

REFERENCE WELL FOR STRUCTURE
 GORE OIL CO. STAHL TRUST #1
 132D' ENL, 33D' FEL, SEC 11-T9S-R18W, ROCKS CTY, KS

FORMATION	DEPTH	LOG TOP	LOG BOT	POSITION
TOPEKA	2981	2978	-911	+12
HEEBNER	3194	3191	-1124	+12
TORONTO	3216	3212	-1145	+11
LANSING	3236	3233	-1166	+10
ARK	3457	3454	-1387	+9
ARBuckle	3495	3495	-1428	+25
TOTAL DEPTH	3590	3588	-1521	-8
ANHYDRITE - TOP	1411	1408	+659	-15
ANHYDRITE - BASE	1446	1446	+621	-19

FORMATION TOPS & STRUCTURE POSITION

PRODUCTION

ELEVATION 2067
 KB 2059

TRIOBITE TESTING INC.
 PIONEER ENERGY SER.
 DIL
 CNL-COL
 MEL

GORE OIL CO.

SIMPSON TRUST #1

CEGAR LINKS
 600' ENL 50D' FWL

SEC 12 T9S R18W

ROCKS
 KANSAS

MUDCO/SERVICE MUD
 MAVERICK DRUG CO. RIG #108
 23 APRIL 14 TO 2 MAY 14

LOGS: 3590', 3588'

NO	SIZE	TYPE	DEPTH CUT	FEET	HOURS	PIPE STRAPS: @ 3280' : 0.83 SHORT @ 263' : 1/2" @ 3280' : 3/4" @ 3590' : 10"	DEVIATION SURVEYS:	DATE	NO	TYPE	DEPTH	FEET	HOURS									
1	3 1/8"	RR	263	263	3 1/4				4	4-26	263'	2768	2768	DRLG	8.6	52	6.8	15	11.0	6/20	1.5#	2200
5	4-27	CTCH	3280	3280	9.2	49	6.8	14	10.0	7/20	1#	3800										
6	4-28	DST#2	3315	3315	9.2	52	7.0	17	9.0	6/23	4#	4000										
7	4-29	DRLG	3365	3365	9.1	48	8.8	15	8.5	6/21	4#	5500										
8	4-30	DRLG	3460	3460	9.0	52	8.0	20	10.0	9/12	4#	5500										
9	5-1	DST#6	3506	3506	9.1	50	10.8	21	10.0	11/19	4#	6100										
10	5-2	DST#8	3548	3548	9.1	56	10.8	29	9.0	11/32	4#	4100										
4-23	MIRT																					

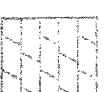
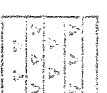
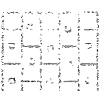
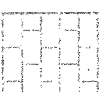
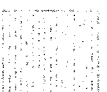
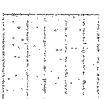
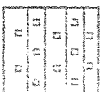
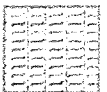
* SEE DETAIL LOG FOR DST'S # 7 & 8

LEGEND

- Polymers
- Asphalts
- Salt
- Sandstone
- Chalk
- Case Sh
- Limestone
- Caliche
- Chert
- Dolomite



LEGEND



Anhydrite

Salt

Sandstone

Shale

Gss. ls

Limestone

Chalk

Gss

Dolomite

DRILLING TIME IN MINUTES

PER FOOT

Rate of Penetration Decreases

5' 10' 15' 20' 25'

DEPTH

LITHOLOGY
SAMPLE DESCRIPTIONS

OF SECTIONS

REMARKS

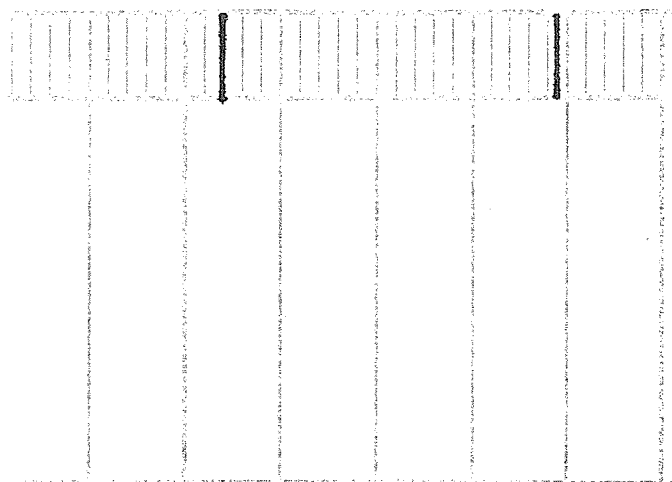
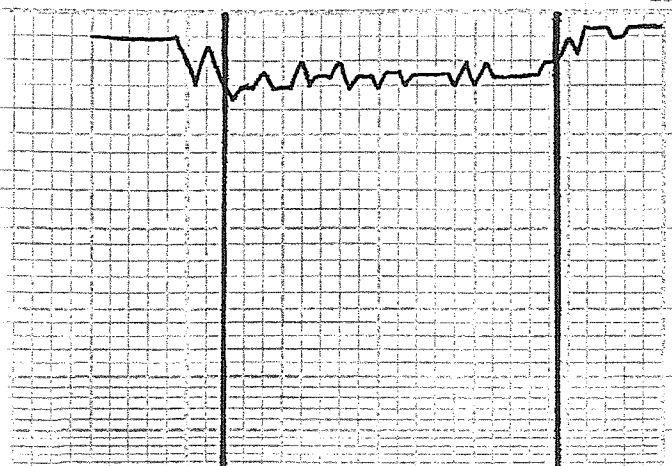
1400

