

ROBERT STOLZLE

CONSULTING PETROLEUM GEOLOGIST

AAPG Cert # 3244

6211 S. 291st ST. W. Goddard, KS 67062 - 6240 (316) 784 - 3400

DRILLING TIME AND SAMPLE LOG

OPERATOR:	<u>Chesterfield Oil Co., Inc.</u>	ELEVATIONS
LEASE:	<u>Newton</u>	KB <u>1611'</u>
FIELD:	<u>Tiffes</u>	GL <u>1601</u>
LOCATION:	<u>700' N. 630' E. NW</u>	Mileage measurements are all from KB
SEC.:	<u>18</u>	TOP: <u>335</u> RANGE: <u>10W</u>
COUNTY:	<u>Barton</u>	STATE: <u>KS</u>
API NO.:	<u>15-007-23645</u>	
CONTRACTOR:	<u>Hank Drilling Co., Inc.</u>	
COMMENCED:	<u>Feb 11, 2011</u>	COMPLETED: <u>2/24/11</u>
ROTARY TOTAL DEPTH:	<u>5170'</u>	LOG TOTAL DEPTH: <u>5173'</u>
GEOSOCIAL SUPERVISION FROM:	<u>35000'</u>	to: <u>I.D.</u>
MUD UP DEPTH:	<u>3200'</u>	MUD TYPE: <u>Chemical Balance</u>
FORMATION	SAMPLE	LOG
	TOP	TOP
	SUBSEA	SUBSEA
		COMPARISON
Heebner Shale	3733 (-2122)	3734 (-2123)
Douglas Shale	3763 (-2152)	3766 (-2155)
Lakin Gray	3954 (-2343)	3954 (-2343)
Kansas City	4238 (-2617)	4226 (-2615)
Stearns	4388 (-2777)	4390 (-2679)
Barreeks Creek	4447 (-2836)	4446 (-2837)
Pawnee L.	4561 (-2950)	4563 (-2952)
Miss. Osage Fm.	4624 (-3012)	4627 (-3015)
Kindred Sh.	4846 (-3235)	4850 (-3239)
Chatanooga Sh.	4918 (-3307)	4918 (-3307)
Viola Fm.	4962 (-3351)	4960 (-3349)
Simsian Fm.	5051 (-3440)	5052 (-3441)
Simsian S.S.	5066 (-3455)	5068 (-3457)
Total Depth	5170	5173

Reference Well for Structural Comparison: Chesterfield 1/2 acre section 13-335-16
Comments and Recommendations: Recommended Miss. C. myrtill

DST # 1 ZONE: Misssissippian Sandstone
INTERVAL: 4936'-4965'

Pressures:	Time	Press.	RECOVERY
1. Initial Hydrostatic		2427 psi	105' gas
2. Initial Flow: Start	0	20 psi	20' gas cut
3. Initial Flow: End	30	23 psi	Mud/w/oil streaks
4. Initial Shut-in: End	45	89 psi	(15% gas)
5. Final Flow: Start	0	20 psi	
6. Final Flow: End	30	30 psi	5' gas cut
7. Final Shut-in: End	45	107 psi	long tube
8. Final Hydrostatic		2402 psi	deviation 1/4°

BHT: 116°F
Rw: _____

DST # 1
Interval: 4936-65'

