

Randall Kilian Corporation

Geologist



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GEOLOGIST'S WELL REPORT

COMPANY BACH OIL PRODUCTION (31569)

WELL Sammons #1

FIELD Wildcat

LOCATION (legal) Ap. NE SE SW SE
(530' FSL & 1450' FEL)

Section 11 TWP 7S RGE 20W

(Map) _____

COUNTY Rooks STATE Kansas

ELEVATION: 2116' K.B., 2111' G.L.

Depths measured from Kelly Bushing

A. P. I. NUMBER 15-163-23898

GEOLOGY BY Randall Kilian
Tobis Eck

PERTINENT WELL DATA

CONTRACTOR Murfin Drilling Co., Inc. (30606)

RIG #16 HYDRAULICS D-375 6x14x60
(Andy Dinkel TP)

DRILL PIPE 4 1/2" X-H COLLARS 6 1/2" 16 (475')

CASING: SURFACE 8 5/8" @ 218' w/ 150 sx Common

PRODUCTION 5 1/2" @ 3647' w/ 150 sx Common
PC in Anh.

DRILLING FLUID: COMPANY Andy's Mud & Chemical Co.
(Ken Rupp)

TYPE: Chemical & Drispac

REMARKS: Full service

DRILL STEM TESTS: COMPANY Trilobite Testing Inc.
(Ray Schwager)

NUMBER OF TESTS Three (3)

ELECTIC LOGS: COMPANY Pioneer Log-Tech Inc.

DETAIL (5") 3000' - RTD

TYPE DI, Comp N-D, Micro

DRILLING TIME FROM 3000' TO RTD

SAMPLE TIME FROM 3000' TO RTD

SUPERVISION FROM 3000' TO RTD

VERTICAL DEVIATION 1/2° @ 218', 1/2° @ 2166', 1/2° @ 3375'
1° @ 3650'

PLUGGING REPORT 30 sx Rat, 15 sx Mouse

RESERVE PIT 500 bbls., Chl. 21,000 Ca 200

DRILL STEM TESTS

NO	INTERVAL	IFP/TIME	ISIP/TIME	FFP/TIME	FSIP/TIME	IHP/FHP	RECOVERY
1	Top-C 3282- 3375'	33# 58# 5"	728# 60"	72# 288# 60"	666# 90"	1563# 1546#	150' M, Oil 31° 248' O, C, W, Mud 186' M, Wtr
2	LKc H-K 3438- 3525'	18# 20# 5"	803# 60"	18# 22# 60"	153# 90"	1653# 1627#	1' Oil 15' O, C, Mud
3	Arb. 3519- 3598'	50# 53# 5"	1018# 60"	55# 69# 60"	778# 90"	1737# 1708#	20' Oil 18° 35' O, C, Mud 15% O
4							
5							
6							
7							
8							

MUD RECORD						
CHK	DEPTH	WT	VIS	FIL	CHL	YP
1	2880'					
2	3031'	8.9	43	8.8	1k	12
3	3120'	8.9	53			
4	3210'	8.9	54			
5	3310'	9.0	51			
6	3375'	9.2	48	8.0	2k	14
7	3450'	8.9	60			
8	3525'	9.2	61	8.8	3k	16
9	3640'	9.2	67			
10						
11						

Displaced
LCM 3/4#

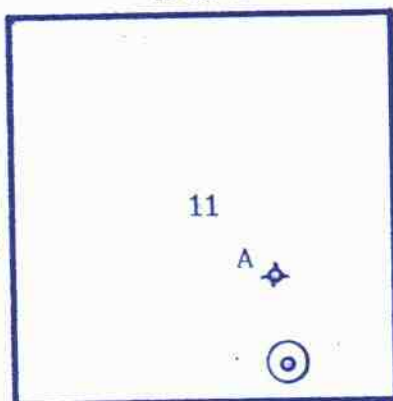
LCM 1#
LCM 3/4#
LCM 2#
LCM 1 1/2# #5901
LCM 3#

