

Rec'd 7-31-00

Onsight Hydrocarbon Analysis Log



Quality Logging, Inc.

"The Company That Lives By Its Name!"

Company: DEVON ENERGY CORP.
Well: EDDY FV ST COM #4
Field: BURTON FLAT
Location: 750FEL & 660FSL, 25-20S-27E
Co/St: EDDY CO., NM
GL: 3322
KB: 3340
Depth: 0 TO: 11500
Date: 1/13/00 TO: 2/16/00
Unit No.: 16 Job Number: 396
Unit Phone: 1-915-661-0199
Contractor: PATTERSON DRILLING

30 - 015 - 30886

Mudlog + 10 ft = Newton log

Loggers:

MARK OSBURN

0

— Total Gas
— Methane
— Ethane
— Propane
— Butane
— Pentane

— Drill Time

Line Dolomite Anhydrite Sat Coal

Rate of Penetration
Minutes Per Foot

Depth

Graphic
Lithology

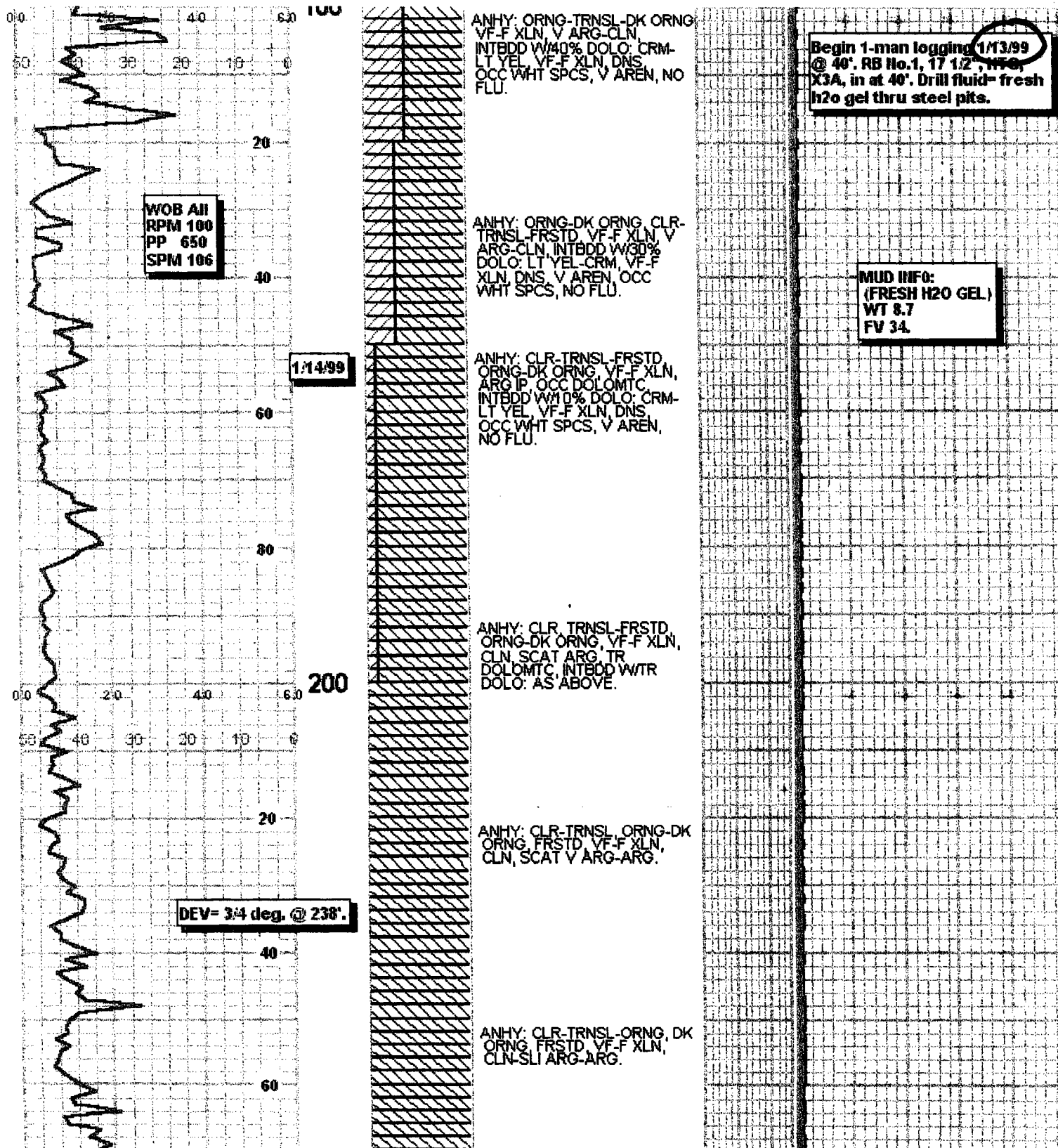
POR

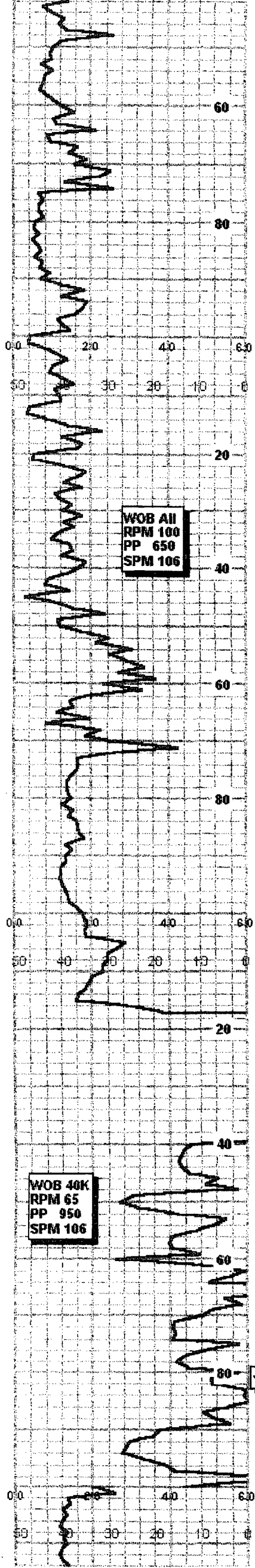
