Scanned

analex
A GEOSCIENCE EXTENSION OF XCO

303/893-8138
DENVER, COLORADO

COMPANY	DIAMOND SHAMROCK
Well Name	CLATSOP COUNTY 33-11
Location—Sec	11
Twp	6N
Rge	6W
Co,	CLATSOP
St	OREGON
Elevation GL	920'
KB	940'
Spud	5/22/83
Finish	6/2/83
Total Depth	4249'
Interval Logged	1000-4249'
Pump Stroke-Length-Pump #1	7½"
Pump #2	5½"
Pump Liner-Diameter-Pump #1	7½"
Pump #2	5½"

LOGGING GEOLOGISTS

LARRY BAILEY
WM. M. SHALOSKY

COMPANY AND RIG PERSONNEL

Company Geologist
Company Foreman CHUCK WILSON
Drilling Company TAYLOR DRILLING # 4
Tool Pusher JIGGS COLCLSURE
Type of Mud KCL POLYMER W/NEUTRAL pH.

SERVICES PERFORMED TWO GEOLOGIST CONTINUOUS FID THA AND FID GAS CHROMATOGRAPH.

HOLE SIZE	DEPTH
13½"	SCF.-1023'
8 3/4"	1023'-TD.

CASING RECORD

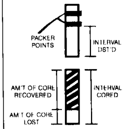
Depth	Size	Date
1023'	9 5/8"	5/25/83

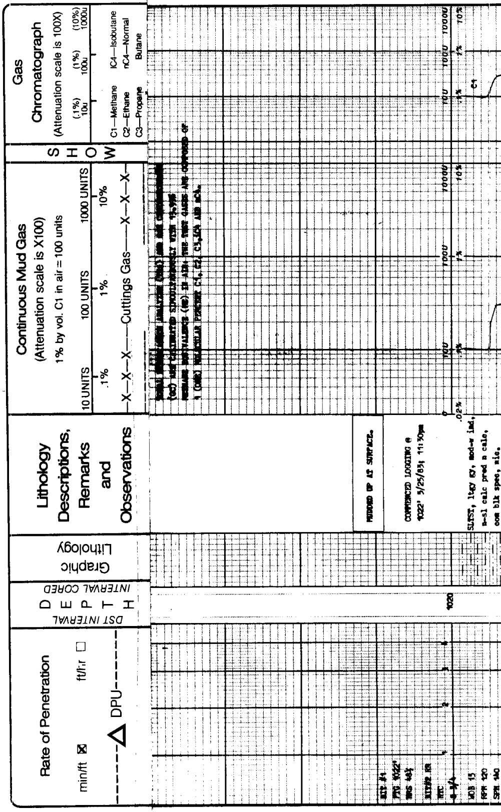
SYMBOLS

- ▨ ANHYDRITE
- CALCITE
- CHERT
- CONGLOMERATE
- ■ COAL
- DOLOMITE
- GYPSUM
- LIMESTONE
- MARLSTONE
- P PYRITE
- SALT
- SANDSTONE
- SHALE
- SILTSTONE
- B BENTONITIC
- ⊥ CALCAREOUS
- CARBONACEOUS
- ? CAVINGS
- DOLOMITIC
- f FOSSILS
- ~ GLAUCONITIC
- ☒ NO SAMPLES
- OOLITES
- ^ SILICEOUS
- ? VERY POOR SAMPLES
- STRINGERS

ABBREVIATIONS

CG—Connection Gas
CO—Circulate Out
DEV—Survey
DST—Drill Stem Test
LAG—8 oz. Carbide
LAT—Logged After Trip
NB—New Bit
NCB—New Core Bit
PP—Pump Pressure
RPM—Revolutions/Minute
SPM—Strokes/Minute
TG—Trip Gas
WOB—Weight On Bit





Lithology Descriptions, Remarks and Observations

TOTAL HYDROCARBON ANALYZER (THA) AND GAS CHROMATOGRAPH (GC) ARE CALIBRATED SIMULTANEOUSLY WITH [illegible] METHANE EQUIVALENCE (ME) IN AIR. THE TEST GASES ARE COMPOSED OF 1 (ONE) MOLECULAR PERCENT C1, C2, C3, IC4 AND nC4.

MUDDED UP AT SURFACE.

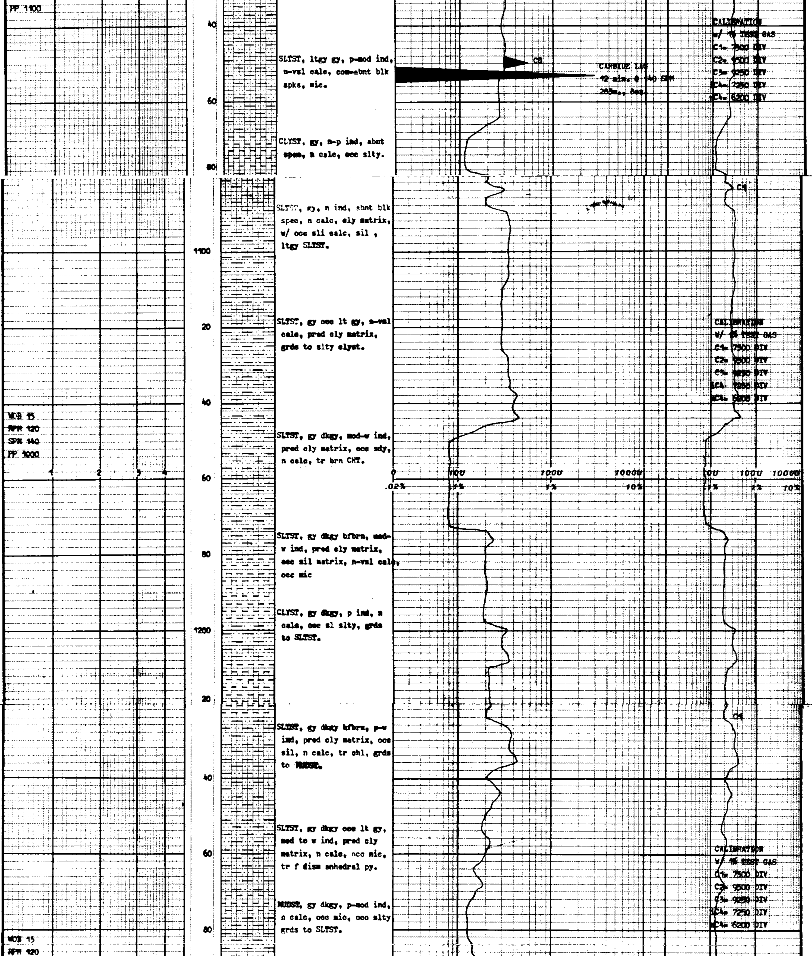
COMMENCED LOGGING @ 1022' 5/25/83; 11:30pm

BIT #1
PTD 1022'
HRS 48½

BIT#2 RR
HTC
8 3/4

WOB 15
RPM 120
SPM 140

SLTST, ltgy gy, mod-w ind, n-sl calc pred n calc, com blk spec, mic.



SLTST, ltgy gy, p-mod ind, n-vsl calc, com-abnt blk spks, mic.

CLYST, gy, n-p ind, abnt spec, n calc, occ slty.

SLTST, gy, n ind, abnt blk spec, n calc, cly matrix, w/ occ sli calc, sil, ltgy SLTST.