BIT RECORD						
NO	SIZE	MAKE	TYPE	DEPTH-OUT	FEET	HOURS
1	12 1/2"	Sec.		218'	218'	3
2	7 7/8"	HICO.	GX20C	3375'	3157'	67 3/4
3	7 7/8"	HICO.	GX20C	3650'	275'	12
4						
5						
6						
7						

FORMATION TOPS & STRUCTURAL GEOLOGY

R 20 W

T
7
S



REFERRED TO:

- A: CIRCLE G OIL
Sammons #1 SE NW SE 11
- B: _____
- C: _____
- D: _____
- E: _____

STRATIGRAPHIC MARKERS	SUBJECT WELL		STRUCTURAL POSITION					
	SAMPLE	E. LOG	DATUM	A	B	C	D	E
Anhydrite	1670'	1666'	+ 450	+ 447				
Base	1705'	1701'	+ 415	+ 415				
Topeka	3083'	3083'	- 967	- 975				
Heeb. Sh.	3285'	3284'	-1168	-1176				
Toronto	3305'	3308'	-1192	-1198				
Lansing	3323'	3322'	-1206	-1213				
BKc	3532'	3532'	-1416	-1426				
Arbuckle	3571'	3571'	-1455					
Reagan Sd.	3630'		-1514					
TD.	3650'	3650'	-1534	-1511				

*Structural position of subject well as compared to referred well.

SUMMARY

The Sammons #1 well was drilled with Murfin Drilling Co. tools rig #16 beginning 10-20-10 and drilling was completed 10-26-10.

The drillsite was located via a 3-D seismic survey. The well ran high structurally to the dry hole north.

DST #1 Tor-LKc C was a positive test with oil coming from 1 zone and water from another zone. DST #2 LKc H-K was tite and DST #3 Arb. had 20' Oil & 35' O.C. Mud 1018-778# SIP (building pressures).

Based upon all data, casing was set and cemented to further test the well.

Recommended perfs: Arb. 3581-90', LKc I 3476-78',
A 3324-25', Tor. 3308-10, and possibly
Plattsmouth 3236-38'.