Fluor

CUT

Continuous Gas/Chromatograph
0-999 Logarithmic

0-25 0-100





ANHY: CLR-TRNSL-ORNG, DK ORNG, FRSTD, VF-F XLN, CLN-SLI ARG-ARG.

ANHY: CLR-TRNSL-FRSTD, ORNG-DK ORNG-PNK, VF-F XLN, CLN, SCAT V ARG-ARG, INTBDD W/30% DOLO: CRM, OFF WHT-LT YEL, VF-F XLN, DNS, CLN-V CLN, NO FLU.

ANHY: CLR-TRNSL, DK ORNG-ORNG, FRSTD, VF-F XLN, CLN, V ARG-ARG, INTBDD W/50% DOLO: CRM-BUFF, LT YEL, VF-F XLN, DNS, AREN, CLN, NO FLU.

DOLO: CRM-LT YEL-BUFF, TR LT GRY, VF XLN, DNS, CLN, AREN, NO FLU, INTBDD W/ 40% ANHY: TRNSL-CLR-ORNG, FRSTD, VF-F XLN, CLN-SLI ARG.

DOLO: CRM-BUFF-TAN, LT YEL, VF-F XLN, DNS, AREN, CLN, NO FLU, INTBDD W/ 35% ANHY: CLR-TRNSL-ORNG, DK ORNG, FRSTD, VF-F XLN, CLN-V ARG.

