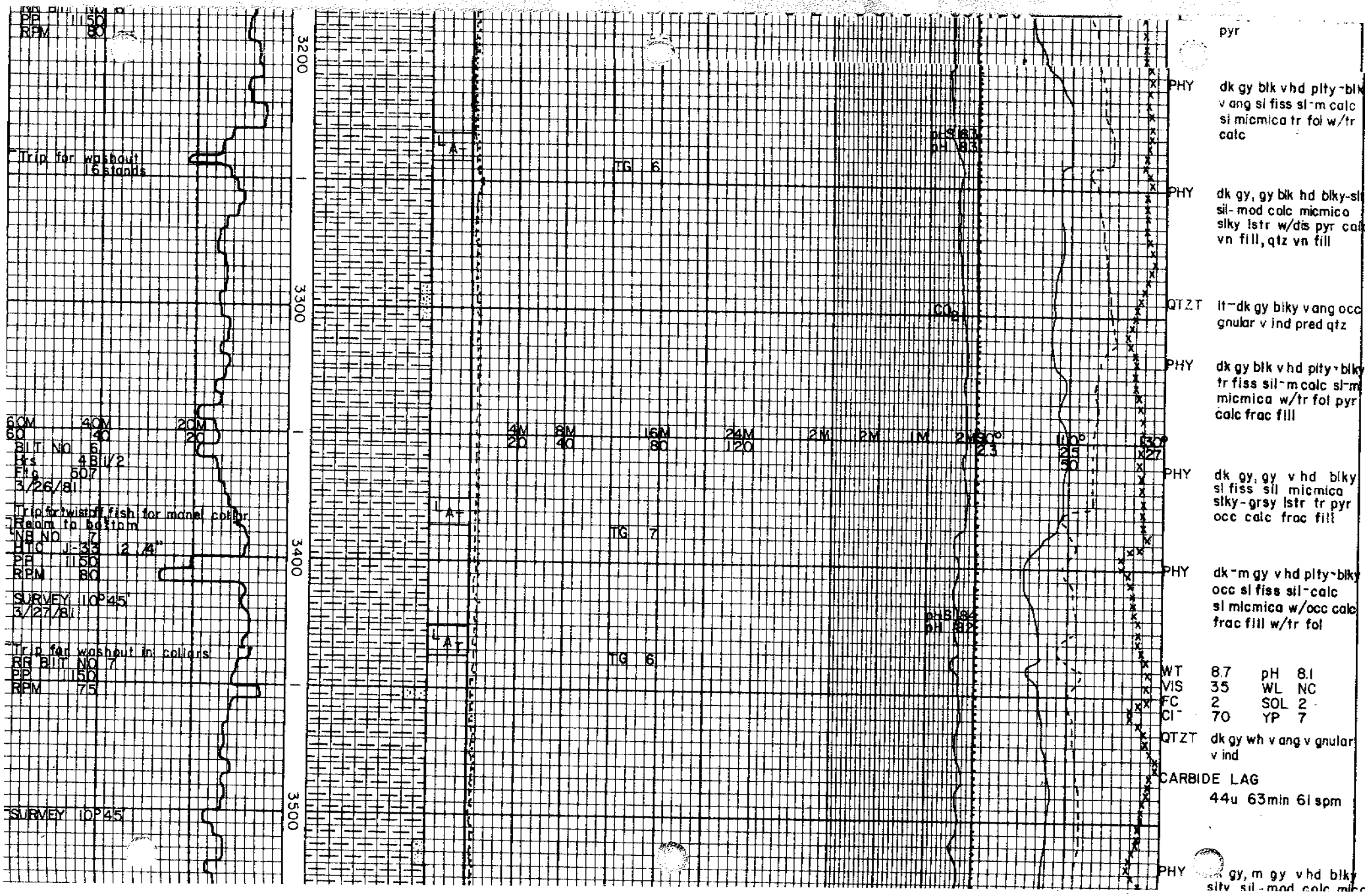
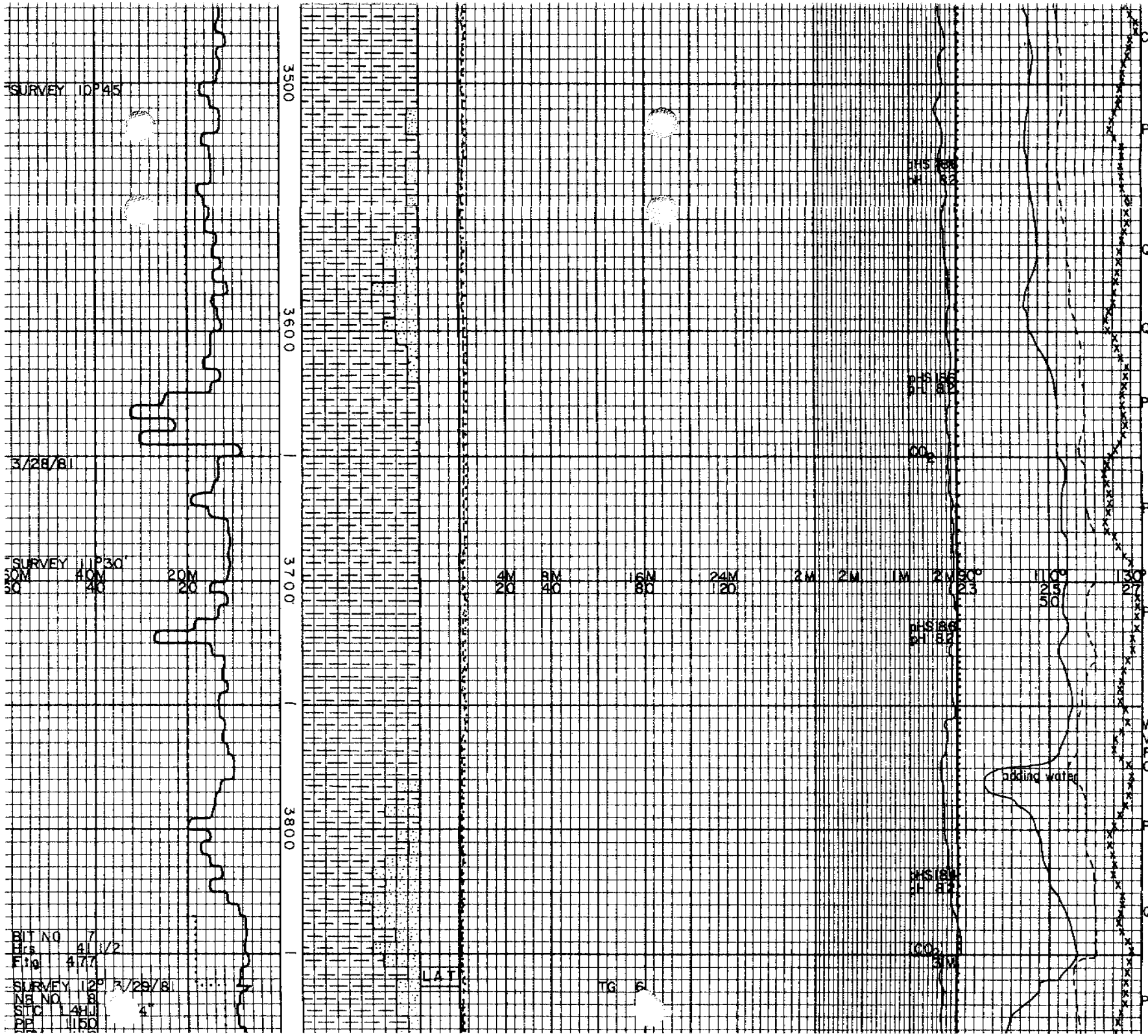


PP 1150
RPM 80
Trip for washout
16 stands
60M 40M 20M
60 40 20
BIT NO 6
Hrs 48 1/2
Ftg 507
3/26/81
Trip for twist off fish for monel collar
Ream to bottom
NB NO 7
HTC J-33 12 1/4"
PP 1150
RPM 80
SURVEY 10°45'
3/27/81
Trip for washout in collars
RR BIT NO 7
PP 1150
RPM 75
SURVEY 10°45'
3200
3300
3400
3500
TG 6
TG 7
TG 6
4M 8M 16M 24M 2M 2M 1M 2M 90° 110° 130°
20 40 80 120 23 25 50 27
pH 8.3
pH 8.3
pH 8.4
pH 8.2
pyr
PHY dk gy blk v hd plty-blky v ang sl fiss sl-m calc sl micmica tr fol w/tr calc
PHY dk gy, gy blk hd blky-slty sil-mod calc micmica slky lstr w/dis pyr calc vn fill, qtz vn fill
QTZT lt-dk gy blky v ang occ gnular v ind pred qtz
PHY dk gy blk v hd plty-blky tr fiss sil-m calc sl-m micmica w/tr fol pyr calc frac fill
PHY dk gy, gy v hd blky sl fiss sil micmica slky-grsy lstr tr pyr occ calc frac fill
PHY dk-m gy v hd plty-blky occ sl fiss sil-calc sl micmica w/occ calc frac fill w/tr fol
WT 8.7 pH 8.1
VIS 35 WL NC
FC 2 SOL 2
Cl⁻ 70 YP 7
QTZT dk gy wh v ang v gnular v ind
CARBIDE LAG
44u 63min 61 spm
PHY gy, m gy v hd blky silty sil-mod calc mic



v ind

CARBIDE LAG
44u 63min 61 spm

PHY gy, m gy v hd blky slty sil-mod calc mica w/occ abnt calc frac fill

QTZT mlky wh lt-dk gy v hd gnular calc inpt sl frac pred qtz

QTZT lt-dk gy wh v hd gnular w/tr calc pyr

PHY dk gy blk v hd plty-sl blky sl slty m-v micmica occ tr fol w/tr qtz calc sl tr pyr

PHY dk gy occ blk hd-v hd plty-occ blky sil-v calc slaty v micmica sl fiss sl fol w/tr calc frac fill v sl tr pyr

