

TIM PRIEST
Petroleum Geologist
(316)-213-6115

GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

COMPANY SHAKESPEARE OIL CO.
LEASE Campbell #1-17
FIELD _____
LOCATION 2305' FNL, 1345' FWL
SEC 17 TWSP 13S RGE 32W
COUNTY Logan STATE Kansas

CONTRACTOR HD Drilling Rig #2
SPUD 6-29-10 COMP 7-13-10
RTD 4700' LTD 4700'
MUD UP 3500' TYPE MUD Chemical

SAMPLES SAVED FROM 3800' to RTD
DRILLING TIME KEPT FROM 3750' to RTD
SAMPLES EXAMINED FROM 3800' to RTD
GEOLOGICAL SUPERVISION FROM 3700' to RTD
GEOLOGIST ON WELL Tim Priest

ELEVATIONS

KB 3027'

DF _____

GL 3017'

Measurements Are All
From KB

CASING

CONDUCTOR N/A

SURFACE 8-5/8" @ 226'

PRODUCTION _____

ELECTRICAL

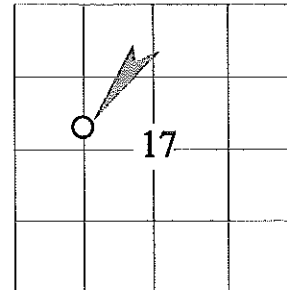
SURVEYS

CND;D/SP;P.E.

Micro

By: Weatherford

FORMATION TOPS	ELECTRIC LOG	SAMPLE
Anhydrite	2514 (+513)	2514 (+513)
Heebner Shale	3965 (-938)	3965 (-938)
Toronto	3985 (-958)	3991 (-964)
Lansing	4007 (-980)	4010 (-983)
Stark	4245 (-1218)	4247 (-1220)
BKC	4312 (-1285)	4317 (-1290)
Fort Scott	4496 (-1469)	4493 (-1466)
Cherokee Shale	4526 (-1499)	4520 (-1493)
Mississippian	4630 (-1603)	4637 (-1610)



REMARKS

Respectfully Submitted,

Tim Priest
Petroleum Geologist





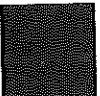

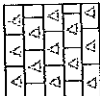


API #15-109-20918-00-00

REMARKS

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API #15-109-20918-00-00

LITHOLOGY	DEPTH	DRILLING TIME IN MINUTES PER FOOT Rate of Penetration Decreases	SAMPLE DESCRIPTION	REMARKS
 Anhydrite  Sandstone  Limestone  Shale  Carb Sh	2500		 Cherty LS  Chert  Dolomite	Anhydrite 2514(+513) Base/ Anhydrite 2537(+490)