SLTST, gy occ lt gy, n-vsl calc, pred cly matrix, grds to slty clyst.

SLTST, gy dkgy, mod-w ind, pred cly matrix, occ sdy, n calc, tr brn CHT.

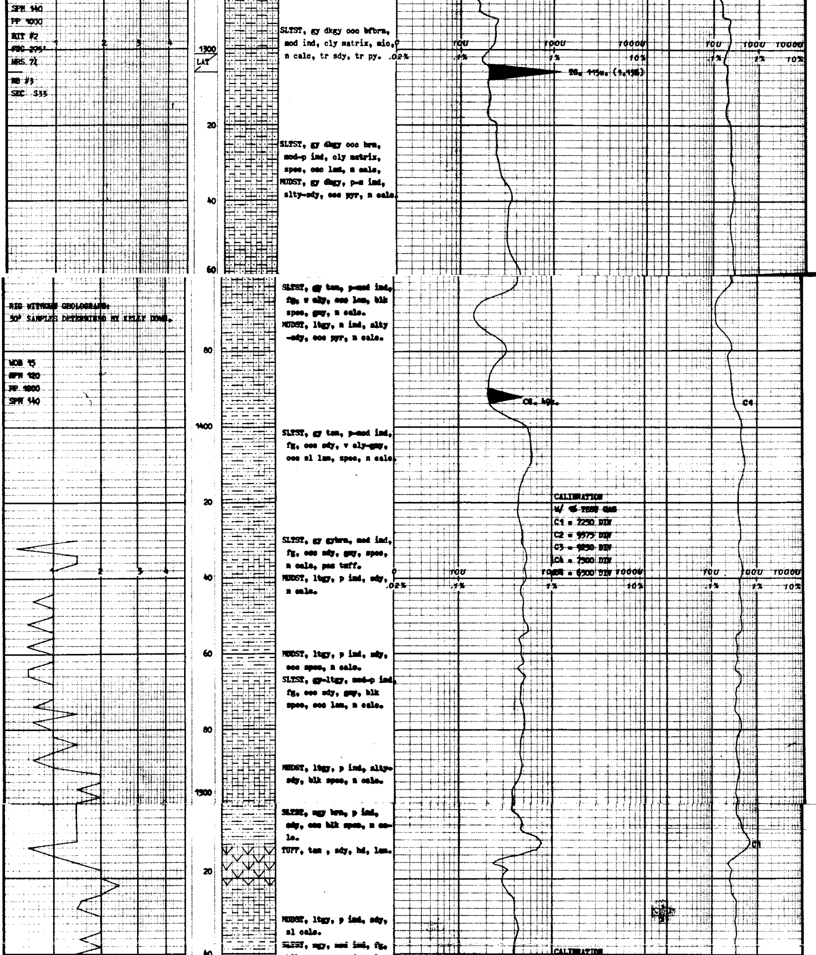
SLTST, gy dkgy bfbrn, mod-w ind, pred cly matrix, occ sil matrix, n-vsl calc, occ mic

CLYST, gy dkgy, p ind, n calc, occ sl slty, grds to SLTST.

SLTST, gy dkgy bfbrn, p-w ind, pred cly matrix, occ sil, n calc, tr chl, grds to MUDST.

SLTST, gy dkgy occ lt gy, mod to w ind, pred cly matrix, n calc, occ mic, tr f dism anhedral py.

MUDST, gy dkgy, p-mod ind, n calc, occ mic, occ slty grds to SLTST.



RIG WITHOUT GEOLOGRAPH:
30' SAMPLES DETERMINED BY KELLY DOWN.

WOB 15
RPM 120
PP 1000
SPM 140

SLTST, gy dkgy occ bfbrn, mod ind, cly matrix, mic, n calc, tr sdy, tr py.

SLTST, gy dkgy occ brn, mod-p ind, cly matrix, spec, occ lam, n calc,
MUDST, gy dkgy, p-m ind, slty-sdy, occ pyr, n calc.

SLTST, gy tan, p-mod ind, fg, v sdy, occ lam, blk spec, gmy, n calc.
MUDST, ltgy, m ind, slty-sdy, occ pyr, n calc.

SLTST, gy tan, p-mod ind, fg, occ sdy, v cly-gmy, occ sl lam, spec, n calc.

CALIBRATION
W/ 1% TEST GAS
C1 = 7250 DIV
C2 = 9575 DIV
C3 = 9250 DIV
C4 = 7300 DIV
[illegible] = 6500 DIV

SLTST, gy gybrn, mod ind, fg, occ sdy, gmy, spec, n calc, pos tuff.
MUDST, ltgy, p ind, sdy, n calc.

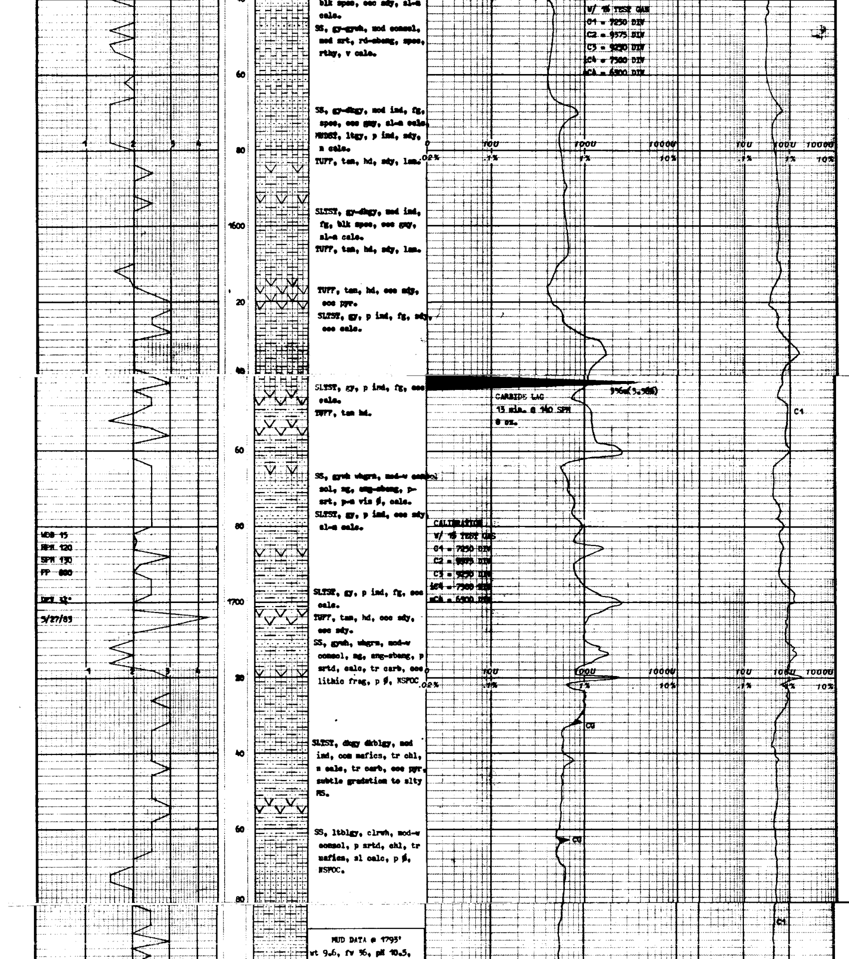
MUDST, ltgy, p ind, sdy, occ spec, n calc.
SLTST, gy-ltgy, mod-p ind, fg, occ sdy, gmy, blk spec, occ lam, n calc.

