

Covey

The Well Watchers

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

Well Name: DIEL F #1
Location: Section 24 - Township 34 South - Range 11 West
License Number: 15-007-23,667. 0000 Region: Barber County, KS.
Spud Date: 19 March 2011 Drilling Completed: 28 March 2011
Surface Coordinates: 820' FNL & 500' FWL
(Approx SE NE SW SW)
Bottom Hole Coordinates:
Ground Elevation (ft): 1,353' K.B. Elevation (ft): 1,362'
Logged Interval (ft): 3,550' To: 5,220' Total Depth (ft): 5,220'
Formation: Heebner Shale -----> McLish Shale
Type of Drilling Fluid: Chemical; Low Solids (non-dispersed)
Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: WOOLSEY OPERATING COMPANY, LLC
Address: 125 North Water, Suite 1000 Geologist:
Wichita, Kansas 67202 Dean Patisson
(316) 267-4379

GEOLOGIST

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

FORMATION TOPS

Formation	Rotary Sample Depth (Datum)	E-log Depth (Datum)
Heebner SH	3,643' (-2,281')	3,642' (-2,280')
Douglas SH	3,678' (-2,316')	3,678' (-2,316')
Haskell Lm	3,902' (-2,540')	3,902' (-2,540')
Stalnaker SS	3,953' (-2,591')	3,956' (-2,594')
Stark SH	4,363' (-3,001')	4,362' (-3,000')
Hushpuckney SH	4,399' (-3,037')	4,398' (-3,036')
B / KC	4,451' (-3,089')	4,452' (-3,090')
Pawnee LS	4,550' (-3,188')	4,548' (-3,186')
Cherokee Gp	4,596' (-3,234')	4,596' (-3,234')
Mississippian	4,660' (-3,298')	4,668' (-3,306')
Woodford Sh	4,964' (-3,602')	4,964' (-3,602')
Viola	4,993' (-3,630')	4,984' (-3,622')
Wilcox SS	5,138' (-3,776')	5,140' (-3,778')

RTD: 5,220' LTD: 5,219' ATD: 5,220' E-log is 3' low to 1' high to rotary sample depth.

Loggers:
Superior Well Services
Hays, Kansas

14-3/4" Hole

7-7/8" Hole

7-7/8" Hole

19 Mar --- Spud @ 7:30pm.
Drill to 235'.
20 --- Run 10-3/4" casing.
Set casing @ 217'.
Cemented w/ 240 sx Class A
(2% Gel + 3% CC). [Allied]
Cement did circulate.
Plug down @ 2am.
WOC.
7am @ 235'.

20 Mar --- WOC.
Under surface casing @ 10:15am..
21 --- 7am @ 1,660'.
22 --- 7am @ 2,547'.
23 --- 7am @ 3,330'.
24 --- 7am @ 3,968'.
DST #1: Stalnakker SS (3,955'-3,968').
25 --- Resumed Drilling @ 12:30am.
7am @ 4,115'.
26 --- 7am @ 4,572'. S/T: 15 stands
@ 4,572'. Resumed Drilling
@ 9:47am. Start &

27 Mar --- Finish DST #2: Miss
(4,566'-4,704').
7am @ 4,704'.
Resumed Drilling @ 7:50am.
DST #3: Miss (4,704'-4,731').
28 --- 7am @ 4,731'.
Resumed Drilling @ 7am.
29 --- 7am @ 5,143'.
RTD (5,220') @ 11:48am.
E-LOG.
[Superior Well Services]

DST #1: STALNAKER SS

Rotary Depth: 3,955' - 3,968'
Logger's Depth: 3,957' - 3,970'

Recovery: 1,550' Gas in Pipe
92' Gas & Water cut Mud (5%G,25%W,70%M)
486' Water
Total Fluid: 578'

Recovery Water: (80,000 ppm)
System Water: (4,000 ppm)

IFP: 128# - 213# / 30"
ISIP: 1,579# / 60"
FFP: 245# - 335# / 30"
FSIP: 1,569# / 60"
119 deg F
MH: 2,023# - 1,912#

IF: Strong Blow, BOB in 30 seconds.
ISI: Fair Blow, built back to 2 inch Blow.
FF: Fair Blow, BOB in 8 minutes.
FSI: Bleed Off, Surface Blow.

Reported Rw =
0.15 ohms @ 45 deg F

Recovery Water- Mud
Engineer: (125,000 ppm)
Trilobite Testing, Inc.
Pratt, KS.

DST #2: MISS

Rotary Depth: 4,566' - 4,704'
Logger's Depth: 4,565' - 4,703'

Recovery: 20P: Gas to Surface (12"). TSTM
4,202' Gas in Pipe
112' Gassy SI Oil cut Mud (5%G,1%O,,94%M)
238' Gassy Mud (5%G,95%M)
Total Fluid: 350'

Recovery Water: NA
System Water: (4,000 ppm)
Reported Rw = NA

IFP: 125# - 125# / 30"
ISIP: 1,627# / 60"
FFP: 157# - 164# / 60"
FSIP: 1,596# / 120"
121 deg F
MH: 2,281# - 2,296#

IF: Strong Blow, BOB in 2-1/2 minutes.
ISI: Bleed Off, Weak Surface Blow.
FF: Strong Blow, BOB immediate. GTS in 12 minute (TSTM).
FSI: Bleed Off, Weak Surface Blow.

Trilobite Testing, Inc.
Pratt, KS.

DST #3: MISS

Rotary Depth: 4,704' - 4,731'
Logger's Depth: 4,703' - 4,730'

Recovery: 20' Gassy Water cut Mud (5%G,39%W,56%M)
120' Mud cut Water (30%M,,70%W)
118' Water
Total Fluid: 258'

Recovery Water:
(125,000 ppm)
System Water: (7,000 ppm)

IFP: 75# - 80# / 30"
ISIP: 1,621# / 60"
FFP: 95# - 138# / 60"
FSIP: 1,773# / 120"
124 deg F
MH: 2,368# - 2,263#

IF: Fair Blow, built to 4-1/2 inches.
ISI: Bleed Off, No Blow.
FF: Weak Blow, built to 2 inches.
FSI: Bleed Off, No Blow.

Reported Rw =
0.13 ohms @ 44 deg F

Recovery Water- Mud
Engineer: (54,000 ppm)

HOLE DEVIATION (235' - 5,220')

DEPTH / TVD	INCLINATION	AZIMUTH	NORTH	SOUTH	EAST	WEST	DOGLEG deg/100'
235' /	--- 1.00	(Surface Casing)					
1,502' /	--- 0.50						
2,066' /	--- 0.50						
2,515' /	--- 0.50						
3,055' /	--- 1.50						
3,278' /	--- 0.75						
3,817' /	--- 0.25						
3,911' /	--- 0.50						
3,968' /	--- 0.25	(DST #1)					
4,102' /	--- 1.00						
4,197' /	--- Bull's Eye						
4,704' /	--- 0.25	(DST #2)					
5,220' /	--- 1.75	(RTD)					

STRAP @ DST #1

Board: 3,975.32'
Strap: 3,976.69'
Diff: 1.37'

CONTRACTOR

H2 Drilling --- Rig #3

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

Rig #3 - (620) 388-1903

Toolpusher:
Randy - (620) 290-1672

Pump: EMSCO D-375
6" x 14" @ 60 SPM.
900 - 1,000 PSI @ Standpipe.

