

H.E.S.S.

O.I.L.
C.O.

HESS OIL COMPANY

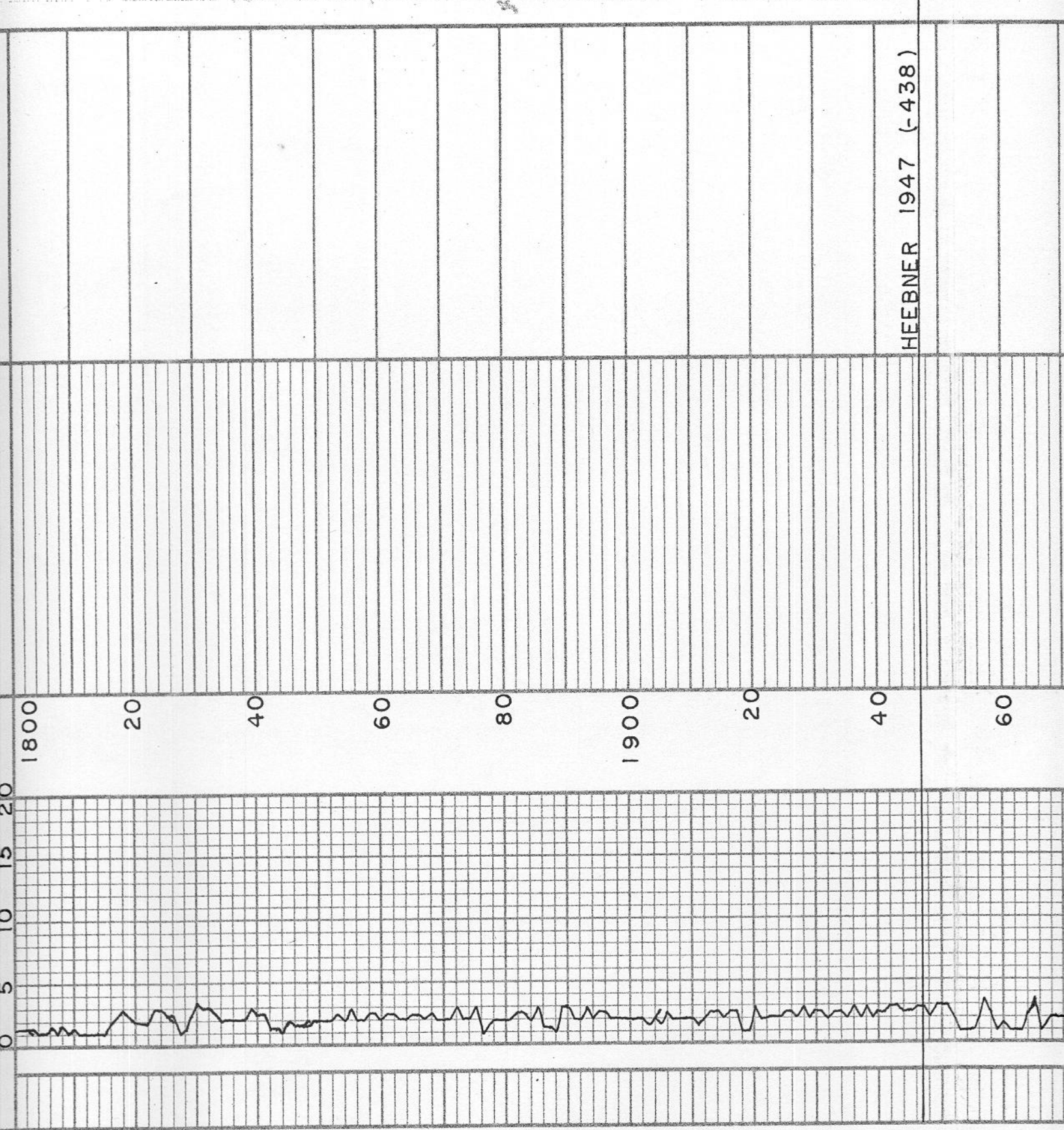
P.O. Box 1009

McPherson, KS 67460-1009

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY <u>HESS OIL COMPANY</u>		ELEVATIONS																													
LEASE <u>BEATRICE #1-27</u>		KB <u>1509'</u>																													
FIELD <u>- WILDCAT -</u>		DF <u>1507'</u>																													
LOCATION <u>900' FNL, 1850' FEL</u>		GL <u>1500'</u>																													
SEC <u>27</u> TWSP <u>18 S</u> RGE <u>1 E</u>		Measurements Are All From <u>KB</u>																													
COUNTY <u>MARION</u> STATE <u>KANSAS</u>																															
CONTRACTOR <u>C & G DRILLING COMPANY</u>		CASING SURFACE <u>8-5/8" at 200'</u>																													
SPUD <u>2-1-12</u> COMP <u>2-10-12</u>		PRODUCTION <u>none</u>																													
RTD <u>3393'</u> LTD <u>3394'</u>		ELECTRICAL SURVEYS																													
MUD UP <u>2450'</u> TYPE MUD <u>CHEMICAL</u>		COMPENSATED DENSITY & DUAL IND.																													
SAMPLES SAVED FROM <u>2100'</u> TO <u>TD</u>																															
DRILLING TIME KEPT FROM <u>1800'</u> TO <u>TD</u>																															
SAMPLES EXAMINED FROM <u>2100'</u> TO <u>TD</u>																															
