

TIM PRIEST
Petroleum Geologist
(316)-213-6115

GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

COMPANY SHAKESPEARE OIL CO.
LEASE PAHLS 1-28
FIELD Wildcat
LOCATION 360' FNL, 1250' FEL
SEC 28 TWSP 13S RGE 34W
COUNTY Logan STATE Kansas

ELEVATIONS

KB 2911'

DF _____

GL 2901'

Measurements Are All
From KB

CONTRACTOR HD DrillingRig #2
SPUD 4-20-13 COMP 5-2-13
RTD 44580' LTD 4580'
MUD UP 3500' TYPE MUD Chemical

CASING

CONDUCTOR N/A

SURFACE 8-5/8" @ 222'

PRODUCTION _____

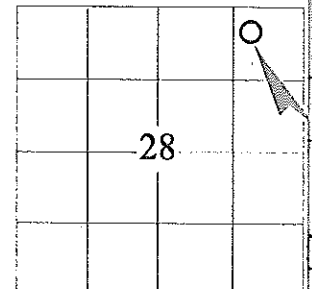
SAMPLES SAVED FROM 3600' to RTD
DRILLING TIME KEPT FROM 3600' to RTD
SAMPLES EXAMINED FROM 3600' to RTD
GEOLOGICAL SUPERVISION FROM 3600' to RTD
GEOLOGIST ON WELL Tim Priest

**ELECTRICAL
SURVEYS**
CND;D/SP;P.E.

Micro

By: Weatherford

FORMATION TOPS	ELECTRIC LOG	SAMPLE
Anhydrite	2311 (+600)	2311 (+600)
Heebner Shale	3745 (-834)	3747 (-836)
Lansing	3788 (-877)	3792 (-881)
Stark	4041 (-1130)	4042 (-1131)
BKC	4114 (-1203)	4115 (-1204)
Fort Scott	4312 (-1401)	4310 (-1399)
Cherokee Shale	4340 (-1429)	4340 (-1429)
Mississippian	4497 (-1586)	4497 (-1586)



REMARKS Due to the negative Drill Stem Tests, it was decided to plug and abandon the well.