HEEBNER 3965, INO

Sh blk

Ls crm-lt gry, fn xtl, fos, p-f int
xtl por, NS

Sh blk

Sh/SS, gry, vfn grn, NS

Ls crm-lt gry, fn xtl, fos, f int xtl
-pp por, NS

Ls gry, vfn xtl, dnse

Sh blk

Ls crm-tan, fn xtl, fos, chky, f
int xtl-pp por, few pcs w/gil sin,
NFO

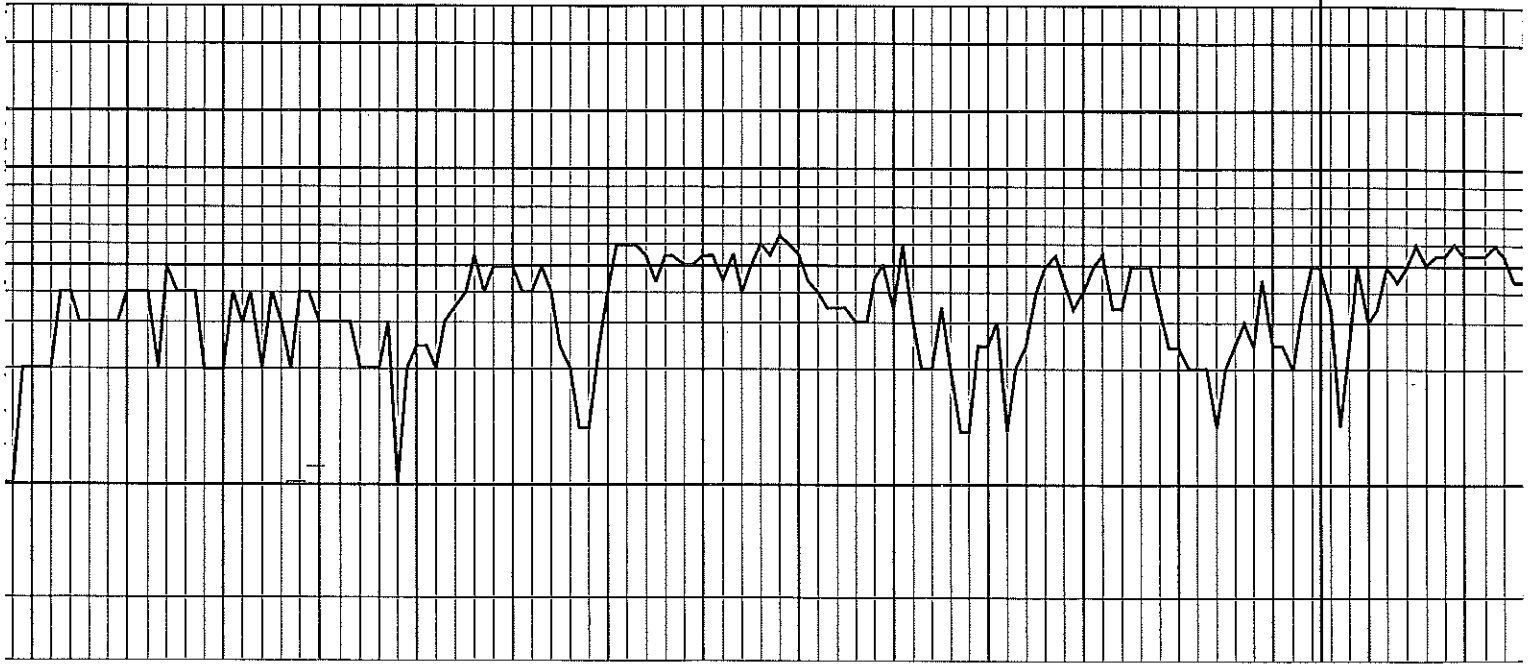
Sh gry

Ls crm-lt gry, fn xtl, fos, p-f int
xtl por, NS

Sh blk, carb

Sh grn-gry, calc

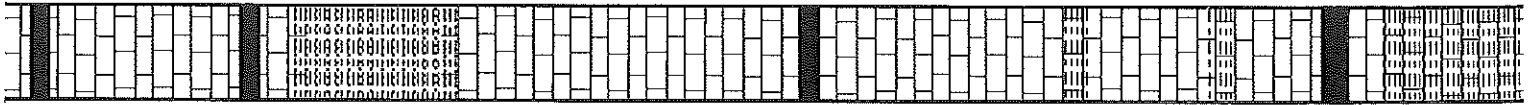
Heebner
3965 (-938)

