063-20001

CORE LAB Grapholog

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COMPANY THE ANSCHUTZ CORP, NCRA, DOW CHEMICAL CO
WELL NO 1 WAYNE MAGEE
FIELD WILDCAT
COUNTY DEKALB STATE MISSOURI
LOCATION NW SW 22-60N-31W ELEVATION 960'

DEPTH LOGGED FROM SURFACE TO 2312' FT.
DATE LOGGED 1-18-75 1-23-75
CREW CHIEF CHARLES L. ARD FILE NO. 98 L
DRLG. FLUID WATER SURFACE TO 960' FT.
CHEM WEIGHTED MUD 1160' TO 2312' FT.

LEGEND

ABBREVIATIONS

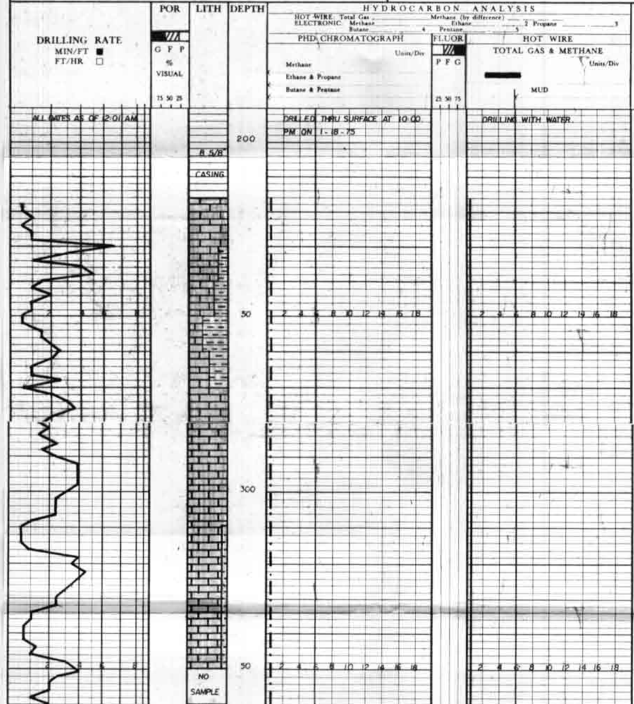
NB = NEW BIT
NCB = NEW CORE BIT
CO = CIRCULATED OUT
DST = DRILL STEM TEST
LAT = LOGGED AFTER TRIP
TG = TRIP GAS
NR = NO RETURNS
DS = DIRECTIONAL SURVEY
DC = DEPTH CORRECTION
DEPTHS CORRESPOND TO DRILL PIPE MEASUREMENTS

RESISTIVITY, OHM-METERS
Rm = MUD
Rmc = MUD CAKE
Rmf = MUD FILTRATE

MUD DATA
CK = CAKE THICKNESS 32nds
V = VISCOSITY API SECONDS
F = FILTRATE API CC'S
W = WEIGHT
S = SALINITY, ppm Cl

LITHOLOGY

SAND	▨	SALT	▨	COAL	■	☐
CONG	▨	CLAY	▨	DOLOMITE	▨	☐
ANHYDRITE OR GYPSUM	▨	SHALE	▨	CHERT	▨	☐
LIMESTONE	▨	CHALK	▨	SILTSTONE	▨	☐



REMARKS
FORMATION DESCRIPTION, MUD DATA, DRILL STEM TESTS, etc.