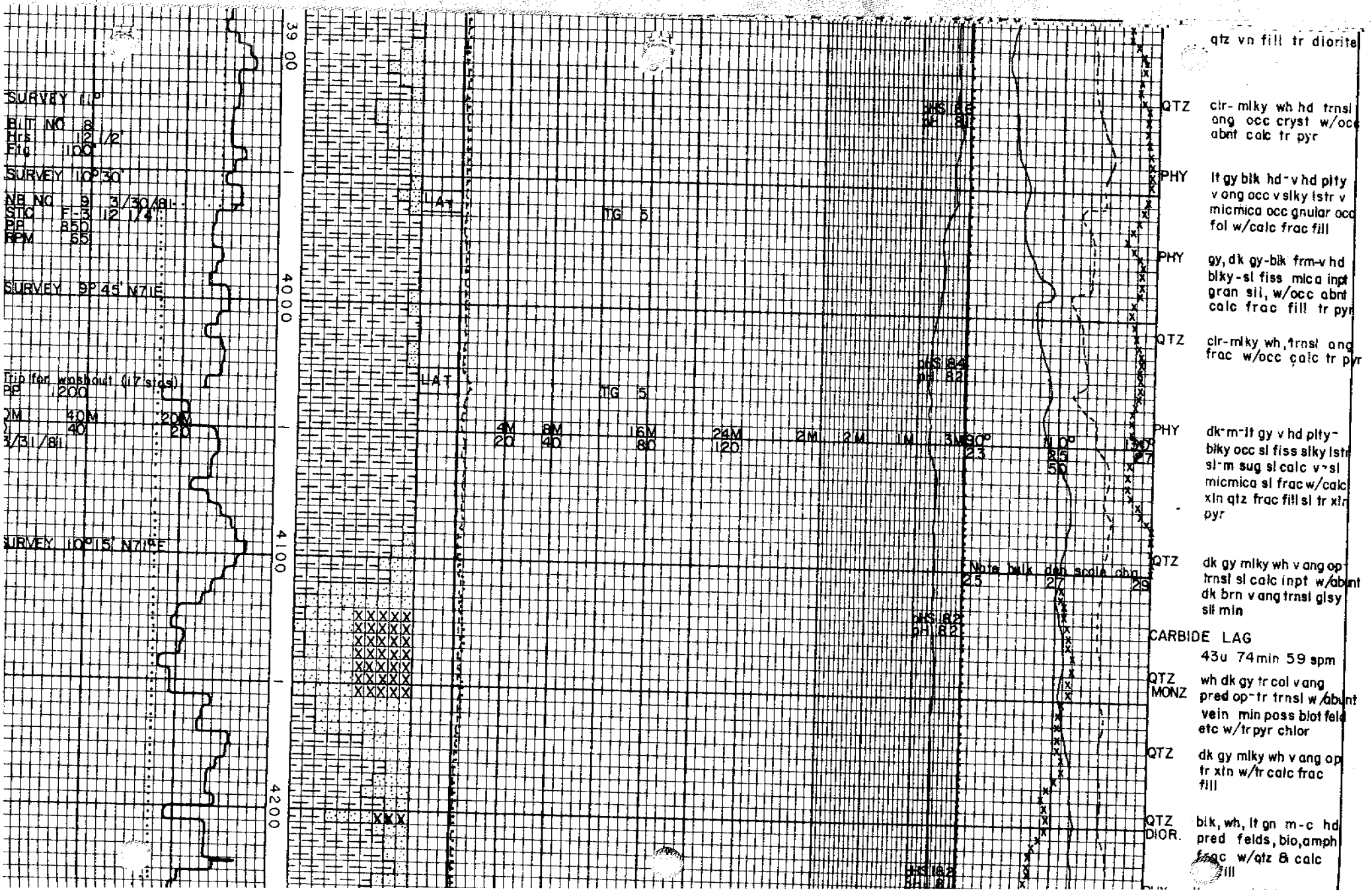
PHY lt-dk gy hd-v hd plty sl fiss sl slaty sil-sl calc bcmng v micmica sl frac w calc frac fill w/sl tr pyr qtz

WT	8.7	pH	8.2
VIS	34	WL	NC
FC	2	SOL	2
Cl⁻	70	YP	10

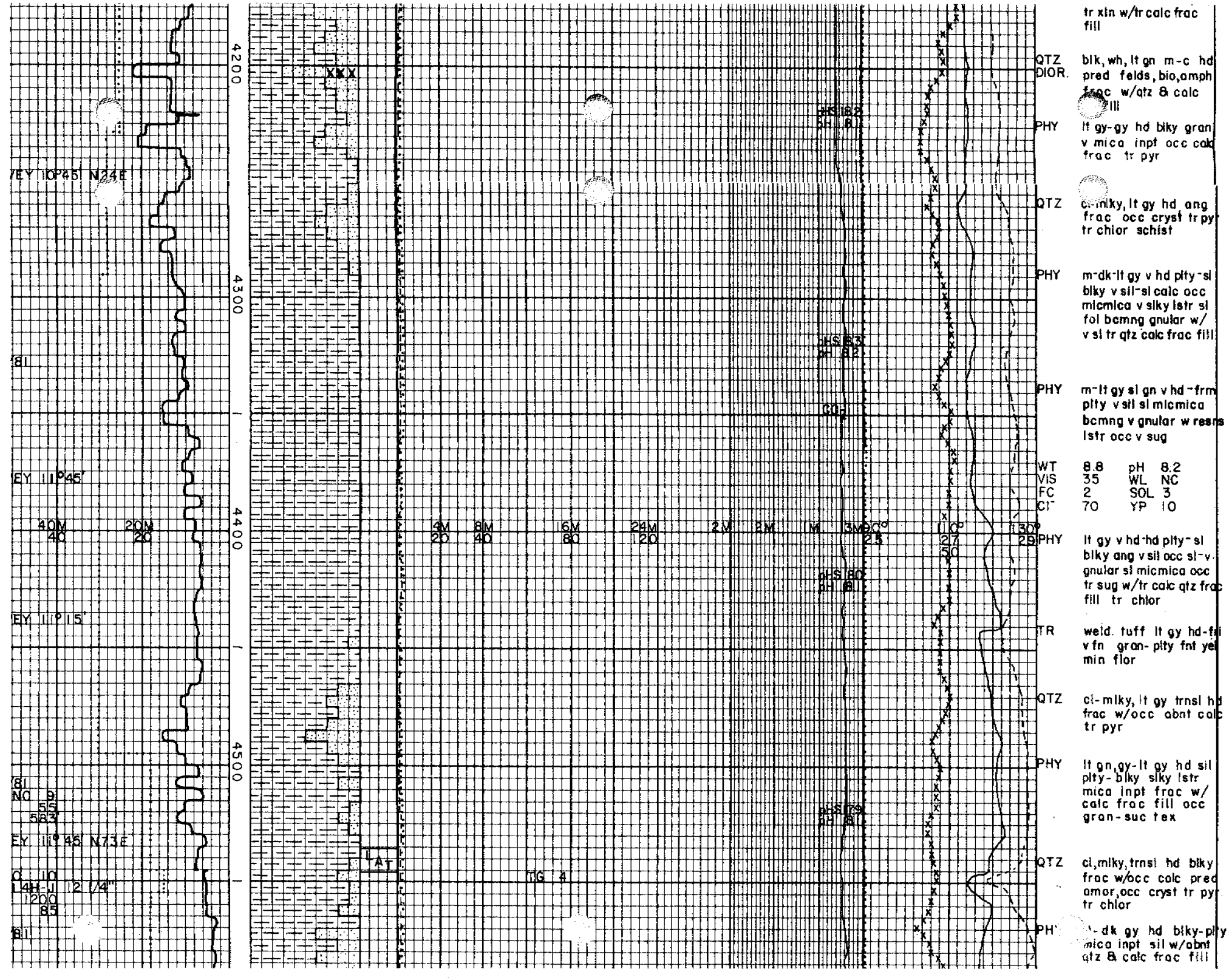
PHY gy-dk gy hd blky sil-occ calc frac occ gran tex schist. fol. inpt abnt qtz & calc frac fill

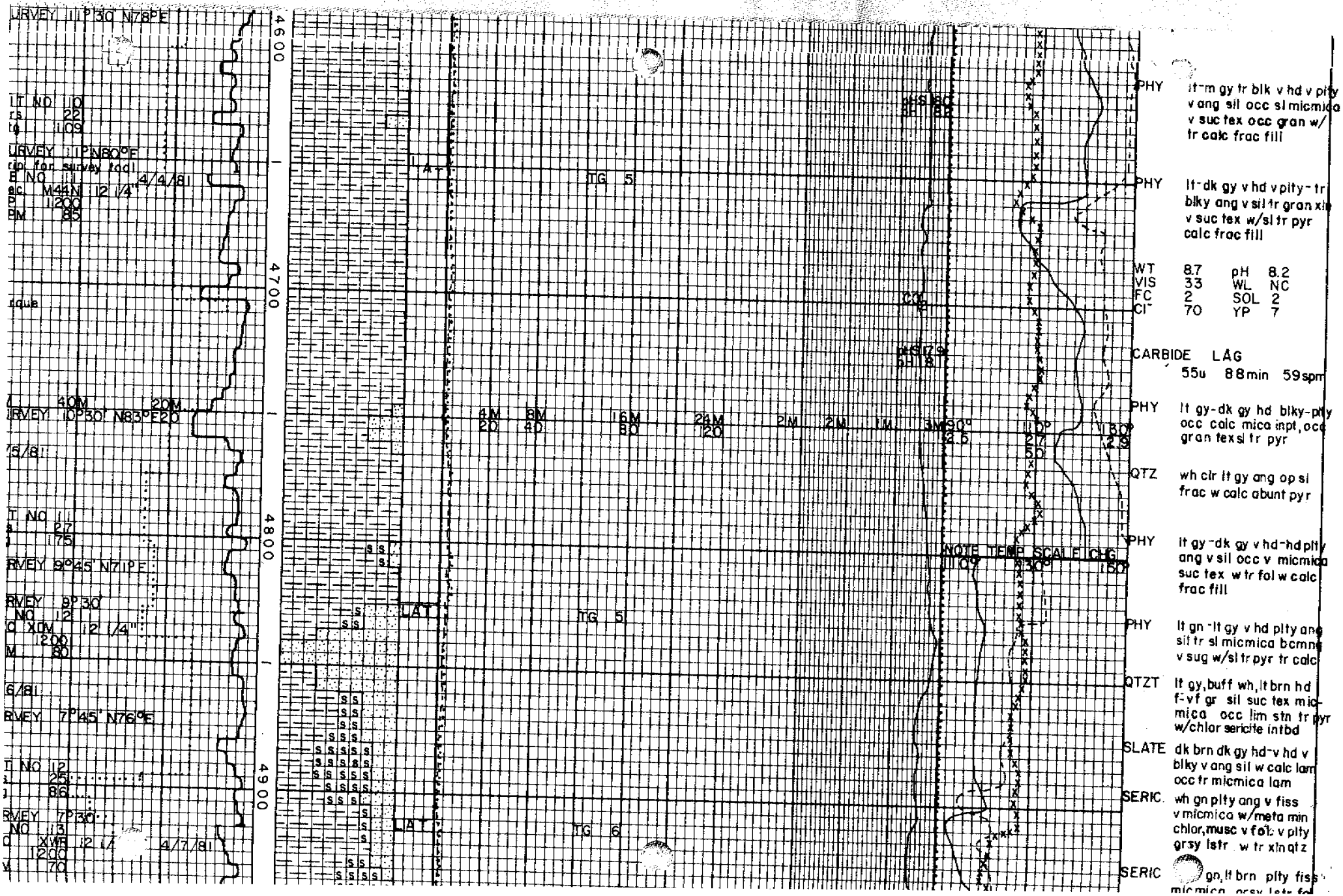
QTZ cl-mlky wh opg-trnsl ang, frac, occ cryst tr pyr