Above 4,100': 15M WOB @ 90/100 RPM.
After 4,100': 25M/30M WOB @ 80/85 RPM.

Drill Collars: 6-1/8" x 2.50" --- 537'. (83.3#/ft)
Dry Collar Weight: 44,903#
(@ 9.10ppg / Buoyancy Factor 0.863)
Bouyancy Collar Weight: 38,751#
Design Factor: 15%, therefore:
available WOB is 32,939#
Drill Pipe: 4-1/2" XH. (16#/ft - used)

BIT RECORD

DATE	SIZE	TYPE	JET SIZE	DEPTH IN / OUT	CUM. FT.	HOURS	ROP
10 Mar 2011	14-3/4"	VAREL L-117	3 / 15's	0' / 235'	235'	3.25	72.3
20 Mar 2011	7-7/8"	VAREL HE-21	14 - 15 - 14	235' / 4,704'	4,469'	111.25	40.2
27 Mar 2011	7-7/8"	VAREL HE-29	14 - 15 - 14	4,704' / 5,220'	516'	24.25	21.3

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
--	-------------

STRINGER

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

OTHER SYMBOLS

ACTIVITY

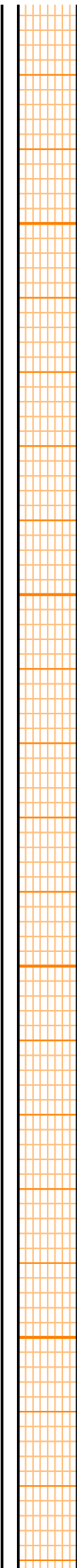
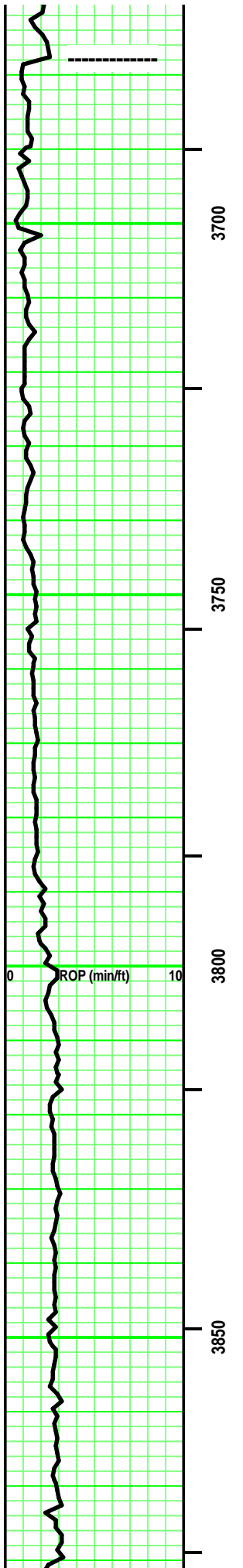
	Lost circluation
	Circulate for sample 2

	Circulate for samples
	Rtd
	Trip

EVENT

	Connection
	Rft

	Sidewall
--	----------



SH - Med/ Dark Gray. Sing. Massive. some LS streaks (Brown/Off White Mot. Micro-xln. xln & part por. Firm. No/ tr vis por.) Silt sized SR qtz grains/ sandy in part (interbedded/intermixed).

SH - Med/ Dark Gray. Sing. minute dark specks. Micaceous. Silty in part. Massive.

SH - Med/ Dark Gray. Sing. minute dark specks. Micaceous. Silty in part. Massive.

SH - Med/ Dark Gray. Sing. minute dark specks. Micaceous. tr Silty in part. Massive. Firm.

SH - Med/ Dark Gray. Sing. minute dark specks. Micaceous. tr Silty in part. Massive. Firm.

-- DOUGLAS SH
3,678' (-2,316')

Vis: 45
Wt: 9.0

Vis: 45
Wt: 8.9

Vis: 45
Wt: 8.9

Vis: 45
Wt: 9.0

Vis: 45
Wt: 9.0

100 units = 1% Gas
TG, C1-C5

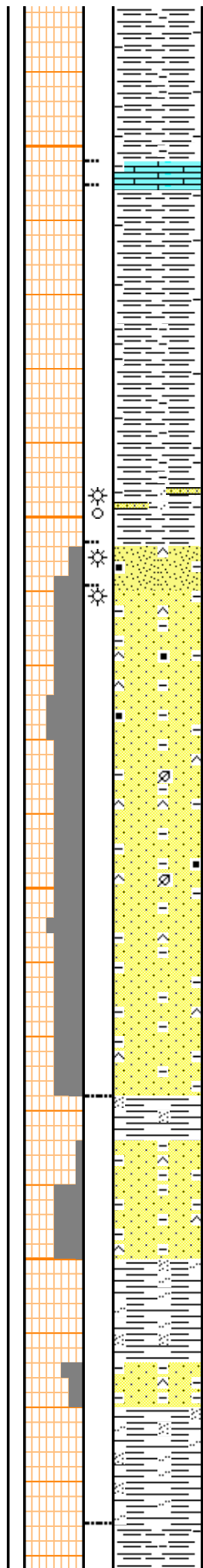
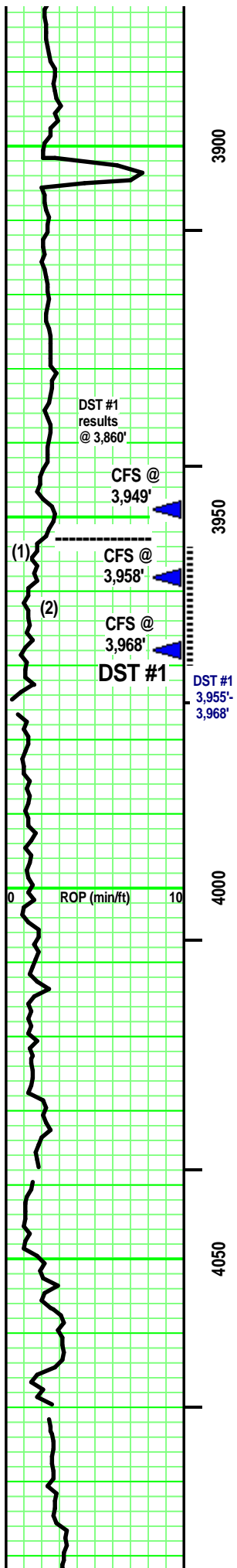
Hole Dev:
0.25 deg @ 3,817'

Vis: 48
Wt: 9.0+

DST #1: STALNAKER
(3,955'-3,968')
Rec: 1,550' GIP
92' Gas & Wtr cMud (5%G,25%W,70%M)
486' Water

Vis: 55
Wt: 9.0

IFP: 128# - 213# / 30"
ISIP: 1,579# / 60"



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

SH - Med/ Dark Gray, Silver/ Greenish Gray. Sing. Soft. Massive. misc minute inclusions. tr silty in part. sandy stringer with depth, similiar to below.

