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GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

COMPANY SHAKESPEARE OIL CO., INC
LEASE ZERR TRUST #1-24
FIELD WILDCAT
LOCATION 1110' FSL & 2251' FWL
SEC 24 TWSP 13S RGE 31W
COUNTY GOVE STATE KANSAS

CONTRACTOR WW DRILLING RIG #2
SPUD 5-18-2012 COMP 5-25-2012
RTD 4700 LTD 4707
MUD UP 3306 TYPE MUD CHEMICAL

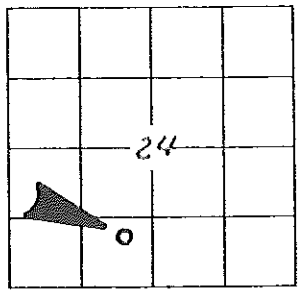
ELEVATIONS
KB 2839
DF
GL 2834
Measurements Are All From KB 2839

CASING
SURFACE 8 5/8 @ 253'
PRODUCTION none

ELECTRICAL SURVEYS
Weatherford: CND, DI, MICRO & SONIC

SAMPLES SAVED FROM 3700 TO RTD
DRILLING TIME KEPT FROM 3700 TO RTD
SAMPLES EXAMINED FROM 3700 TO RTD
GEOLOGICAL SUPERVISION FROM 3700 TO RTD
GEOLOGIST ON WELL STEVE DAVIS

FORMATION TOPS	LOG	SAMPLES
B/ANHYDRITE	2324+515	2321
HEEBNER	3869-1030	3865
LANSING	3915-1076	3907
MUNCIE CREEK	4068-1229	4064
STARK	4154-1315	4149
BKC	4229-1390	4225
FORT SCOTT	4412-1573	4407
CHEROKEE SH	4438-1599	4433
JOHNSON ZONE	4483-1644	4478
MISSISSIPPI	4525-1686	4520



API#: 15-063-21991

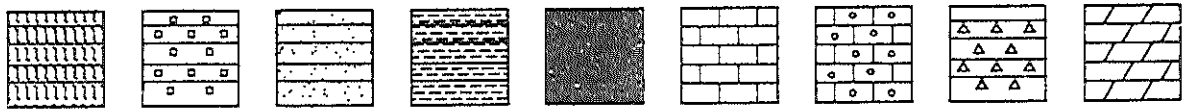
DAILY PENETRATION

DATE	DEPTH
5-18-12	spud
5-19	1030
5-20	2960
5-21	3740
5-22	4142
5-23	4390
5-24	4530
5-25	4700

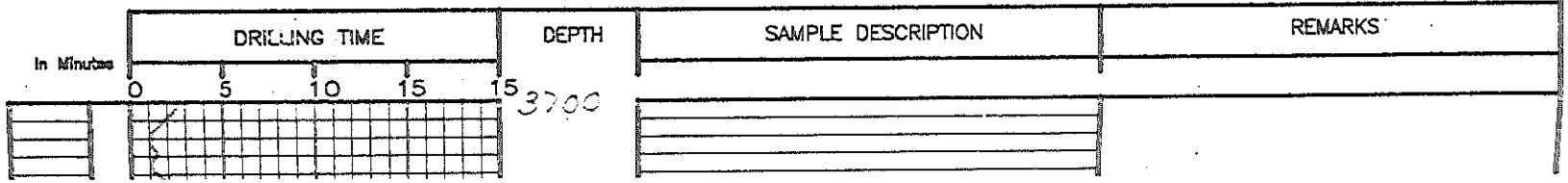
BIT RECORD

NO	SIZE	MAKE	TYPE	DEPTH OUT	FEET	HOURS
1	12¼	SM	RT	253	253	2¼
2	7⅞	SM	PDC	3305	3052	34¼
3	7⅞	SM	F27	4143	838	24¾
4	7⅞	SM	F27 RR	4700	557	28¾

