug Back Total Depth
- [ ] Commingled Permit #:
- [ ] Dual Completion Permit #:
- [ ] SWD Permit #:
- [ ] ENHR Permit #:
- [ ] GSW Permit #:

02/04/2011	02/15/2011	2/25/2011
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-109-20974-00-00
Spot Description:
SE - SW - NE - SW Sec. 16 Twp. 12 S. R. 32 [ ] East [x] West
1382 Feet from [ ] North / [x] South Line of Section
1773 Feet from [ ] East / [x] West Line of Section
Footages Calculated from Nearest Outside Section Corner:
[ ] NE [ ] NW [ ] SE [x] SW
County: Logan
Lease Name: Sheetz Well #: 1
Field Name:
Producing Formation: Mississippian
Elevation: Ground: 2995 Kelly Bushing: 3033
Total Depth: 4780 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 287 Feet
Multiple Stage Cementing Collar Used? [ ] Yes [x] No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from: 255
feet depth to: 245 w/ 200 sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 3100 ppm Fluid volume: 263 bbls
Dewatering method used: Evaporated

Location of fluid disposal if hauled offsite:

Operator Name:
Lease Name: License #:
Quarter Sec. Twp. S. R. [ ] East [ ] West
County: Permit #:

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- [x] **Letter of Confidentiality Received**
  Date: 05/06/2011
- [x] **Confidential Release Date:** 05/05/2013
- [x] **Wireline Log Received**
- [x] **Geologist Report Received**
- [ ] **UIC Distribution**

ALT [ ] I [x] II [ ] III **Approved by:** NAOMI JAMES **Date:** 05/13/2011

Side Two

[redacted] 1054664

Operator Name: New Gulf Operating LLC Lease Name: Sheetz Well #: 1

Sec. 16 Twp. 12 S. R. 32 ☐ East ☑ West County: Logan

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

Electric Log Submitted Electronically ☑ Yes ☐ No
(If no, Submit Copy)

List All E. Logs Run:
Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Attached	Attached	Attached

CASING RECORD ☑ New ☐ Used
Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12.25	8.625	24	255.90	Common	200	
Production	7.857	5.5	24	4738	60/40 poz	375	

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ Plug Off Zone	-			
	-			

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record *(Amount and Kind of Material Used)*	Depth
6		250 Gal 15% NEFE	4562-4568

TUBING RECORD: Size: 2.8750 Set At: 4517 Packer At: 4567 Liner Run: ☐ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR.

Producing Method: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	80	0	37.5	0	30

DISPOSITION OF GAS:
☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)*

PRODUCTION INTERVAL:
4562-4568

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	New Gulf Operating LLC
Well Name	Sheetz 1
Doc ID	1054664

All Electric Logs Run

Dipole Sonic
Induction
Caliper
Porosity
Compensated Neutron Lithodensity

Form	ACO1 - Well Completion
Operator	New Gulf Operating LLC
Well Name	Sheetz 1
Doc ID	1054664

Tops

Name	Top	Datum
Anhydrite Base	2540	+463
Topeka	3751	-748
Heebner	3963	-960
Toronto	3996	-993
Lansing	4003	-1000
Muncie Creek	4153	-1150
Stark	4234	-1231
BKC	4301	-1298
Marmaton	4338	-1335
Altamont	4366	-1363
Pawnee	4442	-1439
Ft. Scott	4492	-1489
Cherokee	4519	-1516
Johnson	4552	-1549
Mississippian	4619	-1616

DRILLING REPORT

NEW GULF ENERGY
6310 E. 102nd Street
Tulsa, Oklahoma 74137
Office (918) 728-3020

 # 1 SHEETZ
1382'FSL 1773'FWL
Section 16-T12S-R32W
Logan County, Kansas
API # 15-109- 20974

Drilling Contractor: VAL DRILLING RIG 4 (620-617-2793)
Elevation: GL 2995 **KB 3003**
Geologist: Curtis Covey 316-258-9976 / Joe Baker 316-253-9696
Comparison Well**:** **KB NORTON # 1 Younkin**
W2 SW/4
15-12S-32W

New Gulf Rep : Danny Birdwell 432-940-6680/ Engineer JoJo Birdwell 432-634-0773

	SAMPLE TOPS	DATUM		SHOWS
ANHYDRITE	**2517**	**+486**	**+18**	
BASE ANHYDRITE	**2540**	**+463**	**+16**	
TOPEKA	**3751**	**-748**	**+17**	
HEEBNER	**3963**	**-960**	**+18**	
TORONTO	**3996**	**-993**	**+16**	
LANSING	**4003**	**-1000**	**+15**	
"E" Zone				Ls Finexln, Fluorescence, gas bubbles, lt-med staining Weak Cut, No odor No Free oil DST # 1
"F" Zone				Ls Finexln, Fossil, Friable, Lt Odor?, Brown Staining, Oil Blebs on wash water DST # 1
MUNCIE CREEK	**4153**	**-1150**	**+11**	
"J" Zone				I piece vuggy porosity, no odor, spotted fluorescence, no free oil, few gas bubbles, spotte cut DST #2
STARK	**4234**	**-1231**	**+14**	
"K" Zone				Ls Fnxln- sucrosic porosity, dull fluorescence, gas bubbles, Fair Odor, wk pos cut DST # 2
BKC	**4301**	**-1298**	**+13**	
MARMATON	**4338**	**-1335**	**+12**	
ALTAMONT	**4366**	**-1363**	**+12**	
PAWNEE	**4442**	**-1439**	**+11**	
FT SCOTT	**4492**	**-1489**	**+12**	
CHEROKEE	**4519**	**-1516**	**+11**	
JOHNSON	**4552**	**-1549**	**+12**	Ls w/ Good Vuggy, fossil cast porosity, Good Odor, Show Free Oil, Fluorescence Dark Brown Stain ,Gas Bubbles **OVERALL GOOD SHOWS**
MISSISSIPPIAN	**4619**	**-1616**	**+7**	
RTD	**4780**	**-1777**		

2/4/2011 287'
2/6/2011 1935'

2/7/2011 2760’
2/8/2011 3430’
2/9/2011 4030’
2/10/2011 4115’ Dst #1 Lansing E & F zones

DST # 1 Lansing E&F Zones
4087-4115
30-45-60-90
IFP: Built to Bottom Of Bucket (OBB) in 11 min. No Blow Back
FFP: Built to Bottom Of Bucket (OBB) in 18 min. No Blow Back
Recovery: 715’ Gassy Muddy Water w/ a light scum of Oil
(2% Gas, 80%Wtr, 18% Mud)
Chlorides 40,000 PPM System Chlorides 2,200
IFP/FFP: 12-135/141-335#
ISP/FSP: 1175/1166# BHT:129
IHP/FHP: 1939/1928 #

2/11/2011 4256’

DST # 2 Lansing H,I J, K Zones
4143-4256’
30-45-60-90
IFP: Built to Bottom Of Bucket (BOB) in 7 min. 11/4” Blow Back
FFP: Built to Bottom Of Bucket (BOB) in 8 min. 11/2” Blow Back
Recovery:
140’ Gas In Pipe
171’ CLEAN OIL
378’ Gassy Oily Muddy Water (10% Gas, 11% Oil,19% wtr,60% Mud)
315’ Muddy Water (17% Mud, 83% wtr)

IFP/FFP: 15-155/165-379#
ISP/FSP: 1276/1260#
IHP/FHP: 1967/1958 # BHT:117

2/12/2011 4390’ Drilling ahead in the Altamont

2/13/11 4583 Dst # 3 Johnson Zone

DST # 3 Johnson
4510-4583’
30-45-60-90
IFP: BOB in 4 Min.
ISP: BOB in 14 Min (Blow Back)
FFP:BOB 31/2 Min
FSP: BOB in 13 Min. (Blow Back)
Recovery:
935’ Gas In Pipe
325’ Muddy Oil (96% oil, 3% Mud, 1% Water)
882’ Muddy Oil (81% Oil, 19% Mud)
126’ Gassy Muddy Oil (3% Gas,92% Oil, 5% Mud)
Total Fluid: 1333 Ft

IFP/FFP: 20-229/240-527#
ISP/FSP: 1139/1135#
IHP/FHP: 2233/2182 # BHT:129 Grav:28.2 @ 60 Deg.

2/14/2011 RTD 4780 Logging

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802

Kansas
Corporation Commission

phone: 316-337-6200
fax: 316-337-6211
http://kcc.ks.gov/

April 25, 2011

Wink Kopczynski
New Gulf Operating LLC
6310 E. 102nd St.
TULSA, OK 74137

Re: ACO1
API 15-109-20974-00-00
Sheetz 1
SW/4 Sec.16-12S-32W
Logan County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Wink Kopczynski

Covey
The Well Watchers

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

Well Name:	**SHEETZ #1**		
Location:	**Section 16 - Township 12 South - Range 32 West**		
Licence Number:	**15-109-20,974. 0000**	**Region:**	**Logan County, KS.**
Spud Date:	**4 February 2011**	**Drilling Completed:**	
Surface Coordinates:	**1,382' FSL & 1,773' FWL (Appromimately SE SW NE SW)**		
Bottom Hole Coordinates:			
Ground Elevation (ft):	**2,995'**	**K.B. Elevation (ft):**	**3,003'**
Logged Interval (ft):	**3,350'** **To:**	**Total Depth (ft):**	
Formation:	**Stotler ------> Miss**		
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

2011 **DAILY DRILLING STATUS -- FEBRUARY** 2011

12-1/4" Hole

4 Feb --- Spud @ 6:30pm. Drill to 272'.
5 --- Run 8-5/8" casing (23#)
Set casing @ 269'.
Cemented w/ 200 sx Class A
(2% Gel + 3% CC). [Consolidated]
Cement did circulate.
Plug down @ 2:45am.
WOC.

7-7/8" Hole

5 Feb --- WOC. 6:30am @ 272'.
Under surface casing @ 11:30am.
6 --- 6:30am @ 1,935'.
7 --- 6:30am @ 2,760'.
8 --- Displace Mud @ 3,339'.
6:30am @ 3,445'.
9 --- 6:30am @ 4,030'.
Start ....
10 --- 6:30am @ 4,115'. Finish DST #1:
Lansing (4,087' - 4,115').

7-7/8" Hole

KB: 3,003'

FORMATION TOPS

GL: 2,995'

Formation	Rotary Sample Depth (Datum)	E-log Depth (Datum)
AnHydrite	2,517' (+486') *	
B / AnHdrite	2,540' (+463') *	
Stotler	3.620' (-617')	
Topeka	3,851' (-748')	
Heebner Shale	3,963' (-960')	
Toronto	3,996' (-993')	
Lansing	4,003' (-1,000')	
Muncie Creek SH		
Stark SH		
B / KC		
Pawnee LS		
Ft. Scott		
Cherokee Sh		
Lower Cherokee Sh		
'Johnson' Zone		
Morrow Shale		
Miss (Erosional)		

* Contractor

RTD: LTD: ATD:

E-log is to rotary sample depth, uphole.
E-log is to rotary sample depth, mid- & down hole.

Loggers: Schlumberger
Elk City, Oklahoma

HOLE DEVIATION (272' - ')

DEPTH / TVD	--- INCLINATION	AZIMUTH	NORTH	SOUTH	EAST	WEST	DOGLEG deg/100'
272' / ---	0.75 (Surface)						
1,291' / ---	1.00						
2,234' / ---	1.00						
3,110' / ---	1.00						
4,115' / ---	(DST #1)						

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.
1,000 PSI @ Standpipe.

Uphole Hole:
WOB 35M @ 80 RPM.

After Mudup / Main Hole:
WOB 40M @ 70 RPM.

Drill Collars: 6-1/8" x 2.50" --- 469'. (83.5#/ft)
Dry Collar Weight: 39,162#
(@ 9.5 ppg / Buoyancy Factor 0.8545)
Bouyancy Collar Weight: 33,464#
Design Factor: 15%, therefore:
available WOB is 28,444#
Drill Pipe: 4-1/2"XH. (16#/ft - used)

BIT RECORD

DATE	SIZE	TYPE	JET SIZE	DEPTH IN / OUT	CUM. FT.	HOURS	ROP
4 Feb 2011	12-1/4"	REED RR	3 / 15's	0' / 272'	272'	2.50	108.8
5 Feb 2001	7-7/8"	JZ QX-21	13 - 14 - 13	272' /			

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 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
- 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
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- Dark specks

STRINGER

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

OTHER SYMBOLS

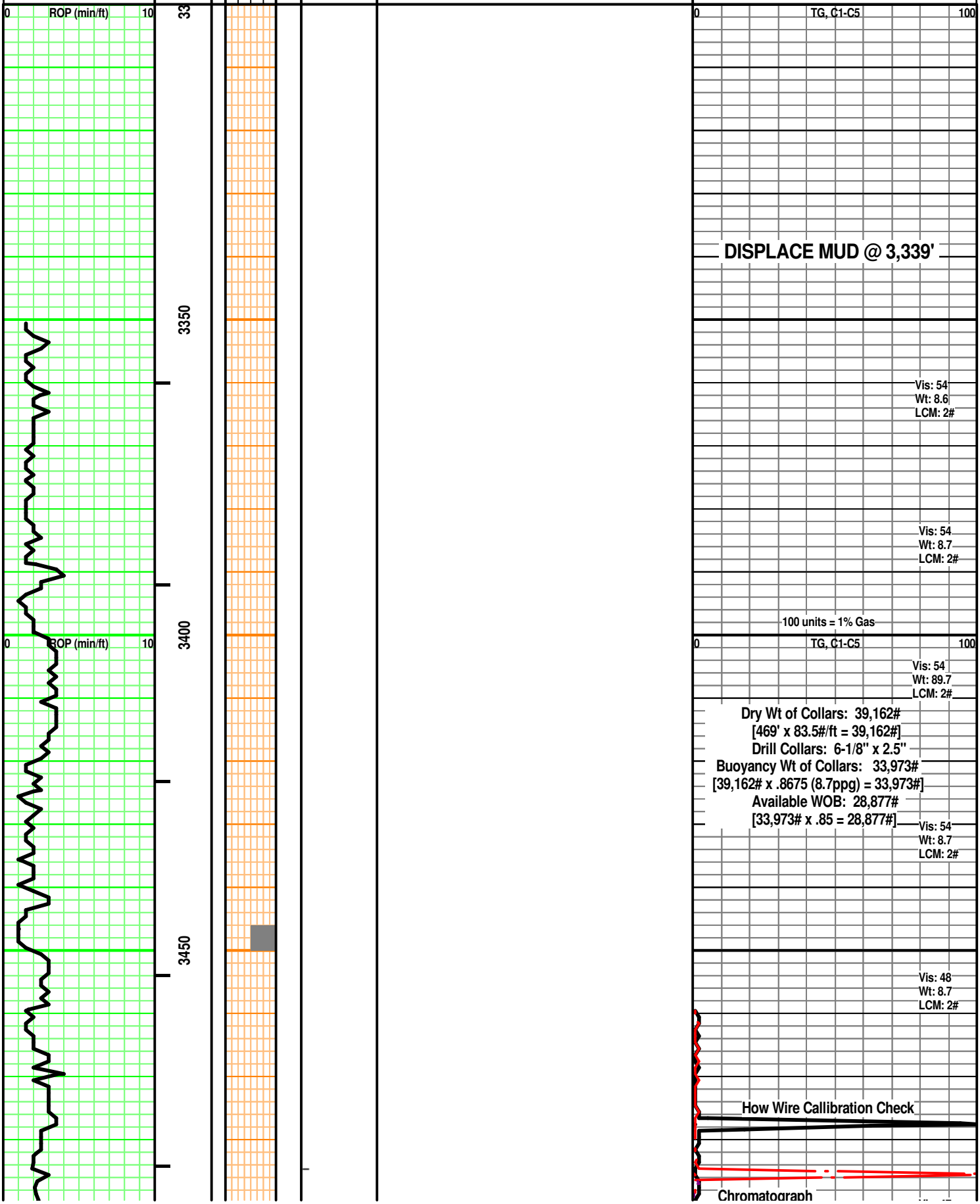
ACTIVITY

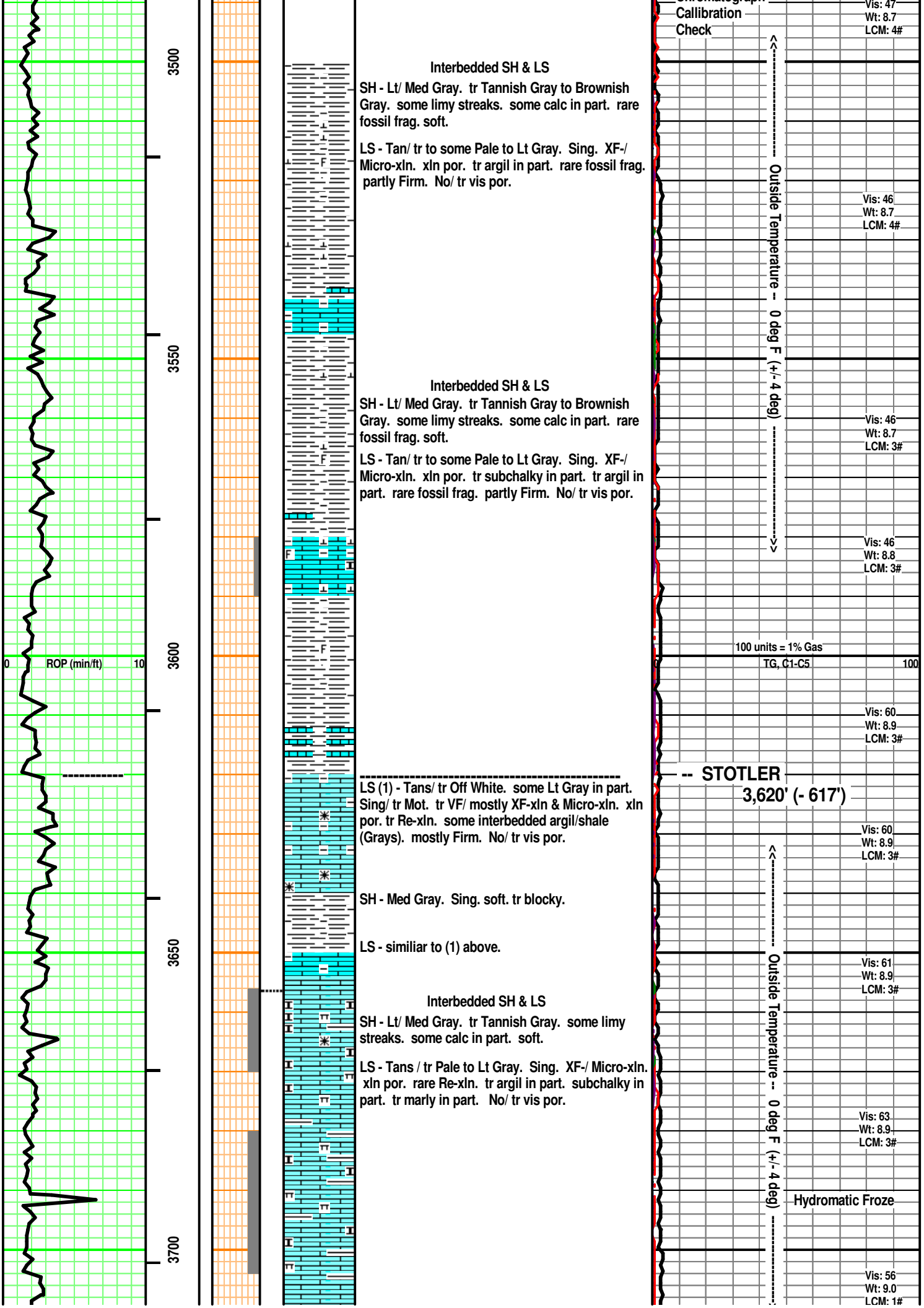
- Lost circluation
- Circulate for sam
- Circulate for sam
- Rtd
- Trip