MUDST, ltgy, p ind, slty-sdy, blk spec, n calc.

SLTST, mgy brn, p ind, sdy, occ blk spec, n calcle.
TUFF, tan , sdy, hd, lam.

MUDST, ltgy, p ind, sdy, sl calc.
SLTST, mgy, mod ind, fg,

CALIBRATION



blk spec, occ sdy, sl-m calc.

SS, gy-grwh, mod consol, mod srt, rd-sbang, spec, rthy, v calc.

CALIBRATION
W/ 1% TEST GAS
C1 = 7250 DIV
C2 = 9375 DIV
C3 = 9250 DIV
iC4 = 7500 DIV
nC4 = 6500 DIV

SS, gy-dkgy, mod ind, fg, spec, occ gyy, sl-m calc.

MUDST, ltgy, p ind, sdy, m calc.

TUFF, tan, hd, sdy, lam.

SLTST, gy-dkgy, mod ind, fg, blk spec, occ gyy, sl-m calc.

TUFF, tan, hd, sdy, lam.

TUFF, tan, hd, occ sdy, occ pyr.

SLTST, gy, p ind, fg, sdy, occ calc.

SLTST, gy, p ind, fg, occ calc.

TUFF, tan hd.

996u(3.98%)

CARBIDE LAG
13 min. @ 140 SPM
8 oz.

SS, grwh whgrn, mod-w consol, mg, ang-sbang, p-srt, p-m vis ø, calc.

SLTST, gy, p ind, occ sdy, sl-m calc.

WOB 15
RPM 120
SPM 130
PP 800

CALIBRATION
W/ 1% TEST GAS
C1 = 7250 DIV
C2 = 9375 DIV
C3 = 9250 DIV
iC4 = 7500 DIV
nC4 = 6500 DIV

DEV 3¼°

5/27/83

SLTST, gy, p ind, fg, occ calc.

TUFF, tan, hd, occ sdy, occ sdy.

SS, grwh, whgrn, mod-w consol, mg, ang-sbang, p srtd, calc, tr carb, occ lithic frag, p ø, NSPOC

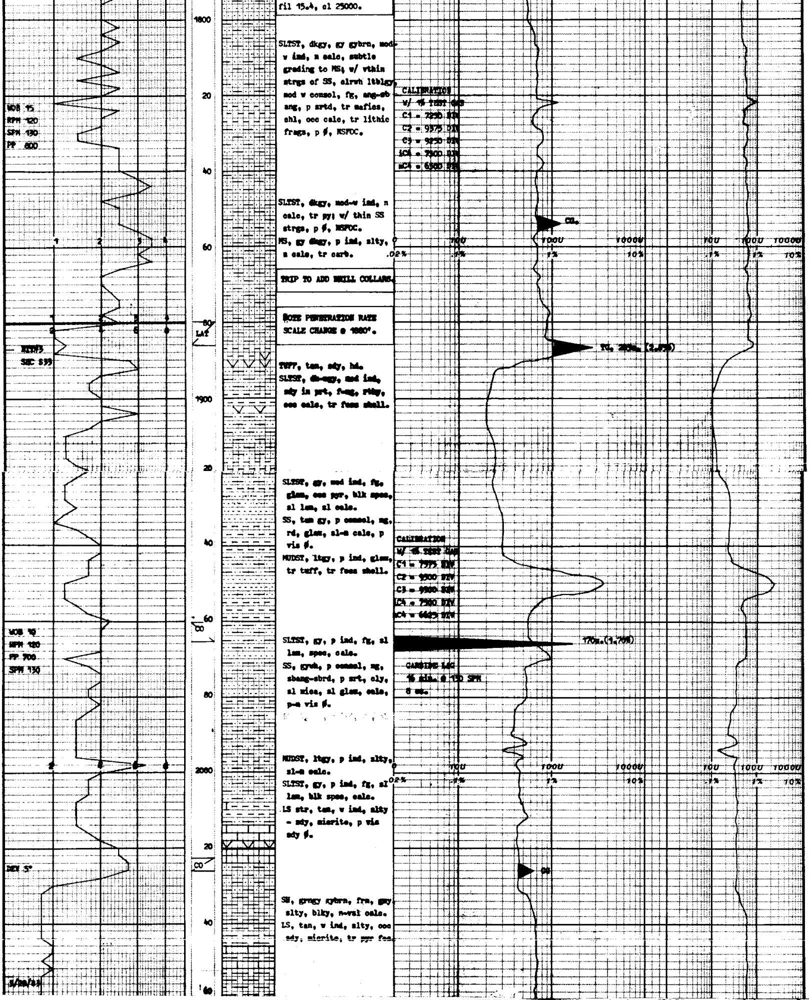
CG

SLTST, dkgy dkblgy, mod ind, com mafics, tr chl, m calc, tr carb, occ pyr, subtle gradation to slty MS.

SS, ltblgy, clrwh, mod-w consol, p srtd, chl, tr mafics, sl calc, p ø, NSPOC.

CG

MUD DATA @ 1793'
wt 9.6, fv 36, pH 10.5,



fil 15.4, cl 25000.

SLTST, dkgy, gy gybrn, mod-w ind, n calc, subtle grading to MS; w/ vthin strgs of SS, clrwh ltblgy, mod w consol, fg, ang-sb ang, p srtd, tr mafics, shl, occ calc, tr lithic frags, p ∅, NSFOC.

CALIBRATION
w/ 1% TEST GAS
C1 = 7250 DIV
C2 = 9375 DIV
C3 = 9250 DIV
iC4 = 7800 DIV
nC4 = 6500 DIV

SLTST, dkgy, mod-w ind, n calc, tr py; w/ thin SS strgs, p ∅, NSFOC.

MS, gy dkgy, p ind, slty, n calc, tr carb.

TRIP TO ADD DRILL COLLARS.

NOTE PENETRATION RATE SCALE CHANGE @ 1880'.

TUFF, tan, sdy, hd.

SLTST, dk-mgy, mod ind, sdy in prt, f-mg, rthy, occ calc, tr foss shell.

SLTST, gy, mod ind, fg, glauc, occ pyr, blk spec, sl lam, sl calc.

SS, tan gy, p consol, mg, rd, glauc, sl-m calc, p vis ∅.

MUDST, ltgy, p ind, glauc, tr tuff, tr foss shell.

CALIBRATION
w/ 1% TEST GAS
C1 = 7575 DIV
C2 = 9500 DIV
C3 = 9900 DIV
iC4 = 7900 DIV
nC4 = 6625 DIV

SLTST, gy, p ind, fg, sl lam, spec, calc.

SS, gywh, p consol, mg, sbang-sbrd, p srt, cly, sl mica, sl glauc, calc, p-m vis ∅.

CARBIDE LAG
16 min. @ 130 SPM
8 mt.