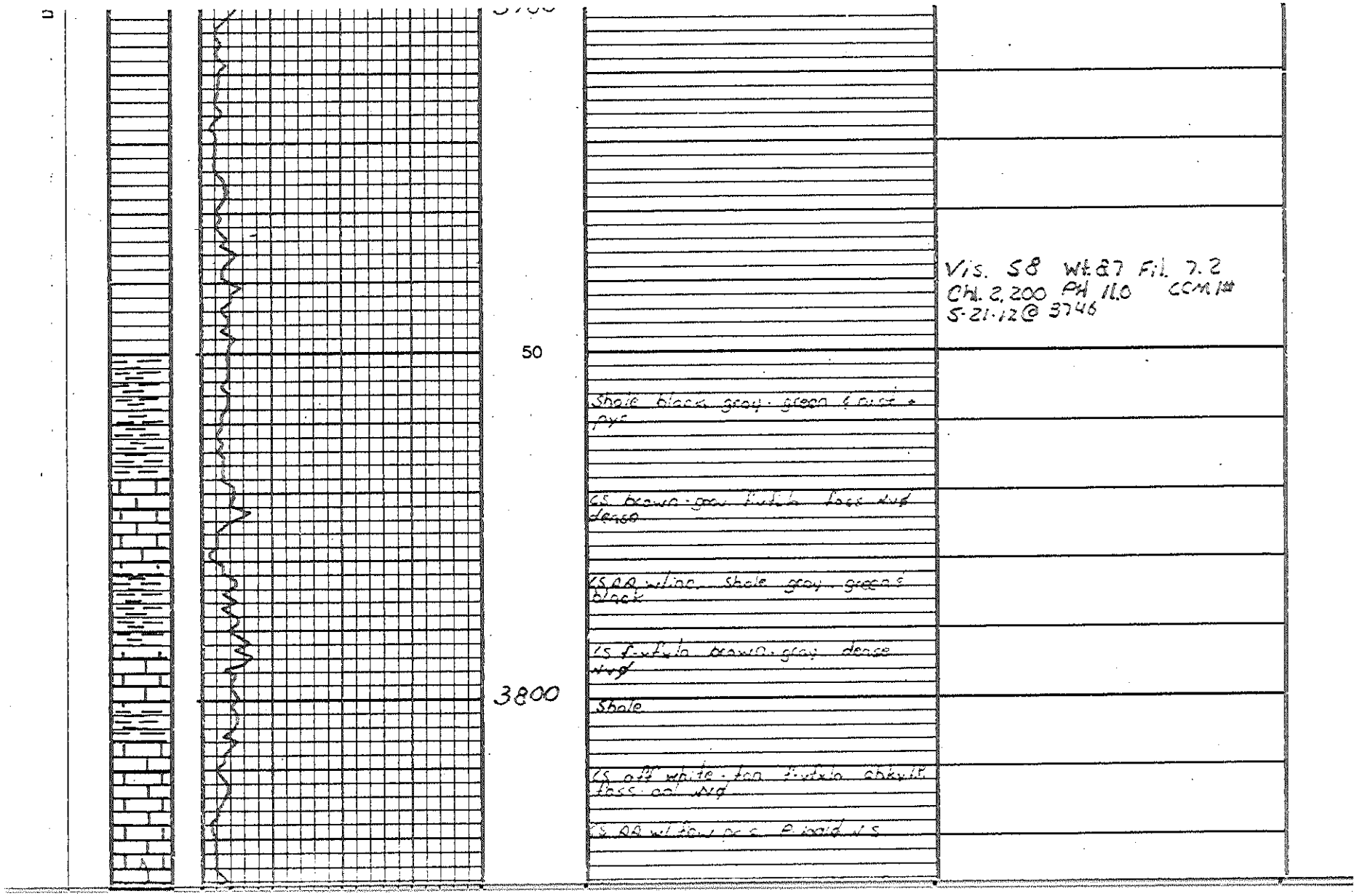
LEGEND

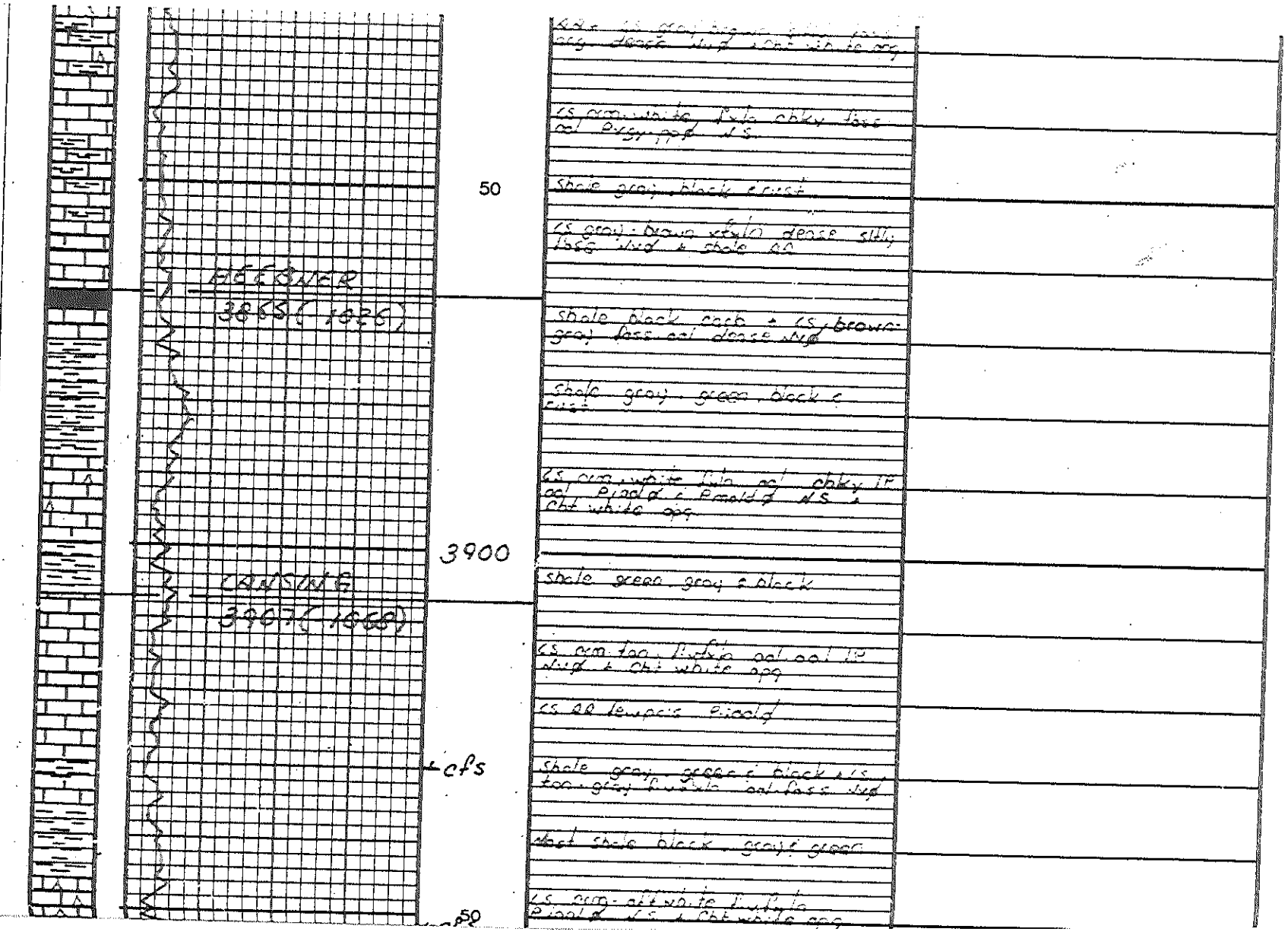


