PR85/029A

Enclosure 2a

EXLOG

COMPANY ARCO

WELL POEPPEL'S CORNER #1

FIELD WILDCAT

REGION NORTHERN TERRITORY, AUST.

COORDINATES 25° 47' 36" S

137° 57' 0[illegible]" E

API WELL INDEX NO.

SPUD DATE 21 AUGUST 1984

ELEVATION 131 FEET

TOTAL DEPTH 8500'

CONTRACTOR RICHTER

RIG / TYPE RIG No.3 / LAND

LOG INTERVAL

DEPTH FROM 80' TO 8500'

DATE FROM 21/8/84 TO 18/9/84

SCALE 1:500 UNIT 195 (ALPHA)

LOG PREPARED BY G.MILES, B.MUNRO, C.NEL, G.HOLNER

HOLE SIZE

26" TO 63'	8½" TO 8500'
17½" TO 740'	TO
12¼" TO 4540'	TO

CASING RECORD

20" AT 63'	AT
13⅜" AT 728'	AT
9⅝" AT 4534'	AT

MUD TYPES

SALT WATER-POLYMER TO 4540'

SALT WATER-GEL-POLYMER TO 8500'

TO

LITHOLOGY SYMBOLS

LIMESTONE | DOLOMITE | ANHYDRITE AND GYPSUM | HALITE

COAL AND LIGNITE | CLAY | SHALE | SILT AND SILTSTONE

SILTY SANDSTONE | SAND AND SANDSTONE | CONGLOMERATE | CHERT

IGNEOUS UNDIFFERENTIATED | METAMORPHIC BASEMENT

EXLOG SUITE

FORMATION EVALUATION LOG	☒	WIRELINE DATA PRESSURE LOG	☐
PRESSURE EVALUATION LOG	☐	TEMPERATURE DATA LOG	☐
DRILLING DATA PRESSURE LOG	☒	GEMDAS COMPUTER LOGS	☐
	☐		☐

ABBREVIATIONS

NB	NEW BIT	SVG	SURVEY GAS
RRB	RERUN BIT	C	CARBIDE TEST
CB	CORE BIT	W	MUD DENSITY
WOB	WEIGHT ON BIT	V	FUNNEL VISCOSITY
RPM	REVS PER MINUTE	F	FILTRATE— API
FLC	FLOW CHECK	FC	FILTER CAKE
CR	CIRCULATE RETURNS	PV	PLASTIC VISCOSITY
PR	POOR RETURNS	YP	YIELD POINT
NR	NO RETURNS	SOL	SOLIDS — %
LAT	LOGGED AFTER TRIP	SD	SAND — %
BG	BACKGROUND GAS	S	SALINITY — PPM Cl
TG	TRIP GAS	RM	MUD RESISTIVITY
STG	SHORT TRIP GAS	RMF	FILTRATE RESISTIVITY
CG	CONNECTION GAS		
SWG	SWAB GAS		

CASING SEAT | WIRELINE LOG RUN

CORED INTERVAL | TEST INTERVAL

NO RECOVERY | + WIRELINE TEST

► SIDEWALL CORE

GAS — 100 Total gas units is equivalent to 2% methane-in-air

OIL — Based on live oil in unwashed cuttings and percentage staining of washed cuttings.

FORMATION EVALUATION LOG

RATE OF PENETRATION

⊞ FT/HR

☐

VISUAL POROSITY

GOOD FAIR TRACE

CORE

[illegible] 40 20 10

DEPTH

TEST

CUTTINGS LITHOLOGY

HYDROCARBON ANALYSIS

OIL: TRACE FAIR GOOD

CONTINUOUS TOTAL GAS

CUTTINGS GAS - - - - -

GAS PERCENT 0.4 0.8 1.2 1.6 2

GAS UNITS 20 40 60 80 100

CHROMATOGRAPH

METHANE 1 BUTANES N4

ETHANE 2 14

PROPANE 3 PENTANES 5

GAS PERCENT 0.01 0.1 1.0 10

PPM 100 1K 10K 100K

CUT: FAIR GOOD

DOLOMITE %

CALCITE %

INTERPRETED LITHOLOGY

LITHOLOGY DESCRIPTION AND REMARKS

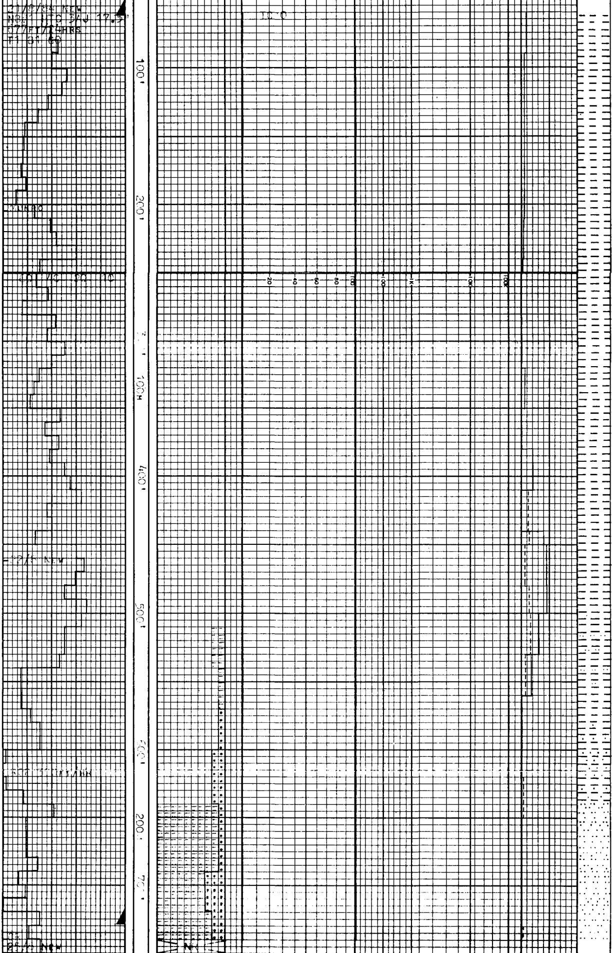
ROTARY KELLY BUSHING

22 FT

GROUND LEVEL

131 FT

MEAN SEA LEVEL



CLAYSTONE, FROM 60'
MED RED BRN-MED BRN
V SFT, DISP, SL CALC,
COM V F QTZ GNS, OCC
GYP

DEV = ½° AT 230'

CLAYSTONE, A/A SL LT
ORNG-WH GY, W/- COM
BRN-RD SD GRNS, HD,
W RND

W 8.9, V 42, PV 11,
YP 17, FC 1, SD ¼.

