

# WELLSITE GEOLOGIST'S REPORT

J. R. Hustead  
Consulting Geologist



Scale 1:240 (5"=100') Imperial  
Measured Depth Log

Well Name: THOMPSON NO 1-30  
Location: SEC 30-T 30 S-R 13 W  
License Number: 15-007-23-827-00-00  
Spud Date:  
Surface Coordinates: 1440' FEL,2080' FSL 65' S,45 E. OF SE NE NW SE  
Region: BARBER  
Drilling Completed:

Bottom Hole Coordinates: Vertical Hole

Ground Elevation (ft): 1918'                      K.B. Elevation (ft): 1929'  
Logged Interval (ft): 2100                      To:                      Total Depth (ft):  
Formation: LANSING/KC, ARBUCKLE  
Type of Drilling Fluid: Native Mud, Chemical Premix (Displaced)

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

## OPERATOR:

Company: F.G. HOLL COMPANY LLC  
Address: 9431 E. CENTRAL STE 100  
WICHITA,KANSAS 67206-2563

## DRILLING CONTRACTOR:

Duke Drilling Company, Rig #2  
Drill Pipe 4.5 X H; DRILL COLLARS 6.25 x 2.25, 496' BHA  
BIT #2: 7-7/8" JZ QX20 (3-16);WOB: 32-36; RPM 60-65;KELLY BUSHING 8' ABOVE GROUND  
LEVEL-MIRT-MAY-11-2011

## SURFACE CASING:

Surface casing at 8 5/8 set 944' with total cmt 400 sxs  
Production casing at 4 1/2 set at 4192' with total cmt 225 sxs

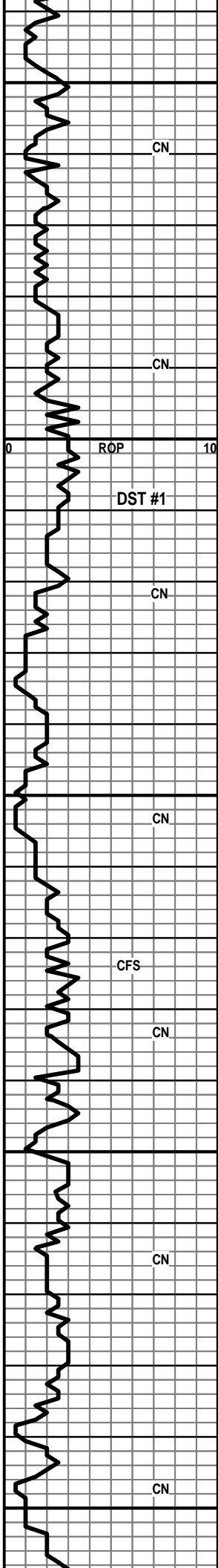
## CIRCULATION SYSTEM:

MUD-PUMP: EWCO-14W-400,DUPLEX, 6.0 x 14, 60 SPM, 266GPM (85%); SPP: 600 PSI; EARTH PITS; MUD-CO/  
SERVICE MUD, INC.;RICK HUGHES

## GAS DETECTION SYSTEM:

MBC WELL LOGGING AND LEASING  
ANALOG HOTWIRE AND CHROMATOGRAPH





HERINGTON 2148

2150 POOR SAMPLE

POOR SAMPLE

DOLO-GRY-M-GRN-BRIT-FOSS FRAGS- TR PP POR

DOLO A.A.

2200 DOLO-GRY-F-GRN-HD-DNS

SH-LT GRY-BLKY

**WINFIELD**

DOLO-TN/GRY-F-GRN-BRIT-SLI CHLKY-PR TO FR INTER-GRN POR

DOLO-TN/GRY-V-F-XLN-TR FOSS FRAGS-HD-DNS

2250 DOLO-TN-F-GRN-BRIT-SNDY TEX-SLI CHLKY-PR-INTER-GRN POR

DOLO-TN/GRY-F-XLN-BRIT-FOSS-OOL-TR SHLY-TR FOSS VUG/INTER-XLN POR

POOR SAMPLE

2300 DOLO-GRY-M-GRN-BRIT-SLI CHLKY-SHLY-FOSS-PR INTER-GRN/PP POR

DOLO-OFF WHT/GRY-F-GRN-HD-BLOCKY-SM FOSS FRAGS-PR PP POR

DOLO-A.A.

DOLO-OFF WHT/GRY-M-GRN-CHLKY-FOSS FRAGS-TR SM VUG TO NO VIS POR

2350 DOLO-TN-F-XLN-BRIT-SM OOL-FOSS-FR OOL-MOLDIC POR

KB=1929'

MUD DATA @ 2206'

WT. 10.0

VIS 41

FIL 28

DST #1

2210'-2273'

REC 220'MUD

IBLW-GD STRNG BLW

BOB IN 1 MIN

FBLW-STRNG BLW

BOB IN 1 MIN -BLW BK

IN 2ND SHUT IN 3'

5/120/30/60

SIP-803.68-790.69

IFP-93.05-101.67

FFP-97.79-147.07

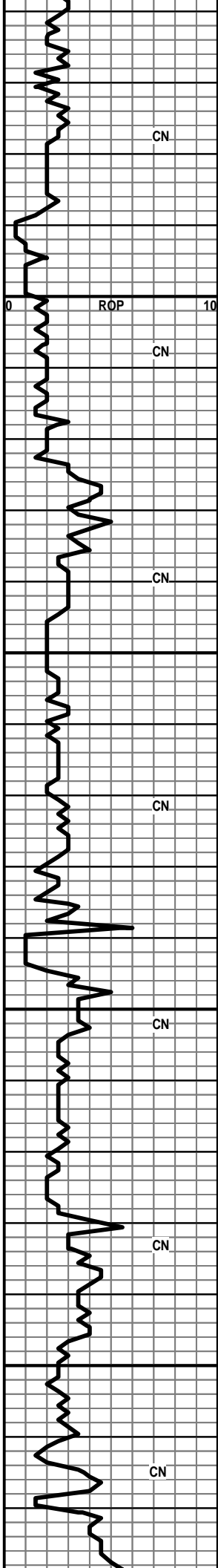
HP-1173.52-1169.92

MUD DAT @ 2272'

