

GEOLOGIC LOG

LITHOLOGY and DRILLING TIME

15-179-21092



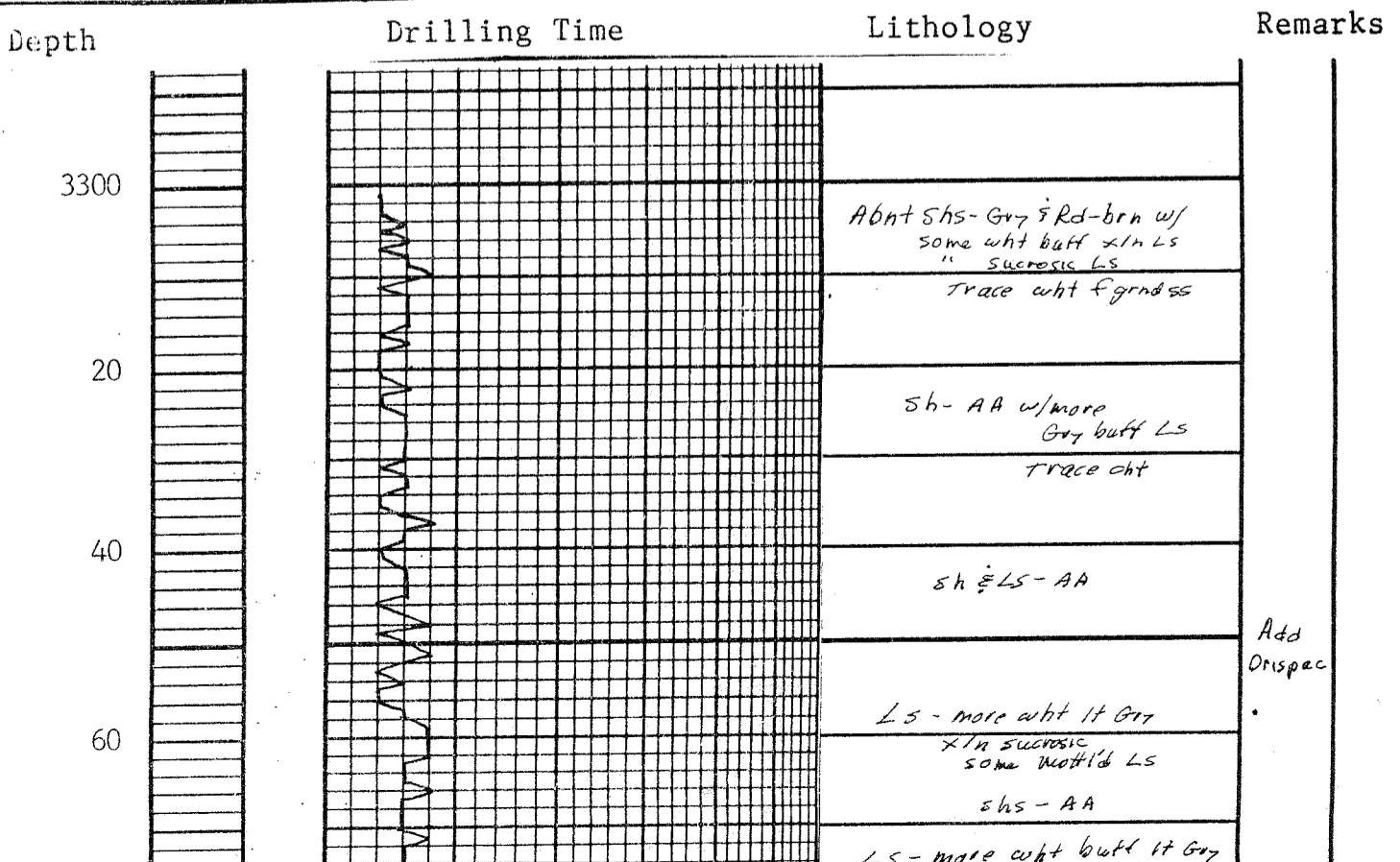
	COMPANY <u>SHIELDS OIL PRODUCERS, INC.</u> <u>Russell, Kansas</u>	ELECTRIC LOGS <u>ELI</u> <u>RA-Guard-Caliper</u>
	WELL <u>Caldwell No. 1</u>	PRODUCTION <u>LKC</u>
	FIELD <u>Wildcat</u>	
	LOCATION <u>NW NE NE</u>	
	SECTION <u>4</u> TWP <u>9 S</u> RANG <u>28 W</u>	
	COUNTY <u>Sheridan</u>	ELEVATION KB <u>2683'</u>
	STATE <u>Kansas</u>	OF _____ GL <u>2678'</u>