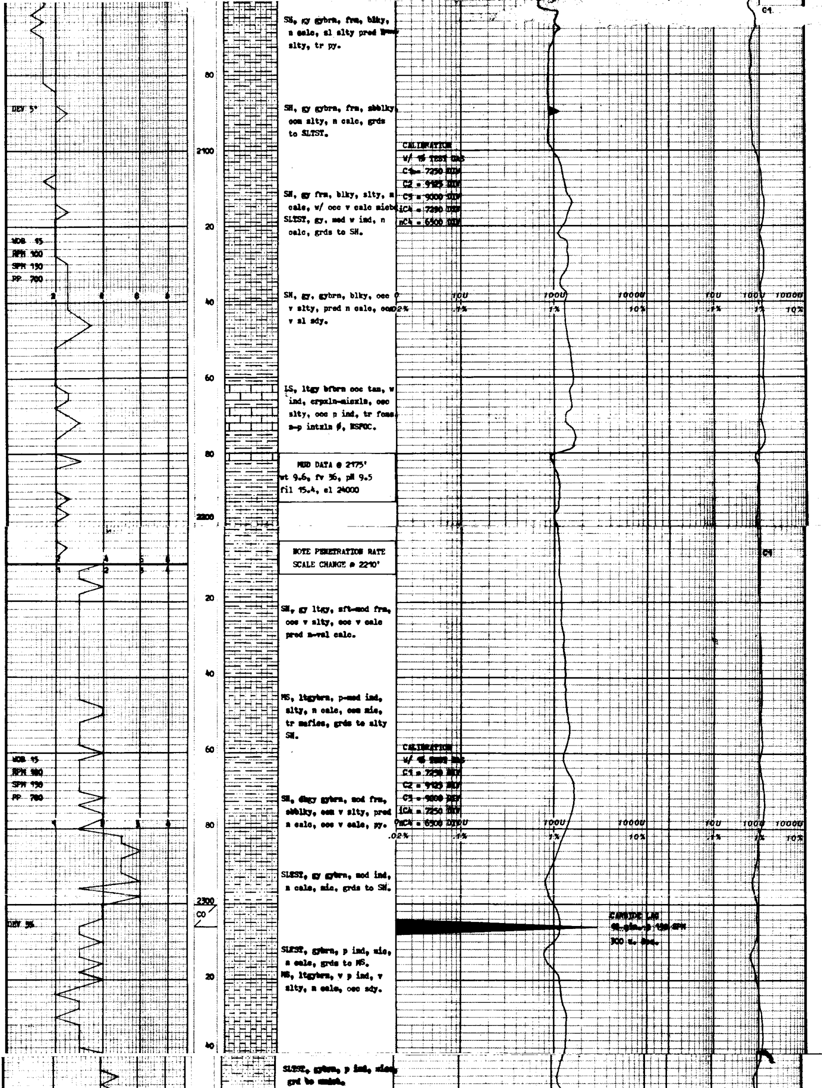
MUDST, ltgy, p ind, slty, sl-m calc.

SLTST, gy, p ind, fg, sl lam, blk spec, calc.

LS str, tan, w ind, slty - sdy, micrite, p vis sdy ∅.

SH, grngy gybrn, frm, gmy, slty, blky, n-vsl calc.

LS, tan, w ind, slty, occ sdy, micrite, tr pyr fos.



SH, gy gybrn, frm, blky, n calc, sl slty pred [illegible] slty, tr py.

SH, gy gybrn, frm, sbblky, com slty, n calc, grds to SLTST.

CALIBRATION
w/ ½ TEST GAS
C1 = 7250 DIV
C2 = 9125 DIV
C3 = 9000 DIV
iC4 = 7250 DIV
nC4 = 6500 DIV

SH, gy frm, blky, slty, n calc, w/ occ v calc micb

SLTST, gy, med w ind, n calc, grds to SH.

SH, gy, gybrn, blky, occ v slty, pred n calc, occ v sl sdy.

LS, ltgy bfbrn occ tan, w ind, crpxln-micxln, occ slty, occ p ind, tr foss, n-p intxln ∅, NSFOC.

MUD DATA @ 2175'
wt 9.6, fv 36, pH 9.5
fil 15.4, cl 24000

NOTE PENETRATION RATE
SCALE CHANGE @ 2210'

SH, gy ltgy, sft-mod frm, occ v slty, occ v calc pred n-vsl calc.

MS, ltgybrn, p-mod ind, slty, n calc, com mic, tr mafics, grds to slty SH.

CALIBRATION
w/ ½ TEST GAS
C1 = 7250 DIV
C2 = 9125 DIV
C3 = 9000 DIV
iC4 = 7250 DIV
nC4 = 6500 DIV

SH, dkgy gybrn, mod frm, sbblky, com v slty, pred n calc, occ v calc, py.

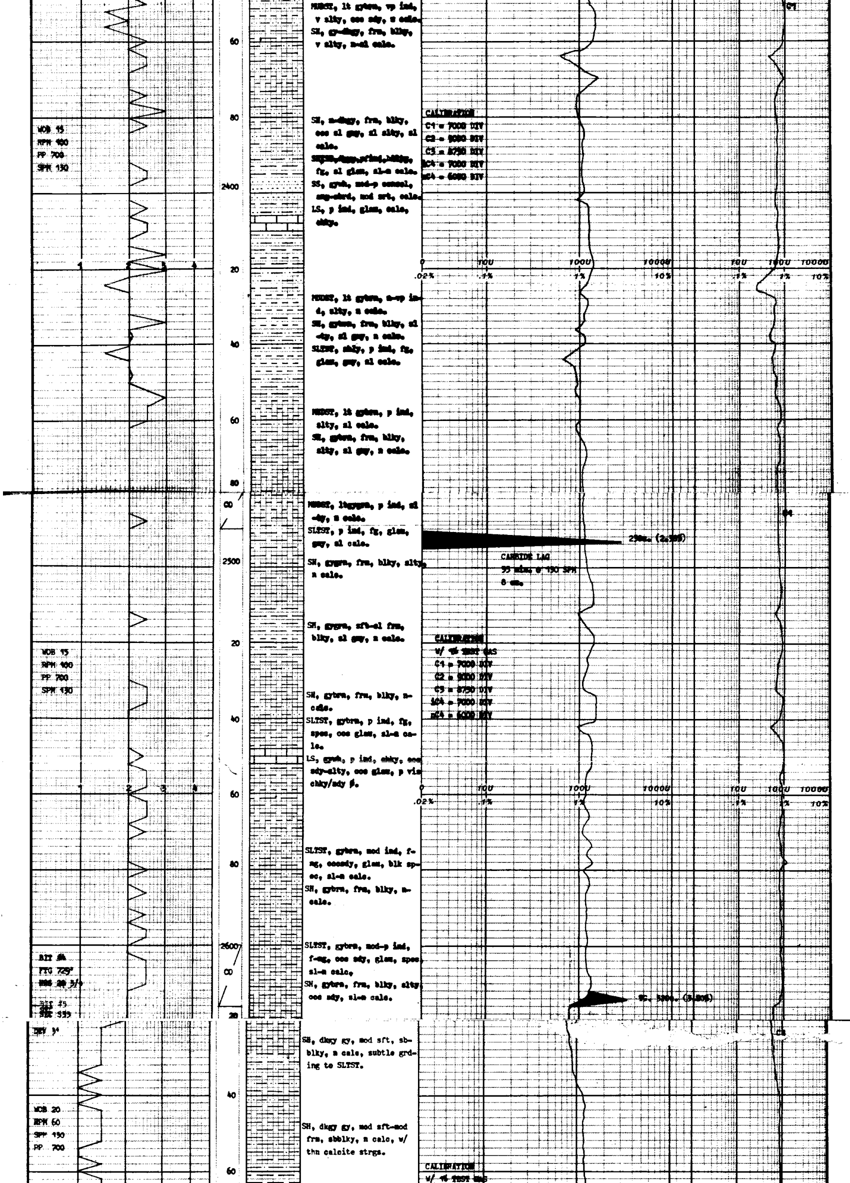
SLTST, gy gybrn, mod ind, n calc, mic, grds to SH.