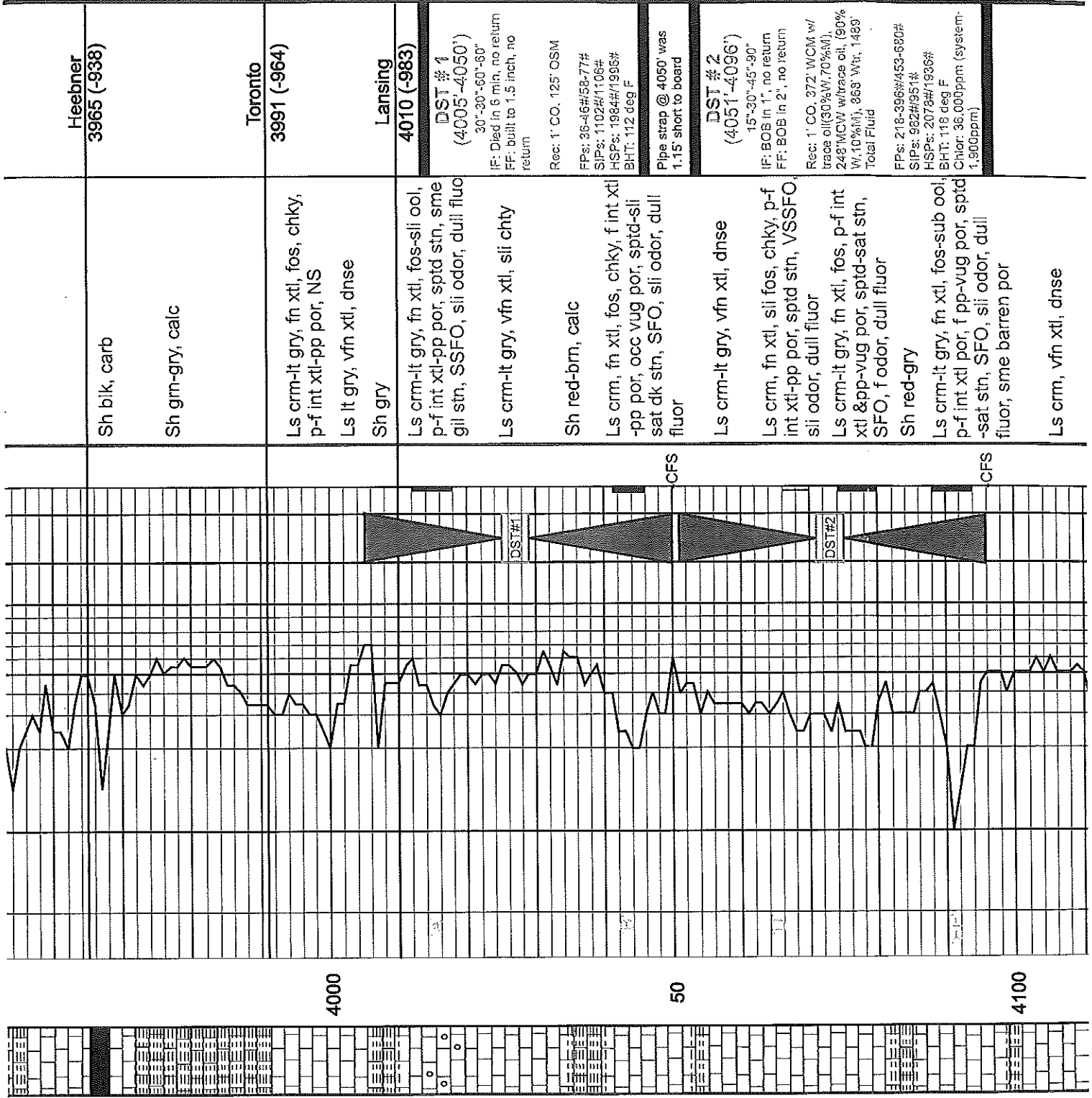


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3900

50





Heebner
3965 (-938)

Toronto
3991 (-964)

Lansing
4010 (-983)

DST #1
(4005'-4050')
30"-30"-60"-60"
IF: Dried in 6 min, no return
FF: built to 1.5 inch, no return

Rec: 1' CO, 125' OSM
FPs: 36-46#58-77#
SIPs: 1102#/1106#
HSPs: 1984#/1996#
BHT: 112 deg F

Pipe strap @ 4050' was
1.15' short to board

DST #2
(4051'-4096')
15"-30"-45"-90"
IF: BOB in 1', no return
FF: BOB in 2', no return

Rec: 1' CO, 372' WCM w/
trace oil(30%W,70%M),
248'ICW w/trace oil, (90%
W,10%M), 368' Wtr, 1489'
Total Fluid

FPs: 218-396W/453-680#
SIPs: 982#/951#
HSPs: 2078#/1936#
BHT: 118 deg F
Chlor: 36.00ppm (system-
1.900ppm)

4000

50

4100

Total Fluid
 FPS: 218-396#/453-680#
 SIPs: 962#/951#
 HSPs: 2072#/1936#
 BHT: 116 deg F
 Chlor: 96.00ppm (system-1.90ppm)

**Muncie Creek
 4160 (-1133)**

DST #3
 (4148'-4184')
 30"-30"-45"-90"
 IF: BOB in 12", no return
 FF: BOB in 8", built to 3inch.

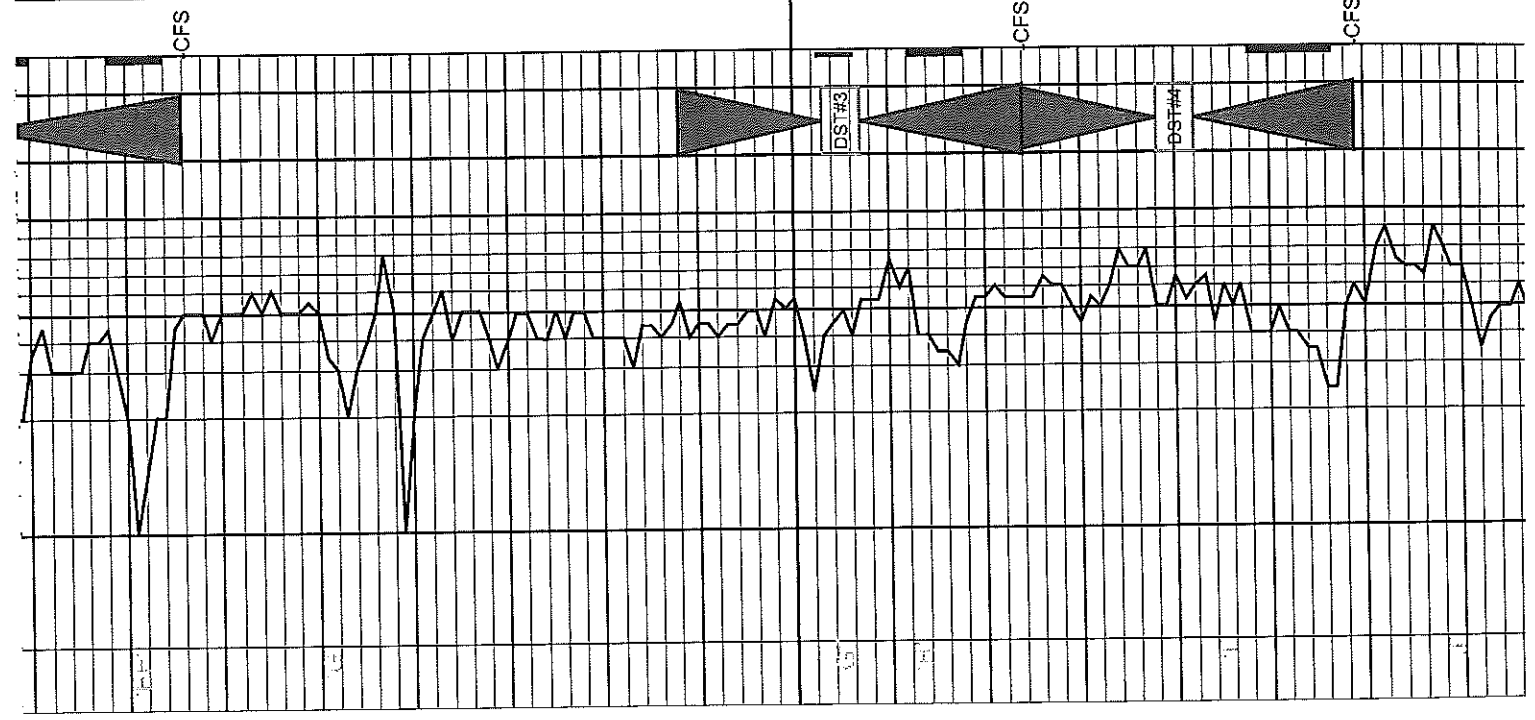
Rec: 62' CO, 248' GCMWO
 (3%G,52%O,15%W,30%M),
 196'GCMWO, (5%G,85%O,
 5%W,5%M), 248'GCMWO
 (5%G,70%O,15%W,5%M),
 724' Total Fluid