WT.9.9

VIS 41

FIL 12



2400

LS-TN-F-XLN-BLOCKY-DNS

LS-TN/GRY-F-XLN-BRIT-DNS TR OF CLAY

POOR SAMPLE

LS-TN-F-XLN-BRIT-OOL-FR OOL-MOLDIC POR

LS-OFF WHT/GRY-V-F-GRN(LITHO)-FOSS-OOL-V-HD-TR INTER-GRN

LS-OFF WHT-F-XLN-FOSS FRAGS-OOL-HD-DNS

LS-OFF WHT-F-XLN-V-FOSS-HD-DNS

**B/FLORENCE**

2450

LS-OFF WHT-F-XLN-SNDY TEX-SLI  
CHLKY-BRIT-OOL-FOSS-NO VIS POR

WT. 9.7  
VIS 38

LS-GRY-F-GRN-BRIT-CHLKY-FOSS-OOL-TR  
INTER-GRN

LS-TN/GRY-F-XLN-SHLY-FOSS-HD-DNS

**COUNCIL GROVE 2488'**

2500

SH-GRY-BLKY

LS-GRY-F-XLN-HD-FOSS-FRAGS-DNS W/  
CHRT-GRY-OPQ-FOSS

WT. 9.7  
VIS 40

LS A.A.

LS-OFF WHT-F-XLN-HD-FOSS-OOL-DNS

LS-TN-F-XLN-HD-FOSS-DNS W/ CHRT-OFF WHT/TN  
MOTT-OPQ-FRSH

WT. 9.6  
VIS 51

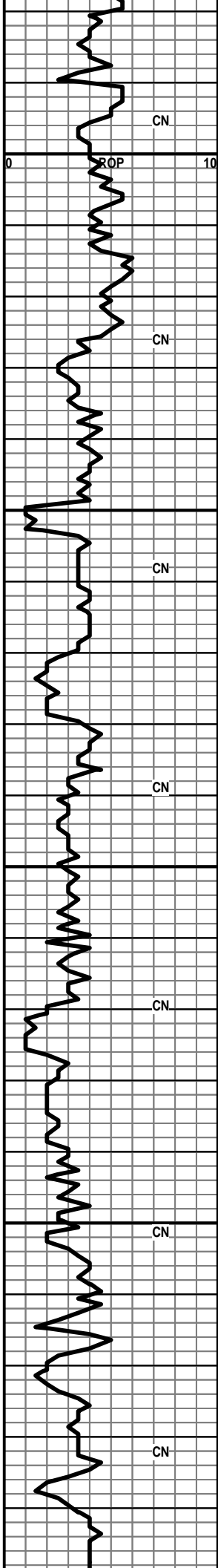
2550

SH-GRY-BLKY-FOSS-LMY

LS-TN-F-XLN-TR FOSS-HD-DNS W/ CHRT-BRITE  
YEL-OPQ-FRSH

SH-GRY-SLTY-W/ LS-OFF WHT W/BLK  
SPECS-F-XLN-CHLKY-BRIT-SM BLK OOL-TR  
INTER-XLN POR

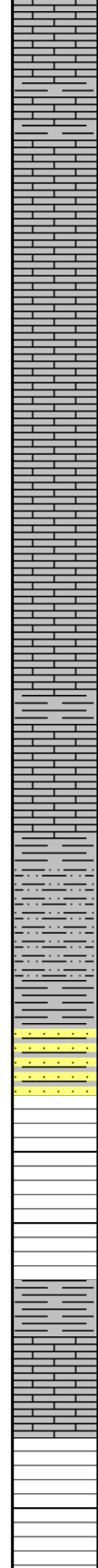
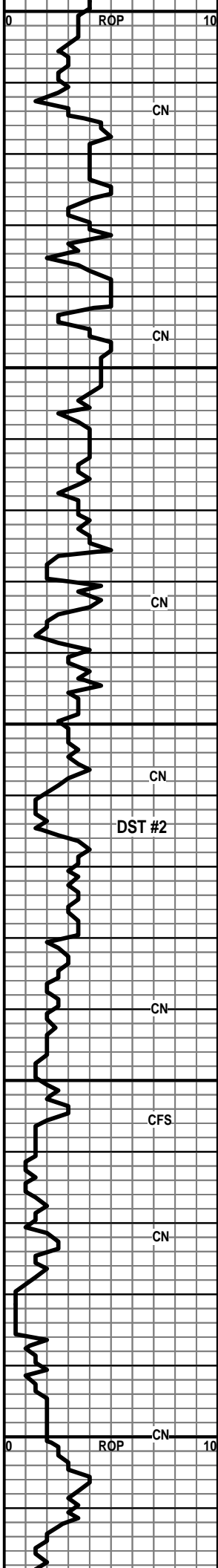
LS-GRY-FXLN-HD-FOSS-SHLY-DNS