CARBIDE LAG
[illegible] 130 SPM
300 [illegible]

SLTST, gybrn, p ind, mic, n calc, grds to MS.

MS, ltgybrn, v p ind, v slty, n calc, occ sdy.

SLTST, gybrn, p ind, mic, grd to [illegible]



MUDST, lt gybrn, vp ind, v slty, occ sdy, n calc.
SH, gy-dkgy, frm, blky, v slty, n-sl calc.

SH, m-dkgy, frm, blky, occ sl gny, sl slty, sl calc.
[illegible] fg, sl glau, sl-n calc.
SS, gywh, mod-p consol, ang-sbrd, mod srt, calc.
LS, p ind, glau, calc, chky.

CALIBRATION
C1 = 7000 DIV
C2 = 9000 DIV
C3 = 8750 DIV
iC4 = 7000 DIV
nC4 = 6000 DIV

WOB 15
RPM 100
PP 700
SPM 130

MUDST, lt gybrn, m-vp ind, slty, n calc.
SH, gybrn, frm, blky, sl -sdy, sl gny, n calc.
SLTST, shly, p ind, fg, glau, gny, sl calc.

MUDST, lt gybrn, p ind, slty, sl calc.
SH, gybrn, frm, blky, slty, sl gny, n calc.

MUDST, ltgygrn, p ind, sl -sdy, n calc.
SLTST, p ind, fg, glau, gny, sl calc.

230u. (2.30%)

CARBIDE LAG
35 mins. @ 130 SPM
8 cm.

SH, gygrn, frm, blky, slty, n calc.

SH, gygrn, sft-sl frm, blky, sl gny, n calc.

CALIBRATION
W/ 1% TEST GAS
C1 = 7000 DIV
C2 = 9000 DIV
C3 = 8750 DIV
iC4 = 7000 DIV
nC4 = 6000 DIV

WOB 15
RPM 100
PP 700
SPM 130

SH, gybrn, frm, blky, n-calc.
SLTST, gybrn, p ind, fg, spec, occ glau, sl-n calc.
LS, gywh, p ind, chky, occ sdy-slty, occ glau, p vis chky/sdy ø.

SLTST, gybrn, mod ind, f-mg, occsdy, glau, blk spec, sl-n calc.
SH, gybrn, frm, blky, n-calc.

SLTST, gybrn, mod-p ind, f-mg, occ sdy, glau, spec, sl-n calc.
SH, gybrn, frm, blky, slty, occ sdy, sl-n calc.

BIT #4
FTG 729'
HRS 20 3/4

TG. 530u. (5.30%)

BIT #5
SER 535

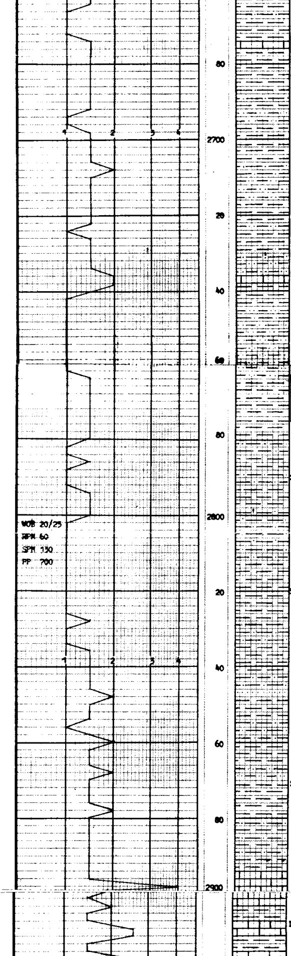
DEV 3/4

SH, dkgy gy, mod sft, sbblky, n calc, subtle grding to SLTST.

WOB 20
RPM 60
SPM 130
PP 700

SH, dkgy gy, mod sft-mod frm, sbblky, n calc, w/ thn calcite strgs.

CALIBRATION
W/ 1% TEST GAS



WOB 20/25
RPM 60
SPM 130
PP 700

LS, gywh tan, w ind, micxln, slty, occ sdy, p ∅, occurs as thn strgs.

SLTST, gy, mod ind, tr glau, tr carb?, occ mic, approaches SH in tex & comp.

SH, dkgy, mod sft, sbblky, slty, n calc, tr calc strgs.

SLTST, ltgy dkgy, mod-p ind, pred n calc occ v calc.

LS, gywh, w ind, micxln, sl sdy-vf gr, p ∅, NSFOC.

MUD DATA @ 2720
wt 9.5, fv 38, pH 8.35,
fil 6.8, cl 21000.

SH, dkgy, mod sft, sbblky, v slty, mic, pred n calc, tr carb, tr foss, v uniform in col & tex, tr tan crpxln LS, tr clrwh ca.

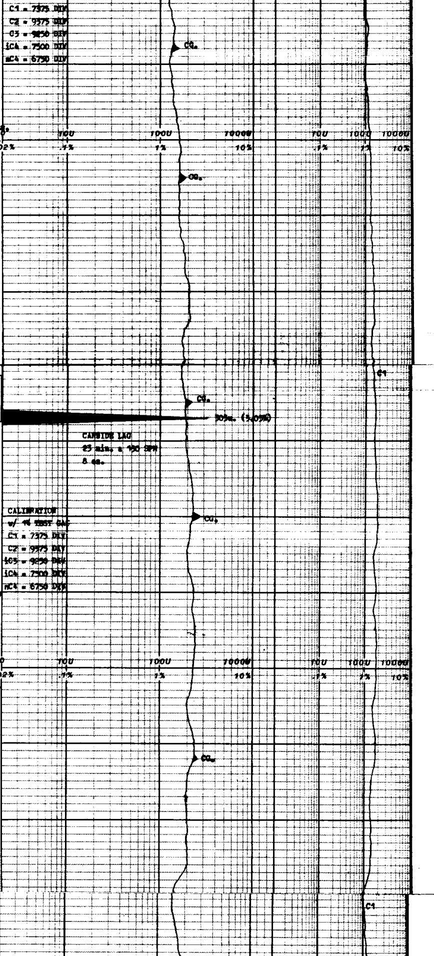
SH, dkgy, occ gy, sft, slty com mic, n-vsl calc, w/ tr fos tan LS.

SS, ltgy, consol, vfgr, ang, p srtd, ark, mic, tr py, tr mafics, arg, f ∅, NSFOC.

SH, dkgy, occ gy, mod sft, slty, com mic, n-slcalc, occ pyr, tr deepgrn SH, tr tan sdy LS.

LS, ltgy, v w ind, crpxln, rextlzd, in pt, w/ strg of yelwh trnsl v dense LS.

LS, ltgy gy occ mttld, p-w ind, gran-crpxln, occ sdy, n-p intxln ∅, NSFOC.