FPS: 97-166#/209-289#
 SIPs: 1235#/1246#
 HSPs: 2125#/2001#
 BHT: 120 deg F
 Grav: .36
 Chlor: N/A

DST #4
 (4183'-4219')
 30"-30"-30"-30"
 IF: Surface blow, no return
 FF: No blow, no return

Rec: 10' OSM

FPS: 47-30#/45-92#
 SIPs: 913#/536#
 HSPs: 2091#/2046#
 BHT: 110 deg F



4100

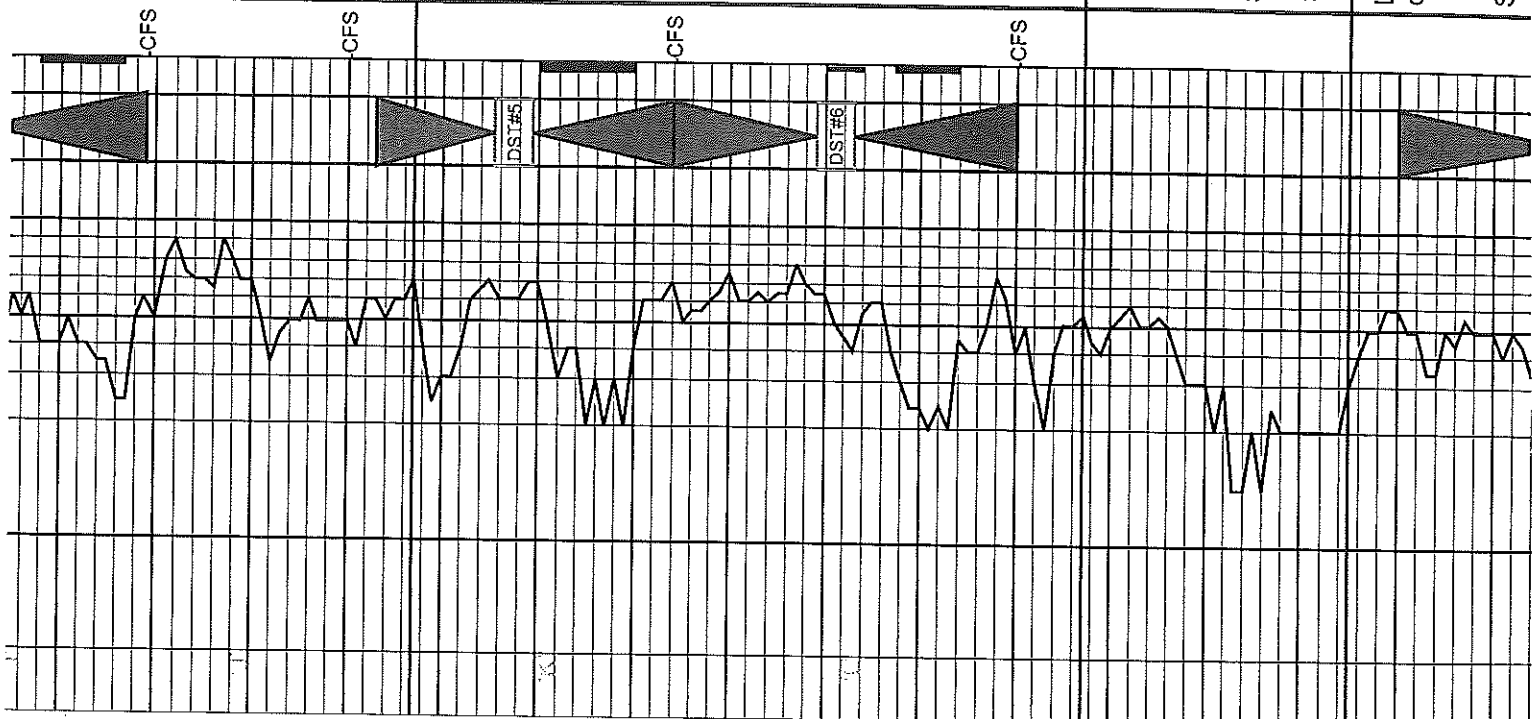
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4200