-- STALNAKER SS 3,953' (-2,591')

SS (1) - Clear/ Lt Gray. Sing. Silt/ tr VF qtz grains. SA/SR. Hi sort / Mod sort. Mod sph. tr Vit/ mostly frosted luster. Hi argil/ shaly. tr minute dark specks/ some carb flecks. Si cement. Point/ some sutured grain contact. Tr/ Fair vis por. ? odor. few pcs: Spotted/ Uniform Yellow flouresence. On own, rare gas bubble. No oil. No stain. Weak Pos cut/ residual. Weak Pos acid/ residual.

SS (2) - Clear/ Lt Gray/ some Tan. Sing. Silt/ tr VF qtz grains. SA/SR. Hi sort / some Mod sort with depth. Mod sph. tr Vit/ mostly frosted luster. some argil/ shaly. tr minute dark specks/ some carb flecks. Si cement. Point/ some sutured grain contact. Tr/ mostly Fair vis por. ?/ Faint odor. some Spotted/ some Uniform Yellow flouresence. some Barren. On own, rare gas bubbles. No oil. No stain. Weak Pos/ Pos cut/ residual. Weak Pos/ Pos acid/ residual.

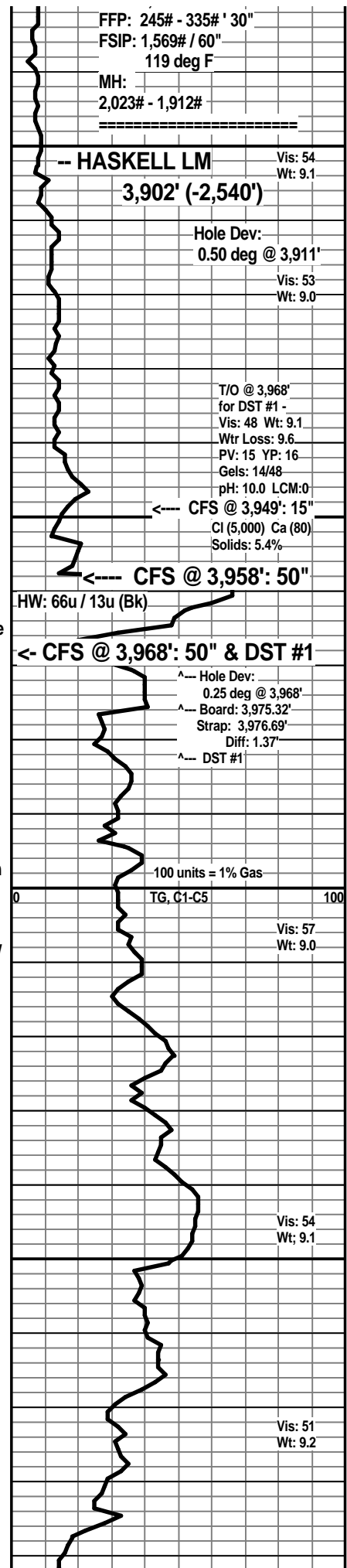
Barren with depth

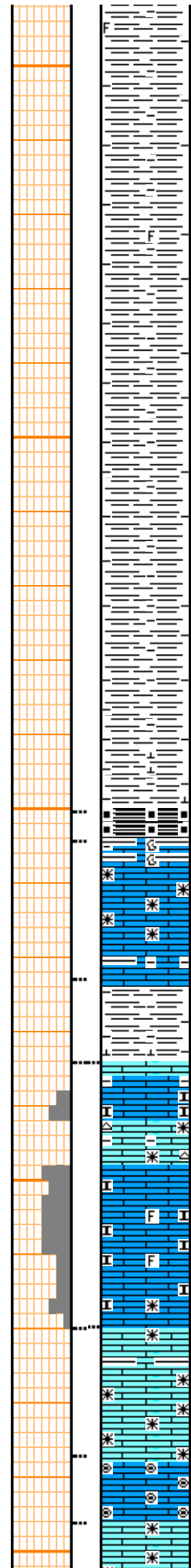
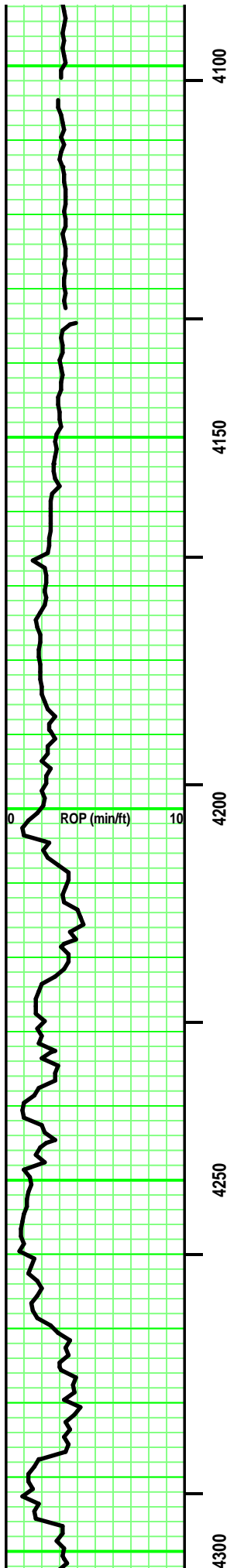
Interbedded SH & SS

SH - Med/ Dark Gray, Silvery Gray. Sing. sandy / silty in part. soft to partly Firm. misc inclusions (carb, dark specks)

SS - similiar to immediately above.

SH - Med/ Dark Gray, tr V Dark Gray. Sing. Massive. Firm. rare fossil frag/ clast.





SH - Med/ Dark Gray, tr V Dark Gray. Sing. Massive. Firm. rare fossil frag/ clast.

SH - Med/ Dark Gray, tr V Dark Gray. Sing. Massive. Firm. rare fossil frag/ clast.

Add: limy

LS - Grays/ Brown/ some Tan. Mot. Crypto-/ mostly Micro-xln. xln por argil in part. some Re-xln. tr ls frags. No/ tr vis por.

SH - Med/ Dark Gray. Sing. calc at depth. soft. tr Firm.

Interbedded LS's

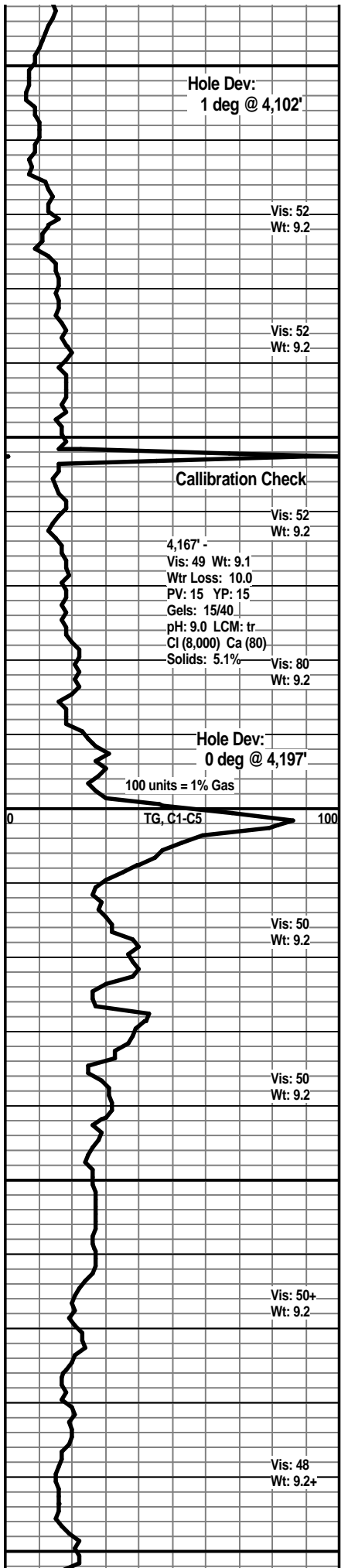
LS - Tans/ Off White/ some Lt Gray. Mottled. Micro-/ tr XF-xln. xln por. subchalky. tr argil. Friable. tr fossil frags. Tr/ Fair vis por.