DOLO: LT GRY-BUFF, CRM-TAN-TRNSL, VF XLN-CHLKY, DNS, OCC ANHY INCLUS, AREN, NO FLU, INTBDD W/20% ANHY: AS ABOVE.

DOLO: LT GRY, TAN-CRM, VF XLN, DNS, AREN, OCC SD GRNS IMEDD, NO FLU, INTBDD W/20% ANHY: OFF WHT-FRSTD, CLR, VF XLN, DNS, CLN.

Run RB No.3, Varrel, V527, Jets= 16-16-16, in @ 438". Out @ 500". Drilled 63" in 5 1/2 hrs.

DOLO: TAN-BRN, CRM, LT GRY, BUFF, VF XLN, DNS, AREN, CLN, NO FLU, INTBDD W/30% ANHY: OFF WHT-FRSTD, TRNSL-CLR, DNS, CLN.

DOLO: BRN, TAN, LT GRY, CRM-BUFF, VF XLN, DNS, AREN, OCC SD GRNS IMEDD, CLN, NO FLU, INTBDD W/ 30% ANHY: OFF WHT-FRSTD, CLR-TRNSL, VF XLN, DNS.

RUN CASING @ 500".

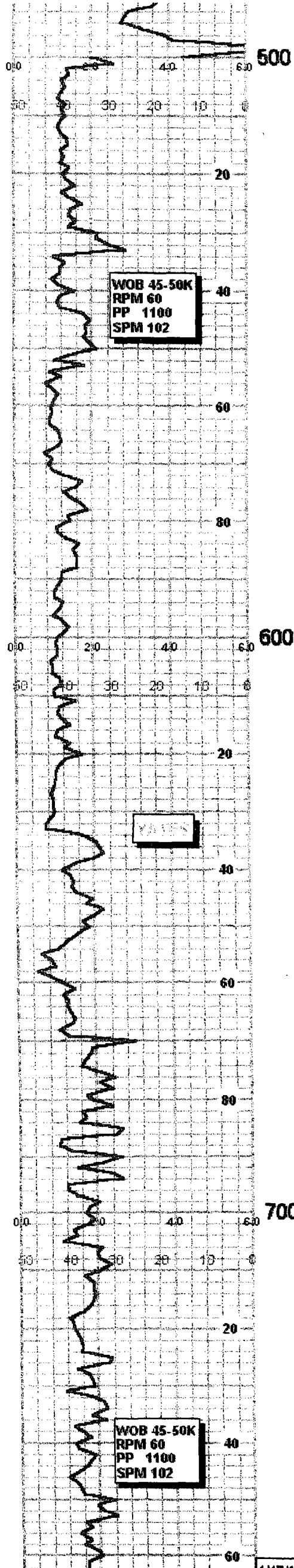
RUN 13 3/8" CASING TO 500". NB No.4, Varel, D29, Jets= 11-11-11, in at 500". Drill fluid= fresh H2O. Circ. thru reserve.

MUD INFO:
WT 9.5
FV 35
PH 9.5

MUD INFO:
WT 9.9
FV 35
PH 8.0

Run RB No.2, Varrel, AN720, Jets= 12-12-13, in at 431". Out @ 438". Drilled 7" in 1 3/4 hrs.

MUD INFO:
WT 10.2
FV 32
PH 10.0



CLR-TRNSL, VF XLN, DNS.

RUN CASING @ 500'.

**RUN 13 3/8" CASING TO 500'.
NB No.4, Varel, D29, Jets= 11-
11-11, in at 500'. Drill fluid=
fresh H2O. Circ. thru reserve.**

ANHY: FRSTD TRNSL OFF
WHT-CLR, ORNG-DK RED,
VF-F XLN, CLN, ARG IP
INTBDD W/30% DOLO: TAN-
CRM, BUFF, BRN, LT GRY,
VF-F XLN, SCAT CHKY,
DNS, SLI ARG, SCAT DULL
ORNG FLU, NO CUT, AND
20% SH DK RED, ORNG-RED
BLKY, OCC FLKY, POORLY
IND-BRTL, OCC MOD IND,
MED TXT, AREN, SLTY,
ANHYDRIC.