PHY lt gy-gy hd-v hd blky sil, occ calc gran tex occ mica w/calc &

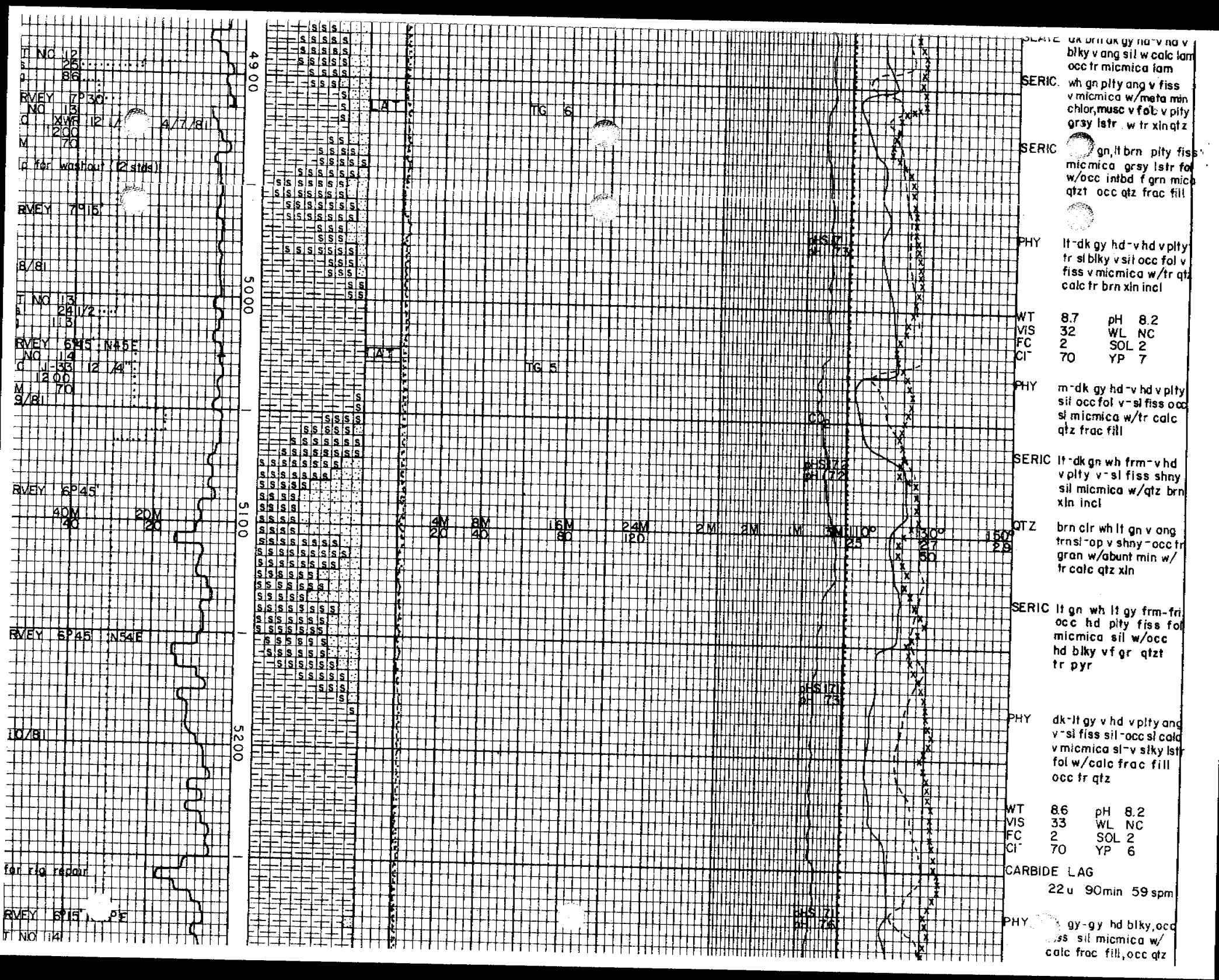


SURVEY 11°
BIT NO 8
Hrs 12 1/2
Ftg 100
SURVEY 10° 30'
NB NO 9 3/30/81
STC F-3 12 1/4
PP 850
RPM 65
SURVEY 9° 45' N71E
Trip for washout (17 stds)
PP 1200
40M 20M
40 20
3/31/81
SURVEY 10° 15' N71°E
39 00
4000
4100
4200
LAT
TG 5
4M 8M 16M 24M 2M 2M 1M 3M 90° 110° 130°
20 40 80 120 23 25 27
50
Note bulk den scale chg
25 27 29
pHS 8.6
pH 8.1
pHS 8.4
pH 8.2
pHS 8.2
pH 8.2
qtz vn fill tr diorite
QTZ clr-mlky wh hd trnsl ang occ cryst w/occ abnt calc tr pyr
PHY lt gy blk hd-v hd plty v ang occ v slky lstr v micmica occ gnular occ fol w/calc frac fill
PHY gy, dk gy-blk frm-v hd blky-sl fiss mica inpt gran sil, w/occ abnt calc frac fill tr pyr
QTZ clr-mlky wh, trnsl ang frac w/occ calc tr pyr
PHY dk-m-lt gy v hd plty-blky occ sl fiss slky lstr sl-m sug sl calc v-sl micmica sl frac w/calc xln qtz frac fill sl tr xln pyr
QTZ dk gy mlky wh v ang op trnsl sl calc inpt w/abunt dk brn v ang trnsl glsy sil min
CARBIDE LAG
43u 74min 59 spm
QTZ MONZ wh dk gy tr col v ang pred op-tr trnsl w/abunt vein min poss biot feld etc w/tr pyr chlor
QTZ dk gy mlky wh v ang op tr xln w/tr calc frac fill
QTZ DIOR. blk, wh, lt gn m-c hd pred felds, bio, amph frac w/qtz & calc fill

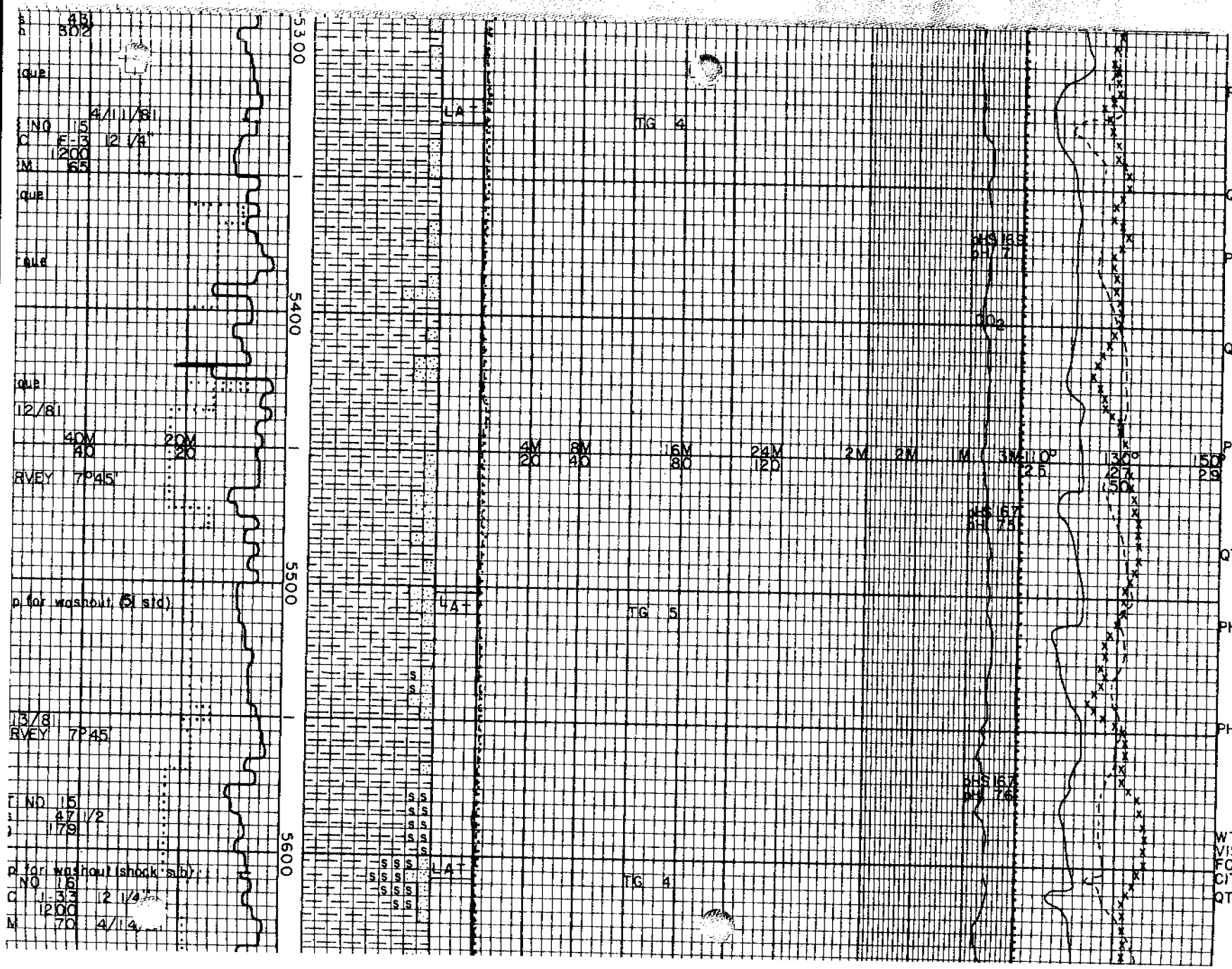

4200
4300
4400
4500
XXX
LAT
FIG 4
tr xln w/tr calc frac fill
QTZ DIOR. blk, wh, lt gn m-c hd pred felds, bio, amph frac w/qtz & calc fill
PHY lt gy-gy hd blky gran v mica inpt occ calc frac tr pyr
QTZ cl-mlky, lt gy hd ang frac occ cryst tr py tr chlor schist
PHY m-dk-lt gy v hd plty-sl blky v sil-sl calc occ micmica v slky lstr sl fol bcmng gnular w/ v sl tr qtz calc frac fill
PHY m-lt gy sl gn v hd-frm plty v sil sl micmica bcmng v gnular w resns lstr occ v sug
WT 8.8 pH 8.2
VIS 35 WL NC
FC 2 SOL 3
Cl⁻ 70 YP 10
PHY lt gy v hd-hd plty-sl blky ang v sil occ sl-v gnular sl micmica occ tr sug w/tr calc qtz frac fill tr chlor
TR weld. tuff lt gy hd-frm v fn gran- plty fnt yel min flor
QTZ cl-mlky, lt gy trnsl hd frac w/occ abnt calc tr pyr
PHY lt gn, gy-lt gy hd sil plty-blky slky lstr mica inpt frac w/ calc frac fill occ gran-suc tex
QTZ cl, mlky, trnsl hd blky frac w/occ calc prec amor, occ cryst tr py tr chlor
PHY m-dk gy hd blky-plty mica inpt sil w/abnt qtz & calc frac fill