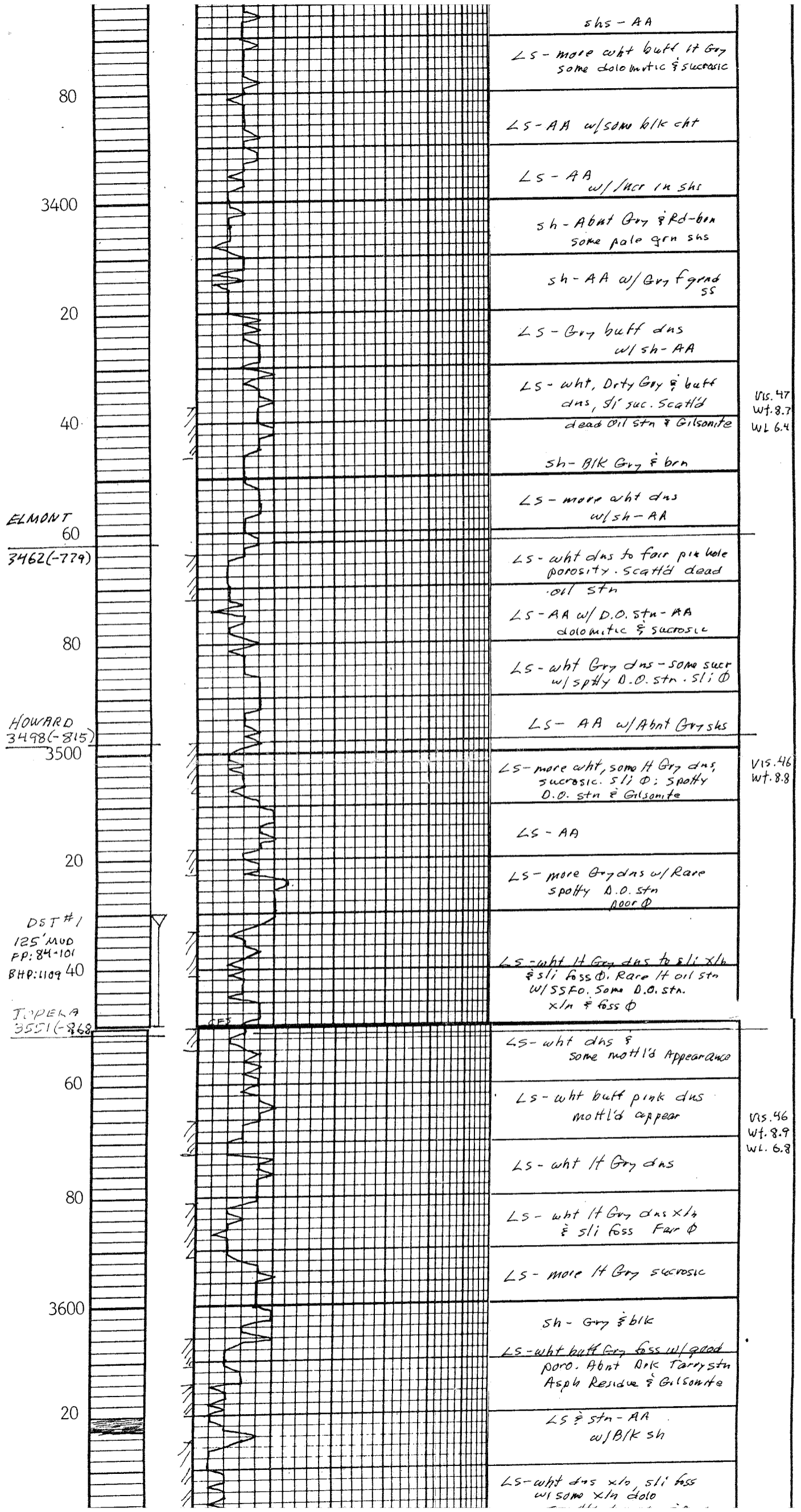
CONTRACTOR <u>Shields Drilling Co., Inc.</u>	CASING RECORD:
SPUD <u>Nov. 7, 1997</u> COMPLETED <u>Nov. 17, 1997</u>	SURFACE <u>8 5/8" @ 218'</u> <u>w/ 175 SX</u>
DEPTHS MEASURED FROM DRILLING _____ LOG <u>X</u>	PRODUCTION <u>4 1/2" @ 3936'</u> <u>w/ 125 SX</u>