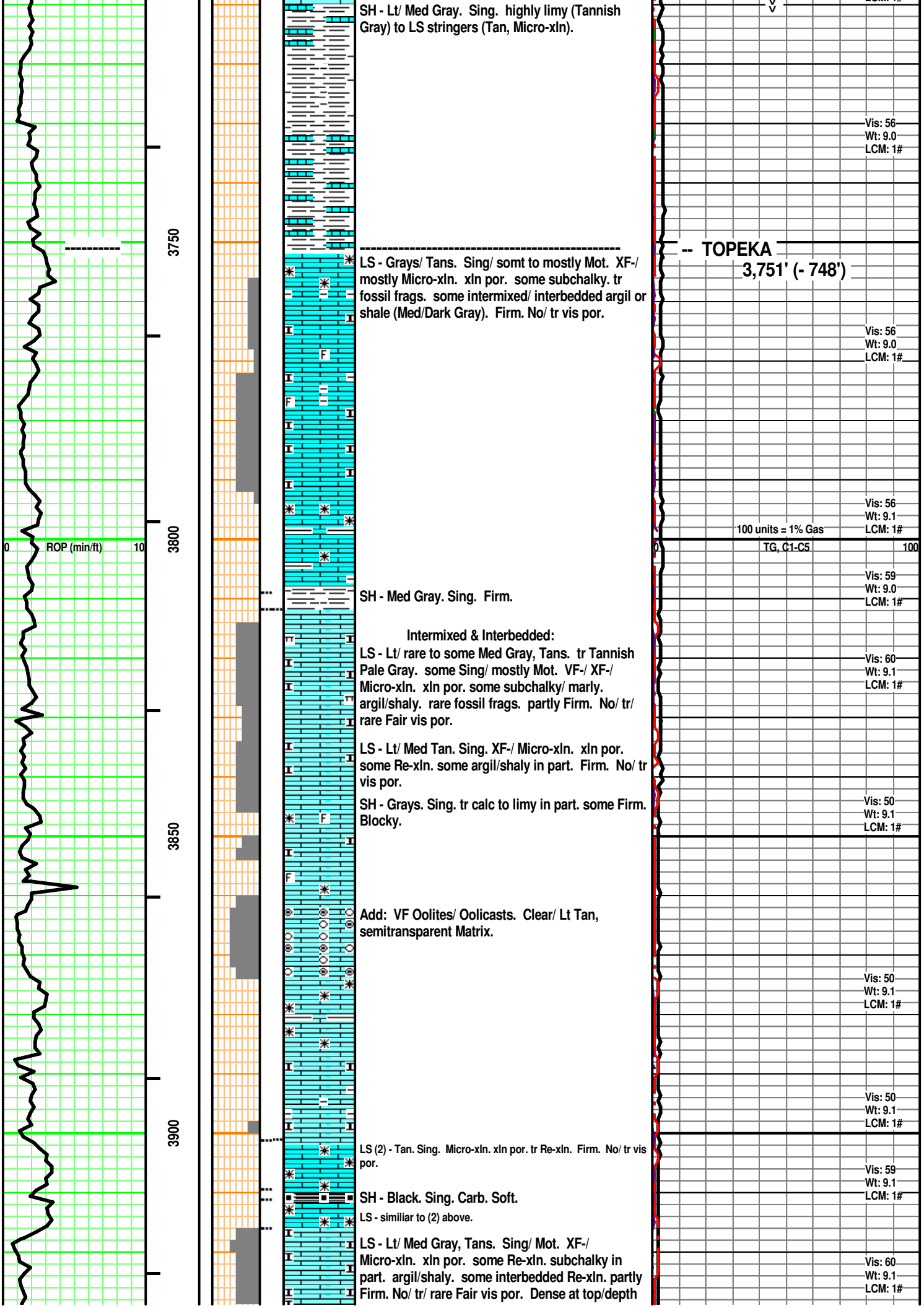
EVENT

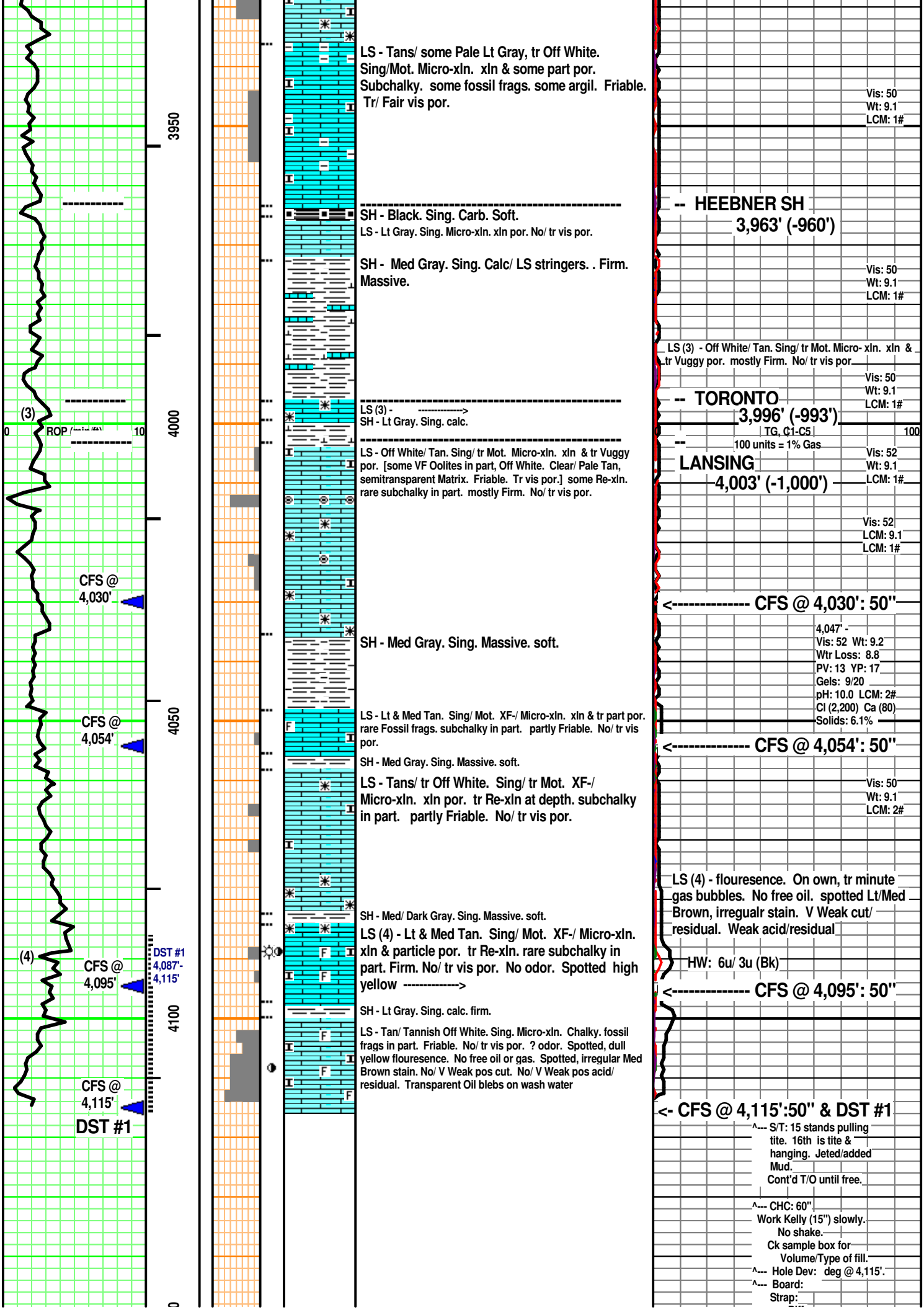
- Connection
- Rft

- Sidewall


Curve Track 1
ROP (min/ft)
Depth
Porosity Type
Porosity
24%
18%
12%
6%
Shows
Lithology
Geological Descriptions
TG, C1-C5
TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
C5 (units)
0
ROP (min/ft)
10
33
3350
3400
3450
0
TG, C1-C5
100
DISPLACE MUD @ 3,339'
Vis: 54
Wt: 8.6
LCM: 2#
Vis: 54
Wt: 8.7
LCM: 2#
100 units = 1% Gas
0
TG, C1-C5
100
Vis: 54
Wt: 89.7
LCM: 2#
Dry Wt of Collars: 39,162#
[469' x 83.5#/ft = 39,162#]
Drill Collars: 6-1/8" x 2.5"
Buoyancy Wt of Collars: 33,973#
[39,162# x .8675 (8.7ppg) = 33,973#]
Available WOB: 28,877#
[33,973# x .85 = 28,877#]
Vis: 54
Wt: 8.7
LCM: 2#
Vis: 48
Wt: 8.7
LCM: 2#
How Wire Callibration Check
Chromatograph


3500
3550
3600
3650
3700
0 ROP (min/ft) 10
Interbedded SH & LS
SH - Lt/ Med Gray. tr Tannish Gray to Brownish Gray. some limy streaks. some calc in part. rare fossil frag. soft.
LS - Tan/ tr to some Pale to Lt Gray. Sing. XF-/ Micro-xln. xln por. tr argil in part. rare fossil frag. partly Firm. No/ tr vis por.
Interbedded SH & LS
SH - Lt/ Med Gray. tr Tannish Gray to Brownish Gray. some limy streaks. some calc in part. rare fossil frag. soft.
LS - Tan/ tr to some Pale to Lt Gray. Sing. XF-/ Micro-xln. xln por. tr subchalky in part. tr argil in part. rare fossil frag. partly Firm. No/ tr vis por.
LS (1) - Tans/ tr Off White. some Lt Gray in part. Sing/ tr Mot. tr VF/ mostly XF-xln & Micro-xln. xln por. tr Re-xln. some interbedded argil/shale (Grays). mostly Firm. No/ tr vis por.
SH - Med Gray. Sing. soft. tr blocky.
LS - similiar to (1) above.
Interbedded SH & LS
SH - Lt/ Med Gray. tr Tannish Gray. some limy streaks. some calc in part. soft.
LS - Tans / tr Pale to Lt Gray. Sing. XF-/ Micro-xln. xln por. rare Re-xln. tr argil in part. subchalky in part. tr marly in part. No/ tr vis por.
Callibration Check
Vis: 47
Wt: 8.7
LCM: 4#
Outside Temperature -- 0 deg F (+/- 4 deg)
Vis: 46
Wt: 8.7
LCM: 4#
Vis: 46
Wt: 8.7
LCM: 3#
Vis: 46
Wt: 8.8
LCM: 3#
100 units = 1% Gas
0 TG, C1-C5 100
Vis: 60
Wt: 8.9
LCM: 3#
-- STOTLER
3,620' (- 617')
Vis: 60
Wt: 8.9
LCM: 3#
Outside Temperature -- 0 deg F (+/- 4 deg)
Vis: 61
Wt: 8.9
LCM: 3#
Vis: 63
Wt: 8.9
LCM: 3#
Hydromatic Froze
Vis: 56
Wt: 9.0
LCM: 1#


SH - Lt/ Med Gray. Sing. highly limy (Tannish Gray) to LS stringers (Tan, Micro-xln).
Vis: 56
Wt: 9.0
LCM: 1#
3750
LS - Grays/ Tans. Sing/ somt to mostly Mot. XF-/ mostly Micro-xln. xln por. some subchalky. tr fossil frags. some intermixed/ interbedded argil or shale (Med/Dark Gray). Firm. No/ tr vis por.
-- TOPEKA
3,751' (- 748')
Vis: 56
Wt: 9.0
LCM: 1#
3800
0 ROP (min/ft) 10
100 units = 1% Gas
0 TG, C1-C5 100
Vis: 56
Wt: 9.1
LCM: 1#
SH - Med Gray. Sing. Firm.
Vis: 59
Wt: 9.0
LCM: 1#
Intermixed & Interbedded:
LS - Lt/ rare to some Med Gray, Tans. tr Tannish Pale Gray. some Sing/ mostly Mot. VF-/ XF-/ Micro-xln. xln por. some subchalky/ marly. argil/shaly. rare fossil frags. partly Firm. No/ tr/ rare Fair vis por.
Vis: 60
Wt: 9.1
LCM: 1#
LS - Lt/ Med Tan. Sing. XF-/ Micro-xln. xln por. some Re-xln. some argil/shaly in part. Firm. No/ tr vis por.
SH - Grays. Sing. tr calc to limy in part. some Firm. Blocky.
Vis: 50
Wt: 9.1
LCM: 1#
3850
Add: VF Oolites/ Oolicasts. Clear/ Lt Tan, semitransparent Matrix.
Vis: 50
Wt: 9.1
LCM: 1#
3900
Vis: 50
Wt: 9.1
LCM: 1#
LS (2) - Tan. Sing. Micro-xln. xln por. tr Re-xln. Firm. No/ tr vis por.
Vis: 59
Wt: 9.1
LCM: 1#
SH - Black. Sing. Carb. Soft.
LS - similiar to (2) above.
LS - Lt/ Med Gray, Tans. Sing/ Mot. XF-/ Micro-xln. xln por. some Re-xln. subchalky in part. argil/shaly. some interbedded Re-xln. partly Firm. No/ tr/ rare Fair vis por. Dense at top/depth
Vis: 60
Wt: 9.1
LCM: 1#


3950
4000
4050
4100
(3)
0
ROP
10
(4)
CFS @ 4,030'
CFS @ 4,054'
CFS @ 4,095'
CFS @ 4,115'
DST #1
DST #1 4,087'- 4,115'
LS - Tans/ some Pale Lt Gray, tr Off White. Sing/Mot. Micro-xln. xln & some part por. Subchalky. some fossil frags. some argil. Friable. Tr/ Fair vis por.
SH - Black. Sing. Carb. Soft.
LS - Lt Gray. Sing. Micro-xln. xln por. No/ tr vis por.
SH - Med Gray. Sing. Calc/ LS stringers. . Firm. Massive.
LS (3) - ---------->
SH - Lt Gray. Sing. 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.
SH - Med Gray. Sing. Massive. soft.
LS - Lt & Med Tan. Sing/ Mot. XF-/ Micro-xln. xln & tr part por. rare Fossil frags. subchalky in part. partly Friable. No/ tr vis por.
SH - Med Gray. Sing. Massive. soft.
LS - Tans/ tr Off White. Sing/ tr Mot. XF-/ Micro-xln. xln por. tr Re-xln at depth. subchalky in part. partly Friable. No/ tr vis por.
SH - Med/ Dark Gray. Sing. Massive. soft.
LS (4) - Lt & Med Tan. Sing/ Mot. XF-/ Micro-xln. xln & particle por. tr Re-xln. rare subchalky in part. Firm. No/ tr vis por. No odor. Spotted high yellow ---------->
SH - Lt Gray. Sing. calc. firm.
LS - Tan/ Tannish Off White. Sing. Micro-xln. Chalky. fossil frags in part. Friable. No/ tr vis por. ? odor. Spotted, dull yellow flouresence. No free oil or gas. Spotted, irregular Med Brown stain. No/ V Weak pos cut. No/ V Weak pos acid/ residual. Transparent Oil blebs on wash water
Vis: 50
Wt: 9.1
LCM: 1#
-- HEEBNER SH
3,963' (-960')
Vis: 50
Wt: 9.1
LCM: 1#
LS (3) - Off White/ Tan. Sing/ tr Mot. Micro- xln. xln & tr Vuggy por. mostly Firm. No/ tr vis por
Vis: 50
Wt: 9.1
LCM: 1#
-- TORONTO
3,996' (-993')
TG, C1-C5
100
100 units = 1% Gas
LANSING
4,003' (-1,000')
Vis: 52
Wt: 9.1
LCM: 1#
Vis: 52
LCM: 9.1
LCM: 1#
<---------- CFS @ 4,030': 50"
4,047' -
Vis: 52 Wt: 9.2
Wtr Loss: 8.8
PV: 13 YP: 17
Gels: 9/20
pH: 10.0 LCM: 2#
Cl (2,200) Ca (80)
Solids: 6.1%
<---------- CFS @ 4,054': 50"
Vis: 50
Wt: 9.1
LCM: 2#
LS (4) - flouresence. On own, tr minute gas bubbles. No free oil. spotted Lt/Med Brown, irregualr stain. V Weak cut/ residual. Weak acid/residual
HW: 6u/ 3u (Bk)
<---------- CFS @ 4,095': 50"
<- CFS @ 4,115':50" & DST #1
^--- S/T: 15 stands pulling tite. 16th is tite & hanging. Jeted/added Mud.
Cont'd T/O until free.
^--- CHC: 60"
Work Kelly (15") slowly.
No shake.
Ck sample box for Volume/Type of fill.
^--- Hole Dev: deg @ 4,115'.
^--- Board:
Strap:


4156
Diff:
^--- DST #1.

Covey
The Well Watchers

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

Well Name:	**SHEETZ #1**		
Location:	**Section 16 - Township 12 South - Range 32 West**		
Licence Number:	**15-109-20,974. 0000**	**Region:**	**Logan County, KS.**
Spud Date:	**4 February 2011**	**Drilling Completed:**	
Surface Coordinates:	**1,382' FSL & 1,773' FWL (Approximately SE SW NE SW)**		
Bottom Hole Coordinates:			
Ground Elevation (ft):	**2,995'**	**K.B. Elevation (ft):**	**3,003'**
Logged Interval (ft):	**3,350'** **To:**	**Total Depth (ft):**	
Formation:	**Stotler ------> Miss**		
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

DAILY DRILLING STATUS -- FEBRUARY

2011 2011

12-1/4" Hole

4 Feb --- Spud @ 6:30pm. Drill to 272'.
5 --- Run 8-5/8" casing (23#)
Set casing @ 269'.
Cemented w/ 200 sx Class A
(2% Gel + 3% CC). [Consolidated]
Cement did circulate.
Plug down @ 2:45am.
WOC.