SFO, f odor, dull fluor
 Sh red-gry
 Ls crm-lt gry, fn xtl, fos-sub ool,
 p-f int xtl por, f pp-vug por, sptd-
 -sat stn, SFO, sli odor, dull
 fluor, sme barren por
 Ls crm, vfn xtl, dnse
 Sh red-grn-gry-blk
 Ls crm-lt gry, fn xtl, fn ool, p-f
 int xtl & int ool por, NS
 Ls crm-lt gry, vfn xtl, sli fos, sli
 chky, dnse
 Ls crm-lt gry, vfn xtl, sli fos, sli
 chky, dnse
 Sh blk
 Ls crm-tan-gry, fn xtl, fos, chky,
 p-f int xtl-pp por, sptd-sat stn,
 SSFO, f odor, bri fluor
 Ls crm-lt gry, fn xtl, fos, f int xtl-
 pp por, few vugs, sptd-sat stn,
 SFO, strong odor, dull fluor
 Ls crm-lt gry, vfn xtl, dnse
 Sh grn-gry-blk
 Ls tan, mic xtl, dnse
 Ls crm-tan, vfn xtl, sli chky
 Ls crm-lt gry, fn xtl, fos-ool, p-f
 int xtl-pp por, f int ool por, sptd-
 sat stn, SFO, f odor, dull fluor
 Sh red-grn-gry, calc
 Ls crm-lt gry, mic xtl, dnse
 Ls crm-tan, fn xtl, fos-sub ool,
 chky. p-f int xtl & int frag por.

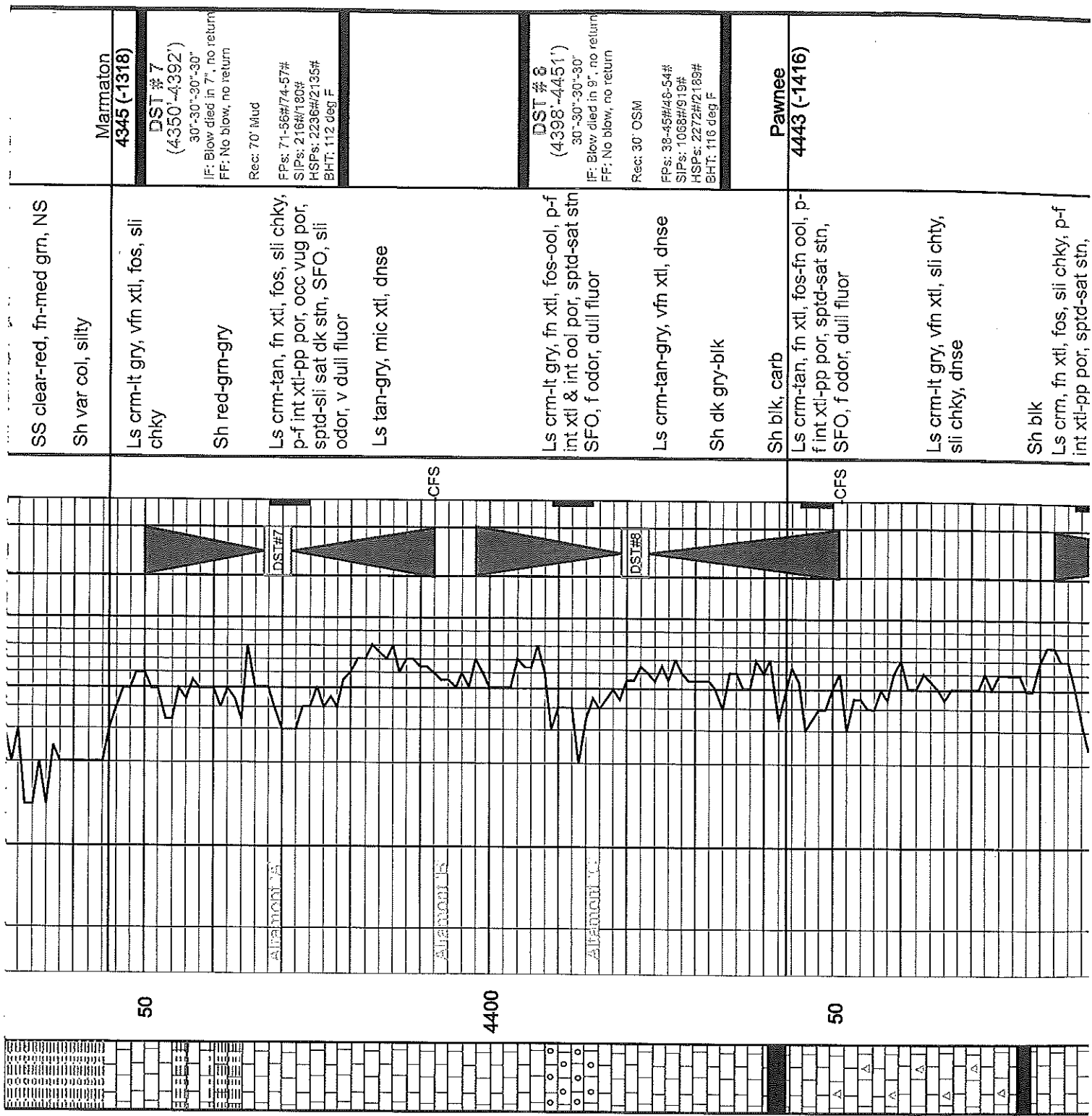
Grav: 36
 Chlor: NA
DST #4
 (4183'-4219')
 30"-30"-30"-30"
 IF: Surface blow, no return
 FF: No blow, no return
 Rec: 10' OSM
 FPS: 47-30#/45-32#
 SIPs: 813#/536#
 HSPs: 2091#/2046#
 BHT: 110 deg F