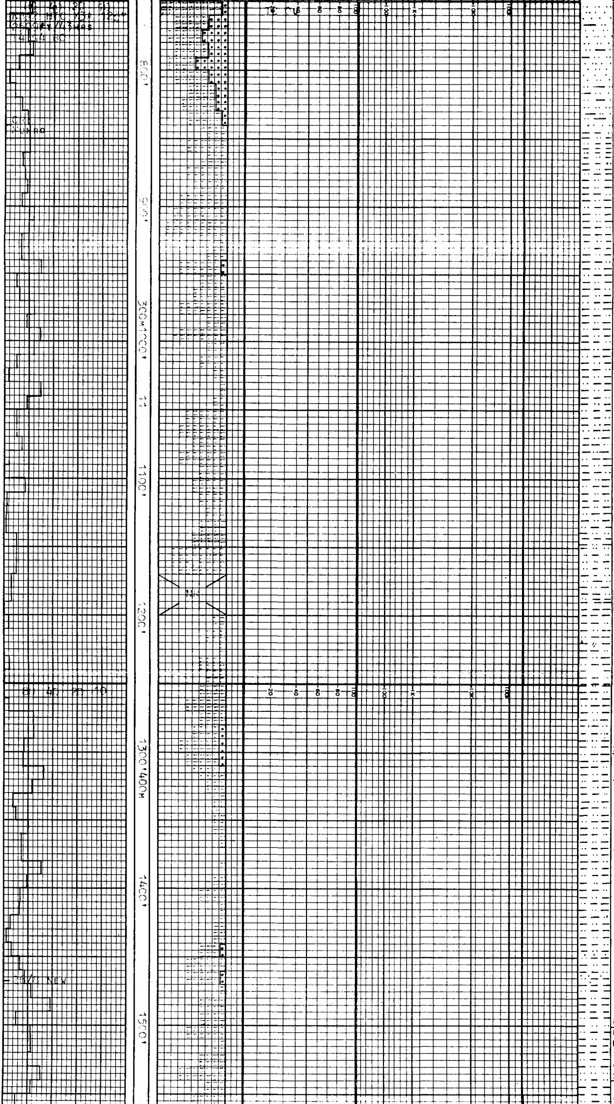
DEV = 0° AT 510'

CLAYSTONE, FROM 510'
WH-V LT GY-ORNG BRN
SFT-OCC HD, SL CALC
IN PT, 10-20% ORNG
BRN SLT, TR F MED RN
QTZ GNS, WITH 5-10%,
HD, WH-LT GY, GRAL, SI
RR CALC, COM V F QTZ
MAS

CLAYSTONE, FROM 570'
WH-V LT GY, V SFT, ST
NON-CALC, COM-ABNT V
F-OCC MED QTZ GNS

SILTSTONE, FROM 640'
MED BRN GY-DK GY-DK
GN GY, V SFT, STKY,
ABNT ARG MTX, NON-CA
COM V F QTZ, GD TR
CARB FLK, TR-GD TR
GLAU GRDS IN PT TO
SANDSTONE, MED GN GY
SFT-OCC FM, V F-F,
SUBRND, MOD SRTD, COM
ARG MTX, GD TR GLAU,
TR CARB FLK, NIL-TR
VIS POR

DEV = ½° AT 690'



DRILL 17.5" HOLE
TO 740'. SET 13 "
CSG AT 728'. DRILL
AHEAD WITH 12¼"
HOLE.

CLAYSTONE, FROM 7[illegible]FT
OL GY-DK GY, V SFT,
GDS TO
SILTSTONE, LT OL GY-
DK GY, V SFT, COM
ARGIL MTX, ABNT V F
QTZ, TR LITH GLAU
W/- CARB MAT, GDS T
SANDSTONE, LT OLV GY
-DK GN GY, V SFT,
DOM V F, SBRND, MOD
SRTD, COM-ABNT ARGI
MTX, TR GLAU, TR CA
-B DET, TR LITH VOL
GNS, NIL-TR VIS POR

C = 3.5U AT 34 VIS

CLAYSTONE, YEL GY-LT
OLV GY, GN GY, MOD BR
V SFT-SFT, DISP, RR
SLT, GD TR GLAU, TR V
F CARB DTRL.

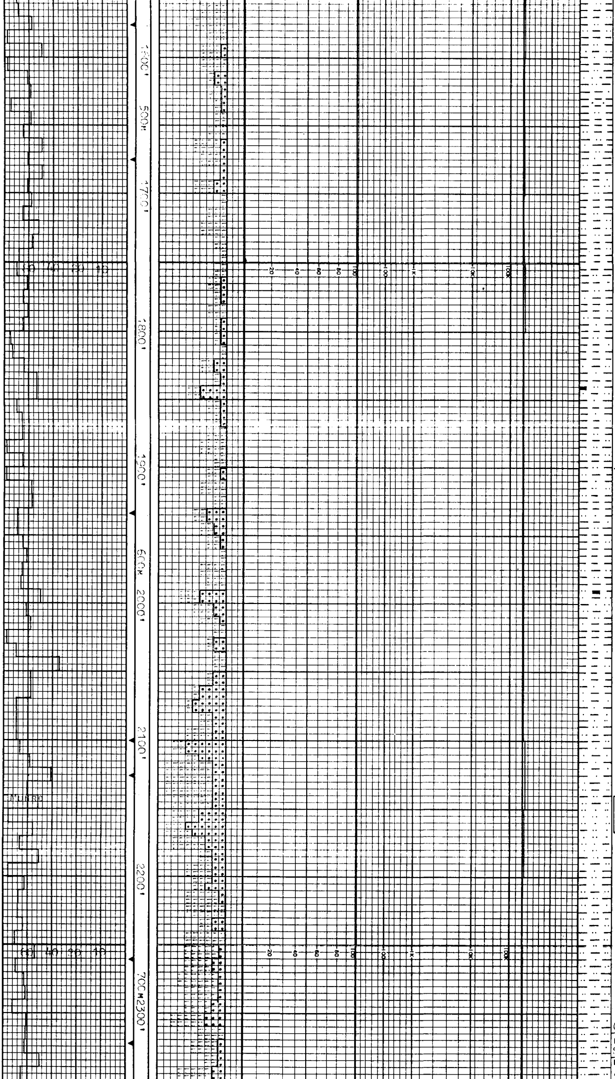
SILTSTONE, YEL GY-LT
OLV GY, OCC BRN GY, V
SFT-OCC FM, COM-ABUN
ARG MTX, TR-COM V F
QTZ GNS, GD TR GLAU,
TR-GD TR V F CARB
DTR.

BYPASSING THE SHAKE
NO RETURNS.

DEV = ¼° AT 1256'

SANDSTONE, FROM 1280
LT OLV GY, SFT-OCC F
COM-ABUND ARG MTX, T
-COM GLAU GNS, V F-
OCC F, SUBRND-RND, PR
SRTD, TR SIL CMT, GD
TR LITH GNS, GD TR V
F CARB GNS, NIL-TR
VIS POR, GDS IN PT T
SILTSTONE, AS ABOVE.