LS-TN-F-XLN-HD-DNS TR CHLKY  
 LS-GRY-F-XLN-SHLY-HD-DNS  
 2600 LS-OFF WHT-F-XLN-SNDY TEX-V-HD-DNS W/  
 CHRT-BRITE YEL-OPQ-FRSH  
 LS-OFF WHT/REDISH BRN-F-XLN-FOSS-SM  
 OOL-HD-PR FOSS VUG POR  
 LS-OFF WHT-F-XLN-HD-FOSS-DNS-W/ CHRT-OFF  
 WHT-OPQ-FRSH-FOSS  
 LS-TN-F-XLN-V-OOL-BRIT-TR INTER-PRT POR  
 LS-TN/GRY-F-XLN-HD-FOSS-OOL-SHLY-DNS W/  
 CHRT-BRN-OPQ-FRSH  
 2650 LS-OFF WHT-F-XLN-MARTIX-V-SM OOL-TR FRAC POI  
 TO NO VIS POR  
 LSTN-F-XLN-TR FOSS-HD-DNS  
 LS-TN/GRY-F-XLN-CHLKY-BRIT-SLI FOSS-TR FRAC  
 -TR OF VUG-MOSTLY NO VIS POR  
 LS-CRM-F-XLN-HD-DNS  
 2700 LS-OFF WHT-F-XLN-HD-DNS  
 SH-LT GRY-WAXY  
 LS-CRM-F-XLN-CHLKY-SM OOL-TR INTER-XLN POR  
 LS-CRM-F-XLN-FOSS-OOL-HD-DNS TR SM VUG POR  
 2750 LS-TN-F-XLN-HD-DNS  
 LS-OFF WHT-V-F-XLN-FOSS FRAGS-HD-DNS W/  
 CHRT-GRY-OPQ-FRSH-FOSS  
 SH-GRY-SFT-WAXY-FOSS  
 SH-GRY-FRM-FOSS-LMY  
 LS-OFF WHT/TRANS-V-F-XLN-V-FOSS-HD-SCATT VUG  
 POR  
 SH-BLK-CARB  
 LS-CRM-F-XLN-HD-FOSS-DNS

WT. 9.9  
VIS 55

MUD DATA @ 2718'  
WT. 10.2  
VIS 46  
FIL 16



2800  
2850  
2900  
2950  
3000

LS-OFF WHT-F-XLN-BRIT-V-FOSS-FR INTER-PRT /INTER-GRN POR

LS-CRM-M-XLN-HD-FOSS-DNS

SH-GRY-BLKY-LMY

LS-CRM-M-GRN-BRIT-FOSS-TR INTER-GRN POR

LS-CRM-F-XLN-BRIT-OOL-FOSS-FR-OOL-MOLDIC POR/INTER-PRT POR

LS-TN-F-XLN-HD-FOSS-OOL-DNS

LS-GRY-V-F-XLN-HD-FOSS-DNS

LS-GRY-F-XLN-BRIT-SHLY-FOSS-DNS

LS-CRM-F-XLN-CHLKY IP-FOSS-INTER-PRT POR-LT BRN STN-NO VIS FLOR-NO VIS CUT

LS-GRY/TN-F-XLN-HD-DNS

**ONAGA 2907' (-978')**

LS-CRM/GRY-F-M-GRN-CHLKY-BRIT-V-FOSS-SM OOL-TR OOL-MOLDIC/FR INTER-XLN POR

SH-GRY-SFT-SLI GUMMY

SLTSS-FRSTY GRY-F-GRN-SHLY

SS-FRSTY GRY-F-GRN-TT-RNDED-WELL SRTEDE-CALC CMT-MICA-HEM-FR INTER-GRN POR

2950 SS-FRSTY CLR-M-GRN-FRI-ANG-PR SRTEDE-CALC CMT-FOSS FRAGS-OOL-TR SH-TR GLAU

SLTSS-FRSTY GRY-F-GRN-V-SHLY-HEM

S-GRY-SFT-SILTY

**WABAUNSEE 2986' (-1057')**

POOR SAMPLE

3000 POOR SAMPLE

LS-CRM-F-XLN-OOL-FN OOL-MOLDIC POR-NO VIS FLOR-NO VIS SHOW

WT. 10  
VIS 43

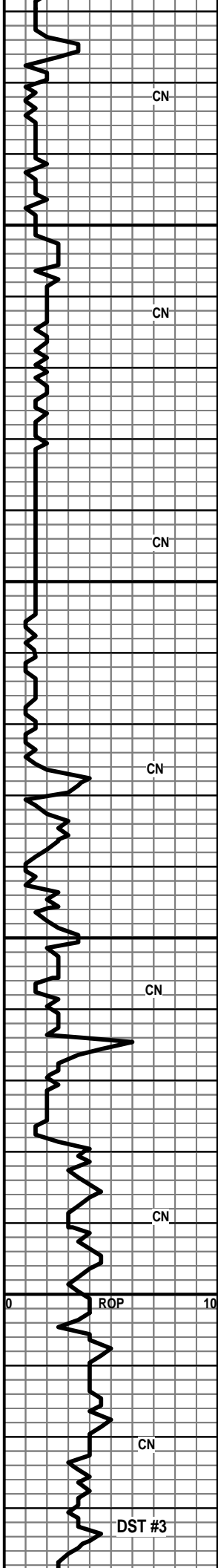
WT. 9.9  
VIS 38

DST #2  
2904'-2955'  
REC 100' MUD  
IBLW-V-WKBLW-BLW  
BLT 2 IN INTO BUCKET  
FBLW-V-WK BLW-BLW  
1 IN INTO BUCKET

15/30/15/30  
SIP-968.64-957.7  
IFP-63.42-95.78  
FFP-105.02-108.63  
HP-1557.68-1533.22

MUD DATA @ 2955  
WT. 10.1  
VIS 46  
FIL 16

WT. 8.7  
VIS 75



SH-GRN-GRY-SFT-WAXY

SS-FRSTY CLR-F-GRN-TT TO FRI-SUB-RNDED TO SUB-ANG-WELLSRTED-HEM-FR INTER-GRN POR

3050 SH-LT GRY-SFT-SLTY

SS-FRSTY WHT-F-GRN-TT-RNDED-WELL SRTED-CALC CMT-HEM-GLAU-FR INTER-GRN POR-NO VIS FLOR-NO VIS CUT

SS A.A.