ANHY: LITH AS ABOVE W/10%
INCREASE IN ANHY.

DOLO: ORNG-ORNG BRN, PNK,
LT GRY, CRM-BUFF, TAN,
VF XLN, CHKY IP, DNS,
SLI ARG, SCAT DULL, ORNG
FLU, NO CUT, INTBDD W/
40% ANHY: AS ABOVE, AND
20% SH: AS ABOVE.

ANHY: FRSTD-TRNSL OFF
WHT, CLR, ORNG-DK RED,
VF-F XLN, CLN, ARG IP
INTBDD W/30% DOLO: ORNG-
ORNG BRN, PNK, LT GRY,
BUFF-CRM, TAN-BRN, VF-
XLN, OCC CHKY, DNS, CLN
SLI ARG IP, AND 20% SH:
AS ABOVE.

DOLO: OFF WHT-BUFF, CRM-
TAN, PNK, LT YEL, VF XLN
DNS, AREN, CLN, OCC SLI
ARG, SCAT YEL FLU, INTBDD
W/30% SS: BRN-TAN-TRNSL,
BUFF-OFF WHT-TRNSL, F-
VFG, MOD CMTD, SUB RND
SLI CALC CMT, SCAT PYRTC
ABUND BLK-BRN TARISH OIL
STN, ABUND BRT YEL FLU
IMMEDIATE GD YEL CLOUDY
CUT, Y GD YEL-WHT RES
RING (DISPTNG QUICKLY),
SLI ODOR, TR FLOATING
ROCKS.

DOLO: LITH AS ABOVE W/SLI
LESS SHOW DOLO: BCMNG
MORE SUCRO, IMMEDIATE
FR-GD CLOUDY CUT, FR-GD
RES RING, SLI ODOR.

DOLO: OFF WHT-BUFF, BRN-
ORNG-LT BRN, DK BRN, F-
VF XLN, CHKY IP, SCAT
SUCRO, AREN, SLI ARG IP,
OCC BRN STN, SCAT YEL
FLU, INTBDD W/20% SS:
CRM-TRNSL-BUFF-LT BRN,
VF-FG, MOD CMTD, SUB RND
SLI CALC CMT, SCAT PYRTC
ABUND BRN-BLK TARISH OIL
STN, ABUND BRT YEL FLU
IMMEDIATE GD YEL CLOUDY
CUT, GD YEL-WHT RES RING
(DISPTNG QUICKLY), SLI
ODOR, TR FLOATING ROCKS.

DOLO: BUFF-TRNSL-OFF WHT,
CRM-TAN, V LT GRY, VF-F
XLN, SCAT SUCRO, V AREN,
CLN, OCC PYRTC, SCAT BLK
BRN TARISH OIL STN, 10%
BRT YEL FLU, IMMEDIATE
FR CUT, FR YEL-WHT RES
RING, (DISPTNG QUICKLY).

DOLO: BUFF-OFF WHT-TRNSL,
CRM-TAN, LT GRY, F-VF
XLN, SUCRO, V AREN, CLN,
OCC PYRTC, SCAT LT BRN
STN, TR DK BRN OIL STN,

**MUD INFO:
(FRESH H2O)
WT 8.4
FV 28
PH 10.0
CL 1100
CAL 820**

**WOB 45-50K
RPM 60
PP 1100
SPM 102**

WOB 45-50K
RPM 60
PP 1100
SPM 102

1/17/00

800

WOB 50K
RPM 60
PP 1150
SPM 104

900

1000

DOLO. BLUFF. TRNSL. OFF WHT. (DISPTNG QCKLY).