7-7/8" Hole

5 Feb --- WOC. 6:30am @ 272'.
Under surface casing @ 11:30am.
6 --- 6:30am @ 1,935'.
7 --- 6:30am @ 2,760'.
8 --- Displace Mud @ 3,339'.
6:30am @ 3,445'.
9 --- 6:30am @ 4,030'.
Start & ....
10 --- 6:30am @ 4,115'. Finish DST #1:
Lansing (4,087' - 4,115').
Resumed Drilling @ 3:30pm.
11 --- 6:30am @ 4,225'. DST #2:
Lansing (4,143' - 4,256').

7-7/8" Hole

12 Feb --- Resumed Drilling @ 12:55am.
6:30am @ 4,360'.
13 --- Start & ....
6:30am @ 4,584'.
Finish DST # 3: 'Johnson'
Zone (4,510' - 4,583').
14 ---

KB: 3,003'

FORMATION TOPS

GL: 2,995'

Formation	Rotary Sample Depth (Datum)	E-log Depth (Datum)
AnHydrite	2,517' (+486') *	
B / AnHdrite	2,540' (+463') *	
Stotler	3.620' (-617')	
Topeka	3,851' (-748')	
Heebner Shale	3,963' (-960')	
Toronto	3,996' (-993')	
Lansing	4,003' (-1,000')	
Muncie Creek SH	4,153' (-1,150')	
Stark SH	4,234' (-1,231')	
B / KC	4,301' (-1,298')	
Pawnee LS	4,442' (-1,439')	
Ft. Scott	4,492' (-1,486')	
Cherokee Sh		
'Johnson' Zone		
Morrow Shale		
Miss (Erosional)		

* Contractor

RTD: LTD: ATD:

E-log is to rotary sample depth, uphole.
E-log is to rotary sample depth, mid- & down hole.

Loggers: Schlumberger
Elk City, Oklahoma

DST # 1 - LANSING

Rotary Depth: 4,087' - 4,115'
Logger's Depth:

IFP: 12# - 135#/30"
ISIP: 1,175# / 45"
FFP: 141# - 335# / 60"
FSIP: 1,166# / 90"
129 deg F
MH: 1,939# - 1,928#

Recovery: 715' Gassy Muddy Wtr (2%G,18%M,80%W)

Total Fluid: 715'

IF: BOB in 11 minutes.
ISI: No Blow Back.
FF: BOB in 18 minutes.
FSI: No Blow Back.

Diamond Testing
Hoisington, KS.

Recovery Water: (40,000 ppm)
System Water: (2,200 ppm)

Reported Rw =
0.12 ohms @ 80 deg F

Recovery Water - Mud Engineer:
(42,000 ppm)

Sampler: Wtr w/ OIL spots

DST # 2 - LANSING

Rotary Depth: 4,143' - 4,256'
Logger's Depth:

IFP: 15# - 155#/30"
ISIP: 1,276# / 45"
FFP: 165# - 379# / 60"
FSIP: 1,260# / 90"
117 deg F
MH: 1,967# - 1,958#

Recovery: 140' GAS in Pipe
171' Clean OIL (41.2 API @ 60 deg F)
378' Gassy Oily Muddy Wtr (10%G,11%O,19%W,60%M)
315' Muddy Water (17%M,83%W - Oil spots)

Total Fluid: 864'

IF: BOB in 7 minutes.
ISI: 1-1/4 inch Blow Back.
FF: BOB in 8 minutes.
FSI: 1-1/2 inch Blow Back.

Diamond Testing
Hoisington, KS

Recovery Water: (48,000 ppm)
System Water: (2,900 ppm)

Reported Rw =
0.10 ohms @ 79 deg F

Recovery Water - Mud Engineer: (
ppm)

Sampler: 4% OIL + 96% Water

HOLE DEVIATION (272' - ') & STRAP

DEPTH / TVD	--- INCLINATION	AZIMUTH	NORTH	SOUTH	EAST	WEST	DOGLEG deg/100'
272' / ---	0.75 (Surface)						
1,291' / ---	1.00						
2,234' / ---	1.00						
3,110' / ---	1.00						
4,115' / ---	1.50 (DST #1)						
4,583' / ---	(DST #3)						

STRAP ON DST # 1

Board: 4,141.98'
Strap: 4,141.92'
Diff: 0.06'

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.
1,000 PSI @ Standpipe.

Uphole Hole:
WOB 35M @ 80 RPM.

After Mudup / Main Hole:
WOB 40M @ 70 RPM.

Drill Collars: 6-1/8" x 2.50" --- 469'. (83.5#/ft)
Dry Collar Weight: 39,162#
(@ 9.5 ppg / Buoyancy Factor 0.8545)
Bouyancy Collar Weight: 33,464#
Design Factor: 15%, therefore:
available WOB is 28,444#
Drill Pipe: 4-1/2"XH. (16#/ft - used)

BIT RECORD

DATE	SIZE	TYPE	JET SIZE	DEPTH IN / OUT	CUM. FT.	HOURS	ROP
4 Feb 2011	12-1/4"	REED RR	3 / 15's	0' / 272'	272'	2.50	108.8
5 Feb 2001	7-7/8"	JZ QX-21	13 - 14 - 13	272' /			

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

STRINGER
- Calc dol

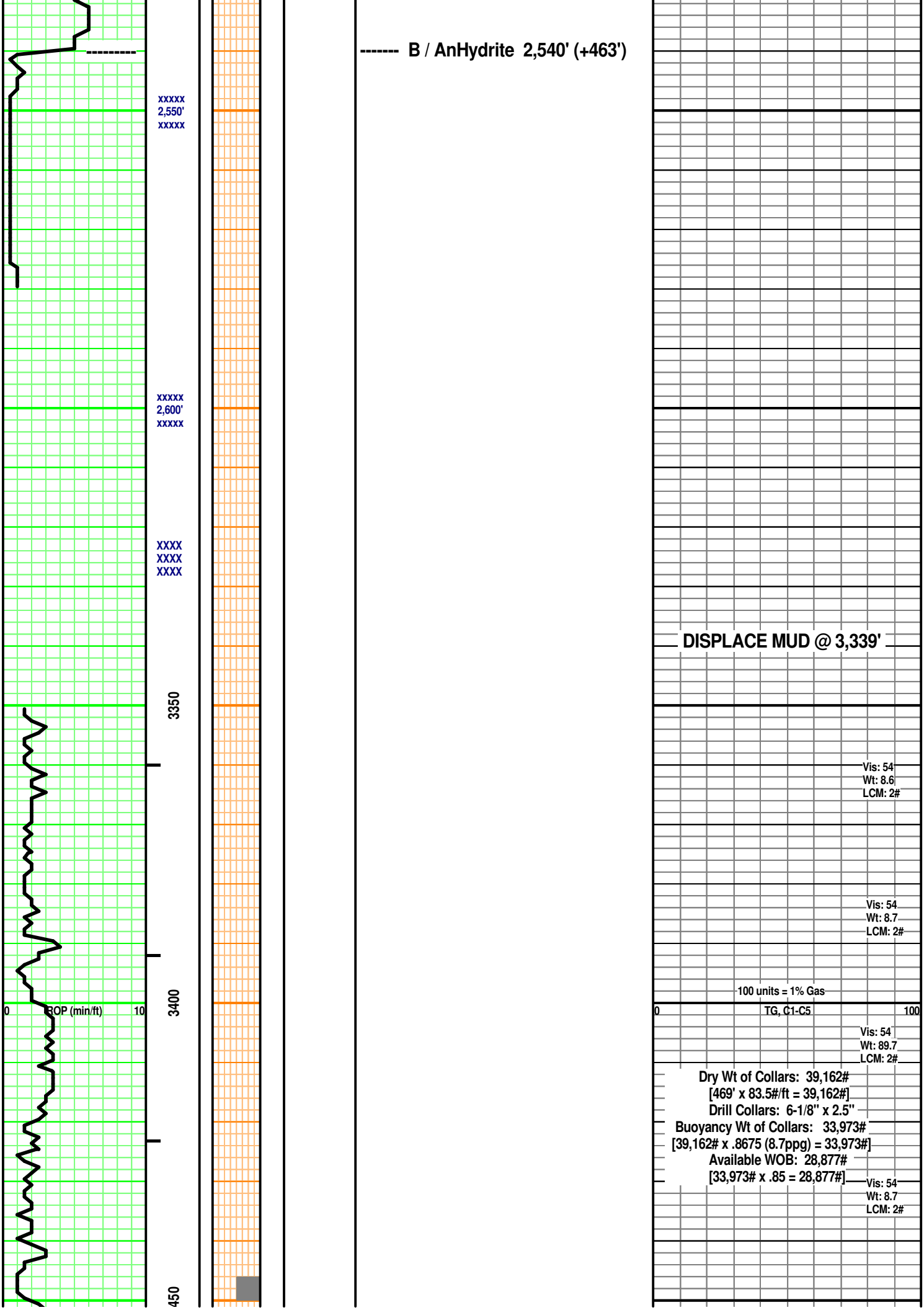
OTHER SYMBOLS

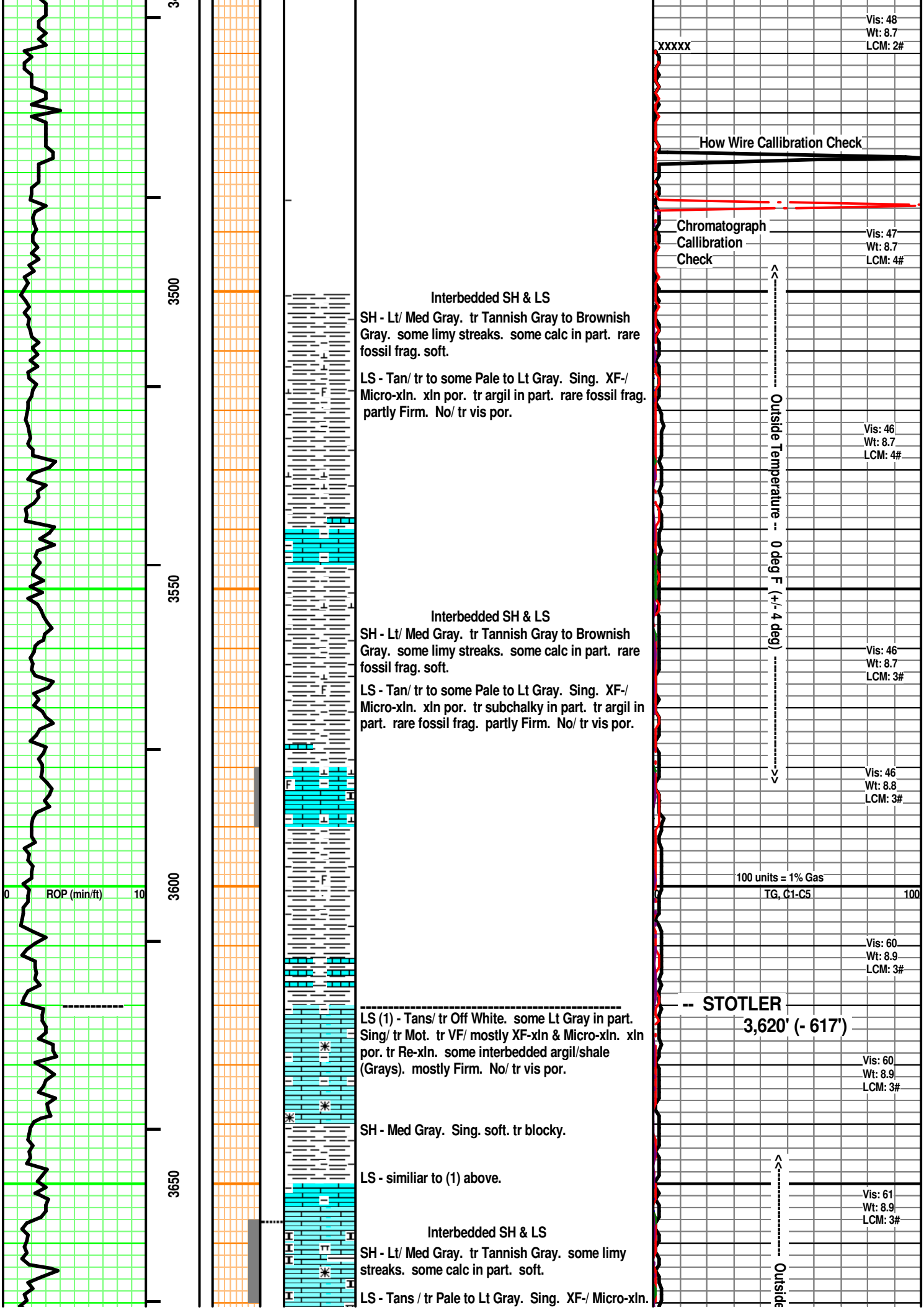
ACTIVITY
- Lost circluation
- Circulate for sam
- Circulate for sam
- Rtd
- Trip