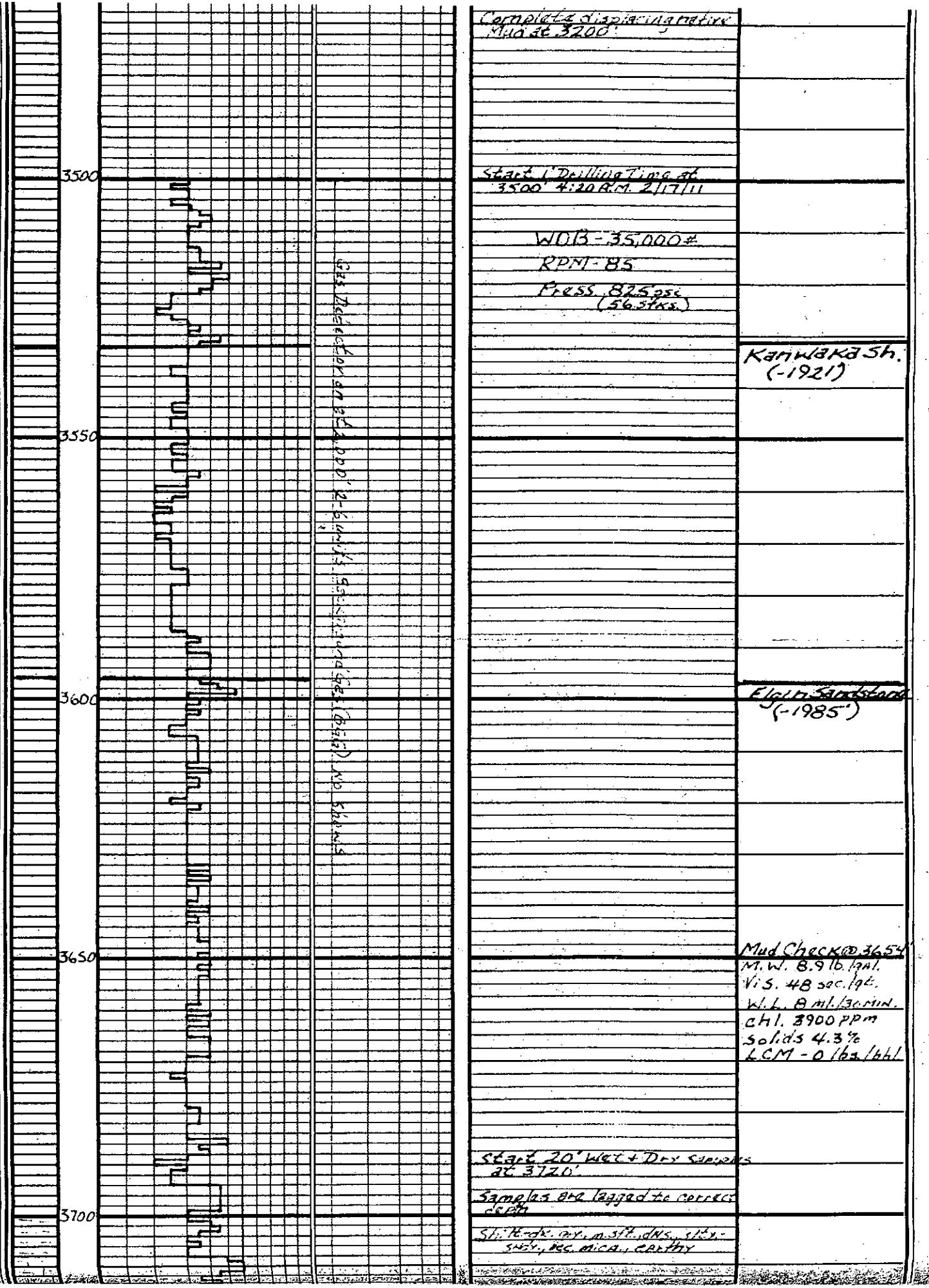
8167 Chart
Depth: 4937'

