

TIM PRIEST
Petroleum Geologist
(316)-213-6115

GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

COMPANY SHAKESPEARE OIL CO.
LEASE JANZEN 2-26
FIELD Wildcat
LOCATION 2305' FSL, 1900' FWL
SEC 26 TWSP 16S RGE 34W
COUNTY Scott STATE Kansas

ELEVATIONS

KB 3125'
DF _____
GL 3115'

Measurements Are All
From KB

CONTRACTOR HD Rig #2
SPUD 2-27-13 COMP 3-14-13
RTD 4897' LTD 4896'
MUD UP 3600' TYPE MUD Chemical

CASING

CONDUCTOR N/A
SURFACE 8-5/8" @ 252'
PRODUCTION 5 1/2" @ 4897'

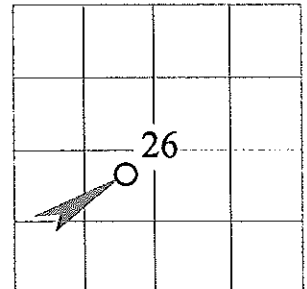
SAMPLES SAVED FROM 3800' to RTD
DRILLING TIME KEPT FROM 3800' to RTD
SAMPLES EXAMINED FROM 3800' to RTD
GEOLOGICAL SUPERVISION FROM 3900' to RTD
GEOLOGIST ON WELL Tim Priest

**ELECTRICAL
SURVEYS**

CND;D/SP;P.E.

Micro
By: Weatherford

FORMATION TOPS	ELECTRIC LOG	SAMPLE
Anhydrite	2446 (+679)	2447 (+678)
Heebner Shale	3991 (-866)	3991 (-866)
Lansing	4030 (-905)	4031 (-906)
Stark	4317 (-1192)	4318 (-1193)
BKC	4413 (-1288)	4409 (-1284)
Fort Scott	4593 (-1468)	4593 (-1468)
Cherokee Shale	4620 (-1495)	4620 (-1495)
	4822 (-1697)	4819 (-1694)



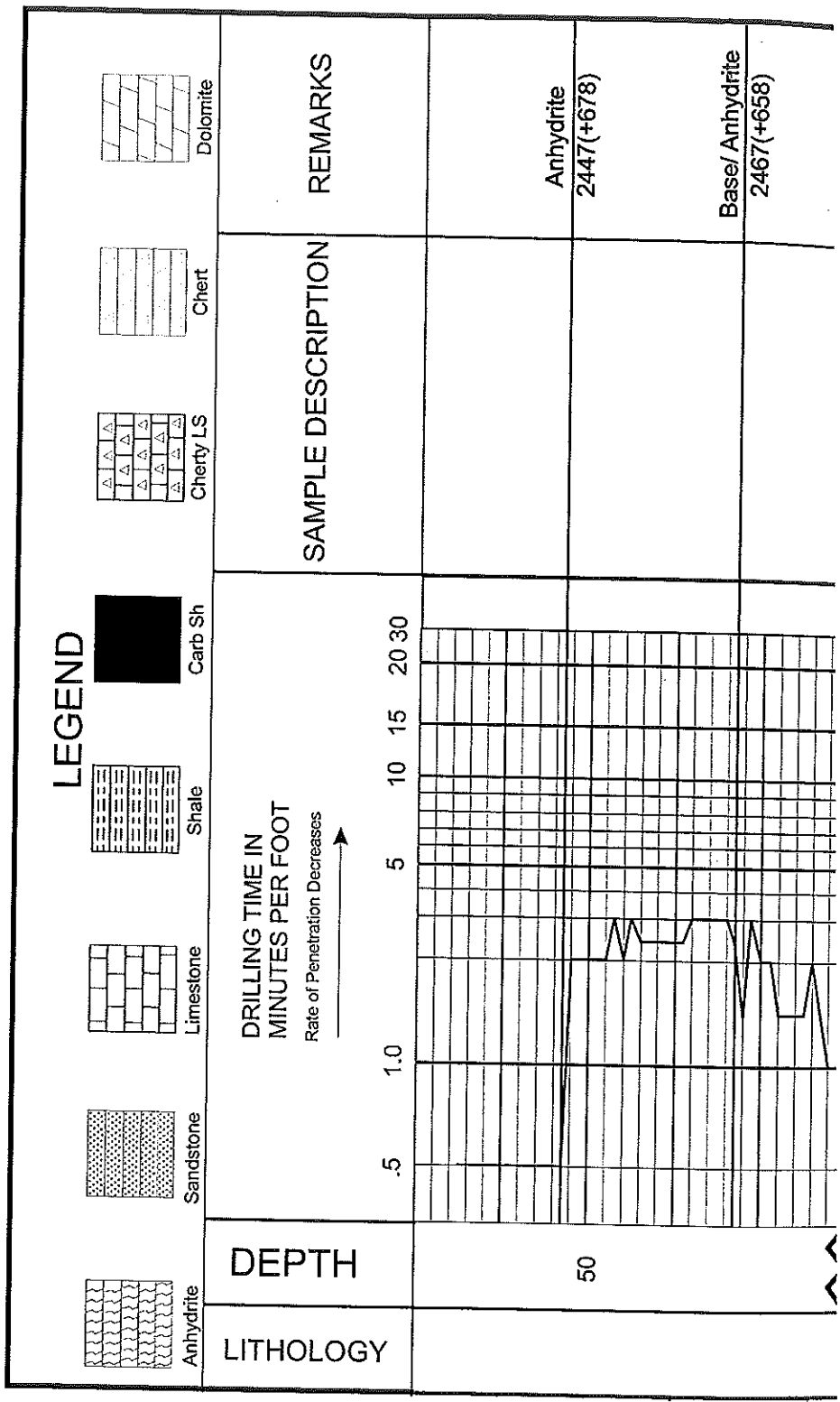
REMARKS Due to the results of DSTs, it was decided to set production casing to further test the well.