SH-LT GRY-BLKY-WAXY

SH-GRY-GRN-BLKY-WAXY

3100 SLTSS-FRSTY-GRY-SHLY-HEM AND GLAU IMBD

SS-FRSTY GRY-F-GRN-FRI-SHLY-GLAU

**STOTLER**

LS-TN-V-F-GRN-HD-DNS

LS-TN-V-F-GRN-SNDY TEX-HD-DNS

SS-FRSTY WHT-F-GRN-TT-SUB-RNDED-FR SRTED-CALC CMT-GLAU-HEM-TR INTER-GRN POR-NO VIS FLOR-NO VIS CUT

3150 SH-LT GRY-V-SILTY

SS-FRSTY WHT-F-GRN-TT-ANG TO SUB-ANG-FR SRTED-CALC CMT-SHLY-TR HEM-TR GLAU

SS AND SH A.A.

**TARKIO**

LS-BRN-F-XLN-FOSS-OOL-HD-DNS

MISSING SAMPLE

MISSING SAMPLE

3200 BERN LS 3235'

LS-TN-F-XLN-SLI CHLKY-TR FOSS-HD-DNS W/ FEW PC OF LS-CRM-F-M-XLN-EDGES-FR INTER-XLN POR-NO VIS FLOR-NO VIS CUT W/ CHRT-TN-OPQ-FRSH

WT. 8.7  
VIS 77

WT. 8.7  
VIS 74

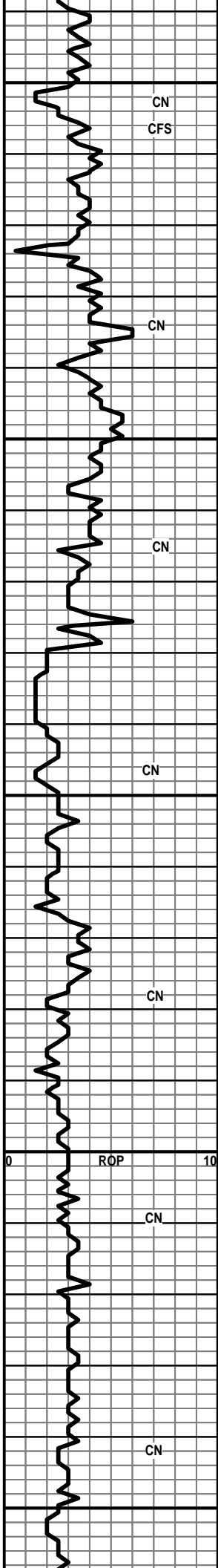
WT. 8.7  
VIS 69

WT. 8.7  
VIS 68

WT. 8.9  
VIS 63

DST #3  
3228'-3257'  
REC 315' MUD  
IBLW-STEADY  
BLW/BOB IN 5 MIN  
FBLW-V-STRNG  
BLW/BOB  
INSTANTLY/GAS TO  
SURF IN 2 MIN

30/60/60/90  
SIP-1216.95-1218.69  
IFP-144.94-147.76  
FFP-138.84-175.78  
HP-1553.88-1462.12



LS-CRM-M-CRS-XLN-BRIT-FOSS-FR INTER-XLN POR W/  
CHT-TN-OPQ-FRSH

3250

SH-LT GRY-SPLNTY

LS-OFF WHT-F-XLN-OOL-HD-DNS 1 PC-W/ PR  
OOL-MOLDIC POR-NO VIS FLOR-NO VIS CUT

LS-CRM-F-GRN W/ SNDY TEX-OOL-FOSS-HD-DNS-TR  
GLAU

LS-A.A. W/PR INTER-GRN POR IP-NO VIS POR-NO VIS  
CUT

3300

LS-GRY-F-XLN-HD-DNS

LS-GRY-F-XLN-FOSS SHELLS-HD-DNS

LS-CRM-M-GRN-BRIT-CHLKY-IP-FOSS FRAGS-TR PR  
INTER-GRN POR-DULL WHT MIN FLOR-NO VIS SHOW

LS-TN-F-XLN-CHLKY-SM FOSS FRAGS-TR  
FRAC/INTER-XLN POR-DULL WHT MIN FLOR-NO VIS  
SHOW

LS-GRY/TN-F-XLN-FOSS-SHLY-HD-DNS

3350

SH-LT GRY-SFT-WAXY

LS-TN/GRY-F-XLN-FOSS-HD-DNS

LS-LT BRN-F-GRN-FOSS-SHELLS-HD-DNS

SH-BLK-CARB

LS-TN-V-F-XLN-TR FOSS-HD-DNS W/  
CHRT-GRY-OPQ-FOSS-FRSH

LS-OFF WHT-FXLN-BRIT-CHLKY-DNS

LS A.A.