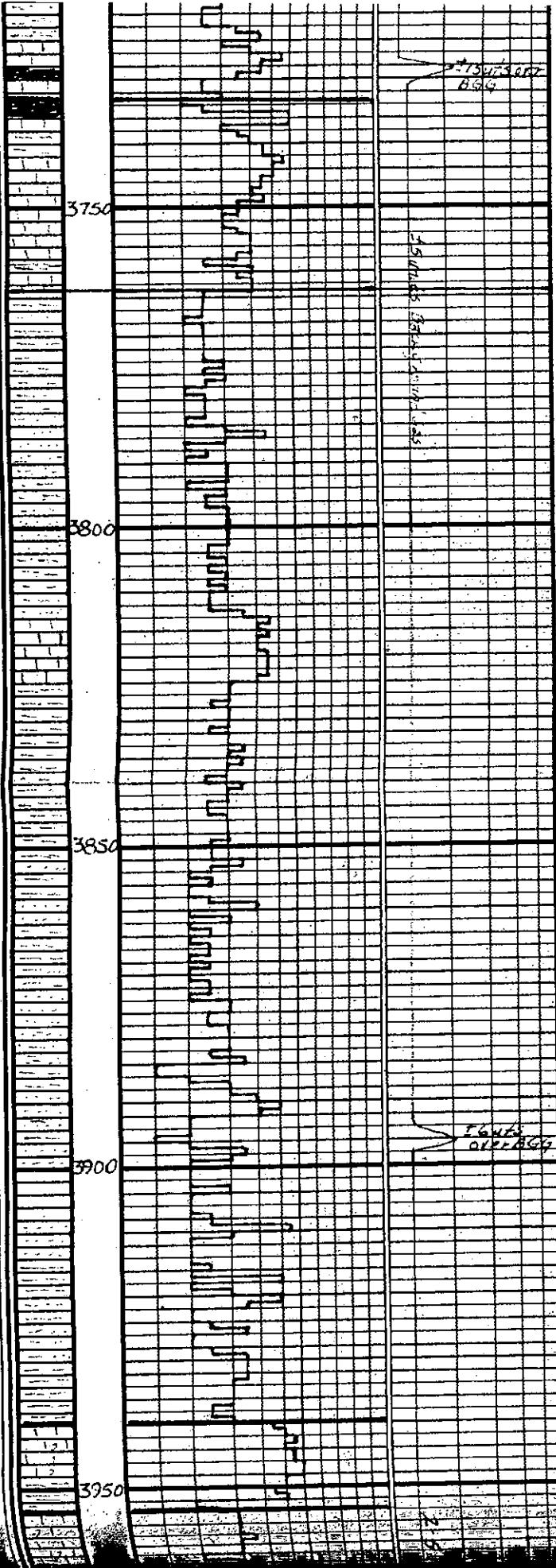
DST # _____
Interval: _____

Chart
Depth: _____

DST # _____ ZONE: _____
INTERVAL: _____

Pressures:	Time	Press.	RECOVERY
1. Initial Hydrostatic		psi	
2. Initial Flow: Start		psi	
3. Initial Flow: End		psi	
4. Initial Shut-in: End		psi	
5. Final Flow: Start		psi	





Sh. H.A. w/ sh. b. r. d. s. i.
CARB. earthy
Tr. Ls. tan - tan, hrd. d. s. vfg.
mch. mch. NONSPEC

Habner Sh.
(-2122')

Sh. A.A. ess. carb.
Ls. carb - tan - br. gry. hrd. d. s.
vfg. xln. tr. fess. NONSPEC

Ls. A.A. NONSPEC SH. A.H.
ss. gry. hrd. d. s. vfg. xln.
mch. w. sh. v. w. sh. NO NSPEC

Douglas Sh.
(-2152')

Sh. H. dr. gry. mch. - mch.
d. s. earthy, loc. sh. w. ch.
tr. ss. A.H. NO NSPEC
tr. Ls. A.H. NO NSPEC

Sh. A.A.
ss. wh - hairy, hrd. - mch. d. s.
vfg. vfg. mch. w. sh. mch.
w. ch. d. s. vfg. vfg. NO NSPEC

Sh. + ss. A.H. NO NSPEC
Ls. carb - tan - tan, hrd. d. s.
vfg. mch. vfg. tr. fess.
NO NSPEC

Sh. H. gry. - gry. mch. d. s. mch.
Ls. carb - tan - tan, hrd. d. s.
vfg. mch. vfg. tr. fess.
NO NSPEC

Sh. gry. - gry. mch. d. s. mch.
ss. wh - gry. mch. d. s. mch.
tr. A. hrd. - w. sh. d. s.
vfg. mch. vfg. vfg. vfg. NO NSPEC