LS - WHT, BUFF, CALC, SLTY IP, SNDY, FOS IP, mIA, wImA

SH - BLK, GY, GRN, SFT, ALMOST SLTY, V/S CALC

TR PYRITE

LS - GY, WHT, BUFF, CALC, FOS, mIA, p-wImA

SH - DGY, GY, SFT-FRM, CALC

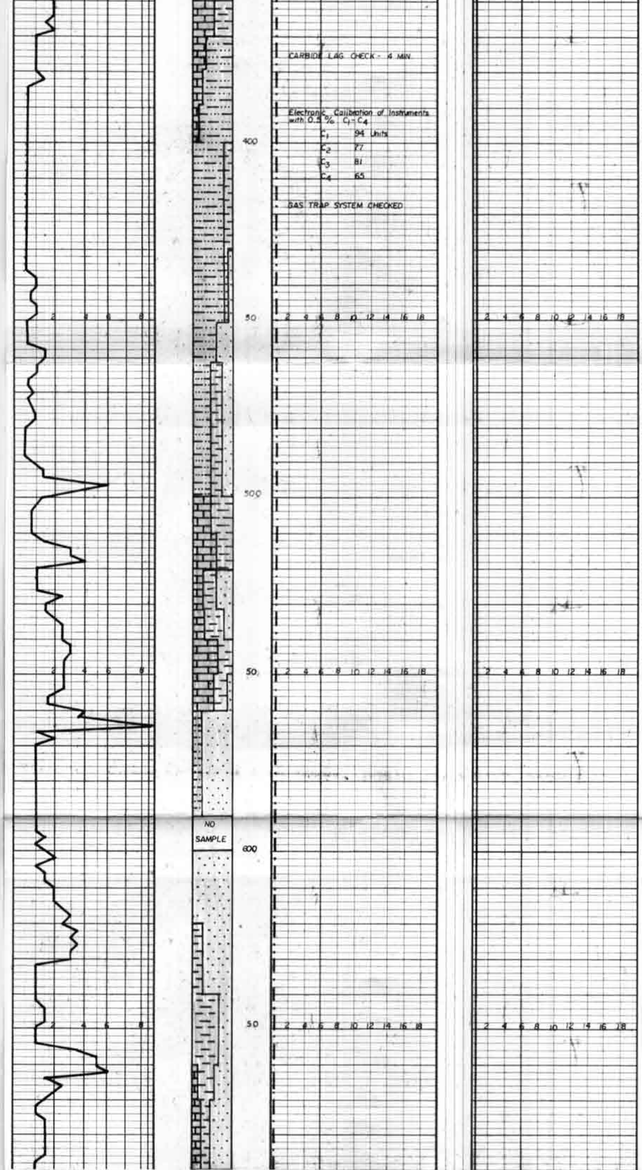
LS - WHT, TAN, FOS, CALC, g-pI(f)A

LS - WHT, TAN, CALC, FOS, g-pI(f)A

SH - GRN, GRY, FRM, DNS, FIS IP

LS - WHT, CRM, LGY, CALC, FRM-HD, DNS, OCC CHLKY, ABUN FOS

NO RETURN



CARBIDE LAG CHECK - 4 MIN

Electronic Calibration of Instruments with 0.5% C_1-C_4
C_1 94 Units
C_2 77
C_3 81
C_4 65