LS - Tans/ tr Lt Gray. Sing. XF-/Micro-xln. xln por. some Re-xln. [tr CHERT - Tan/ Gray. Sing. Opaque. No tripolitic. No inclusions.] Firm. No/ tr vis por.

LS - Tan. Sing. Crypto-/ mostly Micro-xln. xln por. tr Re-xln. tr argil/ shaly stringer. Firm. No/ tr vis por.

LS - Off White/ Tan VF Oolitest. some clear/ Tan matrix. Opaque to semitransparent. Friable. Tr vis por.

LS - Tans/ some Off White, tr Lt Gray. mostly Sing/ some Mot. some Crypto-/ mostly Micro-xln &



Hole Dev:
1 deg @ 4,102'

Vis: 52
Wt: 9.2

Vis: 52
Wt: 9.2

Calibration Check

Vis: 52
Wt: 9.2

4,167' -
Vis: 49 Wt: 9.1
Wtr Loss: 10.0
PV: 15 YP: 15
Gels: 15/40
pH: 9.0 LCM: tr
Cl (8,000) Ca (80)
Solids: 5.1%

Vis: 80
Wt: 9.2

Hole Dev:
0 deg @ 4,197'

100 units = 1% Gas

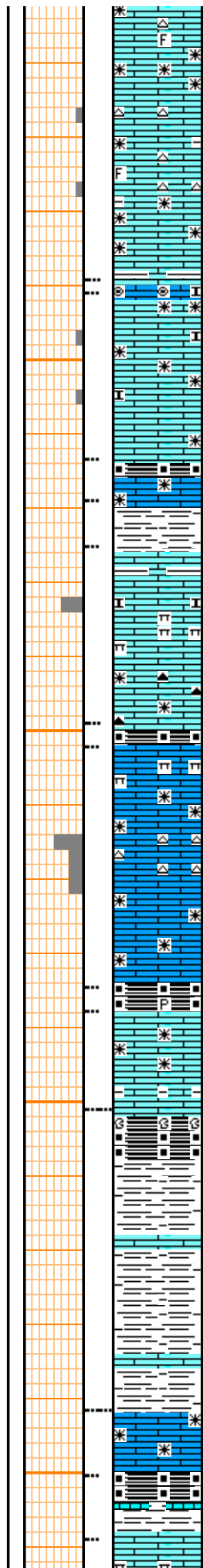
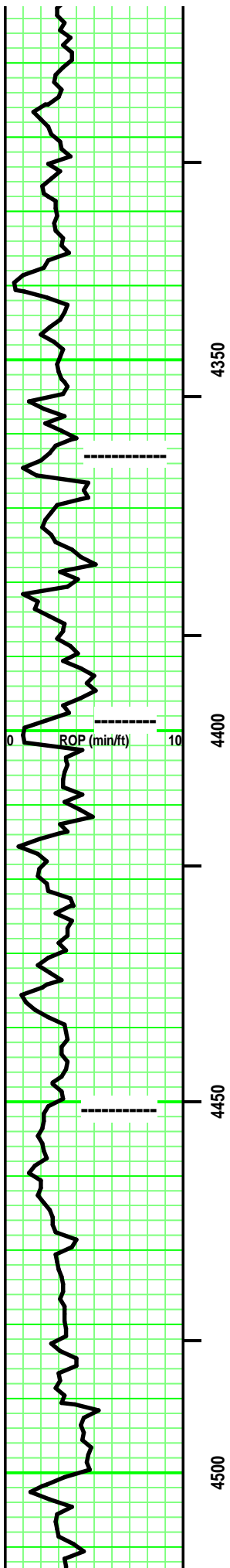
TG, C1-C5

Vis: 50
Wt: 9.2

Vis: 50
Wt: 9.2

Vis: 50+
Wt: 9.2

Vis: 48
Wt: 9.2+



XF-xln. xln por. some Re-xln. some argil in part. rare minute off white fossil frags. [some CHERT - Clear/Tan. Sing/ tr Mot. Opaque to semi-transparent. No inclusions. No tripolitic.] Firm. No/ tr vis por.

Add: SH stringer -Med/ Dark Gray. Sing. Firm.
 LS - Tan VF 'ghost' Micro-Oolite in subchalky matrix. Friable. No/ tr vis por.

LS - Off White/ some Tan. Sing. Micro-xln. xln por. tr Re-xln. Subchalky. partly Friable. tr, irregular Med Gray shale streaks. Tr vis por.

----- STARK SH 4,363' (-3,001')

SH - Black. Sing. Carb. Blocky.
 LS - Tan. Sing. Micro-xln. xln por. Firm. No/ tr vis por.

SH - Med/ Dark Gray. Sing. soft. Massive. tr
 LS - Off White/ some Tan. Sing. XF-/ Micro-xln. xln por. Subchalky/ marly in part. partly Friable. some interbedded Med Gray shale. No/ tr vis por.

Add: few pcs CHERT - Tan/Gray. Sing/ tr Mot. Opaque. No inclusions. No tripolitic.

----- Hushpuckney Sh 4,399' (-3,037')

SH - Black. Sing. Carb. Soft.
 LS - Lt Gray/ tr Brown/ Tan. Sing. Crypto-/ Micro-xln. xln por. Re-xln. some interbedded Lt Gray argil/ marl. [few pcs CHERT - similar to above.] mostly Firm. No/ tr vis por.

SH - Black, Carb. rare pyritic. partly fissile. partly soft.

LS - Tans/ some Off White & Grays. Sing/ tr Mot. XF-/ Micro-xln. xln por. some argil/ shaly in part. some Re-xln. Firm. No/ tr vis por.