3400

LS-TN-F-GRN-BRIT-FOSS-TR INTER-GRN TO NO VIS  
POR

LS-TN-F-GRN-BRIT-CHLKY-TR FRAC POR-DULL WHT  
MIN FLOR

LS-OFF WHT-FGRN-V-SM FOSS FRAGS-HD-DNS

LS-GRY-F-GRN-SHLY-HD-DNS

**SEVERY**

3450

SH-LT GRY-SFT-SLTY-FOSS

**GAS TABLE**

FLOW PERIOD-2

CHOKE INCHES 0.13

MIN	PSIA	MCF/D
10	7.2	2.69
20	9.9	3.71
30	12.8	4.79
40	14.0	5.24

CHOKE INCHES 0.25

50	7.0	11.11
60	6.7	10.63

WT. 8.6  
VIS 54

MUD DATA @ 3257'

WT. 8.9  
VIS 68  
FIL 8

WT. 9.1  
VIS 59

WT. 8.9  
VIS 60



TOPEKA

MUD DATA @ 3460'  
WT. 9.1  
VIS 59  
FIL 8.8

LS-LT BRN-F-XLN-HD-DNS W/ SM PYR XLS IMBD

LS-OFF WHT-F-XLN-SM FOSS FRAGS-OOL-TR SM  
VUG POR-NO VIS FLOR-NO VIS CUT

LS-CRM-F-XLN-CHLKY IP-OOL-PRLY DEV  
OOL-MOLDIC/SCATT SM VUG POR-BRITE WHT MIN  
FLOR-NO VIS STN OR CUT

3500 LS-OFF WHT/BLK-F-GRN-BLK OOL-BRIT-TR  
OOL-MOLDIC POR-DULL WHT MIN FLOR-NO VIS CUT

LS-OFF WH/TN-F-GRN-SLI CHLKY-FOSS FRAGS-TR  
SM VUG POR-DULL WHT FLOR

LS-TN-F-XLN-CHLKY-BRIT-OOL-DULL WHT MIN  
FLOR-W/ CHRT-TN-OPQ-FRSH

LS-TN-F-XLN-SLI CHLKY-BRIT TO HD-DNS

LS-OFF WHT-F-XLN-CHLKY-BRIT-OOL-DNS

3550 SH-GRY-FRM-BLKY

LS-TN-F-XLN-FOSS-OOL-HD-DNS TR CHLK IN TRAY

LS-TN-F-XLN-FOSS-OOL-BRIT TO HD-PR INTER-XLN  
POR-NO VIS FLOR-NO VIS CUT

LS A.A. W/ TR FREE CRS CALCITE XLS IN SAMPLE  
WITH NO VIS FLOR-NO VIS CUT

LS-OFF WHT-F-XLN-BRIT TO HD-GD INTER-XLN POR  
IP TO NO VIS POR-NO VIS FLOR-NO VIS CUT

3600 SH-LT GRY-FRM-FOSS-LMY  
LS-GRY-F-XLN-HD-DNS

WT. 9.2  
VIS 56

SH-BLK-CARB

LS-CRM-F-XLN-FOSS FRAGS-OOL-HD-DNS SAMPLE  
CHLKY IP

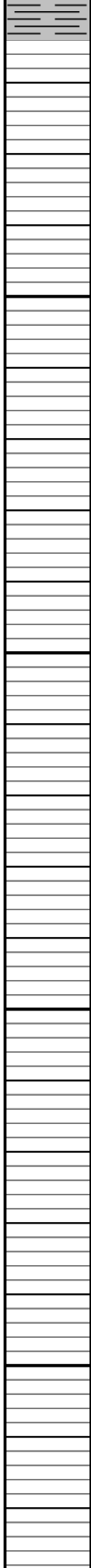
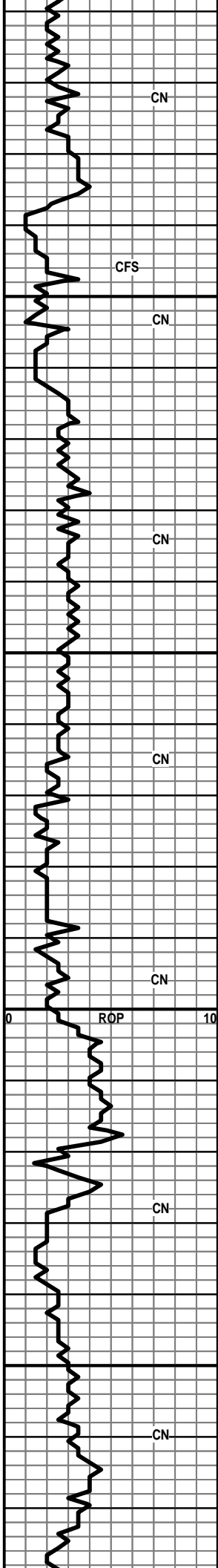
SH-DK-GRY-FRM-BLKY-LMY

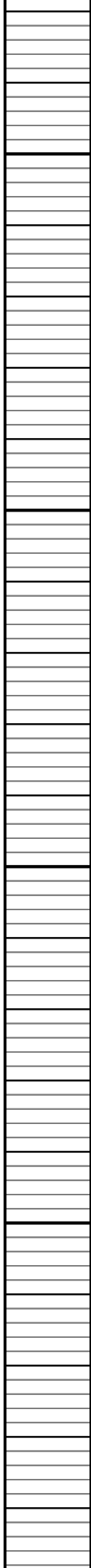
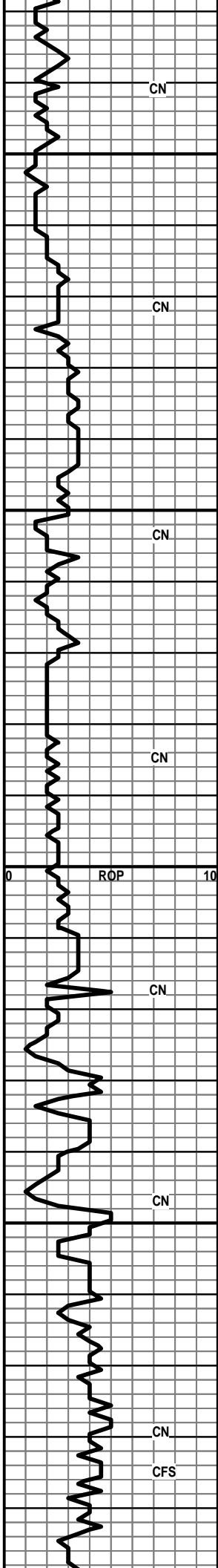
3650 LS-TN/GRY-F-XLN-HD-PR INTER-XLN/SM VUG POR-NO VIS  
VIS FLOR-NO VIS CUT