Ls crm-lt gry, fn xtl, fos-ool, p-f
 int xtl-pp por, f int ool por, sptd-
 sat stn, SFO, f odor, dull fluor
 CFS
 Sh red-grn-gry, calc
 Ls crm-lt gry, mic xtl, dnse
 Ls crm-tan, fn xtl, fos-sub ool,
 chky, p-f int xtl & int frag por,
 NS
 CFS
Stark
4247 (-1220)
DST #5
 (4243'-4274')
 30"-30"-45"-60"
 IF: Built to 1 inch, no return
 FF: Surface blow, no return
 Rec: 124' OSM
 FPS: 46-41#/62-66#
 SIPs: 1178#/1171#
 HSPs: 2145#/1995#
 BHT: 113 deg F



Ls crm-lt gry, fn xtl, fos, p-f int
 xtl-pp por, sptd stn, VSSFO, sil
 odor, bri fluor
 Ls crm-tan, fn xtl, fos-fn ool,
 chky, p-f int xtl-pp por, sptd-sil
 sat stn, SFO, sli odor, dull fluor
 CFS
B/K.C.
4317 (-1290)
DST #6
 (4274'-4310')
 30"-30"-45"-60"
 IF: Built to 1/4 inch, no return
 FF: Built to 1 inch, no return
 Rec: 134' OSM
 FPS: 63-56#/85-83#
 SIPs: 1181#/1127#
 HSPs: 2143#/2122#
 BHT: 114 deg F

Sh grn-gry
 Ls gry, vfn xtl, chty
 Sh var col, silty
 SS clear-red, fn-med grn, NS
 Sh var col, silty
 Ls crm-lt gry, vfn xtl, fos, sli
 chky
Marmaton
4345 (-1318)
DST #7
 (4350'-4392')
 30"-30"-30"-30"
 IF: Blow died in 7", no return
 FF: No blow, no return



Marmaton
4345 (-1318)

DST #7
(4350'-4392')
30"-30"-30"-30"
IF: Blow died in 7", no return
FF: No blow, no return
Rec: 70' Mud

FPs: 71-56#/74-57#
SIPs: 216#/180#
HSPs: 2236#/2135#
BHT: 112 deg F

DST #8
(4398'-4451')
30"-30"-30"-30"
IF: Blow died in 9", no return
FF: No blow, no return
Rec: 30' OSM

FPs: 38-45#/48-54#
SIPs: 1068#/919#
HSPs: 2272#/2189#
BHT: 116 deg F

Pawnee
4443 (-1416)

SS clear-red, fn-med grn, NS
Sh var col, silty

Ls crm-lt gry, vfn xtl, fos, sli chky

Sh red-grn-gry

Ls crm-tan, fn xtl, fos, sli chky, p-f int xtl-pp por, occ vug por, spid-sli sat dk stn, SFO, sli odor, v dull fluor

Ls tan-gry, mic xtl, dnse

Ls crm-lt gry, fn xtl, fos-ool, p-f int xtl & int ool por, sptd-sat stn SFO, f odor, dull fluor