Respectfully,

Randy

Randall Kilian

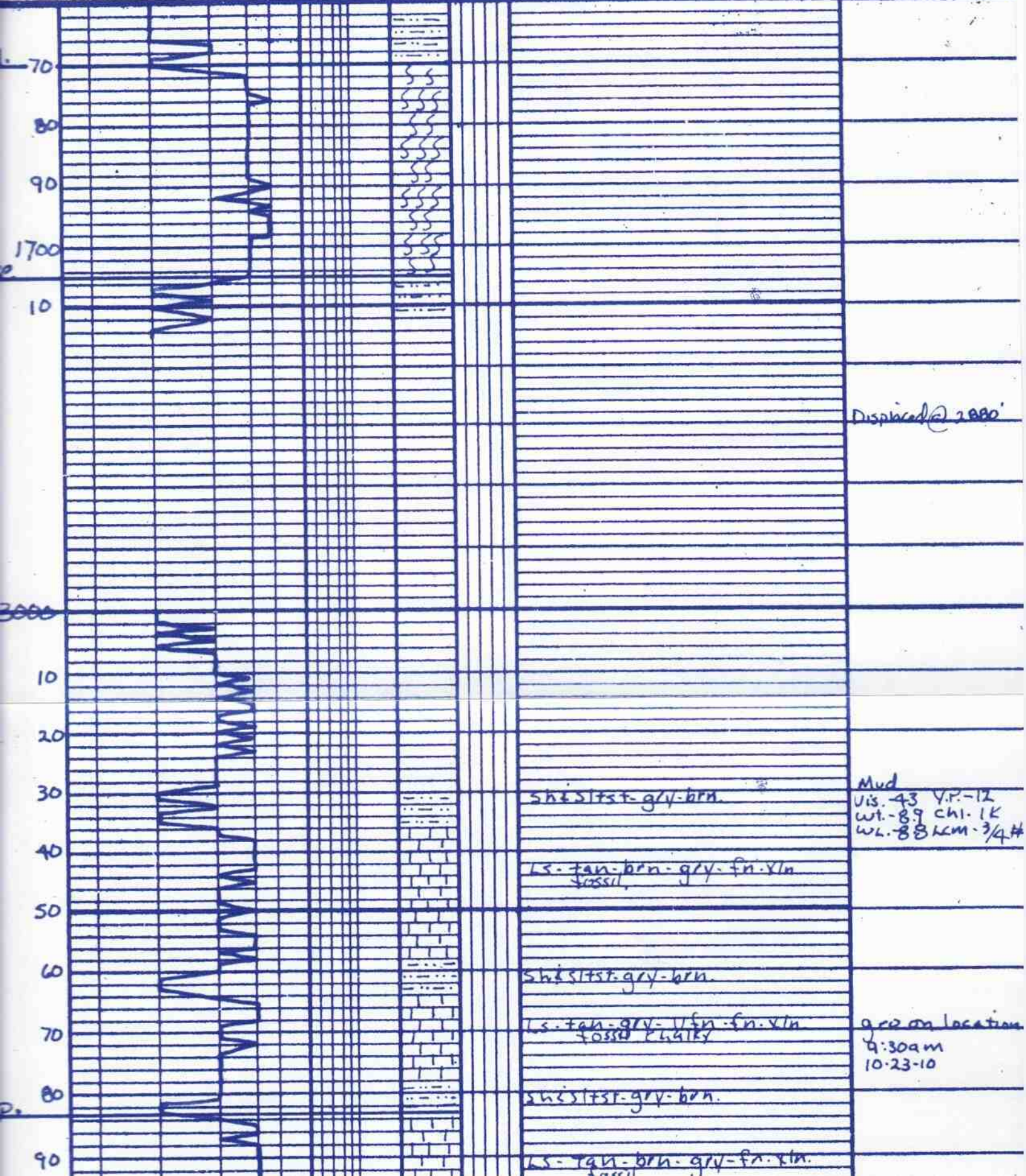
DRILLING TIME (min/ft)

1/2 1 2 3 4 5 6 7 8 9 10

SHOWS
POOR
FAIR
GOOD

LITHOLOGY (LAGGED)

REMARKS



Displaced @ 2880'

sh. siltst. gry-brn.

Mud
vis. 43 v.p. - 12
wt. - 8.9 chl. 1K
wl. - 8.8 kcm. 3/4#

ls. tan-brn-gry-fn-xln
fossil.