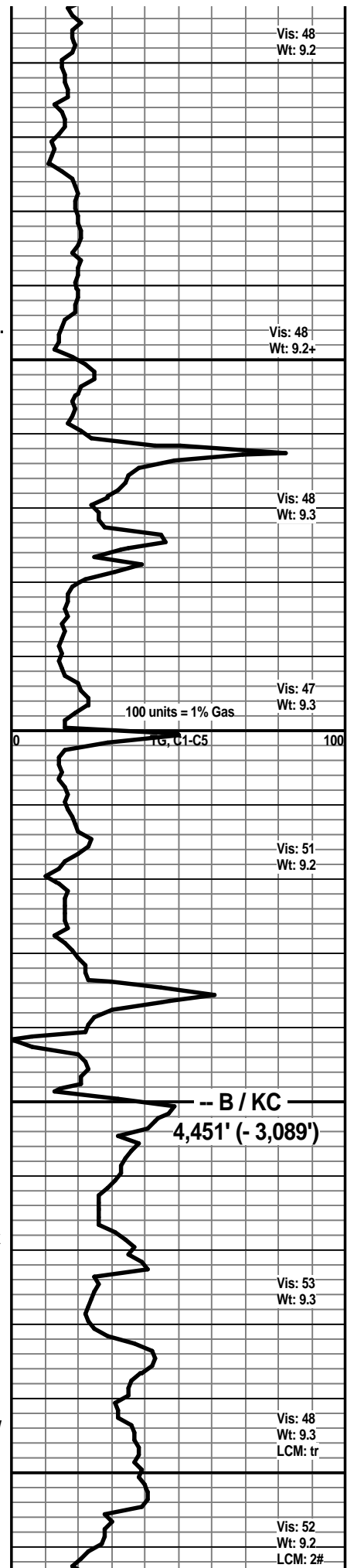
----- B / KC -----
 4,451' (- 3,089')

Intermixed & interbedded SH & LS
 SH - Med/ Dark Grays, Black - carb. Sing. rare rubble.
 SH - Grays, Greenish Grays, Silverish Gray. Black & Carb. Sing. tr silty.
 LS - Tan/ Grays, rare Off White. Sing. Micro-/ tr crypto-xln. xln por. some Re-xln. some argil. Firm. No/ tr vis por.

LS - Tan/ Pale Lt Gray. Sing. Micro-/ Crypto-xln. xln por. Firm/ Dense. No vis por.

SH - Black. Carb Soft. at top. Grays. Sing with limy streaks with depth.

LS - Tans/ Grays. tr Off White. tr Sing/ mostly Mot. mostly Micro-xln. tr XF-xln. xln por. lots



Vis: 48
Wt: 9.2

Vis: 48
Wt: 9.2+

Vis: 48
Wt: 9.3

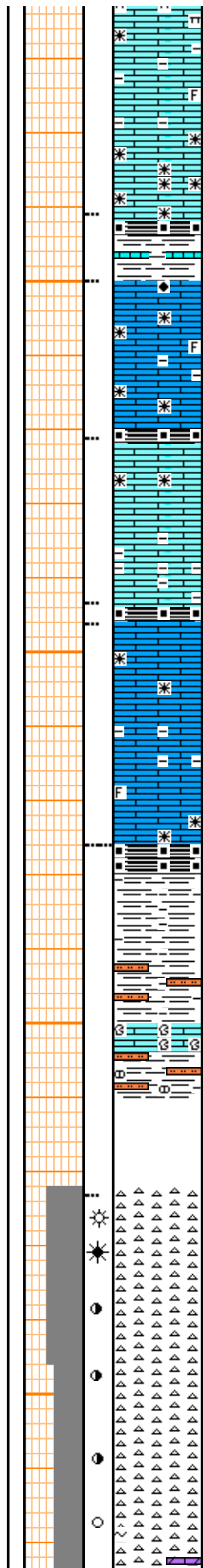
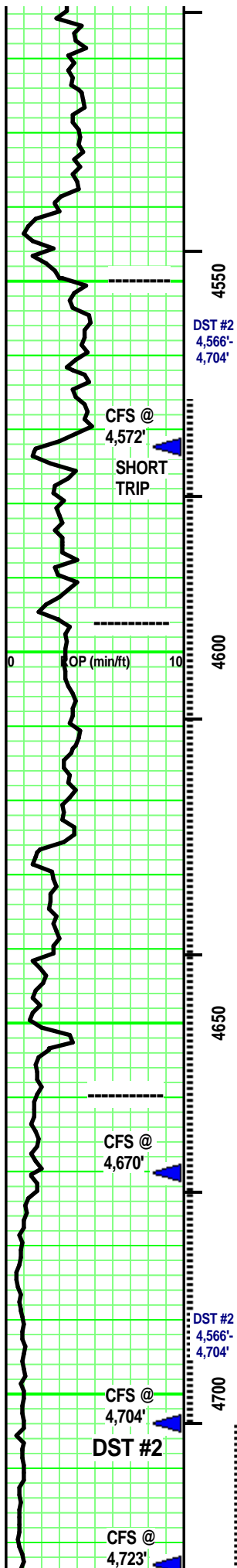
Vis: 47
Wt: 9.3

Vis: 51
Wt: 9.2

Vis: 53
Wt: 9.3

Vis: 48
Wt: 9.3
LCM: tr

Vis: 52
Wt: 9.2
LCM: 2#



Re-xln. some argil/shaly in part. some marl at top. rare fossil frag. mostly Firm. No/ tr vis por.

SH - Black. Carb Soft. at top. Grays. Sing with limy streaks with depth.

LS - Tans/ some Off White. Sing/ tr Mot. some Crypto-/ mostly Micro- & XF-xln. xln por. some Re-xln. tr fossil frags. [rare Micro-Ooloid. Tan. in Off Whitish Tan Matrix. No vis por. Re-xln.] mostly Firm. No/ tr vis por.

SH - Black. Sing. Carb. Soft.

LS - Tan/ some Lt & Med Gray. Sing/ some Mot. XF-/ Micro-xln. xln por. Re-xln. some argil/ shaly in part. mostly Firm. few pcs: subchalky. No/ tr vis por.

SH - Black. Sing. Carb. Soft.

CHEROKEE GP 4,596' (-3,234')
Interbedded & Intermixed SH & LS

SH - Med/ Dark Gray, some Greenish Gray. some Black, carb, soft. tr pyritic. some limy streaks in part. tr marly in part with depth.

LS - Tans/ Lt & Med Gray, Med Gray with depth. Sing/ tr Mot. XF-/ Micro-xln. xln por. some Re-xln. argil in part. tr fossil frags. some, minute limy frags. mostly Firm. mostly No/ tr vis por.

Interbedded & Intermixed SH and Siltstone

SH - Black. Sing. Carb. Grays/ Purple/ Brown/ Greens/ Blue Green. Sing/ Mot. misc pellets/ frags.

Siltstone - Grays, some Greens & Blue green. Massive. misc inclusions of: limestone frags, carb flecks, tr sandy in part & tr marly with depth.

Rubble

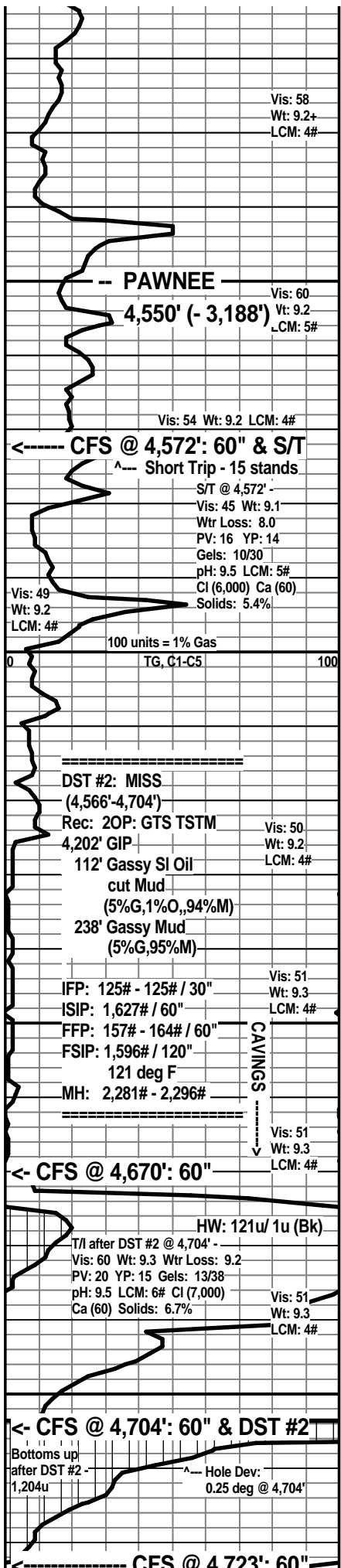
MISS 4,660' (-3,298')

CHERT - Off White/ some Silvery Gray/ rare Clear. Mot. mostly Opaque to semitransparent. some misc fossil frags/hash inclusions. Tr/ fair vis por with show.