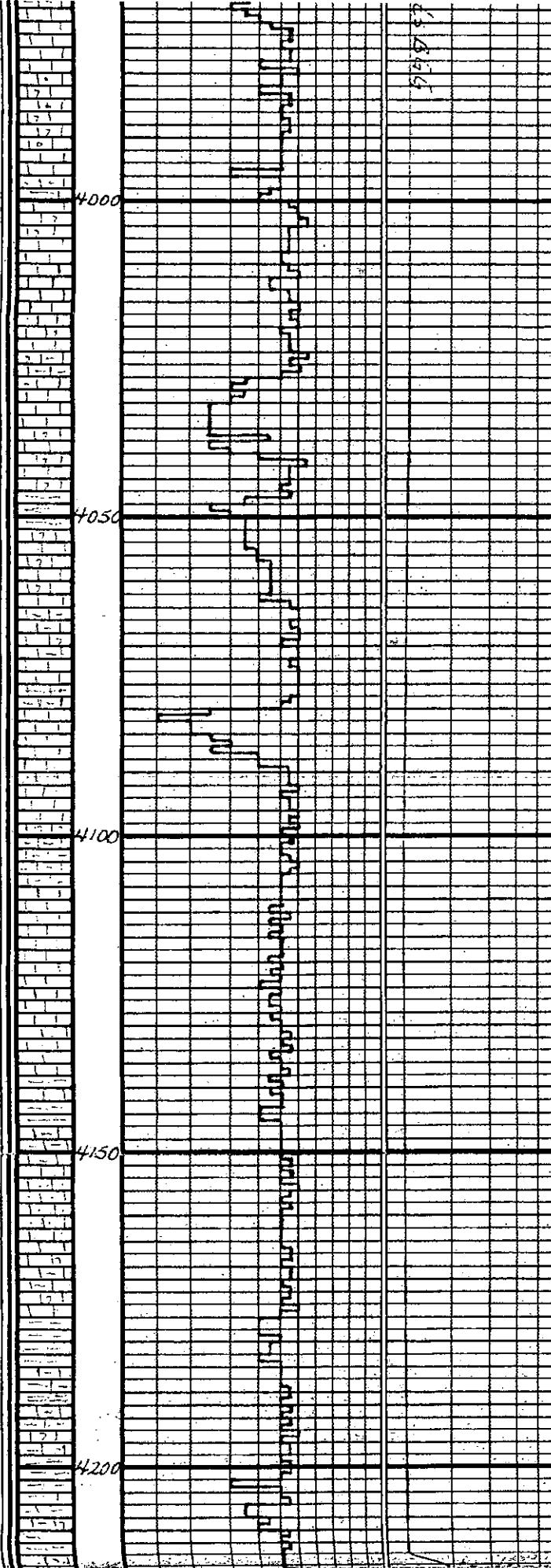
Sh. A.A. dr. - vfg. vfg. NO NSPEC
Sh. gry. - gry. mch. d. s. mch.
tr. tan - tan, hrd. d. s. mch.
NO NSPEC

Sh. wh - gry. hrd. - mch. d. s.
w. sh. w. ch. vfg. vfg.
mch. w. sh. d. s. vfg. vfg. dr.
NO VFG. NO NSPEC
Sh. gry. mch. d. s. mch. mch.
tr. l. tan - tan, hrd. d. s. mch.
vfg. mch. mch. tr. fess.
NO NSPEC

Sh. A.H. more fria. dr. & NSPEC
Ls. carb - tan, hrd. d. s. vfg. vfg.
vfg. fess. NO NSPEC
Sh. gry. mch. d. s. mch. back.

Jalan Ls.
(-2349')

Lansing Group
(-2349')



Ls. cream - tan, brd - m. shly dls., VFG -
min. occ. m. shly, brd.
fr. foss. occ. wld. p. plant
dark. Ø NSFOC

Ls. cream, red - m. shly dls., VFG -
min. occ. m. shly, brd.
foss. Ø NONNSFOC
V. fine grained sample

Ls. cream - tan - m. shly dls., VFG -
min. occ. m. shly, brd.
foss. Ø NSFOC

Mud Check @ 403

M.W. 9.25

V.S. 45

W.L. 8.4

ch. 4900

Sols 6.9

LCM. 0

Ls. cream - tan, shly, chky - brd.
dls., VFG - min. occ. foss. im.
brd. Na 6.0 NSFOC
foss. chky, gray, m. shly, brd.
dark.