ANHYDRITE - TOP
1411 (+656)

1450

ANHYDRITE - BASE
1446 (+621)

LOG 7710

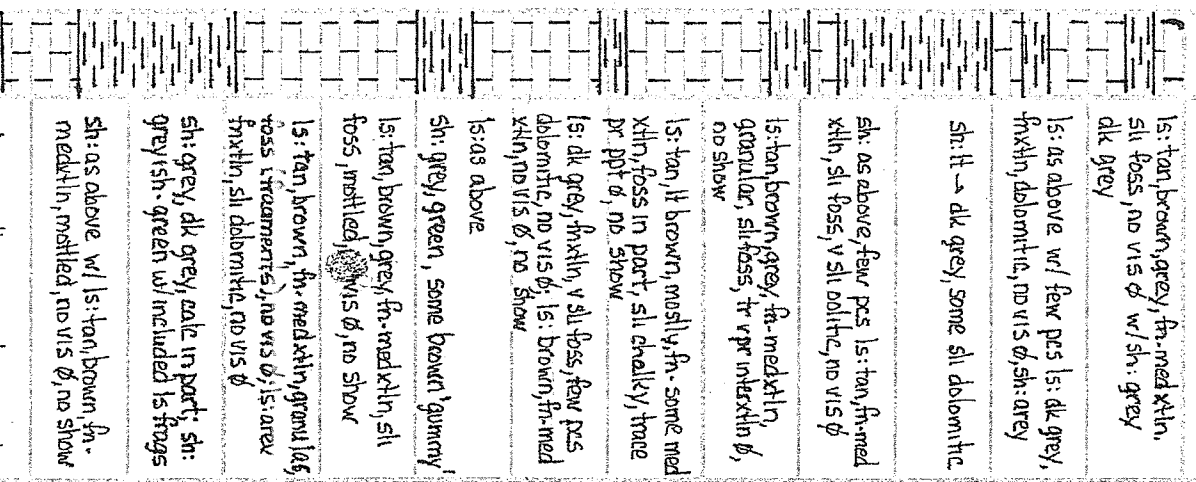
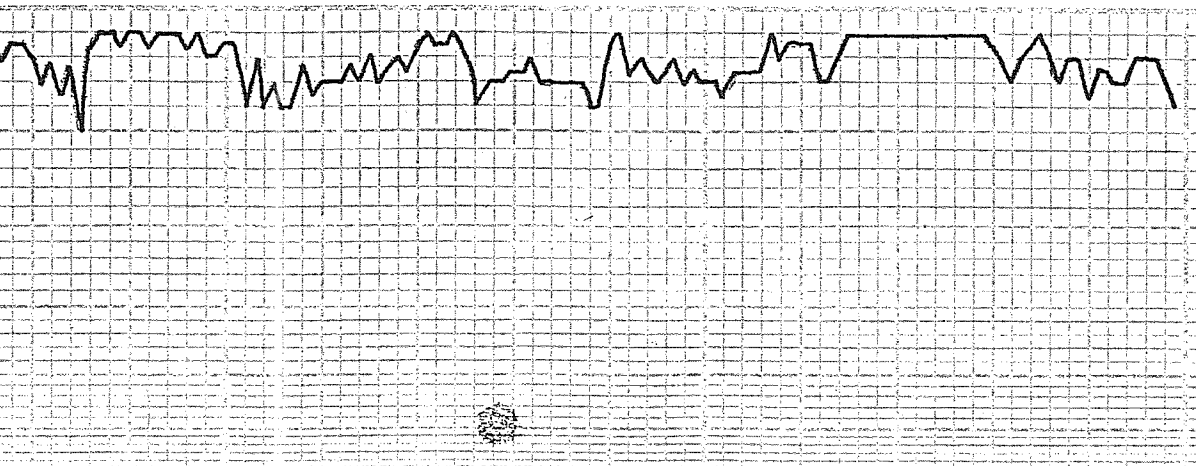