CLAYSTONE, PALE OLV-
MED GN GY, LT YEL BR
LT GY-DK GY, SFT-FM,
BLKY, RR V F CARB DE
GRDS IN PT TO
SILTSTONE, PALE YEL
BRN-GY BRN, GN GY-DK
OLV GY, FM-OCC MOD H



V ARG, TR-COM V F GY
GNS, TR-COM V F GLAU
GNS, NIL-GD TR V F
CARB DETR

SANDSTONE, FROM 1590
YEL GY, MOD HD, V F-F
ANG-SUBRND, MOD SRTD
GD TR ARG MTX, COM T
ABUND CALC CMT, COM
DRTL GLAU, GD TR GN
VOLC GNS, GD TR LITH
GNS, RR MUSC, NIL VIS
POR

W 9.3, V 33, PV 6,
YP 6, PH 7.5, F 35,
FC 3, SD [illegible], CL 24500

DEV = [illegible]° AT 1760FT

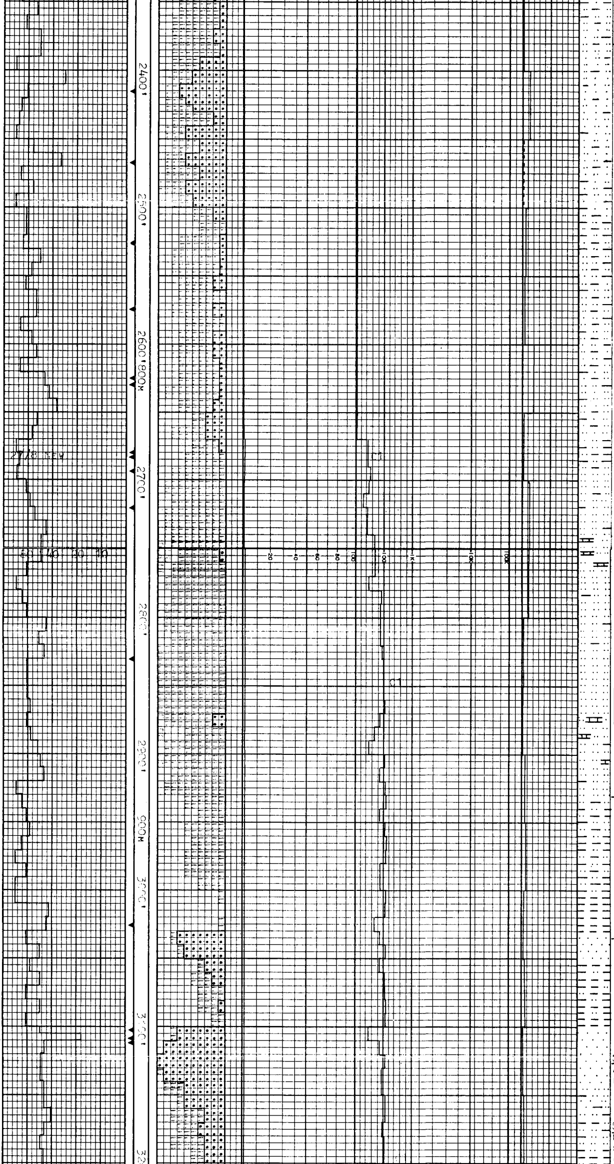
SANDSTONE, FROM 1900
LT GY GN-MED GY, LT
GY BRN, OCC LT GY, FM
MOD HD, V F-MED, DOM
SUBANG-RND, PR SRTD,
TR-COM ARG MTX, TR-
COM CALC CMT, RR PY
CMT, COM GLAU AND AL
FELD, GD TR LITH AND
VOLC GNS, GD TR CARB
DTRS, TR-OCC FR VIS
POR.

THE S/S FM 1940'
HAS A DULL BRN-YEL
MIN FLOR.

W 9.3, V37, PV 8,
YP 14, PH 7.5, F N/C
FC N/C, SD [illegible], CL3400

DEV = [illegible]° AT 2328FT

CLAYSTONE, A/A W/- SI
FRM TEX
SILTSTONE, OLV GN GY-
LT BRN, SFT-MOD HD
ABNT LAYERS CARB DE



, BLKS COAL COM, TR
-ABNT GLAU, TR PYR
, TR CALC

SANDSTONE, FM2400'
GY GN-LT GY, FRM-MO
HD, V F-F, SBANG,
MOD SRT, ABNT CALC
GRNS & CMT, V F QTZ
GRNS, TR-ABNT GLAU
TR VOLC GRNS, NIL-T
VIS POR

C = 11U AT 43VIS

SILTSTONE, FROM 2670'
MED DK GY BRN, SFT-
OCC FM, COM-ABUND AR
MTX, GD TR PRIS CALC
NEEDELS IN PT, TR
CALC GNS, TR V F CAR
FLKS, V RR MICA, GRDS
IN PT TO
CLAYSTONE, MED DK GY
BRN, SFT-FM, TR V F
CARB FLKS, MAS

DEV = 1° AT 2755'

LIMESTONE, FROM 1740'
MED BRN-LT ORNG BRN,
WAXEY LUSTER, FM-MOD
HD, MAS, NIL-OCC COM
ARG MAT, V RR CARB FL
INTLAM WITH
SILTSTONE, AS ABOVE,
BUT WITH RARE DISM
PY

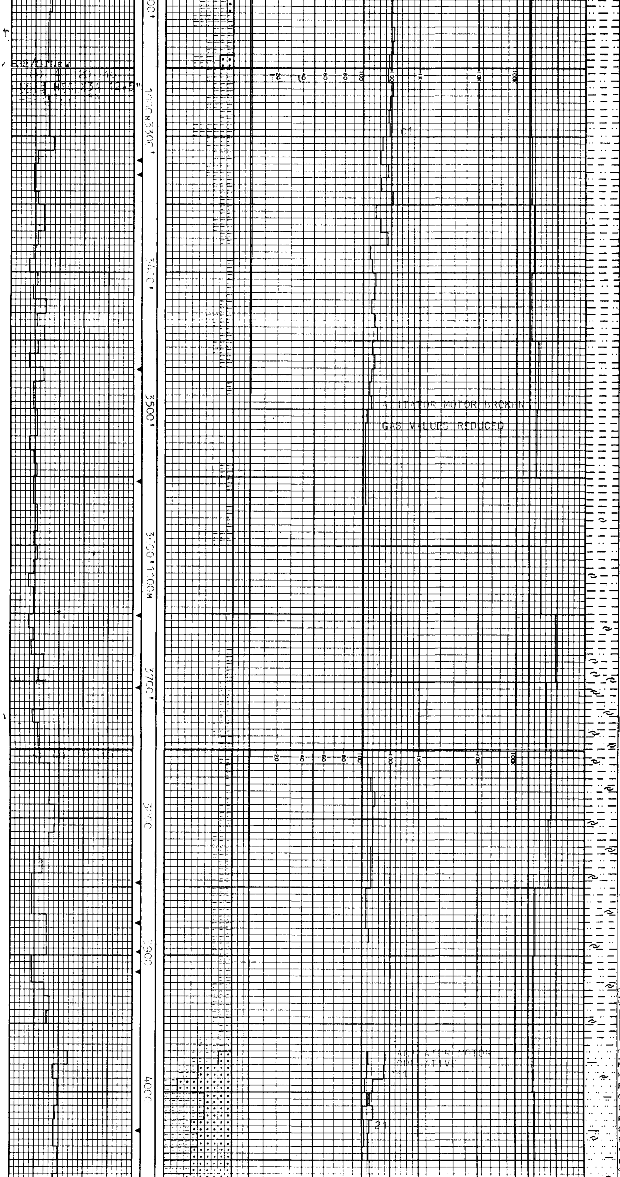
W 9.3, V 37, PV 8,
YP 14, PH 7.5, F N/C
FC N/C, SD ¼, CL 3300

CLAYSTONE, FROM 2930'
GY BRN-BRN GY, MOD
BRN, SFT-FM, MAS, TR V
F CARB, FLKS, V RR
BRAC, TR F-MED GLAU,
TR DISM PY.