STRATIGRAPHIC MARKERS and STRUCTURAL RELATIONSHIP *

MARKER	SAMPLE	ELECTRIC LOG	DATUM (Sea Level)	STRUCTURAL POSITION
Anhydrite	2305	2306	+ 377	+ 10'
Elmont (for correlation purposes)	3462	3462	- 779	+ 6'
Howard Lime	3498	3498	- 815	+ 6'
Topeka Lime	3551	3549	- 866	+ 6'
Heebner Shale	3763	3762	-1079	+ 5'
Toronto Lime	3786	3786	-1103	+ 3'
Lansing-Kansas City	3799	3800	-1116	+ 3'
Base of Kansas City	4030	4030	-1347	+ 10'
Total Depth	4040	4040	-1357	
Note: The Lansing A zone was thinner than the reference well making the B zone and the C zone 9 ft. higher than the reference well.				
TOTAL DEPTH				

*Reference Well: Slawson's #1 Shaw C (abandoned producer) in C SE SE Sec. 33-8S-28W





shs - AA

LS - more wht buff lt Gry
some dolomitic & sucrosic

LS - AA w/some blk cht

LS - AA
w/scr in sh

sh - Abnt Gry & rd-brn
some pale grn shs

sh - AA w/Gry f grad
ss

LS - Gry buff dns
w/sh - AA

LS - wht, Drty Gry & buff
dns, sl suc. Scat'd
dead oil stn & Gilsonite

Vis. 47
Wt. 8.7
WL 6.4

sh - Blk Gry & brn

LS - more wht dns
w/sh - AA

ELMONT
60
3462(-779)

LS - wht dns to fair pix hole
porosity. Scat'd dead
oil stn

LS - AA w/D.O. stn - AA
dolomitic & sucrosic

LS - wht Gry dns - some suc
w/spotty D.O. stn. sli ϕ

LS - AA w/Abnt Gry shs

HOWARD
3498(-815)
3500

LS - more wht, some lt Gry dns,
sucrosic. sli ϕ ; spotty
D.O. stn & Gilsonite

Vis. 46
Wt. 8.8

LS - AA

LS - more Gry dns w/Rare
spotty D.O. stn
poro ϕ

DST #1
125' Mud
FP: 84-101
BHP: 1109 40

LS - wht lt Gry dns to sli xln
& sli foss ϕ . Rare lt oil stn
w/SSFO. Some D.O. stn.
xln & foss ϕ

TOPEKA
3551(-868)