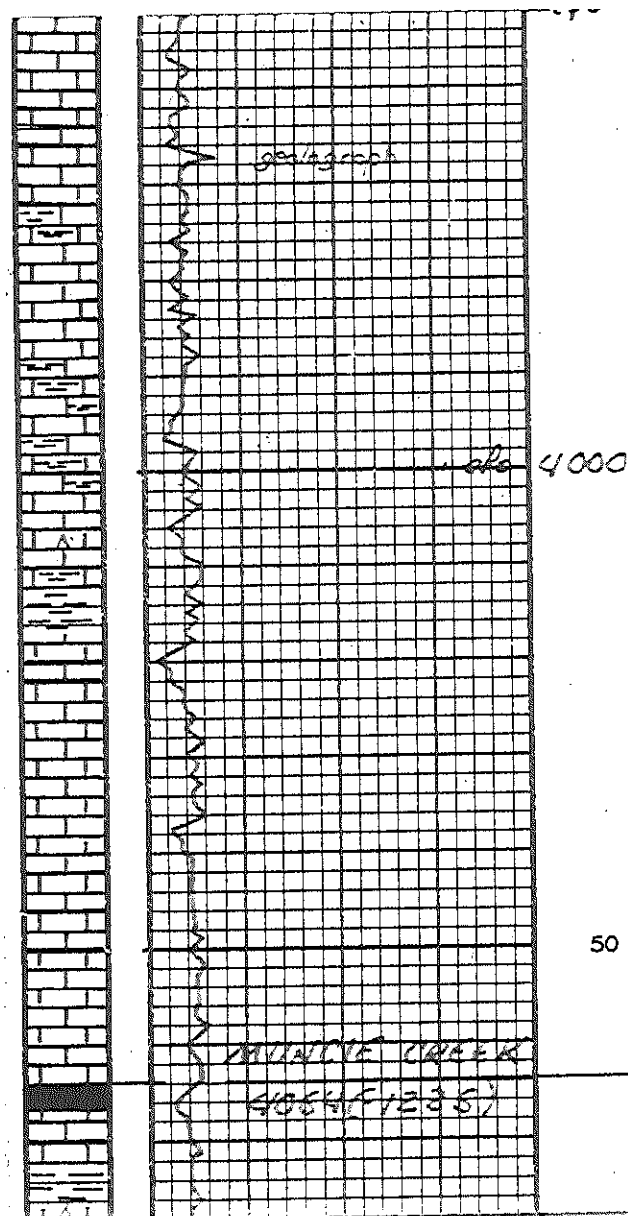
SCALE " = 100'



