



EARTH TECH OGL, INC
 PO BOX 683 8918th st
 HOOKER, OK 73945 GREAT BEND, KANSAS 67531
 1-888-543-8378

COMPANY: Berexco LLC
WELL: Elnora #2-20
FIELD: _____ **COUNTY:** Finney **STATE:** KS
LOCATION: Sec. 20 Twnp. 26S Rng. 33W,
940' FSL, 1655' FEL
Interval Logged: 3700 **To:** 5400 **G.L.:** 2928 **K.B.:** 2940
Date Logged: 3/25/2014 **To:** 4/5/2014 **Spud Date:** 3/18/2014
Rig: Beredco Rig #1 **Unit No.:**
Loggers: Ian Bosmeijer
Api No.: 15-055-22288-00-00
Filename: elnora_-2-20.mlw
Geologist: Pete Wilson

Abbreviations:

NB...New Bit	DST...Drill Stem Test
CO...Circ Out	DS...Directional Survey
NR...No Returns	CG...Connection gas
TG...Trip Gas	LAT...Logged After Trip
WOB...Wt on Bit	PP...Pump Pressure
RPM...Rev/Min	SPM...Strokes/Min
SG...Survey Gas	DTG...Down Time Gas

Mud Data

WT...Weight	V...Viscosity
PH...Acidity	F...Filtrate
CHL...Chlorides	SC...Solids Content

Lithology Symbols:

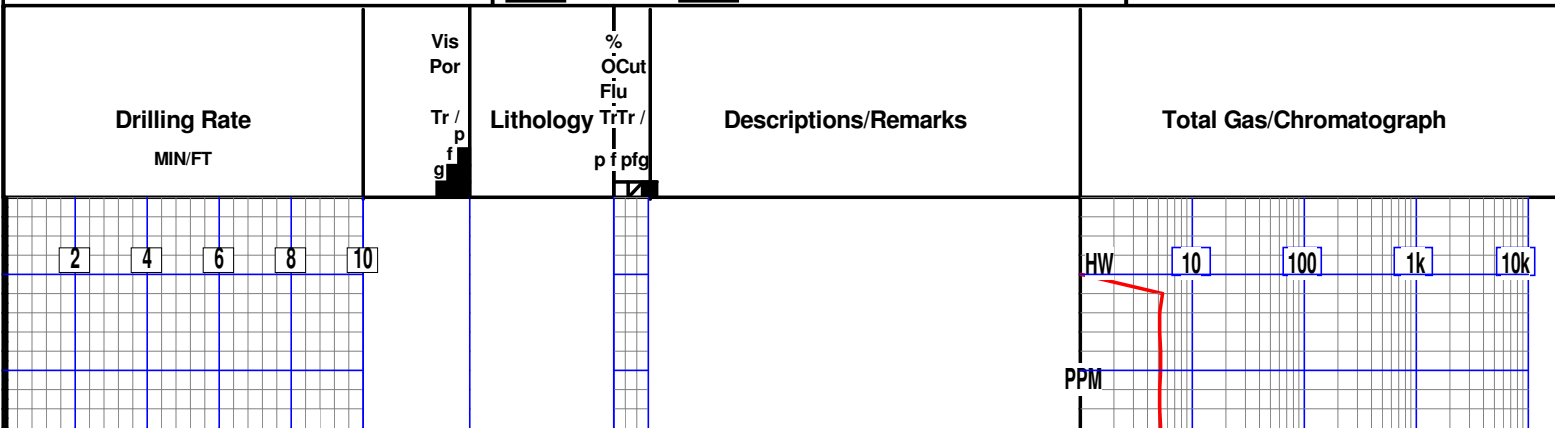
Anhydrite	Salt	Granite
Siltstone	Chert	Sandstone
Dolomite	Conglomerate	Limestone
Coal	Shale	Bentonite
Carb Shale	Granite Wash	Quartz Wash
Red Sh	Org Sh	Green Sh
Cust Sh1	Cust Sh2	Cust Sh3
Cust Sh4	Cust Sh5	Cust Sh6

Gas Chromatograph Analysis:

HW	
C1	
C2	
C3	
IC4	
NC4	
IC5	

Accessories

Glauconite	Pyrite	Fossils	Oolites
Fractures	Cement		



50

START 24 HOUR DATA ACQUISITION 3/25/2014

c

LS- OFF WHT TO CRM LT TN, HD DNS TO BRITT IP, MD-XLN TO RE-XLN IP, TR TT SUCRO MTRX, IMBD SH IP, SCAT SFT WHT CHLK IP, TR FOSS FRAG, DLL YEL MIN FLO IN 30%, NO VIS POR, NO SHOW

c

LS- WHT OFF WHT TO CRM, SFT BRITT TO HD IP, MD-XLN TO TT SUCRO, RE-XLN MTRX IP, ABDT SFT GMMY CHLK THRU, SCAT FOSS FRAG, DLL YEL MIN FLO IN 30%, NO VIS POR, NO SHOW

3700 WOB 35-38 RPM 70-80 PP 900

WT 8.7
VIS 45
PH 11
CHL 1600
FIL 8.4
FIL/CK 1
SOL 2.1
YP 14
PV 14
LCM 2#

LS- OFF WHT TO CRM, HD TO SFT BRITT, FN-MD XLN, SLI SUCRO MTRX IP, SFT GMMY CHLK IP, SCAT FOSS FRAG, TR IMBD SH IP, DLL YEL MIN FLO IN 40%, NO VIS POR, NO SHOW

5 U. BG

SH- LT TO MD GY, FRM BLKY, SMTH TXT

50

LS- LT GY TO WHT IP, HD DNS TO BRITT, F-XLN, SCAT SFT WHT CHLK IP, SCAT FOSS FRAG, DLL YEL MIN FLO IN 10%, NO VIS POR, NO SHOW

c

LS- WHT TO LT GY, HD DNS TO BRITT, FN-MD XLN, SUCRO TO SUB-CHLKY IP, SFT GMMY CHLK IP, ARG TO SHLY IP, DLL YEL MIN FLO IN 20%, NO VIS POR, NO SHOW

3800

LS- LT GY TO OFF WHT, HD DNS TO BRITT IP, F-XLN TO TT SUCRO, SLI RE-XLN IP, TR SFT WHT CHLK, TR IMBD F-GRN QRTZ IP, DLL YEL MIN FLO IN 30%, NO VIS POR, NO SHOW