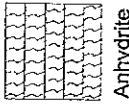
Respectfully Submitted,

Tim Priest

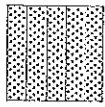
Petroleum Geologist

API #15-109-21170-00-00

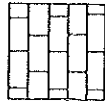
LEGEND



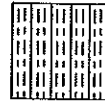
Anhydrite



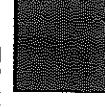
Sandstone



Limestone



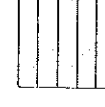
Shale



Carb Sh



Cherty LS



Chert



Dolomite

DEPTH

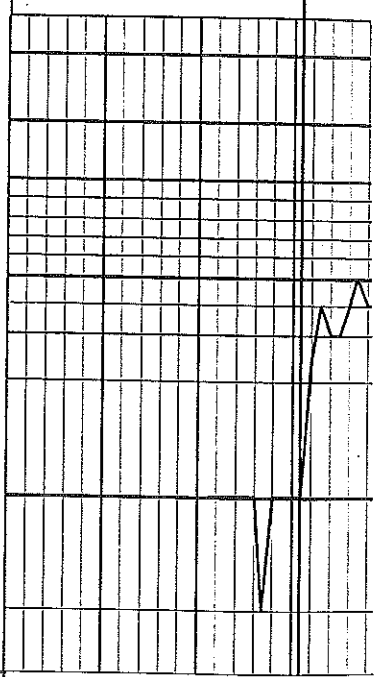
LITHOLOGY

DRILLING TIME IN MINUTES PER FOOT

Rate of Penetration Decreases



.5 1.0 5 10 15 20 30

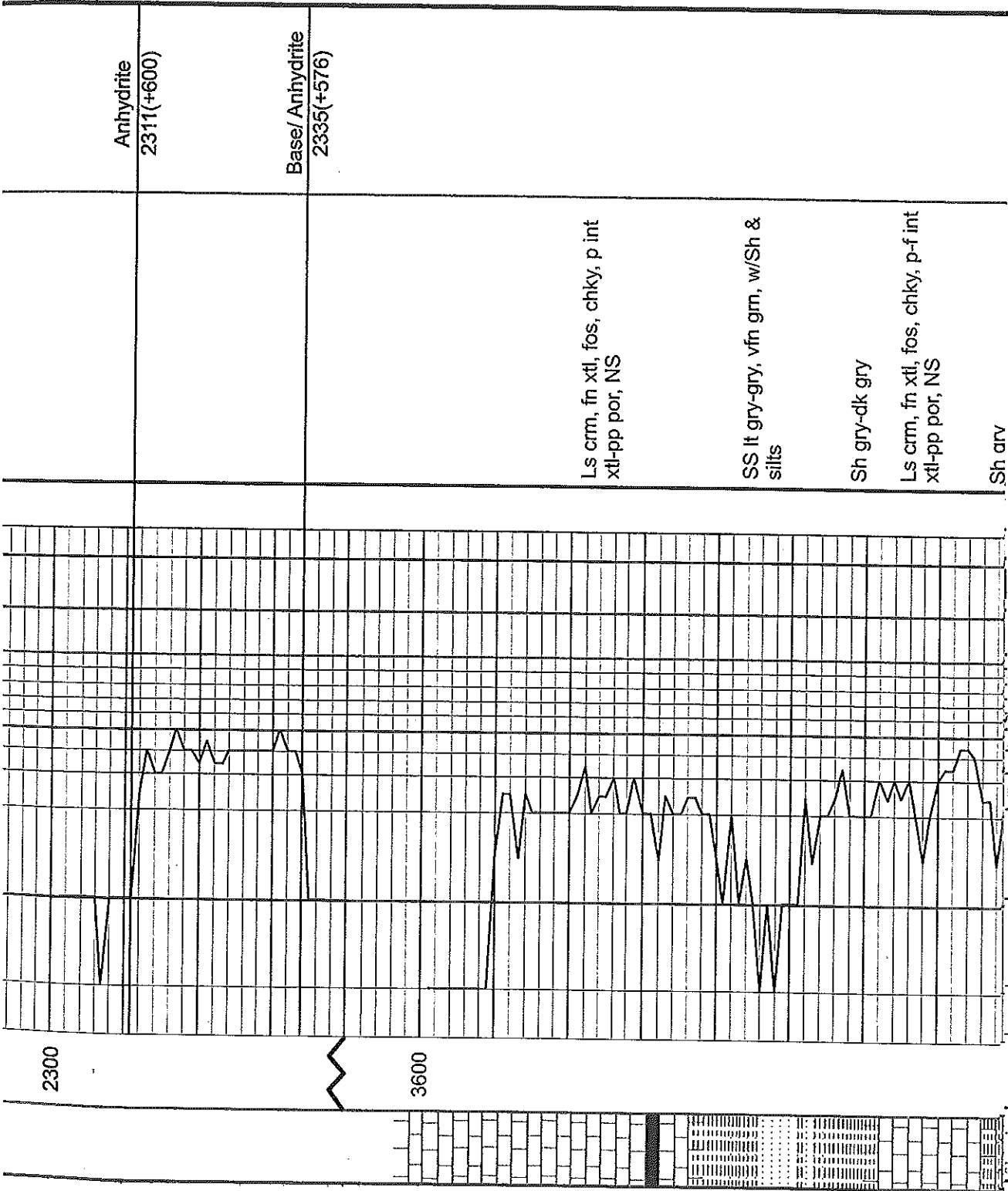


SAMPLE DESCRIPTION

REMARKS

2300

Anhydrite
2311(+600)



Anhydrite
2311(+600)

Base/ Anhydrite
2335(+576)

