

DRILL STEM TESTS

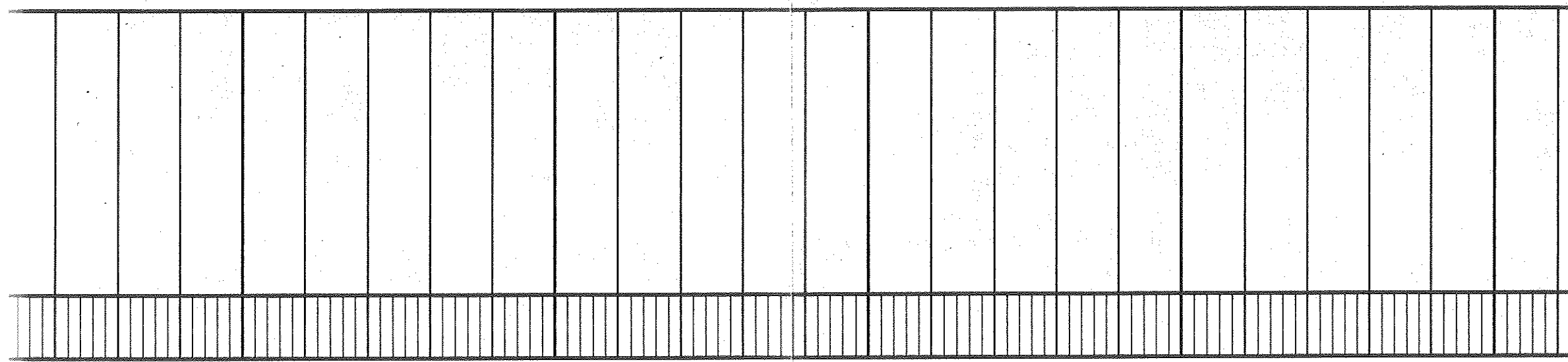
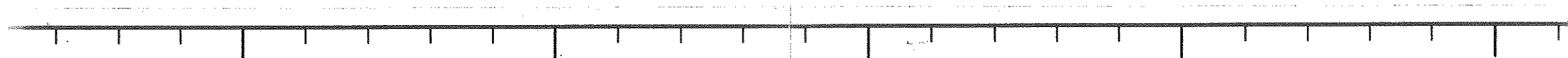
| No. | Interval | IFP/Time | ISIP/Time | FFP/Time | FSP/Time | HH-FHH | RECOVERY |
|-----|----------|----------|-----------|----------|----------|--------|----------|
| | | | | | | | |
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REMARKS AND RECOMMENDATIONS SMALL WLT TEST - NO DAMAGE DEVELOPMENT!
LOW. Ran Nelson

LEGEND

| | |
|--|-----------|
| | Anhydrite |
| | Salt |
| | Sandstone |
| | Shale |
| | Carb sh |
| | Limestone |
| | Ool.Lime |
| | Chert |
| | Dolomite |

| | | |
|---|-----------|---------------------|
| DRILLING TIME IN MINUTES PER FOOT Rate of Penetration Decreases | DEPTH | REMARKS |
| | 300 50 | OIL SHOWS |
| | | SAMPLE DESCRIPTIONS |
| | | LITHOLOGY |