Ls. cream - tan brd - m. shly dls., VFG -
min. occ. brd. shly, m. shly, brd.
foss. chky, gray, m. shly, brd. Ø NSFOC

Ls. cream - tan, shly, chky - brd.
dls., VFG - min. occ. foss. im.
sh. shly. Ø NSFOC
ch. ch. gray - brd. brd. Ø NSFOC

Ls. cream - tan, shly, chky - brd.
dls., VFG - min. occ. foss. im.
foss. brd. sh. shly. Ø NSFOC

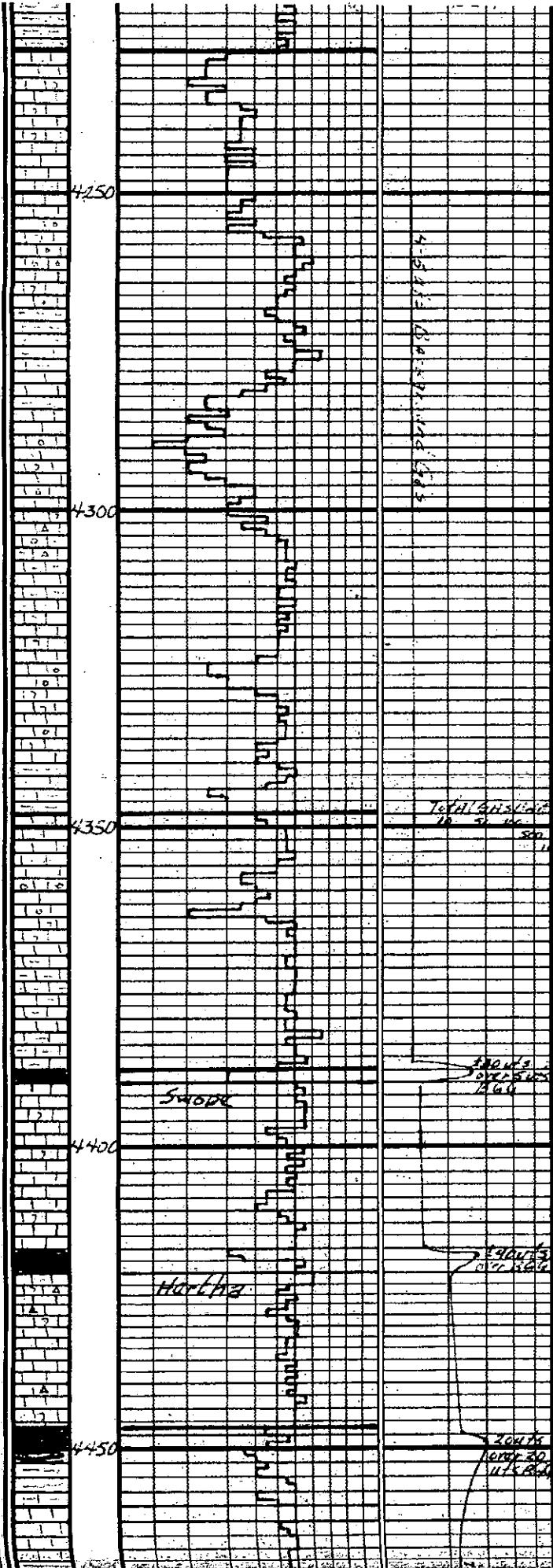
Ls. cream - tan - brd - m. shly dls.,
foss. brd. sh. shly. Ø NSFOC
sh. gray - m. brd. dls. brd.

Sh. gray - m. brd - m. shly dls.,
occ. shly, m. brd. brd.
Ls. cream - tan - brd - m. shly dls.,
foss. brd. sh. shly. Ø NSFOC

Sh. gray - brd - m. brd. dls.,
shly - shly, brd.
Ls. cream - gray, brd, dls., br - VFG
br. br. sh. shly. br. foss. NONNSFOC
br. sh. gray - m. shly, dls., VFG, med.
pr. sh. sh. med. cmtd. NONNSFOC

Sh. sh. gray - brd - m. brd. dls.,
shly - shly, brd.
Ls. cream - gray, brd, dls., br - VFG
br. sh. sh. sh. sh. foss. NONNSFOC