Respectfully Submitted,

Tim Priest

Petroleum Geologist

API #15-171-20929-00-00



Base/ Anhydrite
2467(+658)

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

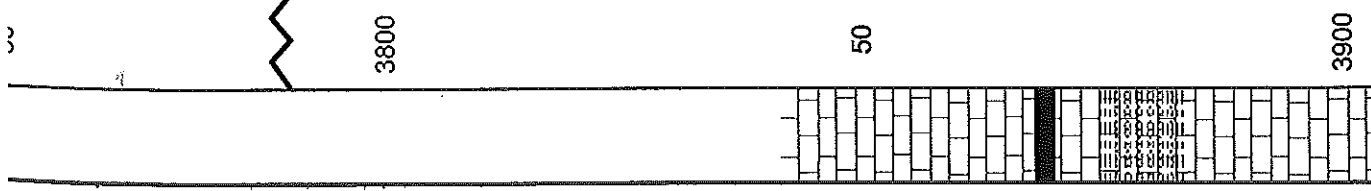
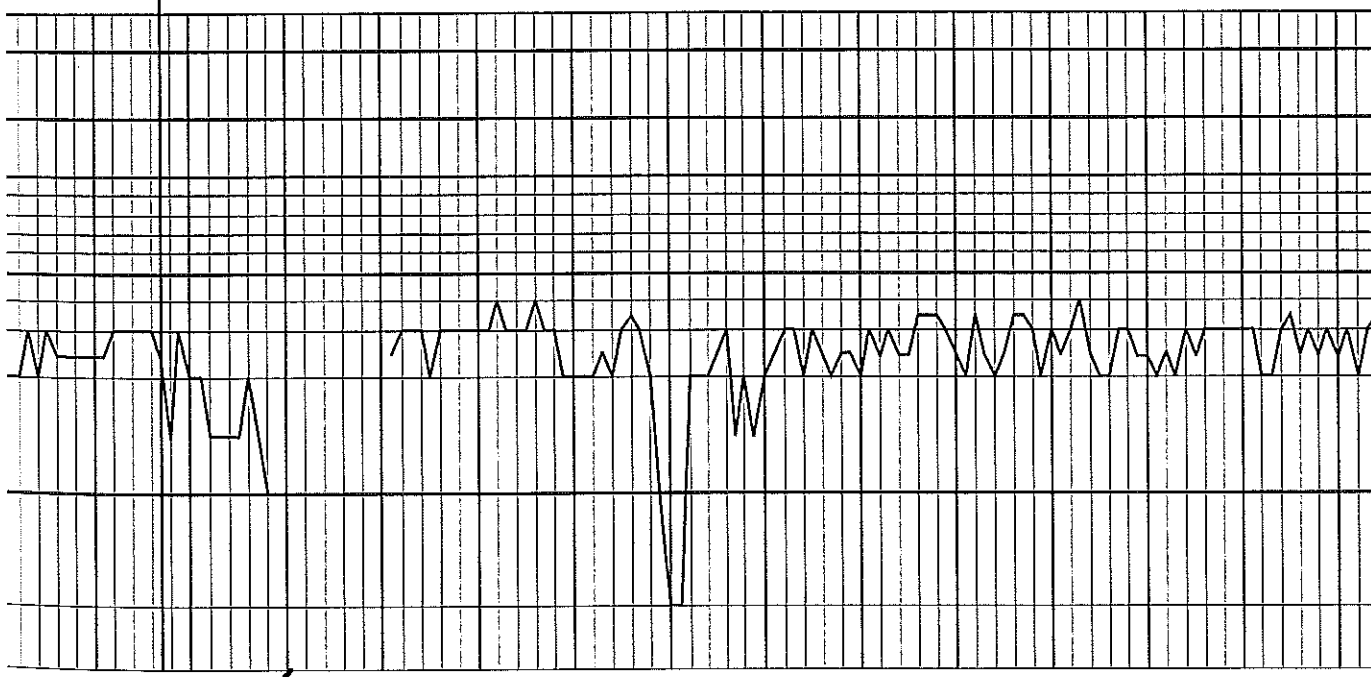
Sh gry-blk