Faint/ Fair odor. Spotted/ some Uniform Yellow fluorescence. No free oil/ rare minute gas bubbles. Stain as above (45% - 80%). Spotted/ some Uniform Tripolitic with some Spotted/ uniform Lt/ Med Brown or Black stain. rare limy dol or dol/ frags in part. Weak Pos/ Pos cut/ residual. Weak Pos/ Pos acid/ residual. few/ some Oil spots on wash water.

CHERT - similar to above. Add: tr, minute pyrite xtals. Stain 10% - 35% of chert.

Add: tr, minute Green, SA, glauc grains.



Vis: 58
Wt: 9.2+
LCM: 4#

PAWNEE
4,550' (-3,188')
Vis: 60
Wt: 9.2
LCM: 5#

Vis: 54 Wt: 9.2 LCM: 4#

CFS @ 4,572': 60" & S/T
Short Trip - 15 stands
S/T @ 4,572' -
Vis: 45 Wt: 9.1
Wtr Loss: 8.0
PV: 16 YP: 14
Gels: 10/30
pH: 9.5 LCM: 5#
Cl (6,000) Ca (60)
Solids: 5.4%

Vis: 49
Wt: 9.2
LCM: 4#

100 units = 1% Gas
TG, C1-C5

DST #2: MISS
(4,566'-4,704')
Rec: 20P: GTS TSTM
4,202' GIP
112' Gassy SI Oil
cut Mud
(5%G,1%O,,94%M)
238' Gassy Mud
(5%G,95%M)

IFP: 125# - 125# / 30"
ISIP: 1,627# / 60"
FFP: 157# - 164# / 60"
FSIP: 1,596# / 120"
MH: 2,281# - 2,296#

Vis: 51
Wt: 9.3
LCM: 4#

CAVINGS

Vis: 51
Wt: 9.3
LCM: 4#

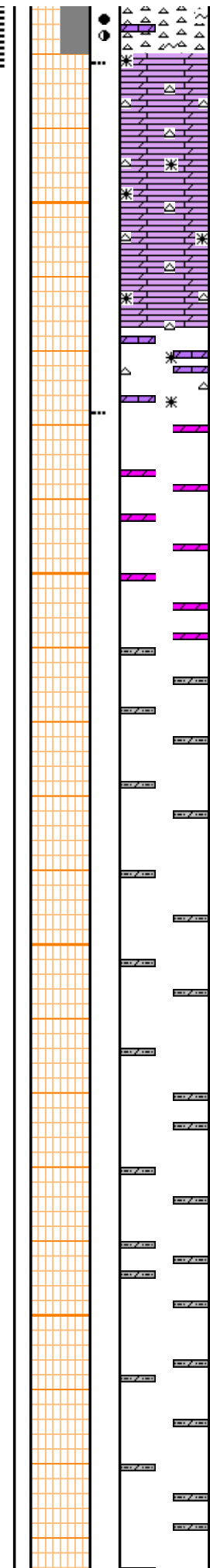
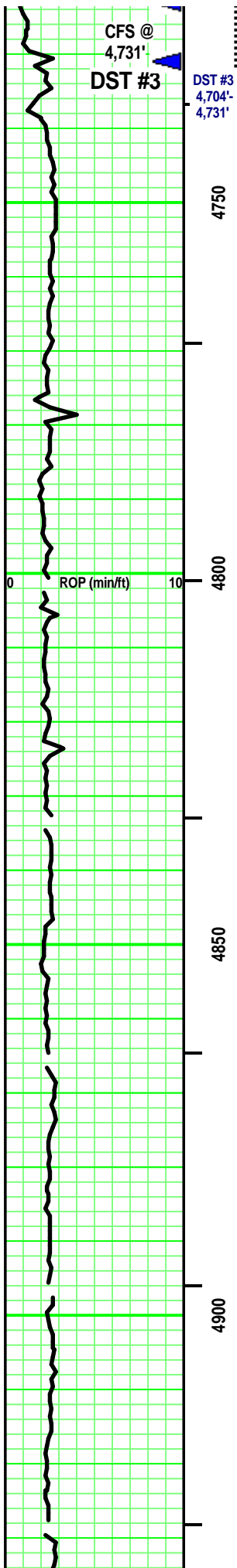
CFS @ 4,670': 60"

HW: 121u/ 1u (Bk)
T/ after DST #2 @ 4,704' -
Vis: 60 Wt: 9.3 Wtr Loss: 9.2
PV: 20 YP: 15 Gels: 13/38
pH: 9.5 LCM: 6# Cl (7,000)
Ca (60) Solids: 6.7%

Vis: 51
Wt: 9.3
LCM: 4#

CFS @ 4,704': 60" & DST #2
Bottoms up
after DST #2 -
1,204u
Hole Dev:
0.25 deg @ 4,704'

CFS @ 4,723': 60"



tr pcs: Dol (Calc) - similar to below.
tr pcs: Add: vuggy por. Dark Blackish Brown 'oil wet' facies.

Dolomite (Calc) - Tans/ Lt Gray. Sing. Re-xln. xln & tr sucrosic por. [CHERT - similar to immediately above.] Firm. some No/ mostly tr vis por.

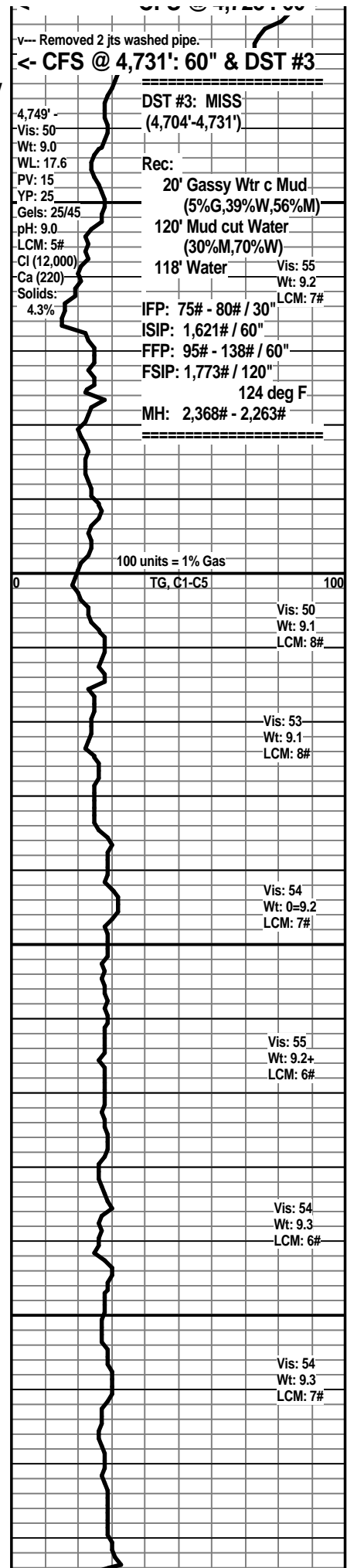
Dolomite (tr calc) - Tans/ some Lt & Med Gray. Sing. XF-/ Micro-xln. xln & rare sucrosic por. some Re-xln. silty in part. Massive. tr vis por.