URVEY 11°30' N78°E
IT NO 10
rs 22
tg 109
URVEY 11°N80°E
rip for survey tool
B NO 11 4/4/81
ec. M44N 12 1/4"
P 1200
PM 85
rque
40M 20M
RVEY 10°30' N83°E 20
/5/81
T NO 11
s 27
175
RVEY 9°45' N71°E
RVEY 9°30'
NO 12
O XDM 12 1/4"
1200
M 80
6/81
RVEY 7°45' N76°E
T NO 12
25
86
RVEY 7°30'
NO 13
O XWR 12 1/4 4/7/81
1200
70
4600
4700
4800
4900
LAT
TG 5
TG 6
4M 8M 16M 24M 2M 2M 1M 3M
20 40 80 120
90° 110° 130°
2.5 2.7 2.9
50
NOTE TEMP SCALE CHG
110° 130° 150°
PHY lt-m gy tr blk v hd v plty v ang sil occ sl micmica v suc tex occ gran w/ tr calc frac fill
PHY lt-dk gy v hd v plty-tr blky ang v sil tr gran xln v suc tex w/sl tr pyr calc frac fill
WT 8.7 pH 8.2
VIS 33 WL NC
FC 2 SOL 2
Cl⁻ 70 YP 7
CARBIDE LAG
55u 88min 59spm
PHY lt gy-dk gy hd blky-plty occ calc mica inpt, occ gran tex sl tr pyr
QTZ wh clr lt gy ang op sl frac w calc abunt pyr
PHY lt gy-dk gy v hd-hd plty ang v sil occ v micmica suc tex w tr fol w calc frac fill
PHY lt gn-lt gy v hd plty ang sil tr sl micmica bcmng v sug w/sl tr pyr tr calc
QTZT lt gy, buff wh, lt brn hd f-vf gr sil suc tex micmica occ lim stn tr pyr w/chlor sericite intbd
SLATE dk brn dk gy hd-v hd v blky v ang sil w calc lam occ tr micmica lam
SERIC. wh gn plty ang v fiss v micmica w/meta min chlor, musc v fol v plty grsy lstr w tr xln qtz
SERIC gn, lt brn plty fiss micmica grsy lstr fol



4900
5000
5100
5200
LAT
TG 6
TG 5
4M 20
8M 40
16M 80
24M 120
2M
2M
1M
3M
110° 25
130° 27 50
150° 29
CO2
pHS 17
pH 73
pHS 172
pH 72
pHS 171
pH 73
pHS 171
pH 76
SLATE dk brn dk gy hd-v hd v blky v ang sil w calc lam occ tr micmica lam
SERIC wh gn plty ang v fiss v micmica w/meta min chlor, musc v fol v plty grsy lstr w tr xln qtz
SERIC gn, lt brn plty fiss micmica grsy lstr fol w/occ intbd f grn mica qtzt occ qtz frac fill
PHY lt-dk gy hd-v hd v plty tr sl blky v sil occ fol v fiss v micmica w/tr qtz calc tr brn xln incl
WT 8.7 pH 8.2
VIS 32 WL NC
FC 2 SOL 2
Cl⁻ 70 YP 7
PHY m-dk gy hd-v hd v plty sil occ fol v-sl fiss occ sl micmica w/tr calc qtz frac fill
SERIC lt-dk gn wh frm-v hd v plty v-sl fiss shny sil micmica w/qtz brn xln incl
QTZ brn clr wh lt gn v ang trnsl-op v shny-occ tr gran w/abunt min w/ tr calc qtz xln
SERIC lt gn wh lt gy frm-fri occ hd plty fiss fol micmica sil w/occ hd blky v f gr qtzt tr pyr
PHY dk-lt gy v hd v plty ang v-sl fiss sil-occ sl calc v micmica sl-v slky lstr fol w/calc frac fill occ tr qtz
WT 8.6 pH 8.2
VIS 33 WL NC
FC 2 SOL 2
Cl⁻ 70 YP 6
CARBIDE LAG
22u 90min 59 spm
PHY gy-gy hd blky, occ fiss sil micmica w/ calc frac fill, occ qtz



PHY dk-m gy hd-v hd v plty fiss sil-occ calc lam v micmica suc tex fol w/calc tr qtz frac fill occ v sl tr pyr

QTZ clr wh dk gy blky-splty ang occ gran frac w/ calc tr pyr tr xln min

PHY gy-lt gy hd blky, occ fiss sil, calc inpt micmica occ suc tex w/occ abnt calc frac fill

QTZ clr-mlky wh, trnsl blky occ xln frac inpt w/occ abnt calc frac fill sl tr dis vf gr pyr

PHY dk-m gy occ brn v hd blky-plty sl fiss sil-sl calc sl-v micmica occ tr fol occ suc tex frac w/calc frac fill

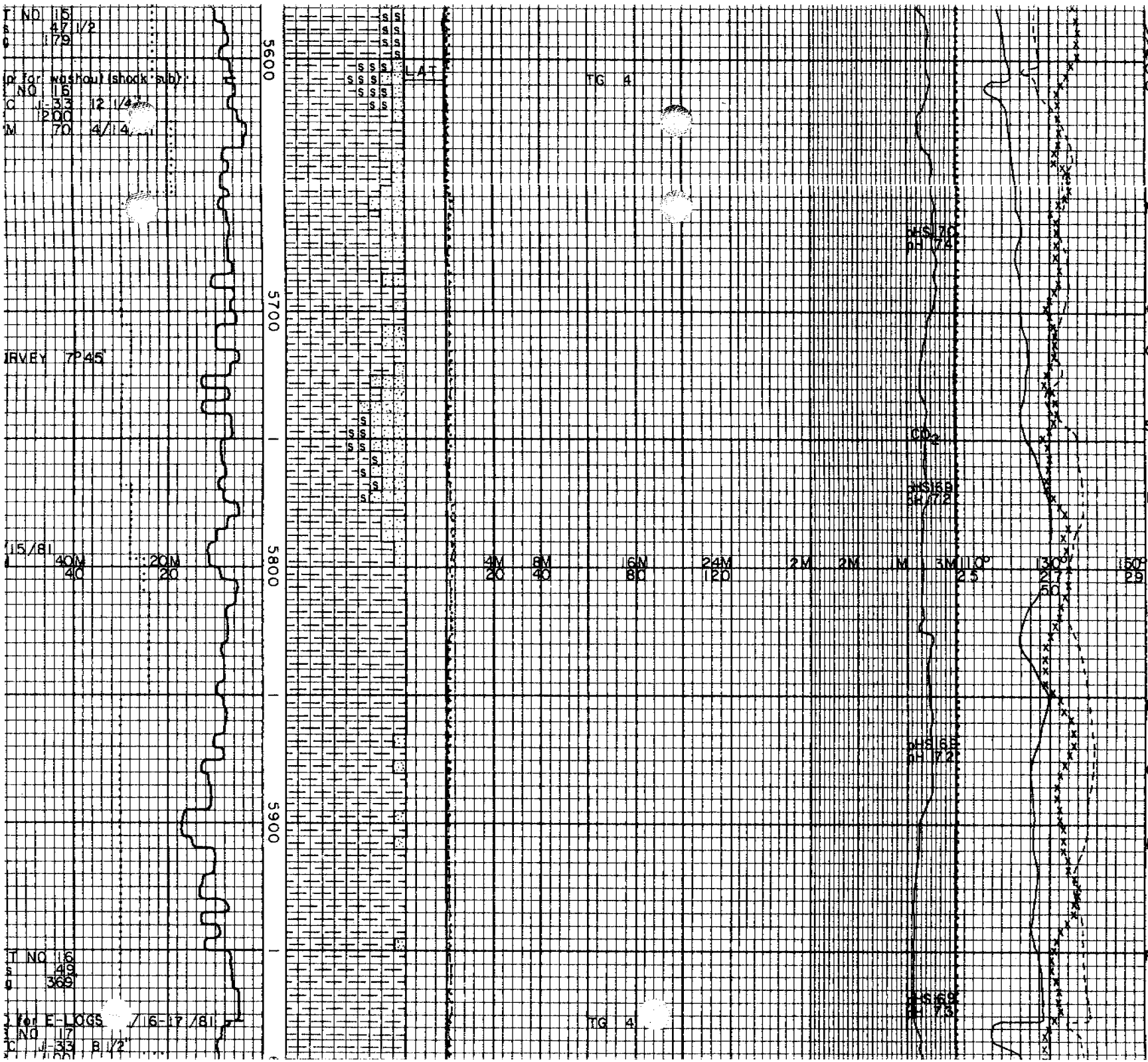
QTZ dk brn amber v hd-fri v ang sl gran w occ xln micmica

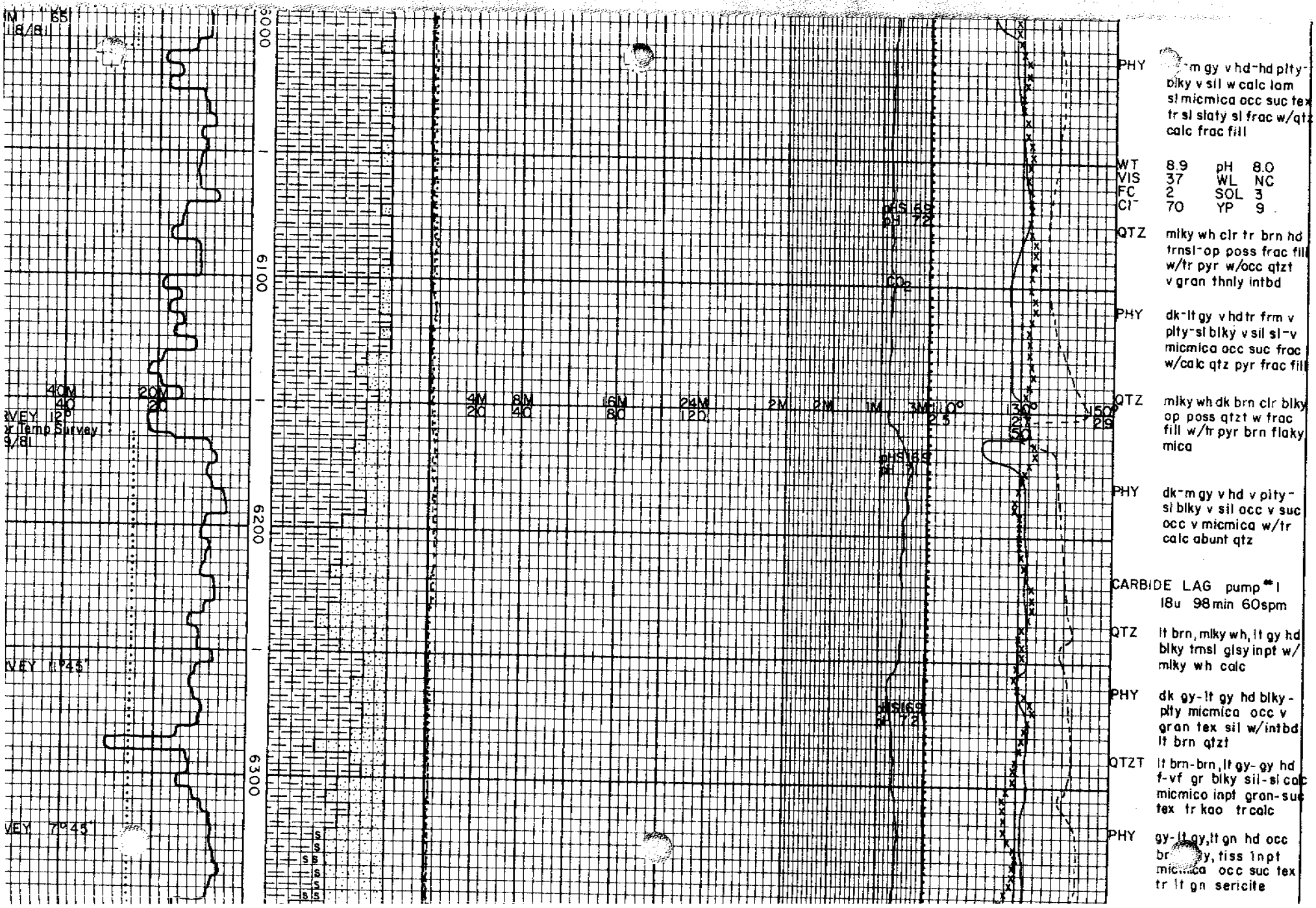
PHY dk gy-gy hd blky, occ fiss sil-calc inpt mic mica gran-suc tex inpt occ abnt calc frac fill tr lt brn plty sericite