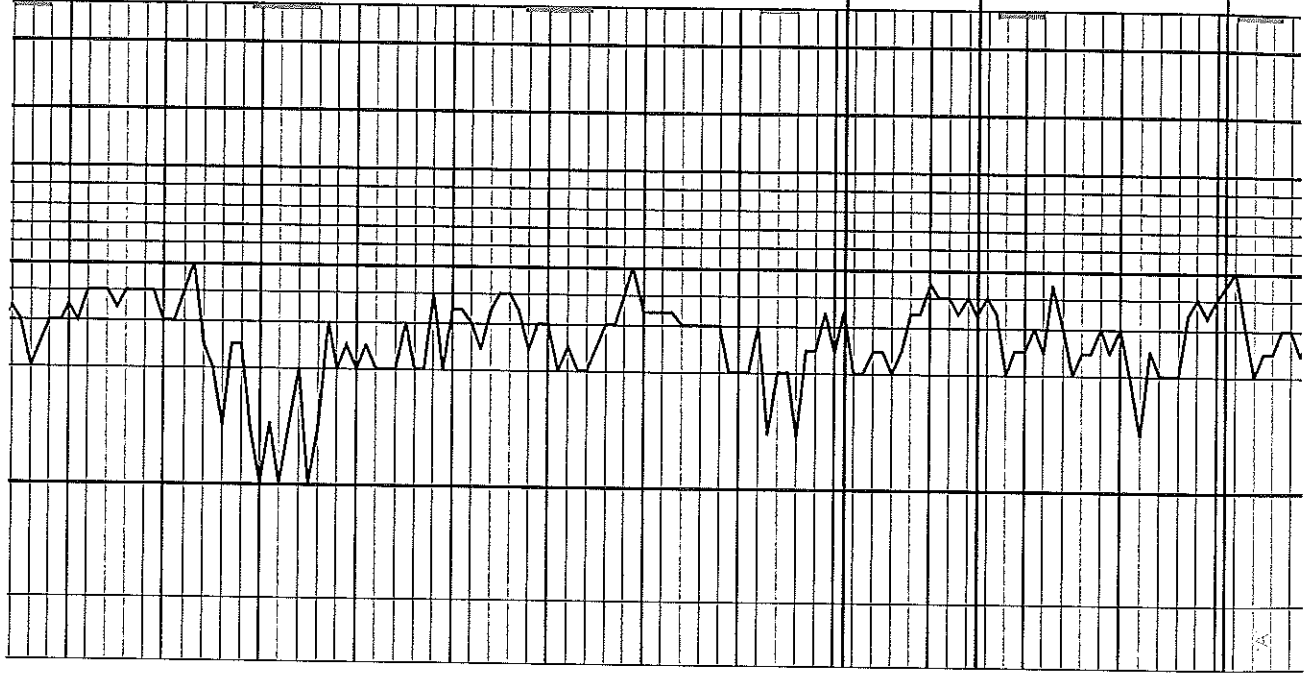
Sh gry, silty, calc in prt

Ls gry, vfn xtl, dnse

Sh gry-dk gry

Ls. very fine-grained, calc in prt

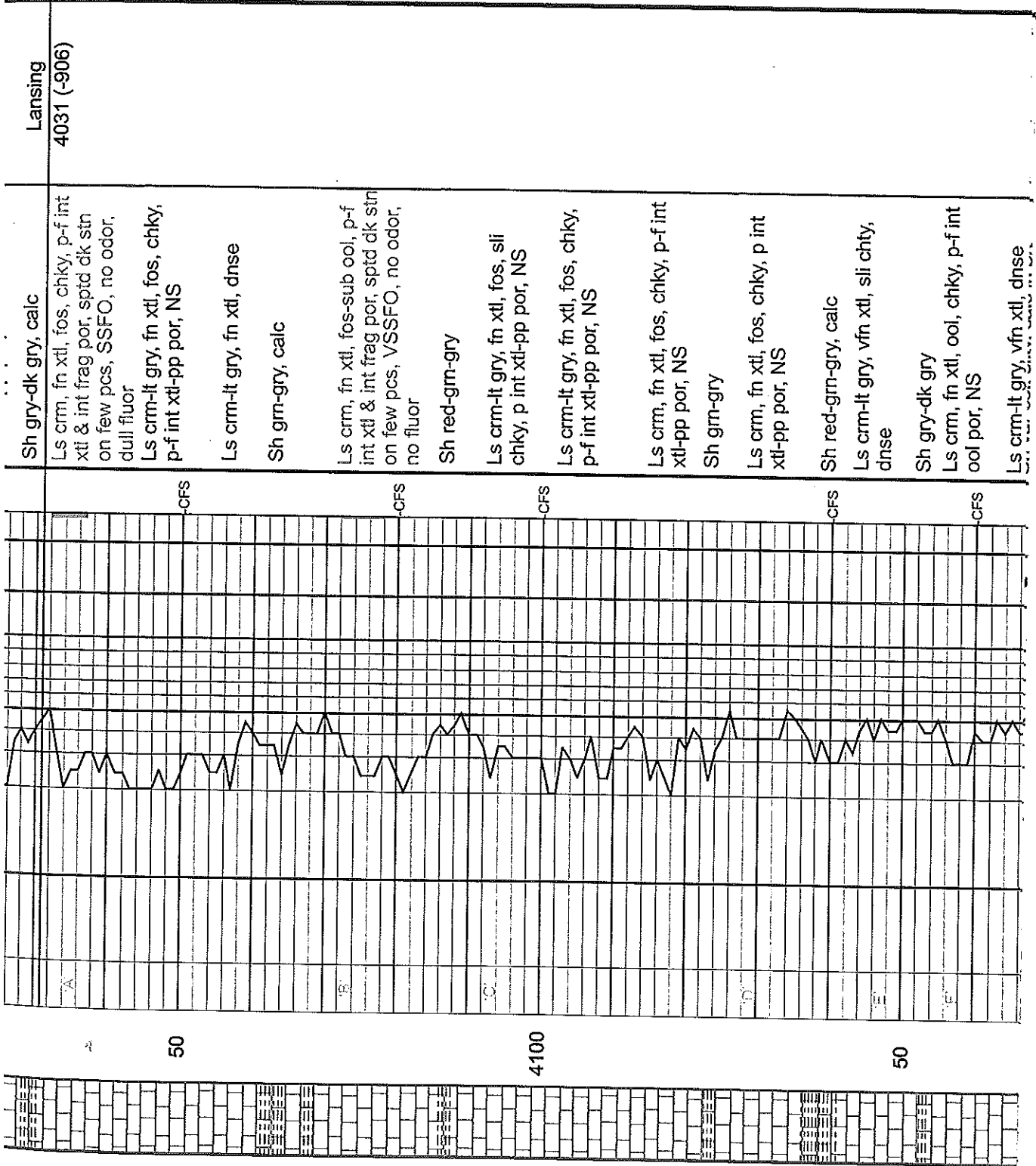




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4000

<p>Ls crm, fn xtl, vss-ool, sptd blk stn, p-f int frag por, sptd blk stn, SSFO, no odor, dull fluor</p>	<p>Sh blk Ls crm, fn xtl, fos-ool, v chky, p-f int frag por, sptd blk stn, SSFO, no odor, dull fluor</p> <p>Sh gry-bik</p>	<p>Ls crm, fn xtl, fos-sub ool, v chky, p-f int frag por, sptd blk stn, SSFO, no odor, dull fluor</p> <p>Ls crm-tan, vfn xtl, dnse</p> <p>Ls crm, fn xtl, fos-sub ool, v chky, p-f int frag por, sptd blk stn, VSSFO, no odor, dull fluor</p>	<p>Heebner 3991 (-866)</p>
<p>Ls crm, fn xtl, fos, chky, p-f int xtl & int frag por, sptd dk stn on few pcs, SSFO, no odor, dull fluor</p> <p>Ls crm-lt gry, fn xtl, fos, chky, f int xtl-pp por, NS</p> <p>Sh gry-dk gry, calc</p>	<p>Ls crm, fn xtl, fos, chky, p-f int xtl & int frag por, sptd dk stn</p>	<p>Toronto 4005 (-880)</p>	<p>Lansing 4031 (-906)</p>



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4100

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Lansing
4031 (-906)