DAVIS-5


50
3800
Shale black gray green & occ pyr
Vis. 58 Wt. 8.7 Fil. 7.2
Ch. 2,200 PH 11.0 CCM 1#
5-21-12 @ 3746


50
3900
cfs
50



LS crm-white fxln cky fxlnd
LS + Cht gray & white opq.

LS crm-white f-vfxln sltly foss
chky LP slvd + Shale black-
gray

LS tan-crm-white fxln chky LP
slvd + LS tan vfxl, ool LP dense
slvd

LS crm-white fxln ool chky LP
Pinold LS + Cht white opq.

LS crm-white f-vfxln sltly ool
rare P ool mold Ø N.S.

Inc Shale rust, green & black
+ Cht brown trans!

LS crm-white fxln ool Pool
Pool mold Ø LS

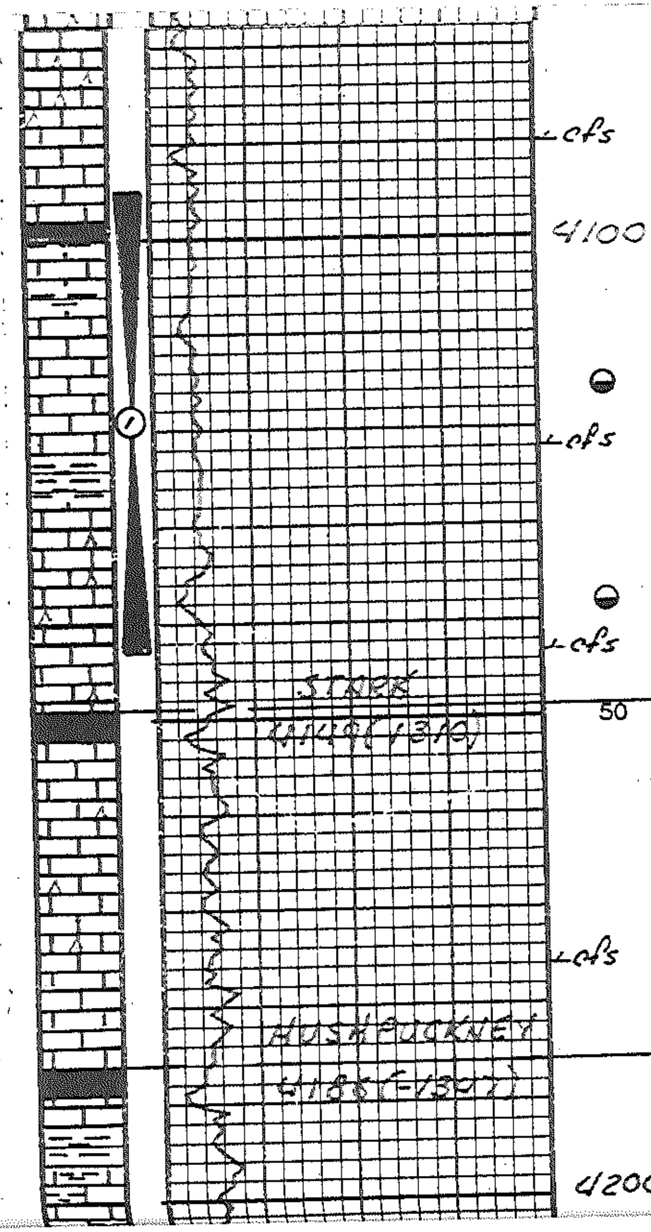
LS tan-gray vfxln sltly foss
dense + Abnt shale rust green
& black ? slough