LS - wht dns &
some mott'l'd appearance

Vis. 46
Wt. 8.9
WL 6.8

LS - wht buff pink dns
mott'l'd appear

LS - wht lt Gry dns

LS - wht lt Gry dns xln
& sli foss Far ϕ

LS - more lt Gry sucrosic

3600

sh - Gry & blk

LS - wht buff Gry foss w/grad
poro. Abnt blk Tarry stn
Asph Residue & Gilsonite

LS & stn - AA
w/Blk sh

20

LS - wht dns xln, sli foss
w/some xln dolo

3600

20

40

60

80

3700

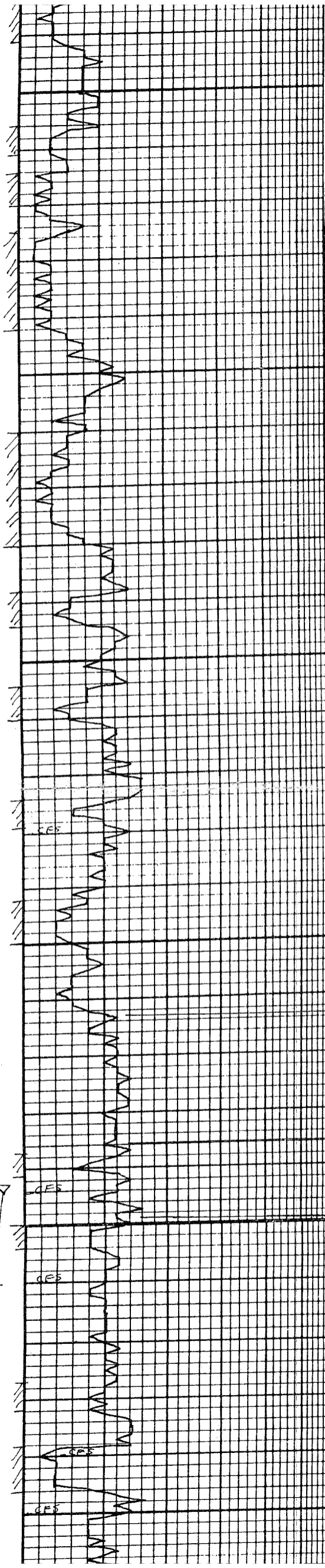
DST#2
65' MUD
20
FD: 58-67
BHP: 451

DST#3
60
HEEBNER
3763 (-1080)
15' SOCM
BHP: 1184-1103

80
TORONTO
3786 (-1103)

DST#4
LANSING
3800
3799 (-1116)
DST#4
10' MO
BHP: 958-991

20
DST#5
210' GAS
90' OIL
60' MO
BHP: 1218-1151
40



± sli foss Fair φ

LS - more lt Grv sucrosic

Sh - Grv ± blk

LS - wht buff Grv foss w/ good poro. Abnt blk Tarry stn Asph Residue ± Gilsomite

LS ± stn - AA w/ B/K sh

LS - wht dns x/10, sli foss w/ some x/14 dolo scatt'd d.o. stn ± Asph Residue - Gilsomite

LS - wht dns fr some chky

w/ B/K Carb sh

SS - Abnt fgrnd grv friable dirty ± shly

SS - AA

Abnt shs ± ss sh - Grv blk

Vis. 44
Wt. 9.2

LS - wht dns to foss w/ Fair φ scatt'd d.o. stn ± Asph Residue
more dns LS w/ Grv shs

LS - wht dns to chky w/ some foss φ: scatt'd d.o. stn. blk hvy stn ± Asph Resi

more wht dns LS w/ trace blk sh

Vis. 42
Wt. 9.3
Wt. 6.8

LS - wht dns sli sucrosic w/ Fair φ: scatt'd blk ± d.o. stn ± Asph Resi. Scatt'd lt stn w/ SSFO ± Ft. odor some hvy Tarry Residue

more dns Grv LS

LS - wht dns, some chky some buff suc ± sli foss φ: Rare blk spilly blk stn - d.o. stn w/ trace lt fr stn.

more dns LS w/ wht lt Grv x/ndolomite

Vis. 49
Wt. 9.1

Sh - Abnt B/K Carb w/ Dns brn LS

Abnt Grv shs w/ wht Grv chky LS

LS - wht buff x/14 to foss w/ Fair φ scatt'd lt stn Ft. odor. Some blk ± d.o. stn. Some wht chky more Grv dns LS

Sh - Abnt B/K ± brn

LS - wht some buff ool-foss ± sli vuggy w/ Fair scatt'd stn, SFO ± odor. Some Tarry stn. Some wht dns LS

LS - wht vry dns

Sh - B/K Grv ± brn

LS - wht some buff ± lt Grv dns w/ Fair foss ± pin hole φ. Some vuggy φ. Scatt'd lt - blk stn SFO ± odor. Some chky

LS - wht lt Grv suc w/ Good p.h. φ vuggy φ. Some foss φ: Fair stn Good sat. SFO ± odor