Sh gry-dk gry, calc
Ls crm, fn xtl, fos, chky, p-f int
xtl & int frag por, sptd dk stn
on few pcs, SSFO, no odor,
dull fluor

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

Ls crm-lt gry, fn xtl, dnse

Sh gm-gry, calc

Ls crm, fn xtl, fos-sub ool, p-f
int xtl & int frag por, sptd dk stn
on few pcs, VSSFO, no odor,
no fluor

Sh red-gm-gry

Ls crm-lt gry, fn xtl, fos, sli
chky, p int xtl-pp por, NS

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

Ls crm, fn xtl, fos, chky, p-f int
xtl-pp por, NS

Sh gm-gry

Ls crm, fn xtl, fos, chky, p int
xtl-pp por, NS

Sh red-gm-gry, calc

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

Sh gry-dk gry

Ls crm, fn xtl, ool, chky, p-f int
ool por, NS

Ls crm-lt gry, vfn xtl, dnse

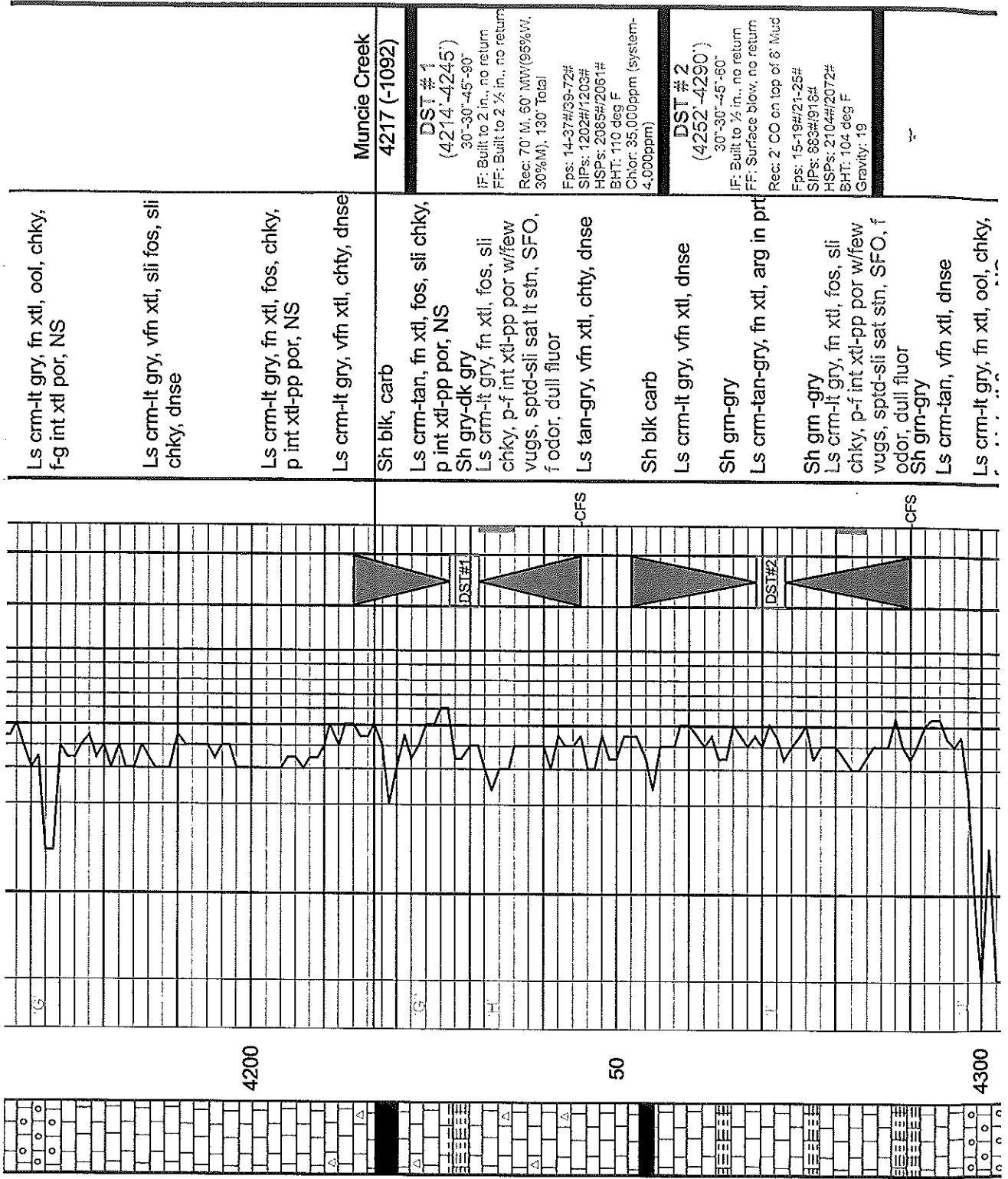
CFS

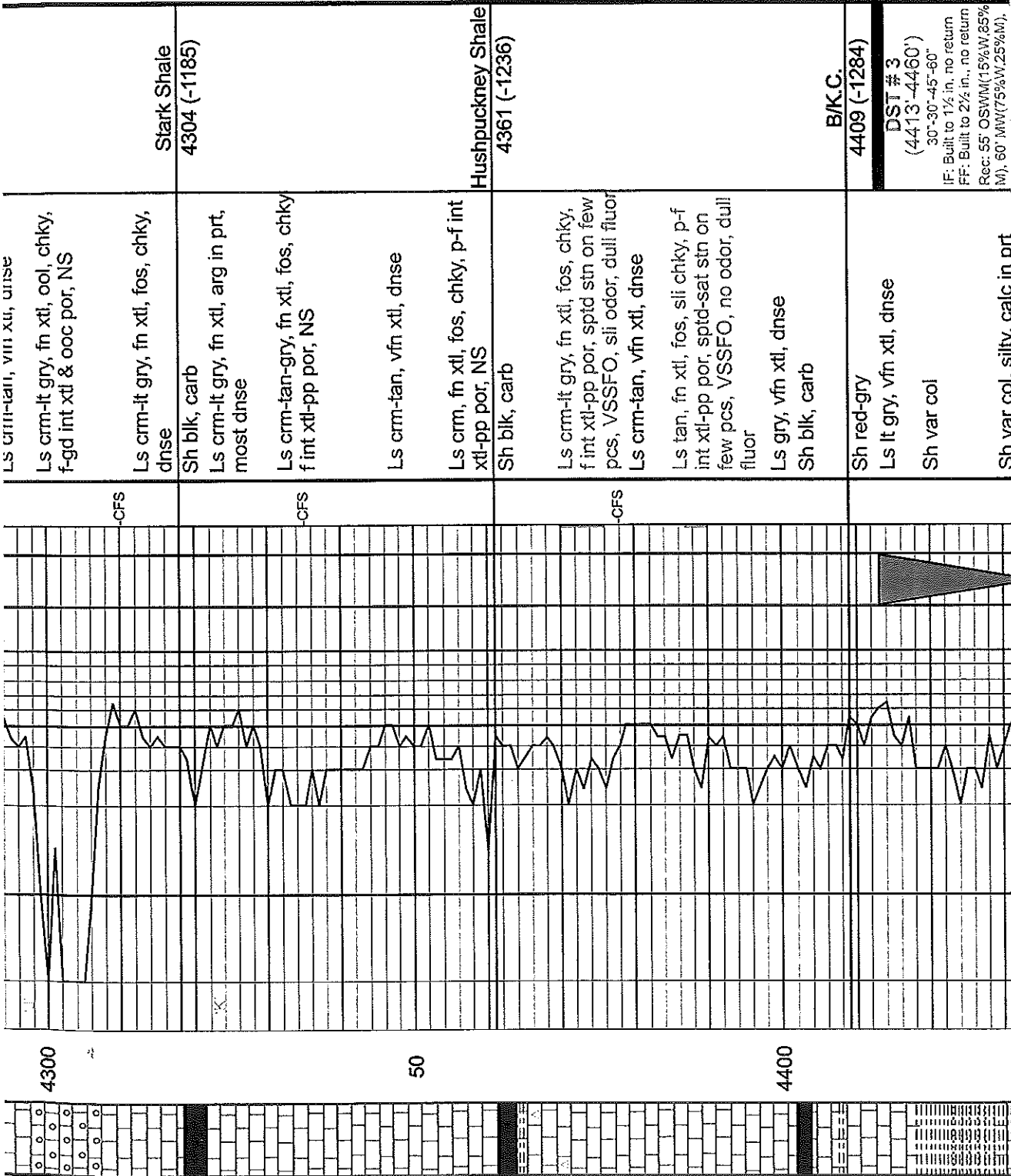
CFS

CFS

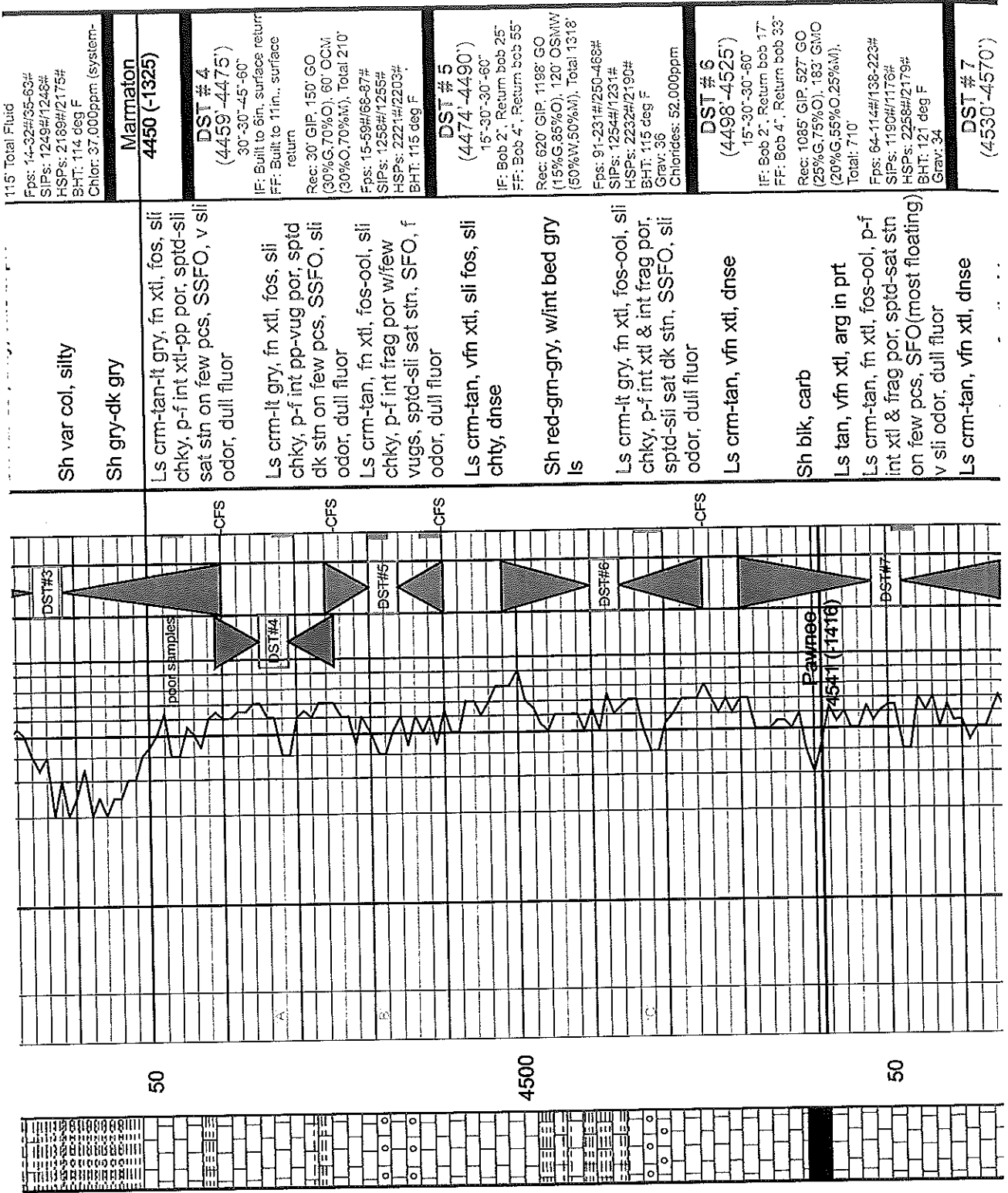
CFS

CFS





DSI #3
 (4413'-4460')
 30°-30'-45°-60"
 IF: Built to 1 1/2 in., no return
 FF: Built to 2 1/2 in., no return
 Rec: 55' OSWM(15%W, 85% W), 60' MWV(75%W, 25%W).