2800

2850

2900

10
20



ls: tan, brown, grey, fr. med xln. sil foss, no vis ϕ w/sh: grey dk grey

ls: as above w/ few pcs ls: dk grey, frxln, dolomitic, no vis ϕ , sh: grey

sh: lt \rightarrow dk grey, some sil dolomitic

sh: as above, few pcs ls: tan, fr. med xln, sil foss, v sil dolitic, no vis ϕ

ls: tan, brown, grey, fr. med xln, granular, sil foss, tr v pr interxln ϕ , no show

ls: tan, lt brown, mostly fr. some med xln, foss in part, sil chalky, trace pr ppt ϕ , no show

ls: dk grey, frxln, v sil foss, few pcs dolomitic, no vis ϕ , ls: brown, fr. med xln, no vis ϕ , no show

ls: as above

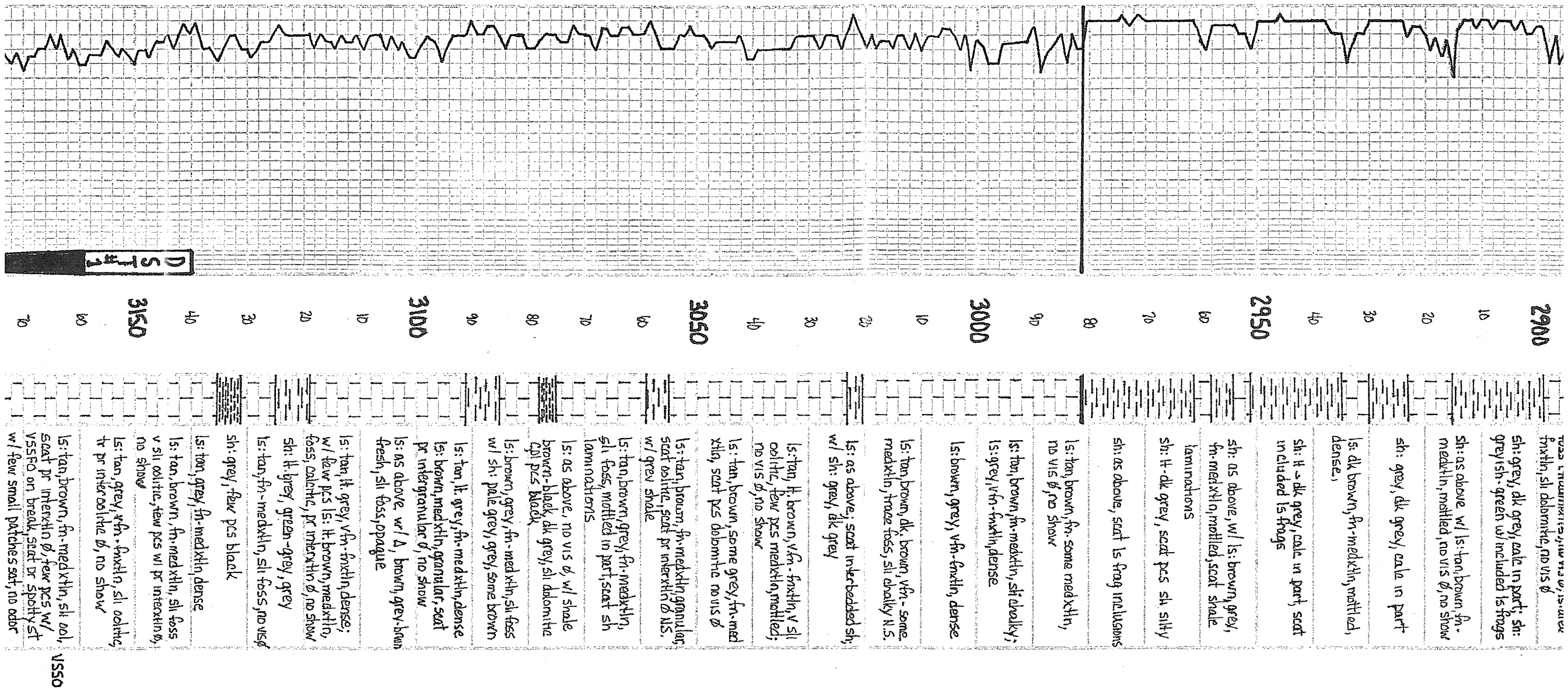
sh: grey, green, some brown 'gummy'

ls: tan, brown, grey, fr. med xln, sil foss, mottled, no vis ϕ , no show

ls: tan, brown, fr. med xln, granular, trace fragments, no vis ϕ , ls: arex frxln, sil dolomitic, no vis ϕ