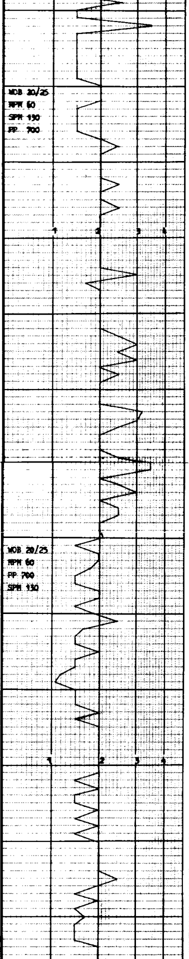


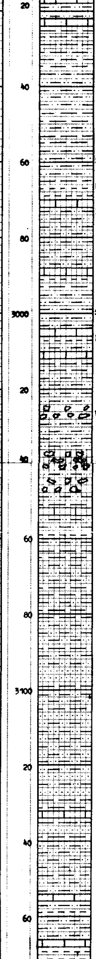
C1 = 7375 DIV
C2 = 9375 DIV
C3 = 9850 DIV
iC4 = 7500 DIV
nC4 = 6750 DIV

30u. (5.09%)

CARBIDE LAG
23 min. @ 130 SPM
8 cc.

CALIBRATION
w/ 1% TEST GAS
C1 = 7375 DIV
C2 = 9375 DIV
iC3 = 9250 DIV
iC4 = 7500 DIV
nC4 = 6750 DIV





SH, gy gybrn, occ lt grngy, com slty, n calc.

SLTST, ltgy-gy, p-mod ind, com sdy, tr glau, occ pyr, n-v calc.

SLTST, gy, mod ind, fg, glau, occ mica, n calc.

MDDST, gy-ltgy, occ gyblu, p ind, glau, slty.

LS, buff, p ind, micrite, sdy, glau, tr ss.

SLTST, gy, mod ind, fg, glau, mica, n calc.

LS, tan gywh, p-v ind, mic-rite-chky, glau in prt, occ sl recxl, occ sdy, n vis ∅, NSOC.

VOL BREC, ltgy, mod consol, ang-blky, p srt, v calc, pyr in prt, poss glauc in-cl, glau.

VOL BREC, ltgy-gyblu, mod consol, ang, p srt, v-calc, pyr, glau.

SH, gy, frm, blky, sl-n calc.

SLTST, grngy, mod ind, fg, pyr, glau, n calc.

SLTST, ltgy-gybrn, mod ind, fg, glau, blk spec.

SS, blugy, mod consol, f-g, rd-sbang, mod srt, sl - n calc, p vis ∅, NSFOC.

SLTST, gybrn-occ gyblu, mod ind, fg, occ glau, calc.

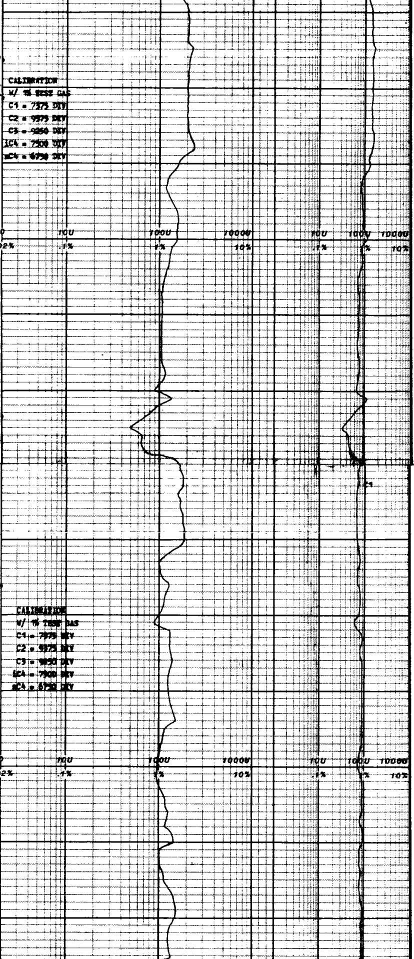
SH, gybrn-gy, frm, blky, sl-n calc.

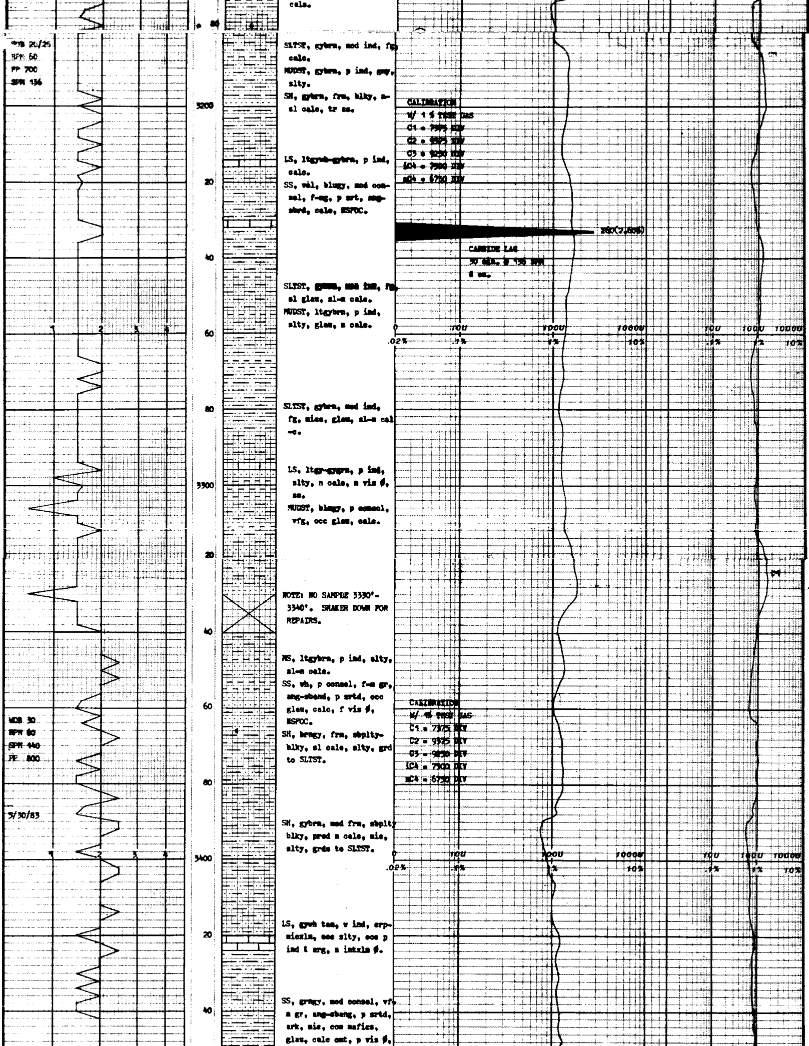
LS, tan, mod-p ind, micrite-chky, calc.

SS, blugy, mod consol, f-vfg, rd-sbang, mod srt, sl-n calc, p vis ∅, NSFOC.

SLTST, brngy, mod-p ind, fg, calc.

LS, buff, p ind, chky,





calc.

SLTST, gybrn, mod ind, fg, calc.

MUDST, gybrn, p ind, gry, slty.

SH, gybrn, frm, blky, n-sl calc, tr ss.

LS, ltgywh-gybrn, p ind, calc.