LS tan-gray fxln chky slvd
+ Abnt Shale AA

LS crm-white fxln chky slvd +
LS tan-gray vfxln sltly foss
dense slvd & Shale black,
gray, green & rust

Shale black carb-sub carb +
LS gray-tan fxln sltly foss-ool
slvd

Shale gray-black + LS brown-
gray foss-ool slvd



Cht gray - amber transl (blood) + LS tan - gray vf xln silty foss dnd + Cht AA

LS tan - gray vf xln silty foss ool dense dnd

Shale black carb, sub carb

Shale gray, green & black + LS gray - brown micro xln dense dnd

Most LS gray - tan vf xln silty foss - ool chky - dense dnd, few pcs LS crm - white fxln silty foss chky, LP. Pinpt φ - Pvgy φ, SSFO, few gas bubb. satd lt stn, sptd - wk fluor, v-odor.

LS crm - tan f-vf xln silty foss w/ Cht gray opq - transl

LS crm - tan fxln ool & ool moldic, few pcs SSFO, rare satd stn & fluor, v-odor + Cht gray opq - transl

Shale black carb

LS dk brn - gray vf micro xln dnd dense

LS crm - gray fxln foss - ool, Pinpt φ & Pvgy φ, NSFO, dist. N-odor & Cht gray opq.

LS gray - tan vf xln silty foss chky - chty & Cht gray opq.

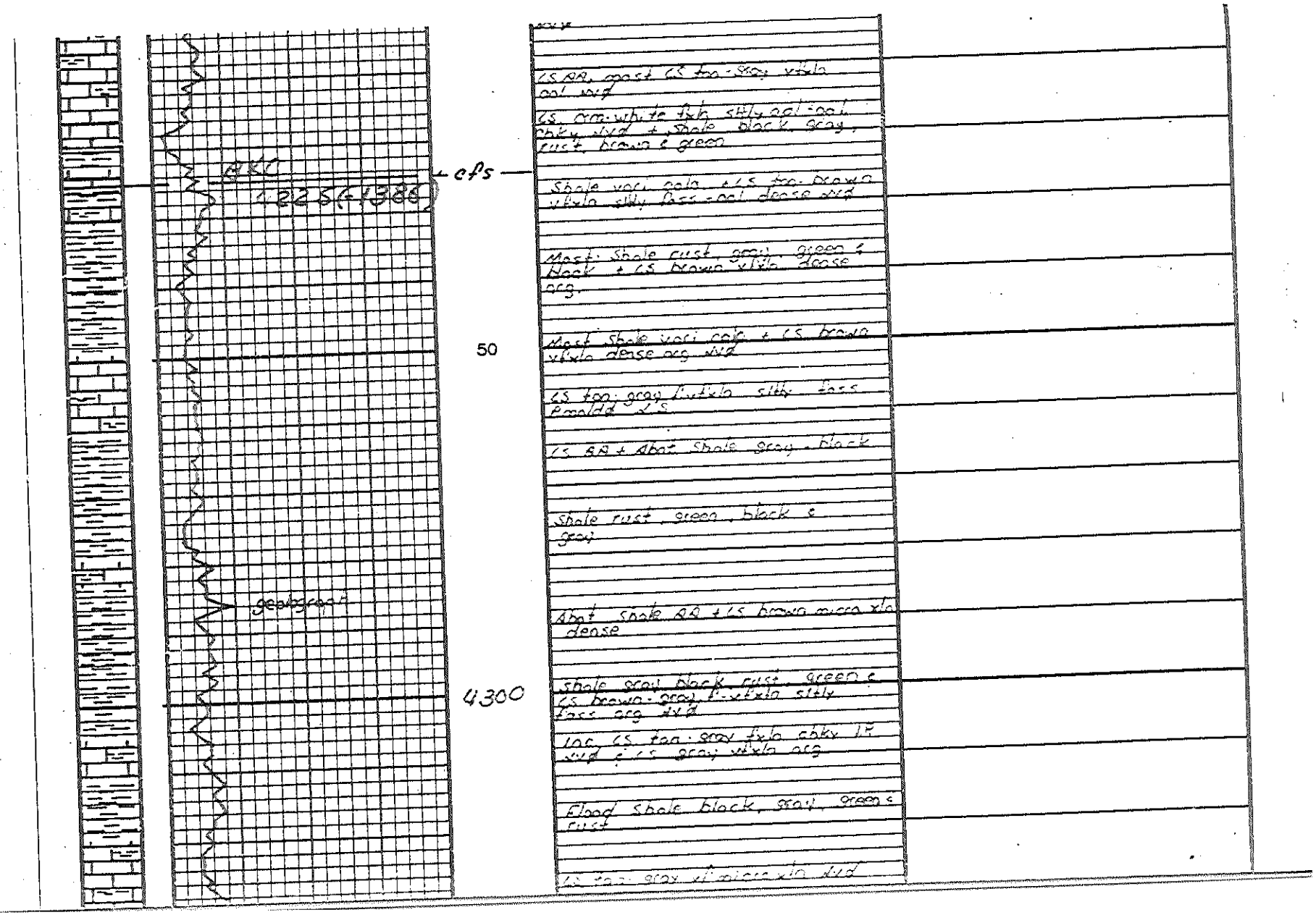
LS tan - gray vf micro xln dense dnd & Cht gray opq.