DOLO. BLUFF. OFF WHT. TRNSL.
CRM-TAN. LT GRY. F-VF
XLN. SUCRO. V AREN. CLN.
OCC PYRTC. SCAT LT BRN
STN. TR DK BRN OIL STN.
SCAT BRT YEL FLU. FR IM-
MEDIATE CUT. FR YEL-WHT
RES RING. (DISPTNG QCKLY)
TR FLOATING ROCKS.

DOLO. BLUFF. TRNSL. OFF WHT.
V LT GRN. CRM-TAN. F-VF
XLN. SUCRO. TR SLI VUG
POR. V AREN. CLN. SCAT
LT BRN STN. OCC DK BRN-
BLK TARISH OIL STN. SCAT
BRT YEL FLU. IMMEDIATE
FR CUT. FR YEL-WHT RES
RING. (DISPTNG QCKLY)
TR FLOATING ROCKS.

DOLO. BLUFF. TRNSL. OFF WHT
LT GRY. CRM-TAN. F-VF
XLN. OCC FR VUG POR W/
DK BRN-BLK TARISH OIL
STN. SUCRO. P. AREN. CLN
SCAT BRT YEL FLU. IM-
MEDIATE GD CLOUDY.
STRMING CUT. GD YEL-WHT
RES RING. (DISPTNG QCK)
SCAT FLOATING ROCKS.

DOLO. BLUFF. TRNSL. OFF
WHT. CRM. TAN. BRN. VF-F
XLN. SCAT FR VUG POR W/
DK BRN-BLK OIL STN. OCC
FREE RHOMB. OCC SUCRO.
V AREN. CLN. SCAT BRT
YEL FLU. IMMEDIATE GD
YEL CUT. GD YEL-WHT RES
RING. (DISPTNG QCK). OCC
FLOATING ROCKS.

DOLO. BLUFF. TRNSL. OFF WHT
CRM-TAN. BRN. VF-F XLN.
SCAT FR VUG POR WIDK-
BLK TARISH OIL STN. TR
FREE RHOMB. OCC SUCRO.
V AREN. CLN. SCAT BRT
YEL FLU. IMMEDIATE GD
YEL CUT. GD YEL-WHT RES
RING. (DISPTNG QCK).

DOLO. BLUFF. LT GRY. TRNSL.
OFF WHT. CRM. TAN. BRN.
VF-F XLN. SCAT FR VUG
POR WIDK BRN OIL STN. TR
FREE RHOMB. OCC SUCRO.
CLN. SCAT BRT YEL FLU.
IMMEDIATE GD YEL CUT. GD
YEL-WHT RES RING. (DISPTN
QCK).

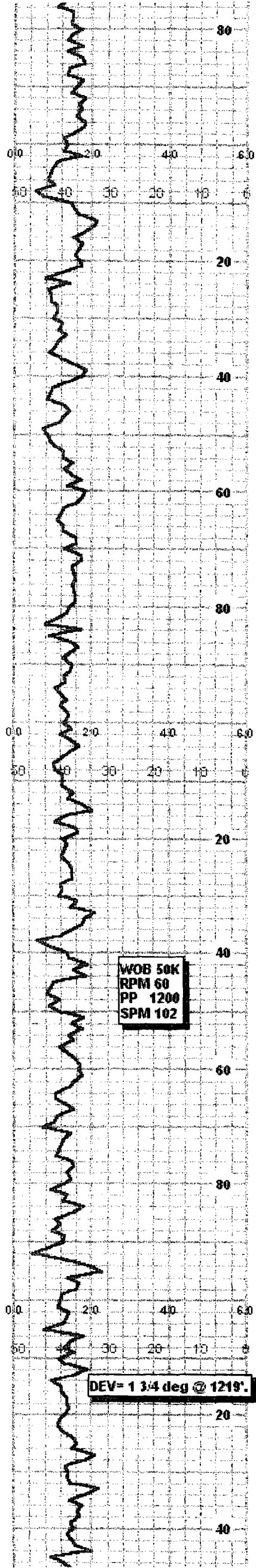
DOLO. LT GRY. BLUFF. OFF
WHT. TRNSL. VF XLN. OCC
F XLN. OCC FR VUG POR W/
BLK-DK BRN TARISH OIL
STN. CLN. V AREN. OCC
SUCRO. SCAT BRT YEL FLU.
IMMEDIATE FR CUT. FR YEL-
WHT RES RING. (DISPTNG
QCK).