SANDSTONE, FROM 3030'
MED GN GY-MED DK GY,
FM-MOD HD, V F-F, ANG-
SUBRND, MOD SRTD, TR-
OCC COM ARG MTX, COM
CALC CMT, COM ALT
FELD, GD TR GLAU AND
LITH GNS, TR CARB
FLKS, NIL-TR VIS POR.

SANDSTONE, FROM 3100'
AS ABV, BUT WITH OCC
RND MED QTZ GRNS.

SILTSTONE, FROM 3150'
MED BRN GY-DK BRN GY
SFT-FM, OCC MOD HD,
COM-ABUND ARG MTX, GD



TR V F CARB FLKS, RR CALC XLS, RR INOCERAMUS FOS FRAG, TR PY NOD, GRDS TO CLYST.

DEV = 1° AT 3226'

W 9.6, V 40, PV 11, YP 20, PH 7.5, F 23, FC 4, SD 1, CL 23500

C = 2U AT 40 VIS

CLAYSTONE, MED BRN GY-DK BRN GY, SFT-FM, OC MOD HD, COM SLT MAT, TR V F CARB FLKS, RR CALC XLS, RR LS GRNS, TR INOCERAMUS FOS FRAG, V RR BRAC, TR DISM PY, TR PY NOD, GRDS IN PT TO SILTSTONE, AS ABOVE.

CLAYSTONE, AS ABOVE BUT WITH UP TO 20% INOCERAMUS SHELL FRA

THE FOS FRAG HAVE A DULL ORNG-YEL FLOR

DEV = 1¾° AT 3725'

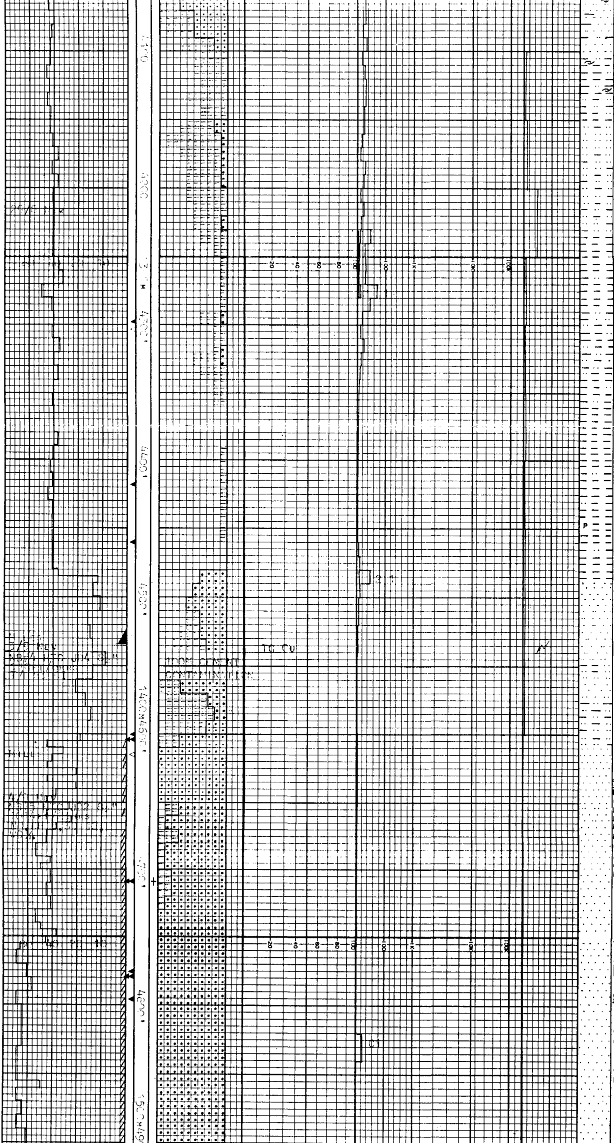
CLAYSTONE, FROM 3750' M BRN GY-DK BRN GY, V DK GY, OCC LT GY, SFT-FIRM, OCC MOD HD, V SLTY IN PT, TR V F SD, MAS-SBFIS, RR CALC RHOMBS, RR MIC-VEINS, MIC-MICA, TR CARB FLKS, TR DISM & NOD PYR, ABUND INOC FRAG, RR BRAC, INTBDD W/ & GRD TO:-

SILTSTONE, MED BRN GY-DK GY, FM-OCC MOD HD, MAS-SUBFIS, COM CLY MTX, COM CALC CMT IN PT, GD TR CALC GRNS, TR V F CARB FLKS, TR DISM & NOD PY, GRD TO CLYST A/A

SILTSTONE, AS ABOVE W/ INCR V F SD

W 9.6, V 34, PV 7, YP 11, PH 7.5, F 14.5 FC 3, SD 1, CL 24000

SANDSTONE, FROM 3970' M LT BRN GY-M BRN GY, M GY, FRI-FIRM, V F-OCC F, SBRND-RND, MOD SRT, QTZ, ABUND ARG MTX, MNR CALC CMT, MAS, COM ALT FELD, COM LITH GR, TR CARB MAT, TR GLAU, TR PYR, TR MICA, NIL-V P VIS POR, INTBDD W/ & GRD INCR W/ DEPTH TO SILTSTONE, AS ABOVE



THE SANDSTONE HAS TR-50% DULL ORNG-BRI LT YEL MIN FLOR NO CUT

CLAYSTONE, FROM 4080' DK GY-DG BRN GY, FM-OCC MOD HD, BLKY-OCC SUBFIS, GD TR INOC SHELL FRAG, GD TR PY NOD, RR FOS FRAG REPL BY PY, TR V F GLAU, TR V F CARB, TR V F QTZ AND FELD, V SLTY IN PT GRDS TO

SILTSTONE, FROM 3970, LT GY-MED DK GY-MED BRN GY, FM-OCC MOD HD, BLKY, TR-OCC COM CLY MTX, TR-COM CLAC CMT AND GRNS, TR PY CMT, COM-ABUND QTZ, GD TR V F GLAU AND FELD, GDS IN PT TO SS A/A

DEV 1¾° AT 4260'

W 9.6, V 38, PV 9, YP 13, PH 7.5, F 17.5 FC 3, SD 1, CL 26000

CLAYSTONE, GRDG FROM 4350', DK BRN GY-DK BL GY, FM-MOD HD, OCC HD, MAS-SUBFIS, TR-OCC COM SLTY MAT, GD TR VN CALC & CALC XL, TR-OCC COM PY NOD, RR DISM PY, RR FOS FRAG REPL BY PY.