GAS TEST

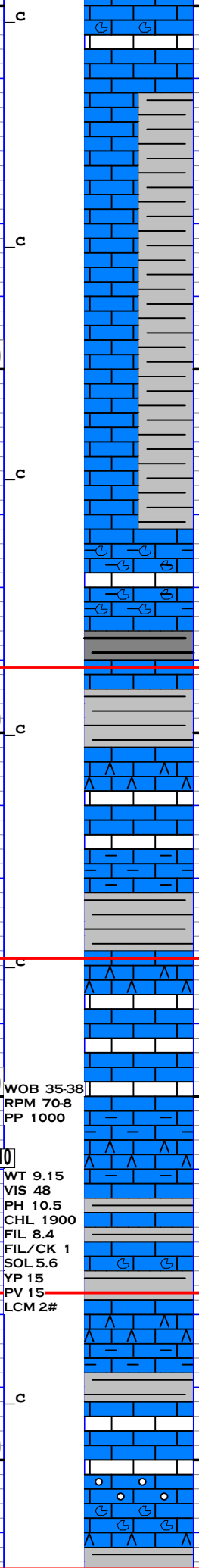
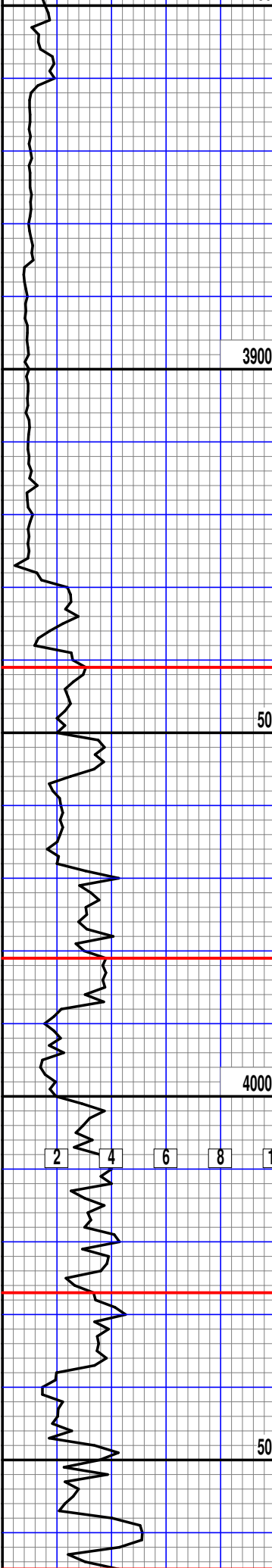
2 4 6 8 10

HW 10 4-5 U. BG 1k 10k

c

LS- LT GY TO LT TN IP, HD DNS TO BRITT, F-XLN TO TT SUCRO, SCAT IMBD MICRO-FOSS, TR IMBD F-GRN QRTZ IP, TR SFT WHT CHLK, DLL YEL MIN FLO IN 40%, NO VIS POR, NO SHOW

PPM



LS- WHT TO OFF WHT, BRITT SFT TO HD IP, F-XLN TO SLI SUB-CHLKY, SLI RE-XLN MTRX IP, SCAT SFT WHT CHLK, SCAT FOSS FRAG, IMBD GY SLT IP, DLL YEL MIN FLO IN 25%, NO VIS POR, NO SHOW

PR SAMPLE QUALITY, LS- OFF WHT TO LT GY, HD TO SFT, F-XLN TO SUB-CHLKY, SCAT FOSS FRAG IP, SCAT SFT GMMY CHLK, DLL YEL MIN FLO IN 20%, NO VIS POR, NO SHOW, SH- RD, GY TO BLK, FRM BLKY TO SFT GMMY, CARB IP, SMTH TO SLTY TXT

LS- LT TO MD GY, HD DNS, F-XLN, IMBD SH IP, TR FOSS FRAG, TR GMMY CHLK, DLL YEL MIN FLO IN 10%, NO VIS POR, NO SHOW

SH- BLK SFT CARB

SH- LT GY TO LT GRN, SFT GMMY

LS- WHT, SFT TO HD IP, SUCRO TO SUB-CHLKY, ABDT SFT WHT CHLK, TR WHT CHRT IN TRAY, DLL YEL MIN FLO IN 70%, NO VIS POR, NO SHOW

LS- LT GY TO OFF WHT, HD TO SFT BRITT, FN-MD XLN, RE-XLN MTRX IP, SFT WHT CHLK IP, ABDT IMBD SH IP, DLL YEL MIN FLO IN 25%, NO VIS POR, NO SHOW

SH- LT GY, FRM BLKY TO SFT GMMY, SMTH TXT

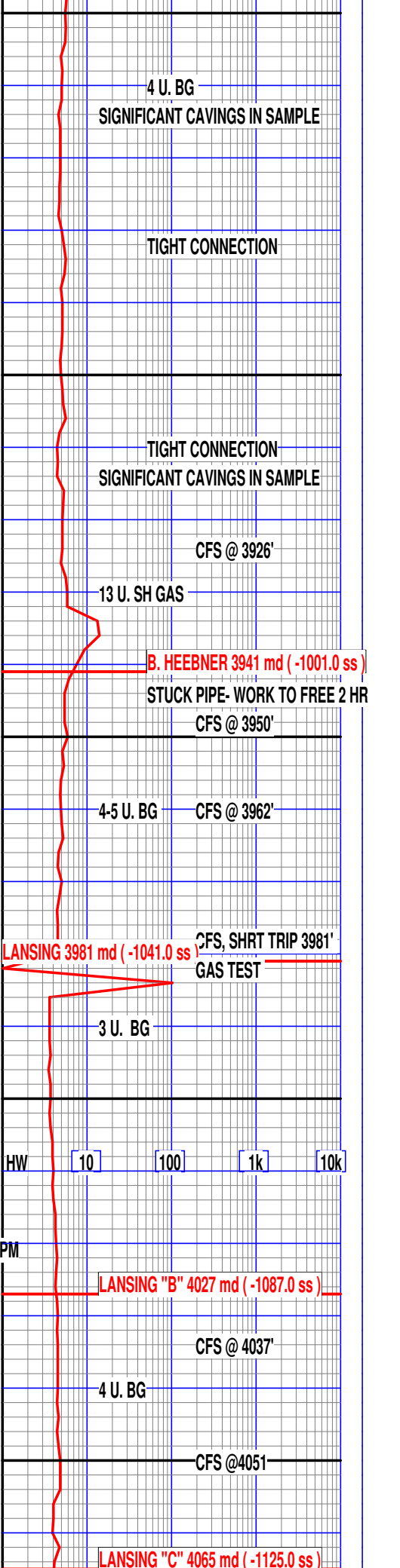
LS- OFF WHT TO LT GY, HD TO V/ SFT BRITT, RE-XLN TO TT SUCRO, SUB-CHLKY IP, ABDT SFT WHT CHLK, TR LT GY CHRT IP, DLL YEL MIN FLO IN 40%, NO VIS POR, NO SHOW

LS- LT GY, CRM TO OFF WHT, HD DNS, SFT IP, F-XLN, SLI RE-XLN MTRX IP, SFT WHT CHLK IP, IMBD SH IP, TR WHT TO GY CHRT IP, DLL YEL MIN FLO IN 30%, NO VIS POR, NO SHOW