Vis. 45
Wt. 9.3

Abnt wht dns LS ± wht chky

LS - AA

20
DST #5
210' Gas
90' Oil
60' MO
BHP: 1218-
1157
40

60
DST #6
310' SW
BHP: 1250-
1250
80

3900

20

40

60

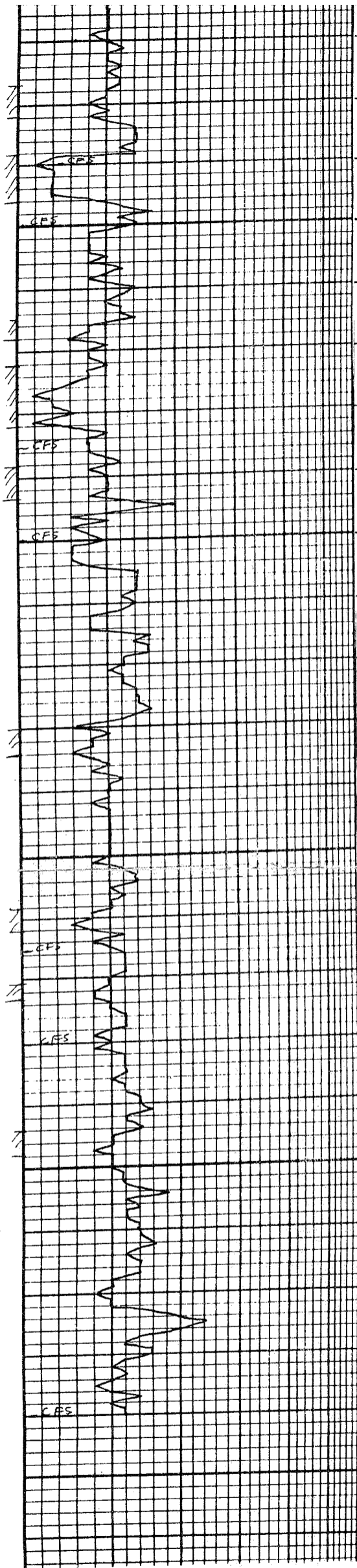
80

4000

20

BASE/KC
4030 (-1347)

40
TD 4040
(-1357)



Sh - Blk Gry & brn

LS - wht some buff & lt Gry dns w/ Fair foss & pin hole Φ . Some vuggy Φ . Seal Hd lt - Dk stn SFO + odor. some chit

LS - wht lt Gry suc w/ Good p.h. Φ vuggy Φ . some Gss Φ . Fair stn Good sat. SFO + odor

Abnt wht das LS & wht chit

LS - AA

Sh - Blk Carb

LS - wht lt Gry xln sli foss w/ Rare Dk stn & O.O. stn w/ Brn & Gry sh.

LS - wht w/ Abnt p.h. Φ & wht xln dolo w/ Good Φ . Rare lt & Dk stn vssFO. Abnt war Φ . No odor

Orty Gry xln dolo & LS w/ stn

AA - Gry shs

LS - wht dns w/ some xln dolo w/ p.h. Φ & xln Φ . v Rare lt stn NFO or odor some chit

wht vuggy das LS w/ chit

LS - AA w/ shs

sh - Blk Carb & Gry - brn LS

Abnt shs - Blk & brn

LS - wht lt Gry xln dns to chky w/ Rare Dk Tarry stn. Fair Φ NFO or odor

LS - AA w/ some xln dolo. trace stn - Dk spotty

Sh - Gry Blk & brn

More sh - AA

LS - wht lt Gry dns to xln dolo some chit. Only trace Dk stn Abnt Gry brn sh

LS - Dirty Gry dns w/ shs some Tarry Resi & AspH Resi poor Φ

Sh - Blk Gry & brn

Abnt sh - AA

LS - wht lt Gry dns w/ Trace Φ spotty Dk stn & AspH Resi

more wht Gry dns LS

Sh - Gry blk brn

LS - wht lt Gry buff dns w/ N.S.

Sh - Rd - brn & some Gry

Vis. 45
Wt. 9.3

Vis. 55
Wt. 9.5

Vis. 42
Wt. 9.3
Wt. 6.8

Vis. 48
Wt. 9.3

Vis. 49
Wt. 9.4
Wt. 7.2