GAS TRAP SYSTEM CHECKED

SH - BLK, FRM-HD,
FIS, SLTY

SLTST - WHT, LGRN,
FRM-HD, CALC

LS - WHT, CRM, LBRN,
FRM-HD, DNS, SLTY,
CALC, MSTLY N/XTLN

SLTST - WHT, LGRN,
FRM-HD, CALC

SH - BLK, DGY, FRM,
DNS, SLTY IP,
MICAC

SLTST - GY, LGRN,
FRM, SNDY IP, S/
CALC, MICAC, BLKY,
OCC BLK FOLIATIONS

SS - WHT, LGRN, FRI
F-VFG, WL CONS,
WL-MOD/SRTD, SUB-
RND, SLTY, CALC

SH - GY, BRN, RED,
FRM, DNS, SLTY IP,
VS/CALC

TR LIG SH, FIS, HD

SH - RED, RED-BRN,
FRM, DNS, SLTY IP,
HEMATITE RICH

LS - WHT, CRM, CALC,
DNS, N/XTLN,
PYRIC IP

SH - RED, RED-BRN,
FRM, DNS, SLTY IP,
HEMATITE RICH,
GY, LGRn, FRM-SFT,
SLTY, S/CALC

SS - WHT, CLR, HD,
F-MG, WL CONS, FRI
SUBANG, m/SRTD,
GLAUC, SILIC CMT,
MICAC, OCC PYRITE

SLTST - LGN, LGY,
S & P, HD, S/CALC

NO RETURN

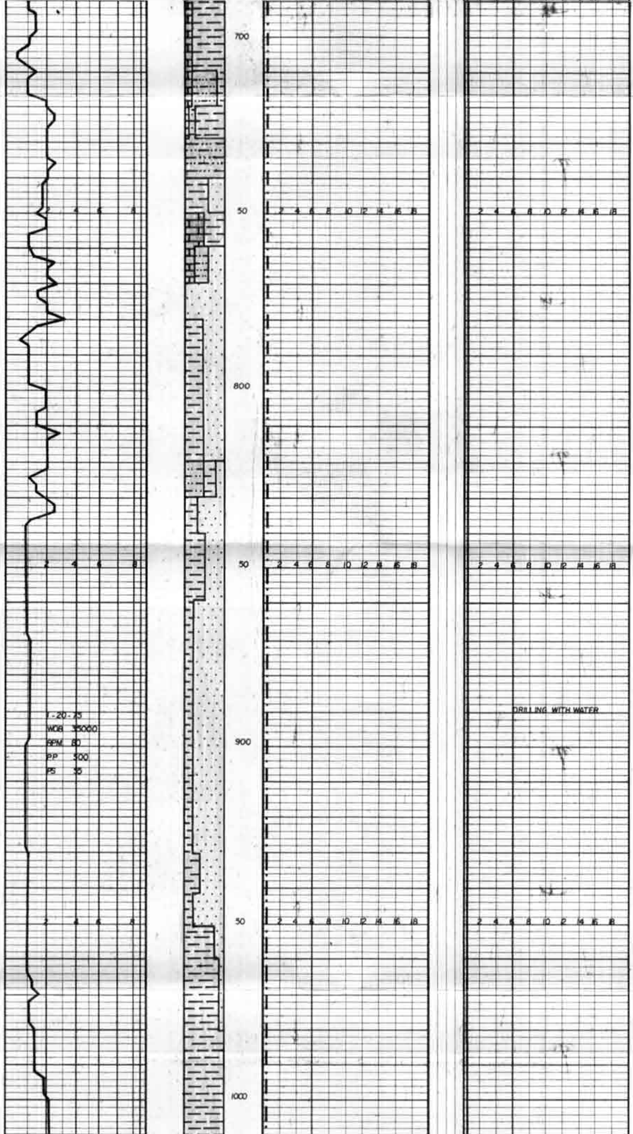
SS - WHT, CLR, HD,
F-MG, WL CONS, FRI
SUBANG, M/SRTD,
GLAUC, SILIC CMT,
MICAC, OCC PYRITE