SANDSTONE, FM 4485', V LT GY-WH, OFT CLR, HD WITH COM LSE BRKN QTZ GRNS, F-V CRS, DOM MED-CRS, PR SRTD, ANG-RND, COM CALC CMT, GD TR SIL CMT, TR PY CMT, TR ARG MTX, TR INFD POR

DEV 1° AT 4520'

RUN WIRELINE LOGS: DLL-MSFL-GR, SLS-GR HDT, CST, GR

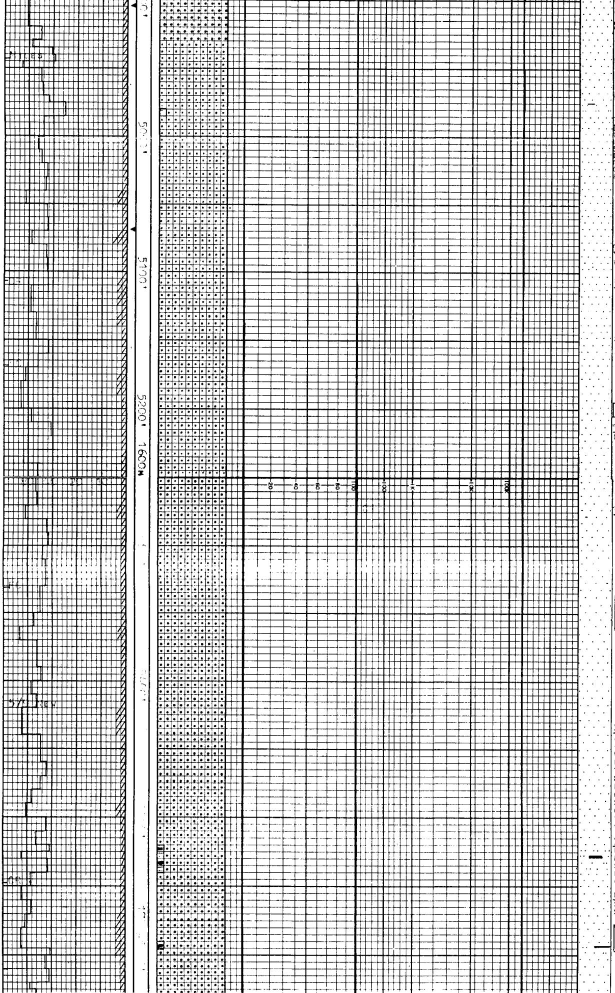
DRILL 12¼" HOLE TO 4540'. SET 9" CSG AT 4534'. DRILL AHEAD W/- 8½" HOLE

SANDSTONE, FROM 4605' LT GY-LT BRN GY, COM CLR, LSE-FM, OCC MOD HD, V F-F, DOM V F, OCC MED-CRS, SUBANG-SUBRN, MOD W SRTD, GD TR ARG MTX, TR-OCC COM SIL CMT, RR QTZ OVERGRTH, RR MUSC FELD & CARB GRNS, TR-OCC PR VIS POR.

C = 42 AT 49 VIS

W 9.0, V 49, PV 17, YP 14, PH 8.5, F 8, FC 1, SD TR, CL 20000

SANDSTONE, FROM 4755' V LT GY, COM CLR, LSE, V F-CRS, DOM F-MED, ANG-SUBRD, DOM SUBANG, GD TR SUBHEDRAL GRN, PR SRTD, TR ARG MTX, COM SIL CMT & QTZ OVERGRTH, V RR CARB MAT, TR-PR VIS POR



SANDSTONE, FROM 4920'
CL. V LT GY-LT GY, OCC
M-M DK GY, FRI-MOD HD,
F-C, OCC V C, ANG-SBRND
P SRT, QTZ, G TR SUB-
HEDRAL GR, TR ARG MTX
COM SIL CMT W/ COM
QTZ OVERGRTHS, RR-TR
R-BRN STN QTZ GR, TR
M-DK GY OCC M GY BRN
LITH GR, TR CARB MAT.
TR PYR, TR-P VIS POR

SANDSTONE, FROM 4965'
CL. V LT GY-LT GY,
TRNSL, FRI-MOD HD, F-M
OCC C, ANG-RND, MOD W
SRT QTZ, TR ARG MTX,
COM SIL CMT, MNR-COM
QTZ OVERGTHS, TR YEL-
ORNG BRN STN QTZ GR,
RR CARB MAT, RR PYR,

SANDSTONE, AS ABOVE,
GRDG TO C & OCC V C
W/ DEPTH

SANDSTONE, FROM 5110'
CL, V LT GY-OCC LT GY
TRNSL, FRI-OCC LSE, F-
M, DOM F, SBANG-RND, W
SRT, TR ARG MTX, SIL
CMT W/ MNR QTZ OVER
GTHS. TR YEL-YEL ORNG
STN QTZ GR, RR CARB
MAT, RR PYR, TR DK GY
LITH GR, P-FR VIS POR

C = 22u AT 36VIS

SANDSTONE, AS ABOVE
DOM F

SANDSTONE, PRED AS
ABOVE, DOM M, GRDG OCC
TO C W/ DEPTH

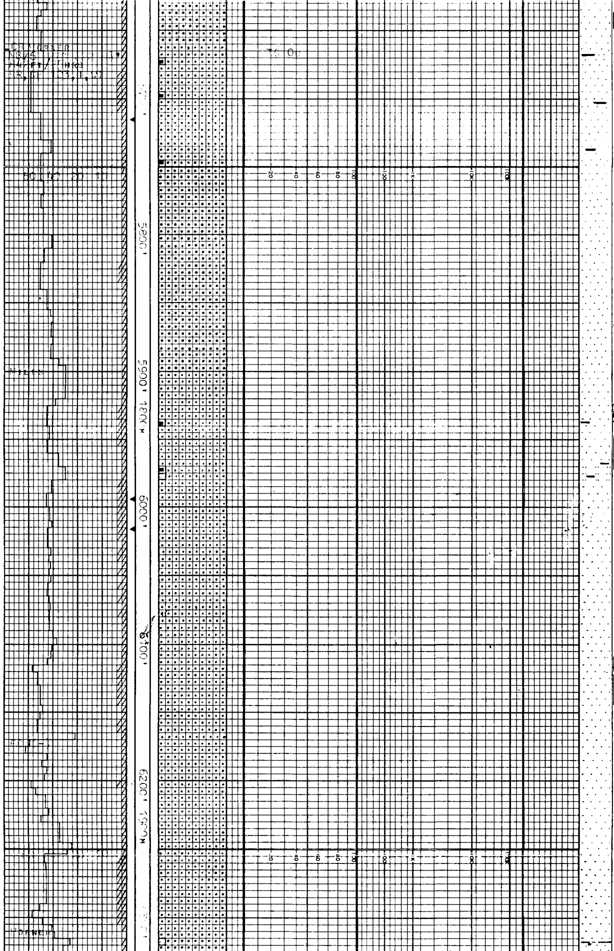
W 9.1, V 35, PV 9,
YP 8, PH 8.5, F 6.5,
FC 1, SD TR, CL 22000

SANDSTONE, DOM AS
ABOVE, V LT GY, COM
CLR, RR MED GY, LSE-FR
OCC MOD HD, V F-CRS,
DOM F-MED, RR V CRS,
TR ARG MTX, GD TR-COM
SIL CMT & QTZ OVERGT
RR PY CMT, RR SUBHED
GRN, SUBANG-SUBRN, PR
SRTD, RR LITH & CARB
GRNS, V RR GARNET FRA
TR-PR VIS POR, RR FR
VIS POR