LS- CRM TO LT GY, LT TN, HD DNS TO BRITT, F-XLN TO SLI RE-XLN IP, IMBD SH IP, SFT WHT CHLK IP, SCAT FOSS FRAG IP, DLL YEL MIN FLO IN 30%, NO VIS POR, NO SHOW

LS- LT GY TO WHT, HD DNS, CRYPTO-FN XLN, TR V/ RE-XLN MTRX IP, IMBD SH IP, LT GY CHRT IP, SCAT FOSS FRAG, DLL YEL MIN FLO IN 25%, NO VIS POR, NO SHOW

LS- LT CRM, HD DNS TO BRITT IP, F-XLN TO V/RE-XLN TO SUB-CHLKY, SFT WHT CHLK, SCAT IMBD OOL AND FOSS FRAG, LRG CALC XLS IP, WHT TO CRM CHRT IN TRAY, TR IMBD BRN SH, DLL YEL MIN FLO IN 60%, NO VIS



POR, NO SHOW

LS- CRM TO OFF WHT, BRITT TO HD IP, FN-MD XLN, RE-XLN MTRX IP, SCAT IMBD OOL, SCAT FOSS FRAG, SFT WHT CHLK IP, SCAT CLR TO GY CHRT IN TRAY, DLL YEL MIN FLO IN 70%, NO VIS POR, NO SHOW

4 U. BG

4100

LS- WHT TO OFF WHT, HD TO BRITT, MD-XLN TO RE-XLN, SUB-CHLKY IP, SCAT FOSS FRAG, SCAT PYR CLSTR, SFT WHT CHLK IP, DLL YEL MIN FLO IN 60%, NO VIS POR, NO SHOW

CARBIDE TEST

LANSING "D" 4119 md (-1179.0 ss)

LS- WHT TO LT GY, HD DNS TO BRITT, F-XLN, V/RE-XLN IP, ABDT IMBD CALC XLS, TR SFT WHT CHLK, TR IMBD GY SH, DLL YEL MIN FLO IN 50%, PR MICRO PP POR IN 5%, NO VIS CUT OR SHOW

3/27/14

LS- OFF WHT TO WHT, GY IP, HD DNS TO SLI BRITT, FN-MD XLN, TR SUCRO MTRX, SCAT IMBD FOSS FRAG, TR IMBD SH, TR SFT WHT CHLK, DLL YEL MIN FLO IN 25%, NO VIS CUT OR SHOW

50 WOB 35-38 RPM 70-80 PP 1000

3-5 U. BG

WT 9.1 VIS 38 LCM 2#

LS- WHT TO CRM, HD TO BRITT, F-XLN, ABD IMBD OOL THRU, RE-XLN MTRX IP, DLL YEL MIN FLO IN 40%, FR OOLIMOLDIC POR IN 2%, NO VIS CUT OR SHOW

SH- MD GY TO BLK, LT GRN IP, FRM BLKY, SMTH TXT

LS- OFF WHT TO CRM, WHT IP, F-XLN TO TT-SUCRO, TR RE-XLN MTRX IP, SCAT FOSS FRAG, TR SFT WHT CHLK, DLL YEL MIN FLO IN 50%, NO VIS POR, NO VIS CUT OR SHOW

4200

LANSING "F" 4202 md (-1262.0 ss)

NO SAMPLE CAUGHT BY RIG

HW 10 100 1k 10k

LS- OFF WHT CRM TO BUFF, HD DNS TO BRITT IP, FN-MD XLN, TR TT SUCRO MTRX, SCAT WHT TO GY CHRT IN TRAY, V/ SHLY IP, SCAT IMBD FOSS FRAG IP, DLL YEL MIN FLO IN 30%, NO VIS POR, NO SHOW

4 U. BG

LANSING "G" 4238 md (-1298.0 ss)

LS- CRM TO BUFF, HD DNS, CRYPTO-FN XLN, TR RE-XLN MTRX, ARG TO SHLY IP, SCAT WHT TO GY CHRT IN TRAY, DLL YEL MIN FLO IN 25%, NO VIS POR, NO SHOW

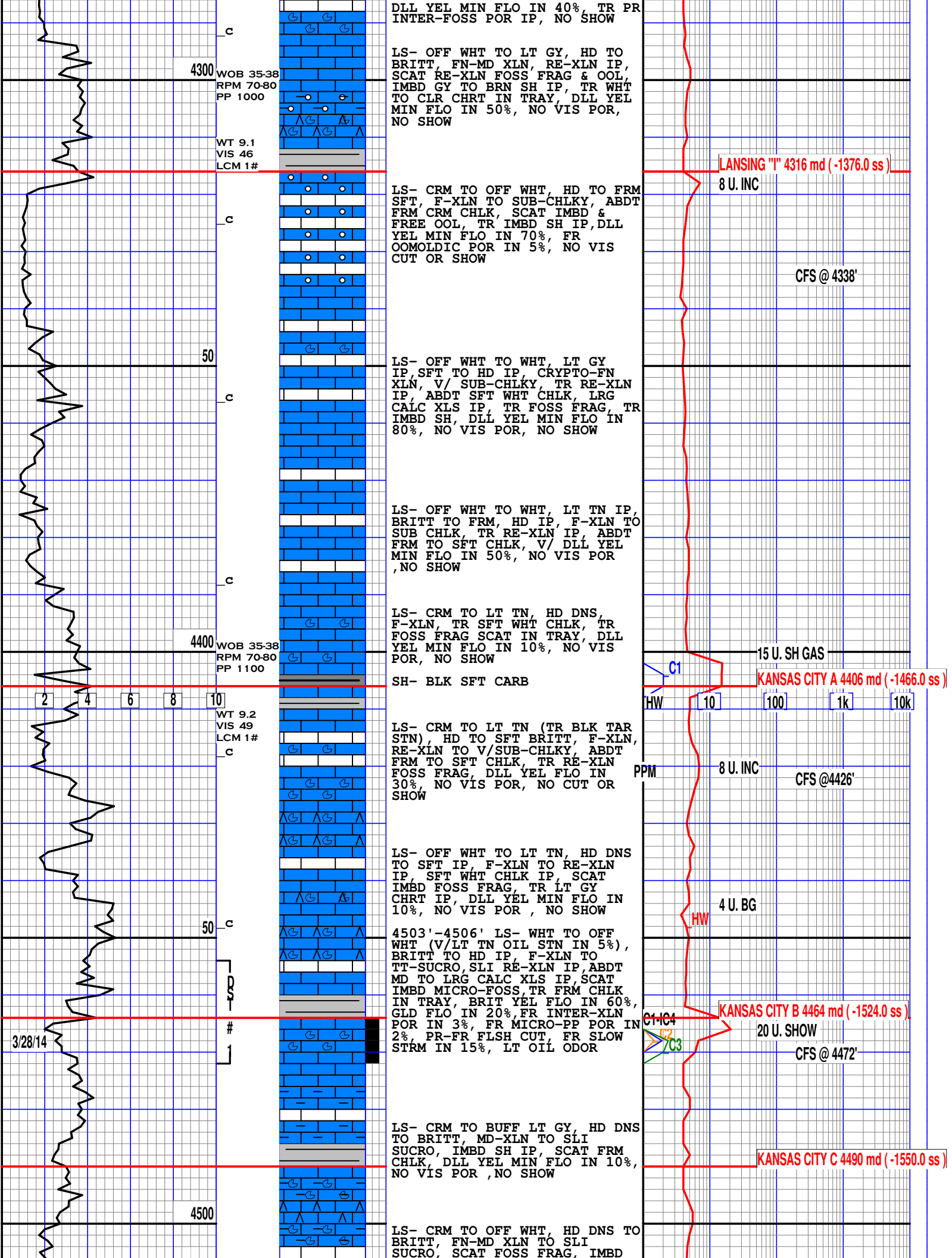
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3-5 U. BG