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

SS lt gry-gry, vfn gm, w/Sh &
silts

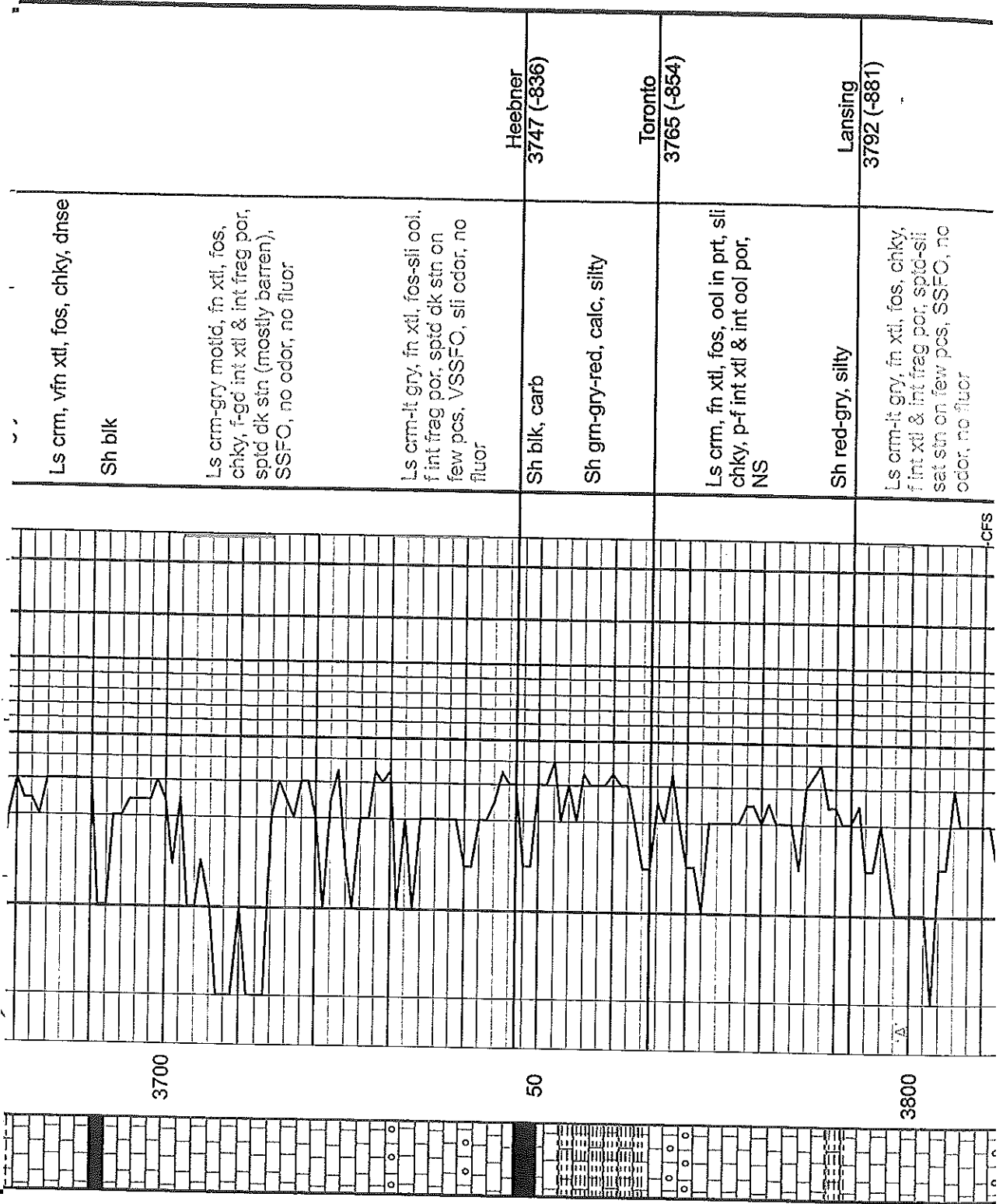
Sh gry-dk gry

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

Sh arv

2300

3600



Ls crm, vfn xtl, fos, chky, dnse

Sh blk

Ls crm-gry motid, fn xtl, fos, chky, f-gd int xtl & int frag por, spid dk stn (mostly barren), SSFO, no odor, no fluor

Ls crm-lt gry, fn xtl, fos-sli ool, f int frag por, spid dk stn on few pcs, VSSFO, sli odor, no fluor

Sh blk, carb

Sh gm-gry-red, calc, silty

Ls crm, fn xtl, fos, ool in prt, sli chky, p-f int xtl & int ool por, NS

Sh red-gry, silty

Ls crm-lt gry, fn xtl, fos, chky, f int xtl & int frag por, spid-sli sat stn on few pcs, SSFO, no odor, no fluor

Heebner
3747 (-836)

Toronto
3765 (-854)

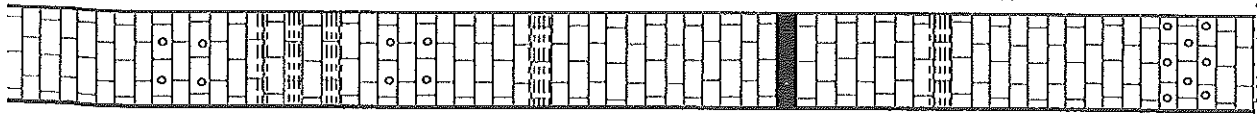
Lansing
3792 (-881)

3700

50

3800

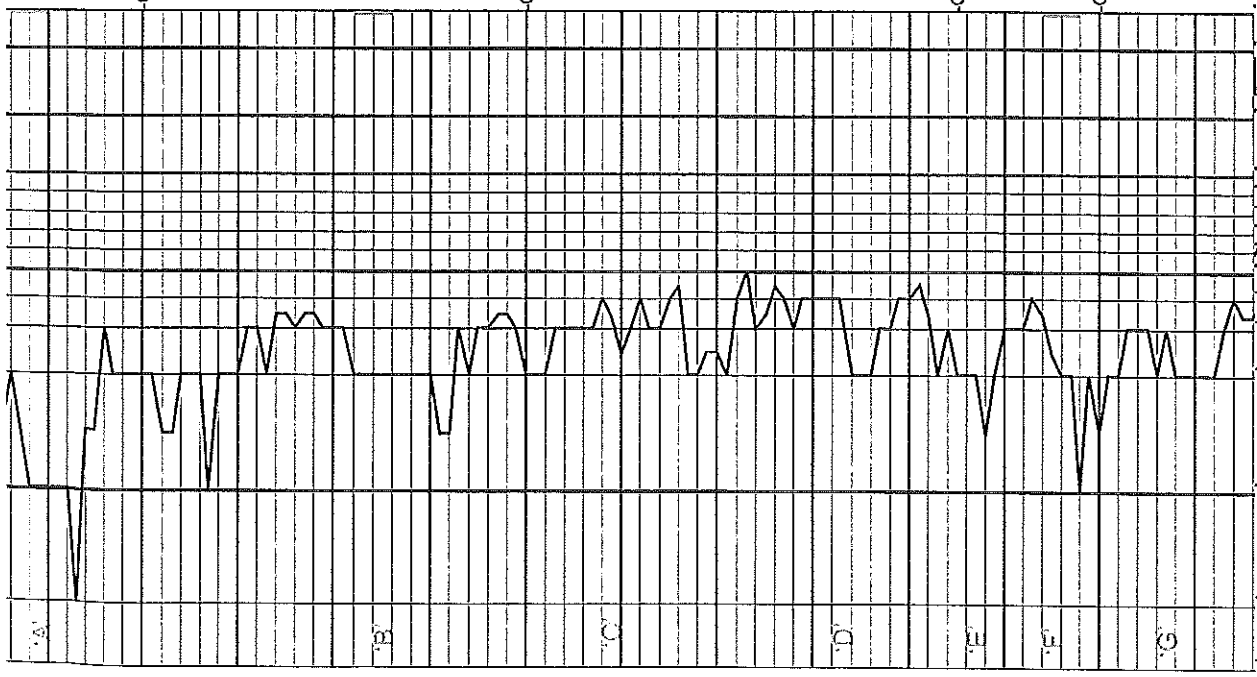
CFS



3800

50

3900



CFS

CFS

CFS

CFS

Ls crm-lt gry, fn xtl, fos, chky, f int xtl & int frag por, spid-sli sat stn on few pcs, SSFO, no odor, no fluor