SILTSTONE, FROM 5520'
PL BRN-MOD BRN-DK
BRN GY, FM-MOD HD,
SUBFIS-FIS, COM CARB
FLKS & LAM, GD TR V F
QTZ, GD TR MICRO MICA

COAL, FROM 5520', BLK,
SUBVIT, MOD HD, BLKY,
SUBCONCH FRAC, SLTY
IN PT

THE COAL HAS A MOD
BRI BL-WH STRM
CRUSH CUT FLOR



DEV 1½° AT 5644'

SANDSTONE, DOM AS ABOVE, V LT GY, COM CLR, DOM LSE GRAINS, SOME HD AGGREGATES, V F-CRSE, DOM F, SBANG -SBRND, MOD-WELL SRTD QTZ WITH TR RED GARNET, TR LITHICS, COM CARB DTRL, TR WH ARG MTX, COM WH ARG MTX IN PT, STRONG SIL CMT IN PT, COM QTZ OVERGROWTHS, TR-FAIR VIS POR.

SANDSTONE, AS ABOVE.

COAL, FROM 5930', BLK, DULL, FIRM-MOD HD, BLKY -SBVIT, ETHY, V SILTY IN PT, TR PYR

THE COAL HAS A MOD BRI CRM WH W/ A MOD FAST STRM CRUCH CUT FLOR

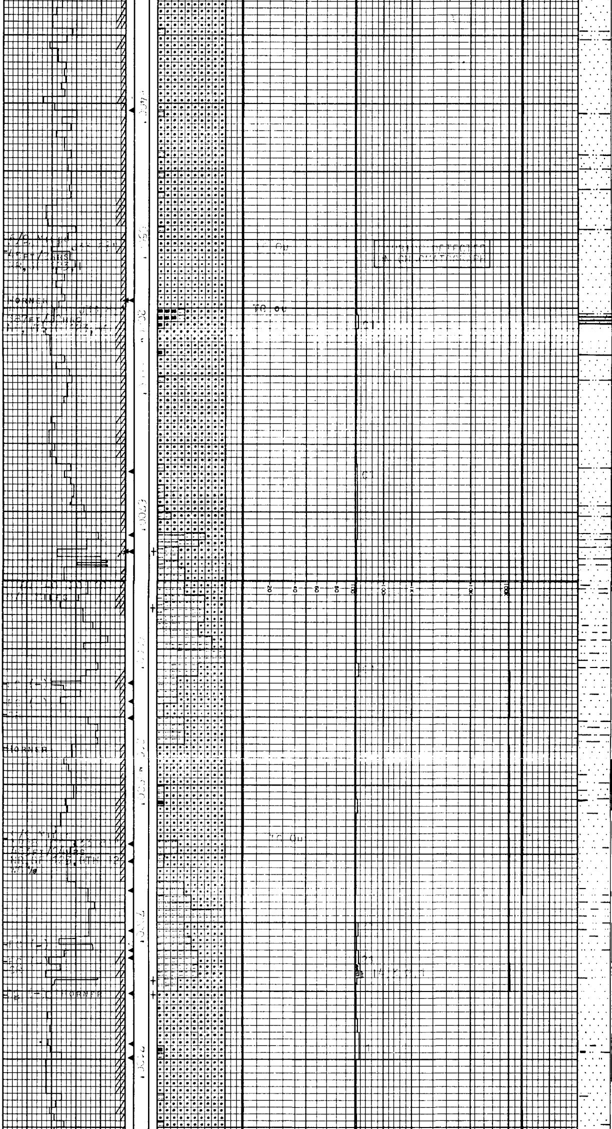
SILTSTONE, LT GY-M GY FIRM, V COM V F SD MAS-SBFIS, COM CARB FLKS, TR MIC-MICA

SANDSTONE, GEN AS ABOVE, CL, V LT GY-OCC LT GY, LSE-MOD HD, DOM M, GRD TO V C W/ DEPTH SBANG-SBRND, MOD W SRT, QTZ, TR WH ARG MTX, STRONG SIL CMT W/ COM QTZ OVERGTHS, RR M RED GARNET, TR M-DK GY LITH GR, RR LT PINK QTZ GR, TR-FAIR VIS POR

C = 32U AT 38 VIS

W 9.3, V 39, PV 12,
YP 6, PH 8.5, F 6.5
FC 1, SD TR, CL 24K

SANDSTONE, AS ABOVE, W/ INCR SIL CMT & WH ARG MTX



DEV = 2° AT 6480'

SANDSTONE, AS ABOVE, CL-V LT GY, DOM LSE GRAINS, OFTEN FRACT BY ROCK BIT, SOME HD AGGREGATES, V F-V C, DOM MED, SBANG-SBRND, MOD W SRTD, QTZ W/ COM RED GARNET, TR MED-DK GY LITHICS, TR WH ARG MTX, STRONG SIL CMT W/ COM QTZ OVERGROWTHS, TR-FAIR VIS POR, WITH MINOR
COAL, DETRITAL, BK, HD, EARTHY-SUBVIT, BLOCKY FRACT, SL ARG,
MINOR INTLAMS OF:
SILTSTONE, LT-DK GY, FIRM, V DISPERSIVE, MAS-SBFIS, OFT V CARB OCC MOD ARG, COM MICROMICA IN PT, OFT V SILICIFIED.

C = 42U AT 46 VIS

SANDSTONE, A/A, WITH SOME LT-MED BRN, LT GN, HD, V F-V C, DOM C-MED, SBANG, PR SRTD, QTZ W/ TR RED GARNET CARB DTRL, COM LITH, TR WH ARG MTX, ABUND SILT MTX IN PT, STRNG SIL CMT, NIL-PR POR.
COAL, BK, HD, BRIT, V ARG & SILTY IN PT, BLOCKY-SBCONCH FRAC, SUBVIT, GRDG TO:
SILTSTONE, MED BRN, FRM-HD, SBFIS, ABUND MICROMICA, COM CARB FLECKS, MOD SILICEOUS
SANDSTONE, FROM 6570' A/A, BCMG DOM LT GN.
SANDSTONE, FROM 6630' A/A, BCMG DOM V LT GY

THE COAL FROM 6550' HAS NO FLUOR BUT HAS A VERY WEAK VERY SLOW STREAMING MILKY WHITE CUT FLUOR.

SILTSTONE, LT-MED GY, LT-MED BRN GY, HD, V CARB IN PT, V MICROMICA, RR PYR, GRDG IN PT TO SHALE, AS FOR THE SILTSTONE.
CARB MATERIAL IN THE SILT & SHALE HAS CUT AS FOR THE COAL A/A.

SANDSTONE, FROM 3740' CL V LT GY-LT BRN GY OCC M GY BRN, TRNSL, MOD HD-HD, V F-M, DOM M, SBANG-SBRND, MOD W SRT, QTZ, WH-OCC LT GY ARG MTX, MAS, SIL CMT W/ COM QTZ OVERGTHS, COM CARB FLKS, TR-P VIS POR

THE CARB MAT IN THE SANDSTONE FROM 740' HAS NO FLOR BUT HAS A VERY SLOW, WEAK. STREAMING LT YEL GN CUT FLOR

C = 31U AT 43VIS

SANDSTONE, FROM 6870' AS ABOVE.