LS- WHT TO CRM, HD TO BRITT, CRYPTO-FN XLN, DLL YEL MIN FLO IN 50%, NO VIS POR, NO SHOW

LS- WHT TO CRM, BRITT SFT TO HD, SUB-CHLKY TO TT SUCRO, F-XLN IP, SCAT SFT WHT CHLK, SCAT IMBD & FREE FOSS FRAG,

4 U. BG



4300 WOB 35-38
RPM 70-80
PP 1000
WT 9.1
VIS 46
LCM 1#

DLL YEL MIN FLO IN 40%, TR PR INTER-FOSSPOR IP, NO SHOW
LS- OFF WHT TO LT GY, HD TO BRITT, FN-MD XLN, RE-XLN IP, SCAT RE-XLN FOSS FRAG & OOL, IMBD GY TO BRN SH IP, TR WHT TO CLR CHRT IN TRAY, DLL YEL MIN FLO IN 50%, NO VIS POR, NO SHOW

LANSING "I" 4316 md (-1376.0 ss)
8 U. INC

50

LS- CRM TO OFF WHT, HD TO FRM SFT, F-XLN TO SUB-CHLKY, ABDT FRM CRM CHLK, SCAT IMBD & FREE OOL, TR IMBD SH IP, DLL YEL MIN FLO IN 70%, FR OOMOLDIC POR IN 5%, NO VIS CUT OR SHOW

CFS @ 4338'

4400 WOB 35-38
RPM 70-80
PP 1100
WT 9.2
VIS 49
LCM 1#

LS- OFF WHT TO WHT, LT GY IP, SFT TO HD IP, CRYPTO-FN XLN, V/ SUB-CHLKY, TR RE-XLN IP, ABDT SFT WHT CHLK, LRG CALC XLS IP, TR FOSS FRAG, TR IMBD SH, DLL YEL MIN FLO IN 80%, NO VIS POR, NO SHOW

LS- OFF WHT TO WHT, LT TN IP, BRITT TO FRM, HD IP, F-XLN TO SUB CHLK, TR RE-XLN IP, ABDT FRM TO SFT CHLK, V/ DLL YEL MIN FLO IN 50%, NO VIS POR, NO SHOW

LS- CRM TO LT TN, HD DNS, F-XLN, TR SFT WHT CHLK, TR FOSS FRAG SCAT IN TRAY, DLL YEL MIN FLO IN 10%, NO VIS POR, NO SHOW

15 U. SH GAS
KANSAS CITY A 4406 md (-1466.0 ss)

SH- BLK SFT CARB

LS- CRM TO LT TN (TR BLK TAR STN), HD TO SFT BRITT, F-XLN, RE-XLN TO V/SUB-CHLKY, ABDT FRM TO SFT CHLK, TR RE-XLN FOSS FRAG, DLL YEL FLO IN 30%, NO VIS POR, NO CUT OR SHOW

8 U. INC
CFS @ 4426'

50

LS- OFF WHT TO LT TN, HD DNS TO SFT IP, F-XLN TO RE-XLN IP, SFT WHT CHLK IP, SCAT IMBD FOSS FRAG, TR LT GY CHRT IP, DLL YEL MIN FLO IN 10%, NO VIS POR, NO SHOW

4 U. BG

4503'-4506' LS- WHT TO OFF WHT (V/LT TN OIL STN IN 5%), BRITT TO HD IP, F-XLN TO TT-SUCRO, SLI RE-XLN IP, ABDT MD TO LRG CALC XLS IP, SCAT IMBD MICRO-FOSS, TR FRM CHLK IN TRAY, BRIT YEL FLO IN 60%, GLD FLO IN 20%, FR INTER-XLN POR IN 3%, FR MICRO-PP POR IN 2%, PR-FR FL SH CUT, FR SLOW STRM IN 15%, LT OIL ODOR

KANSAS CITY B 4464 md (-1524.0 ss)
20 U. SHOW
CFS @ 4472'

4500

LS- CRM TO BUFF LT GY, HD DNS TO BRITT, MD-XLN TO SLI SUCRO, IMBD SH IP, SCAT FRM CHLK, DLL YEL MIN FLO IN 10%, NO VIS POR, NO SHOW

KANSAS CITY C 4490 md (-1550.0 ss)