GEOLOGICAL SUPERVISION FROM <u>1785'</u> TO <u>TD</u>																															
GEOLOGIST ON WELL <u>JAMES C. HESS</u>																															
FORMATION TOPS	LOG	SAMPLES																													
HEEBNER		1947 (-438)	<table border="1"> <tr><td></td><td></td><td>1 E</td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td>+</td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td>27</td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> </table>			1 E												+								27					
		1 E																													
		+																													
		27																													
LANSING		2188 (-679)																													
MISSISSIPPI		2771 (-1262)																													
KINDERHOOK SHALE		2939 (-1430)																													
VIOLA		3218 (-1709)																													
SIMPSON SAND		3325 (-1816)																													
ARBUCKLE		none																													
RTD		3393 (-1884)	18 S																												



1800

20

40

60

80

1900

20

40

60

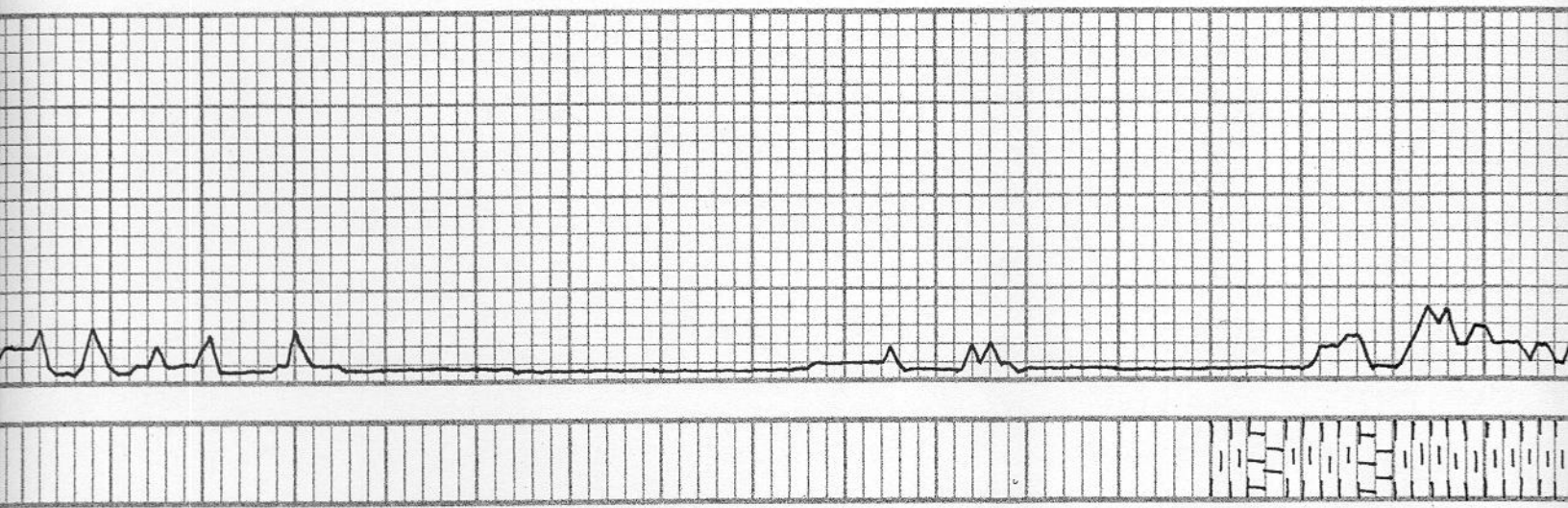
20

15

10

5

0



80

2000

20

40

60

80

2100

20

40

Some SILTSTONE w/pe's MT-TAN
VF-Fx in sil chunky lam
Some Green - grey sh's

AA w/ mostly sh's No ~~pe~~ No show

Mostly sh's w/pe's lam No show

Mostly Green + grey sh's
w/pe's lam No show

BROWN LIME 2141 (-632)