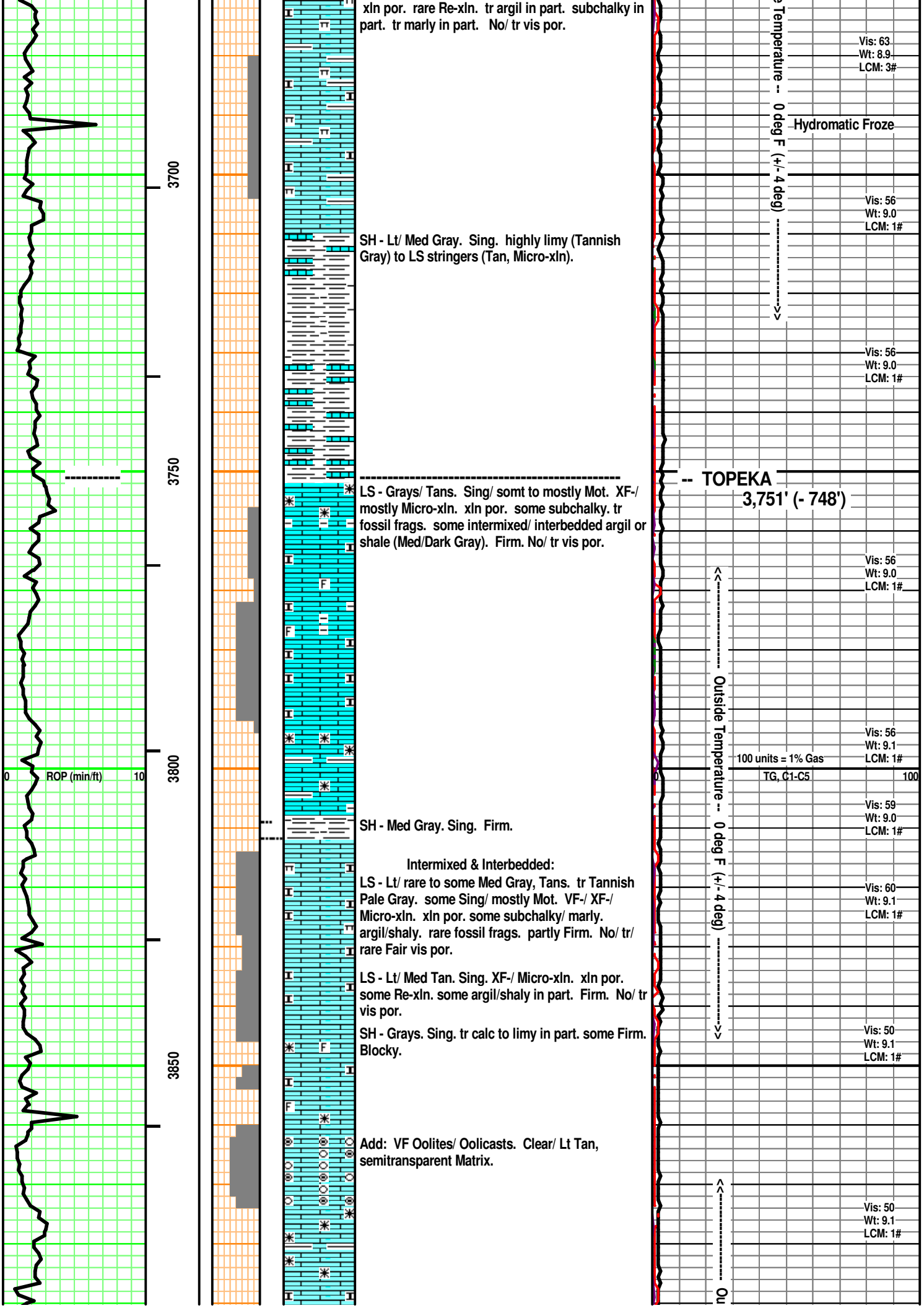
EVENT
- Connection
- Rft
- Sidewall

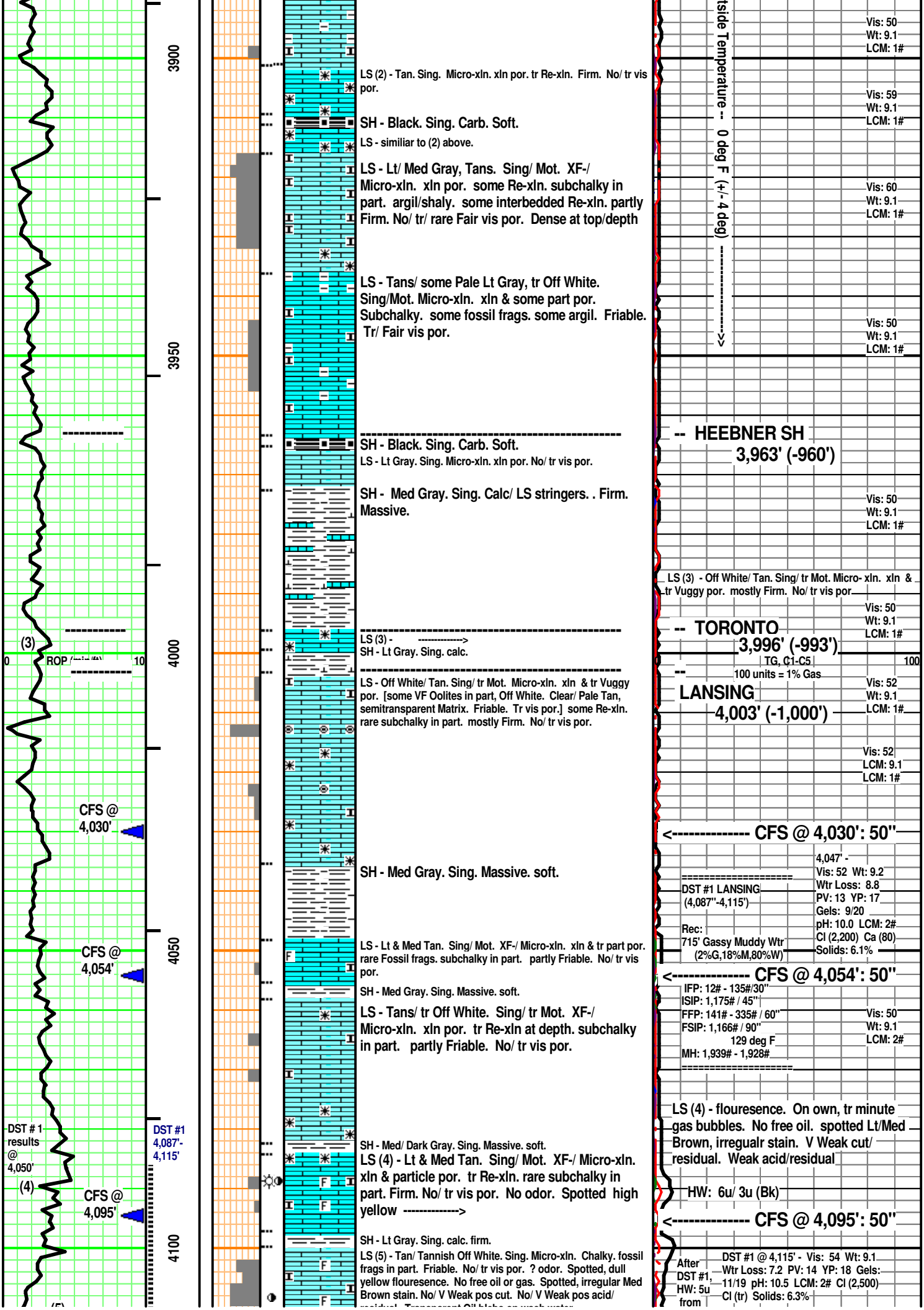
Curve Track 1 ROP (min/ft)	Depth	Porosity Type	Porosity 24% 18% 12% 6%	Shows	Lithology	Geological Descriptions	TG, C1-C5
0 ROP (min/ft) 10	xxxxx 2,450' xxxxx						0 TG, C1-C5 100
0 ROP (min/ft) 10	xxxxx 2,500' xxxxx					---------- AnHydrite 2,517' (+486')	0 TG, C1-C5 100

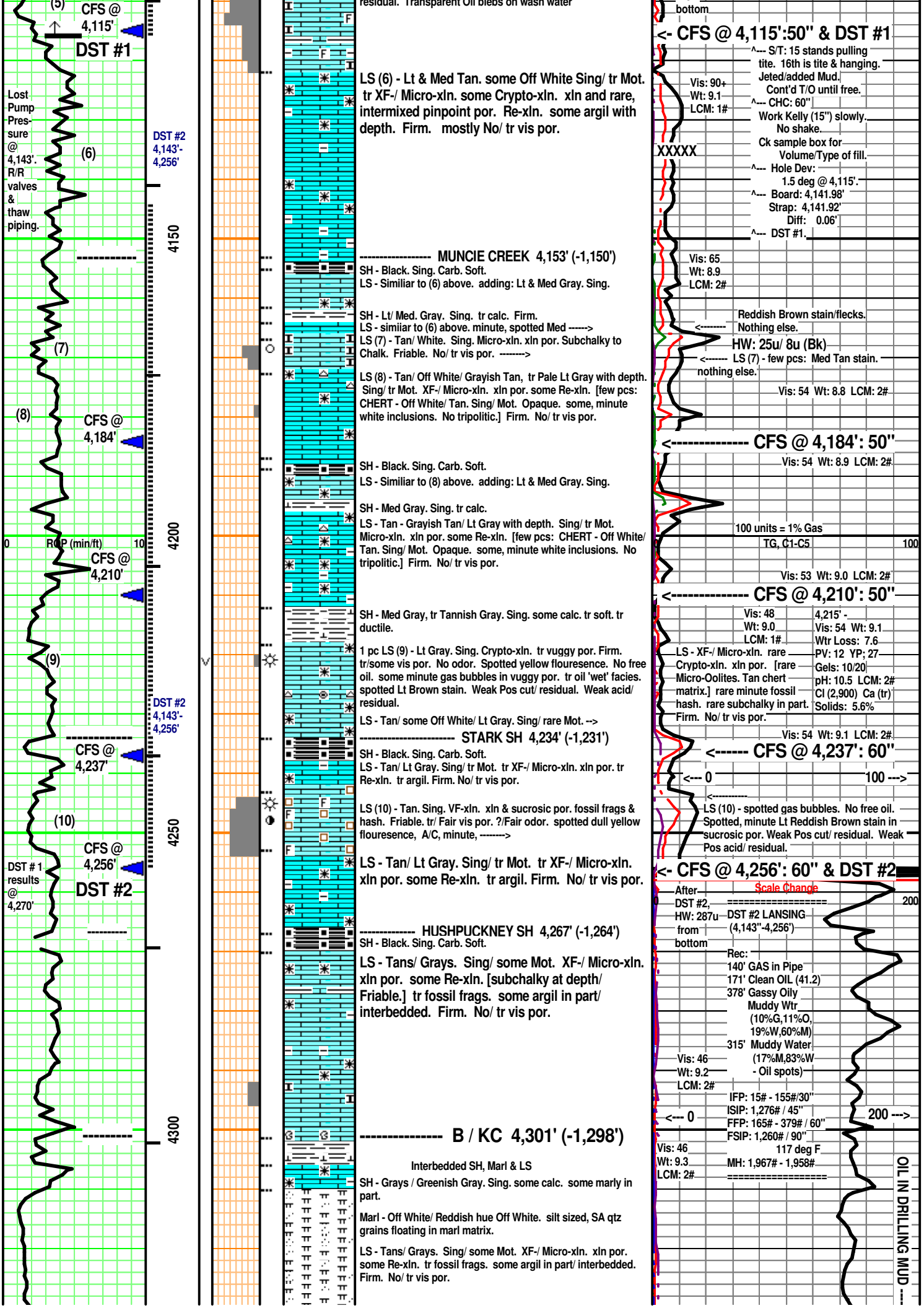
TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
C5 (units)

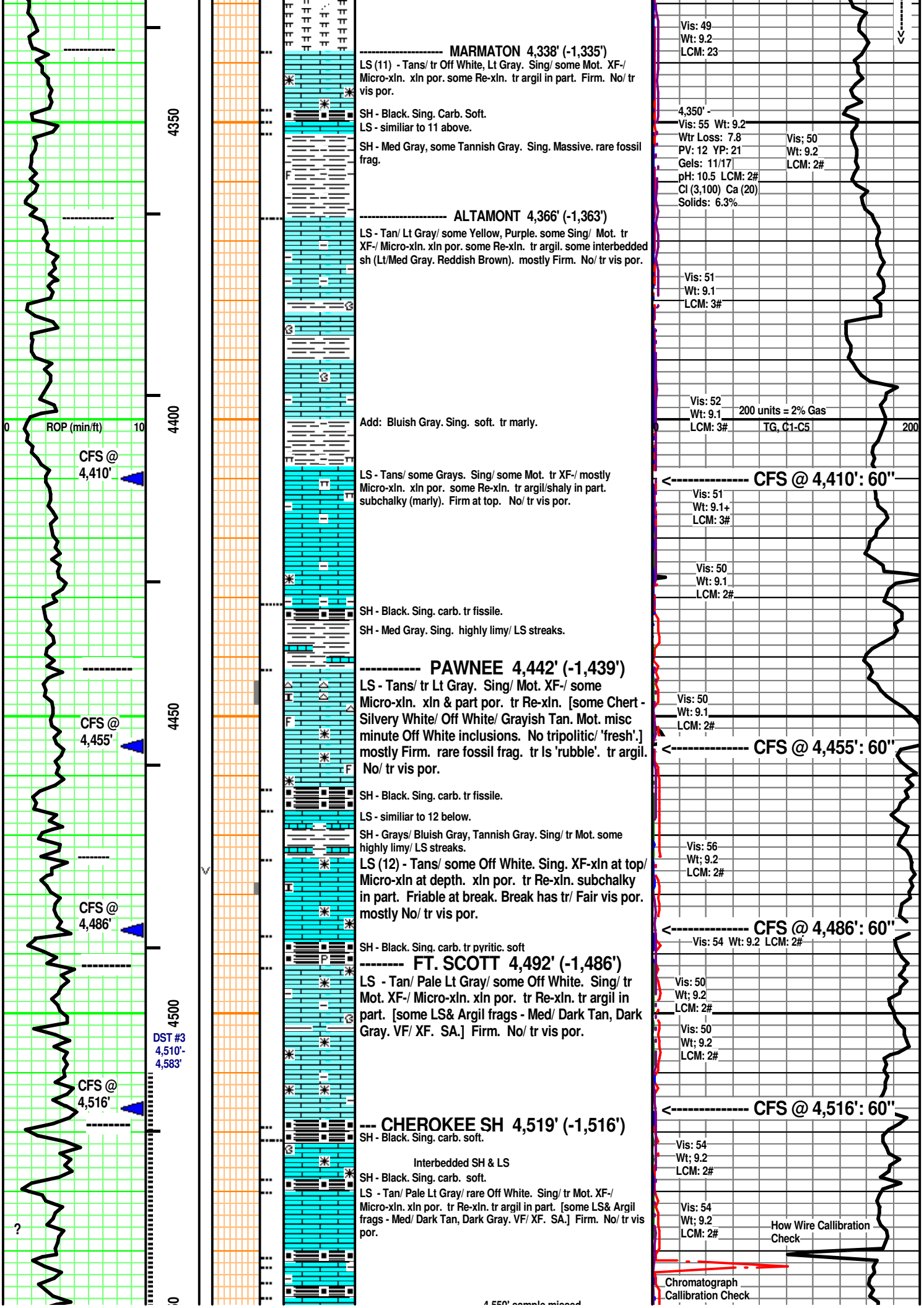

------- B / AnHydrite 2,540' (+463')
xxxxx
2,550'
xxxxx
xxxxx
2,600'
xxxxx
XXXX
XXXX
XXXX
3350
3400
3450
0
ROP (min/ft)
10
DISPLACE MUD @ 3,339'
Vis: 54
Wt: 8.6
LCM: 2#
Vis: 54
Wt: 8.7
LCM: 2#
100 units = 1% Gas
0
TG, C1-C5
100
Vis: 54
Wt: 89.7
LCM: 2#
Dry Wt of Collars: 39,162#
[469' x 83.5#/ft = 39,162#]
Drill Collars: 6-1/8" x 2.5"
Buoyancy Wt of Collars: 33,973#
[39,162# x .8675 (8.7ppg) = 33,973#]
Available WOB: 28,877#
[33,973# x .85 = 28,877#]
Vis: 54
Wt: 8.7
LCM: 2#

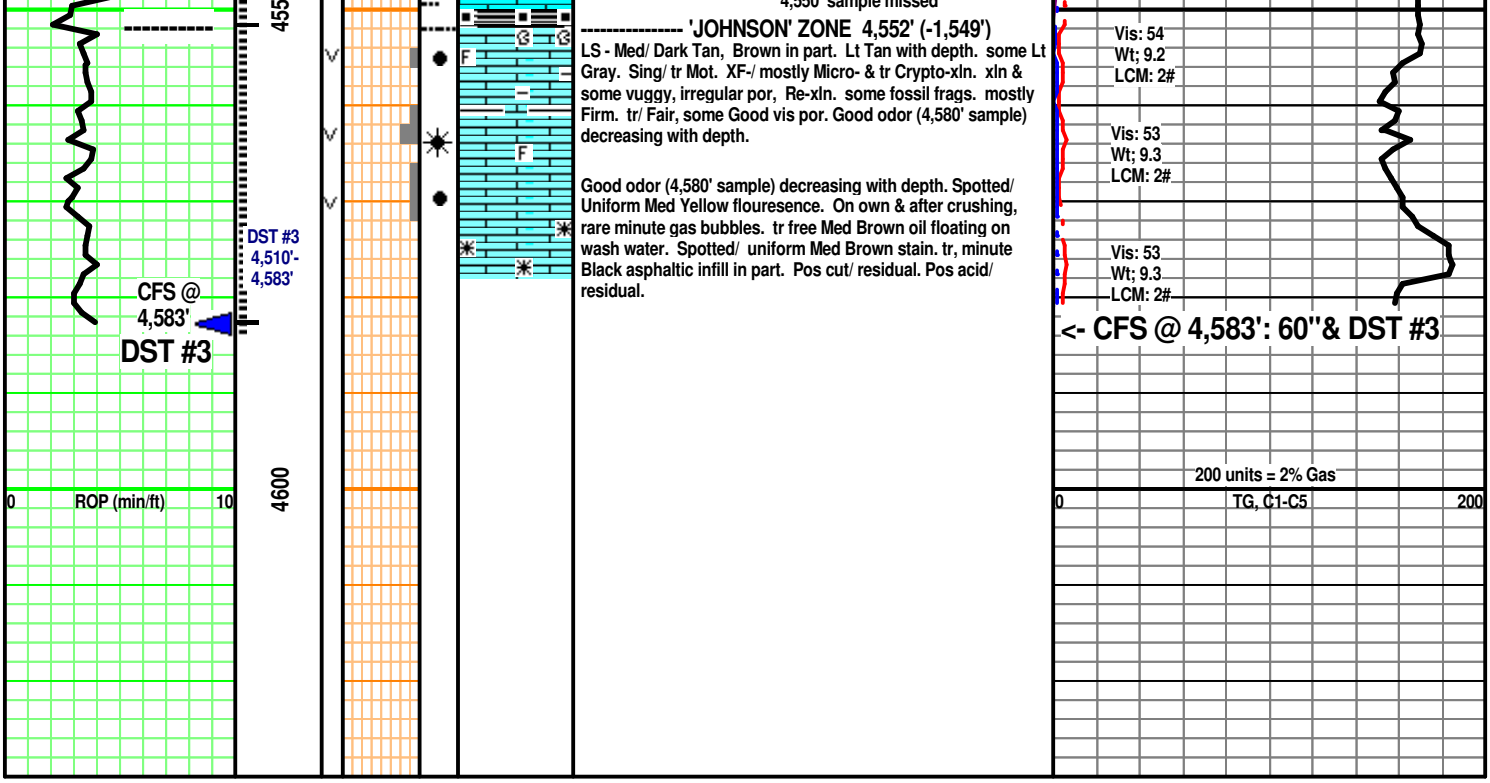

3500
3550
3600
3650
0
ROP (min/ft)
10
Interbedded SH & LS
SH - Lt/ Med Gray. tr Tannish Gray to Brownish Gray. some limy streaks. some calc in part. rare fossil frag. soft.
LS - Tan/ tr to some Pale to Lt Gray. Sing. XF-/ Micro-xln. xln por. tr argil in part. rare fossil frag. partly Firm. No/ tr vis por.
Interbedded SH & LS
SH - Lt/ Med Gray. tr Tannish Gray to Brownish Gray. some limy streaks. some calc in part. rare fossil frag. soft.
LS - Tan/ tr to some Pale to Lt Gray. Sing. XF-/ Micro-xln. xln por. tr subchalky in part. tr argil in part. rare fossil frag. partly Firm. No/ tr vis por.
LS (1) - Tans/ tr Off White. some Lt Gray in part. Sing/ tr Mot. tr VF/ mostly XF-xln & Micro-xln. xln por. tr Re-xln. some interbedded argil/shale (Grays). mostly Firm. No/ tr vis por.
SH - Med Gray. Sing. soft. tr blocky.
LS - similiar to (1) above.
Interbedded SH & LS
SH - Lt/ Med Gray. tr Tannish Gray. some limy streaks. some calc in part. soft.
LS - Tans / tr Pale to Lt Gray. Sing. XF-/ Micro-xln.
Vis: 48
Wt: 8.7
LCM: 2#
XXXXX
How Wire Callibration Check
Chromatograph
Callibration
Check
Vis: 47
Wt: 8.7
LCM: 4#
Outside Temperature -- 0 deg F (+/- 4 deg)
Vis: 46
Wt: 8.7
LCM: 4#
Vis: 46
Wt: 8.7
LCM: 3#
Vis: 46
Wt: 8.8
LCM: 3#
100 units = 1% Gas
0
TG, C1-C5
100
Vis: 60
Wt: 8.9
LCM: 3#
-- STOTLER
3,620' (- 617')
Vis: 60
Wt: 8.9
LCM: 3#
Vis: 61
Wt: 8.9
LCM: 3#
Outside