SH - GY, DGY, BLK,
FRM, FIS, SLTY IP,
S/CALC

SS - WHT, CLR, HD,
F-MG, WL CONS, FRI
SUBANG, M/SRTD,
GLAUC, SILIC CMT,
MICAC, OCc PYRITE

LS - WHT, TAN, CALC,
NO FOS, mIA,
xIII(vf)A

SH - GY, SFT-FRM,
FIS, V/SLTY



LS - BRN, GY, CALC, mIA, WHT, SFT, mIIB

SH - BLK, GY, LGRN, SFT-FRM, VS/CALC, PYRIC, SNDY IP, VS/COALLY

SLTST - LGRN, SFT, VFG

SS - WL CMTD, MODWL SORTd, SUBRND, VS/CALC, SLTY IP, PYRIC

LS - GY, BRN, WHT, CALC, MSTLY mIA

SS - CLR, MLKY, MOD-WL SRTD, SUBRND, WL CMTD, VS/CALC, S & P

SH - BLK, GY, GRN, FRM-SFT, FIS, VS/CALC

SS - CLR, MLKY, MOD-WL SRTD, SUBRND, WL CMTD, VS/CALC, S & P

SLTST - BRN, GY, SFT

SH - BLK, GY, GRN, FRM, PYRIC

SS - CLR, MLKY, MOD-WL SRTD, SUBRND, WL CMTD, VS/CALC, S & P

SH - BLK, FRM-SFT, SLTY IP

SS - CLR, WL SRTD, WL CMTD, VS/CALC, SSUBRND-RND, FG, S & P

SH - BLK, FRM-SFT, SLTY IP

SS - CLR, WL SRTD, WL CMTD, VS/CALC, SUBRND-RND, FG, SS & P

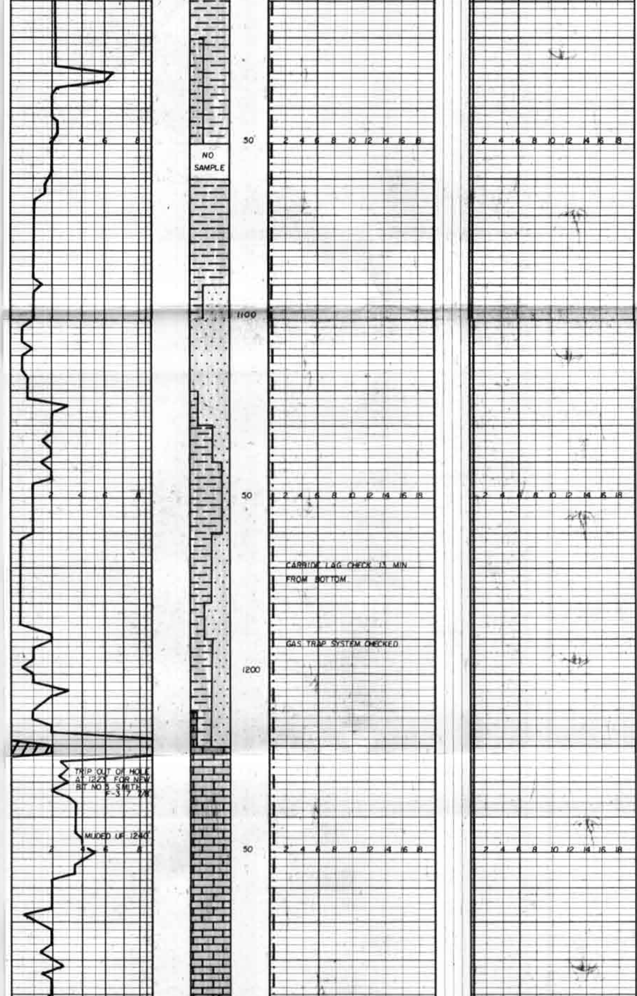
TR PYRITE

SH - BLK, FRM-SFT, SLTY IP

SS - CLR, WL SRTD, WL CMTD, VS/CALC, SUBRND-RND, FG, SS & P

SH - BLK, GY, GRN, FRM, SLTY IP

SH - BLK, DGY, FRM-HD, FIS IP, EARTHY, DULL, BLKY



SLTST - WHT, HD, VS/ CALC, SNDY IP, OCC VFG SS, SH STREAKS

NO RETURN

SH - BLK, DGY, GY, FRM, SLTY IP, VS/ CALC.

SS - WHT, CLR, M-CG, PRLY-UNCONS, MOD/ SRTD. SUBRND

V/FRI WHEN CONSOL, V/PYRIC

SH - BLK, GY, DGY, SLTY IP, VS/CALC

SS - WHT, CLR, M-CG, PRLY-UNCONS, MOD-SRTD, SUBRND, V/ FRI WHEN CONSOL, V/PYRIC

SH - BLK, DGY, GY, F FRM, HD, FIS

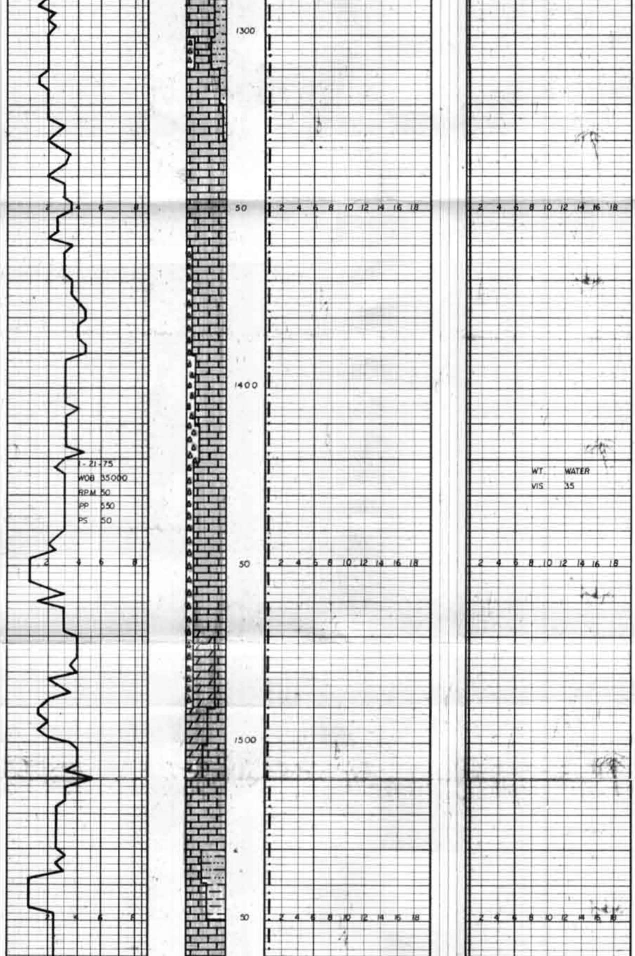
SS - WHT, CLR, M-CG, MSTLY UNCONS, WL RND-RND, PYRIC