WT. 9.2  
VIS 62

LS-LT GRY-F-CRS XLN-FOSS-HD W/ TR INTR-XLN POR  
IN CRS XLS-NO VIS FLOR-NO VIS CUT

LS-CRM-F-XLN-CHLKY TO SLI CHLKY  
MATRIX-FOSS-OOL-PR INTER-GRN/SM VUG POR-NO  
VIS FLOR-NO VIS CUT





3700

LS-CRM-M-CRS-XLN-BRIT-GD INTER-XLN/VUG  
POR-NO VIS FLOR-NO VIS CUT

WT. 9.2  
VIS 60

LS-TN-F-XLN-CHLKY-HD-DNS

LS-OFF WHT-F-XLN-HD-DNS

SH-GRY-FRM-WAXY

LS-TN/BLK-F-GRN-BRIT-SM BLK OOL-NO VIS  
POR-DULL YEL FLOR-NO VIS CUT

WT. 9.1  
VIS 53

LS-OFF WHT-F-M-XLN-HD-DNS

SH-GRY-SPLNTY W/ LS-OFF WHT-F-XLN-CHLKY-DNS

3750

LS-TN-F-XLN-CHLKY-SFT-DNS

SH-GRY-GRN-SFT-SPLNTY

LS-GRY-F-XLN-BRIT-DNS

LS-TN/GRY-M-XLN-BRIT-FOSS-SHLY-TR CHLK IMBD

LS-TN-F-XLN-HD-FOSS-DNS W/LOTS OF CHLK IN  
TRAY

LS-GRY-F-XLN-HD-W/SH-DK GRY IMBD-NO VIS  
FLOR-NO VIS CUT

3800

LS-OFF WHT-M-CRS XLN-HD TO BRIT-FR INTER-XLN  
POR IP-NO VIS FLOR-NO VIS CUT

LS-GRY-F-XLN-HD-DNS

WT. 9.2  
VIS 55

SH-BLK-CARB

**HEEBNER**

SH-BLK-CARB

3850

LS-BRN-F-XLN-HD-FOSS-DNS-W/ SM PYR XLS

**TORONTO**

LS-TN-F-GRN-BRIT-FOSS-DNS

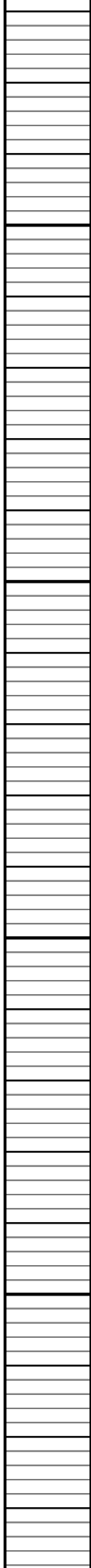
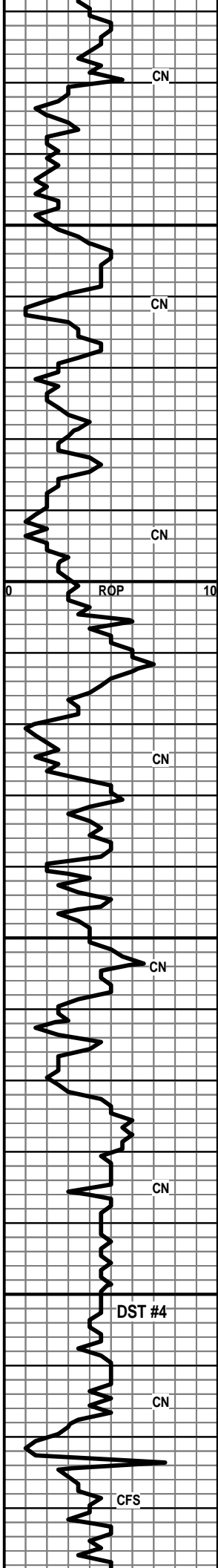
LS-TN-F-GRN-HD-DNS