115' Total Fluid
 Fps: 14-32#/35-63#
 SIPS: 1249#/1248#
 HSPs: 2189#/2175#
 BHT: 114 deg F
 Chlor: 37,000ppm (system-)

Marmaton
4450 (-1325)

DST # 4
(4459'-4475')
 30'-30"-45'-60'
 IF: Built to 6in. surface return
 FF: Built to 11in., surface return
 Rec: 30' GIP, 150' GO
 (30%G,70%O), 60' OCM
 (30%O,70%M), Total 210'
 Fps: 15-59#/68-87#
 SIPS: 1258#/1255#
 HSPs: 2221#/2203#
 BHT: 115 deg F

DST # 5
(4474'-4490')
 15'-30"-30'-60'
 IF: Bob 2', Return bob 25'
 FF: Bob 4', Return bob 55'
 Rec: 620' GIP, 1198' GO
 (15%G,85%O), 120' OSNW
 (50%W,50%M), Total 1318'
 Fps: 91-231#/250-468#
 SIPS: 1254#/1231#
 HSPs: 2232#/2190#
 BHT: 115 deg F
 Grav: 36
 Chlorides: 52,000ppm

DST # 6
(4498'-4525')
 15'-30"-30'-60'
 IF: Bob 2', Return bob 17'
 FF: Bob 4', Return bob 33'
 Rec: 1085' GIP, 527' GO
 (25%G,75%O), 183' GMO
 (20%G,55%O,25%M),
 Total: 710'
 Fps: 64-114#/138-223#
 SIPS: 1190#/1178#
 HSPs: 2258#/2179#
 BHT: 121 deg F
 Grav: 34

Sh var col, silty
 Sh gry-dk gry

Ls crm-tan-lt gry, fn xtl, fos, sli
 chky, p-f int xtl-pp por, sptd-sli
 sat stn on few pcs, SSFO, v sli
 odor, dull fluor

Ls crm-lt gry, fn xtl, fos, sli
 chky, p-f int pp-vug por, sptd
 dk stn on few pcs, SSFO, sli
 odor, dull fluor
 Ls crm-tan, fn xtl, fos-ool, sli
 chky, p-f int frag por w/few
 vugs, sptd-sli sat stn, SFO, f
 odor, dull fluor

Ls crm-tan, vfn xtl, sli fos, sli
 chty, dnse
 Sh red-gm-gry, w/int bed gry
 Is
 Ls crm-lt gry, fn xtl, fos-ool, sli
 chky, p-f int xtl & int frag por,
 sptd-sli sat dk stn, SSFO, sli
 odor, dull fluor

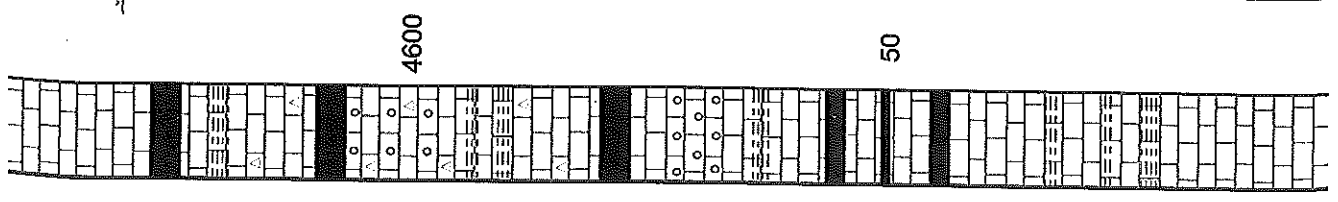
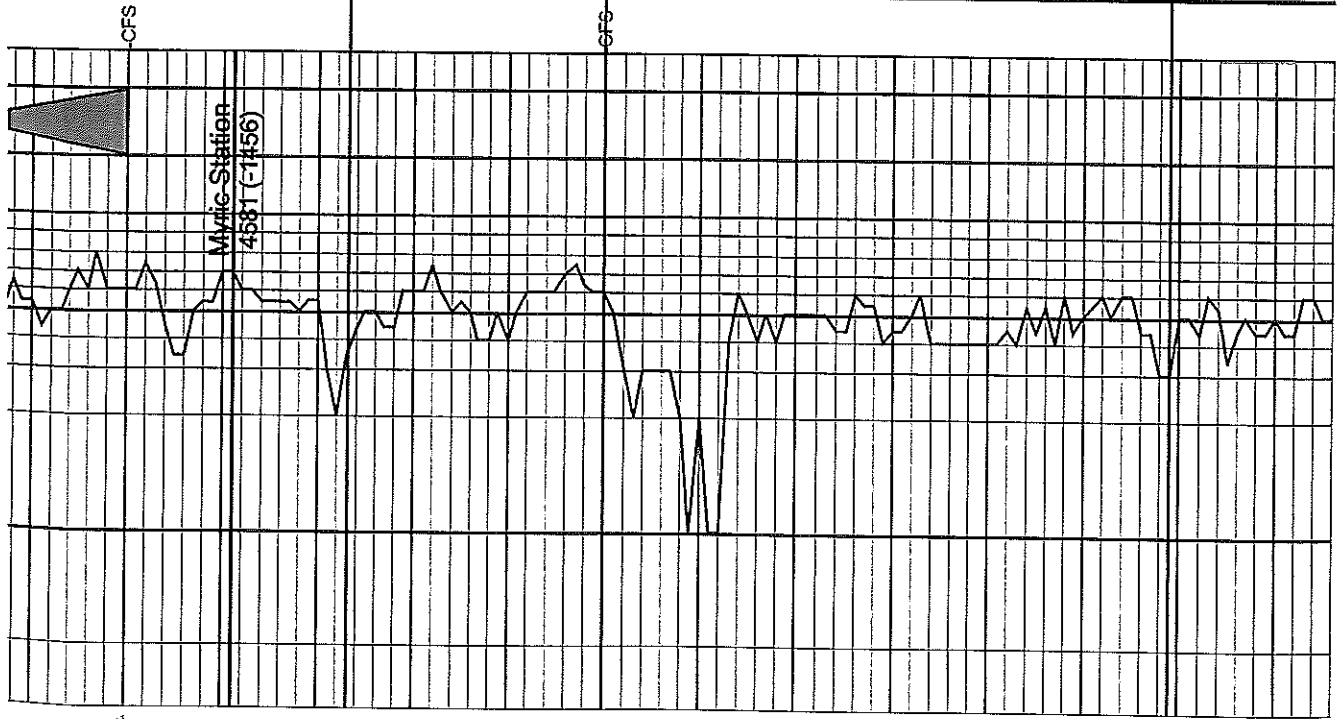
Ls crm-tan, vfn xtl, dnse
 Sh blk, carb
 Ls tan, vfn xtl, arg in prt
 Ls crm-tan, fn xtl, fos-ool, p-f
 int xtl & frag por, sptd-sat stn
 on few pcs, SFO(most floating)
 v sli odor, dull fluor
 Ls crm-tan, vfn xtl, dnse