SS, wh, blugy, mod consol, f-mg, p srt, ang-sbrd, calc, NSFOC.

SLTST, gybrn, mod ind, fg, sl glau, sl-m calc.

MUDST, ltgybrn, p ind, slty, glau, n calc.

SLTST, gybrn, mod ind, fg, mica, glau, sl-m calc.

LS, ltgy-gygrn, p ind, slty, n calc, n vis ø, ss.

MUDST, blugy, p consol, vfg, occ glau, calc.

NOTE: NO SAMPLE 3330'-3340'. SHAKER DOWN FOR REPAIRS.

MS, ltgybrn, p ind, slty, sl-m calc.

SS, wh, p consol, f-m gr, ang-sbrnd, p srtd, occ glau, calc, f vis ø, NSFOC.

SH, brngy, frm, sbplty-blky, sl calc, slty, grd to SLTST.

SH, gybrn, mod frm, sbplty blky, pred n calc, mic, slty, grds to SLTST.

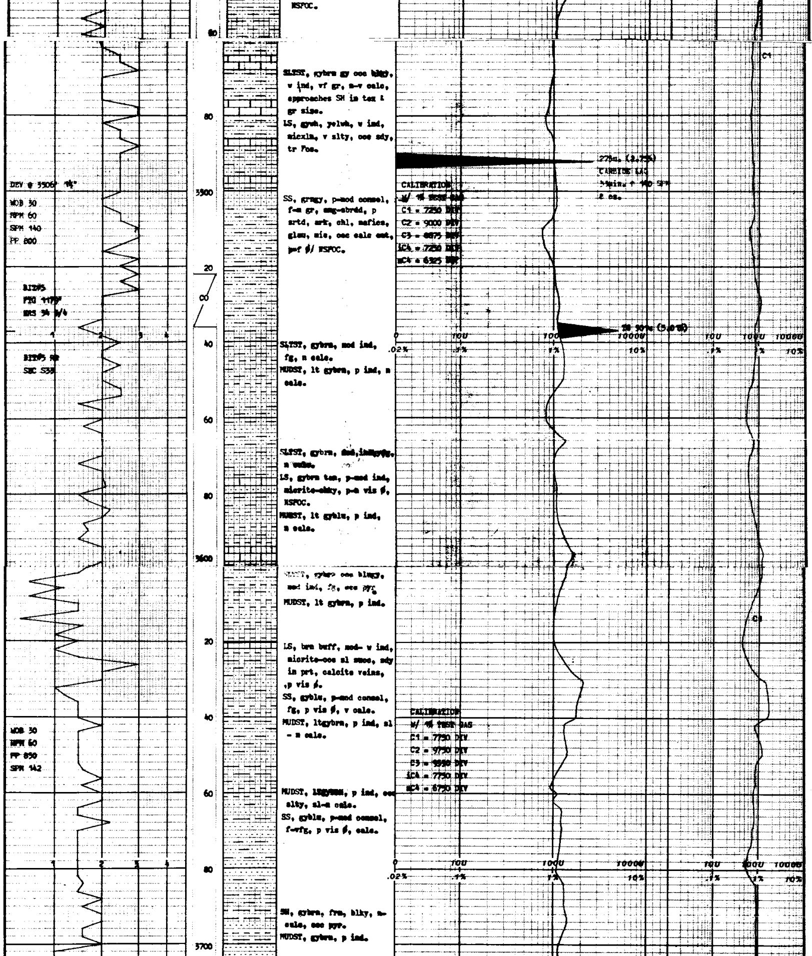
LS, gywh tan, v ind, crp-micxln, occ slty, occ p ind & arg, n intxln ø.

SS, grngy, mod consol, vf-m gr, ang-sbang, p srtd, ark, mic, com mafics, glau, calc cmt, p vis ø,

CALIBRATION
W/ 1 % TEST GAS
C1 = 7375 DIV
C2 = 9375 DIV
C3 = 9250 DIV
iC4 = 7500 DIV
nC4 = 6750 DIV

CARBIDE LAG
30 MIN. @ 136 SPM
8 un.

CALIBRATION
W/ 1% TEST GAS
C1 = 7375 DIV
C2 = 9375 DIV
C3 = 9850 DIV
iC4 = 7500 DIV
nC4 = 6750 DIV



NSPOC.

SLTST, gybrn gy occ blky, v ind, vf gr, m-v calc, approaches SH in tex & gr size.

LS, gysh, yelwh, v ind, micxln, v slty, occ sdy, tr Fos.

SS, grngy, p-mod consol, f-m gr, ang-sbrdd, p srtd, ark, chl, mafics, glau, mic, occ calc cmt, p-f ø/ NSPOC.

SLTST, gybrn, mod ind, fg, m calc.

MUDST, lt gybrn, p ind, m calc.

SLTST, gybrn, mod, [illegible], m calc.

LS, gybrn tan, p-mod ind, micrite-chky, p-m vis ø, NSPOC.

MUDST, lt gyblu, p ind, m calc.

SLTST, gybrn occ blkgy, mod ind, fg, occ pyr.

MUDST, lt gybrn, p ind.

LS, brn buff, mod- v ind, micrite-occ sl succ, sdy in prt, calcite veins, p vis ø.

SS, gyblu, p-mod consol, fg, p vis ø, v calc.

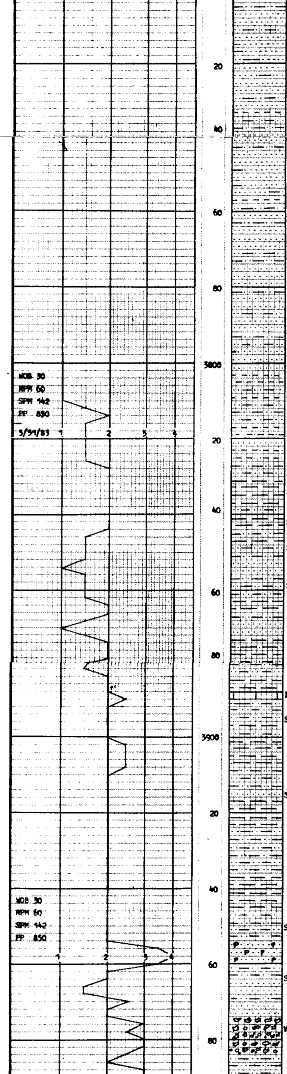
MUDST, ltgybrn, p ind, sl - m calc.

MUDST, ltgybrn, p ind, occ slty, sl-m calc.

SS, gyblu, p-mod consol, f-vfg, p vis ø, calc.

SH, gybrn, frm, blky, m-calc, occ pyr.

MUDST, gybrn, p ind.



SLTST, gybrn, mod ind, fg, n calc.
SS, gyblu, p-mod consol, f-vfg, p vis ø.

SS, gybl, p consol, f g, ang-sbang, p srtd, gmy, n vis ø, v calc.
MUDST, brngy grngy, p ind, v slty, sl calc.

SS, gybl, p consol, f g, ang-sbrd, p srtd, gmy, n vis ø, NSFOC.
SLTST, brngy, mod ind, fg, sl-n calc, pyr.