DOLO. BLUFF. TRNSL. OFF WHT
VF-F XLN. OCC SLI VUG
POR. OCC FREE RHOMB. V
AREN. CLN. TR DK BRN-BLK
TARISH OIL STN. OCC BRT
YEL FLU. SLI IMMEDIATE
YEL CUT. SLI-FR YEL-WHT
RES RING. (DISPTNG QCK).

DOLO. OFF WHT. BLUFF. TRNSL
F-VF XLN. SCAT CLR FRAC

RPM 60
PP 1100
SPM 102

MUD INFO:
WT 8.4
FV 28
PH 10.0
CL 1100
CAL 820



RES RING, (DISPTNG QCK).

DOLO: OFF WHT, BLUFF-TRNSL
F-VF XLN, SCAT CLR FRAC
XTALS, SUCRO, AREN, V
CLN, TR BLK SPTY STN
SCAT BRT YEL FLU, SLI
YEL CUT, SLI YEL RES RING
(DISPTNG QCKLY)

DOLO: BLUFF-TRNSL, V LT
GRY, OFF WHT, VF-F XLN,
OCC CHLKY, TR CLR FRAC
XTALS, OCC SUCRO, AREN,
CLN, TR BRT YEL FLU, SLI
YEL CUT, SLI YEL RES RING
(DISPTNG QUICKLY)

DOLO: BLUFF-TRNSL, CRM,
OFF WHT, VF-F XLN, SCAT
CLR-TRNSL FRAC XTALS,
SCAT SUCRO, AREN, CLN,
TR BLK SPTY STN, OCC
BRT YEL FLU, SLI YEL CUT
SLI YEL-WHT RES RING,
(DISPTNG QUICKLY)

DOLO: BLUFF-TRNSL, OFF WHT
-CRM, VF-F XLN, TR CHLKY
SCAT CLR-TRNSL FRAC
XTALS, SCAT SUCRO, AREN,
CLN, TR BLK SPTY STN,
OCC BRT YEL FLU, SLI YEL
CUT, SLI YEL-WHT RES RING
(DISPTNG QUICKLY)

DOLO: TRNSL-BUFF, CRM,
OFF WHT, LT GRY, F-VF
XLN, SUCRO, OCC CLR-
TRNSL FRAC XTALS, AREN,
CLN, TR BLK SPTY STN,
OCC BRT YEL FLU, SLI YEL
CUT, SLI YEL-WHT RES RING
(DISPTNG QUICKLY)

DOLO: TRNSL-BUFF, CLR,
OFF WHT, F XLN, TR CHLKY
V SUCRO, SCAT CLR-TRNSL
FRAC XTALS, AREN, V CLN,
OCC BRT YEL FLU, SLI YEL
CUT, SLI YEL-WHT RES RING
(DISPTNG QUICKLY).

DOLO: BLUFF-TRNSL, OFF WHT
CRM, CLR, VF-F XLN, SCAT
CLR-TRNSL FRAC XTALS,
SUCRO IP, AREN, V CLN,
OCC BRT YEL FLU, SLI YEL
CUT, SLI YEL-WHT RS RING,
(DISPTNG QUICKLY).