xln por. rare Re-xln. tr argil in part. subchalky in part. tr marly in part. No/ tr vis por.
SH - Lt/ Med Gray. Sing. highly limy (Tannish Gray) to LS stringers (Tan, Micro-xln).
LS - Grays/ Tans. Sing/ somt to mostly Mot. XF-/ mostly Micro-xln. xln por. some subchalky. tr fossil frags. some intermixed/ interbedded argil or shale (Med/Dark Gray). Firm. No/ tr vis por.
SH - Med Gray. Sing. Firm.
Intermixed & Interbedded:
LS - Lt/ rare to some Med Gray, Tans. tr Tannish Pale Gray. some Sing/ mostly Mot. VF-/ XF-/ Micro-xln. xln por. some subchalky/ marly. argil/shaly. rare 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.
SH - Grays. Sing. tr calc to limy in part. some Firm. Blocky.
Add: VF Oolites/ Oolicasts. Clear/ Lt Tan, semitransparent Matrix.
3700
3750
3800
3850
0
ROP (min/ft)
10
-- TOPEKA
3,751' (- 748')
Outside Temperature -- 0 deg F (+/- 4 deg)
Hydromatic Froze
Vis: 63
Wt: 8.9
LCM: 3#
Vis: 56
Wt: 9.0
LCM: 1#
Vis: 56
Wt: 9.0
LCM: 1#
Vis: 56
Wt: 9.0
LCM: 1#
Vis: 56
Wt: 9.1
LCM: 1#
100 units = 1% Gas
0
TG, C1-C5
100
Vis: 59
Wt: 9.0
LCM: 1#
Vis: 60
Wt: 9.1
LCM: 1#
Vis: 50
Wt: 9.1
LCM: 1#
Vis: 50
Wt: 9.1
LCM: 1#


3900
3950
4000
4050
4100
(3)
(4)
(5)
0
ROP
10
CFS @ 4,030'
CFS @ 4,054'
CFS @ 4,095'
DST # 1 results @ 4,050'
DST #1 4,087'-4,115'
LS (2) - Tan. Sing. Micro-xln. xln por. tr Re-xln. Firm. No/ tr vis por.
SH - Black. Sing. Carb. Soft.
LS - similiar to (2) above.
LS - Lt/ Med Gray, Tans. Sing/ Mot. XF-/ Micro-xln. xln por. some Re-xln. subchalky in part. argil/shaly. some interbedded Re-xln. partly Firm. No/ tr/ rare Fair vis por. Dense at top/depth
LS - Tans/ some Pale Lt Gray, tr Off White. Sing/Mot. Micro-xln. xln & some part por. Subchalky. some fossil frags. some argil. Friable. Tr/ Fair vis por.
SH - Black. Sing. Carb. Soft.
LS - Lt Gray. Sing. Micro-xln. xln por. No/ tr vis por.
SH - Med Gray. Sing. Calc/ LS stringers. . Firm. Massive.
LS (3) ----------> SH - Lt Gray. Sing. 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.
SH - Med Gray. Sing. Massive. soft.
LS - Lt & Med Tan. Sing/ Mot. XF-/ Micro-xln. xln & tr part por. rare Fossil frags. subchalky in part. partly Friable. No/ tr vis por.
SH - Med Gray. Sing. Massive. soft.
LS - Tans/ tr Off White. Sing/ tr Mot. XF-/ Micro-xln. xln por. tr Re-xln at depth. subchalky in part. partly Friable. No/ tr vis por.
SH - Med/ Dark Gray. Sing. Massive. soft.
LS (4) - Lt & Med Tan. Sing/ Mot. XF-/ Micro-xln. xln & particle por. tr Re-xln. rare subchalky in part. Firm. No/ tr vis por. No odor. Spotted high yellow ---------->
SH - Lt Gray. Sing. calc. firm.
LS (5) - Tan/ Tannish Off White. Sing. Micro-xln. Chalky. fossil frags in part. Friable. No/ tr vis por. ? odor. Spotted, dull yellow flouresence. No free oil or gas. Spotted, irregular Med Brown stain. No/ V Weak pos cut. No/ V Weak pos acid/
Outside Temperature -- 0 deg F (+/- 4 deg)
Vis: 50 Wt: 9.1 LCM: 1#
Vis: 59 Wt: 9.1 LCM: 1#
Vis: 60 Wt: 9.1 LCM: 1#
Vis: 50 Wt: 9.1 LCM: 1#
-- HEEBNER SH
3,963' (-960')
Vis: 50 Wt: 9.1 LCM: 1#
LS (3) - Off White/ Tan. Sing/ tr Mot. Micro- xln. xln & tr Vuggy por. mostly Firm. No/ tr vis por
Vis: 50 Wt: 9.1 LCM: 1#
-- TORONTO
3,996' (-993')
0 TG, C1-C5 100
-- 100 units = 1% Gas
LANSING
4,003' (-1,000')
Vis: 52 Wt: 9.1 LCM: 1#
Vis: 52 LCM: 9.1 LCM: 1#
<---------- CFS @ 4,030': 50"
4,047' - Vis: 52 Wt: 9.2 Wtr Loss: 8.8 PV: 13 YP: 17 Gels: 9/20 pH: 10.0 LCM: 2# Cl (2,200) Ca (80) Solids: 6.1%
DST #1 LANSING (4,087"-4,115')
Rec: 715' Gassy Muddy Wtr (2%G,18%M,80%W)
<---------- CFS @ 4,054': 50"
IFP: 12# - 135#/30"
ISIP: 1,175# / 45"
FFP: 141# - 335# / 60"
FSIP: 1,166# / 90"
129 deg F
MH: 1,939# - 1,928#
Vis: 50 Wt: 9.1 LCM: 2#
LS (4) - flouresence. On own, tr minute gas bubbles. No free oil. spotted Lt/Med Brown, irregualr stain. V Weak cut/ residual. Weak acid/residual
HW: 6u/ 3u (Bk)
<---------- CFS @ 4,095': 50"
After DST #1, HW: 5u from
DST #1 @ 4,115' - Vis: 54 Wt: 9.1 Wtr Loss: 7.2 PV: 14 YP: 18 Gels: 11/19 pH: 10.5 LCM: 2# Cl (2,500) Cl (tr) Solids: 6.3%


(5)
CFS @ 4,115'
DST #1
Lost Pump Pressure @ 4,143'. R/R valves & thaw piping.
DST #2 4,143'-4,256'
(6)
4150
(7)
(8)
CFS @ 4,184'
0 ROP (min/ft) 10
4200
CFS @ 4,210'
(9)
DST #2 4,143'-4,256'
CFS @ 4,237'
(10)
4250
CFS @ 4,256'
DST # 1 results @ 4,270'
DST #2
4300
residual. Transparent Oil blebs on wash water
LS (6) - Lt & Med Tan. some Off White Sing/ tr Mot. tr XF-/ Micro-xln. some Crypto-xln. xln and rare, intermixed pinpoint por. Re-xln. some argil with depth. Firm. mostly No/ tr vis por.
---------- MUNCIE CREEK 4,153' (-1,150')
SH - Black. Sing. Carb. Soft.
LS - Similiar to (6) above. adding: Lt & Med Gray. Sing.
SH - Lt/ Med. Gray. Sing. tr calc. Firm.
LS - simiiar to (6) above. minute, spotted Med ------>
LS (7) - Tan/ White. Sing. Micro-xln. xln por. Subchalky to Chalk. Friable. No/ tr vis por. -------->
LS (8) - Tan/ Off White/ Grayish Tan, tr Pale Lt Gray with depth. Sing/ tr Mot. XF-/ Micro-xln. xln por. some Re-xln. [few pcs: CHERT - Off White/ Tan. Sing/ Mot. Opaque. some, minute white inclusions. No tripolitic.] Firm. No/ tr vis por.
SH - Black. Sing. Carb. Soft.
LS - Similiar to (8) above. adding: Lt & Med Gray. Sing.
SH - Med Gray. Sing. tr calc.
LS - Tan - Grayish Tan/ Lt Gray with depth. Sing/ tr Mot. Micro-xln. xln por. some Re-xln. [few pcs: CHERT - Off White/ Tan. Sing/ Mot. Opaque. some, minute white inclusions. No tripolitic.] Firm. No/ tr vis por.
SH - Med Gray, tr Tannish Gray. Sing. some calc. tr soft. tr ductile.
1 pc LS (9) - Lt Gray. Sing. Crypto-xln. tr vuggy por. Firm. tr/some vis por. No odor. Spotted yellow flouresence. No free oil. some minute gas bubbles in vuggy por. tr oil 'wet' facies. spotted Lt Brown stain. Weak Pos cut/ residual. Weak acid/ residual.
LS - Tan/ some Off White/ Lt Gray. Sing/ rare Mot. -->
---------- STARK SH 4,234' (-1,231')
SH - Black. Sing. Carb. Soft.
LS - Tan/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr Re-xln. tr argil. Firm. No/ tr vis por.
LS (10) - Tan. Sing. VF-xln. xln & sucrosic por. fossil frags & hash. Friable. tr/ Fair vis por. ?/Fair odor. spotted dull yellow flouresence, A/C, minute, -------->
LS - Tan/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. some Re-xln. tr argil. Firm. No/ tr vis por.
---------- HUSHPUCKNEY SH 4,267' (-1,264')
SH - Black. Sing. Carb. Soft.
LS - Tans/ Grays. Sing/ some Mot. XF-/ Micro-xln. xln por. some Re-xln. [subchalky at depth/ Friable.] tr fossil frags. some argil in part/ interbedded. Firm. No/ tr vis por.
---------- B / KC 4,301' (-1,298')
Interbedded SH, Marl & LS
SH - Grays / Greenish Gray. Sing. some calc. some marly in part.
Marl - Off White/ Reddish hue Off White. silt sized, SA qtz 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.
bottom
<- CFS @ 4,115':50" & DST #1
^--- S/T: 15 stands pulling tite. 16th is tite & hanging. Jeted/added Mud. Cont'd T/O until free.
^--- CHC: 60" Work Kelly (15") slowly. No shake. Ck sample box for Volume/Type of fill.
^--- Hole Dev: 1.5 deg @ 4,115'.
^--- Board: 4,141.98' Strap: 4,141.92' Diff: 0.06'
^--- DST #1.
Vis: 90+ Wt: 9.1 LCM: 1#
XXXXX
Vis: 65 Wt: 8.9 LCM: 2#
<-------- Reddish Brown stain/flecks. Nothing else.
HW: 25u/ 8u (Bk)
<------- LS (7) - few pcs: Med Tan stain. nothing else.
Vis: 54 Wt: 8.8 LCM: 2#
<---------- CFS @ 4,184': 50"
Vis: 54 Wt: 8.9 LCM: 2#
100 units = 1% Gas
TG, C1-C5 100
Vis: 53 Wt: 9.0 LCM: 2#
<---------- CFS @ 4,210': 50"
Vis: 48 Wt: 9.0 LCM: 1#
4,215' - Vis: 54 Wt: 9.1 Wtr Loss: 7.6 PV: 12 YP: 27 Gels: 10/20 pH: 10.5 LCM: 2# Cl (2,900) Ca (tr) Solids: 5.6%
LS - XF-/ Micro-xln. rare Crypto-xln. xln por. [rare Micro-Oolites. Tan chert matrix.] rare minute fossil hash. rare subchalky in part. Firm. No/ tr vis por.
Vis: 54 Wt: 9.1 LCM: 2#
<------ CFS @ 4,237': 60"
<--- 0 100 --->
<----------
LS (10) - spotted gas bubbles. No free oil. Spotted, minute Lt Reddish Brown stain in sucrosic por. Weak Pos cut/ residual. Weak Pos acid/ residual.
<- CFS @ 4,256': 60" & DST #2
Scale Change
0 200
After DST #2, HW: 287u from bottom
DST #2 LANSING (4,143"-4,256')
Rec:
140' GAS in Pipe
171' Clean OIL (41.2)
378' Gassy Oily Muddy Wtr (10%G,11%O, 19%W,60%M)
315' Muddy Water (17%M,83%W - Oil spots)
Vis: 46 Wt: 9.2 LCM: 2#
IFP: 15# - 155#/30"
ISIP: 1,276# / 45"
FFP: 165# - 379# / 60"
FSIP: 1,260# / 90"
117 deg F
MH: 1,967# - 1,958#
<--- 0 200 --->
Vis: 46 Wt: 9.3 LCM: 2#
OIL IN DRILLING MUD ---->


4350
4400
4450
4500
0 ROP (min/ft) 10
CFS @ 4,410'
CFS @ 4,455'
CFS @ 4,486'
CFS @ 4,516'
DST #3 4,510'- 4,583'
?
---------- MARMATON 4,338' (-1,335')
LS (11) - Tans/ tr Off White, 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.
LS - similiar to 11 above.
SH - Med Gray, some Tannish Gray. Sing. Massive. rare fossil frag.
---------- ALTAMONT 4,366' (-1,363')
LS - Tan/ Lt Gray/ some Yellow, Purple. some Sing/ Mot. tr XF-/ Micro-xln. xln por. some Re-xln. tr argil. some interbedded sh (Lt/Med Gray. Reddish Brown). mostly Firm. No/ tr vis por.
Add: Bluish Gray. Sing. soft. tr marly.
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.
SH - Black. Sing. carb. tr fissile.
SH - Med Gray. Sing. highly limy/ LS streaks.
---------- PAWNEE 4,442' (-1,439')
LS - Tans/ tr Lt Gray. Sing/ Mot. XF-/ some Micro-xln. xln & part por. tr Re-xln. [some Chert - Silvery White/ Off White/ Grayish Tan. Mot. misc minute Off White inclusions. No tripolitic/ 'fresh'.] mostly Firm. rare fossil frag. tr ls 'rubble'. tr argil. No/ tr vis por.
SH - Black. Sing. carb. tr fissile.
LS - similiar to 12 below.
SH - Grays/ Bluish Gray, Tannish Gray. Sing/ tr Mot. some highly limy/ LS streaks.
LS (12) - Tans/ some Off White. Sing. XF-xln at top/ Micro-xln at depth. xln por. tr Re-xln. subchalky in part. Friable at break. Break has tr/ Fair vis por. mostly No/ tr vis por.
SH - Black. Sing. carb. tr pyritic. soft
--------- FT. SCOTT 4,492' (-1,486')
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.
--- CHEROKEE SH 4,519' (-1,516')
SH - Black. Sing. carb. soft.
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.
Vis: 49
Wt: 9.2
LCM: 23
4,350' -
Vis: 55 Wt: 9.2
Wtr Loss: 7.8
PV: 12 YP: 21
Gels: 11/17
pH: 10.5 LCM: 2#
Cl (3,100) Ca (20)
Solids: 6.3%
Vis; 50
Wt: 9.2
LCM: 2#
Vis: 51
Wt: 9.1
LCM: 3#
Vis: 52
Wt: 9.1
LCM: 3#
200 units = 2% Gas
0 TG, C1-C5 200
<---------- CFS @ 4,410': 60''
Vis: 51
Wt: 9.1+
LCM: 3#
Vis: 50
Wt: 9.1
LCM: 2#
Vis: 50
Wt: 9.1
LCM: 2#
<---------- CFS @ 4,455': 60''
Vis: 56
Wt; 9.2
LCM: 2#
<---------- CFS @ 4,486': 60''
Vis: 54 Wt: 9.2 LCM: 2#
Vis: 50
Wt; 9.2
LCM: 2#
Vis: 50
Wt; 9.2
LCM: 2#
<---------- CFS @ 4,516': 60''
Vis: 54
Wt; 9.2
LCM: 2#
Vis: 54
Wt; 9.2
LCM: 2#
How Wire Callibration Check
Chromatograph Callibration Check
4,550' sample missed


4550' sample missed
---------- 'JOHNSON' ZONE 4,552' (-1,549')
LS - Med/ Dark Tan, Brown in part. Lt Tan with depth. some Lt Gray. Sing/ tr Mot. XF-/ mostly Micro- & tr Crypto-xln. xln & some vuggy, irregular por, Re-xln. some fossil frags. mostly Firm. tr/ Fair, some Good vis por. Good odor (4,580' sample) decreasing with depth.
Good odor (4,580' sample) decreasing with depth. Spotted/ Uniform Med Yellow flouresence. On own & after crushing, rare minute gas bubbles. tr free Med Brown oil floating on wash water. Spotted/ uniform Med Brown stain. tr, minute Black asphaltic infill in part. Pos cut/ residual. Pos acid/ residual.
Vis: 54
Wt; 9.2
LCM: 2#
Vis: 53
Wt; 9.3
LCM: 2#
Vis: 53
Wt; 9.3
LCM: 2#
<- CFS @ 4,583': 60"& DST #3
200 units = 2% Gas
0
TG, C1-C5
200
4550
4600
DST #3
4,510'-
4,583'
CFS @
4,583'
DST #3
0
ROP (min/ft)
10

Covey
The Well Watchers

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

Well Name:	**SHEETZ #1**		
Location:	**Section 16 - Township 12 South - Range 32 West**		
Licence Number:	**15-109-20,974. 0000**	**Region:**	**Logan County, KS.**
Spud Date:	**4 February 2011**	**Drilling Completed:**	
Surface Coordinates:	**1,382' FSL & 1,773' FWL (Appromimately SE SW NE SW)**		
Bottom Hole Coordinates:			
Ground Elevation (ft):	**2,995'**	**K.B. Elevation (ft):**	**3,003'**
Logged Interval (ft):	**3,350'** **To:**	**Total Depth (ft):**	
Formation:	**Stotler ------> Miss**		
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

2011 **DAILY DRILLING STATUS -- FEBRUARY** 2011

12-1/4" Hole

4 Feb --- Spud @ 6:30pm. Drill to 272'.
5 --- Run 8-5/8" casing (23#)
Set casing @ 269'.
Cemented w/ 200 sx Class A
(2% Gel + 3% CC). [Consolidated]
Cement did circulate.
Plug down @ 2:45am.
WOC.