SH - BLK, DGY, GY, FRM, HD, FIS

LS - WHT, V/SFT, CALC CHLKY IP, SLTY IP, NO POR, TAN, LBRN, HD, DNS, FOS, PYRIC, NO POR

LS - THNLY LAM, ALL CMTD FUSILINIDS, NO POR

LS - WHT, V/SFT, CALC CHLKY, SLTY IP, NO POR, TAN, LBRN, HD, DNS, FOS, PYRIC, NO POR



SLTST - WHT, CRM, FRM, SFT, SNDY IP, CALC

CHT - WHT, BLUE, HD, MOTTLED, BANDED

LS - WHT, TAN, CALC, V/FOS, CHRTY, SLTY, g-wI(f)A, mIA

LS - TAN, BUFF, CALC, CLN, HD, NO FOS, MSTLY mIA

CHT - WHT, TAN, HD, DNS

LS - TAN, BUFF, CALC, HD, DRTY, NO FOS, MSTLY mIA

CHT - WHT, XTLN, HD, DNS

LS - TAN, MLKY, CALC, SFT, mIIA, wIIB

CHT - WHT, XTLN, HD, DNS

LS - TAN, MLKY, GRY, CALC, NO FOS, SFT-HD, gII(f)B, MIA

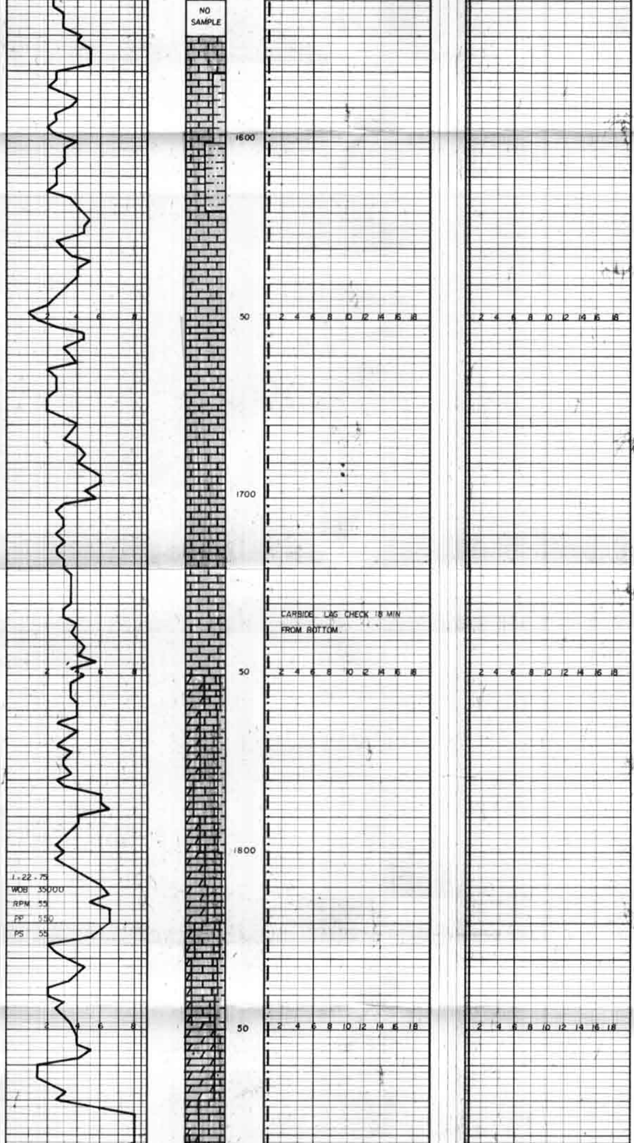
DOLO - BRN, CLR, TAN, SUCROSIC, DRTY

CHRT - WHT, HD, DNS

LS - WHT, CRM, TAN, LBRN, HD, DNS, TR FOS, mstly N/XTLN, PYRIC, BRN, VF/XTLN GRANULAR, CHRTY

LS - WHT, CRM, TAN, LBRN, HD, DNS, TR FOS, MSTLY N/XTLN, PYRIC, BRN, DBRN, GRANULAR, VF/XTLN, DOLO IP, CHRTY

SH - GRY, LGRY, LGRN, FRM-SFT, SLTY, S/CALC, PYRIC IP