THE TIGHT FINE AGGS OF SANDSTONE HAVE NO NATURAL FLOR BUT ON A DRY SAMPLE HAVE AN EXTREMELY WEAK MILKY WHITE CUT FLOR, NO CUT ON WET SAMPLE.

W 9.4, V 38, PV 13, YP 8, PH 8.5, F 7.0, FC 1, SD TR, CL 27000

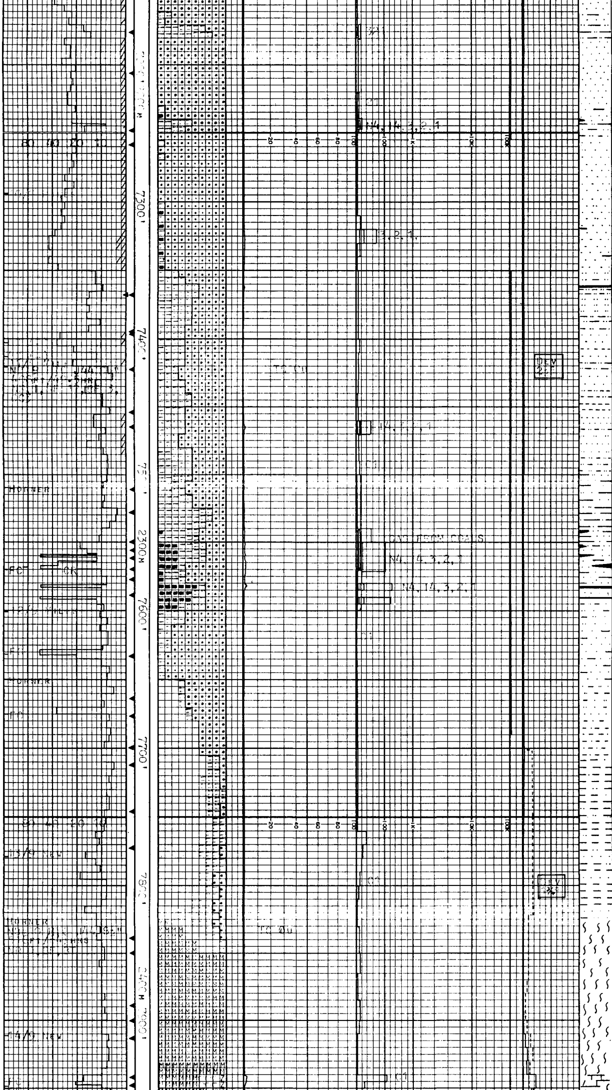
DEV = 2° AT 6930'

SILTSTONE, FROM 6973' LT BRN, LT GY BRN-BRN GY, FIRM-HD, V CLY IN PT, MNR V F SD, SPLT, MIC-MICA, TR CARB FLKS

THE SILTSTONE HAS V DULL ORANGE NAT FLOR WITH A WEAK MILKY WHITE CRUSH CUT FLOR.

SANDSTONE, FROM 7010' CL, LT GY-LT BRN GY, FRI-MOD HD, V F-M, DOM F, SBANG-SBRND, W SRT, QTZ, WH ARG MTX, MAS, SIL CMT, COM QTZ OGTHS TR CARB FLKS, RR PYR, TR LITH GR, TR-V P VIS POR

THE SANDSTONE HAS TR V DIM YEL GN NAT FLOR WITH AN EXTREMELY WEAK WHITE CRUSH CUT FROM A DRY SAMPLE.



SILTY SHALE, FROM 7170', MED-DK BRN, DK-MED GY, FRM, SBFIS, COM MICROMICA, V CARB.

THE SHALE HAS TR MED ORNG CUTITIC FLOR, WITH V WEAK SLOW STRMG-CRUSH MILKY-WH CUT FLOR.

SANDSTONE, FROM 7250' CL, WH-V LT GY, TRNSL, HD, M-V C, PROB GRAN, ANG-SBRND, PROB BIT FRAC, P SRT, QTZ W/ TR INTSTL PYR, TR WH ARG MTX, MAS, STRONG SIL CMT W/ COM QTZ OGTHS, TR CARB MAT, TR M GY LITH, TR ORNG STN QTZ GRN, TR-P VIS POR

W 9.2, V 36, PV 10, YP 6, pH 8.5, F 7.2, FC 1, SD 0, CL 29000

SILTSTONE, FROM 7350' LT GY-M GY BRN, OCC V DK GY, FIRM-MOD HD, COM V F SD, COM CARB FLKS & MICROLAM, MIC-MICA, RR DISM PYR INTBDD AT DEPTH W/ SILTY SHALE, M BRN, LT BRN GY-V DK GY BRN, FIRM-MOD HD, CARB, MIC-MICA, COM SILT, SBFIS-FIS

THE SILTSTONES AND SILTY SHALES FROM 7350' HAVE TR DULL ORNG NAT FLOR GIVING A WEAK MILKY WH CRUSH CUT FLOR TO A WEAK V SLOW STRMG MILKY WH CUT FLOR FROM A DRY SAMPLE

C = 29u AT 39VIS

SILTSTONE, AS ABOVE, GRDG TO SILTY SHALE, AS ABOVE, INTBDD W/ SANDSTONE, V LT GY-M GY BRN, HD-V HD, V F-F OCC M, SBANG-SBRND, MOD SRT, QTZ, WH-M BRN GY MTX, MAS, STRONG SIL CMT, TR LITH GR, TR CARB FLKS, NIL-V P VIS POR

THE SANDSTONES HAVE TR DIM ORNG-V DIM LT YEL GN NAT FLOR GIVING AN EXTREMELY WEAK WH CRUSH CUT FLOR TO A WEAK SLOW STRMG WH CUT FLOR FROM A DRY SAMPLE

COAL, BK, HD, BRIT, VIT, CONCH FRACT, OFT V ARG

SANDSTONE, FROM 7615' V LT GY-LT GY BRN, FRI-MOD HD, V F-F, BCM M W/ DEPTH, SBANG-RND, MOD SRT, QTZ, WH-LT GY ARG MTX, MAS, SIL CMT, TR LITH GR, TR CARB MAT, TR-V P VIS POR