7-7/8" Hole

5 Feb --- WOC. 6:30am @ 272'.
Under surface casing @ 11:30am.
6 --- 6:30am @ 1,935'.
7 --- 6:30am @ 2,760'.
8 --- Displace Mud @ 3,339'.
6:30am @ 3,445'.
9 --- 6:30am @ 4,030'.
Start & ....
10 --- 6:30am @ 4,115'. Finish DST #1:
Lansing (4,087' - 4,115').
Resumed Drilling @ 3:30pm.
11 --- 6:30am @ 4,225'. DST #2:
Lansing (4,143' - 4,256').

7-7/8" Hole

12 Feb --- Resumed Drilling @ 12:55am.
6:30am @ 4,360'.
13 ---

KB: 3,003'

FORMATION TOPS

GL: 2,995'

Formation	Rotary Sample Depth (Datum)	E-log Depth (Datum)
AnHydrite	2,517' (+486') *	
B / AnHdrite	2,540' (+463') *	
Stotler	3.620' (-617')	
Topeka	3,851' (-748')	
Heebner Shale	3,963' (-960')	
Toronto	3,996' (-993')	
Lansing	4,003' (-1,000')	
Muncie Creek SH	4,153' (-1,150')	
Stark SH	4,234' (-1,231')	
B / KC	4,301' (-1,298')	
Pawnee LS	4,442' (-1,439')	
Ft. Scott		
Cherokee Sh		
'Johnson' Zone		
Morrow Shale		
Miss (Erosional)		

* Contractor

RTD: LTD: ATD:

E-log is to rotary sample depth, uphole.
E-log is to rotary sample depth, mid- & down hole.

Loggers: Schlumberger
Elk City, Oklahoma

DST # 1 - LANSING

Rotary Depth: 4,087' - 4,115'
Logger's Depth:

IFP: 12# - 135#/30"
ISIP: 1,175# / 45"
FFP: 141# - 335# / 60"
FSIP: 1,166# / 90"
129 deg F
MH: 1,939# - 1,928#

Recovery: 715' Gassy Muddy Wtr (2%G,18%M,80%W)

Total Fluid: 715'

IF: BOB in 11 minutes.
ISI: No Blow Back.
FF: BOB in 18 minutes.
FSI: No Blow Back.

Diamond Testing
Hoisington, KS.

Recovery Water: (40,000 ppm)
System Water: (2,200 ppm)

Reported Rw =
0.12 ohms @ 80 deg F

Recovery Water - Mud Engineer:
(42,000 ppm)

Sampler: Wtr w/ OIL spots

DST # 2 - LANSING

Rotary Depth: 4,143' - 4,256'
Logger's Depth:

IFP: 15# - 155#/30"
ISIP: 1,276# / 45"
FFP: 165# - 379# / 60"
FSIP: 1,260# / 90"
117 deg F
MH: 1,967# - 1,958#

Recovery: 140' GAS in Pipe
171' Clean OIL (41.2 API @ 60 deg F)
378' Gassy Oily Muddy Wtr (10%G,11%O,19%W,60%M)
315' Muddy Water (17%M,83%W - Oil spots)

Total Fluid: 864'

IF: BOB in 7 minutes.
ISI: 1-1/4 inch Blow Back.
FF: BOB in 8 minutes.
FSI: 1-1/2 inch Blow Back.

Diamond Testing
Hoisington, KS

Recovery Water: (48,000 ppm)
System Water: (2,900 ppm)

Reported Rw =
0.10 ohms @ 79 deg F

Recovery Water - Mud Engineer: (
ppm)

Sampler: 4% OIL + 96% Water

HOLE DEVIATION (272' - ') & STRAP

DEPTH / TVD	--- INCLINATION		AZIMUTH	NORTH	SOUTH	EAST	WEST	DOGLEG deg/100'
272' /	---	0.75 (Surface)						
1,291' /	---	1.00						
2,234' /	---	1.00						
3,110' /	---	1.00						
4,115' /	---	1.50 (DST #1)						

STRAP ON DST # 1

Board: 4,141.98'
Strap: 4,141.92'
Diff: 0.06'

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.
1,000 PSI @ Standpipe.

Uphole Hole:
WOB 35M @ 80 RPM.

After Mudup / Main Hole:
WOB 40M @ 70 RPM.

Drill Collars: 6-1/8" x 2.50" --- 469'. (83.5#/ft)
Dry Collar Weight: 39,162#
(@ 9.5 ppg / Buoyancy Factor 0.8545)
Bouyancy Collar Weight: 33,464#
Design Factor: 15%, therefore:
available WOB is 28,444#
Drill Pipe: 4-1/2"XH. (16#/ft - used)

BIT RECORD

DATE	SIZE	TYPE	JET SIZE	DEPTH IN / OUT	CUM. FT.	HOURS	ROP
4 Feb 2011	12-1/4"	REED RR	3 / 15's	0' / 272'	272'	2.50	108.8
5 Feb 2001	7-7/8"	JZ QX-21	13 - 14 - 13	272' /			

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

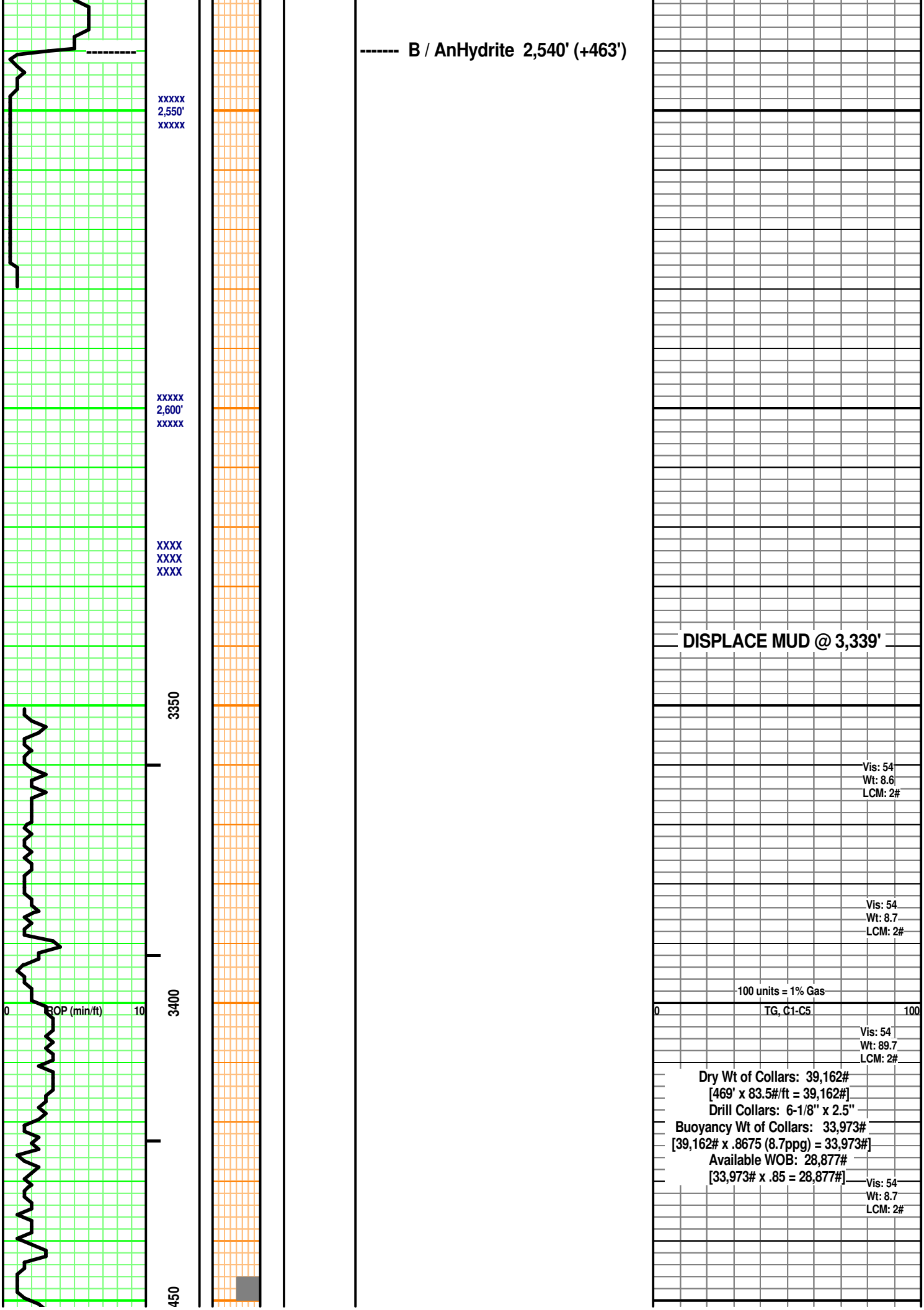
STRINGER
- Calc dol

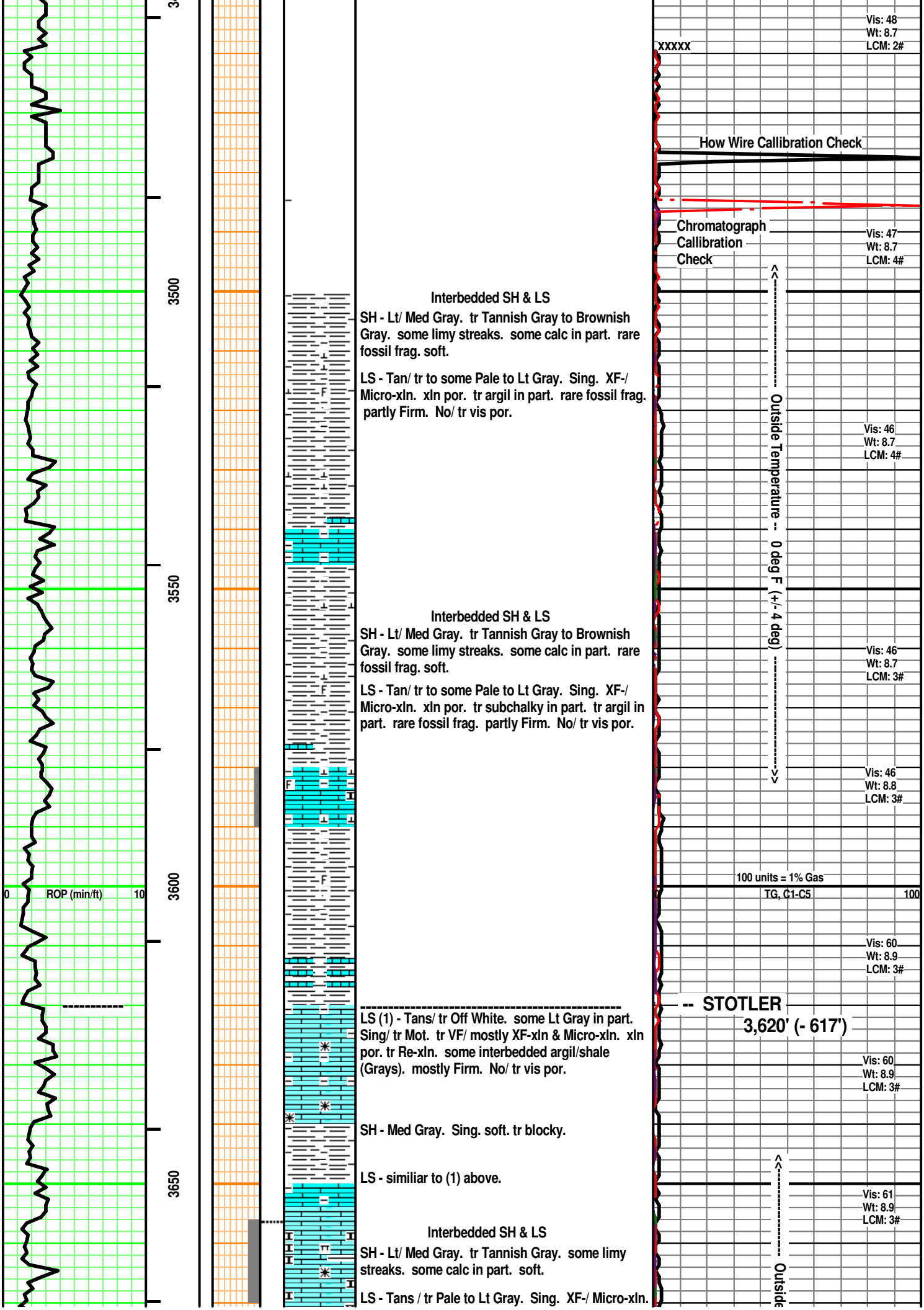
OTHER SYMBOLS

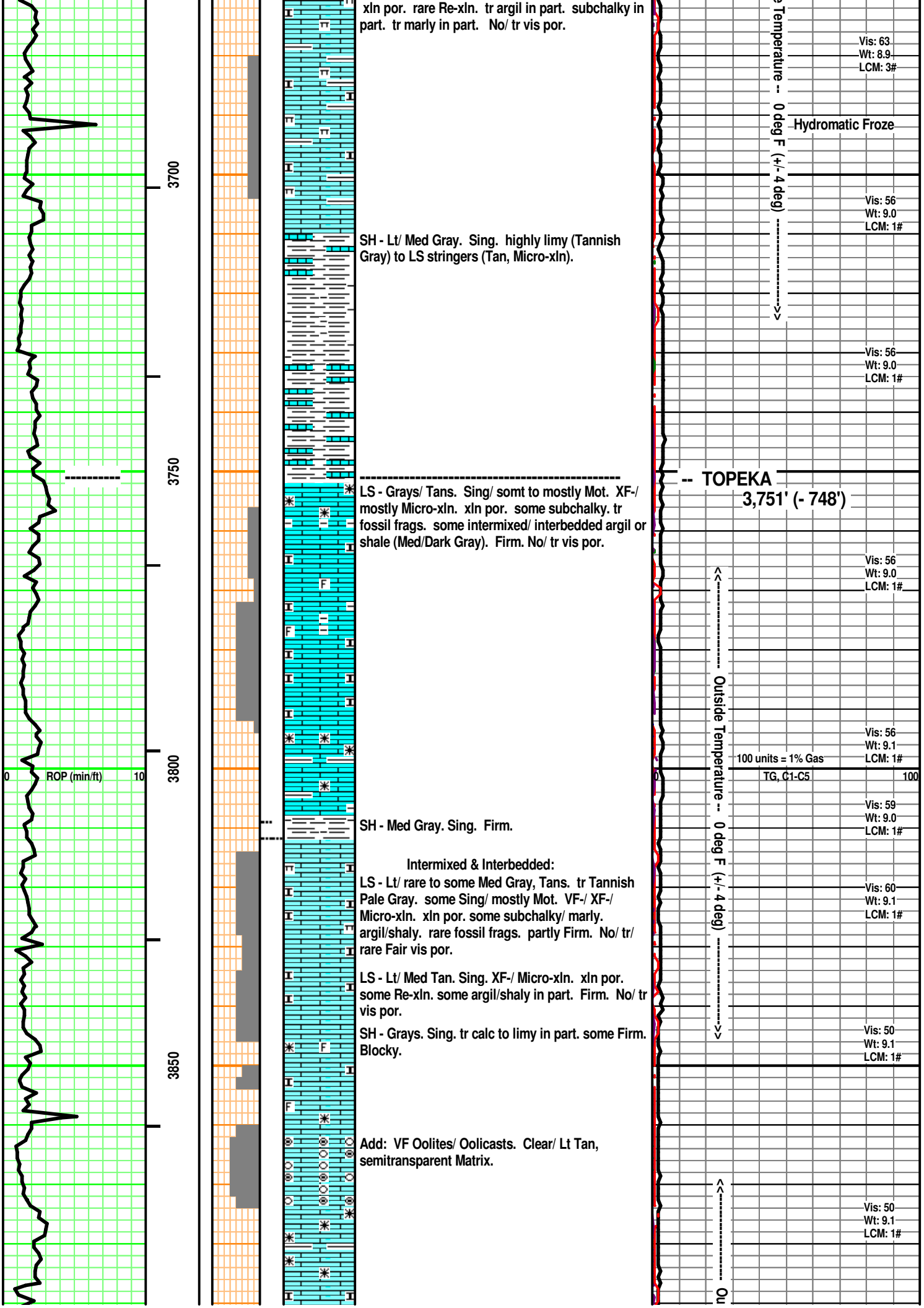
ACTIVITY
- Lost circluation
- Circulate for sam
- Circulate for sam
- Rtd
- Trip