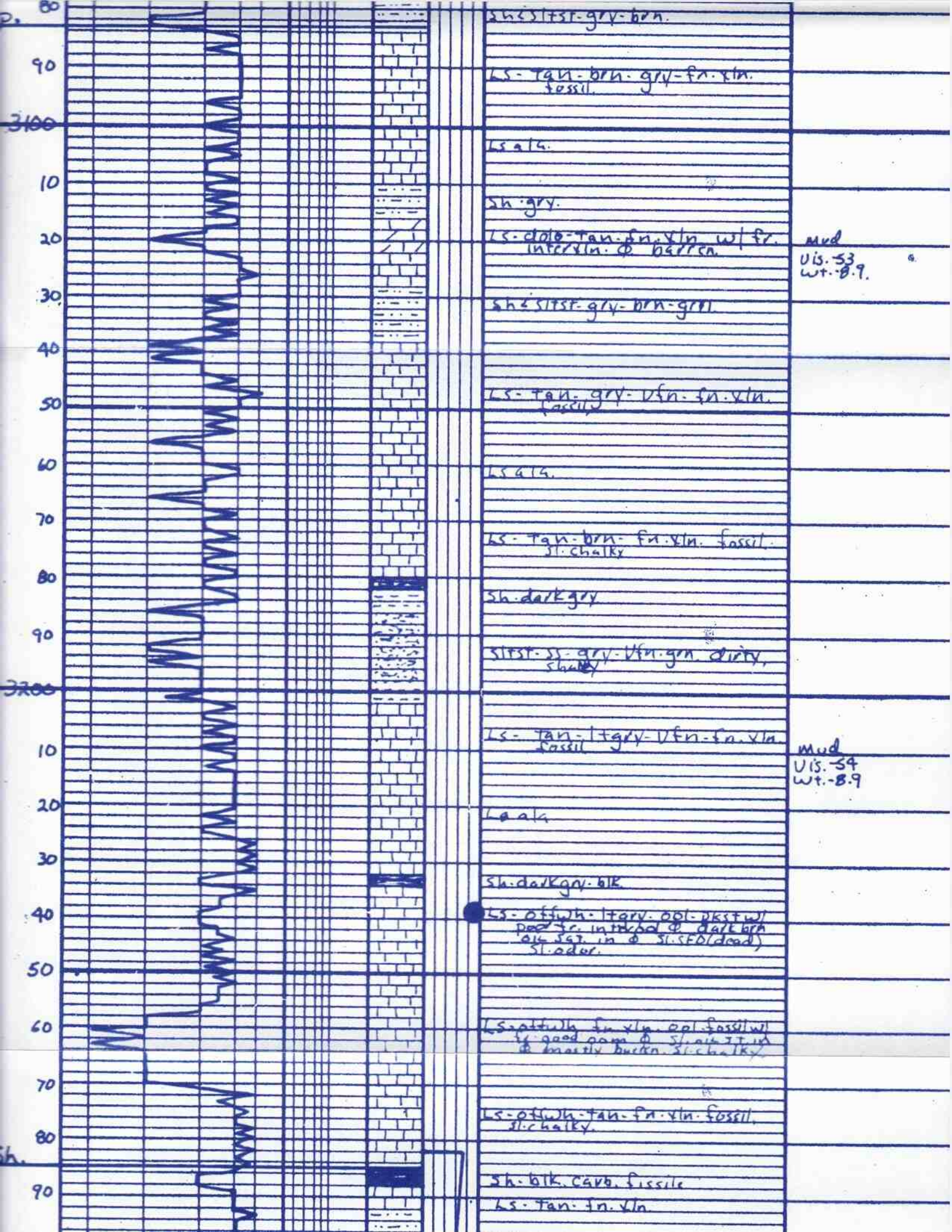
sh. siltst. gry-brn.

ls. tan-gry-1/2 fn-fn-xln
fossil PLATE

g. rd on location
9:30am
10-23-10

sh. siltst. gry-brn.

ls. tan-brn-gry-fn-xln
fossil



sh. siltst. gry-brn.

ls. tan-brn. gry-fn. vln. fossil.

ls. slt.

sh. gry.

ls. dol. tan. fn. vln. w/ fr. intervln. of barren.

mud
vis. 53
wt. 8.9

sh. siltst. gry-brn-gry.

ls. tan. gry. vln. fn. vln. fossil.

ls. slt.

ls. tan-brn. fn. vln. fossil. sl. chalky.

sh. dark gry.

siltst. sl. gry. vln. gm. dirty, shaly.

ls. tan. ltgray. vln. fn. vln. fossil.

mud
vis. 54
wt. 8.9

ls. slt.

sh. dark gry. blk.