BROWN LIME 2141 (-632)

w/pe's lm no show

Tan - Br VF-Film DS LM
Some green sh's

Mostly green Red sh's
w/pe's lm

Mostly grey + green sh's
No ♂ No show

Mostly sh's

AA w/ NO ♂ NO show

Crn - Grey VF-Film sl chalky lm
w/pe's w/ chalky lm
Some green sh's

Tan - grey Film sl foss lm
w/pe's, w/ chalky lm
FEW green sh's
Fair ♂
NO show

Crn - Grey Fxlm sl foss lm
w/pe's, w/ chalky lm
FEW sh's

AA w/ NO ♂ NO show

AA w/ same green sh's
NO ♂ NO show

Crn - grey VF-Film sl chalky lm
w/pe's w/ chalky lm
FEW green sh's

AA w/ less sh's
No ♂ No show

AA w/Few green sh's
No ♂ NO show

Tan - grey Fxlm lm w/ Fair ♂
(sl foss)
NO show

wt-Tan - grey VF-Film lm
w/pe's w/ chalky lm
FEW sh's

AA w/ No ♂ NO show

AA

LANSING 2188 (-679)

40

60

80

2200

20

40

60

80

2300

AA

AA No of No show

20

Lim - grey VF-Fxlm sl chalky Lm
Some wt chalky Lm
Some Fair of
Few sh's No show

WT - grey VF-Fxlm sl chalky Lm