LS- CRM TO OFF WHT, HD DNS TO BRITT, FN-MD XLN TO SLI SUCRO, SCAT FOSS FRAG, IMBD

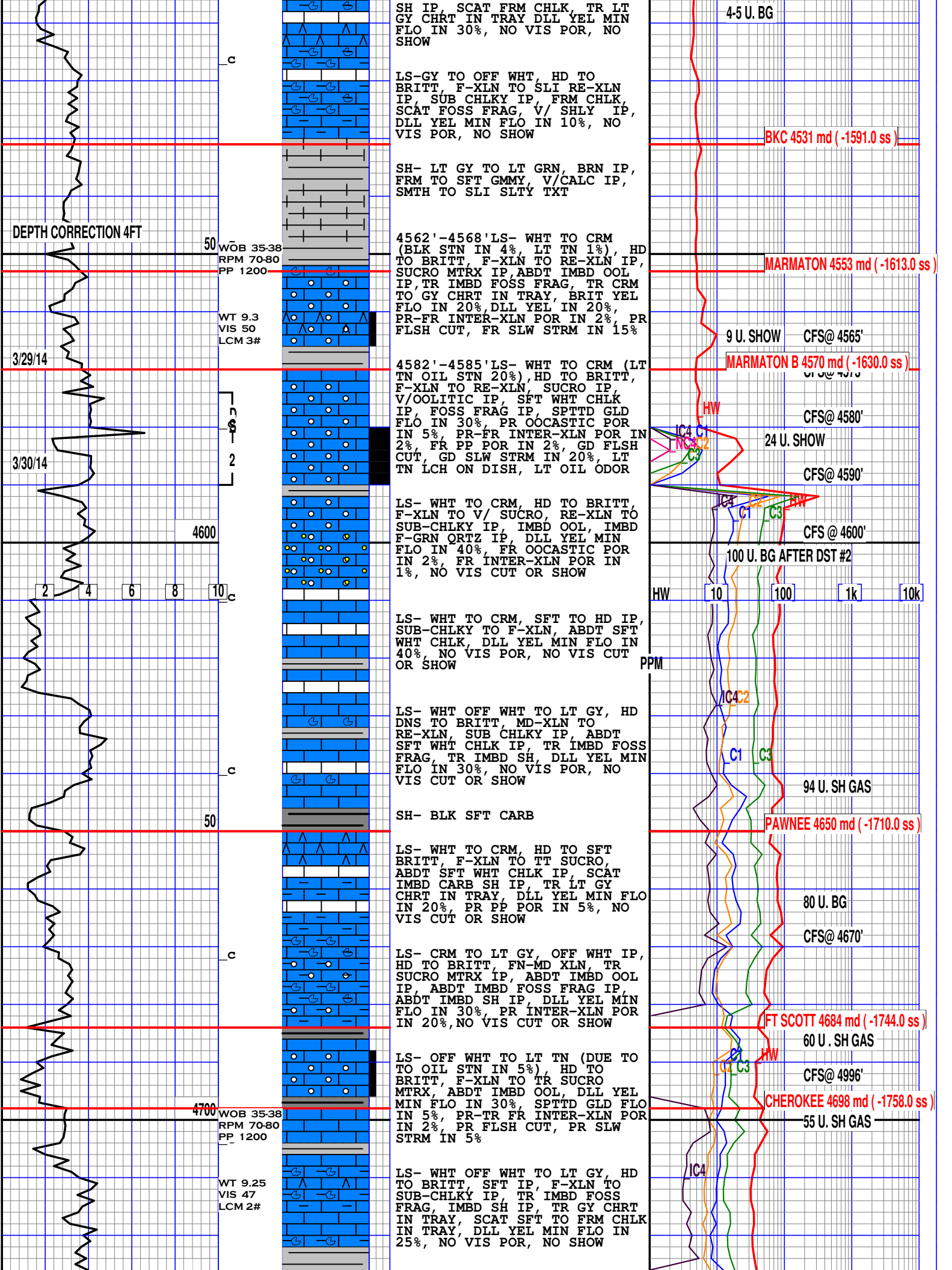
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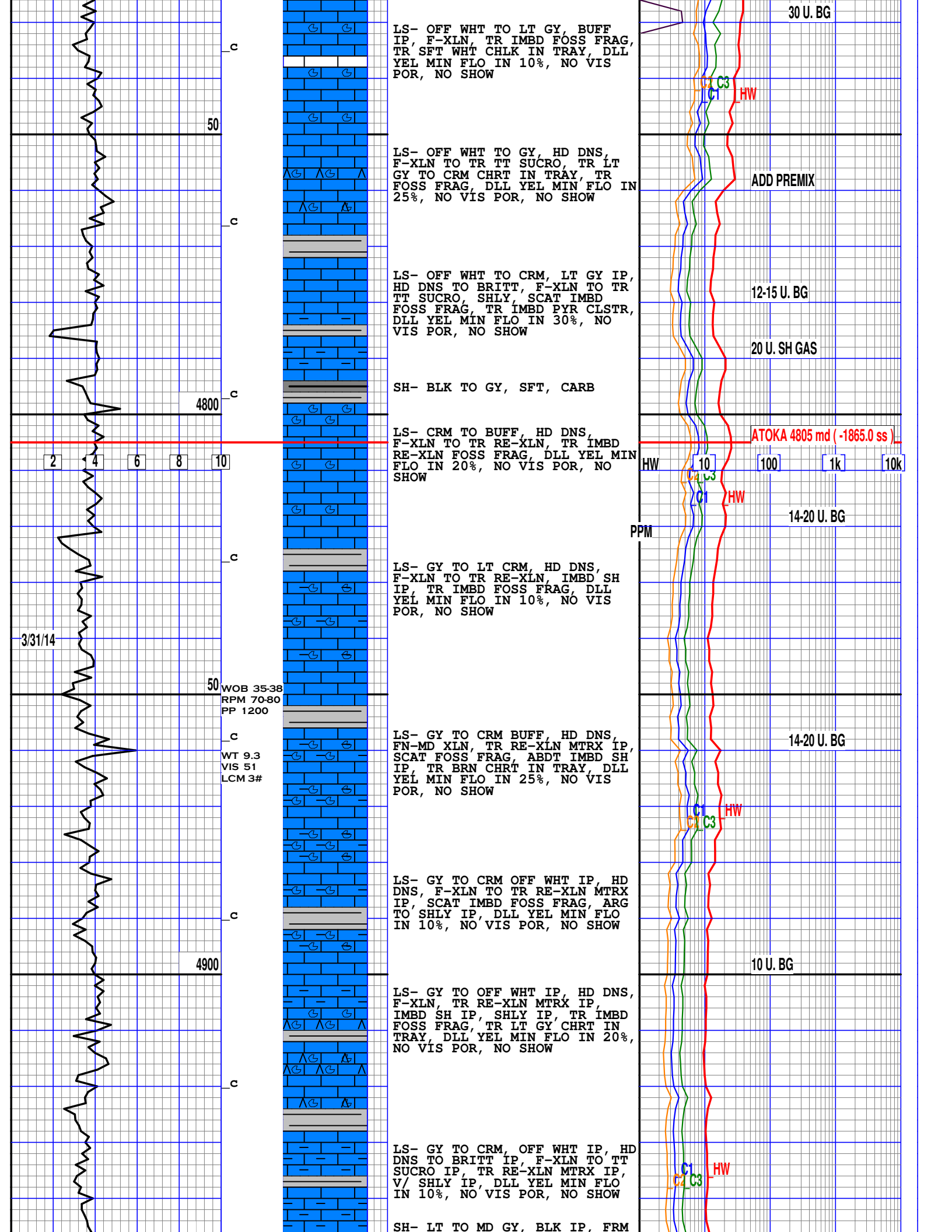
3/28/14

C1
HW 10 100 1k 10k

PPM

C1-IC4
C2
C3





LS- OFF WHT TO LT GY, BUFF IP, F-XLN, TR IMBD FOSS FRAG, TR SFT WHT CHLK IN TRAY, DLL YEL MIN FLO IN 10%, NO VIS POR, NO SHOW

LS- OFF WHT TO GY, HD DNS, F-XLN TO TR TT SUCRO, TR LT GY TO CRM CHRT IN TRAY, TR FOSS FRAG, DLL YEL MIN FLO IN 25%, NO VIS POR, NO SHOW

LS- OFF WHT TO CRM, LT GY IP, HD DNS TO BRITT, F-XLN TO TR TT SUCRO, SHLY, SCAT IMBD FOSS FRAG, TR IMBD PYR CLSTR, DLL YEL MIN FLO IN 30%, NO VIS POR, NO SHOW