Ls crm-lt gry, fn xtl, fos-ool, chky, f int xtl & int frag por, NS

Ls crm-lt gry, vfn xtl, dnse, w/ int bed red-gry Sh

Ls crm-lt gry, fn xtl, fos-ool, chky, f int xtl & int frag por, spid bik stn of few pcs, VSSFO, no odor, no fluor

Ls crm-lt gry, vfn xtl, dnse

Sh red-gry

Ls crm-lt gry, vfn xtl, dnse

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

Sh blk, carb

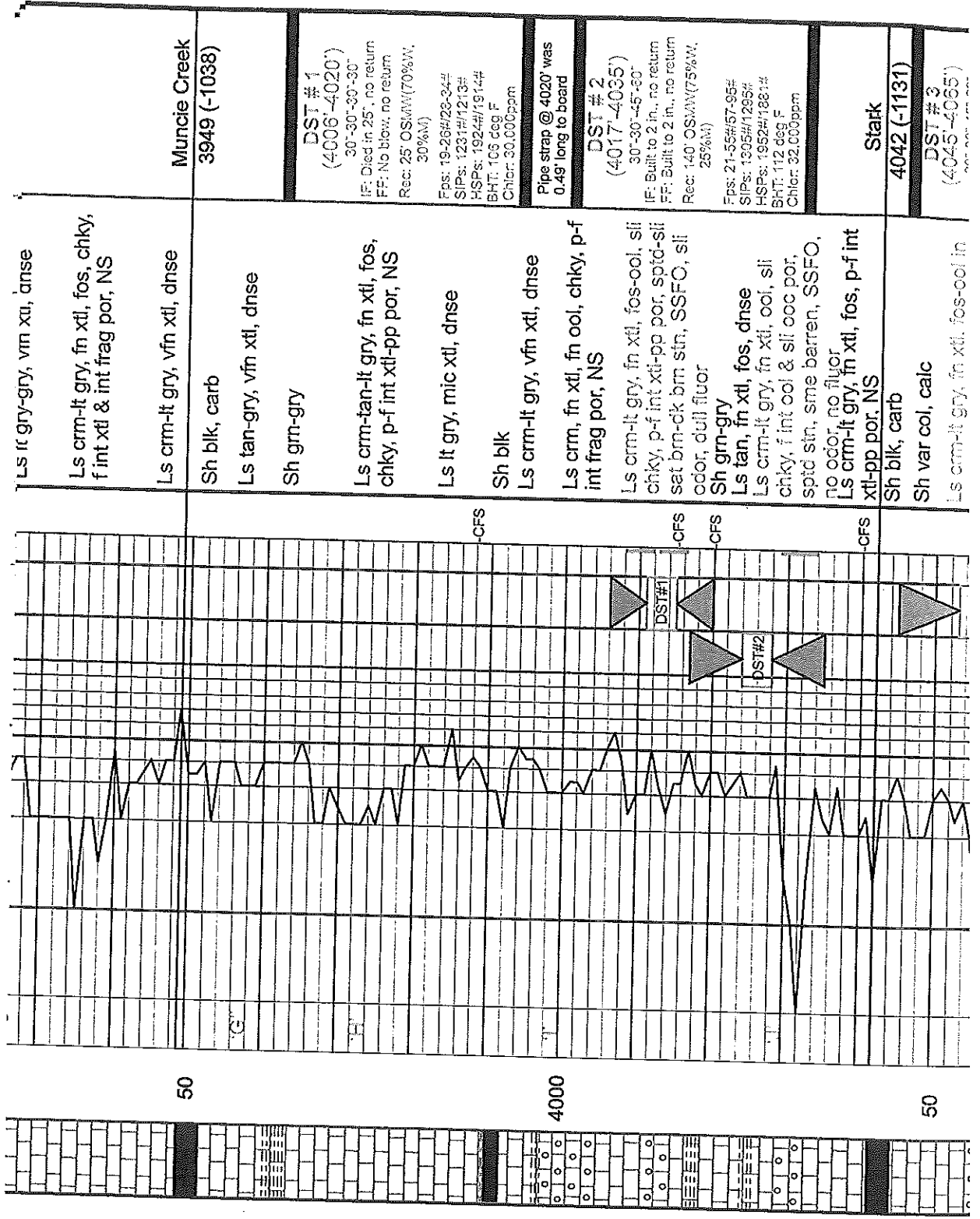
Ls crm-lt gry, fn xtl, fos, chky, p-f int xtl-pp por, NS

Sh grm-gry

Ls crm-lt gry, fn xtl, dolo in prt, fos, chky, f int xtl-pp por, NS

Ls crm-tan, fn xtl, fos, chky, p-f int xtl-pp por, spid-sli sat stn on 2 pcs, VSSFO, no odor, duil fluor