Ls crm-tan-gry, vfn xtl, dnse

Sh dk gry-blk

Sh blk, carb

Ls crm-tan, fn xtl, fos-fn ool, p-f int xtl-pp por, sptd-sat stn, SFO, f odor, dull fluor

Ls crm-lt gry, vfn xtl, sli chty, sli chky, dnse

Sh blk

Ls crm, fn xtl, fos, sli chky, p-f int xtl-pp por, sptd-sat stn,

50

4400

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CFS

CFS

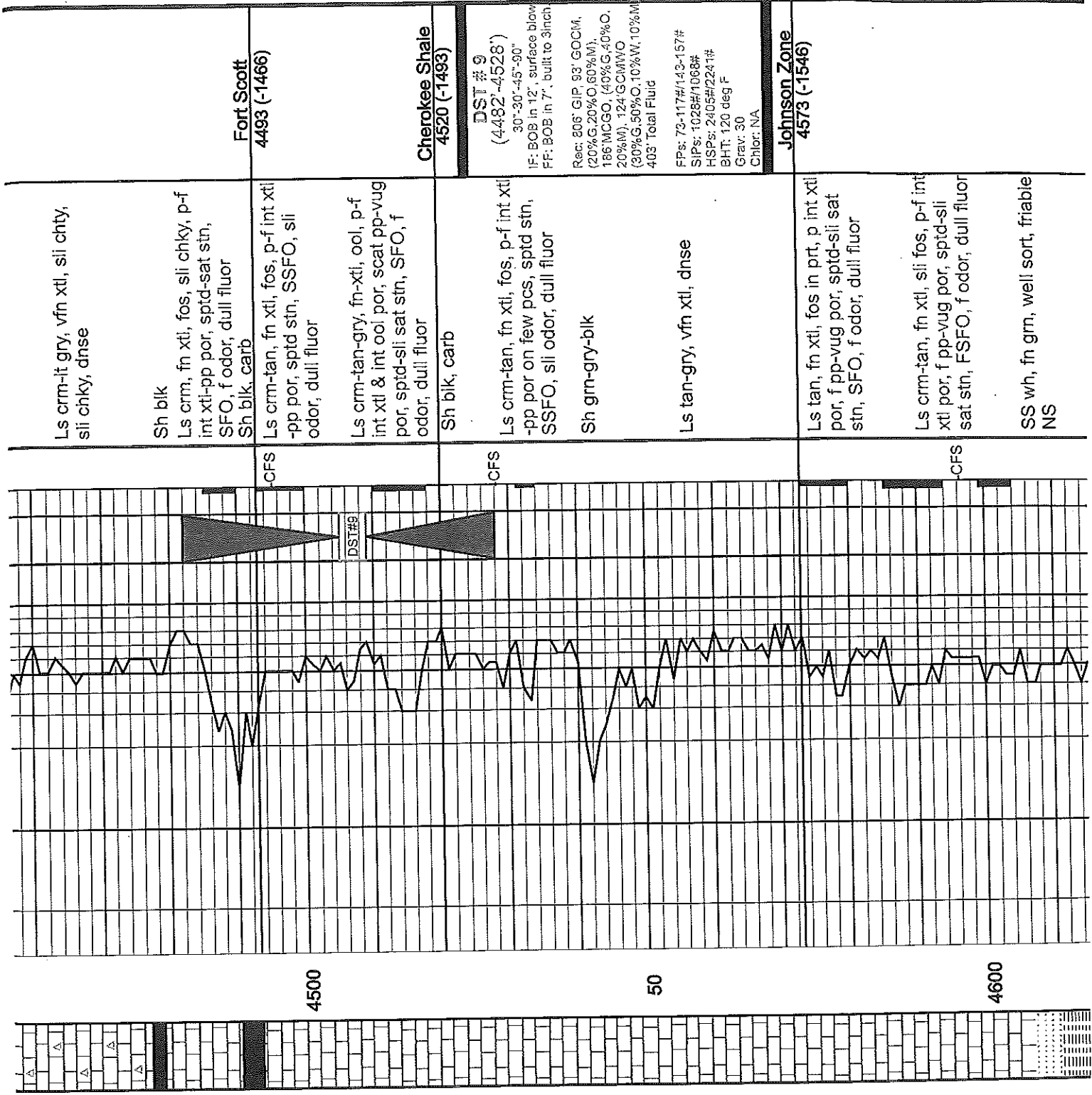
ALFANORITE

ALFANORITE

ALFANORITE

DST#7

DST#8



Fort Scott
4493 (-1466)

Cherokee Shale
4520 (-1493)

Johnson Zone
4573 (-1546)

DST #9
(4482'-4528')
30'-30"-45"-90"
IF: BOB in 12", surface blow
FF: BOB in 7", built to 3inch