SH- BLK TO GY, SFT, CARB

LS- CRM TO BUFF, HD DNS, F-XLN TO TR RE-XLN, TR IMBD RE-XLN FOSS FRAG, DLL YEL MIN FLO IN 20%, NO VIS POR, NO SHOW

LS- GY TO LT CRM, HD DNS, F-XLN TO TR RE-XLN, IMBD SH IP, TR IMBD FOSS FRAG, DLL YEL MIN FLO IN 10%, NO VIS POR, NO SHOW

LS- GY TO CRM BUFF, HD DNS, FN-MD XLN, TR RE-XLN MTRX IP, SCAT FOSS FRAG, ABDT IMBD SH IP, TR BRN CHRT IN TRAY, DLL YEL MIN FLO IN 25%, NO VIS POR, NO SHOW

LS- GY TO CRM OFF WHT IP, HD DNS, F-XLN TO TR RE-XLN MTRX IP, SCAT IMBD FOSS FRAG, ARG TO SHLY IP, DLL YEL MIN FLO IN 10%, NO VIS POR, NO SHOW

LS- GY TO OFF WHT IP, HD DNS, F-XLN, TR RE-XLN MTRX IP, IMBD SH IP, SHLY IP, TR IMBD FOSS FRAG, TR LT GY CHRT IN TRAY, DLL YEL MIN FLO IN 20%, NO VIS POR, NO SHOW

LS- GY TO CRM, OFF WHT IP, HD DNS TO BRITT IP, F-XLN TO TR SUCRO IP, TR RE-XLN MTRX IP, V/ SHLY IP, DLL YEL MIN FLO IN 10%, NO VIS POR, NO SHOW

SH- LT TO MD GY, BLK IP, FRM

30 U. BG

ADD PREMIX

12-15 U. BG

20 U. SH GAS

ATOKA 4805 md (-1865.0 ss)

14-20 U. BG

14-20 U. BG

10 U. BG

PPM

HW 10 100 1k 10k

c

50

c

4800

c

3/31/14

WOB 35-38
RPM 70-80
PP 1200

c

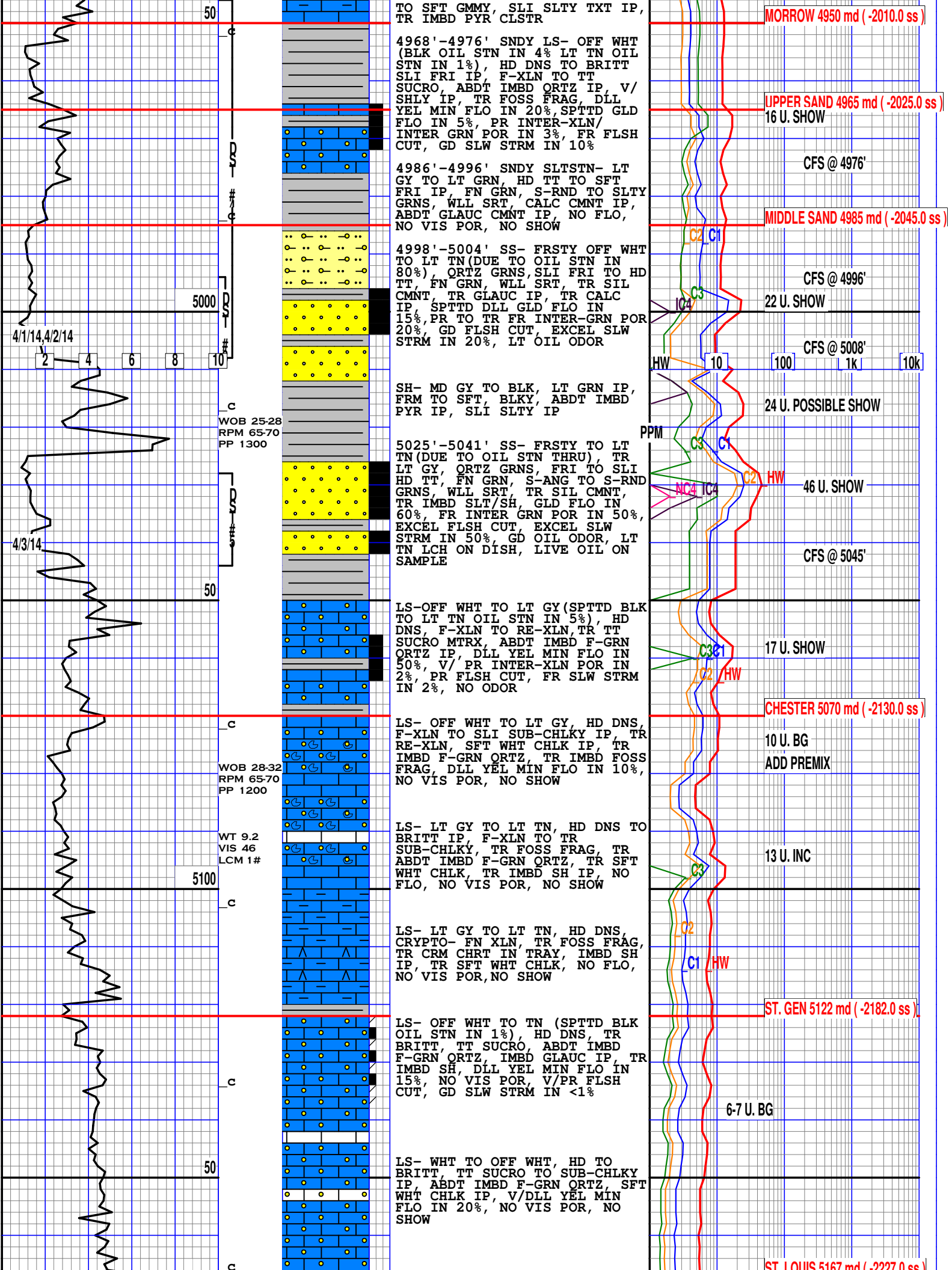
WT 9.3
VIS 51
LCM 3#

c

4900

c

2 4 6 8 10



TO SFT GMMY, SLI SLTY TXT IP,
TR IMBD PYR CLSTR

MORROW 4950 md (-2010.0 ss)

4968'-4976' SNDY LS- OFF WHT
(BLK OIL STN IN 4% LT TN OIL
STN IN 1%), HD DNS TO BRITT
SLI FRI IP, F-XLN TO TT
SUCRO, ABDT IMBD ORTZ IP, V/
SHLY IP, TR FOSS FRAG, DLL
YEL MIN FLO IN 20%, SPTTD GLD
FLO IN 5%, PR INTER-XLN/
INTER GRN, POR IN 3%, FR FLSH
CUT, GD SLW STRM IN 10%