sh: grey, dk grey, calc in part; sh: greyish-green w/ included ls frags

sh: as above w/ ls: tan, brown, fr. med xln, mottled, no vis ϕ , no show



sh: as above w/ ls: tan, brown, fn- med xln, mottled, no vis of fossils

sh: grey, dk grey, calc in part; sh: greyish-green w/ included ls frags

sh: as above w/ ls: tan, brown, fn- med xln, mottled, no vis of no show

sh: grey, dk grey, calc in part

ls: dk brown, fn- med xln, mottled, dense,

sh: lt - dk grey, calc in part, scat included ls frags

sh: as above, w/ ls: brown, grey, fn- med xln, mottled, scat shale laminations

sh: lt - dk grey, scat pcs sh silty

sh: as above, scat ls frag inclusions

ls: tan, brown, fn- some med xln, no vis of, no show

ls: tan, brown, fn- med xln, sh: shaly; ls: grey, vfn- fn xln, dense

ls: brown, grey, vfn- fn xln, dense

ls: tan, brown, dk, brown, vfn- some med xln, trace foss, sh: shaly N.S.

ls: as above; scat interbedded sh, w/ sh: grey, dk grey

ls: tan, lt. brown, vfn- fn xln, v sil calcic, few pcs med xln, mottled, no vis of, no show

ls: tan, brown, some grey, fn- med xln, scat pcs dolomite no vis of

ls: tan, brown, fn- med xln, granular, scat calcic, scat pr inter xln of N.S. w/ grey shale

ls: tan, brown, grey, fn- med xln, sh: foss, mottled in part, scat sh laminations

ls: as above, no vis of, w/ shale brown-black dk grey, sh: dolomite cgl pcs black

ls: brown, grey, fn- med xln, sh: foss w/ sh: pale grey, grey, some brown

ls: tan, lt. grey, fn- med xln, dense

ls: brown, med xln, granular, scat pr intergranular of, no show

ls: as above w/ Δ, brown, grey-brown fresh, sh: foss, opaque

ls: tan, lt. grey, vfn- fn xln, dense; w/ few pcs ls: lt. brown, med xln, foss, calcic, pr inter xln of, no show

sh: lt. grey, green-grey, grey

ls: tan, fn- med xln, sh: foss, no vis of

sh: grey, few pcs black

ls: tan, grey, fn- med xln, dense

ls: tan, brown, fn- med xln, sh: foss v sil calcic, few pcs w/ pr inter xln of, no show

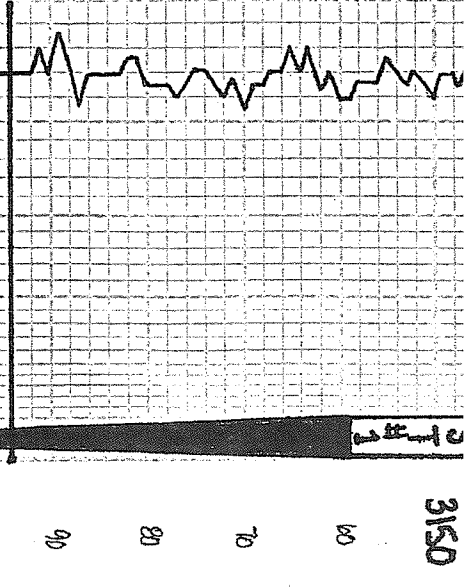
ls: tan, grey, vfn- fn xln, sh: calcic, tr pr inter calcic of, no show

ls: tan, brown, fn- med xln, sh: dol, scat pr inter xln of, few pcs w/ vss fo on break, scat pr spotty st w/ few small patches scat, no odor

TOPEKA
2981 (-914)

DST #1
(3159 - 3280)
3d - 6d - 6d - 9d
LEP: B08 IN 1d
LSIP: SURF BLWD DIED IN 12"
FEP: B08 IN 8"
FSIP: SURF BLWD BLDG TO 4"
RECOVERED:
32d GIP
5d CO
125' MCD
(20% MUD, 80% OIL)
125' O & WCM
(25% OIL, 15% MUD, 60% MUD)
63' SGMW