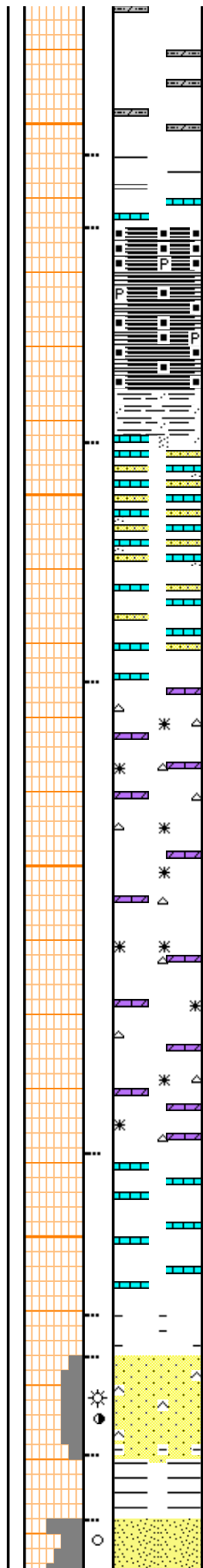
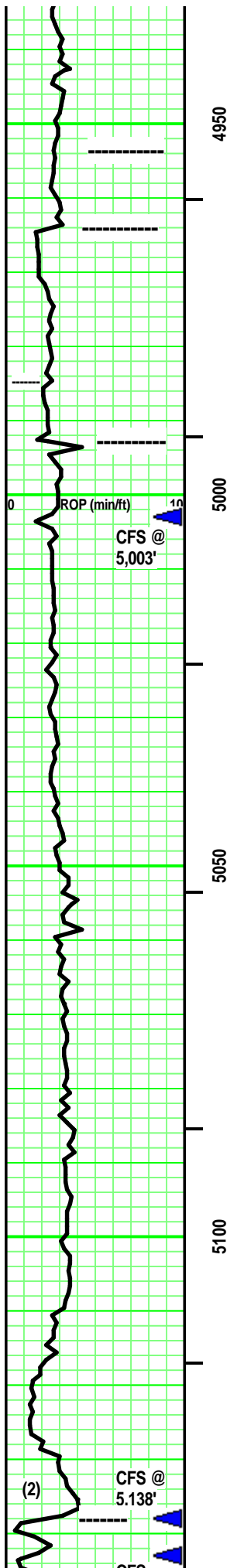
Dolomite - Med/ some Dark Gray. tr Lt Gray. - Sing. Micro-Re-xln. xln por. highly Silty. rare misc, minute inclusion. Massive. No/ tr vis por.

Dolomite - Med/ some Dark Gray. tr Lt Gray. - Sing. Micro-Re-xln. xln por. highly Silty. rare misc, minute inclusion. Massive. No/ tr vis por.

Dolomite - Med/ some Dark Gray. tr Lt Gray. - Sing. Micro-Re-xln. xln por. highly Silty. rare misc, minute inclusion. Massive. No/ tr vis por.

Dolomite - Med/ some Dark Gray. tr Lt Gray. - Sing. Micro-Re-xln. xln por. highly Silty. rare misc, minute inclusion. Massive. No/ tr vis por.





----- KINDERHOOK SH 4,
SH - Dark Gray, Greenish Gray. Sing/ tr Mot. Firm.
tr calc stringers in part.

----- WOODFORD SH 4,964' (-3,602')
SH - Black. Sing. carb. (Brown hue scratch.)
Massive. some blocky. tr pyritic.

SH - Dark/ V Dark Gray. Sing. highly silt-sized qtz grain, SR,
grains 'floating' in shale matrix. some misc LS rubble.

----- VIOLA 4,993' (- 3,630')
LS (tr Dol) - Lt Gray/ Tan. Sing. Micro-xln. xln por.
some Re-xln. Random, minute black specks.
(interbedded near top: some VF, SR, vitreous, mod
sph, dissem, qtz grains in pyritized sh/lts.)
Massive. No/ tr vis por.

LS (tr Dol) - Tans/ Grays. Sing/ Mot. rare VF-/
mostly XF- & Micro-xln. xln por. some Re-xln. [
some CHERT - Tans/ Grays. Sing/ some Mot.
Opaque. No/ rare White inclusions. No tripolitic.]
tr/ some minute black specks in part. Firm. No/ tr
vis por.

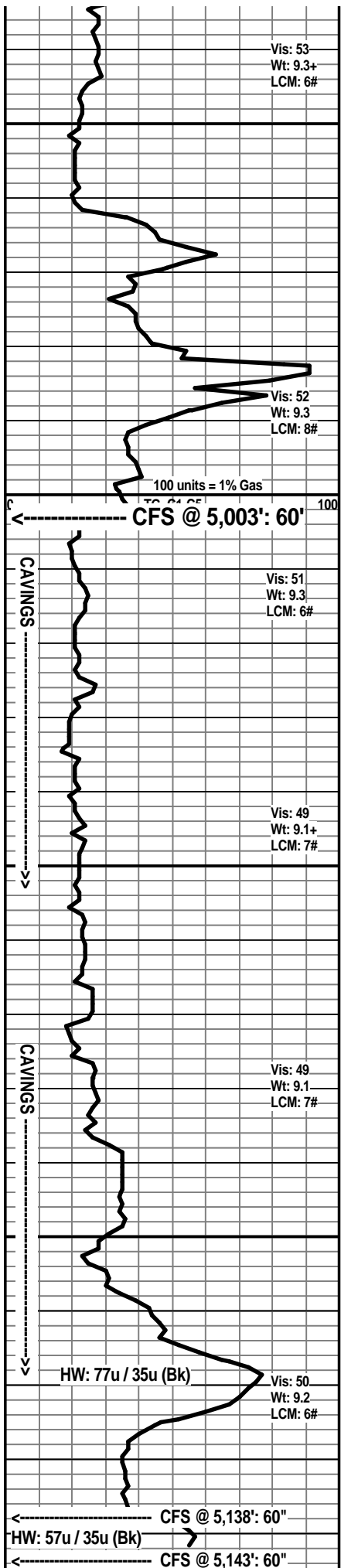
LS - Tans/ tr Lt Gray. Sing. Micro-xln. xln por. tr
subchalky in part. Massive. No/ tr vis por.