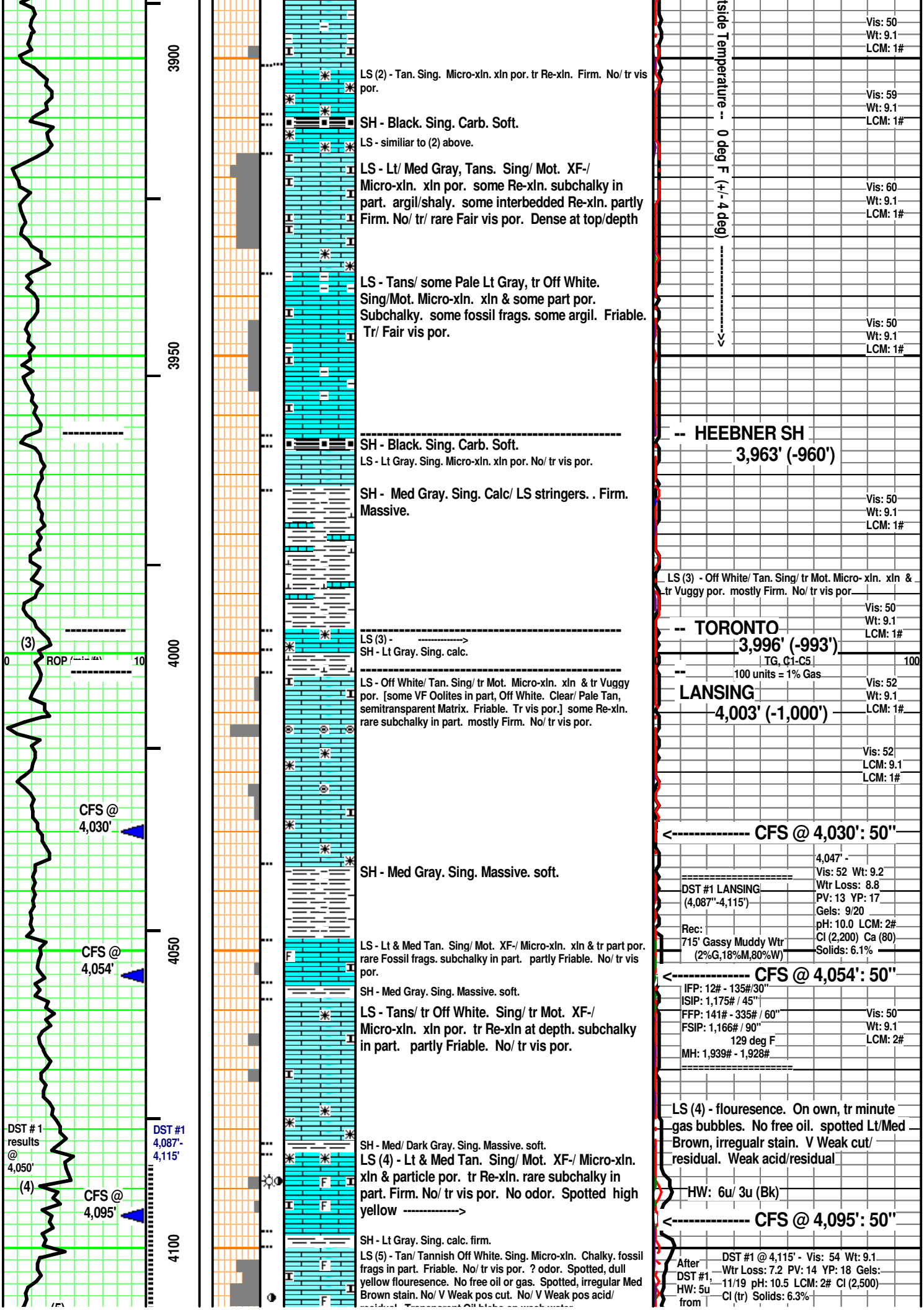
EVENT
- Connection
- Rft
- Sidewall

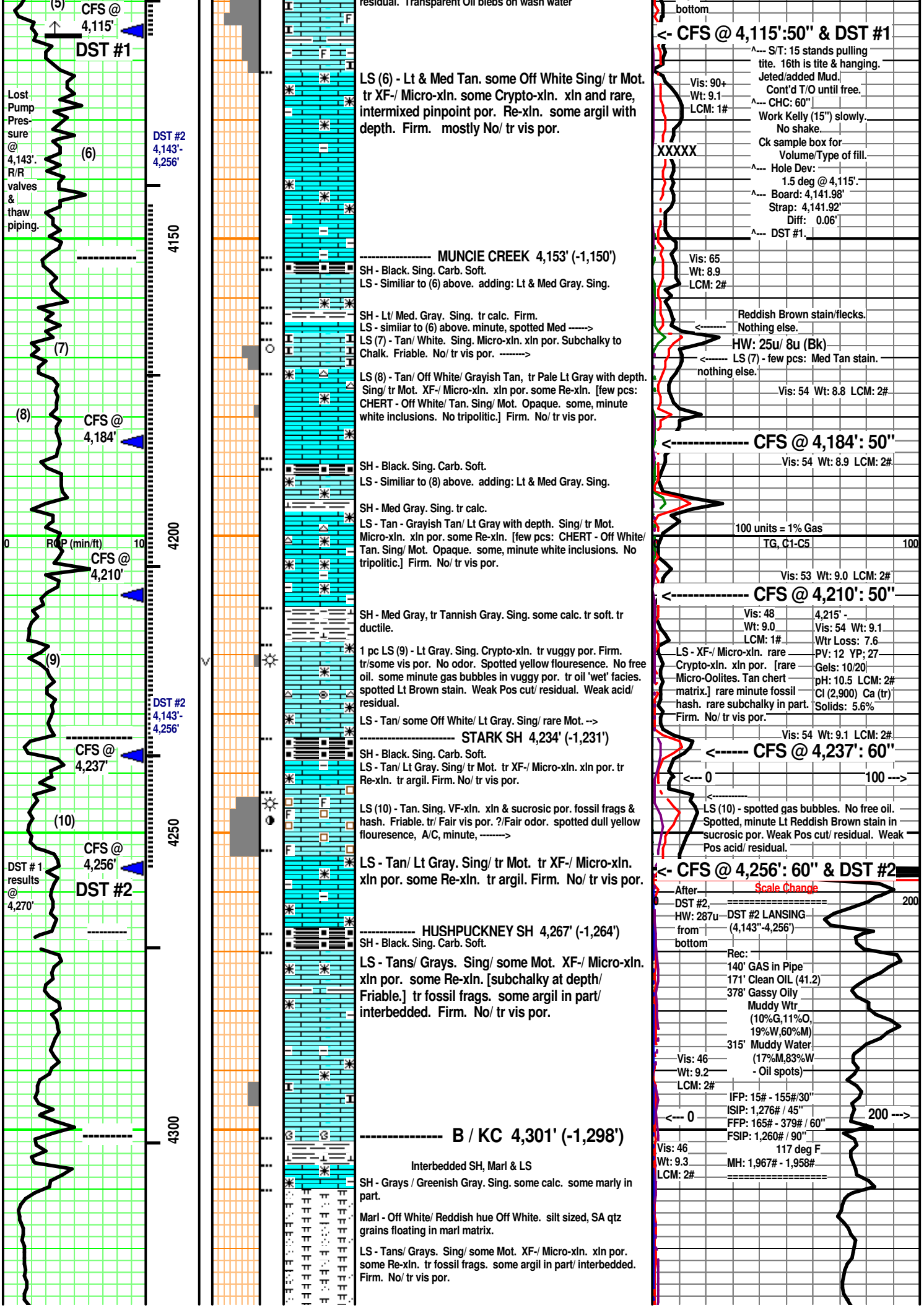
Curve Track 1 ROP (min/ft)	Depth	Porosity Type	Porosity 24% 18% 12% 6%	Shows	Lithology	Geological Descriptions	TG, C1-C5
							TG (Units) C1 (units) C2 (units) C3 (units) C4 (units) C5 (units)
0 ROP (min/ft) 10	xxxxx 2,450' xxxxx						0 TG, C1-C5 100
0 ROP (min/ft) 10	xxxxx 2,500' xxxxx					---------- AnHydrite 2,517' (+486')	0 TG, C1-C5 100

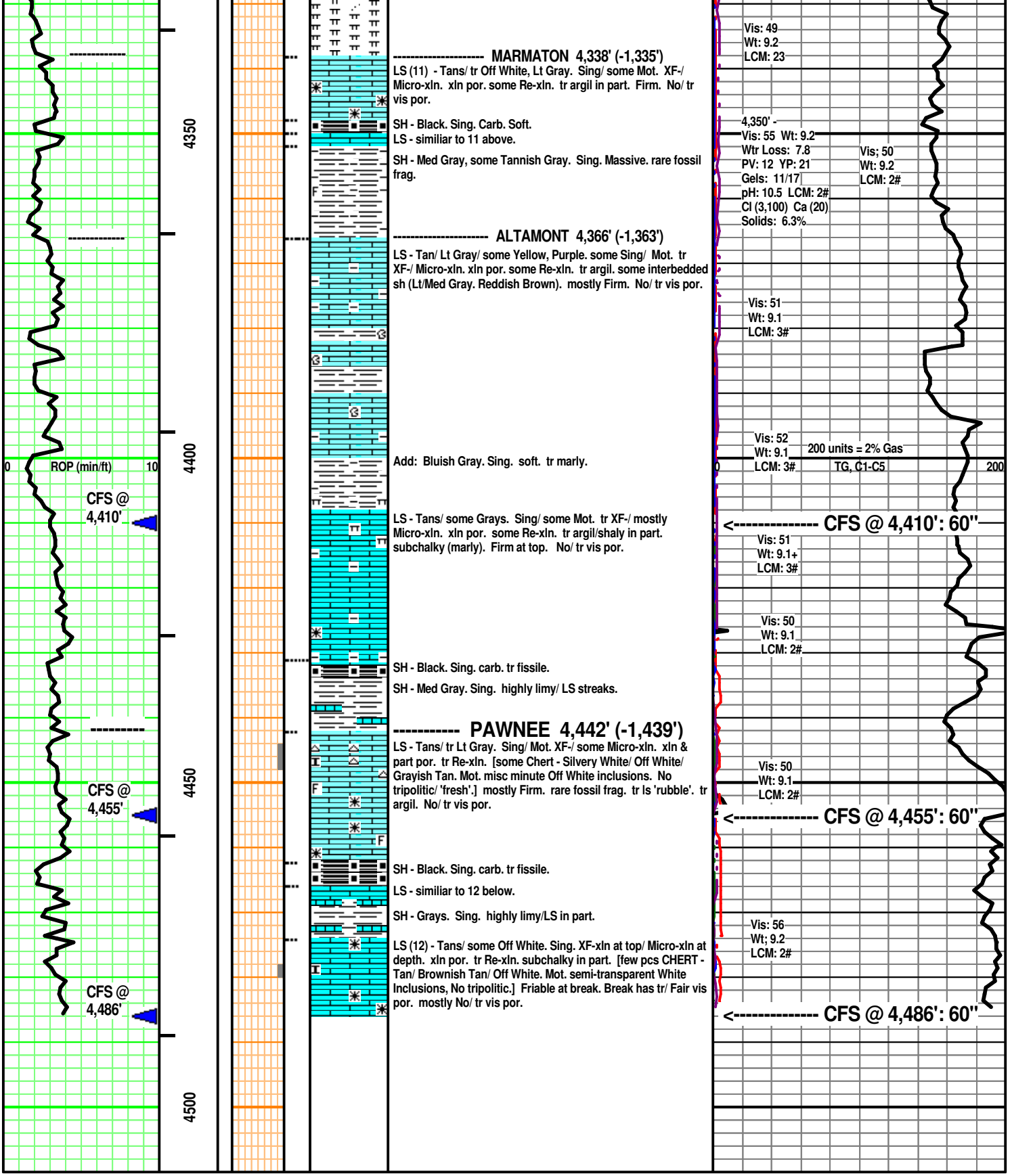

B / AnHydrite 2,540' (+463')
xxxxx
2,550'
xxxxx
xxxxx
2,600'
xxxxx
XXXX
XXXX
XXXX
DISPLACE MUD @ 3,339'
3350
3400
3450
0
ROP (min/ft)
10
Vis: 54
Wt: 8.6
LCM: 2#
Vis: 54
Wt: 8.7
LCM: 2#
100 units = 1% Gas
0
TG, C1-C5
100
Vis: 54
Wt: 89.7
LCM: 2#
Dry Wt of Collars: 39,162#
[469' x 83.5#/ft = 39,162#]
Drill Collars: 6-1/8" x 2.5"
Buoyancy Wt of Collars: 33,973#
[39,162# x .8675 (8.7ppg) = 33,973#]
Available WOB: 28,877#
[33,973# x .85 = 28,877#]
Vis: 54
Wt: 8.7
LCM: 2#


3500
3550
3600
3650
0
ROP (min/ft)
10
Interbedded SH & LS
SH - Lt/ Med Gray. tr Tannish Gray to Brownish Gray. some limy streaks. some calc in part. rare fossil frag. soft.
LS - Tan/ tr to some Pale to Lt Gray. Sing. XF-/ Micro-xln. xln por. tr argil in part. rare fossil frag. partly Firm. No/ tr vis por.
Interbedded SH & LS
SH - Lt/ Med Gray. tr Tannish Gray to Brownish Gray. some limy streaks. some calc in part. rare fossil frag. soft.
LS - Tan/ tr to some Pale to Lt Gray. Sing. XF-/ Micro-xln. xln por. tr subchalky in part. tr argil in part. rare fossil frag. partly Firm. No/ tr vis por.
LS (1) - Tans/ tr Off White. some Lt Gray in part. Sing/ tr Mot. tr VF/ mostly XF-xln & Micro-xln. xln por. tr Re-xln. some interbedded argil/shale (Grays). mostly Firm. No/ tr vis por.
SH - Med Gray. Sing. soft. tr blocky.
LS - similiar to (1) above.
Interbedded SH & LS
SH - Lt/ Med Gray. tr Tannish Gray. some limy streaks. some calc in part. soft.
LS - Tans / tr Pale to Lt Gray. Sing. XF-/ Micro-xln.
Vis: 48
Wt: 8.7
LCM: 2#
XXXXX
How Wire Callibration Check
Chromatograph Callibration Check
Vis: 47
Wt: 8.7
LCM: 4#
Outside Temperature -- 0 deg F (+/- 4 deg)
Vis: 46
Wt: 8.7
LCM: 4#
Vis: 46
Wt: 8.7
LCM: 3#
Vis: 46
Wt: 8.8
LCM: 3#
100 units = 1% Gas
0
TG, C1-C5
100
Vis: 60
Wt: 8.9
LCM: 3#
-- STOTLER
3,620' (- 617')
Vis: 60
Wt: 8.9
LCM: 3#
Vis: 61
Wt: 8.9
LCM: 3#
Outside


xln por. rare Re-xln. tr argil in part. subchalky in part. tr marly in part. No/ tr vis por.
SH - Lt/ Med Gray. Sing. highly limy (Tannish Gray) to LS stringers (Tan, Micro-xln).
LS - Grays/ Tans. Sing/ somt to mostly Mot. XF-/ mostly Micro-xln. xln por. some subchalky. tr fossil frags. some intermixed/ interbedded argil or shale (Med/Dark Gray). Firm. No/ tr vis por.
SH - Med Gray. Sing. Firm.
Intermixed & Interbedded:
LS - Lt/ rare to some Med Gray, Tans. tr Tannish Pale Gray. some Sing/ mostly Mot. VF-/ XF-/ Micro-xln. xln por. some subchalky/ marly. argil/shaly. rare 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.
SH - Grays. Sing. tr calc to limy in part. some Firm. Blocky.
Add: VF Oolites/ Oolicasts. Clear/ Lt Tan, semitransparent Matrix.
3700
3750
3800
3850
0 ROP (min/ft) 10
-- TOPEKA
3,751' (- 748')
Outside Temperature -- 0 deg F (+/- 4 deg)
Hydromatic Froze
Vis: 63
Wt: 8.9
LCM: 3#
Vis: 56
Wt: 9.0
LCM: 1#
Vis: 56
Wt: 9.0
LCM: 1#
Vis: 56
Wt: 9.0
LCM: 1#
Vis: 56
Wt: 9.1
LCM: 1#
100 units = 1% Gas
0 TG, C1-C5 100
Vis: 59
Wt: 9.0
LCM: 1#
Vis: 60
Wt: 9.1
LCM: 1#
Vis: 50
Wt: 9.1
LCM: 1#
Vis: 50
Wt: 9.1
LCM: 1#