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



50

4000

50

Muncie Creek
3949 (-1038)

DST #1
(4006'-4020')
30'-30'-30'-30'
IF: Died in 25', no return
FF: No blow; no return
Rec: 25' OSMAW(70%W,
30%N)

Fps: 19-26#123-34#
SIPs: 1231#1213#
HSPs: 1924#1914#
BHT: 108 deg F
Chlor: 30.000ppm

Pipe strap @ 4020' was
0.49' long to board

DST #2
(4017'-4035')
30'-30'-45'-30'
IF: Built to 2 in., no return
FF: Built to 2 in., no return
Rec: 140' OSMAW(75%W,
25%N)

Fps: 21-55#57-95#
SIPs: 1305#1295#
HSPs: 1952#1861#
BHT: 112 deg F
Chlor: 32.000ppm

Stark
4042 (-1131)

DST #3
(4045'-4065')

Ls lt gry-gry, vfn xtl, dnse
Ls crm-lt gry, fn xtl, fos, chky,
f int xtl & int frag por, NS

Ls crm-lt gry, vfn xtl, dnse

Sh blk, carb

Ls tan-gry, vfn xtl, dnse

Sh grn-gry

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

Ls lt gry, mic xtl, dnse

Sh blk

Ls crm-lt gry, vfn xtl, dnse

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

Ls crm-lt gry, fn xtl, fos-ool, sli
chky, p-f int xtl-pp por, spfd-sli
set brn-ck brn str, SSFO, sli
odor, dull fluor

Sh grn-gry

Ls tan, fn xtl, fos, dnse

Ls crm-lt gry, fn xtl, ool, sli
chky, f int ool & sli ool por,
spfd str, sme barren, SSFO,
no odor, no fluor

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

Sh blk, carb

Sh var col, calc

Ls crm-lt gry, fn xtl, fos-ool in

-CFS

-CFS

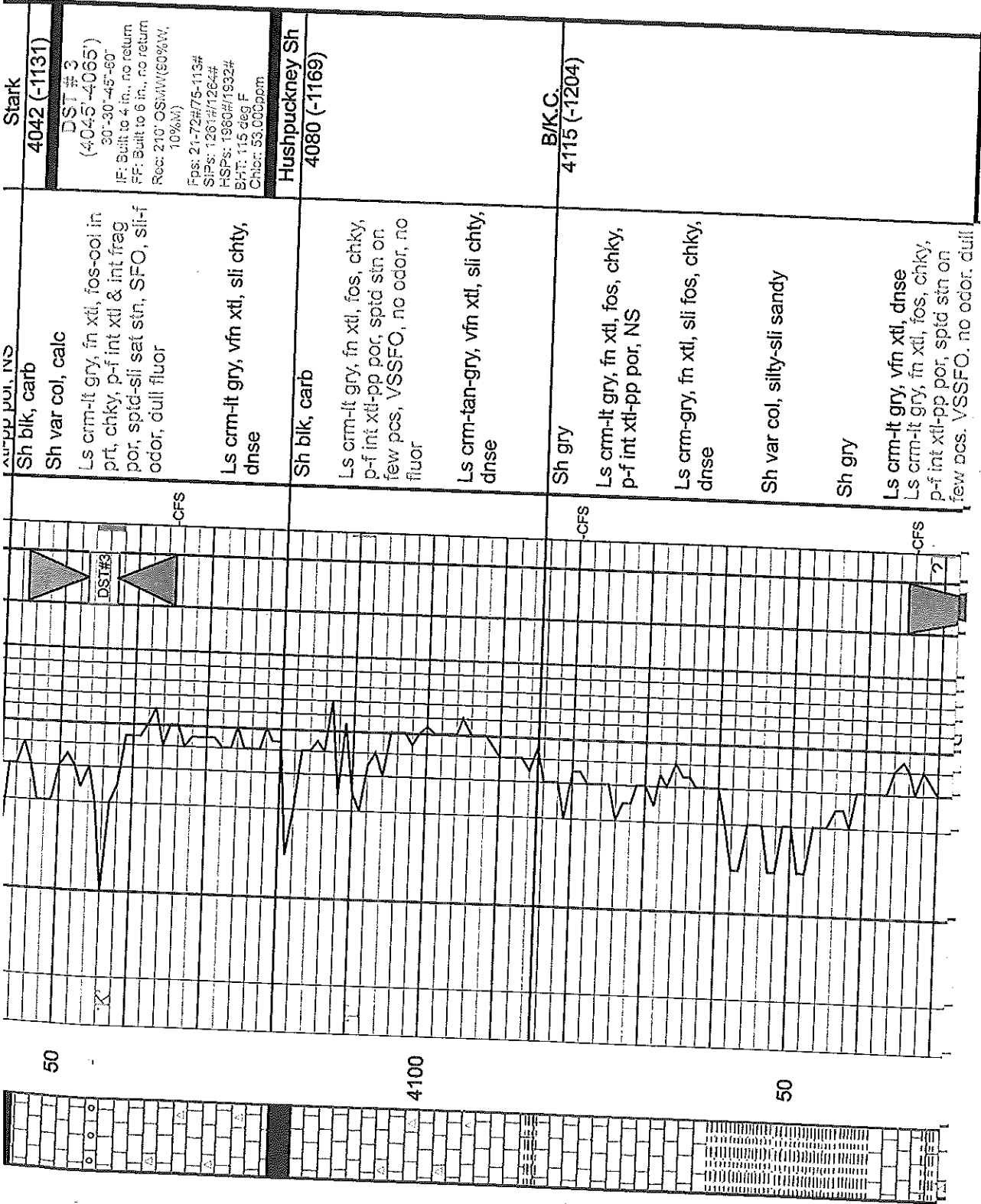
-CFS

-CFS

DST#1

DST#2

DST#3



Stark
4042 (-1131)