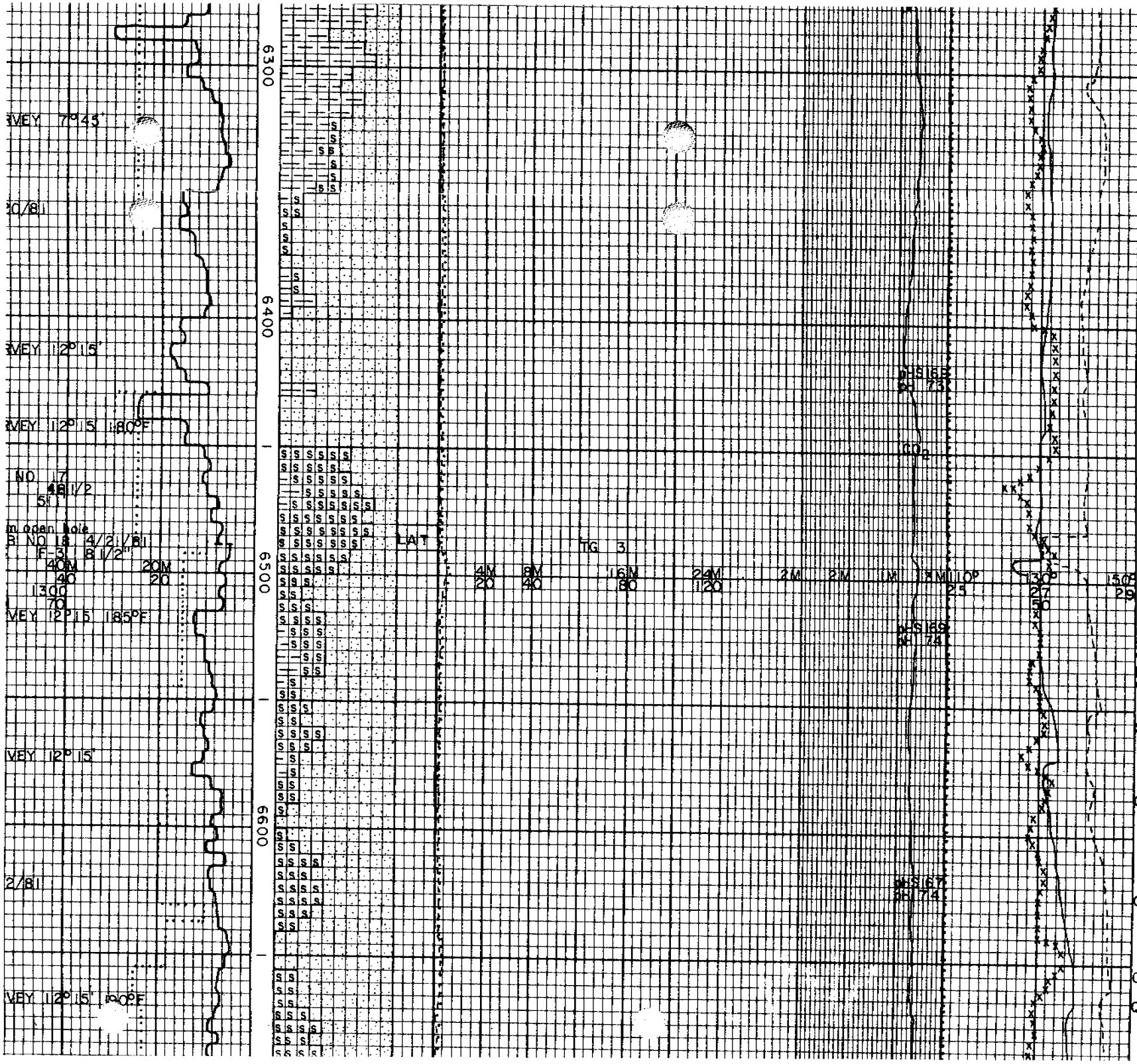
PHY dk-lt gy hd-v hd v plty sl blky fiss sil w occ calc lam v micmica fo occ suc tex w/tr qtz calc frac fill w/occ abunt brn xln

WT	8.6	pH	8.0
VIS	35	WL	NC
FC	2	SOL	2
Cl⁻	70	YP	5

QTZ clr-mlky, trnsl hd blky frac ang occ micxln w[illegible] calc frac fill w[illegible] wh seric frm plty


T NO 15
s 47 1/2
g 179
(r for washout (shock sub)
NO 15
C J-33 12 1/4"
200
M 70 4/14
IRVEY 7P45
15/81
40M 20M
40 20
5600
5700
5800
5900
T NO 16
s 48
g 369
for E-LOGS 16-17/81
NO 17
C J-33 8 1/2"
LAT
TG 4
TG 4
4M 8M 16M 24M 2M 2M M 3M 10° 30° 50°
20 40 80 120 2.5 27 29
50
WT 8.6 pH 8.0
VIS 35 WL NC
FC 2 SOL 2
Cl⁻ 70 YP 5
QTZ clr-mlky, tmsl hd blky frac ang occ micxln w/ calc frac fill w/ wh seric frm plty
PHY dk gy brn v hd plty-sl blky fiss v sil occ v micmica w fol occ mass suc tex w qtz frac w/ calc frac fill tr pyr tr brn xln
CARBIDE LAG pump #2
28u 102 min 60 spm
QTZ clr-mlky wh, lt brn hd blky ang inpt w/mlky wh fri-hd calc tr seric tr pyr
SERIC lt gn-wh, lt gy fri-hd plty fiss inpt micmica fol w/wh, clr, lt brn hd blky vf gr qtzt
PHY dk-m gy brn hd-v hd blky v plty sl-v fiss v sl v slky-v suc tex occ fol w v micmica w/brn xln abunt qtz occ calc frac fill w/lt gn seric intbd
PHY dk gy dk brn v hd v blky-tr plty v sil tr sl micmica bcmng v slaty sl frac w/tr pyr calc
PHY dk brn dk gy hd-v hd v blky v sil slaty w/tr pyr qtz calc
QTZ clr-mlky wh, lt gy hd blky frac inpt w/occ calc tr pyr
PHY blk, dk gy hd, occ brit slate inpt blky-plty occ vf gr suc tex mic-micica sl grsy lstr w/occ calc frac fill
PHY gy-dk gy hd plty occ fiss v micmica sl grsy occ fol tr lt brn qtzt
pyr


6000
6100
6200
6300
4M 8M 16M 24M 2M 2M 1M 3M
20 40 80 120
40M 20M
40 20
VEY 12°
r Temp Survey
9/81
VEY 11°45'
VEY 7°45'
PHY
WT 8.9 pH 8.0
VIS 37 WL NC
FC 2 SOL 3
Cl⁻ 70 YP 9
QTZ
PHY
QTZ
PHY
CARBIDE LAG pump #1
18u 98min 60spm
QTZ
PHY
QTZT
PHY



gran tex sil w/ intbd lt brn qtzt

QTZT lt brn-brn, lt gy-gy hd f-vf gr blky sil-sl calc micmica inpt gran-suc tex tr kao tr calc

PHY gy-lt gy, lt gn hd occ br[illegible]y, tiss inpt mic[illegible]ca occ suc tex tr lt gn sericite

QTZT dk gy wh clr gn v hd-hd blky occ brn micmica trnsl-op mass-occ gran tr suc tex w/calc frac fill

SERIC lt gn wh frm-hd plty v fiss mica sl fol sil

QTZT dk gy mlky wh clr gn v hd blky v ang mass trnsl-op frac w calc w/ dk brn qtzt fri v ang v gran abunt brn mica flakes

SERIC lt gn, lt gy, wh hd plty fiss v micmica sil w/ sl grsy lstr intbd w/ v f gr mica qtzt

QTZT dk-lt gn dk brn dk gy v hd-sl fri v f gr-mass trnsl-op occ brn mic-mica w xln w/sl tr calc