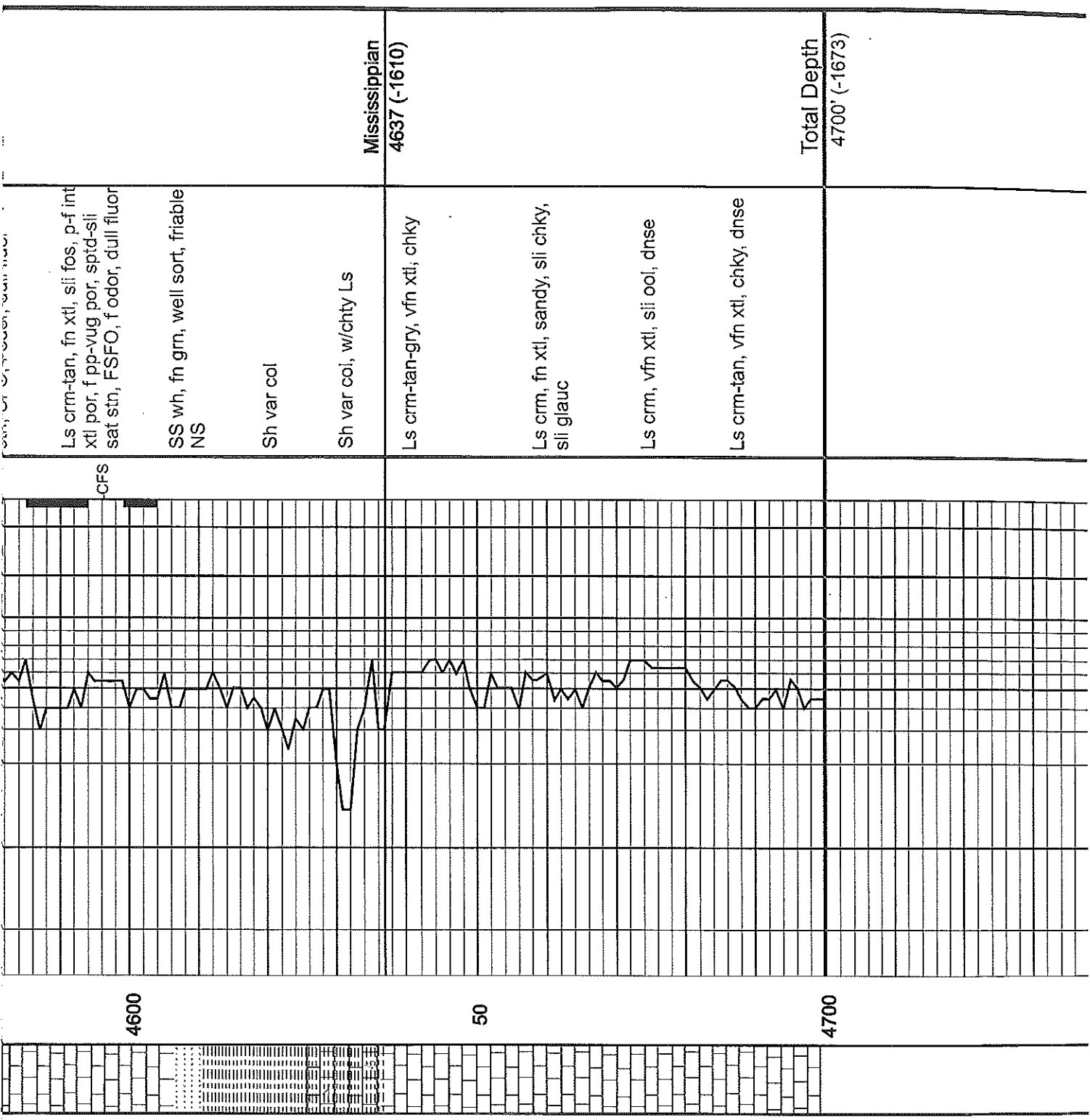
Rec: 806' GIP, 93' GOCM,
(20%G, 20%O, 60%M),
186' MCGO, (40%G, 40%O,
20%M), 124' GCMWO
(30%G, 50%O, 10%W, 10%M)
403' Total Fluid

FPs: 73-117#/143-157#
SIPs: 1028#/1068#
HSPs: 2405#/2241#
BHT: 120 deg F
Grav: 30
Chlor: NA

4500

50

4600



Ls crm-tan, fn xtl, sli fos, p-f int
xtl por, f pp-vug por, sptd-sli
sat stn, FSFO, f odor, dull fluor

SS wh, fn grm, well sort, friable
NS

Sh var col

Sh var col, w/chty Ls

Ls crm-tan-gry, vfn xtl, chky

Ls crm, fn xtl, sandy, sli chky,
sli glauc

Ls crm, vfn xtl, sli ool, dnse

Ls crm-tan, vfn xtl, chky, dnse

Mississippian
4637 (-1610)

Total Depth
4700' (-1673)

4600

50

4700

CFS