SHALE, FROM 7690FT, M RED BRN, FM-HD, V DISP SBFIS-FIS, COM MIC-MICA, INTLAM & INTBD W/

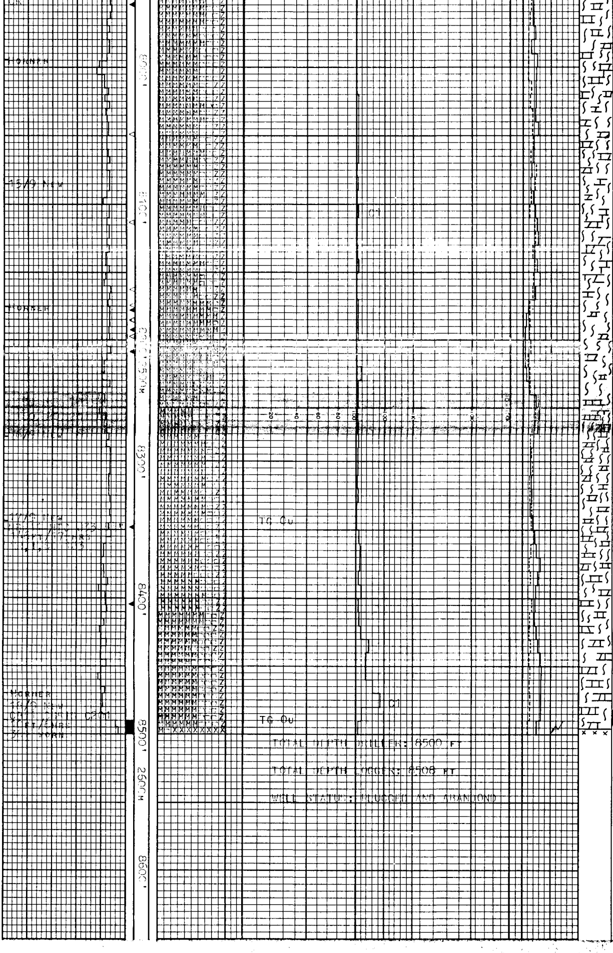
SANDSTONE, OFF WH-LT BRN RED, PR-MOD SRTD V HD, V F-C, DOM M, SBRD-RD, QTZ, TR RED ARG MTX IN PT, STRNG SIL CMT W/ COM QTZ OVER GRTH, TR ANKERITE, NO VIS POR.

CHLORITIZED TALC, ? FROM 7705', WH-MED GN, OCC MED YEL, SFT-OCC MOD HD, FIS, PEARLY LSTR, PHYLLITIC TEX, COM META FLOW & REXL TEX, TR V DK GY V MICA CARB GRNS, TR CRS QTZ GRNS W/- INTERNALLY INTERGROWN BLK MNRL (TOURMALINE?), INTBD W/- MNR RED SHALE A/A

PHYLLITE, FROM [illegible]', DK GY, HD, FIS, COM MIC-MICA, MOD CARB, COM INTGROWN PYRITE, MINOR QTZ VEINING WHERE SILTY, V SILICIFIED, GRDG TO & INT LAM WITH:

QUARTZITE, LT GY, OFT TRANSLUCENT, CHERTY TEX IN PT, CONCH FRAC IN PT, V HD, ORIGINAL SAND STRUCTURE ALMOST ENTIRELY DESTROYED BY SILICIFICATION, TRACE BIOT, TR LAMINAR CARB & ARG MATTER, RELICT QTZ GRNS OFTEN STRES ELONGATED, TR DISEM PY ESP ALONG FRACT PLANES, TR RADIAL PY GROWTH, NO POR.

C = 48u AT 41 VIS



MARBLE, FROM 7940', WH-MED GN GY, MOTTLED, HD-V HD, CRPXL, TR-COM MACROXL, COM CHLORITIC ELLIPSOIDAL GROWTHS, TR QTZ GRNS, COM CALC & DOL VEINS, TR-ABUND QTZ VEINS, GRD TO:

METASEDIMENTS, LT GN GY-LT GY-WH, HD, DENSE, TR-ABNT HD NON-CALC WH MTX, COM F-MED LT-DK GN MTX SUPPORTED ELLIPSOIDS, COM-ABNT QTZ CALC & DOL VEIN, TR RED CLAY, SCHISTOSE TEX WHERE MIC-MICA, TR PY, TR BRI YEL-ORN CALCITE FROM 8030'.

W 9.3, V 40, PV 13, YP 10, PH 9.0, F 6.8 FC 1, SD TR, CL 25K

METASEDIMENTS, CRD FROM 8160', WH-LT GY-MED GN GY, MOTTLED IN PT, HD-V HD, MAS-OCC FIS, COM WH-MED GN GY (SIL?) GROUNDMASS W/- CHLORITIC VEINS BANDS & ELLIPSOIDS, COM-ABNT CRPXL-MACRXL CALC & DOL VEINS AND XLS, COM QTZ VEINS, CALC DOL & QTZ COM INTERGROWN, V/MICA IN PT, SCHISTOSE/PHYLLIT TEX WHERE MICA, RARE ACICULAR TEX, RR ELL-IPSOIDAL QTZ GRN W/- [illegible] GROWTH HALOES [illegible] GRN BOUNDARIES DIFUS AND INTERGROWN, GRDS IN PT TO MARBLE A/A, NO POR.

METASEDIMENTS, A/A. SEE CORE REPORT No. 1 FOR ROCK DESCRIPTION INTERVAL 8490-8495'

W 9.2, V 40, PV 13, YP 12, PH 9.0, F 7.5 FC 1, SD TR, CL 25500

C = 38U AT 38 VIS

DEV = 14° AT 8469'

SEE CORE REPORT No. 1

RUN WIRELINE LOGS: LDL-CNL-EPT-GR, DLL-MSFL-GR-SP-CAL, SLS-CAL-GR, HDT, RFT CST, WST.

ARCO **CORE No. 1** **POEPPELS CORNER No. 1**

INTERVAL CORED: 8490'0" - 8500'0" INTERVAL RECOVERED: 8490'0" - 8500'5½" (104.6%)

DATE: 18TH SEPTEMBER, 1984 LOGGED BY: D. HORNER / D. NEW.

LITHOLOGY:

8490' 0" - 8495'8½" METASEDIMENTS/VOLCANICS: WHITE TO LIGHT GREY TO LIGHT GREEN GREY, MOTTLED, VERY HARD, MASSIVE, ANGULAR TO ROUNDED FINE TO PEBBLE SIZED QUARTZ, DOLOMITE AND CALCITE INCLUSIONS AND VEINS IN A TIGHT LIGHT TO MEDIUM GREY SILICEOUS TO CRYPTOCRYSTALLINE, OCCASIONALLY ACICULAR GROUNDMASS, COMMON PYRITE NODULES, TRACE CHLORITIC NODULES, COMMON PEBBLE TO COBBLE SIZED AMYGDOIDAL FRAGMENTS WITH FINE TO COARSE VESICLES FILLED WITH QUARTZ, RARELY WITH CALCITE AND DOLOMITE, COMMON HIGH ANGLE FRACTURES COMMONLY VEINED BY CALCITE.

8495'8½"-8500'5½" TRACHYTE: VERY DARK GREY TO BLACK, MELANOCRATIC, VERY HARD, MASSIVE, HYALINE TO FINE CRYSTALS OF HORNBLENDE, AUGITE, PINK ORTHOCLASE, PLAGIOCLASE, COMMON FELDSPAR PHENOCRYSTS UP TO GRANULE IN SIZE (SIZE INCREASES WITH DEPTH), MINOR HIGH ANGLE FRACTURES INFILLED BY CALCITE WITH MINOR CHLORITE. THE CONTACT WITH THE METASEDIMENTS/VOLCANICS IS SHARP WITH AN INFUSED CONTACT (ANGLE OF CONTACT IN CORE = 35°, HOLE DEVIATION ANGLE = 14°).