UPPER SAND 4965 md (-2025.0 ss)
16 U. SHOW

4986'-4996' SNDY SLTSTN- LT
GY TO LT GRN, HD TT TO SFT
FRI IP, FN GRN, S-RND TO SLTY
GRNS, WLL SRT, CALC CMNT IP,
ABDT GLAUC CMNT IP, NO FLO,
NO VIS POR, NO SHOW

CFS @ 4976'

MIDDLE SAND 4985 md (-2045.0 ss)

4998'-5004' SS- FRSTY OFF WHT
TO LT TN (DUE TO OIL STN IN
80%), ORTZ GRNS, SLI FRI TO HD
TT, FN GRN, WLL SRT, TR SIL
CMNT, TR GLAUC IP, TR CALC
IP, SPTTD DLL GLD FLO IN
15%, PR TO TR FR INTER-GRN POR
20%, GD FLSH CUT, EXCEL SLW
STRM IN 20%, LT OIL ODOR

CFS @ 4996'

22 U. SHOW

SH- MD GY TO BLK, LT GRN IP,
FRM TO SFT, BLKY, ABDT IMBD
PYR IP, SLI SLTY IP

CFS @ 5008'

24 U. POSSIBLE SHOW

5025'-5041' SS- FRSTY TO LT
TN (DUE TO OIL STN THRU), TR
LT GY, ORTZ GRNS, FRI TO SLI
HD TT, FN GRN, S-ANG TO S-RND
GRNS, WLL SRT, TR SIL CMNT,
TR IMBD SLT/SH, GLD FLO IN
60%, FR INTER GRN POR IN 50%,
EXCEL FLSH CUT, EXCEL SLW
STRM IN 50%, GD OIL ODOR, LT
TN LCH ON DISH, LIVE OIL ON
SAMPLE

CFS @ 5045'

46 U. SHOW

LS-OFF WHT TO LT GY (SPTTD BLK
TO LT TN OIL STN IN 5%), HD
DNS, F-XLN TO RE-XLN, TR TT
SUCRO MTRX, ABDT IMBD F-GRN
ORTZ IP, DLL YEL MIN FLO IN
50%, V/ PR INTER-XLN POR IN
2%, PR FLSH CUT, FR SLW STRM
IN 2%, NO ODOR

17 U. SHOW

CHESTER 5070 md (-2130.0 ss)

LS- OFF WHT TO LT GY, HD DNS,
F-XLN TO SLI SUB-CHLKY IP, TR
RE-XLN, SFT WHT CHLK IP, TR
IMBD F-GRN ORTZ, TR IMBD FOSS
FRAG, DLL YEL MIN FLO IN 10%,
NO VIS POR, NO SHOW

10 U. BG
ADD PREMIX

LS- LT GY TO LT TN, HD DNS TO
BRITT IP, F-XLN TO TR
SUB-CHLKY, TR FOSS FRAG, TR
ABDT IMBD F-GRN ORTZ, TR SFT
WHT CHLK, TR IMBD SH IP, NO
FLO, NO VIS POR, NO SHOW

13 U. INC

LS- LT GY TO LT TN, HD DNS,
CRYPTO- FN XLN, TR FOSS FRAG,
TR CRM CHRT IN TRAY, IMBD SH
IP, TR SFT WHT CHLK, NO FLO,
NO VIS POR, NO SHOW

ST. GEN 5122 md (-2182.0 ss)

LS- OFF WHT TO TN (SPTTD BLK
OIL STN IN 1%), HD DNS, TR
BRITT, TT SUCRO, ABDT IMBD
F-GRN ORTZ, IMBD GLAUC IP, TR
IMBD SH, DLL YEL MIN FLO IN
15%, NO VIS POR, V/PR FLSH
CUT, GD SLW STRM IN <1%

6-7 U. BG

LS- WHT TO OFF WHT, HD TO
BRITT, TT SUCRO TO SUB-CHLKY
IP, ABDT IMBD F-GRN ORTZ, SFT
WHT CHLK IP, V/DLL YEL MIN
FLO IN 20%, NO VIS POR, NO
SHOW

ST. LOUIS 5167 md (-2227.0 ss)

4/1/14, 4/2/14
2 4 6 8 10

4/3/14

WOB 25-28
RPM 65-70
PP 1300

WOB 28-32
RPM 65-70
PP 1200

WT 9.2
VIS 46
LCM 1#

PPM

HW

HW

HW

HW

C

C

C

C

C

C

C

C

10

100

10

100

10

100

10

10

10k

10k

10k

10k

10k

10k

10k

10k

ST. LOUIS 5167 md (-2227.0 ss)

LS- OFF WHT TO LT CRM, HD DNS TR BRITT, FN-MD XLN, TR TT SUCRO MTRX, ABDT IMBD MICRO OOL, IMBD FOSS FRAG IP, TR IMBD F-GRN ORTZ IP, DLL YEL MIN FLO IN 20%, NO VIS POR, NO SHOW

5 U. BG

LS- OFF WHT TO WHT, CRM IP, HD DNS TO BRITT, FN-MD XLN, RE-XLN TO SUCRO IP, TR IMBD FOSS FRAG, TR IMBD OOL, DLL YEL MIN FLO IN 25%, NO VIS POR, NO SHOW

5200

LS- WHT TO OFF WHT, HD DNS TO BRITT, F-XLN TO SUCRO, IMBD F-GRN ORTZ IP, TR FOSS FRAG, TR SFT WHT CHLK, DLL YEL MIN FLO IN 40%, V/PR INTER-XLN POR IN 10%, NO VIS CUT OR SHOW

7 U. INC

CLEAR GAS

LS-WHT TO OFF WHT, HD DNS TO BRITT, SUCRO TO SUB CHLKY, F-XLN IP, TR IMBD F-GRN ORTZ IP, TR IBMD FOSS FRAG, TR IMBD OOL, DLL YEL MIN FLO IN 40%, NO VIS POR, NO VIS CUT OR SHOW

50

4-6 U. BG

ST. LOUIS C 5254 md (-2314.0 ss)

LS-WHT TO OFF WHT, HD DNS, FN-MD XLN TR SUCRO, ABDT IMBD OOL, TR SFT WHT CHLK, DLL YEL MIN FLO IN 50%, NO VIS POR, NO SHOW

WOB 35-40 RPM 65-70 PP 1200

CFS @ 5270'

LS- WHT TO TR OFF WHT, HD DNS, MD-XLN TO SUCRO IP, DLL YEL MIN FLO IN 40%, NO VIS POR, NO SHOW

WT 9.3 VIS 49 LCM 4#

5300

3-4 U. BG

ST. LOUIS D 5305 md (-2365.0 ss)

DOLO- GY TO OFF WHT, HD DNS TO BRITT, F-XLN TO SUCRO, LRG DOLO GRNS IP, V/ CALC IP, DLL YEL MIN FLO THRU, NO VIS POR, NO SHOW