w/pe's wt chalky Lm
Few green sh's

40

AA w/Few sh's No of No show

AA w/Some green sh's No of No show

60

Some green sh's
w/pe's Tan-grey VF-Fxlm sl chalky Lm
Some wt chalky Lm

sl show of light oil in cut
NFO No oil wt-Cem VF-Fxlm Lm

80

Tan-grey VF-Fxlm Lm
w/pe's wt chalky Lm
Some green sh's

Lim-wt VF-Fxlm sl chalky Lm
w/Some wt chalky Lm
Some green sh's

2400

AA w/more green sh's

Tan-grey VF-Fxlm sl Foss Lm
w/Some wt chalky Lm
Few green sh's

20

AA w/pe's wt chalky Lm
No of No show

WT - grey VF-Fxlm sl chalky Lm
w/pe's wt chalky Lm
Few green sh's

40

AA w/more sh's No of No show

STARK SHALE 2454

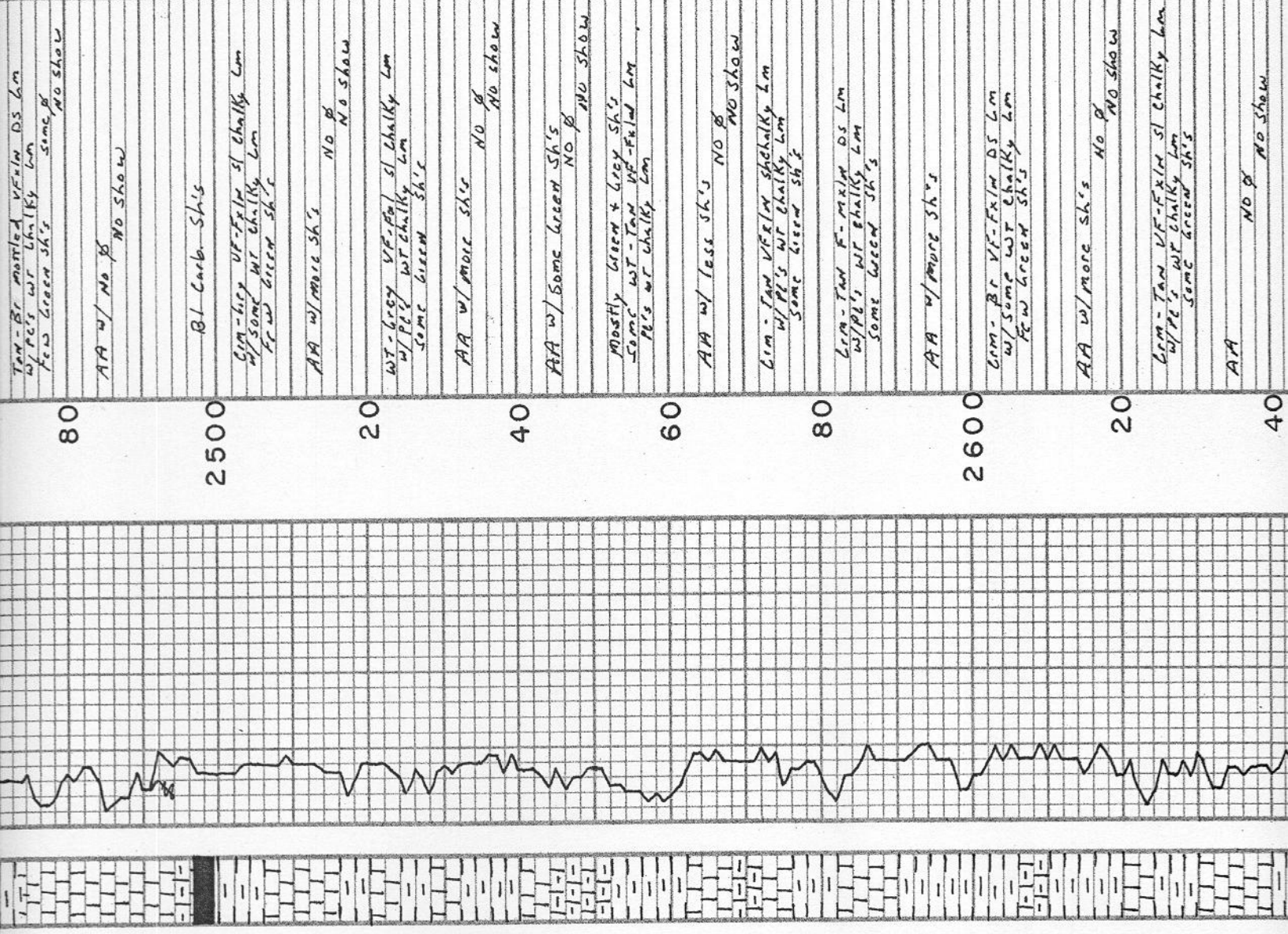
(-945)

BT carb. sh's

60

Tan + Bc (Mottled) VF-Fxlm DS Lm
w/pe's wt chalky Lm
Few green sh's No show

Tan-Bc mottled VF-Fxlm DS Lm



Tan - Br mottled VF-Fx LM DS LM
w/PE's w/ chalky LM
few green sh's some ♂
NO SHOW