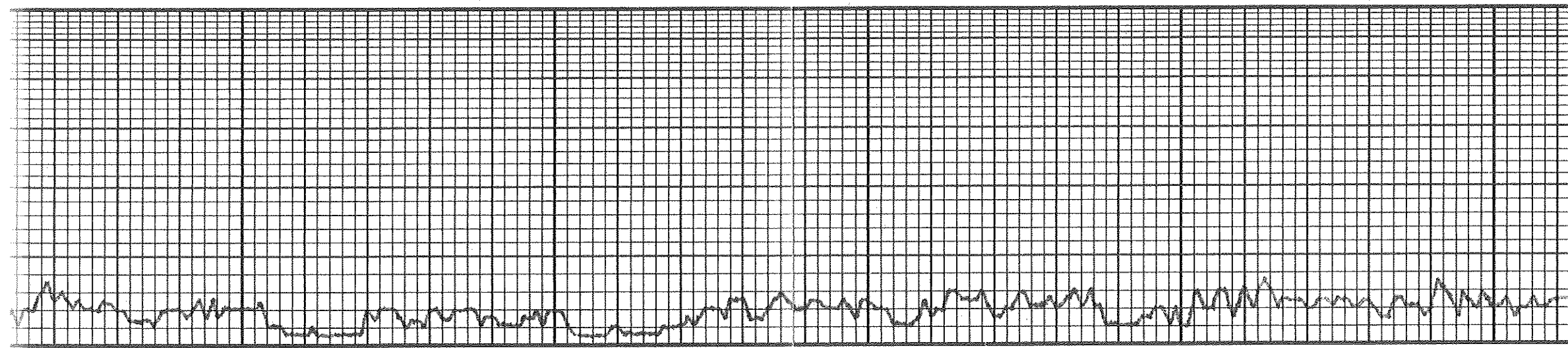
3600

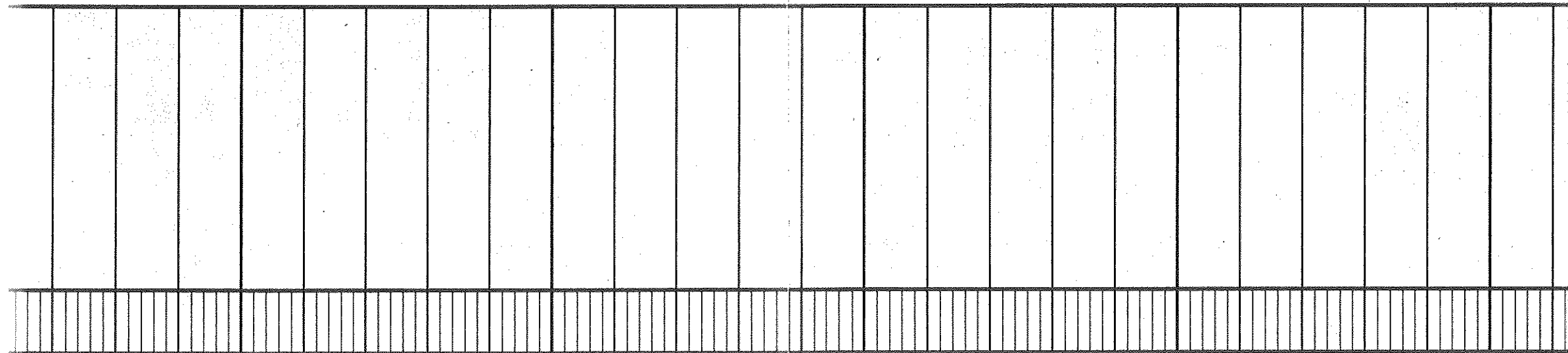
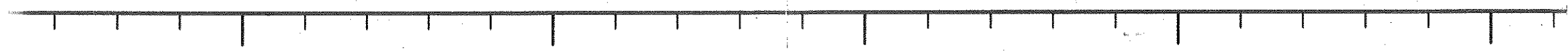
50