DST #3
(4045'-4065')
30'-30"-45"-60"
IF: Built to 4 in., no return
FF: Built to 6 in., no return
Rec: 210' OSW(90%W,
10%AM)
FOS: 21-72#75-113#
SIPs: 1261#/1264#
HSPs: 1960#/1932#
BHT: 115 deg F
Chlor: 53,000ppm

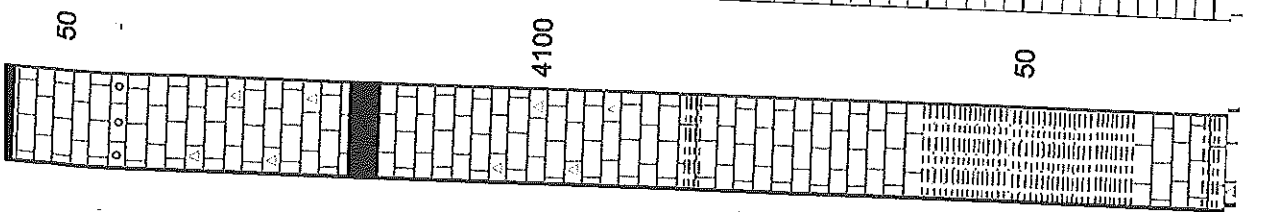
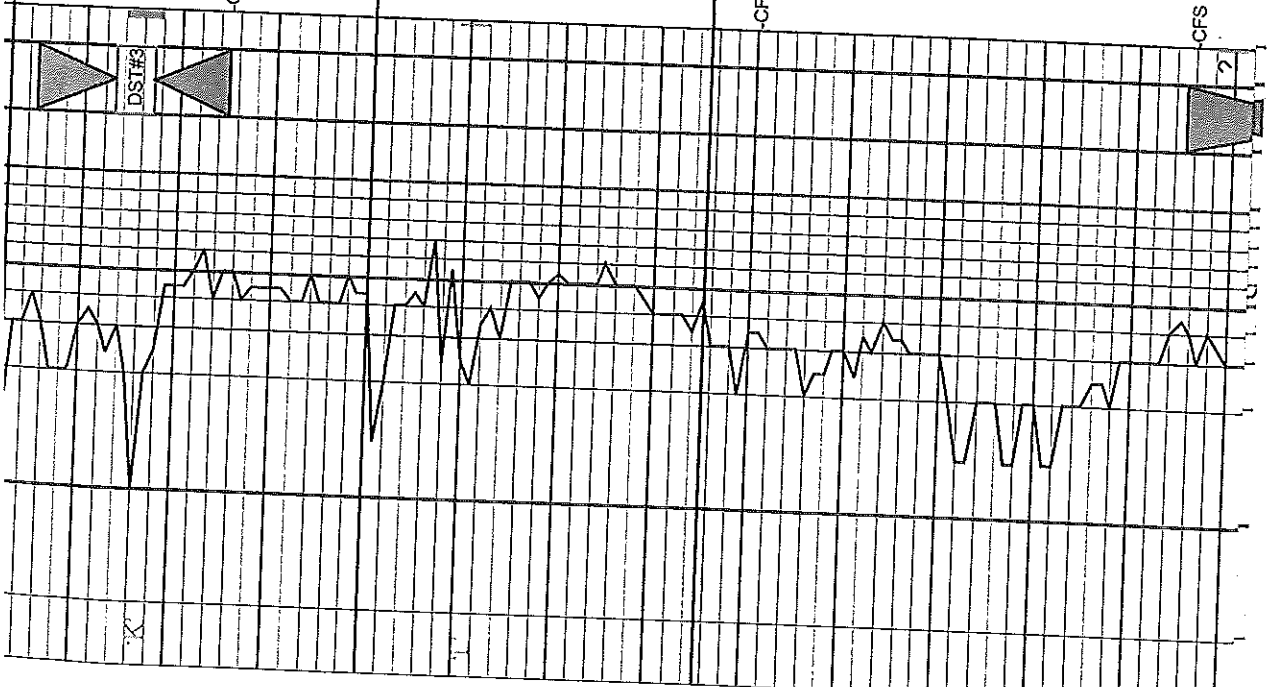
Hushpuckney Sh
4080 (-1169)