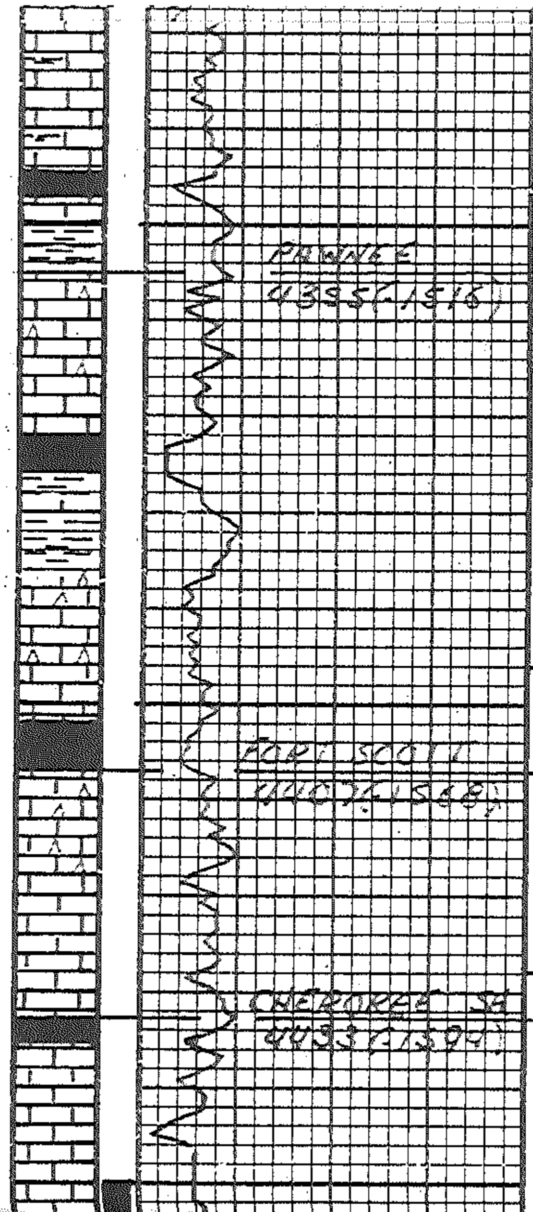
Shale black carb & LS dk brn micro xln dense

Shale black, gray, green & rust + LS tan - brown micro xln dense & LS brown - gray fxln ocs. silty foss

DST #1 4095 - 4143
15 - 30 - 30 - 45
BLOW:
I.F. Surface
F.F. No blow
RECOVERY:
5' M w/oil spots
I.H.P. 2020#
I.F.P. 24 - 24#
I.S.I.P. 864#
F.F.P. 25 - 28#
F.S.I.P. 1042#
F.H.P. 2029# B.H.T. 118°F

Vis. 55 Wt. 9.0 Fil. 7.5
Chl. 3,000 PH 10.5 CCM# 0
5-22-12 @ 4143


cfs
4300
50



50

cfs

cfs
4400

cfs

50

LS RR & LS gray-tan f-xln slty foss, ool, chky - dense, dud

Shale black carb, gray, green & rust

LS tan-brown vf-xln dense dud & cht gray-tan, transl. opq

LS gray-tan f-xln slty, foss-ool rare fugy? LS nodes

Shale black carb

Shale gray, black, green & rust

LS gray-white f-xln, slty ool chky dud LS nodes & Cht gray-tan opq

Shale black carb

LS dk brn & gray micro xln dense dud

LS gray-brown vf-micro xln slty foss dense dud & Cht gray-white opq & amber transl