AA w/ No ♂
NO SHOW

B1 Carb. Sh's

GM - big VF-Fx LM sl chalky LM
w/ some w/ chalky LM
FE w/ green sh's

AA w/ more sh's
NO ♂
NO SHOW

WT - grey VF-Fx LM sl chalky LM
w/PE's w/ chalky LM
some green sh's

AA w/ more sh's
NO ♂
NO SHOW

AA w/ some green sh's
NO ♂
NO SHOW

Mostly green + grey sh's
Some WT - Tan VF-Fx LM
PE's w/ chalky LM

AA w/ less sh's
NO ♂
NO SHOW

GM - Tan VF-Fx LM chalky LM
w/PE's w/ chalky LM
some green sh's

LM - Tan F-Mix LM DS LM
w/PE's w/ chalky LM
some green sh's

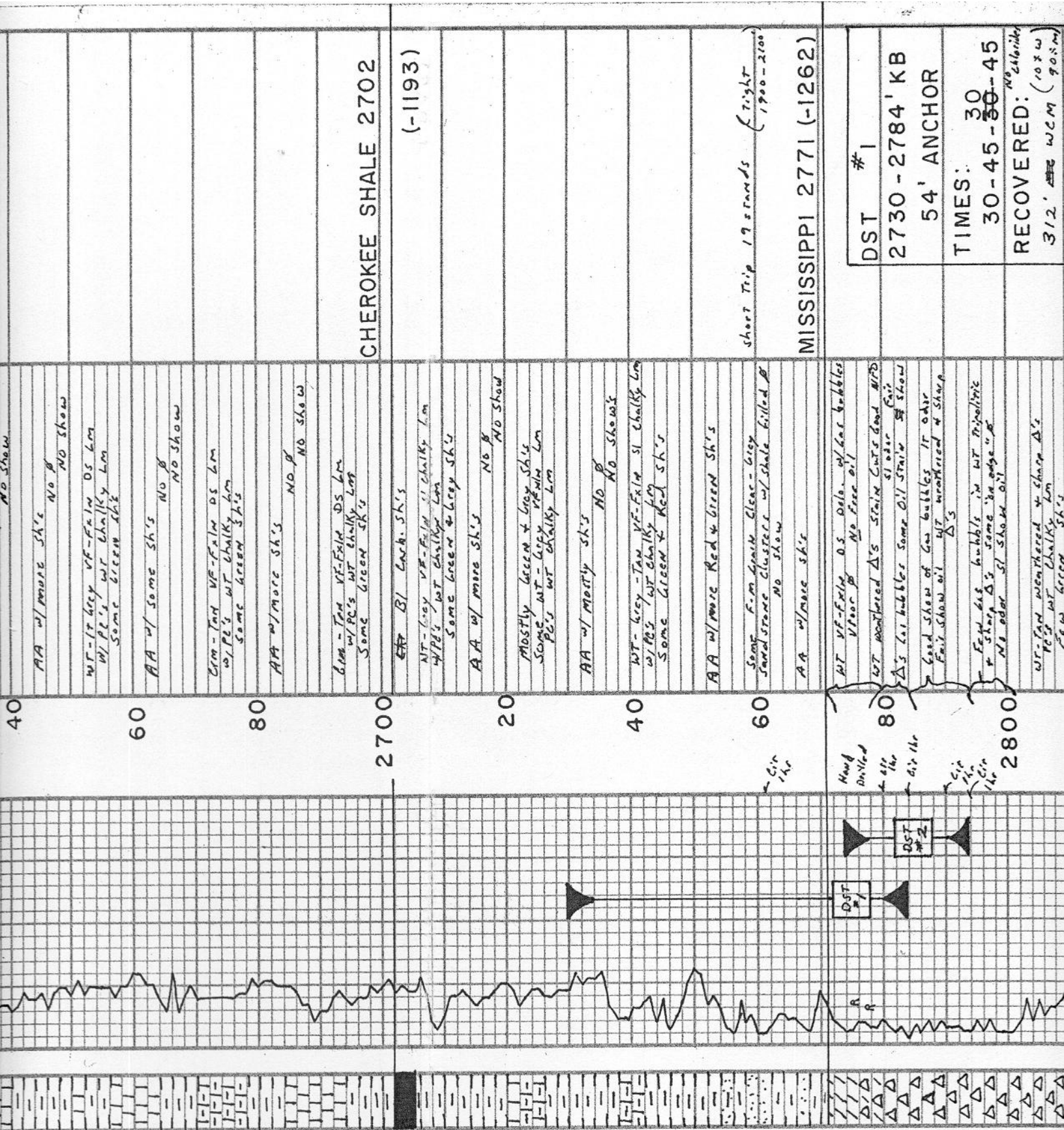
AA w/ more sh's

GM - Br VF-Fx LM DS LM
w/ some w/ chalky LM
FE w/ green sh's

AA w/ more sh's
NO ♂
NO SHOW

GM - Tan VF-Fx LM sl chalky LM
w/PE's w/ chalky LM
some green sh's

AA
NO ♂
NO SHOW



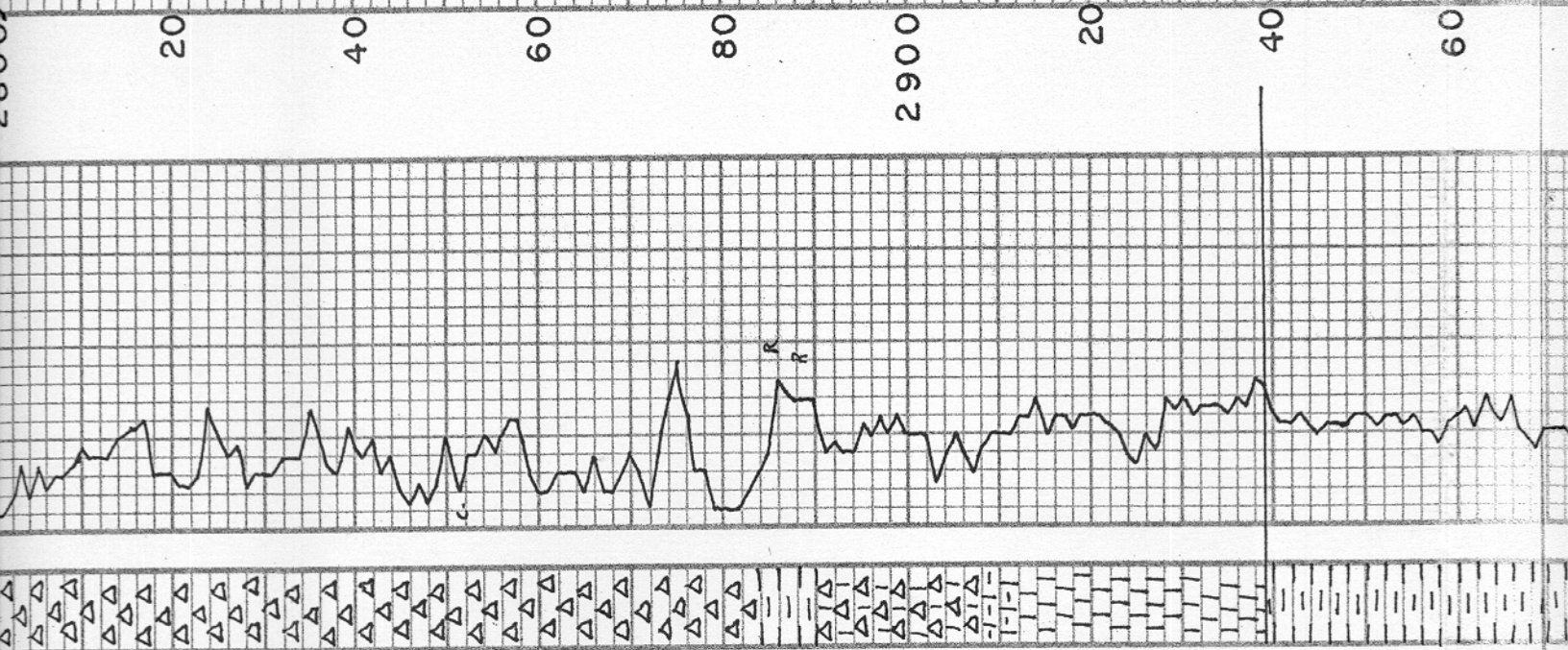
DST #1
2730 - 2784' KB
54' ANCHOR
TIMES: 30
30-45-50-45
RECOVERED: 312' WCM (90% W)

RECOVERED:
 312' WCM (10xw 905m)
 PRESSURES:
 FH 1381#
 FM 1331#
 JF 69-137#
 FF 108-150#
 JSIP 382A
 FSIP 383#