WT	8.9	pH	8.1
VIS	36	WL	NC
FC	2	SOL	3
Cl⁻	50	YP	7

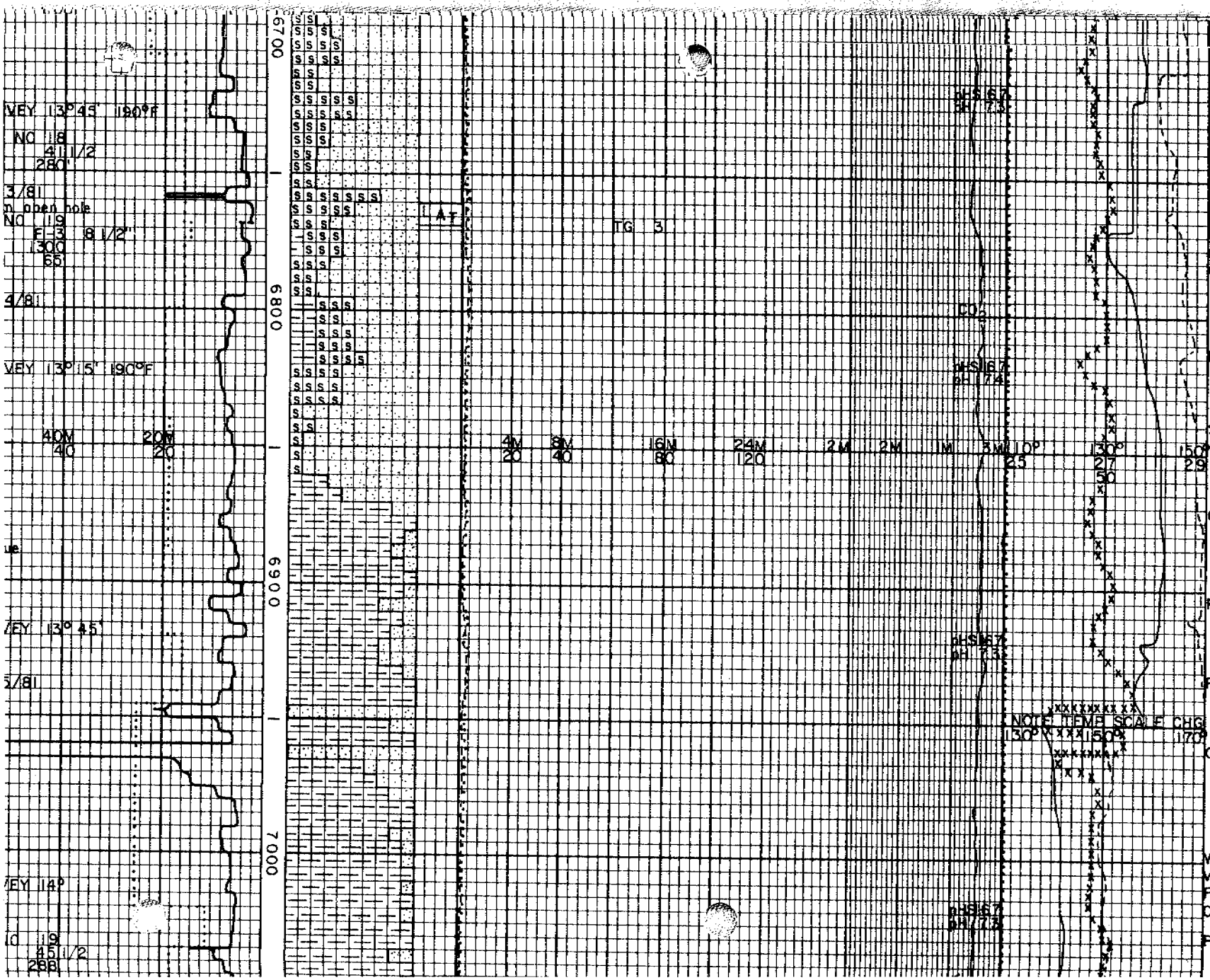
SERIC lt gn, wh, lt gy frm-brit plty, fol inpt v micmica sil w/occ calc frac fill

QTZT wh, lt brn, lt gn v hd blky vf-f gr sil-sl calc occ mica w/biot tr feld w/occ amor qtz vn fill

QTZT dk-lt gn dk brn hd-brit blky v f gr-mass pred-trnsl v sil occ fol mica poss biot w/sl tr calc clr xln qtz frac fill

CARBIDE LAG pump #1 23u 106min 58 spm

QTZT m-lt gn tr lt brn hd-brit [illegible]y-spity mass-vf [illegible]rnsl v sil tr fol occ v mica w tr biot spot w/



SERIC wh, lt gn hd-fri plty-fiss micmica sil cly inpt occ calc frac fill occ tr pyr

QTZT lt-dk gn occ dk brn v hd blky-splty v f gr-mass occ v mica w tr poss biot occ frac w amor clr qtz frac fill

QTZT lt-dk gn dk brn gy v hd v blky mass-occ f gr v glsy-v mica w/qtz frac fill w sl tr calc

PHY dk brn dk gy v hd v blky ang v sil slaty-v mic-mica

SERIC wh lt gn frm-sl hd v plty fiss occ v micmica v sil-sl calc v thnly bd occ tr xln qtz frac fill

QTZT lt gn, wh, gy hd blky f-v f gr mica inpt w/ occ sft wh kao pred sil occ frac w/calc frac fill

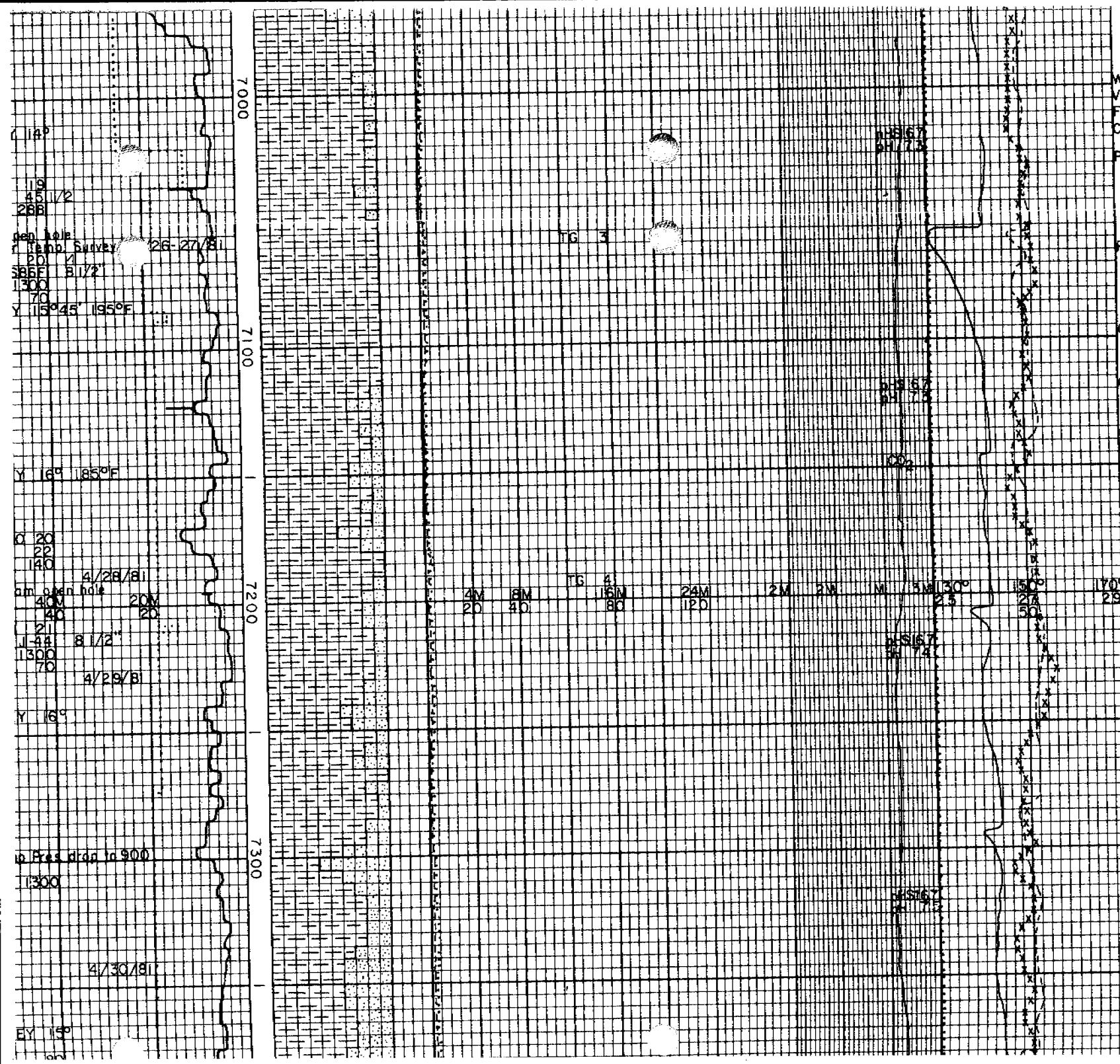
PHY pred gy-dk gy hd fiss plty sil occ blky w/ suc tex micmica occ qtz frac fill

PHY dk gy v hd blky-plty sl fiss v sil w calc lam occ v micmica

QTZT mlky wh gy v hd-fri blky v gran-mass m-c gr v ang tr calc w gr occ chlor stn w/sl tr pyr

WT	8.9	pH	8.0
VIS	34	WL	NC
FC	2	SOL	3
CL	70	YP	10

PHY gy-dk gy hd plty-fiss micmica sil fol



c gr v ang tr calc w gr occ chlor stn w/sl tr pyr

WT	89	pH	8.0
VIS	34	WL	NC
FC	2	SOL	3
CL-	70	YP	10

PHY gy-dk gy hd plty-fiss micmica sil fol inpt w/occ calc frac

PHY dk gy tr dk brn v hd blky v ang v sil suc tex-micmica-slaty sl frac w/tr qtz sl tr calc frac fill

CARBIDE LAG pump #1 25u 107min 58spm

QTZ wh, lt brn vf gr xln hd ang inpt sil pred frac fill w/tr calc

PHY gy-dk gy, dk brn hd-brit blky-plty v micmica fol inpt w/occ macmic biot pred sil tr lt gy amor cly, pos kao

QTZT lt gy, wh, lt gn hd vf-f blky occ micmica sil w/tr pyr

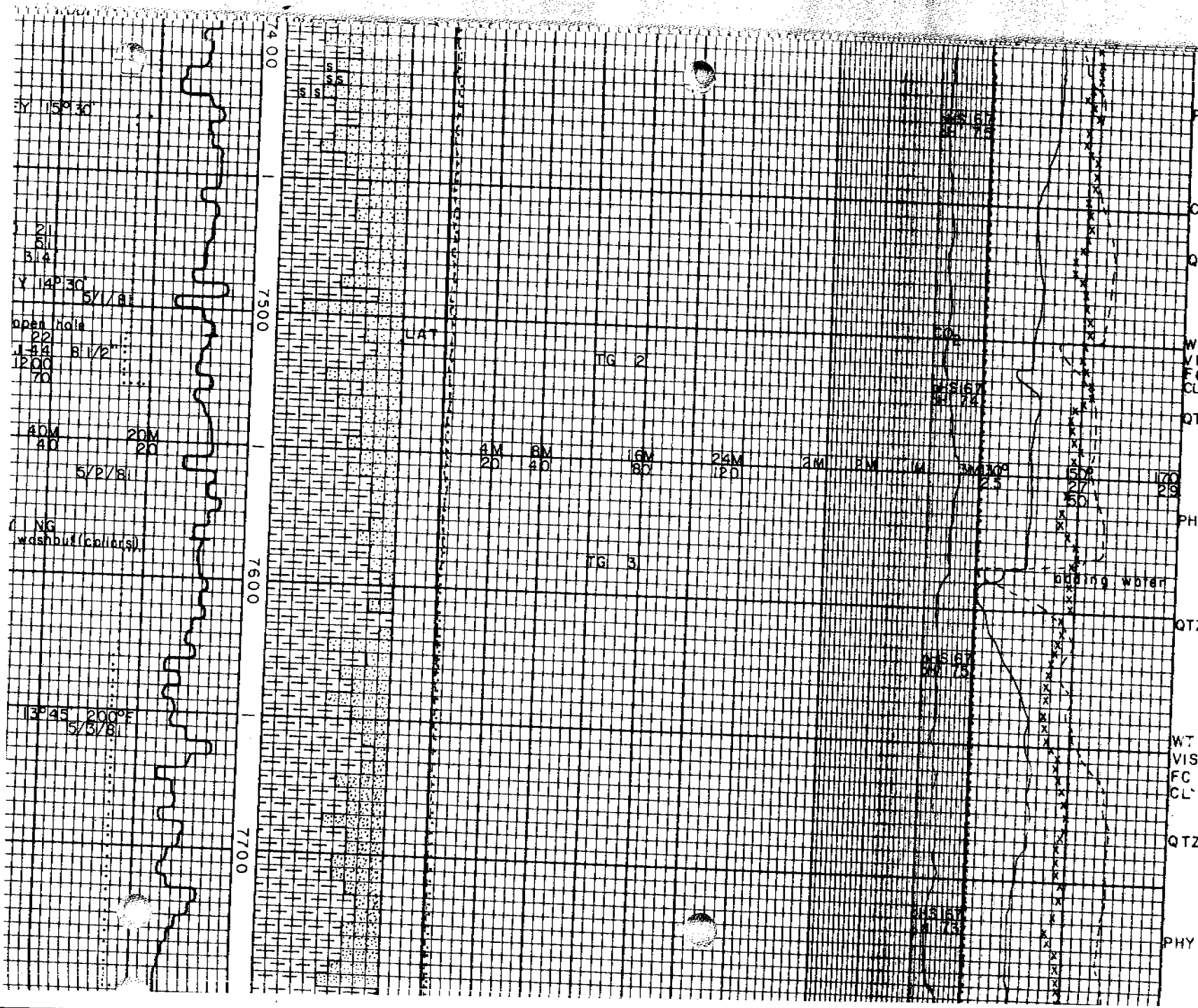
PHY dk gy-gy, lt gn hd-brit blky-plty sil, occ calc micmica fol inpt occ suc tex tr pyr