3700

50

3800





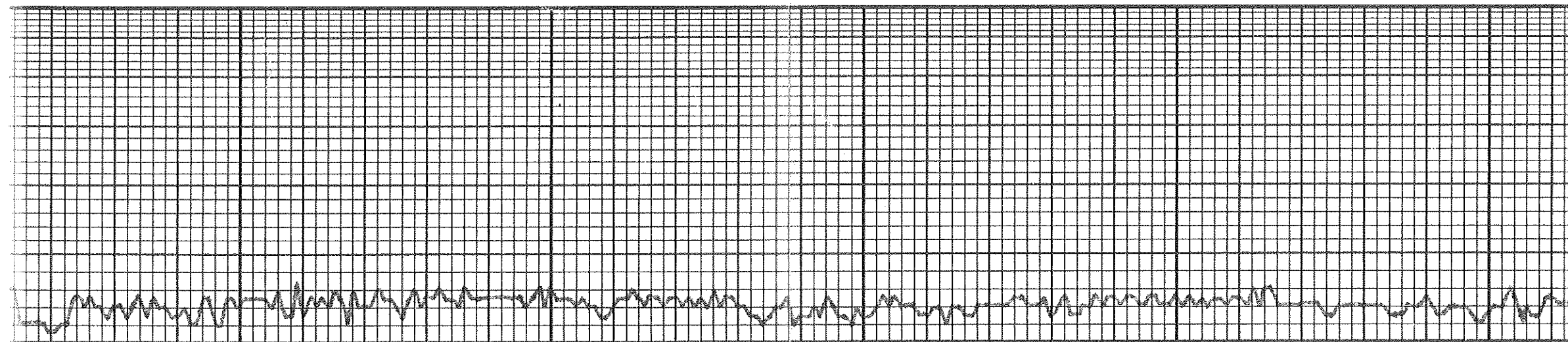
50

3900

50

4000

50



4100

50

4200

50

4300

sh. blue clays

sh. blue clay, brn.
red clay

3 AS 28

LS nodules with white clay, for
blue grey sh. w. ss. to
clayey ss.

LS sh. - grey sand to ss.
fine to med. gr. sh. sand
w. sh. wood

sh. blue grey to blue

LS sh. w. ss.

sh. blue to blue grey
gr. sh.

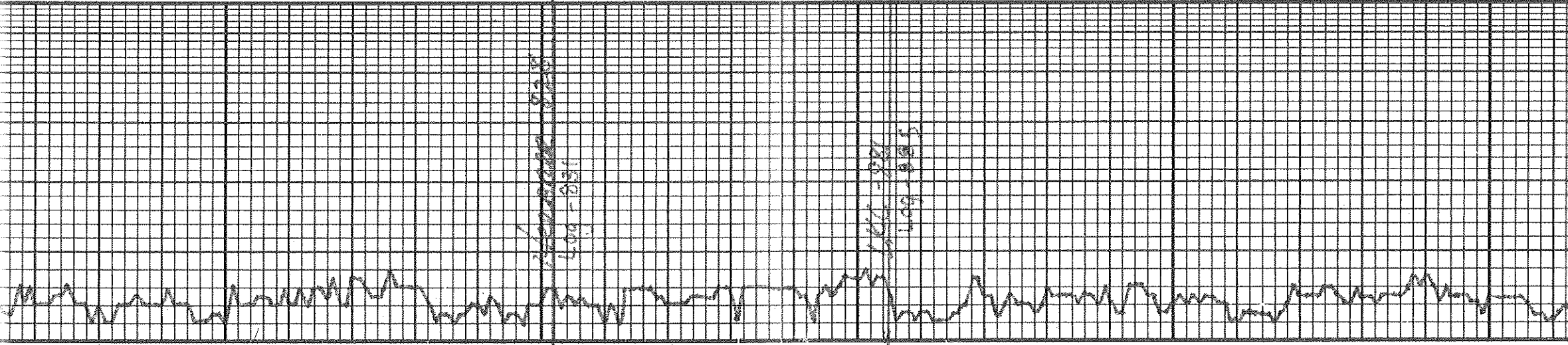
LS sh. w. sh. grey to blue
med. gr. sh. w. sh. wood
w. blue gr. sh. wood
sh. wood to sh. grey clay
gr. sh.

sh. grey to clay
sh.

LS sh. - sh. to ss. w. sh. nodules
sh. ss. to sh. sand to sh. wood
sh. to sh. grey sand w. sh. wood

w. grey sh. to blue grey clay

DST #2
STRADOLE
30° 30' 5" - 6"
120° 1/2" below



4100 - 4300

4200 - 4300

FFP 22-27
SIP 66"
HP 2773-2143
REC 30'50cm
270g, 3700, 95% m

AST # 2

OST #1

4361'-4405'
1st 45% 45% 45% 45%
1st op 10' 8" 8000
No SI Blow
2nd op 9' 14" 8000
No SI Blow
IFFP 23-43
FFP 43-62
SIP 1038-956
HP 2249-2193
Rec: 47' 60cm
1570g 20900 65% m
63' 6m0
2020g 48% 637% m
BWT 138°

| | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------------|---------------|-------------------|---|---|------------------------|--|---------------|-----------|---|---------------|--------------|--|----------|--|----------------|---|--|---------------------------|--|-----------------|---|---|
| LS w/ sm. silt ss w/ sh. int to ss. m. s. | gray muds pr. light sh. silt ss. | SAS blue clay | gray gran. ss. m. | LS w/ sh. gray sm. silt. foss. in md. sh. gran. ss. sm. sh. silt sm. sh. md. w/ sh. silt. blue sh. silt. sm. silt. sm. no sm. md. sh. silt. | mic. w/ sh. gran. v. ss pr. p. m. s. | w/ sh. silt. sh. silt. | LS sh. md. - gray to f. foss. w/ sh. int - sh. silt. v. gran. v. md. sh. silt. sm. sh. silt. sm. silt. sh. sh. silt. sm. silt. w/ sh. silt. sm. silt. sh. silt. sm. silt. w/ sh. silt. sm. silt. | RD. Blue clay | sh. s. a. | gray - sm. silt. sh. silt. sh. silt. sm. silt. sh. silt. sh. silt. pr. p. m. s. | sh. blue clay | dk gray. sm. | LS sh. md. - blue. silt. sm. silt. pr. p. m. s. | gray sh. | LS gray. md. sh. silt. sm. silt. pr. p. m. s. | gray gran. ss. | LS sh. md. - w/ sh. silt. pr. p. m. s. | v. d. ss. mic. silt. sh. md. - gray LS pr. p. m. s. | ss w/ sh. silt. sh. silt. | sm. v. d. ss. gran. f. silt. sh. silt. pr. p. m. s. | w/ sh. gray sh. | gray gran. ss. w/ sh. silt. sh. silt. pr. p. m. s. | gray gran. ss. w/ sh. silt. sh. silt. pr. p. m. s. |
|--|-------------------------------------|---------------|-------------------|---|---|------------------------|--|---------------|-----------|---|---------------|--------------|--|----------|--|----------------|---|--|---------------------------|--|-----------------|---|---|

50

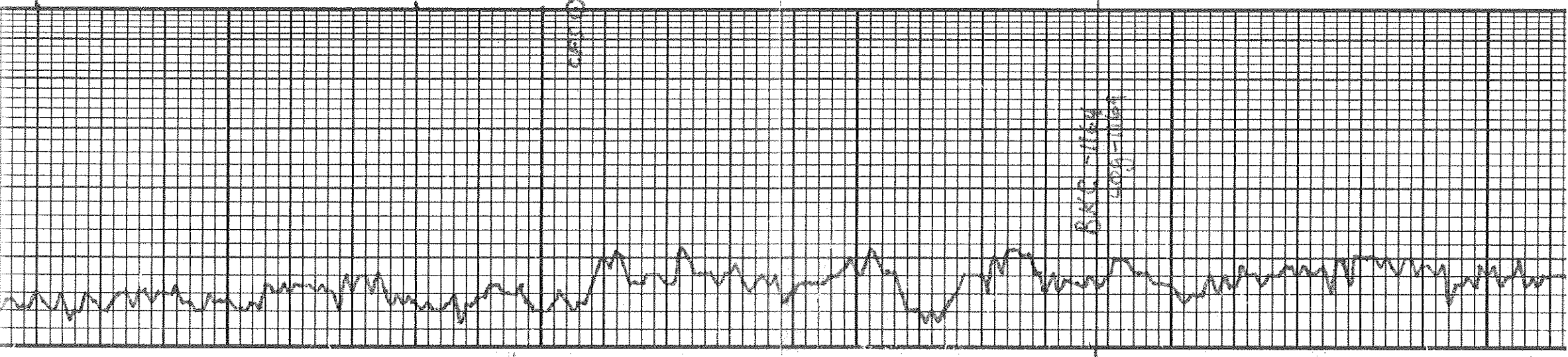
4400
BIT CHANGE

50

4500

50

4000



8000-1164
100-1164

DST#3
 30° 30' 50"
 (stop down 15")
 TDP 15-19
 FFP 17-18
 SIP 22 -
 HP 2253-2252
 Rec 1:05m
 BHT 138°

DST#3

LS heavy grey mudstone
 DMS pr indcl. ref.
 few pct sand - wh chd

sh B w carb
 ch qtz

ls w 1-2 silfoss in fin med
 DMS pr indcl. ref.
 V silfoss, silfoss, rd pr silf
 V silfoss b z-thre-plagioc
 most silfoss pr