DST #2
 2774 - 2794' KB
 20' ANCHOR
 TIMES: 15
 30-45 - 30-45
 RECOVERED:
 225' Gas (94,000 ppm)
 335' MCSW
 PRESSURES:
 JH 1402#
 FH 1377#
 JF 32-121#
 FF 144-154#
 JSIP 615#
 FSIP 617#

WT-Tan weathered + sharp Δ's
 FC's WT Chalky Lm
 Few Green Sh's
 AA w/ few sh's NO SHOW
 WT-Tan weathered + sharp Δ's
 Fair NO SHOW
 Clear-Tan weathered + sharp Δ's
 FC's Sh's Some B NO SHOW
 Clear-WT weathered Δ's
 Some B NO SHOW
 WT-Tan weathered + sharp Δ's
 FC's Sh's
 Clear-WT-Tan Tripolitic + sharp Δ's
 FC's WT Chalky Lm
 FEW Sh's
 AA w/ some Green Sh's
 NO SHOW
 Clear-WT-Tan Tripolitic + sharp Δ's
 FC's WT Chalky Lm
 Some Green Sh's
 AA w/ some Lim-Grey v. Fine DS Lm
 NO B NO SHOW
 WT-Grey v. Fine DS Lm
 w/ FC's WT Chalky Lm
 FEW Sh's
 AA w/ more Sh's NO B NO SHOW
 Lim-Grey v. Fine DS Lm
 w/ FC's WT Chalky Lm
 Some Green Sh's
 AA w/ NO B NO SHOW
 Mostly Green + Grey Sh's
 FC's WT-Tan v. Fine DS Lm
 NO B NO SHOW
 AA
 w/ NO B NO SHOW
 AA w/ mostly Sh's NO B NO SHOW