WT	89	pH	8.2
VIS	37	WL	NC
FC	2	SOL	3
CL-	70	YP	11

QTZT wh, lt gy, lt brn hd-fri vf-f gr gran tex blky occ v micmica sil w/occ sft wh sl calc cly occ abnt mlky wh ang amor calc frac fill

PHY dk gy-gy, lt brn-brn hd blky-plty micmica fol inpt pred sil occ calc gran tex inpt w/calc frac fill

QTZT lt-dk brn, wh, lt gy, lt gn pred hd vf-f gr ang blky occ micmica s[illegible] v calc occ abnt w[illegible] cly abnt frac w/calc frac fill



PHY gy-lt gy hd blky-plty micmica occ suc tex occ v calc glsy lstr inpt slaty inpt w/occ sft-frm lt gn seric

CARBIDE LAG pump# 1 23u 109.5min 58spm

QTZT lt gy, wh-lt brn fri-hd blky-ang sil-occ calc mica inpt w/occ amor sft-brit kao cly

WT	8.9	pH	8.1
VIS	34	WL	NC
FC	2	SOL	3
CL	70	YP	7

QTZT lt gy-gy brn-lt brn hd-fri f gr blky-ang pred sil, occ calc mica inpt slty w/calc frac fill

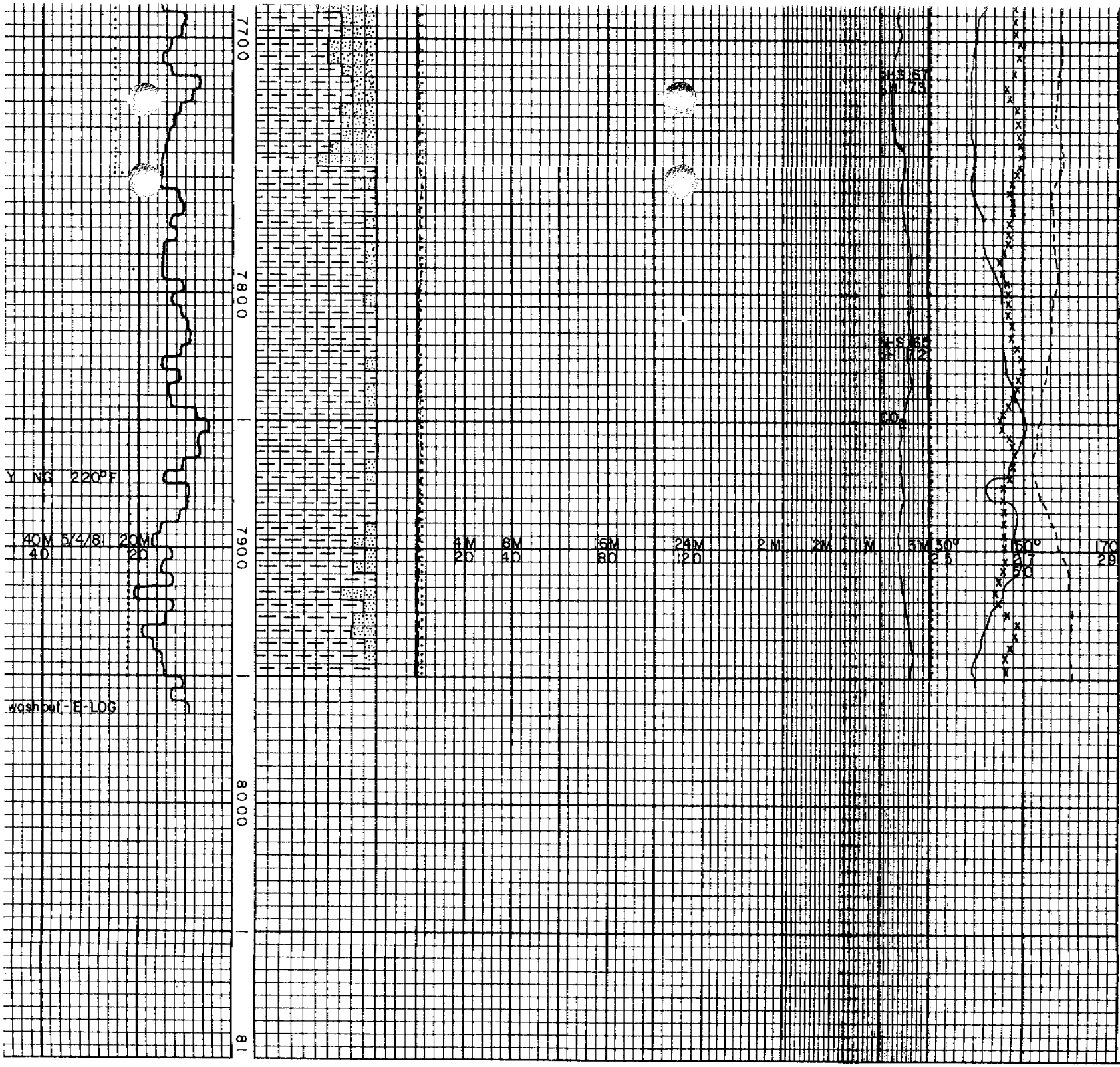
PHY gy-lt gy frm-hd blky, occ fiss sil-sl calc micmica occ v slaty earthy w/calc frac fill

QTZT lt gy-gy, v lt brn hd-fri f gr- micxln tex ang-mod plty pred sil occ calc mica inpt w/kao cly

WT	8.8	pH	8.2
VIS	34	WL	NC
FC	2	SOL	3
CL	70	YP	9

QTZT lt-gry brn-lt brn hd fri f gr blky-ang pred sil, occ calc mica w calc fract fill

PHY gy lt g[illegible]m hd blky occ fis[illegible] sil-sl calc mic mica slty



fri f gr blky-ang pred sil, occ calc mica w calc fract fill

PHY gy lt g[illegible]m hd blky occ fis[illegible] sil-sl calc mic mica slty

PHY pred dk gy, gy hd-brit plty-fiss mod calc-sil v micmica fol schist. inpt v frac occ sks w/abnt calc frac fill tr pyr

PHY gy- lt gy hd fiss v micmica sil ang occ gran tex w/occ qtz frac fill tr pyr

QTZ cl- fros, mlky wh hd ang v fnly xln- amor w/ occ tr pyr

PHY pred dk gy, gy hd-brit fiss mod calc sil v mic mica v fract tr pyr

WT	8.8	pH	8.2
VIS	34	WL	NC
FC	2	SOL	3
CL⁻	70	YP	9

NOTE: no samp washout

THE ANALYSTS

Schlumberger

ANCHORAGE, ALASKA VENTURA, CALIFORNIA DENVER, COLORADO

COMPANY GETTY OIL COMPANY

WELL COLADO USL-44X-10

FIELD OR AREA COLADO KGRA

LOCATION SECTION 10 27N 32E MDBHV

COUNTY PERSHING STATE NEVADA

ELEVATION 4213' K.B. 4240'

SPUD DATE 3/13/81 FINAL DATE 5/4/81

TOTAL DEPTH 7965'

DRILLING CO. BRINKERHOFF PUSHER

REMARKS

LOGGING PERSONNEL TAD TOMKO GERRY MILHOLLAND
DON KIETMAN W.H. FRIDLEY

DATE BEGUN 3/17/81 DATE RELEASED 5/4/81

INTERVAL LOGGED 1215' - 7965' FOOTAGE 6750'

SERVICES PERFORMED CONVENTIONAL LOGGING, CHROMATOGRAPH, TEMPERATURE IN & OUT, H_2S, MUD DUCK, SHALE DENSITY, CO_2

HOLE SIZE	
SIZE	DEPTH
17"	1220'
12 1/2"	5977'
8 1/2	7965'

CASING RECORD		
SIZE	DEPTH	FOOTAGE
13 3/8"	1215'	1215'

MUD TYPE GEL / WATER w BEN-X

ABBREVIATIONS

NB	NEW BIT	CG	CONNECTION GAS
NCB	NEW CORE BIT	COR	CORRECTED DEPTH
NR	NO RETURNS	WT	MUD WEIGHT
CO	CIRCULATE OUT	VIS	VISCOSITY
DST	DRILL STEM TEST	WL	WATER LOSS
PR	POOR RETURNS	Cl	PPM CHLORIDE
TG	TRIP GAS	NaCL	SOD. CHLORIDE
LAT	LOGGED AFTER TRIP	Rm	MUD RESISTIVITY