DST # 7
(4530-4570')
 30'-30"-30'-30"
 IF: Built to 1/4 in., no return
 FF: No blow, no return
 Rec: 1' OSM
 Fps: 16-17#/16-20#
 SPS: 21#/20#
 HSPs: 2236#/2199#
 BHT: 105 deg F

Fort Scott
4593 (-1468)

Cherokee Shale
4620 (-1495)

Johnson Zone
4679 (-1554)



4600

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V Sh odor, dull fluor

Ls crm-tan, vfn xtl, dnse

Ls crm-lt gry, vfn xtl, chty

Sh blk, carb

Sh grn-gry

Ls crm-tan-gry, vfn xtl, sli fos,

sli chky, chty, dnse

Sh blk, carb

Ls crm-tan-gry motld, vfn xtl,

sli ool, sli chky, chty, dnse

Sh grn-gry, calc

Ls crm-gry, vfn xtl, chty, dnse

Sh blk, carb

Ls crm-tan-gry motld, fn xtl,

ool, chky, f int ool por, NS

Sh grn-gry

Ls crm-lt gry, vfn xtl, dnse

Sh blk

Ls tan-gry, w/int bed blk Sh

Sh blk, w/int bed gry Ls

Ls crm-lt gry, vfn xtl, dnse

Sh gry-dk gry

Ls crm-lt gry, vfn xtl, dnse

Sh gry-dk gry

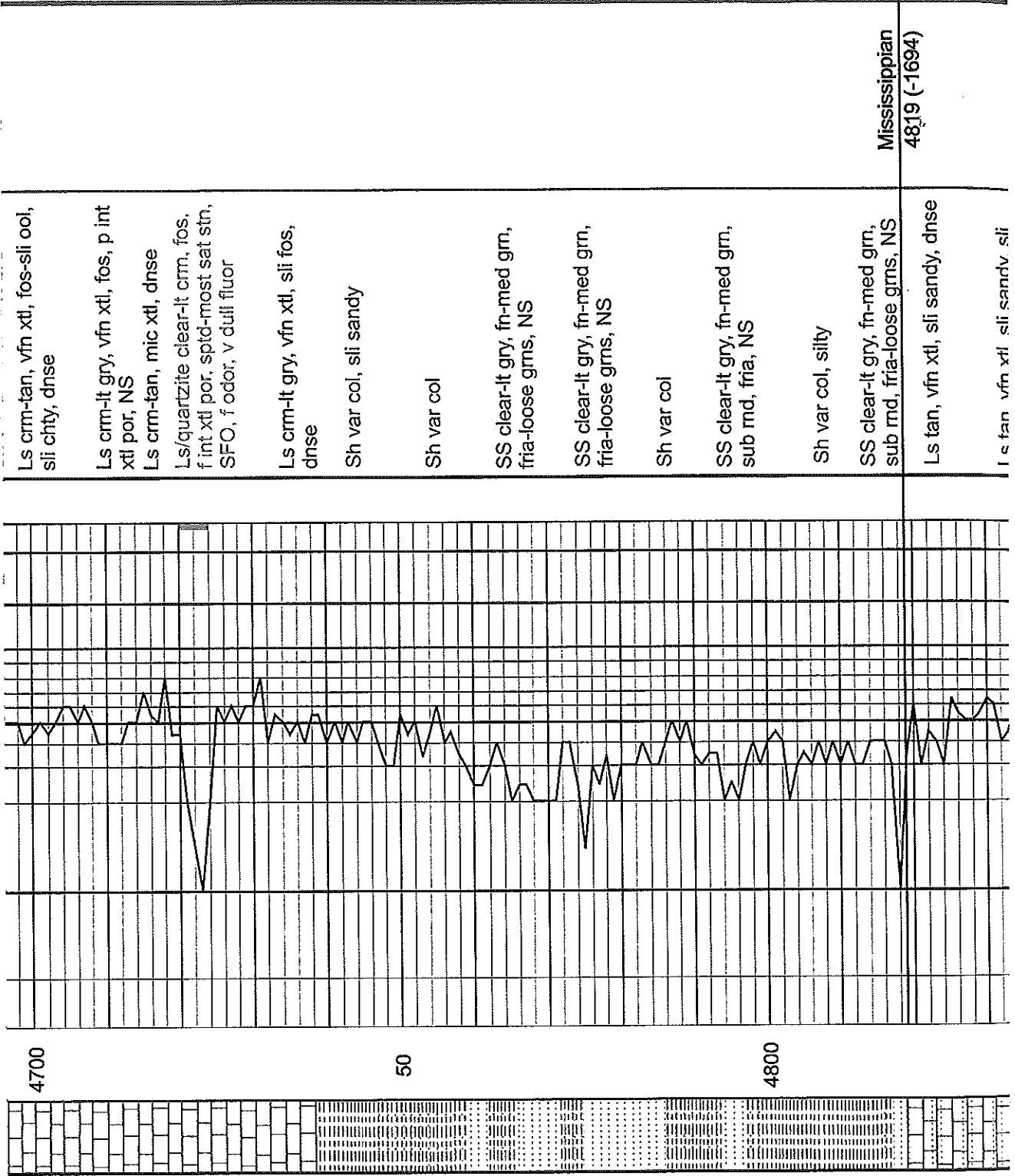
Ls crm-lt gry, vfn xtl, sli fos, sli

chky, p int xtl-pp por, sptd &

edge str, VSSFO, no odor, sli

dull fluor

Ls crm-lt gry, vfn xtl, fos, dnse



Ls crm-tan, vfn xtl, fos-sli ool, sli chty, dnse