KINDERHOOK SHALE 2939
 (-1430)



AA w/ mostly sh's No ♂ No show

Green + grey sh's

80

AA w/ No ♂ No show

Green + grey sh's No ♂ No show

3000

AA w/ No ♂ No show

AA w/ No ♂ No show

20

Green + grey sh's

AA w/ No ♂ No show

40

Mostly Green + grey sh's
w/ some wt. - If grey sh's chalky bn
No ♂ No show

Back to mostly Green + grey sh's

60

AA w/ No ♂ No show

Mostly Green + grey sh's
some Red sh's

80

AA w/ No ♂ No show

AA No ♂ No show

3100

HUNTON 3105 (-1596)

PC's wt-TAM VFXM 05 Dale
mostly Green + grey sh's

Mostly Green + Red sh's

20

AA w/ mostly sh's No ♂ No show



NO SHOW

Mostly green + grey sh's
NO ♂
NO SHOW

Mostly green + grey sh's
Some grey siltstone
NO ♂
NO SHOW

AA w/ NO ♂
NO SHOW

Mostly sh's + siltstone
NO ♂
NO SHOW

AA w/ NO ♂
NO SHOW

Mostly green + grey sh's
Some grey siltstone
NO ♂
NO SHOW

Green + grey sh's
Lots of soft sh
NO ♂
NO SHOW

AA w/ NO ♂
NO SHOW

Soft green + grey sh's
NO ♂
NO SHOW

Tan - Br F-Mxin Dolo.
Some Poor Interbed ♂
NO SHOW

tan - Br F-Mxin Dolo.
NO SHOW

WT. Tan - DK Br F-Mxin Dolo.
Some wt chalky Lm
Some green sh's
NO SHOW

Tan - DK Br Mxin Dolo.
PLT wt chalky Lm
Some green sh's
NO SHOW

Tan - Br Mxin Dolo.
w/ some green sh's
Fair ♂
NO SHOW

AA w/ less sh's
Poor-Fair ♂
NO SHOW

Tan - Br F-Mxin Dolomitic Lm
w/ FB's Br Mxin Dolomite
Few green sh's

AA w/ few sh's
NO ♂
NO SHOW

tan - Br F-Mxin Lm
w/ some wt chalky Lm
Few green sh's

VIOLA 3218 (-1709)

DST #3
3314-3334' KB
20' ANCHOR
TIMES: 30-45-30-45
RECOVERED: 10' Mud
PRESSURES: IH 1668 # FH 1600 #
IF 17-19 # FF 19-20 # ISIP 926 # FSIP 977 #

40

60

80

3200

20

40

60

80

air 1hr

air 1hr

air 1hr

v. some wt. chalky LM
few green sh's

WT - Br. VC-Film sl. dolomitic LM
w/ some wt. chalky LM
few green sh's

AA w/more sh's No. 8 NO SHOW

Fair - Good show of free oil sl odor
Clear-BL

Weak - Fair show of free oil "Tite"

Good clusters ~~NEB~~ NO OIL

Some sl residue (No. 8)
Sample came later than reported
"Tite" Clear sl cluster w/ good show oil
Fair odor. 3334-60 KB

Clear - Tan P-56 Tite sl clusters
w/ sl show free oil NO odor

Mostly green & grey sh's NO. 8
NO SHOW

Mostly green & grey sh's
Some "Tite" sl clusters NO. 8
NO SHOW

Mostly green & grey sh's
Few clear - grey sl clusters NO. 8

Clear - Tan P-56 w/ F. S. F. S.
sl clusters Black residue
some barren # NO SHOW

Mostly green - grey sh's
Few clear - Tan "Tite" sl clusters
NO SHOW

SIMPSON SAND 3325
(-1816)

ROTARY TOTAL DEPTH
3393 (-1884)

DST #4

3314-3344' KB

30' ANCHOR

TIMES:

45-45-45-45

RECOVERED:

496' M.C.S.W. w/show of oil

PRESSURES:

IH 1657 #
FH 1624 #

IF 21-170 #

FF 172-234 #

ISSIP 1202 #
FSTP 1183

3300

20

40

60

80

3400

20

40

60