Sh. br. - br. gray, sh. - m. brd. dls.,
occ. shly, br. br. br. br. br. br. Ø NSFOC
Ls. cream - gray, brd, dls., br - VFG
br. foss. sh. sh. sh. sh. foss. NONNSFOC



57-ET-CAR-474, M-374 - M-NO-0-0-0
T-514-114-CAR-3, CAR-114-114
L-5-9-1-CAR-114, 114-114, D-114, V-114
X-114-M-114-114-CAR-114 NO NSPCC

KANSAS CITY
GROUP (-3617-)

Is. Cen.-goy. stt. schiz.-pred.
fr. Is. VFG-MXIN. It. fr. pr.
rug. moldic. ♀ fr. foss. N3FOC

L3. *com-gex*, *carpifrons*, *luc*,
stt, *shuk*, *esf*, *tr*, *gr*, *vug*,
moldic-*camelidic* \oplus *tr*, *shuk*,
tr, *crit*, *NSFOL*
S1. *tr*, *gex*, *tr*, *shuk*, *occ*, *sity*,
shuk, *tr*, *ppr*, *tr*, *carp*, *base*,
L3. *H.A.*, *tr*, *moldic*, *vug* \oplus *A.H.*,
NSFOL

L.S. com. stt. & chick - prod. odds,
1FF - M&W, tr. foss, tr. cat.
w/ tr. - pr. com. Q, tr. cat.
tr. PVR. NSFOC

Ls. crm. - Fairly red, idios., stiff - pinkish
tr. 3 ft. + 5 in. h., tr. loss. 100 ft.
fr. pr. moldic sp. NSFC
Shrubby m. br. idios. - CARVING?

Lacistema has most interesting
inches 556 to 536 17.20 meters
7.46 mi. NSEOC
ABOVE STRIDE CREEK - DIVISION OF
GLENWOOD CREEK

~~2201175 L.S.~~
~~(-2737')~~

Leucostachys - stems, leaves,
fls, frt, rhizome, root,
seeds, RSEOC,
round, sharp, smooth, thin, bran?

Mud Check #440
M.W. 9.35 SAGS 7.
V.I.S. 57 L.G.T. 0
W.L. 7.2
CHI 4100

Ls: circ. farben. slf.-hrd., dvs., vrs.
-myia, l. mic. gr. & ch. nqns fox
St. blk., m. slf.-m. hrd., dvs.,
psyc, caro, carbo-hackl.

~~Steark Shale~~
(-2777')