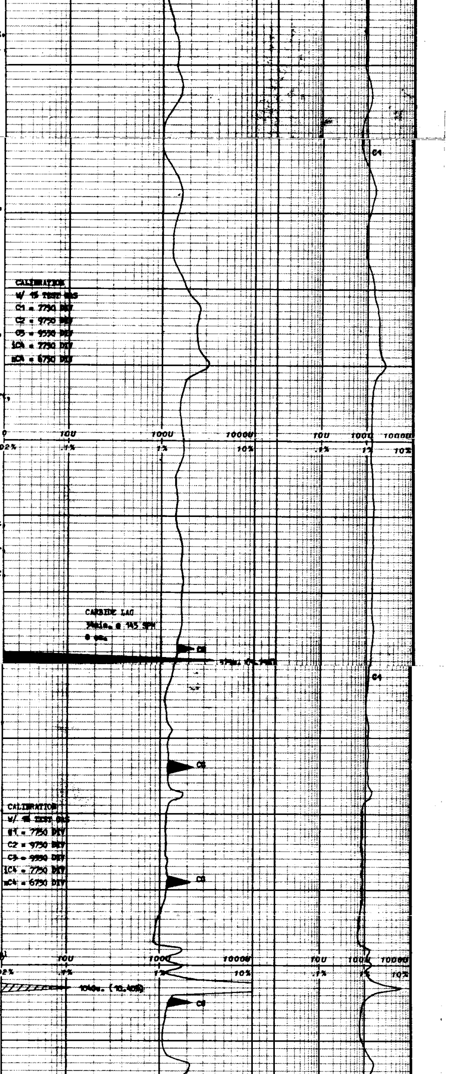
SLTST, brngy, p ind, v sft, occ sdy, abnt py, occ sl calc.
MUDST, brngy, v p ind, v sft, v slty, com sdy, occ mic.,calc.

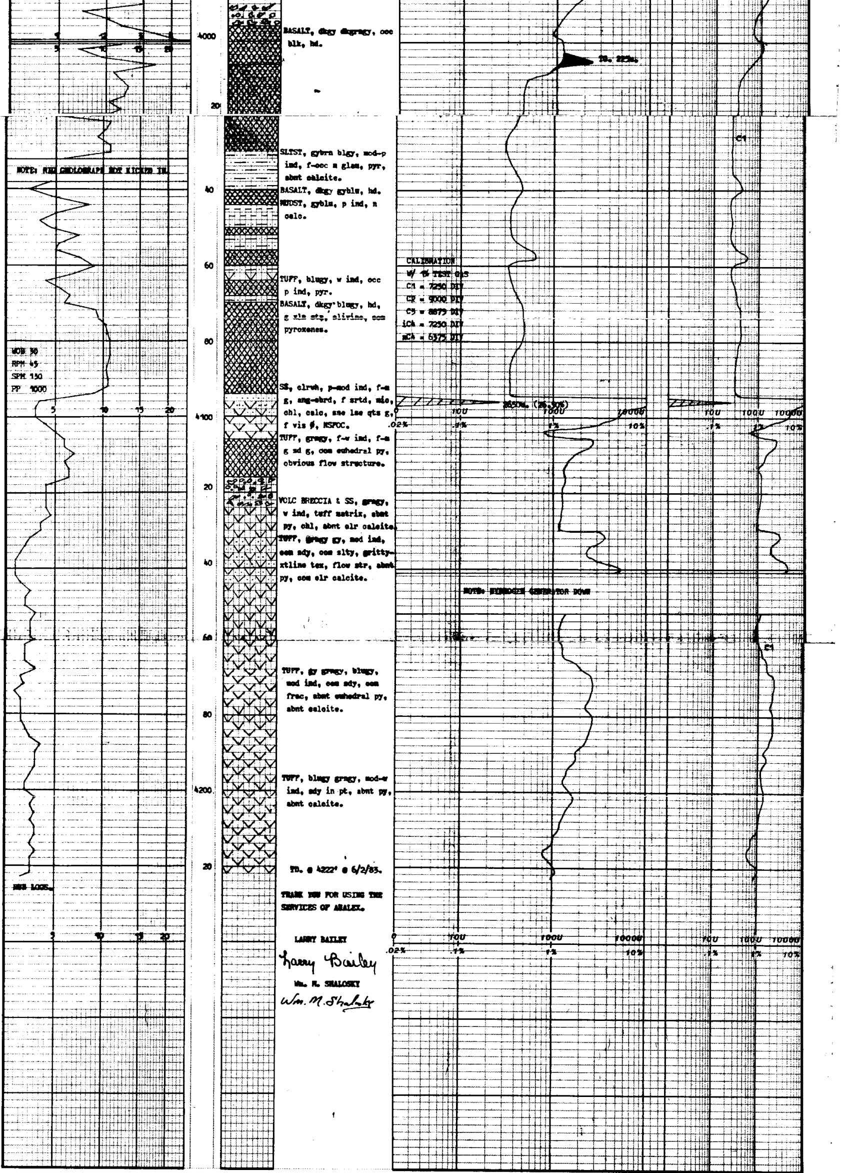
SH, gy brngy dkgy, mod sft, blky-plty, occ lam, pyr.
SS, blgy, p consol, f-m gr, ang-sbang, p srtd, ark, abnt py, calc, f ø, NSFOC.
SLTST, brngy, p-mod ind, occ slty, com pyr, n-sl calc.

LS, yelbrn, w ind, crpxln, tr clr wh calcite.
SLTST, gy brngy, mod w ind, com pyr, occ calc strgs, sl-v calc, grds to SH.

SS, gy, clrgy blgy, occ mot, p-mod consol, vf-m g, ang-sbang, p srtd, occ v calc, n-p vis ø, NSFOC.

SS, grngy, occ yelgy, w consol, vf-m g, ang-sbrd, occ ark, mic, chl, euhedral py, n-p vis ø, NSFOC.
SS, clrwh grngy, v consod, vf-m g, ang-sbang, mod std, mic, abnt chl, glau, py, calc, p vis ø, NSFOC.
VOLC BREC/CGL, grngy, blgy, pnkgy, m-vc g, ang-rd, p srtd, abnt chl, glau, py, com calc, vuggy, n vis ø.





BASALT, dkgy dkgrngy, occ blk, hd.

SLTST, gybrn blgy, mod-p ind, f-occ m glau, pyr, abnt calcite.

BASALT, dkgy gyblu, hd.

MUDST, gyblu, p ind, m calc.

TUFF, blugy, w ind, occ p ind, pyr.

BASALT, dkgy blugy, hd, ~~g xln stp, olivine, com~~ pyroxenes.

SS, clrwh, p-mod ind, f-m g, ang-sbrd, f srtd, mic, chl, calc, sme lse qtz g, f vis ø, NSFOC.

TUFF, grngy, f-w ind, f-m g sd g, com euhedral py, obvious flow structure.

VOLC BRECCIA & SS, grngy, w ind, tuff matrix, abnt py, chl, abnt clr calcite.

TUFF, grngy gy, mod ind, com sdy, com slty, gritty-xtline tex, flow str, abnt py, com clr calcite.

TUFF, gy grngy, blugy, mod ind, com sdy, com frac, abnt euhedral py, abnt calcite.

TUFF, blugy grngy, mod-w ind, sdy in pt, abnt py, abnt calcite.

TD. @ 4222' @ 6/2/83.

THANK YOU FOR USING THE SERVICES OF ANALEX.

LARRY BAILEY

Larry Bailey

WM. M. SHALOSKY

Wm. M. Shalosky