DOLO: BLUFF-TRNSL, OFF WHT
CRM, VF-F XLN, SCAT FR
VUG POR, SUCRO IP, SCAT
CLR-TRNSL FRAC XTALS,
AREN, CLN, OCC BRT YEL
FLU, SLI YEL CUT, SLI
YEL-WHT RES RING, (DIS-
PTNG QUICKLY)

MUD INFO:
(FRESH H2O)
WT 8.4
FV 28
PH 10.0
CL 1100
CAL 820

DEV= 1 3/4 deg @ 1219'.

WOB 50K
RPM 60
PP 1200
SPM 102

WOB 50K
RPM 60
PP 950
SPM 80

DOLO: BUFF-TRNSL OFF WHT
CRM, CLR, VF-F XLN, SCAT
CLR-TRNSL FRAC XTALS,
SUCRO IP, AREN, V CLN,
OCC BRT YEL FLU, SLI YEL
CUT, SLI YEL-WHT RES RNG,
(DISPTNG QUICKLY).

DOLO: BUFF-TRNSL OFF WHT
CRM, VF-F XLN, SCAT FR
VUG POR, SUCRO IP, SCAT
CLR-TRNSL FRAC XTALS,
AREN, CLN, OCC BRT YEL
FLU, SLI YEL CUT, SLI
YEL-WHT RES RNG, (DIS-
PTNG QUICKLY).

DOLO: BUFF-TRNSL OFF WHT
CRM, F-VF XLN, SUCRO, TR
SLI VUG POR, SCAT CLR-
TRNSL FRAC XTALS, AREN,
CLN, OCC BRT YEL FLU,
SLI YEL CUT, SLI YEL-WHT
RES RNG, (DISPTNG QCKLY)

DOLO: BUFF-TRNSL OFF WHT
CRM, F-VF XLN, SUCRO,
SCAT CLR-TRNSL FRAC XTAL
AREN, CLN, OCC BRT YEL
FLU, SLI YEL CUT, SLI
YEL-WHT RES RNG, (DIS-
PTNG QUICKLY).

DOLO: BUFF-TRNSL OFF WHT
CRM, F-VF XLN, SLI VUG
POR, SUCRO IP, SCAT CLR-
TRNSL FRAC XTALS, AREN,
CLN, OCC BRT YEL FLU,
SLI YEL CUT, SLI YEL-WHT
RES RNG, (DISPTNG QCKLY)

DOLO: BUFF-TRNSL OFF WHT
CRM, F-VF XLN, SUCRO,
OCC CLR-TRNSL FRAC XTALS
AREN, CLN, OCC BLK SPTTY
STN, OCC BRT YEL FLU,
SLI YEL CUT, SLI YEL-WHT
RES RNG, (DISPTNG QCKLY)

DOLO: BUFF-TRNSL OFF WHT
CLR, VF-F XLN, SCAT CLR-
TRNSL FRAC XTALS, SUCRO
IP, AREN, CLN, OCC BLK
SPTTY STN, OCC BRT YEL
FLU, SLI YEL CUT, SLI
YEL-WHT RES RNG, (DIS-
PTNG QUICKLY).

DOLO: BUFF-TRNSL OFF WHT
CLR, VF-F XLN, SUCRO
SCAT CLR-TRNSL FRAC
XTALS, AREN, CLN, TR BRT
YEL FLU, SLI YEL CUT,
SLI YEL RES RNG, (DIS-
PTNG QUICKLY).