VSSO



DST # 1

3150
3200
3250
3300
3350
3400
3450

CFSE@00
CFSE@52
CFSE@30
CFSE@15
CFSE@02
CFSE@80

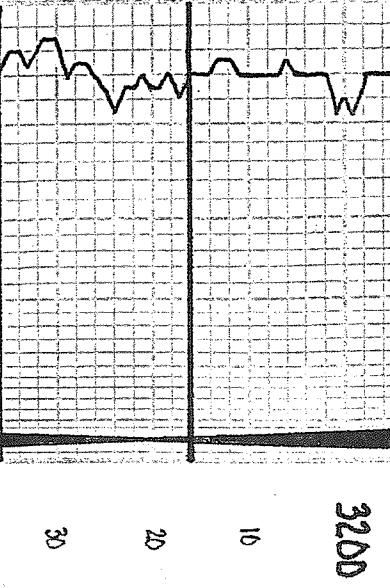
DST # 2

DST # 3

DST # 4

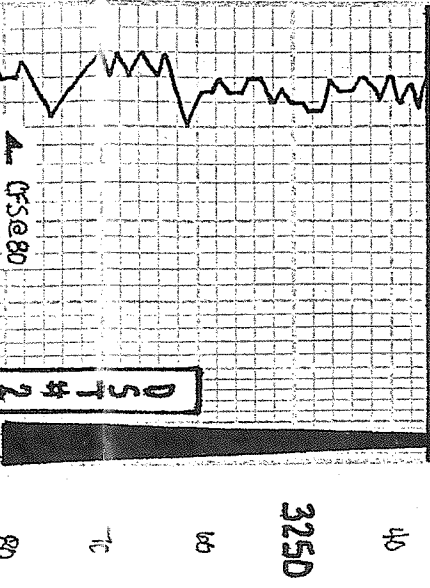
DST # 5

50' CD
125' MCD
(20% MUD, 80% OIL)
125' D & WCM
(25% OIL, 15% ANTI, 50% MUD)
63' SGC MW
(5% OIL, 40% MUD, 55% WATER)
GHL: 33000 PPM SYS: 2200 PPM
HSP: 1560# - 1522#
FP: 29# - 87# / 94# - 162#
SIP: 1018# - 996#
GHT: 105' F



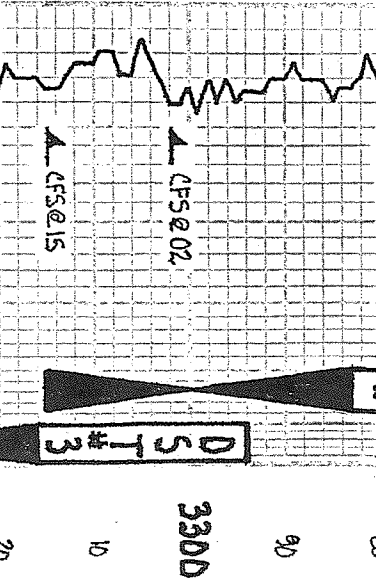
no show
ls: tan, grey, wh - finxlin, sil oolitic tr pr interoolitic b, no show
ls: tan, brown, fr - med xlin, sil dol, scat pr interolith of few pcs w/ VSSFO on break, scat dr spotty st w/ few small patches scat, no odor
ls: tan, lt. grey, fr - med xlin, floss, no vis of, no show
ls: off wh, tan, fr - med xlin, granular, dr intergranular & ppt of few pcs w/ S5FO on break, scat spotty pr st & scat, no odor
sh: dk grey, few pcs black
ls: tan, yln - finxlin, dense
sh: lt. grey, grey, diabomite imp pt
sh: as above
ls: off wh, finxlin, finely oolitic, v scat pr interoolitic of, cp 1 pcs w/ few minute ppt's FD on break, pr spotty st & scat, no odor
sh: pale - dk grey, green, few pcs brown
ls: tan, lt brown, finxlin, scat pr ppt vuggy of, few pcs w/ VSSFO, pr - 2 pcs w/ fr st & pr patchy scat, no odor
ls: tan, lt. grey, yln - some med xlin, sil floss, no vis of, no show
ls: as above w/ sh: lt grey, green, grey, grey, scat included ls frags

HEEBNER
3194 (-1127)
TORONTO
3216 (-1149)
LANSING
3236 (-1169)



ls: tan, lt brown, fr - med xlin, sil floss, dr - fr ppt & vuggy (some large) por, S5FO, pr - fr st & scat, of odor
ls: tan, brown fr - med xlin, dense no vis of; ls: wh, finxlin, chalky
sh: grey
ls: wh, tan, finxlin, oolitic, most w/ cemented (oolitic), scat pr interoolitic por, S5FO mostly dr spotty & pr patchy scat, 2-3 pcs, fraly fr of & fr - gd st, fr scat, fr - fr odor
sh: grey, greenish, grey w/ ls: brown, fr - med xlin, dense
ls: tan, lt grey, finxlin, mostly dense cp 1 pcs w/ few isolated vugs, rare ppt fo, trace pr edge st, no odor
ls: wh, lt grey, finxlin, scat vpr - dr ppt & vuggy of, scat large vugs (isolated line st in vugs, rare ppt fo, pr patchy lt brown st & scat, no odor; fr amount Δ tan, lt grey, fresh, opaque
ls: tan - finxlin, scat pr vry fine ppt of, scat pr vuggy of, VSSFO, pr - cp 1 pcs fr patches med brwn st, fr scat, fr odor
ls: as above dec in show w/ wh, finxlin chalky ls, & tan, fresh, op Δ
sh: grey, greyish-green, some brown
ls: off-wh, finxlin, sil floss, mostly dense, scat pcs w/ vpr - pr vuggy & interolith of, tr vpr floss of, pr spotty st, cp 1 pcs w/ pr scat, rare ppt fo, no odor
ls: off-wh, tan, finxlin, dense, no vis of, chalky in part
sh: mostly grey, few pcs brown, grn
ls: tan, brown, finxlin, finely granular, even fr fine ppt & vuggy of, sil on, shreen on w/ other break, line oil coated of, NSFD, lt - med even brown st w/ ga to full scat, fr odor
sh: lt - med grey
ls: off-wh, tan, lt grey, fr - some med xlin, scat pr - fr in interolith & vuggy (isolated?) of, rare ppt, FD, scat pr - fr st, scat pr scat, no odor
ls: grey, dk grey, few pcs black