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

Ls crm-tan, mic xtl, dnse

Ls/quartzite clear-lt crm, fos, f int xtl por, spid-most sat stn, SFO, f odor, v dull fluor

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

Sh var col, sli sandy

Sh var col

SS clear-lt gry, fn-med gm, fria-loose grms, NS

SS clear-lt gry, fn-med gm, fria-loose grms, NS

Sh var col

SS clear-lt gry, fn-med gm, sub rnd, fria, NS

Sh var col, silty

SS clear-lt gry, fn-med gm, sub rnd, fria-loose grms, NS

Ls tan, vfn xtl, sli sandy, dnse

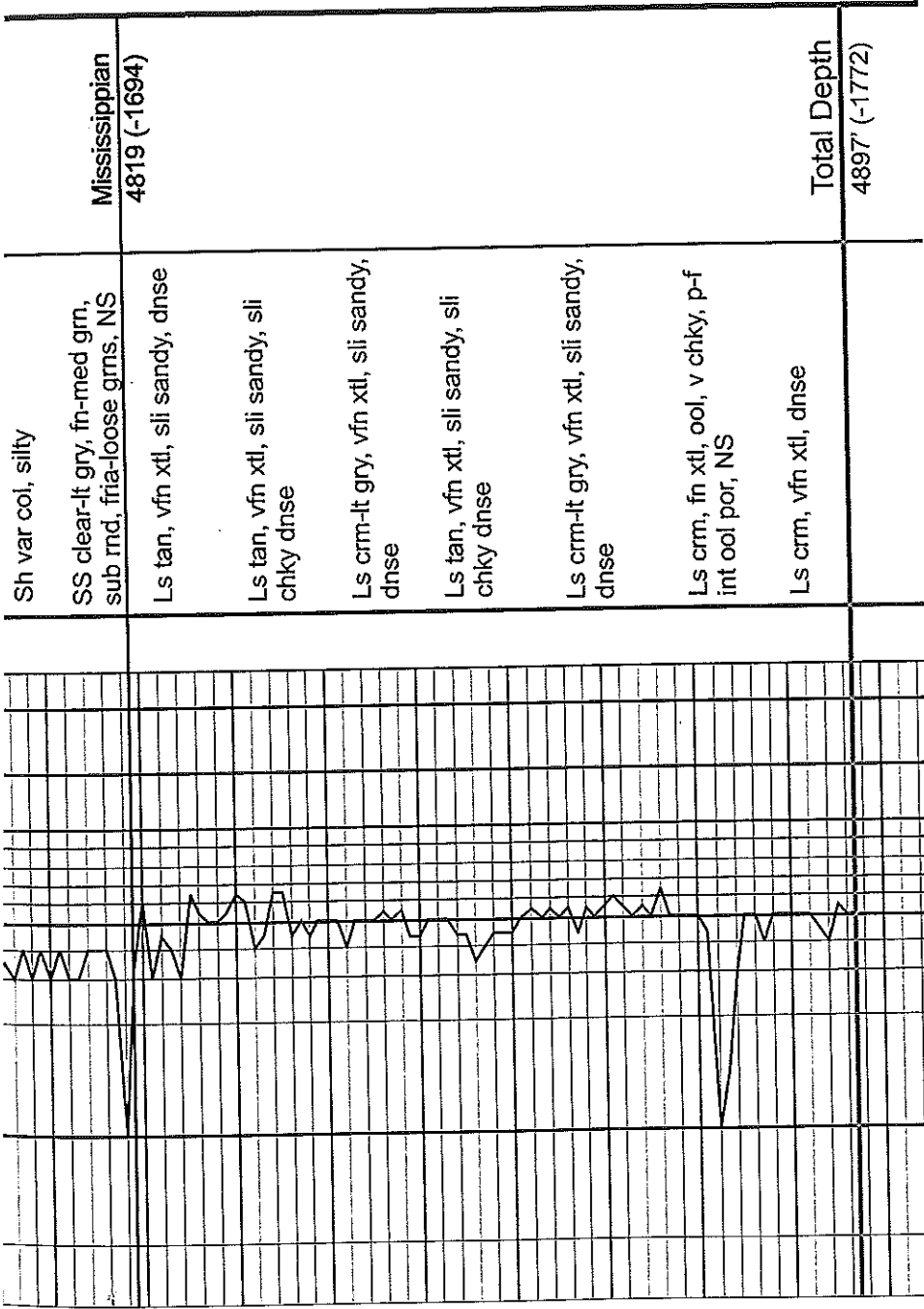
L s tan vfn xtl sli sandy sli

Mississippian
48,19 (-1694)

4700

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4800



Mississippian
4819 (-1694)

Sh var col, silty

SS clear-lt gry, fn-med gm,
sub rnd, fria-loose gms, NS

Ls tan, vfn xtl, sli sandy, dnse

Ls tan, vfn xtl, sli sandy, sli
chky dnse

Ls crm-lt gry, vfn xtl, sli sandy,
dnse

Ls tan, vfn xtl, sli sandy, sli
chky dnse

Ls crm-lt gry, vfn xtl, sli sandy,
dnse

Ls crm, fn xtl, ool, v chky, p-f
int ool por, NS

Ls crm, vfn xtl, dnse

Total Depth
4897 (-1772)