LS tan-brown micro xln ool dense dud & Cht AA

Shale black carb

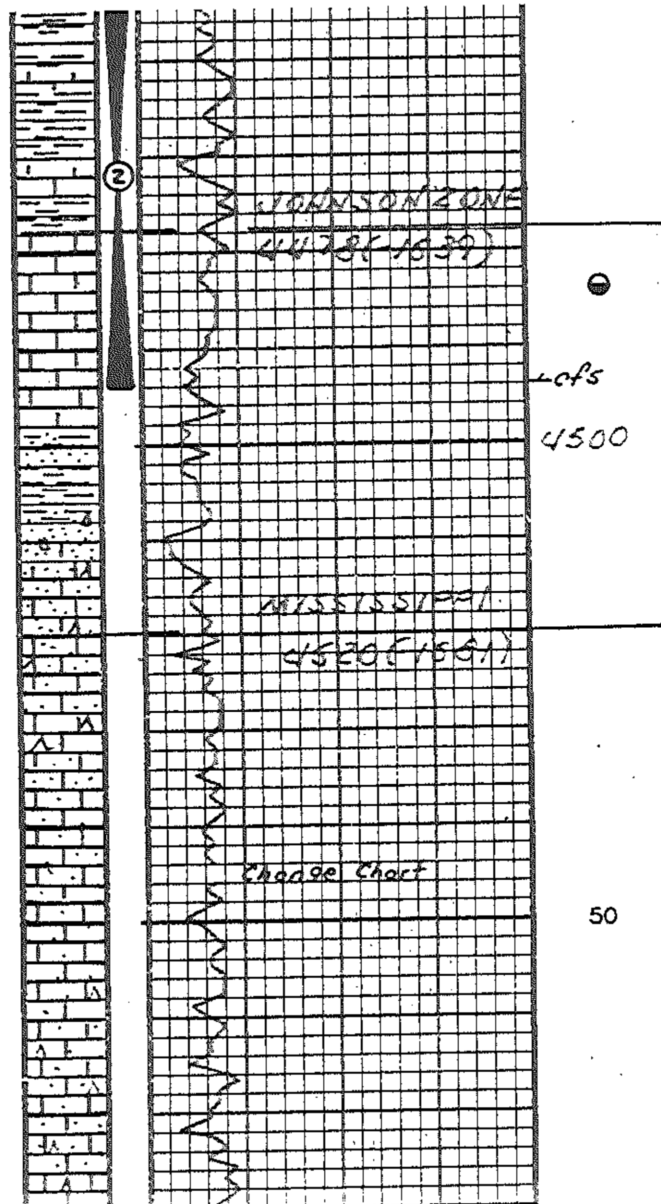
LS gray-tan f-xln ool few ool-ic ool mold ø LS & Cht gray-amber transl-opq

LS gray-tan vf-xln foss-ool dense

Vis. 53 Wt 9.2

Vis. 49 Wt. 9.3 Fil. 8.0
Chl. 3,800 PH 10 CCM. 5#
5-23-12 @ 4400

DST #2 4450-4494
IS - 30 - 30 - 30



[illegible]

LS brown-gray xln-micro xln dense [illegible] + Shale black carb-subcarb

Abnt Shale black, gray, green & rust + LS brown-gray xln dense [illegible]

LS tan gray [illegible] silty foss, [illegible] SSFO [illegible] dk stn [illegible] [illegible]

Shale green, red, rust, black & gray + SS white clr qtz [illegible] sub rd mod-well sort [illegible] clus w/ black shale incl [illegible] LS w/ show from above

Abnt Shale rust red, gray & black + SS tan clr qtz [illegible] subrd-rd mod-well sort few clus w/ glauc & blk shale incl [illegible] [illegible] LS [illegible] + Cht pink trace

LS tan-off white [illegible] sdy chky [illegible] + SS & shale AA & Cht white weath + LS brown-tan [illegible] dolo [illegible] dense

LS cream-white [illegible] sdy chky [illegible] + SS gray [illegible] [illegible]

LS AA + LS tan-brown [illegible] dense [illegible]