DST # 2
(3283 - 3315)
30" - 60" - 60" - 90"
IPE: SUPE BLW BLD TO 2 1/2"
FP: 1" BLW DEC TO 1/2"
RECOVERED:
45' SGL MW
(10% GAS 35% MUD 55% OIL)
HSP: 1626# - 1595#
FP: 12# - 24# / 18# - 32#
SIP: 980# - 972#
BHT: 97' F

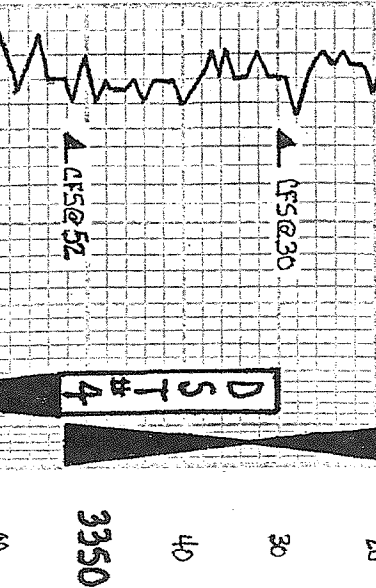


DST # 3

DST # 4

DST # 5

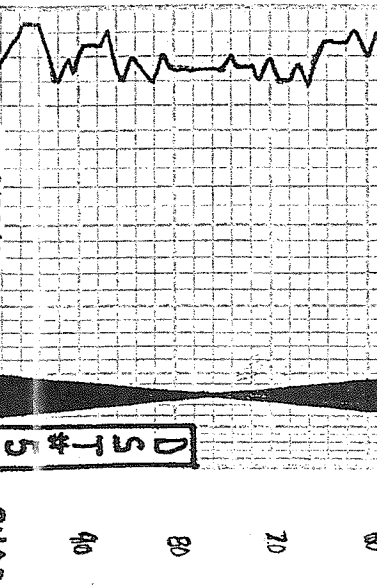
DST # 3
(3316 - 3352)
30" - 60" - 60" - 90"
IPE: BOB IN 26"
LSIP: NO BLOW
FP: BOB IN 31"
FSIP: NO BLOW
RECOVERED:
340' MCW
(15% MUD 85% WATER)
GHL: 57000 PPM SYS: 4000 PPM
HSP: 1653# - 1587#
FP: 16-74# / 76# - 171#
SIP: 968# - 954#
BHT: 102' F



DST # 4

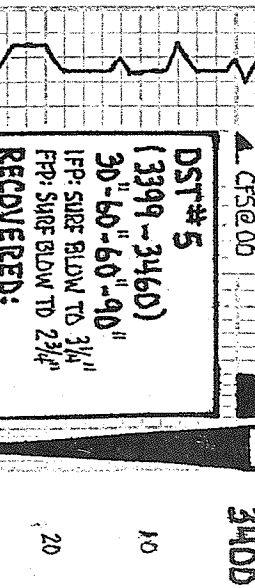
DST # 5

DST # 4
(3353 - 3400)
30" - 60" - 60" - 90"
IPE: BOB IN 16"
LSIP: NO BLOW
FP: BOB IN 20"
FSIP: NO BLOW
RECOVERED:
440' MCW
(25% MUD 75% WATER)
GHL: 72500 PPM SYS: 4000 PPM
HSP: 1686# - 1643#
FP: 23# - 99# / 102# - 229#
SIP: 1001# - 979#
BHT: 102' F



DST # 5

DST # 5
(3399 - 3460)
30" - 60" - 60" - 90"
IPE: SUPE BLW TO 3 1/4"
FP: SUPE BLW TO 2 3/4"
RECOVERED:



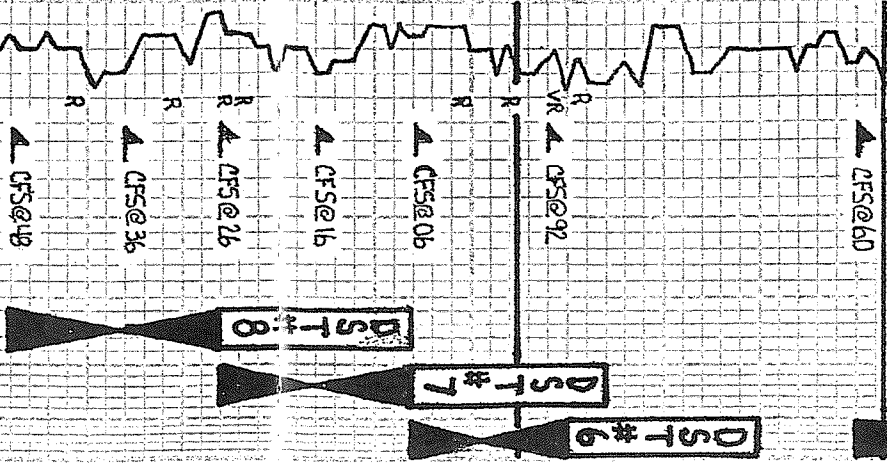
DST # 5

DST # 5
(3399 - 3460)
30" - 60" - 60" - 90"
IPE: SUPE BLW TO 3 1/4"
FP: SUPE BLW TO 2 3/4"
RECOVERED:

DST # 5
 (3399 - 3460)
 30" - 60" - 60" - 90"
 IFP: SURF BLDW TO 3/4"
 FFP: SURF BLDW TO 2 3/4"
RECOVERED:
 3' CD
 3' SD & WCM
 (15% DL, 5% WTR, 80% MUD)
 62' DRILLED MUD
 HSP: 1723# - 1679#
 FP: 15-39# / 41# - 47#
 SIP: 984# - 964#
 BHT: 915° F

LTD 3588 (-1521)
RTD 3590 (-1523)

3400 3450 3500 3550



sh: green, dk grey, few pcs black
 ls: grey, dk grey, few pcs black
 ls: wh, tan, fine, dense w/ sh: grey
 ls: off wh, lt grey, tan, fr. med xln, sli. foss, pr. fr. vuggy, pr. interxln, pr. few pcs fr. sfd, scat pr. fr. st, pr. fr. patchy scat. # odor?
 sh: dk grey, black
 ls: off wh, lt grey, finxln, fr. vpr interxln, most dense, rare fr. pr. shain, rta scat, NSFO, nodar
 sh: grey, green, some brown, few pcs rust
 ls: grey, green, brown, purple sh, hard, calc in part
 ls: grey, micro - finxln, dense
 sh: grey, dk grey
 ls: wh, finxln, sli chalky in part, few pcs w/ imbedded sand grains, sli. grey, micoxln, dense
 sh: grey, green, brown, few pcs silty - sli sandy
 dol: off wh, tan, med xln, rhombic fr. interxln, sfd, sfd, sly, gd hvly dk br w/ blk st, full scat, gd odor. CFS@ 06
 dol: as above, w/ dol: tan, lt grey, fr. med xln, scat pr. w/ few xln of sfd, scat pr. fr. st w pr scat, gd odor @ 16
 dol: wh, finxln, pr interxln & vuggy, sfd, pcs fr. vuggy, sfd, pr. st w patchy scat, fr. odor
 dol: brown, tan, finxln, dense, no vis, no show
 dol: wh, med xln, app fr. interxln, s. few pcs sfd, fr. st w scat, fr. odor, scat ad oil residue
 ls: tan, lt grey, fr. med xln, scat pr. fr. interxln, sfd oil, NSO
 dol: wh, mostly med xln, scat pr. fr. interxln & vuggy, VSS dd oil residue, no show. live oil, sh: green, grey
 ls: wh, tan, lt grey, fr. med xln, few imbedded sand grains, scat pr. fr. interxln, no show
 dol: as above, no show, w/ grey, green sh.