DMS from wh micrite
 LS

silf carb sil
 90%+ mm mtd chass prp
 LS

LS indcl of BUC an organ
 ls tan-grey silfoss for
 in mod DMS med to med
 fr pr indcl & MS

sh ALK carb w/ pyrit
 wh ext w pyrit laces

few silfoss, ms, fr
 DMS

sh B w carb

LS heavy grey mudstone
 DMS pr indcl. ref.
 few pct sand - wh chd

ls heavy grey mudstone
 DMS pr indcl. ref.
 few pct sand - wh chd

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 ch qtz

ls w 1-2 silfoss in fin med
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 V silfoss b z-thre-plagioc
 most silfoss pr

DMS from wh micrite
 LS

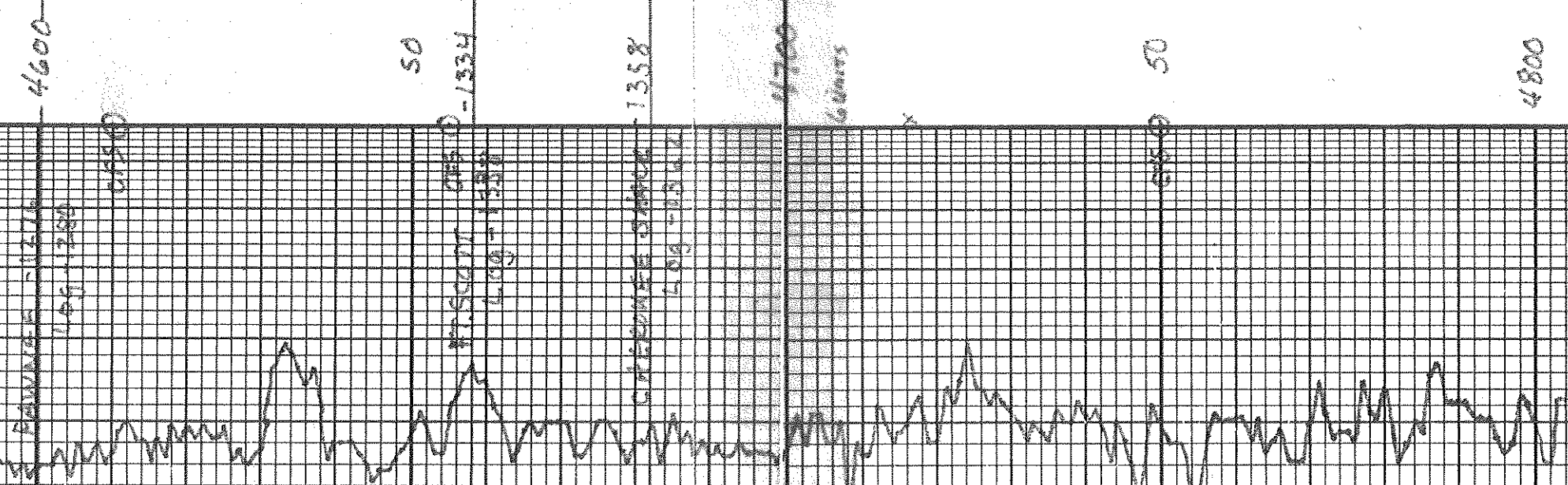
silf carb sil
 90%+ mm mtd chass prp
 LS

LS indcl of BUC an organ
 ls tan-grey silfoss for
 in mod DMS med to med
 fr pr indcl & MS