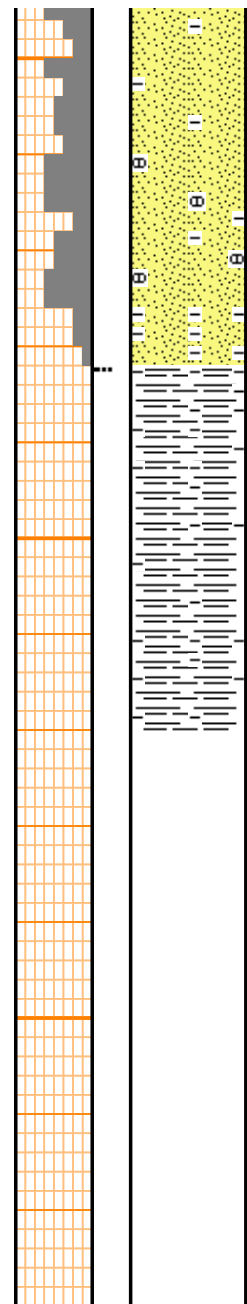
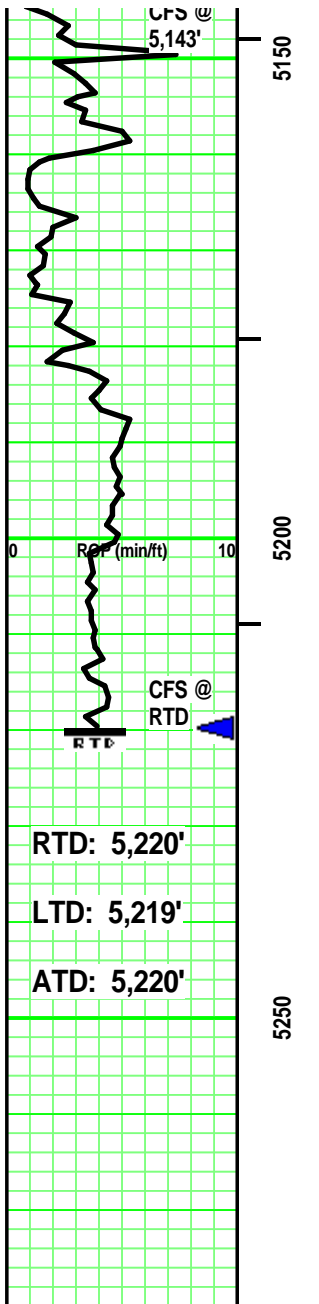
Add: SH - Green/ Grayish Green/ Dark Green. Sing.
frags/streaks. Highly Limy.

SS - Clear/ Lt & tr Med Gray. Mot. VF- tr silt sized qtz grains.
SR/SA. Mod sort. Mod sph. Vitreous/ some frosted grain
contact. tr sil cement. some Point/ mostly sutured grain
contact. tr argil in part, partly Friable. Fair/ good vis por. ?
odor. Spotted/ tr uniform Yellow fluorescence. rare, minute gas
bubble. No oil. tr, minute Med Brown stain. Weak Pos/ Pos
cut & residual. Weak Pos/ Pos acid & residual.

SH (2) - Green/ Greenish Gray. Sing. Firm. Massive. tr ductile.

----- WILCOX SS 5,138' (-3,776')
SS - Clear/ Off White. Mot. Mixture of Silt/ rare VF qtz grains.
SA/SR. Hi/ tr Mod sort. Mod sph. tr Vitreous/ mostly Frosted
luster. Point & Sutured grain contact. rare argil/ pyritic infill





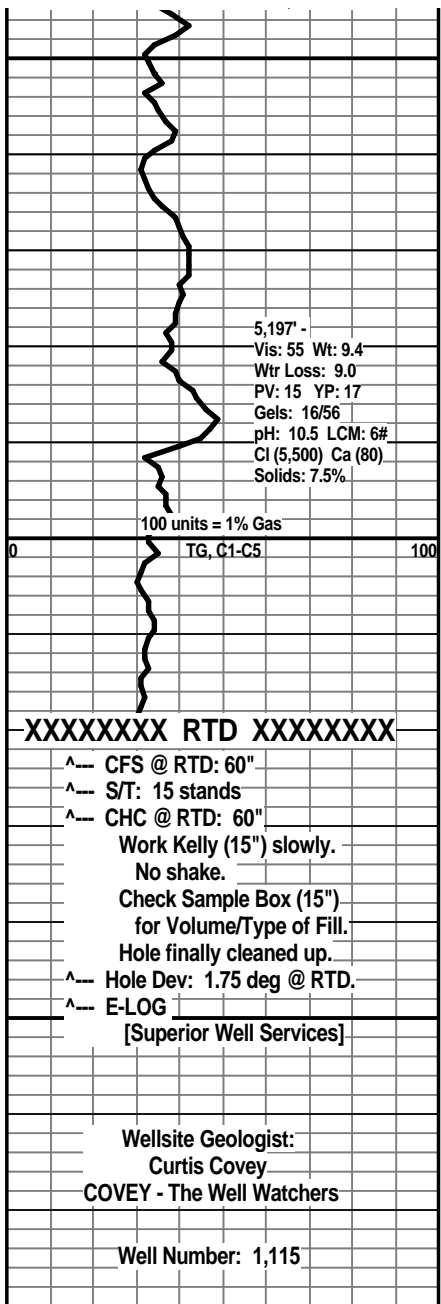
SS - Clear/ Grays/ Tan. Mot. VF-/ tr silt sized qtz grains.
 SR/SA. Mod sort. Mod sph. Vitreous/ some frosted grain
 contact. Calc/ tr sil cement. some/ highly sutured grain
 contact. some SR, VF obliterated argil grains in part. partly
 Friable. Fair/ Good vis por.

 Add: argil frags/ pellets. tr glauc grains.
 Interbedded SH & SS
 SH - Gray/ Greenish Gray. Sing. tr sandy.
 SS - similiar to above. misc brecc frags.

 SH - Grays/ Green Gray/ some Pale Greenish Gray.
 Sing/ tr Mot. tr sandy stringers in part (similar to
 immediately above). mixture of 'crumbly' / grainy /
 blocky / some waxy. Massive.

DIEL F #1
 820' FSL & 500' FWL 24-T34S-R11W
 Barber County, Kansas

WOOLSEY OPERATING COMPANY
 Wichita, Kansas



5,197' -
 Vis: 55 Wt: 9.4
 Wtr Loss: 9.0
 PV: 15 YP: 17
 Gels: 16/56
 pH: 10.5 LCM: 6#
 Cl (5,500) Ca (80)
 Solids: 7.5%

100 units = 1% Gas

XXXXXXXX RTD XXXXXXXX

- ^-- CFS @ RTD: 60"
 - ^-- S/T: 15 stands
 - ^-- CHC @ RTD: 60"
 - Work Kelly (15") slowly.
No shake.
 - Check Sample Box (15")
for Volume/Type of Fill.
Hole finally cleaned up.
 - ^-- Hole Dev: 1.75 deg @ RTD.
 - ^-- E-LOG
- [Superior Well Services]

Wellsite Geologist:
 Curtis Covey
COVEY - The Well Watchers

Well Number: 1,115

RTD: 5,220'
 LTD: 5,219'
 ATD: 5,220'