CARBIDE LAG CHECK 18 MIN FROM BOTTOM.

1-22-75
WOB 35000
RPM 55
PP 550
PS 55

NO RETURN

LS - WHT, TAN, SFT, CHLKY, BRN, DBRN, HD, DNS, SLTY, FOS, S/DOLO

SH - GRN, GY, BLK, FRM-SFT, SLTY, S/CALC, RED, FRM, RIC IN HEMATITE NODS.

SLTST - GY, LGRN, HD-sft, TR PYRITE, MSTLY GY SH

LS - WHT, CRM, V/SFT, CHLKY, LTAN, LBRN HD, DNS, FOS IP, PYRIC, DOLO IP

LS - WHT, LTAN, SFT, CHLKY, N/XTLN, OCC PYRITE, MSTLY FEATURELESS "MUDSTONE"

LS - WHT, LTAN, PINK, CLN, SFT, CHLKY, N/XTLN, OCC PYRITE, MSTLY MUDSTONE

SH - BLK, GY, GRN, SFT, FRM, SNDY IP, SLTY, FIS

DOLO - BRN, SUCROSIC, FG, HD

LS - WHT, TAN, CLR, CALC, NO FOS, FEATURELESS

TR COAL

SH - BLK, GY, GRN, SFT, FRM, SNDY IP, SLTY IP, FIS, PYRIC, VS/CALC

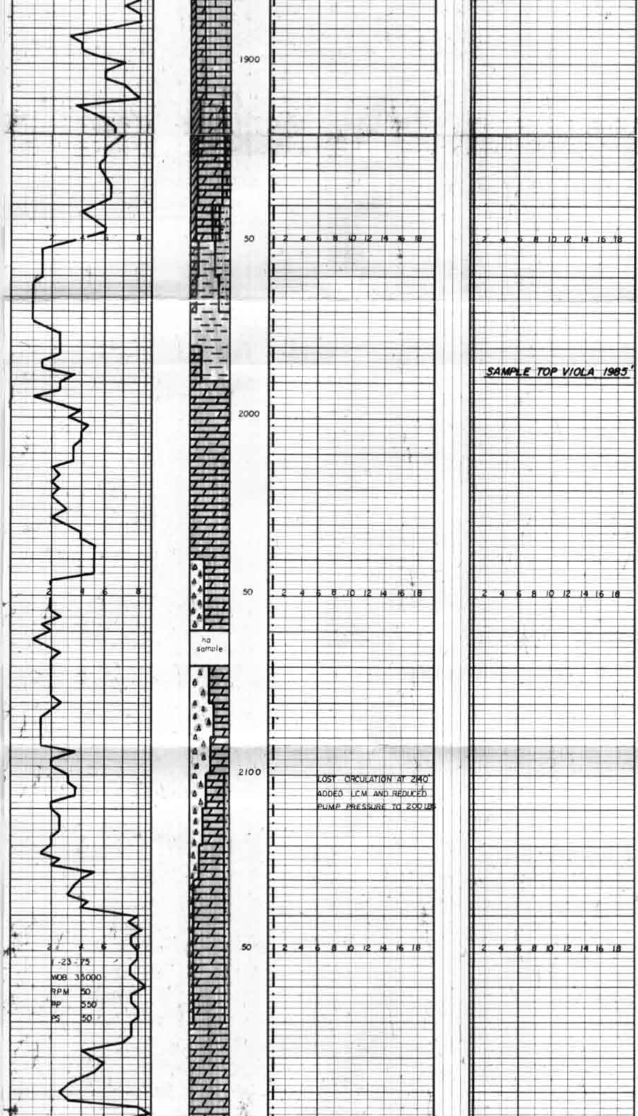
DOLO - BRN, GRANULAR, FRM

LS - WHT, SFT, SLTY, CHLKY, DOLO IP

SH - BLK, GRN, GY, RDBRN, SFT, VS/CALC, SLTY IP, FIS

DOLO - WHT, SFT, V/SLTY, GRANULAR

LS - TAN, LBRN, HD, DNS, MSTLY N/XTLN, FEATURELESS LIME MUDSTONE



SAMPLE TOP VIOLA 1985'