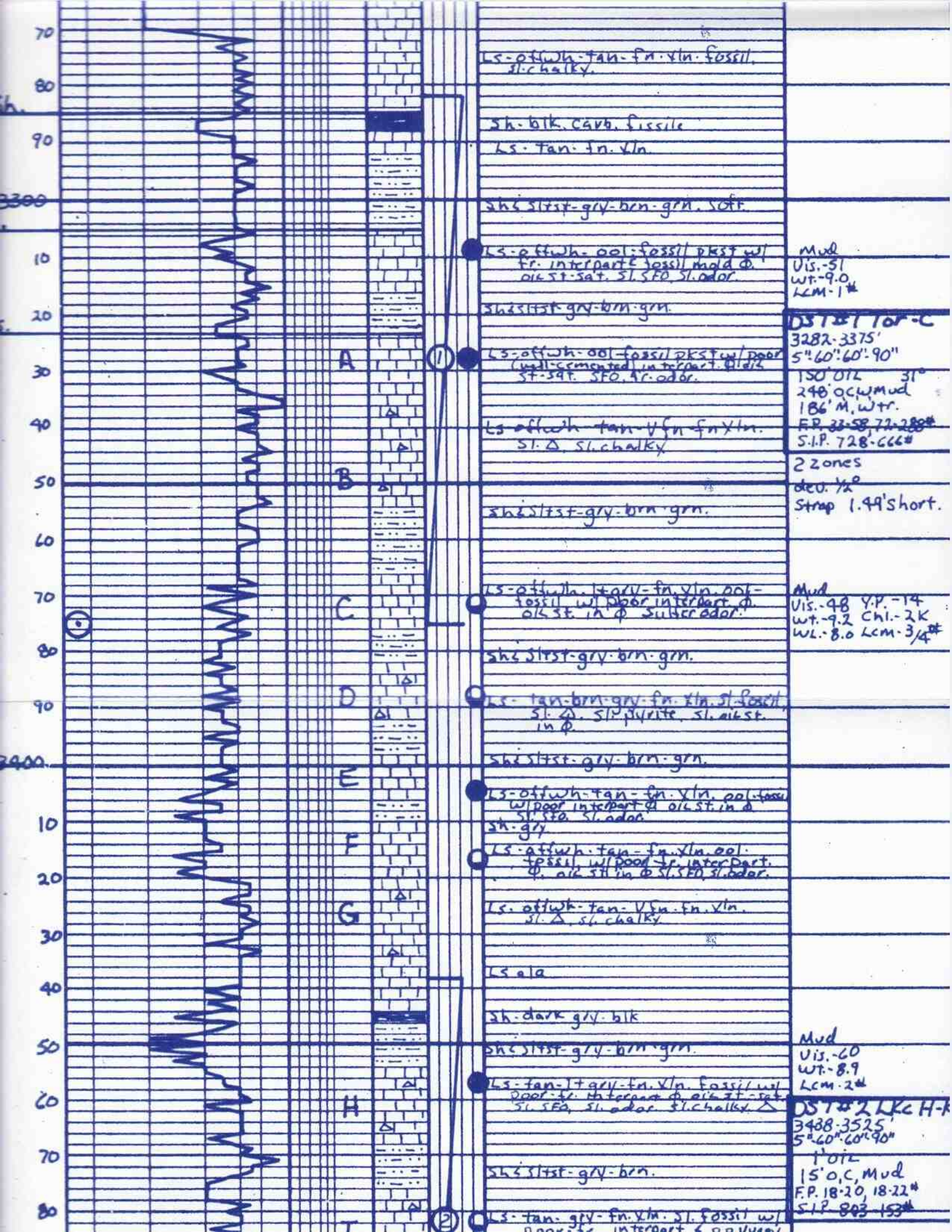
ls. offwh. ltgray. ool. dkst w/ poor fr. in interval of dark brn. sil. ss. in of sl. sfo (dead) sl. odor.

ls. offwh. tan. fn. vln. fossil w/ good am of sil. silt in of mostly barren. sl. chalky.

ls. offwh. tan. fn. vln. fossil. sl. chalky.

sh. blk. carb. fissile

ls. tan. fn. vln.



LS-offwh-tan-fn.vln. fossil. sl. chalky.

sh. blk. carb. fissile
LS-tan-fn.vln.

sh. sltst-grv-brn-grn. soft.

LS-offwh-ool-fossil pkst w/ fr. interpart. fossil mold φ. oil st. sat. sl. sfo. sl. odor.

Mud
Vis.-51
wt.-9.0
LCM-1#

sh. sltst-grv-brn-grn.

DST #1 for-C

LS-offwh-ool-fossil pkst w/ poor (well cemented) interpart. φ. oil st. sat. sfo. yr. odor.