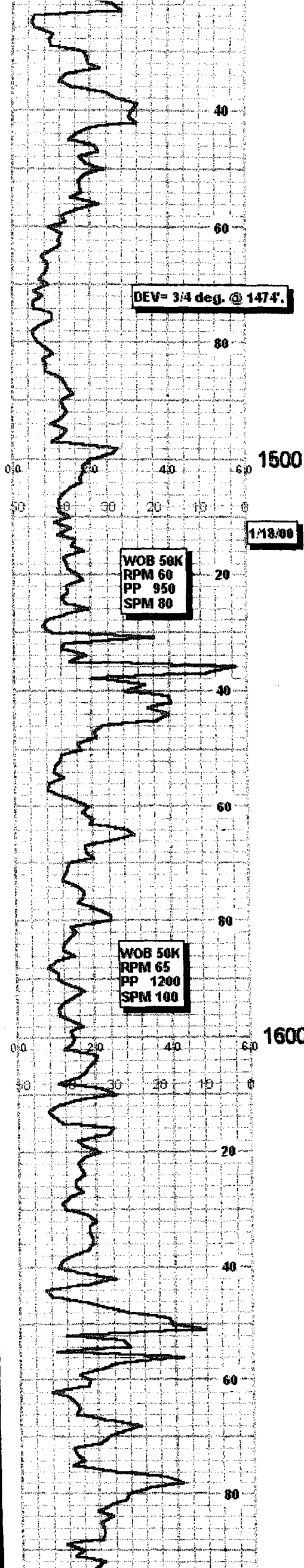
LOST CIRC. (1326' to 1360').

PUMP LCM PILL

REGAIN CIRC. (1360').

APROX. 60%-70% RETURNS

80% RETURNS



DEV= 3/4 deg. @ 1474'.

WOB 50K
RPM 60
PP 950
SPM 80

WOB 50K
RPM 65
PP 1200
SPM 100

1:18:00

DOLO: BUFF-TRNSL OFF WHT
CLR VF-F XLN, SUCRO,
SCAT CLR-TRNSL FRAC
XTALS, AREN, CLN, TR BRT
YEL FLU, SLI YEL CUT
SLI YEL RES RING, (DIS-
PTNG QUICKLY).

DOLO: TRNSL-BUFF OFF WHT
CLR F-VF XLN, V SUCRO,
SCAT CLR-TRNSL FRAC
XTALS, AREN, CLN, TR BRT
YEL FLU, SLI YEL CUT
SLI YEL WHT RES RING,
(DISPTNG QUICKLY)

DOLO: LT GRY-TRNSL BUFF
OFF WHT VF-F XLN, SCAT
CLR-TRNSL FRAC XTALS,
SUCRO IP, AREN, CLN, OCC
BRT YEL FLU, SLI YEL CUT
SLI YEL WHT RES RING,
(DISPTNG QUICKLY).

DOLO: BUFF-TRNSL-LT GRY,
OFF WHT VF-F XLN, OCC
CHLKY SCAT CLR-TRNSL
FRAC XTALS, SUCRO IP
AREN, CLN, OCC BRT YEL
FLU, SLI YEL CUT SLI
YEL WHT RES RING, (DIS-
PTNG QUICKLY).

DOLO: BUFF-LT GRY-TRNSL,
OFF WHT VF-F XLN, OCC
CHLKY SCAT CLR-TRNSL
FRAC XTALS, SUCRO IP
AREN, CLN, OCC BRT YEL
FLU, SLI YEL WHT RES RING
(DISPTNG QUICKLY).

DOLO: BUFF-TRNSL-LT GRY,
OFF WHT VF-F XLN, TR
CHLKY SCAT CLR-TRNSL
FRAC XTALS, SUCRO IP
AREN, CLN, OCC BRT YEL
FLU, SLI YEL CUT, SLI
YEL RES RING, (DISPTNG
QUICKLY).

DOLO: BUFF-TRNSL OFF WHT,
LT GRY-GRY DK GRY VF-F
XLN, OCC CHLKY OCC CLR
-TRNSL FRAC XTALS, SUCRO
IP, AREN, CLN, OCC YEL
FLU, SLI YEL CUT, SLI
YEL RES RING.

DOLO: LITH AS ABOVE.

DRILL WHO RETURNS BEGINNING
@ 1665'.

40%-80% RETURNS

MUD INFO:
(FRESH H2O)
WT 8.4
FV 28
PH 10.0
CL 1100
CAL 820

LOST RETURNS @ 1665'.