LOST CIRCULATION AT 2140'
ADDED LCM AND REDUCED
PUMP PRESSURE TO 200 LBS

1-23-75
WOB 35000
RPM 50
PP 550
PS 50

ANHYD - WHT, CLR, MSTLY XTLN, INSOLUBLE

DOLO - DBRN, BRN, HD, DNS, GRANULAR

ANHYD - WHT, CLR, HD, XTLN

LS - WHT, TAN, LBRN, FRM-SFT, SLTY, DOLO IP, MSTLY N/XTLN, DRTY, CHLKY

SH - BLK, GY, GRN, FRM, FIS, SILTY IP, VS/CALC

SLTST - WHT, FRM-sft, V/CALC, DOLO

DOLO - WHT, HD, C/XTLN, ABUN LS DOLO RHOMBS, P/POR, NO SHOW

DOLO - BRN, DBRN, HD, DNS, SLTY, DRTY, N/POR

CHT - WHT, LGY, HD, DNS

NO RETURN

DOLO - BRN, DBRN, HD, DNS, SLTY, DRTY, GRANULAR, N/POR

CHT - WHT, LGY, HD, DNS

SH - BLK, GY, GRN, FRM PYRIC, CALC IP

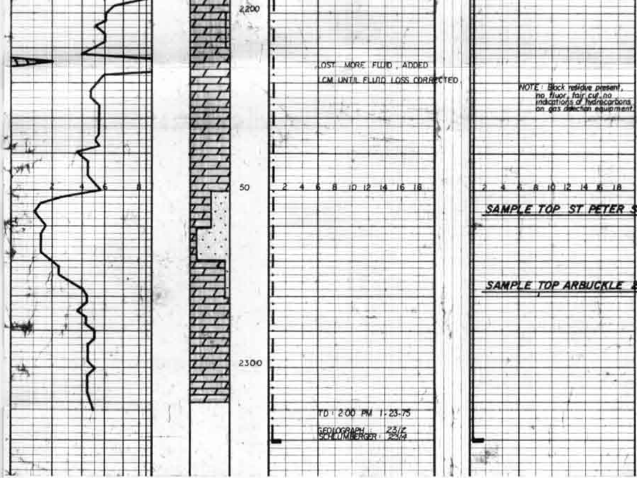
DOLO - BRN, DBRN, HD, DNS, SLTY, DRTY, SUCROSIC, N/POR

SH - BLK, GY, GRN, FRM, PYRIC, CALC IP

Cht - WHT, LGY, HD, DNS

DOLO - BRN, DBRN, GRANULAR, HD, DNS, BLK RES, NO FLUOR, NO CUT

DOLO - BRN, DBRN, HD, GRANULAR, HD, DNS, BLK RES, NO SHOW, NO CUT



LOST MORE FLUID, ADDED LCM UNTIL FLUID LOSS CORRECTED.

NOTE: Black residue present, no fluor, fair cut, no indications of hydrocarbons on gas detection equipment.

SAMPLE TOP ST PETER SS. 2255'

SAMPLE TOP ARBUCKLE 2275'

TD: 2:00 PM 1-23-75

GEOLOGRAPH: 23/2
SCHLUMBERGER: 23/4

SH - GY, GRN, FRM, SNDY IP, NON-CALC

DOLO - TAN, DBRN, HD, SLTY, MSTLY/XTLN, OCC INTERXTLN POR, BLK RES, VS/HALO CUT

SS- WHT, CLR, MSTLY UNCONS, RND-WL RND, WL SRTD, V/FRI WHEN CONS, PYRIC

DOLO - WHT, LGY, FRM-HD, MSTLY FINE GRANULAR, VS/CALC, NO VIS POR