3900
3950
4000
4050
4100
(3)
(4)
(5)
0
ROP
10
CFS @ 4,030'
CFS @ 4,054'
CFS @ 4,095'
DST # 1 results @ 4,050'
DST #1 4,087'-4,115'
LS (2) - Tan. Sing. Micro-xln. xln por. tr Re-xln. Firm. No/ tr vis por.
SH - Black. Sing. Carb. Soft.
LS - similiar to (2) above.
LS - Lt/ Med Gray, Tans. Sing/ Mot. XF-/ Micro-xln. xln por. some Re-xln. subchalky in part. argil/shaly. some interbedded Re-xln. partly Firm. No/ tr/ rare Fair vis por. Dense at top/depth
LS - Tans/ some Pale Lt Gray, tr Off White. Sing/Mot. Micro-xln. xln & some part por. Subchalky. some fossil frags. some argil. Friable. Tr/ Fair vis por.
SH - Black. Sing. Carb. Soft.
LS - Lt Gray. Sing. Micro-xln. xln por. No/ tr vis por.
SH - Med Gray. Sing. Calc/ LS stringers. . Firm. Massive.
LS (3) ----------> SH - Lt Gray. Sing. 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.
SH - Med Gray. Sing. Massive. soft.
LS - Lt & Med Tan. Sing/ Mot. XF-/ Micro-xln. xln & tr part por. rare Fossil frags. subchalky in part. partly Friable. No/ tr vis por.
SH - Med Gray. Sing. Massive. soft.
LS - Tans/ tr Off White. Sing/ tr Mot. XF-/ Micro-xln. xln por. tr Re-xln at depth. subchalky in part. partly Friable. No/ tr vis por.
SH - Med/ Dark Gray. Sing. Massive. soft.
LS (4) - Lt & Med Tan. Sing/ Mot. XF-/ Micro-xln. xln & particle por. tr Re-xln. rare subchalky in part. Firm. No/ tr vis por. No odor. Spotted high yellow ---------->
SH - Lt Gray. Sing. calc. firm.
LS (5) - Tan/ Tannish Off White. Sing. Micro-xln. Chalky. fossil frags in part. Friable. No/ tr vis por. ? odor. Spotted, dull yellow flouresence. No free oil or gas. Spotted, irregular Med Brown stain. No/ V Weak pos cut. No/ V Weak pos acid/
Outside Temperature -- 0 deg F (+/- 4 deg)
Vis: 50
Wt: 9.1
LCM: 1#
Vis: 59
Wt: 9.1
LCM: 1#
Vis: 60
Wt: 9.1
LCM: 1#
Vis: 50
Wt: 9.1
LCM: 1#
-- HEEBNER SH
3,963' (-960')
Vis: 50
Wt: 9.1
LCM: 1#
LS (3) - Off White/ Tan. Sing/ tr Mot. Micro- xln. xln & tr Vuggy por. mostly Firm. No/ tr vis por
Vis: 50
Wt: 9.1
LCM: 1#
-- TORONTO
3,996' (-993')
0
TG, C1-C5
100
--
100 units = 1% Gas
LANSING
4,003' (-1,000')
Vis: 52
Wt: 9.1
LCM: 1#
Vis: 52
LCM: 9.1
LCM: 1#
<---------- CFS @ 4,030': 50"
DST #1 LANSING
(4,087"-4,115')
Rec:
715' Gassy Muddy Wtr
(2%G,18%M,80%W)
4,047' -
Vis: 52 Wt: 9.2
Wtr Loss: 8.8
PV: 13 YP: 17
Gels: 9/20
pH: 10.0 LCM: 2#
Cl (2,200) Ca (80)
Solids: 6.1%
<---------- CFS @ 4,054': 50"
IFP: 12# - 135#/30"
ISIP: 1,175# / 45"
FFP: 141# - 335# / 60"
FSIP: 1,166# / 90"
129 deg F
MH: 1,939# - 1,928#
Vis: 50
Wt: 9.1
LCM: 2#
LS (4) - flouresence. On own, tr minute gas bubbles. No free oil. spotted Lt/Med Brown, irregualr stain. V Weak cut/ residual. Weak acid/residual
HW: 6u/ 3u (Bk)
<---------- CFS @ 4,095': 50"
After DST #1, HW: 5u from
DST #1 @ 4,115' - Vis: 54 Wt: 9.1
Wtr Loss: 7.2 PV: 14 YP: 18 Gels: 11/19 pH: 10.5 LCM: 2# Cl (2,500)
Cl (tr) Solids: 6.3%


(5)
CFS @ 4,115'
DST #1
Lost Pump Pressure @ 4,143'. R/R valves & thaw piping.
DST #2 4,143'-4,256'
(6)
4150
(7)
(8)
CFS @ 4,184'
0 ROP (min/ft) 10
4200
CFS @ 4,210'
(9)
DST #2 4,143'-4,256'
CFS @ 4,237'
(10)
4250
CFS @ 4,256'
DST # 1 results @ 4,270'
DST #2
4300
residual. Transparent Oil blebs on wash water
LS (6) - Lt & Med Tan. some Off White Sing/ tr Mot. tr XF-/ Micro-xln. some Crypto-xln. xln and rare, intermixed pinpoint por. Re-xln. some argil with depth. Firm. mostly No/ tr vis por.
---------- MUNCIE CREEK 4,153' (-1,150')
SH - Black. Sing. Carb. Soft.
LS - Similiar to (6) above. adding: Lt & Med Gray. Sing.
SH - Lt/ Med. Gray. Sing. tr calc. Firm.
LS - simiiar to (6) above. minute, spotted Med ------>
LS (7) - Tan/ White. Sing. Micro-xln. xln por. Subchalky to Chalk. Friable. No/ tr vis por. -------->
LS (8) - Tan/ Off White/ Grayish Tan, tr Pale Lt Gray with depth. Sing/ tr Mot. XF-/ Micro-xln. xln por. some Re-xln. [few pcs: CHERT - Off White/ Tan. Sing/ Mot. Opaque. some, minute white inclusions. No tripolitic.] Firm. No/ tr vis por.
SH - Black. Sing. Carb. Soft.
LS - Similiar to (8) above. adding: Lt & Med Gray. Sing.
SH - Med Gray. Sing. tr calc.
LS - Tan - Grayish Tan/ Lt Gray with depth. Sing/ tr Mot. Micro-xln. xln por. some Re-xln. [few pcs: CHERT - Off White/ Tan. Sing/ Mot. Opaque. some, minute white inclusions. No tripolitic.] Firm. No/ tr vis por.
SH - Med Gray, tr Tannish Gray. Sing. some calc. tr soft. tr ductile.
1 pc LS (9) - Lt Gray. Sing. Crypto-xln. tr vuggy por. Firm. tr/some vis por. No odor. Spotted yellow flouresence. No free oil. some minute gas bubbles in vuggy por. tr oil 'wet' facies. spotted Lt Brown stain. Weak Pos cut/ residual. Weak acid/ residual.
LS - Tan/ some Off White/ Lt Gray. Sing/ rare Mot. -->
---------- STARK SH 4,234' (-1,231')
SH - Black. Sing. Carb. Soft.
LS - Tan/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr Re-xln. tr argil. Firm. No/ tr vis por.
LS (10) - Tan. Sing. VF-xln. xln & sucrosic por. fossil frags & hash. Friable. tr/ Fair vis por. ?/Fair odor. spotted dull yellow flouresence, A/C, minute, -------->
LS - Tan/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. some Re-xln. tr argil. Firm. No/ tr vis por.
---------- HUSHPUCKNEY SH 4,267' (-1,264')
SH - Black. Sing. Carb. Soft.
LS - Tans/ Grays. Sing/ some Mot. XF-/ Micro-xln. xln por. some Re-xln. [subchalky at depth/ Friable.] tr fossil frags. some argil in part/ interbedded. Firm. No/ tr vis por.
---------- B / KC 4,301' (-1,298')
Interbedded SH, Marl & LS
SH - Grays / Greenish Gray. Sing. some calc. some marly in part.
Marl - Off White/ Reddish hue Off White. silt sized, SA qtz 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.
bottom
<- CFS @ 4,115':50" & DST #1
^--- S/T: 15 stands pulling tite. 16th is tite & hanging. Jeted/added Mud. Cont'd T/O until free.
^--- CHC: 60" Work Kelly (15") slowly. No shake. Ck sample box for Volume/Type of fill.
^--- Hole Dev: 1.5 deg @ 4,115'.
^--- Board: 4,141.98' Strap: 4,141.92' Diff: 0.06'
^--- DST #1.
Vis: 90+ Wt: 9.1 LCM: 1#
XXXXX
Vis: 65 Wt: 8.9 LCM: 2#
<-------- Reddish Brown stain/flecks. Nothing else.
HW: 25u/ 8u (Bk)
<------- LS (7) - few pcs: Med Tan stain. nothing else.
Vis: 54 Wt: 8.8 LCM: 2#
<---------- CFS @ 4,184': 50"
Vis: 54 Wt: 8.9 LCM: 2#
100 units = 1% Gas
TG, C1-C5 100
Vis: 53 Wt: 9.0 LCM: 2#
<---------- CFS @ 4,210': 50"
Vis: 48 Wt: 9.0 LCM: 1#
4,215' - Vis: 54 Wt: 9.1 Wtr Loss: 7.6 PV: 12 YP: 27 Gels: 10/20 pH: 10.5 LCM: 2# Cl (2,900) Ca (tr) Solids: 5.6%
LS - XF-/ Micro-xln. rare Crypto-xln. xln por. [rare Micro-Oolites. Tan chert matrix.] rare minute fossil hash. rare subchalky in part. Firm. No/ tr vis por.
Vis: 54 Wt: 9.1 LCM: 2#
<------ CFS @ 4,237': 60"
<--- 0 100 --->
<----------
LS (10) - spotted gas bubbles. No free oil. Spotted, minute Lt Reddish Brown stain in sucrosic por. Weak Pos cut/ residual. Weak Pos acid/ residual.
<- CFS @ 4,256': 60" & DST #2
Scale Change
0 200
After DST #2, HW: 287u from bottom
DST #2 LANSING (4,143"-4,256')
Rec:
140' GAS in Pipe
171' Clean OIL (41.2)
378' Gassy Oily Muddy Wtr (10%G,11%O, 19%W,60%M)
315' Muddy Water (17%M,83%W - Oil spots)
Vis: 46 Wt: 9.2 LCM: 2#
IFP: 15# - 155#/30"
ISIP: 1,276# / 45"
FFP: 165# - 379# / 60"
FSIP: 1,260# / 90"
117 deg F
MH: 1,967# - 1,958#
<--- 0 200 --->
Vis: 46 Wt: 9.3 LCM: 2#


4350
4400
4450
4500
0 ROP (min/ft) 10
CFS @ 4,410'
CFS @ 4,455'
CFS @ 4,486'
---------- MARMATON 4,338' (-1,335')
LS (11) - Tans/ tr Off White, 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.
LS - similiar to 11 above.
SH - Med Gray, some Tannish Gray. Sing. Massive. rare fossil frag.
---------- ALTAMONT 4,366' (-1,363')
LS - Tan/ Lt Gray/ some Yellow, Purple. some Sing/ Mot. tr XF-/ Micro-xln. xln por. some Re-xln. tr argil. some interbedded sh (Lt/Med Gray. Reddish Brown). mostly Firm. No/ tr vis por.
Add: Bluish Gray. Sing. soft. tr marly.
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.
SH - Black. Sing. carb. tr fissile.
SH - Med Gray. Sing. highly limy/ LS streaks.
---------- PAWNEE 4,442' (-1,439')
LS - Tans/ tr Lt Gray. Sing/ Mot. XF-/ some Micro-xln. xln & part por. tr Re-xln. [some Chert - Silvery White/ Off White/ Grayish Tan. Mot. misc minute Off White inclusions. No tripolitic/ 'fresh'.] mostly Firm. rare fossil frag. tr ls 'rubble'. tr argil. No/ tr vis por.
SH - Black. Sing. carb. tr fissile.
LS - similiar to 12 below.
SH - Grays. Sing. highly limy/LS in part.
LS (12) - Tans/ some Off White. Sing. XF-xln at top/ Micro-xln at depth. xln por. tr Re-xln. subchalky in part. [few pcs CHERT - Tan/ Brownish Tan/ Off White. Mot. semi-transparent White Inclusions, No tripolitic.] Friable at break. Break has tr/ Fair vis por. mostly No/ tr vis por.
Vis: 49
Wt: 9.2
LCM: 23
4,350' -
Vis: 55 Wt: 9.2
Wtr Loss: 7.8
PV: 12 YP: 21
Gels: 11/17
pH: 10.5 LCM: 2#
Cl (3,100) Ca (20)
Solids: 6.3%
Vis; 50
Wt: 9.2
LCM: 2#
Vis: 51
Wt: 9.1
LCM: 3#
Vis: 52
Wt: 9.1
LCM: 3#
200 units = 2% Gas
0 TG, C1-C5 200
<---------- CFS @ 4,410': 60''
Vis: 51
Wt: 9.1+
LCM: 3#
Vis: 50
Wt: 9.1
LCM: 2#
Vis: 50
Wt: 9.1
LCM: 2#
<---------- CFS @ 4,455': 60''
Vis: 56
Wt; 9.2
LCM: 2#
<---------- CFS @ 4,486': 60''

CONSOLIDATED
Oil Well Services, LLC

C, S in 5 K5

TICKET NUMBER 27985
LOCATION Oakley KS
FOREMAN Pat Heisler

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT H+M
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
2-5-11	5616l	Sheetz #1	16	12S	33W	Logan

CUSTOMER: New Gulf Operating
MAILING ADDRESS:
CITY / STATE / ZIP CODE:

74 sks
1 w
½ s
w into

TRUCK#	DRIVER	TRUCK #	DRIVER
456 Tim	Chad S		
528 T127	Kelly G		
	Miles S		

JOB TYPE Surface HOLE SIZE 12 1/4 HOLE DEPTH 272 CASING SIZE & WEIGHT 8 5/8 24#
CASING DEPTH 255 DRILL PIPE TUBING OTHER
SLURRY WEIGHT 16.2 SLURRY VOL WATER gal/sk 5.6 CEMENT LEFT In CASING 20'
DISPLACEMENT 16 DISPLACEMENT PSI MIX PSI RATE

REMARKS: Safty meeting mix 200 sks 3% cc 2% gel Release Plug Displace 16 BBL H20 @ 150 PSI shut in @ 100 PSI

Circulated good cement

Thank you
Pat & Crew

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401S	1	PUMP CHARGE	1025.00	1025.00
5406	15 mi	MILEAGE	5.00	50.00
5407	1	Min. Bulk Deliver	410.00	410.00
1104S	200 sk	Class "A" cement	16.80	3,360.00
1102	564 Lbs	Calcium Chloride	.84	473.76
1118B	376 Lbs	Bentonite gel	.24	90.24
4432	1	8 5/8 wooden Plug	96.00	96.00
		Subtotal		5,505.00
		Less	20%	1,101.00
				4,404.00
			SALES TAX	313.56
			ESTIMATED TOTAL	4717.56

Revin 3737

AUTHORIZATION [signature] TITLE Tool Pusher 239510 DATE 2-5-11

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

WID, JR3
KG

CONSOLIDATED
Oil Well Services, LLC

TICKET NUMBER 30799
LOCATION Oakley Ks
FOREMAN Pat Hessler

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
2-15-11	5661	Sheetz #1	16	12S	33W	Logan Kansas

CUSTOMER: New Gulf Operating
MAILING ADDRESS:
CITY: STATE: ZIP CODE:

TRUCK #	DRIVER	TRUCK #	DRIVER
528-T127	Kelly Gubla		
456-T127	Chad Smith		
460	Josh Gubla		

JOB TYPE Prod-DV-0 HOLE SIZE 7 7/8 HOLE DEPTH 4780' CASING SIZE & WEIGHT 5 1/2 - 15.5#
CASING DEPTH 4779 DRILL PIPE TUBING OTHER
SLURRY WEIGHT 13.8 - 12.5 SLURRY VOL WATER gal/sk 6.2 - 10.5 CEMENT LEFT In CASING 42'
DISPLACEMENT 114 BBL DISPLACEMENT PSI MIX PSI 300# RATE 7 BPM

REMARKS: Safety Meeting, Rig Float Equipment, Centralizers #1, 2, 3, 6, 9, 12, 15, 18, 21, 24, #40, 62, 65, 68, 71, 74, 77, 80, Basket on #61 - DV Tool on Top #61 (2509'), Circ 30 min on Bottom, Pump 500 gal mud Flush, Mixed 175 sks OWC, clear Pump Lines, Drop Plug Displaced 52 BBL H2O 62 BBL mud @ 350#, Land Plug @ 1600#, released Pressure, Float Held, Drop opening tool wait 15 min, open tool, Circ 4 Hrs
Cement Rat Hole - 30 sks, Mouse hole - 20 sks, Mixed 375 sks @ 4 lb/gal 5% gal 1/4# Flo Seal released Plug + Displaced 53 BBL H2O @ 850#, Land Plug @ 1800#, released Pressure, Tool Held
Cement Did Circ,

Thank You, Pat + Crew

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401C	1	PUMP CHARGE	2,850.00	2,850.00
5406	10	MILEAGE	5.00	50.00
1126	175	OWC	21.48	3,759.00
1110A	875#	Kolseal	.53	463.75
1118B	3256#	Bentonite	.24	781.44
1146	500 gal	Mud Flush	1.00	500.00
1131	425 sks	60/40 poz	14.35	6,098.75
1107	106#	Flo Seal	2.66	281.96
5407A	26.5	Ton Mileage Delivery	1.58	418.70
4159	1	AFU Float Shoe - 5 1/2	413.00	413.
4130	18	Centralizers - 5 1/2	58.00	1044.00
4104	1	Basket - 5 1/2	276.00	276.00
4277	1	DV Tool - 5 1/2	3220.00	3220.00
				20,156.60
		less 20% Disc	-	4,031.32
				16,125.28
			SALES TAX	1313.34
			ESTIMATED TOTAL	17,438.62

Revin 3737

AUTHORIZTION 239585 TITLE DATE

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this for