sh ALK carb w/ pyrit
 wh ext w pyrit laces

few silfoss, ms, fr
 DMS

sh B w carb



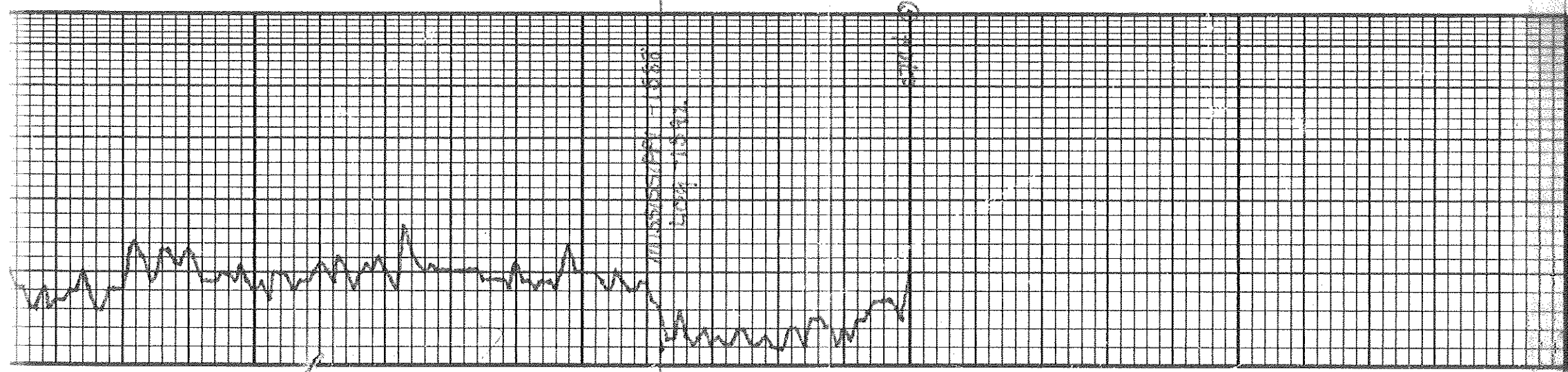
TEMPERATURE (C)

DEPTH (m)

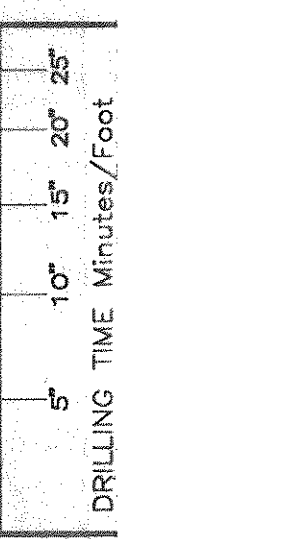
4600

4700

4800



| DEPTH | LITHO | SAMPLE DESCRIPTIONS | OIL SH | REMARKS |
|-------|-------|--------------------------|--------|---------|
| 50 | | w/ sm. or. s. m. s. | | |
| | | SHS RO BAN GM | | |
| | | aa | | |
| | | w/ 12 pcs ANSES | | |
| | | MSTLY ALL SHAG | | |
| | | aa | | |
| | | DRS. Sm. s. / ANSES. MS | | |
| | | aa w/ more sh | | |
| | | abund. s/s. v. color | | |
| | | aa | | |
| | | MS | | |
| | | aa | | |
| 4900 | | long, a.s. s. s. / ANSES | | |
| | | frap. s. chd | | |
| | | m of BAN mg. x. l. s. ac | | |
| | | DRS. Sm. s. / ANSES | | |
| | | ALL MS | | |
| | | DRS. s. s. / aa | | |
| | | aa MS | | |
| | | N.S. | | |
| 50 | | RAN S. S. / aa | | |
| 5000 | | | | |



| DEPTH | LITHO | SAMPLE DESCRIPTIONS | OIL SH | REMARKS |
|-------|-------|--------------------------|--------|---------|
| 50 | | w/ sm. or. s. m. s. | | |
| | | SHS RO BAN GM | | |
| | | aa | | |
| | | w/ 12 pcs ANSES | | |
| | | MSTLY ALL SHAG | | |
| | | aa | | |
| | | DRS. Sm. s. / ANSES. MS | | |
| | | aa w/ more sh | | |
| | | abund. s/s. v. color | | |
| | | aa | | |
| | | MS | | |
| | | aa | | |
| 4900 | | long, a.s. s. s. / ANSES | | |
| | | frap. s. chd | | |
| | | m of BAN mg. x. l. s. ac | | |
| | | DRS. Sm. s. / ANSES | | |
| | | ALL MS | | |
| | | DRS. s. s. / aa | | |
| | | aa MS | | |
| | | N.S. | | |
| 50 | | RAN S. S. / aa | | |
| 5000 | | | | |

Rate of Penetration Decreases

OWS

OGY

OPERATOR DNOCL
LEASE KARMMR UNIT # 2-24 IP 450
ELEVATION 3324'KR RTD 490

LOCATION SD, FSL, E 330, FEEL
SEC. 24 TWP. 5 S RNG. 37 W
COUNTY CHEYENNE STATE WYOMING