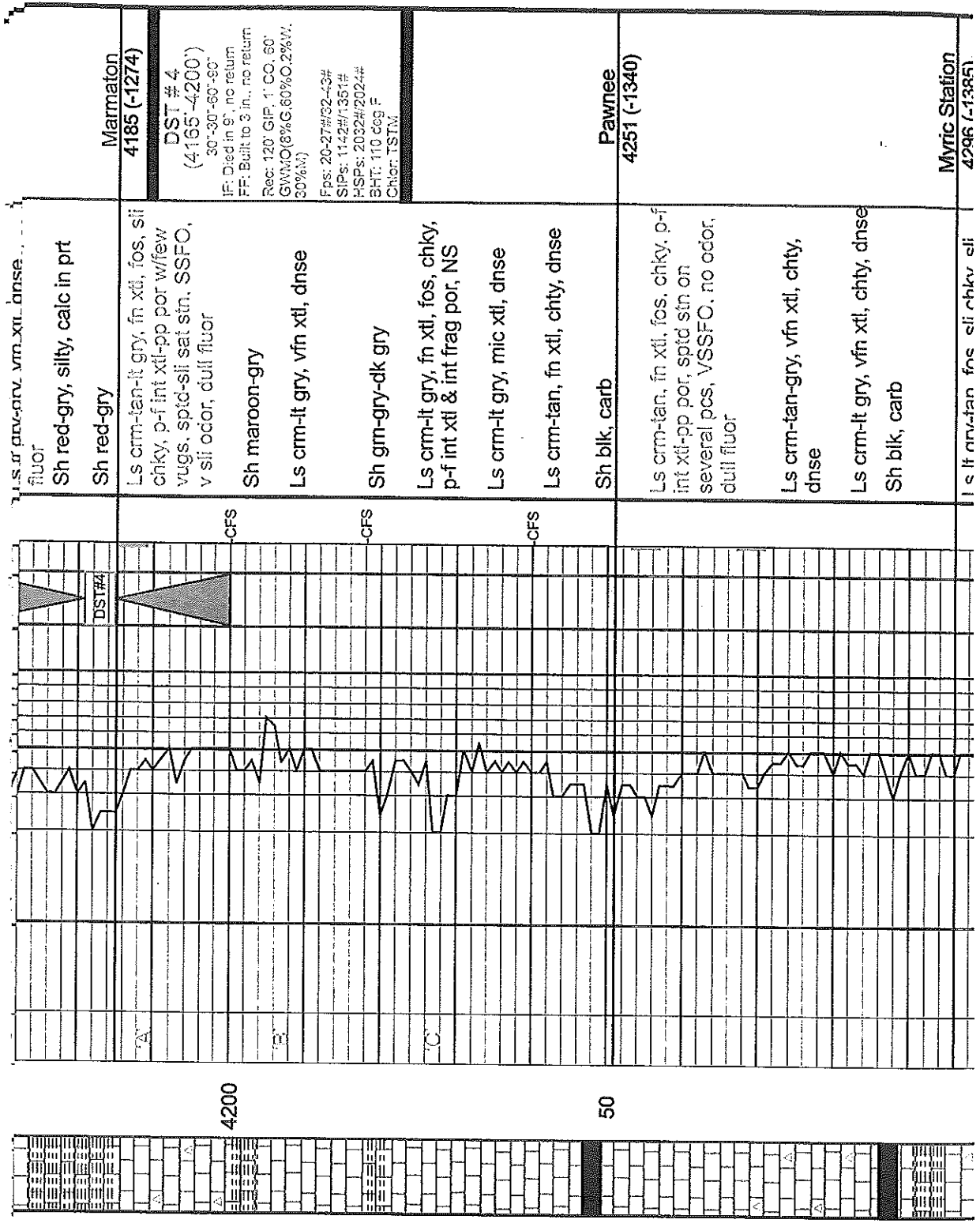
B/K.C.
4115 (-1204)