SHABAN
LACUN-TAN, M-361 - bed 1, 15'
VEG. MYRI. OCC. FOSS. ITC. DRY.
HORNFOC

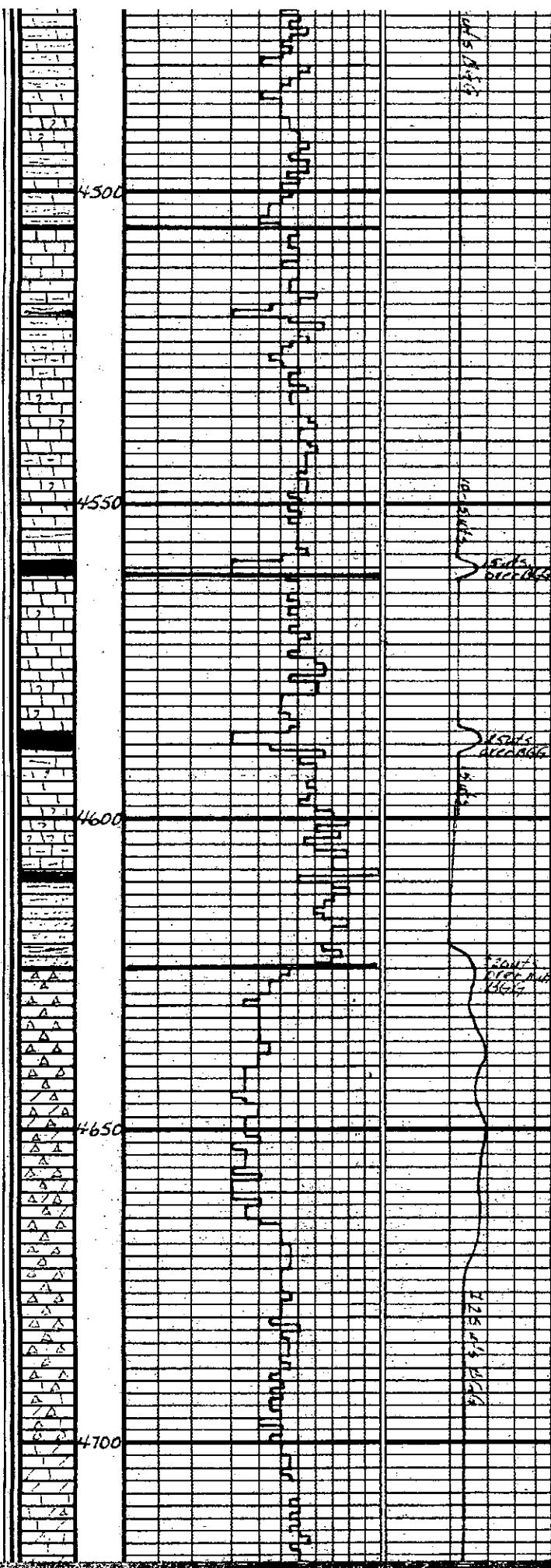
Sh. bivalve shell carb. Coal?
CARTHY - HALL
Ls. carb - tan - grey bed - m. stiff
Chalk - ferruginous - grey
redish - yellow - main part to
Cht. - NO LIMESTONE

L. crenata - long pet, d.s., VEG - male
MIC, IN FISS NON SEDOC
SH. GREY - BUR. M. 3 FT. N. HAB. d.s.,
CRAB. CARTHY - BACKLVR.

Base of Kansas
City Group
(-2836')

Sh.A. A. 1635 CARB
1-1635 CARB
1-1635 CARB
1-1635 CARB

Marmatong GP.
(-2847)



Leigey - TAN - CRM. (prod. JONES, VITO
- MUSICALS, C. 1955) POSS. NON-SEC
Leigey - BIR. (MELT JONES, S.H.Y. -
SNOY, THE CARB., CARTAY

Altamont Ls.
(-2895')

Stigmaria-like imbricated st. dist.
fr. over. Early, sandy, backly
L. iron-pan bedrocks. Vtg-mkt
mic. & talcoss. H. cat. NO NS LOC

L.S. CRAT-H. GRAY, BIRD POINTS, VEG MILE
10 MI. E. OF ST. THERESA, LAM.
TOSSE. NONSPEC
TR. CH. A.H.

*Shaggy-brown, play-coat; -
brownish cap, earthy stem
15 cm. tan, brown, VFG-milk
mic, occ. stiff, sticky, ratu
foess. NONSFDC*

Pawnee Ls.
(-2950')

Ls. com-bray-gray, had, dogs, veg
-mild, one with less, teach.
strat-tachy NONSFOL
shide-grey-bik, asti, carp,
carp, grey, brack

15. rem-tad-gov, had girls, brother-
in-law, wife, geese, still + chirky,
tasse, fr. go! NØNSFOC
fr. St. Paul.

L3; A.A., mortgatess, NO, NSFDC
Shade, A.Y.-B.I.K., MHD.GNS, HAKK.
T.F. 32, Q.T.E., Y.E.C.PT, MHD.GNS
V.I. VULCMST, W.H. STN, H.Y.

Mississippi
Osage Fm.
Good Show
(-3013')

Good Show

Chit. w/ white head & wings, VIT - dep. 17
large egg - 4.8cc. pale yellow-green,
intestines bright red - DIA. 31.5mm.
ad. cut off. 1.75cm.

CHIT. ADULT. 4.8cc. pale yellow-green
X 10.5mm. long. VIT. 4.8cc. pale yellow-green
- 51.5mm. long. ad. cut off. 1.75cm.
+ 1.75. Some bairam. 0.75cm.