LS-OFF WHT-F-GRN-BRIT-CHLKY-OOL-NO VIS  
FLOR-NO VIS SHOW

**DOUGLAS SH 3894' (-1965')**

0





LS-CRM-F-GRN-BRIT-FOSS-OOL-TR INTER-GRN POR  
IP TO NO VIS POR-NO VIS FLOR-NO VIS CUT W/  
CHRT-LT GRY-OPQ-FRSH

4150 LS-TN-F-XLN-HD-DNS-PYR XLS IMBD THRU

LS A.A. W/ CHLK IN TRAY

LS-TN-F-GRN-BRIT-CHLKY-FOSS-SHLY-PR  
INTER-GRN POR-DULL WHT MIN FLOR-NO VIS SHOW

SH-DK GRY-SPLNTY-SILTY

LS-TN-F-GRN-SNDY TEX-BRIT-FOSS-TR SH DK GRY  
IMBD-TR EDGE INTER-GRN POR-NO VIS FLOR-NO VIS  
CUT

4200 LS A.A. INCRS OF CHLK IN TRAY

LS-GRY-F-XLN-HD-FOSS-DNS

LS-LT BRN-F-XLN-OOL-BRIT TO HD-PRLY DEV  
OOL-MOLDIC POR-NO VIS FLOR-NO VIS SHOW

LS-TN-F-XLN-OOL-FOSS-HD TO BRIT-TR PRLY DEV  
OOL-MOLDIC POR-SEV PCS BRITE YEL FLOR-NO VIS  
CUT-NO ODOR-CHLK IN TRAY

4250 LS-CRM-F-XLN-OOL-HD-DNS W/ PYR VEINS THRU SE  
PC'S

LS-CRM-F-XLN-CHLKY IP-V-FOSS-OOL-TR  
PP/INTER-XLN POR-DULL WHT MIN FLOR-NO VIS CUT

LS-TN-F-XLN-SLI-CHLKY-BRIT-FOSS-TR TO PR  
INTER-GRN POR-DULL WHT FLOR-NO VIS  
CUT-CHRT-GRY-OPQ-FOSS-FRSH IN TRAY

LS-OFF WHT-F-XLN-OOL-HD-DNS W/ CHRT-LT  
GRY-TRANS-FRSH

4300 LS A.A.

LS-OFF WHT-F-XLN-OOL-HD-DNS

LS-OFF WHT-F-XLN-OOL-PRLY DEV OOL-MOLDIC  
POR-NO VIS FLOR-NO VIS CUT 1 PC LS-OFF  
WHT-F-XLN-W/ CRS CALCITE XLS ON EDGE-NO VIS  
FLOR-NO VIS CUT

LS-TN-F-XLN-HD-DNS W/ CHRT-TN-OPQ-FRSH

MUD DATA @ 4243'

WT. 9.6  
VIS 54  
FIL 9.0

WT. 9.6  
VIS 55

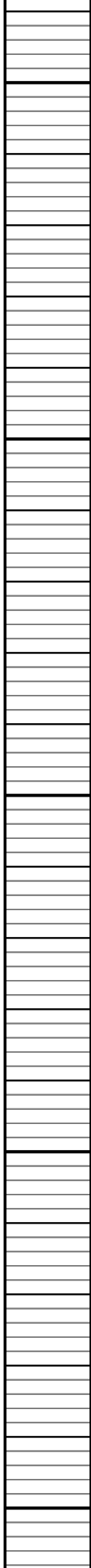
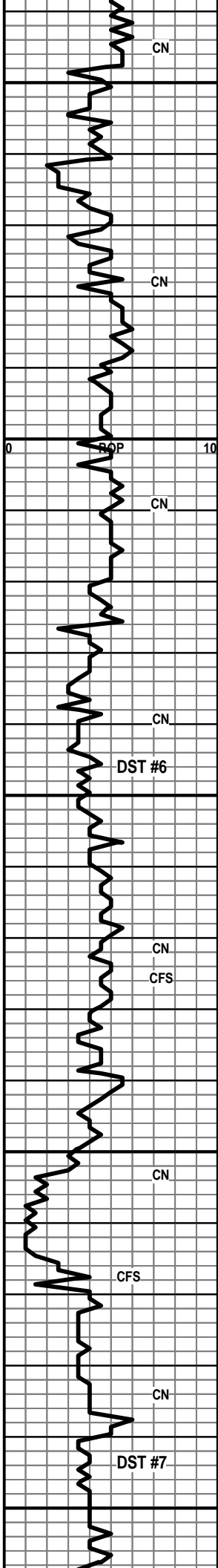
DST #4

4308'-4330'  
REC 40'MUD  
IBLW-FR BLDING BLW  
BOB IN 8 MIN  
FBLW-STRNG BLW  
BOB INSTANTLY  
15/60/45/90  
SIP-371.08-583.22  
IFP-76.82-43.66  
FFP-39.47-46.69  
HP-2133.56-2105.58

WT. 9.4  
VIS 47

MUD DATA @ 4330'

WT. 9.3  
VIS 44  
FIL 8.8



4350 LS AND CHRT A.A.

LS-CRM-V-F-GRN-BRIT-ABUNDT SM FOSS FRAGS-PR INTER-GRN POR-YEL/GLD FLOR-NO VIS CUT

LS-TN-GRY-F-XLN-HD-DNS W/ CHLK AND CHRT-GRY-TRANS-FRSH IN TRAY

LS-DK BRN-V-F-XLN-HD-DNS

SHALES-GRY-GRN-BLK-REDISH BRN-FRM-BLKY W/ TR CHRT-TN-TRANS-FRSH

4400 SH-SK GRY-BLKY-WAXY  
LS-OFF WHT-F-XLN-HD-DNS

LS TN-GRY-F-XLN-HD-DNS W/CHLK , PYR XLS, AND CHRT-TN-OPQ-FRSH IN TRAY

LS/CHRT/PYR A.A.

SH-BLK-CARB

LS-CRM-F-XLN-BRIT-CHLKY-TR PP POR-LT BRN STN-YEL/GLD FLOR-V-FNT FLSH CUT

4450 LS-TN-F-XLN-OOL-HD-PR PP POR-LT TO DK BRN STN-YEL/GLD FLOR-V-FNT CUT TO NO VIS CUT W/ CHRT-TN-GRY-OPQ-FRSH-FRAC-LT BRN STN-SOME CHRT-OFF WHT-TRIP-DK BRN STN