3282-3375'
5" 60' 60' 90"
150' oil 31"
248' oil mud
186' m. wtr.
FP 33-58, 72-288#
S.I.P. 728-666#

LS-offwh-tan-vfn-fn.vln. sl. Δ. sl. chalky.

2 zones
dev. 1/2"
Strap 1.49' short.

sh. sltst-grv-brn-grn.

LS-offwh. l. + grv-fn.vln. ool-fossil w/ poor interpart. φ. oil st. in φ. sulfur odor.

Mud
Vis.-48 Y.P.-14
wt.-9.2 Chl.-2K
WL-8.0 LCM-3/4#

sh. sltst-grv-brn-grn.

LS-tan-brn-grv-fn.vln. sl. fossil. sl. Δ. sl. pyrite. sl. oil st. in φ.

sh. sltst-grv-brn-grn.

LS-offwh-tan-fn.vln. pol. tan w/ poor interpart. φ. oil st. in φ. sl. sfo. sl. odor.

sh. gry
LS-offwh-tan-fn.vln. ool-fossil w/ poor interpart. φ. oil st. in φ. sl. sfo. sl. odor.

LS-offwh-tan-vfn-fn.vln. sl. Δ. sl. chalky.

LS o.l.

sh. dark grv. blk

sh. sltst-grv-brn-grn.

Mud
Vis.-60
wt.-8.9
LCM-2#

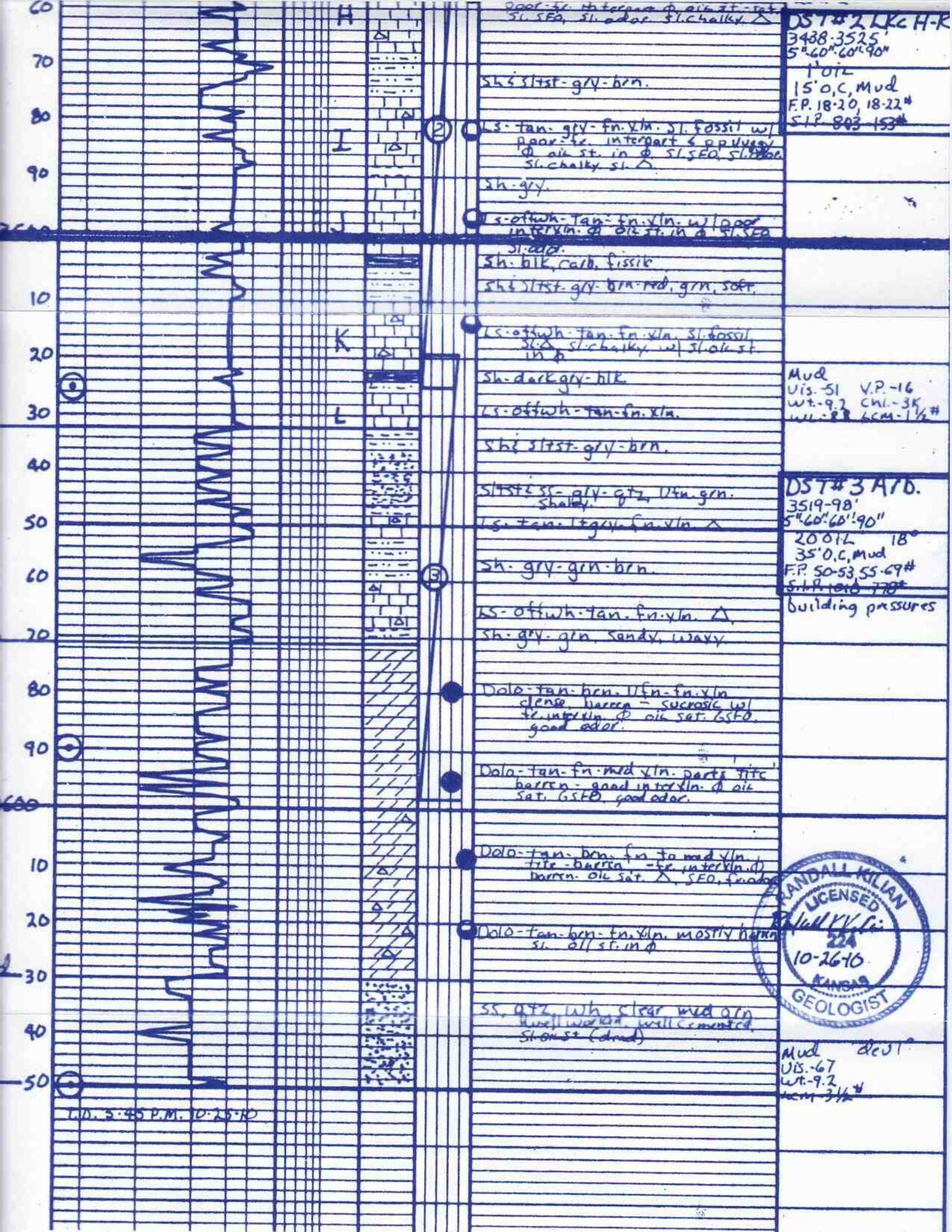
LS-tan-l + grv-fn.vln. fossil w/ poor interpart. φ. oil st. sat. sl. sfo. sl. odor. sl. chalky.