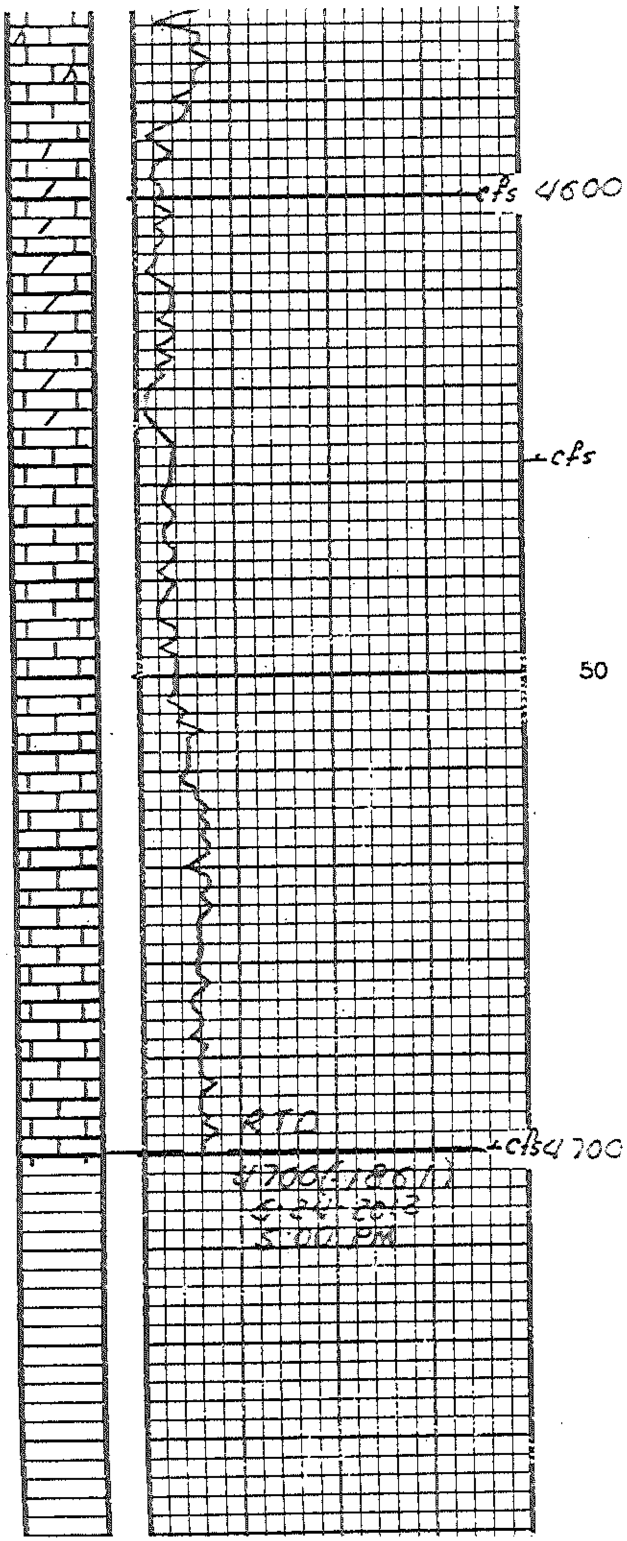
LS gray-white [illegible] sdy-silty ool [illegible]

LS tan-cream [illegible] dense [illegible] + LS tan-gray [illegible] sdy-ool [illegible] + Cht tan-white

[illegible]

BLOW:
I.F. Weak surface
F.F. No blow
RECOVERY: 5'M
I.H.P. 2222#
I.F.P. 22-26#
I.S.I.P. 1106#
F.F.P. 28-33#
F.S.I.P. 1028#
F.H.P. 2191# B.H.T. 124°F

Vis. 61 Wt. 9.3 Fil. 8.8
Chl. 4,000 PH10.5 LCM 1#
5-24-12 @ 4570



[illegible]

LS brown sltly dolo sdy P-l-ed LS

LS dolo gray-brown f-xln foss-ool P-ool-ed - P-l-ed LS dolo

LS AA, LS

LS dolo brown-gray f-xln sltly foss-ool P-mold-ed - P-l-ed

(Smpl's dolo luster, strong reac HCL)

LS dolo brown-gray vf-xln sltly foss-ool P-mold-ed & P-l-ed LS w-odor

LS brown-gray dolo vf-f-xln foss chty dense slid

LS brown-gray sltly foss-ool dense chty, sltly dolo, slid

LS sltly dolo AA + LS brown micro xln dense slid

LS brown-gray vf-xln ool-foss dense slid abdt shale gray-black, green & rust (slough)

LS tan-brown-gray vf-xln ool-foss dense slid

LS brown-gray f-xln ool-foss dense slid + LS brown micro xln dense abdt shale slough

Survey @ 4700', 1½°