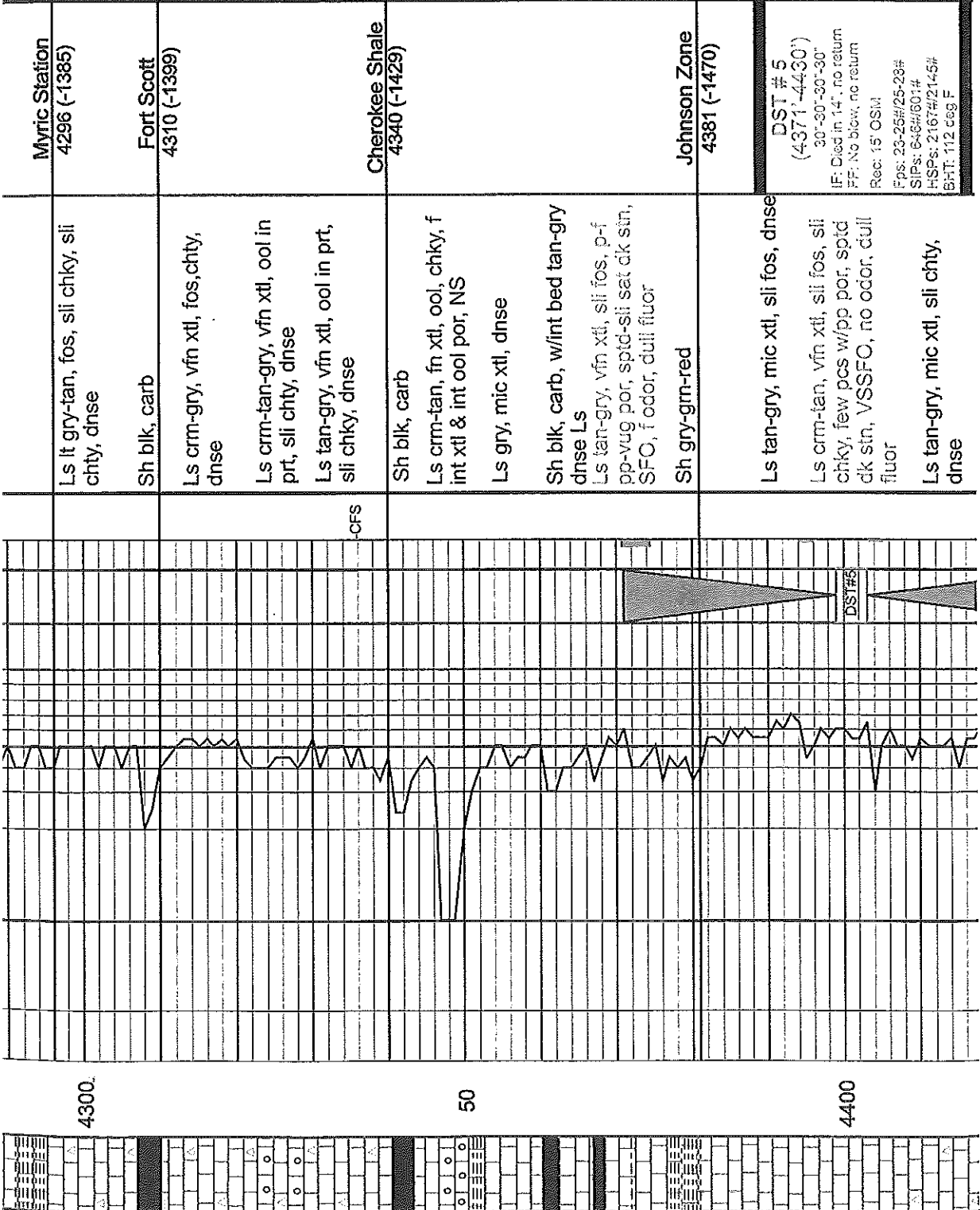
Sh blk, carb
Sh var col, calc
Ls crm-lt gry, fn xtl, fos-ool, in prt, chky, p-f int xtl & int frag por, spfd-sli sat str, SFO, sil-f odor, dull fluor

Sh blk, carb
Ls crm-lt gry, fn xtl, fos, chky, p-f int xtl-pp por, spfd str on few pcs, VSSFO, no odor, no fluor

Sh gry
Ls crm-lt gry, fn xtl, fos, chky, p-f int xtl-pp por, NS
Ls crm-gry, fn xtl, sli fos, chky, dnse
Sh var col, silty-sli sandy
Sh gry
Ls crm-lt gry, vfn xtl, dnse
Ls crm-lt gry, fn xtl, fos, chky, p-f int xtl-pp por, spfd str on few pcs, VSSFO, no odor, dull







4300.

50

4400

Myric Station
4296 (-1385)

Fort Scott
4310 (-1399)

Cherokee Shale
4340 (-1429)

Johnson Zone
4381 (-1470)

Ls lt gry-tan, fos, sli chky, sli chty, dnse

Sh blk, carb

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

Ls crm-tan-gry, vfn xtl, ool in prt, sli chty, dnse

Ls tan-gry, vfn xtl, ool in prt, sli chky, dnse

-CFS

Sh blk, carb

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

Ls gry, mic xtl, dnse

Sh blk, carb, w/int bed tan-gry dnse Ls

Ls tan-gry, vfn xtl, sli fos, p-f pp-vug por, sptd-sli sat dk stn, SFO, f odor, dull fluor

Sh gry-gm-red

Ls tan-gry, mic xtl, sli fos, dnse

Ls crm-tan, vfn xtl, sli fos, sli chky, few pcs w/pp por, sptd dk stn, VSSFO, no odor, dull fluor

Ls tan-gry, mic xtl, sli chty, dnse

DST# 5
(4371'-4430')
30"-30"-30"-30"
IF: Died in 14", no return
FF: No blk-w, no return
Rec: 15' OSM
Fps: 23-25#/25-28#
SIPs: 648#/601#
HSPs: 2167#/214-5#
BPT: 112 ceg F

Sh var col, silty, calc in prt	Mississippian 4497 (-1586)
SS lt gry, fn grm, sli fria, sli dirty	
Sh var col, w/wh-lt grm fn grm SS, sli fria, NS	
Sh var col, most blk	
Sh var col, w/wh vfn grm SS	
Sh var col, silty, sme blk	
SS wh-lt grm, fn grm, fria, NS	
Ls tan, mic xtl, dnse	Total Depth 4580' (-1669)
Ls crm-tan, mic xtl, sli chky, dnse	
Ls tan, mic xtl, dnse	
Ls crm-tan, mic xtl, sli chky, dnse	
Ls crm-tan, mic xtl, sli chty, dnse	
Ls crm-tan vfn xtl, sandy, dnse	