Fair Show

Workshop

Cht. wh. has id's. 117. with
pr. VWS., SPK + TAN. Gird. - six
std. WK CHTS F. 117. Heavy
VWK Snow

Mud Check @ 4688'
M.W. 9.3 Solids to 33%
V.I. 51 ICM 2#
W.L. 6.8
Chl. 3601

Dol. lvs. crn. had. dol. s. v. FG
xly. peri. BIK. oil. STAN. yolk
odgr. wk. - fer. cut. fl. VFG
int. x. L. O. v. ? Dern.

Weak Show

74. DR. RUG. UNIFOR. 011574.
Dot. 113. 2 cm. long. smooth
skin. nostrils very large. $\frac{1}{2}$
long. tail short. white chin. & t.
V. WR. odor, 2 per cent.

Weak Show

1750

Dol:Com - far-guy, had jobs,
VFG XLR, LSC, VFG INT'L, etc
L.C. BAN, STN, MK CUT + T.V.
DREAM. Very wear show
Chai with his dog, with STN 500

(-3137)

480

Ls. wh. rrm. br. d. lws. VFGXAN
NONSPC
occ. Del. PLN. VFGXAN. pr. VFG
inf. FLY. D. pcc. WLF. LONSH.
VFGXAN. V. WLF. SHON
PLN. wh. br. d. lws. V. VFG
NSPC

Mrs. D. S. C. (-3137)

485

3n. gr.-gr.-gr.-m.-m.-m.-m.-m.-m.
dys., pale - earthy, r. sity.
fr. ch. win. nr. dasilva
NS loc.

Kinderboeksh
(-3235')

-490-

Schistocerca gregaria (L.)
st. - mi. first inst. occ. 5/14
C. V. 100% H. 100%

M.W. 9.3 50/165 7.35
V.S. 53 LCM 48
W.L. 6.6
CHI. 3100

3404

so what products do you offer?

NY 587170-55 1

25-10-1980
SILVERWOOD STATE PARK - FL.
FL. GARD., W.S.-L.D., SUBANG - SUB
WATERFRONT, Q.B. Q.M. SH. PART, P.P. Y.S.
INTERIOR. Ø 1-3PC. LI. Ø 1. V.H. 8PC.

Yiota Fm. (-3351)
DSTA 14936-15

Digitized by srujanika@gmail.com

Yiota Fm. (-3351)
DSTA 14936-15

			Ls: cm. - bedded, fng. vfg. xlt. non-sfoc abund. carings ± 80% smot.	RAC. 10' GIP 20' DSGCM strap 5.07' long bottom Deviation 4.1°
5000			Ls: cm. - gray, bedded, fng. vfg. mod. mic., fr. chit. fachik, occ. silt. - v. sandy. NO NSFOC	Mud Check 4965' M.W. 9.3 Solids 7.3% Vis. 6.8 LCM 48 W.L. 6.8 Chl. 3800
5050			Ls: cm. - bedded, fng. vfg. - mod. mic., occ. chit., occ. sh. dolomitic, fr. sandy, lt. Chit. NO NSFOC	Start 10' samples
			Ls: cm. - pcc. vfg. fr. chit. Chit. NO NSFOC	SIMPSON Fm. Shale (-3440')
			Sh. gray - marl, m. st. - m. w. dns. sandy, carings	SIMPSON SS. (-3455')
			Ls: cm. - bedded, fng. dolomitic sandy NO NSFOC	WOB 25,000 ft
			Sh. gray - very thin, m. dol. dns. occ. sandy, occ. wack., occ. lt.	Bit worn out
5100			Sh. gray - thin, m. dol. dns. occ. sandy, occ. wack., occ. lt.	Mud Check 5170 M.W. 9.3 Solids 7.3% Vis. 6.3 LCM 5# W.L. 6.0 Chl. 4500
5150			Sh. gray - thin, m. dol. dns. occ. sandy, occ. wack., occ. lt.	2' CS Sandstone D.T.D. 5170' L.T.D. 5173' Deviation 3.4°
5200			Sh. gray - thin, m. dol. dns. occ. sandy, occ. wack., occ. lt.	Robert Stoltz 2/23/11