LS-OFF WHT/BRN-F-XLN-FOSS-OOL-GLAU-W/ CHRT-OFF WHT-OPQ-FRSH-GLAUC

LS-OFF WHT/BRN-M-XLN-FOSS-GLAUC- 1 PC DK BLK STN-NO VIS FLOR-NO VIS CUT-TR CHRT-OFF WHT-OPQ-FRSH

LS-GRY-F-XLN-V-FOSS-HD-DNS W/ CHRT-OFF WHT/BLK-TRIP-NO VIS FLOR-NO VIS CUT

4500 CHRT-OFF WHT TO TRANS-FRSH-SOME TRIP-LT BRN STN-NO VIS FLOR-FREE OIL

LS-TN-F-XLN-HD-DNS W/ CHRT-OFF WHT-OPQ- FRSH

LS-GRN-F-XLN-HD-DNS W/ LS-OFF WHT/BLK STN-V-F-GRN-SNDY-NO VIS POR-NO VIS FLOR-NO VIS CUT

4550 LS-LT GRN-F-XLN-HD-DNS W/ CHRT-TN-TRIP-DK BLK

LCM #1

WT. 9.1  
VIS 53  
LCM #1

WT. 9.3  
VIS 48  
LCM #2

WT. 9.2  
VIS 52  
LCM #3

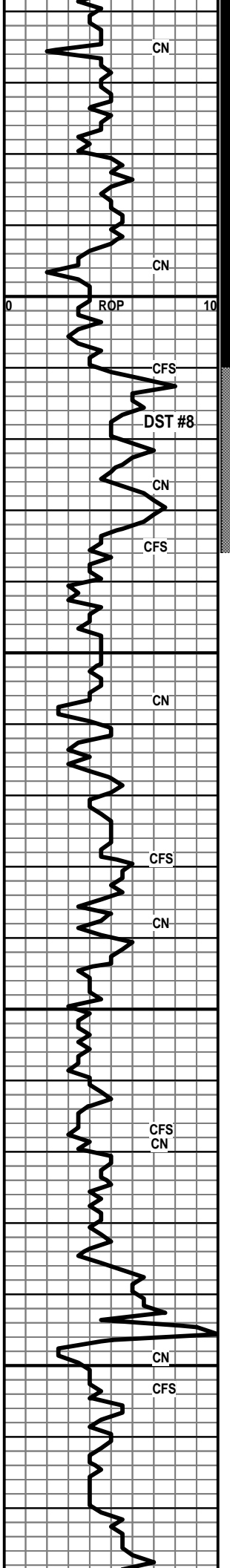
WT. 9.2  
VIS 55  
LCM #4

DST #6  
REC 45 MUD  
IBLW-FR STDY BLW 3 INCHES IN 15 MIN  
FBLW-FR BLW 2.5 INCHES THEN DIED OFF  
15/60/45/90  
SIP-318.36-183.91  
IFP-83.45-81.39  
FFP-95.79-84.97

MUD DATA @ 4519'  
WT. 9.3  
VIS 64  
FIL 8.8  
LCM #4

DST #7  
4529'-4609'  
REC - 17.18 MCF/D GAS AND 265' MUD  
IBLW-STRNG BLW-BOB IN 1 MIN  
FBLW-STRNG BLW BOB INSTANTLY  
5/60/60/90  
SIP-538.6-535.73  
IFP-246.53-163.88  
FFP-164.43-162.8  
HP-2378.12-2237.35

GAS CHART  
FLOW PERIOD 2  
CHOKE 0.75  
MIN PSIA MCF/D  
10 1.00 15.62



STN-NO VIS FLOR-FNT CU

LS-TN-GRY-F-XLN-HD-DNS W/CHRT-OFF WHT-TRIP  
IP-DK BLK STN-NO VIS FLOR-NO VIS CUT

**VIOLA 4597'**

DOLO-OFF WHT/TN-M-CRS XLN-V-SUCRO-BRIT-TR  
FOSS-GLAUC-GD INTER/XLN/CONNECTED VUG  
POR-NO VIS FLOR-DELAYED RING CUT-STRNG ODOR  
AT THE SAMPLE BOX

DOLO A.A. W/ CHLK

DOLO-OFF WHT-CRS XLN-LT BRN STN-SCATT BRITE  
YEL FLOR-NO VIS CUT W/ CHRT-OFF WHT-OPQ-FRSH

DOLO-OFF WHT-M-XLN-GD INTER-XLN-TR FRAC  
POR-DULL WHT FLOR-LT FLSH CUT W/  
CHRT-TRANS-FRAC/PP POR-LT BRN STN-NO VIS  
FLOR-GD STRM CUT-FNT ODOR

POOR SAMPLES

POOR SAMPLES

SIMPSON SAND

SS-FRSTY CLR-F-M-GRN-FRI TO TT-RND TO  
SUB-RNDED-PR SRTE-DOLO CMT-SHLY IP-LT BRN  
STN-NO VIS FLOR-NO VIS CUT

20	1.00	15.62
30	1.10	17.18
40	1.10	17.18

WT. 9.1  
VIS 54  
LCM #4

PUMP PRESSURE 650  
WEIGHT ON BIT 30  
STROKE 50

MUD DATA @ 4610'

WT. 9.3  
VIS 64  
FIL 8.8  
LCM #4

WT. 9.3  
VIS 49  
LCM #2

PUMP PRESSURE 850  
WEIGHT ON BIT 32

MUD DATA @ 4635'

WT. 9.3  
VIS 49  
FIL 8.8  
LCM #4

DST #8  
4610'-4635'  
REC 30 FT MUD  
IBLW-FR BLDING BLW  
8 INCHES IN 30 MIN  
FBLW-FR BLDING BLW  
BOB IN 42 MIN

30/60/45/90  
SIP-137.85-138.72  
IFP-45.35-45.0  
FFP-45.07-47.84  
HP-2333.38-2262.39

WT. 9.2  
VIS 47  
LCM #3

DST #9  
4791'-4800'  
REC-900' SALT H2O  
10% AND 90% H2O-90%  
MUDDY H2O(90% MUD  
AND 10% H2O)

IBLW-FR BLDING BLW  
BOB IN 12 MIN  
FBLW-FR BLDING BLW  
BOB IN 7 MIN

30/60/45/90  
SIP-1719.6-1704.2  
IFP-39.45-252.61  
FFP-250.52-530.76  
HP-2371.09-2248.76