440 MCW
 (25% MUD 75% WTR)
 CHL: 17500 PPM SLS: 4000 PPM
 HSP: 1686# - 1643#
 FP: 23-99# / 102# - 229#
 SIP: 1001# - 979#
 BHT: 102° F

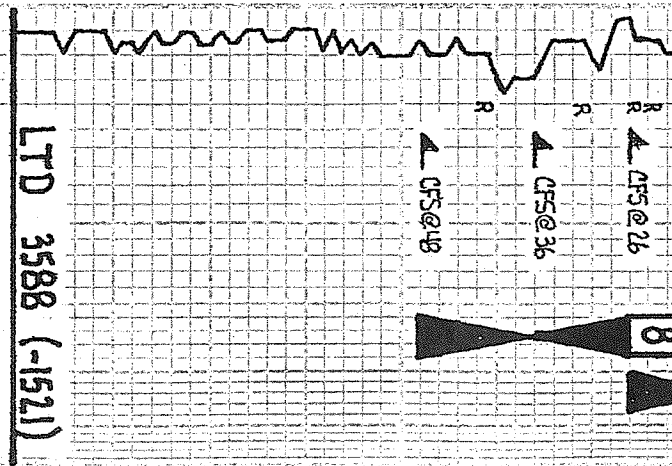
BKC
3457 (-1390)

ARBUCLE
3495 (-1428)

DST # 6
 (3490 - 3506)
 30" - 60" - 60" - 90"
 IFP: SURF BLDW BLDG TO 1"
 FFP: SURF BLDW THRU OUT
RECOVERED:
 3' HVY CD
 52' SOCM
 (5% DL, 95% MUD)
 HSP: 1772# - 1684#
 FP: 14-26# / 26# - 28#
 SIP: 1063# - 1036#
 BHT: 99° F

DST # 7
 (3506 - 3526)
 30" - 60" - 60" - 90"
 IFP: SURF BLDW BLDG TO 1 1/4"
 FFP: SURF BLDW TO 1 1/4"
RECOVERED:
 4' CD - (GR 20°)
 31' SD & WCM
 (5% DL, 20% WTR, 75% MUD)
 30' DRILLED MUD
 (20% WTR, 80% MUD)
 CHL: 20500 PPM SLS: 6100 PPM
 HSP: 1781# - 1697#
 FP: 17-30# / 32# - 43#
 SIP: 1090# - 1070#
 BHT: 99° F

DST # 8
 (3526 - 3540)
 30" - 60" - 60" - 90"
 IFP: BDB IN 29"
 IFF: NO BLDW
 FFP: BDB IN 30"
 FSI: NO BLDW
RECOVERED:
 70' MUD
 250' MCW
 (45% MUD 55% WTR)



DRILLING TIME Minutes/Foot	DEPTH	LITHOLOGY	DEPTH	
5"	10"	15"	20"	25"
Rate of Penetration Decreases				

dol: wh med xlin, pr scat fr inter-
 xlin of base - hvy, gd dk st w/gd
 sat, gd odor
 S-550
 dol: wh, fin xlin, pr inter xlin & vug
 of - cd, pcs fr vuggy of, S550, pr st
 w patchy sat, fr odor
 dol: brown, tan, fin xlin, dense, no
 vis of, no show
 dol: wh, med xlin, app fr inter-
 xlin of, S - few pcs F50, fr st w/
 sat, fr odor, scat add oil residue
 ls: tan, lt grey, fr med xlin, scat br
 - fr fr inter xlin of S550 oil N50
 dol: wh, mostly med xlin scat
 pr - fr inter xlin & vuggy of, v55 add
 oil residue, no show live oil; sh:
 green, grey
 ls: wh, tan, lt grey, fr med xlin, few
 imbedded sand grains, scat pr -
 fr inter xlin of, no show
 dol: as above, no show, w/ grey,
 green sh.

IFC: SURF BLOW THRU OUT
 FFP: SURF BLOW THRU OUT
RECOVERED:
 3' Hvy CD
 52' SOCM
 (5% OIL 95% MUD)
 HSP: 1772# - 1684#
 FP: 14#20# / 26#28#
 SIP: 1063# - 1036#
 BHT: 99° F

DST #7
 (35DB - 3526)
 30" - 60" - 60" - 90"
 IFP: SURF BLOW BLDG TD 1 1/4"
 FFP: SURF BLOW BLDG TD 1 1/4"
RECOVERED:
 4' LD - (Gr 20°)
 31' 50¢ WCM
 (5% OIL 20% WTR 75% MUD)
 30' OIL SPOTTED WCM
 (20% WTR, 80% MUD)
 CHL: 2000 PPM SYS: 6100 PPM
 HSP: 1781# - 1697#
 FP: 17#30# / 32#43#
 SIP: 1090# - 1070#
 BHT: 99° F

DST #8
 (3526 - 3540)
 30" - 60" - 60" - 90"
 IFP: BDB IN 29"
 I SIP: NO BLDW
 FFP: BDB IN 30"
 F SIP: NO BLDW
RECOVERED:
 70' MUD
 250' MCM
 (45% MUD 55% WTR)
 CHL: 28000 PPM SYS: 4000 PPM
 HSP: 1786# - 1733#
 FP: 17#76# / 79#160#
 SIP: 1063# - 1027#
 BHT: 103° F

(ALL SHOWS)
REMARKS