DST #2 LKc H-K

sh. sltst-grv-brn.

3488-3525'
5" 60' 60' 90"
1' oil
15' o.c. Mud
F.P. 18-20, 18-22#
S.I.P. 803-153#

LS-tan-grv-fn.vln. sl. fossil w/ poor interpart. φ. oil st. sat.



poor fr. interpart & oil st. in
sl. seo, sl. odor sl. chalky

DST #2 LKCH-K
3488-3525'
5" 60' 60' 90"
1" oil
15' o.c. Mud
F.P. 18-20, 18-22"
SIP 803-153#

sh. sltst-grv-brn.

ls. tan-grv-fn. vln. sl. fossil w/
poor fr. interpart & p. vuggy
oil st. in sl. seo, sl. shaly
sl. chalky sl.

sh-grv.

ls. offwh-tan-fn. vln. w/ poor
interpart. oil st. in sl. seo
sl. carb.

sh. blk, carb. fissile
sh. sltst-grv-brn-red, grn, soft.

ls. offwh-tan-fn. vln. sl. fossil
sl. shaly, sl. chalky w/ shale st
in p.

sh. dark gry-blk

ls. offwh-tan-fn. vln.

sh. sltst-grv-brn.

Mud
Vis. 51 V.P. -16
wt. 9.2 Chl. -3K
mem. 88 6cm-1 1/2 #

sltst sl. gry-gtz, ltn. grn.
shaly.

ls. tan-ltgrv-fn. vln.

sh. gry-grn-brn.

ls. offwh-tan-fn. vln. Δ
sh. gry-grn, sandy, wavy

DST #3 A/D.
3519-98'
5" 60' 60' 90"
20 oil 18"
35' o.c. Mud
F.P. 50-53 55-67#
SIP 1010-778#
Building pressures

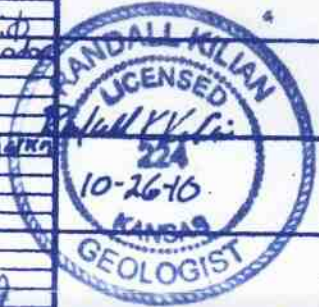
Dolo-tan-brn-fn. vln.
dense barren - fr. interpart
fr. interpart oil sat. GSF.
good odor.

Dolo-tan-fn-med vln. parts fine
barren - good interpart. oil
sat. GSF. good odor.

Dolo-tan-brn-fn. to med vln.
fine barren - fr. interpart
barren. oil sat. Δ, seo, water

Dolo-tan-brn-fn. vln. mostly barren
sl. oil st. in p.

ss. qtz. wh. clear med grn
well sorted, well cemented,
sl. or st. (dred)



Mud dec 1"
Vis. 67
wt. 9.2
mem 3 1/2 #

T.D. 3:45 P.M. 10-25-10