LS- WHT TO OFF WHT, HD DNS TO BRITT IP, FN-MD XLN, V/ RE-XLN IP, ABDT IMBD OOL IP, TR DOLO, TR CHLORO/GLAUC, DLL YEL MIN FLO IN 60%, NO VIS POR, NO SHOW

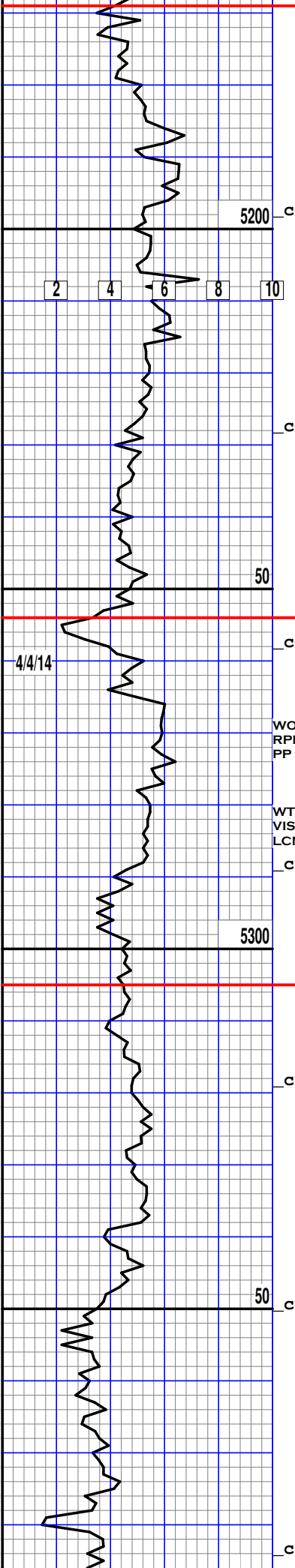
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7 U. INC.

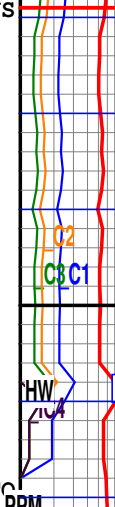
LS- WHT OFF WHT TO LT CRM, HD DNS TO BRITT IP, FN-MD XLN, V/ RE-XLN IP, TR IMBD FOSS FRAG, TR DOLO XLS IP, TR IMBD OOL, DLL YEL MIN FLO IN 50%, NO VIS POR, NO SHOW

LS- WHT TO GY, HD DNS TR BRITT, F-XLN TO TR SUCRO, TR

c



4/4/14

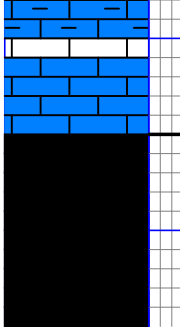
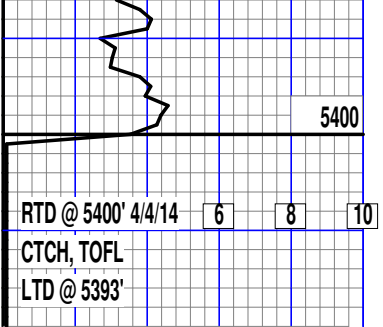


PPM

HW

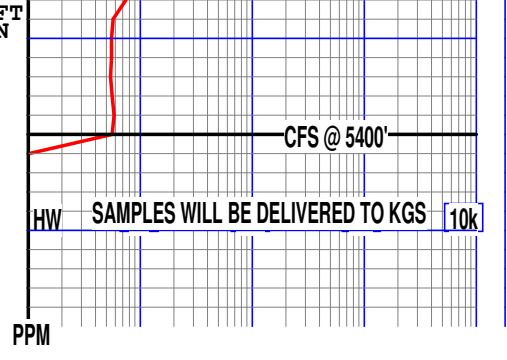
HW

HW



RE-XLN IP, IMBD SH IP, TR SFT
 WHT CHLK, DLL YEL MIN FLO IN
 10%, NO VIS CUT OR SHOW

LOG COMPLETED BY: IAN BOSMEIJER



om: 4492 TO: 4510

FORMATION: KANSAS CITY B

	PRESSURE (psi)	TIME (min)
IAL HYD:	2153	
AL FLOW:	17-22	20
L SHUT IN:	1254	30
AL FLOW:	23-27	30
L SHUT IN:	1262	60
AL HYD:	2149	

PE RECOVERY:

5' MUD

R RECOVERY:

MENTS:

E BLOW, NO BB/ 2ND BLOW: NO BLOW

13 DEG F.

om: 4492 TO: 4510

FORMATION: Kansas City B

	PRESSURE (psi)	TIME (min)
IAL HYD:	2153	
AL FLOW:	17-22	20
L SHUT IN:	1254	30
AL FLOW:	23-27	30
L SHUT IN:	1262	60
AL HYD:	2149	

PE RECOVERY:

5' Mud

R RECOVERY:

MENTS:

E BLOW, NO BB/ 2ND BLOW: NO BLOW

13 DEG F.

om: 4574 TO: 4590

FORMATION: MARMATON B

	PRESSURE (psi)	TIME (min)
IAL HYD:	2174	
AL FLOW:	14-71	30
L SHUT IN:	808	60
AL FLOW:	79-131	60
L SHUT IN:	797	120
AL HYD:	2138	

PE RECOVERY:

OIL), 162' OGM (25%G, 10%O, 65%M)

F 325'

R RECOVERY:

0% OIL

MENTS:

@ 60 DEG, BHT 117 F

BOB IN 5 MIN/ NO BB

3 BOB IN 4 MIN/ 8" BB

om: 4994 TO: 5008

FORMATION: MORROW

	PRESSURE (psi)	TIME (min)
IAL HYD:	2264	
AL FLOW:		
L SHUT IN:		
AL FLOW:		
L SHUT IN:		
AL HYD:	2260	

PE RECOVERY:

50' MUD

R RECOVERY:

MENTS:

CKER SEAT

om: 4946 TO: 5008

FORMATION: MORROW

	PRESSURE (psi)	TIME (min)
IAL HYD:	2365	
AL FLOW:	74-89	30
L SHUT IN:	692	60
AL FLOW:	91-112	60
L SHUT IN:	543	120
AL HYD:	2311	

PE RECOVERY:

ME GASSY BUBBLES, SLIGHT ODOR

R RECOVERY:

00%M

MENTS:

BB)/ 2ND BLOW: NO BLOW /(NOBB)

om: 5028 TO: 5045

FORMATION: MORROW

	PRESSURE (psi)	TIME (min)
IAL HYD:	2351	
AL FLOW:	12-20	30
L SHUT IN:	732	60
AL FLOW:	19-23	60
L SHUT IN:	611	120
AL HYD:	2339	

PE RECOVERY:

TH SOME GASSY BUBBLES

R RECOVERY:

S BUBBLES, LT OIL ODOR

MENTS:

FR BLOW BUILT TO 7/8" / NO BB

NO BLOW / NO BB

121 DEG F