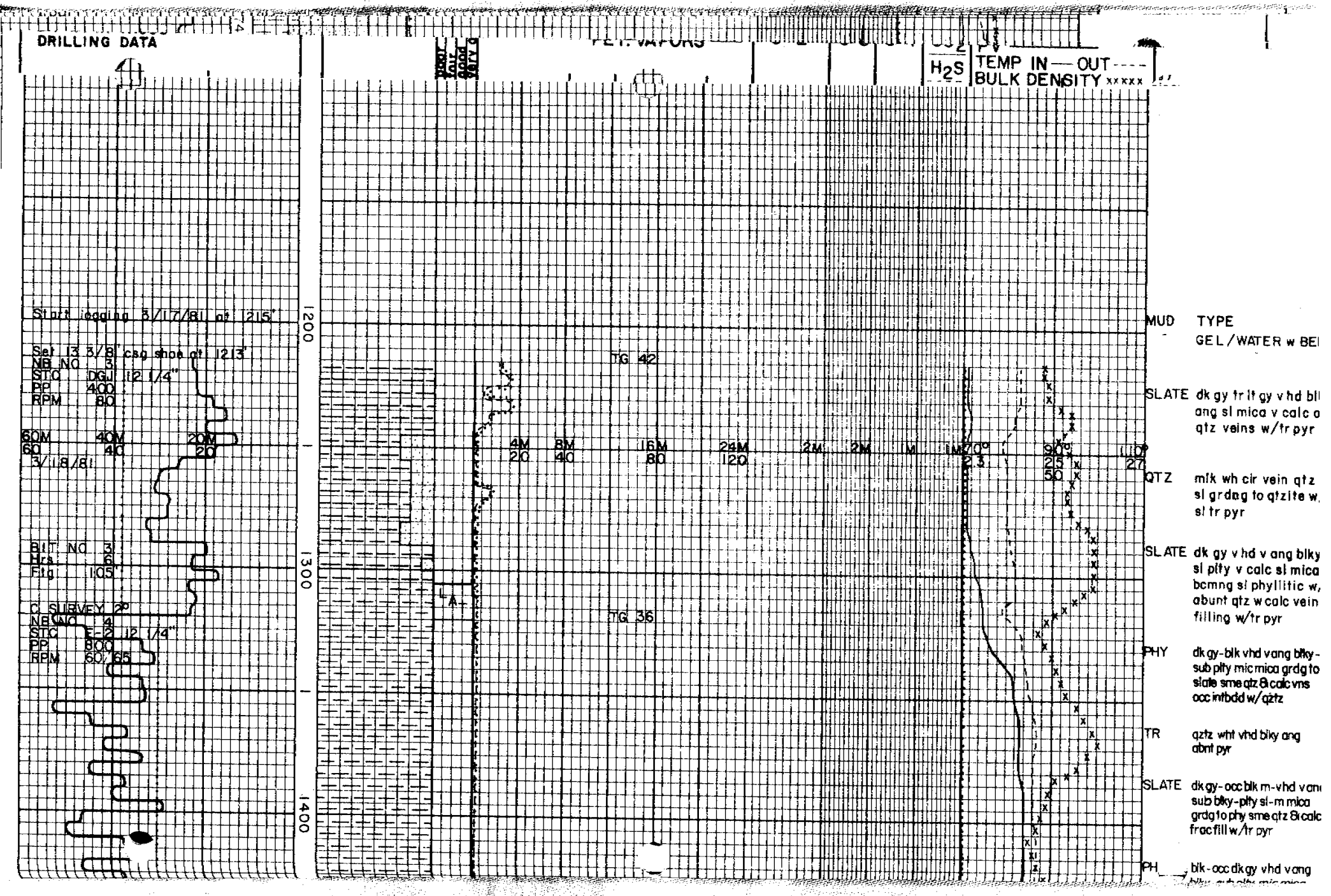
Gas detector is calibrated to record 100 units w/mixture of 2% methane in air

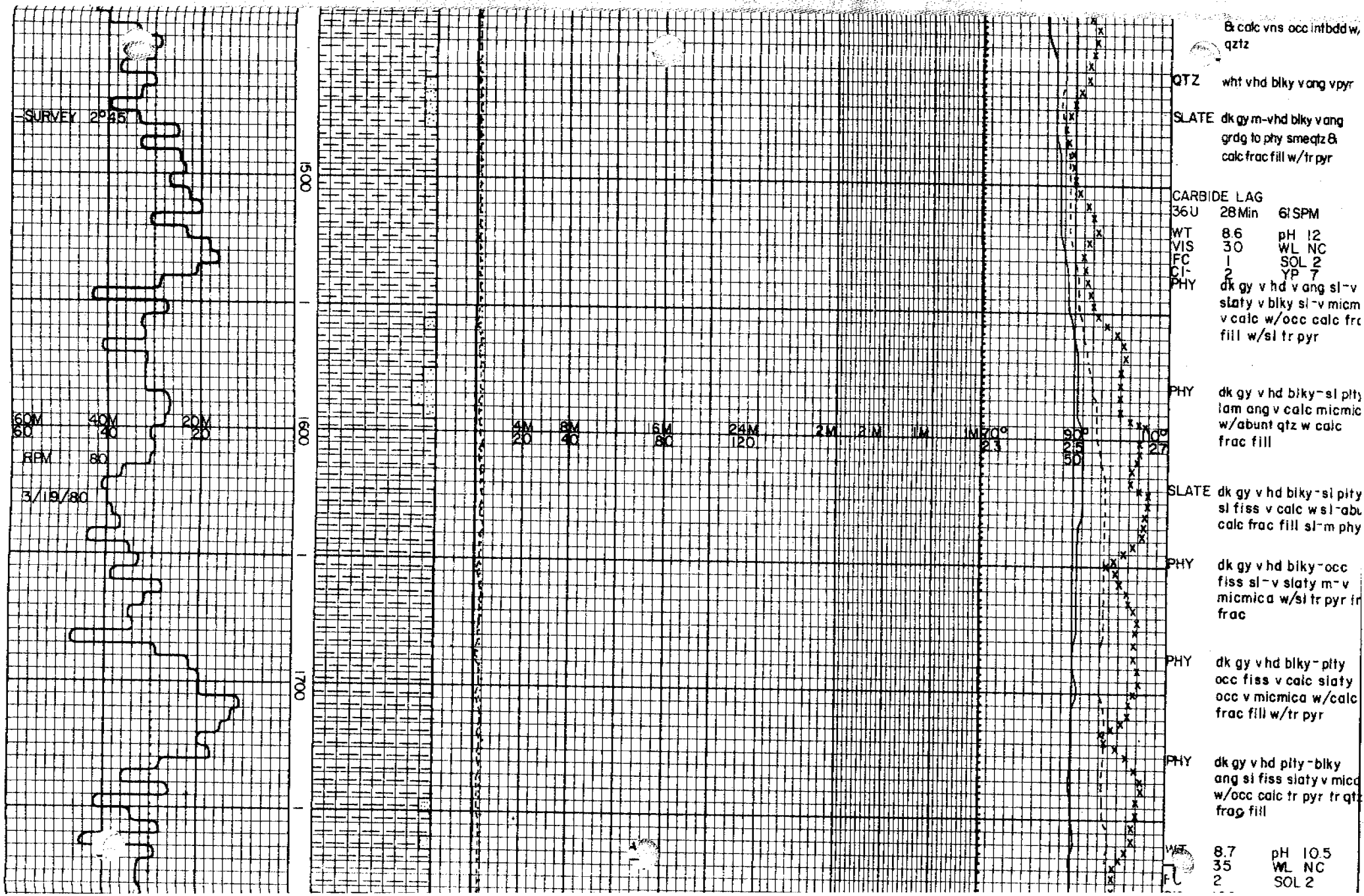
"The Analysts, inc., does not warrant the accuracy or correctness or any interpretation, recommendation or measurement contained herein. The interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule."

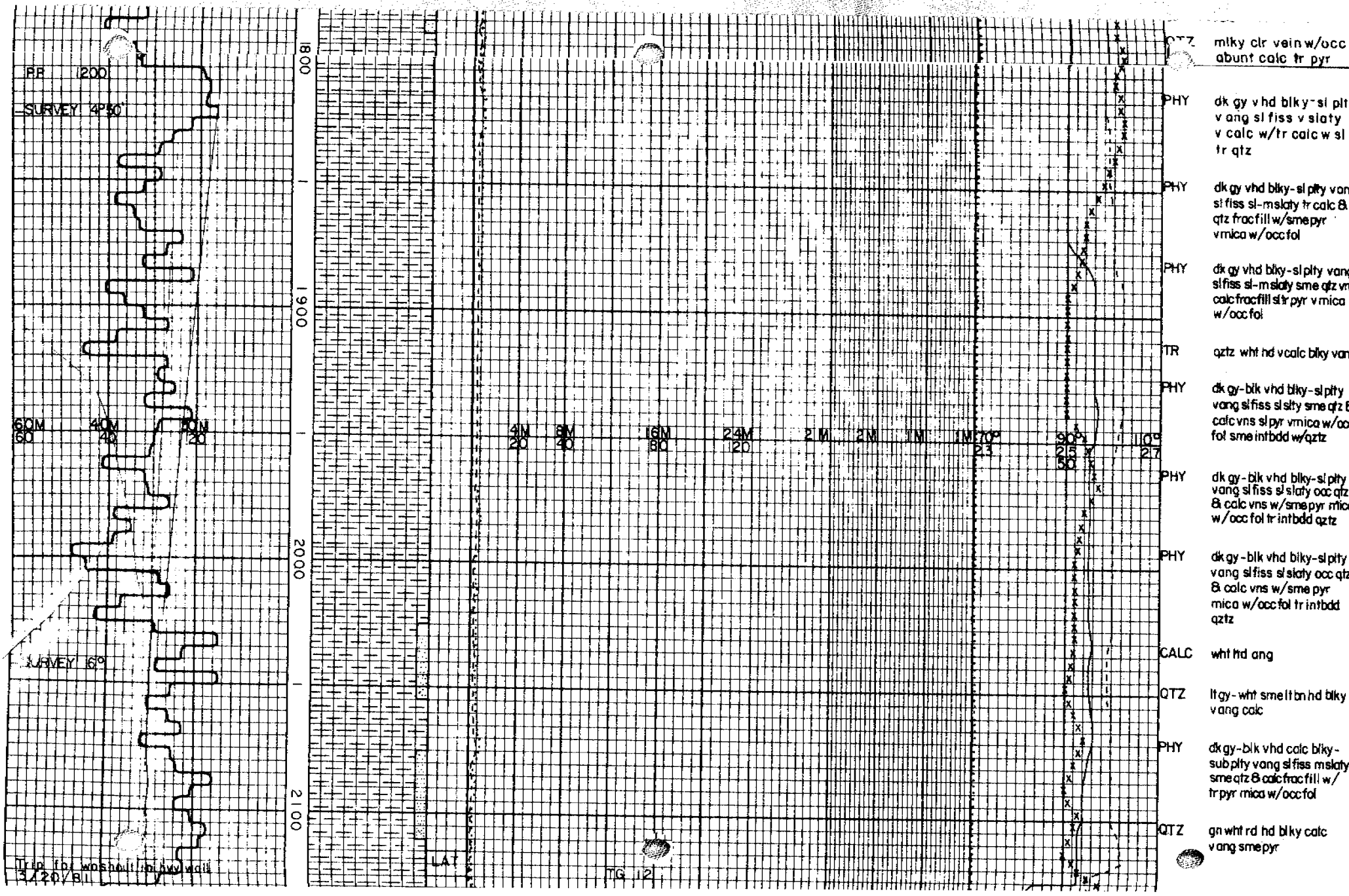
QUARTZ SILTSTONE CONGLOMERATE CHERT VOLCANICS

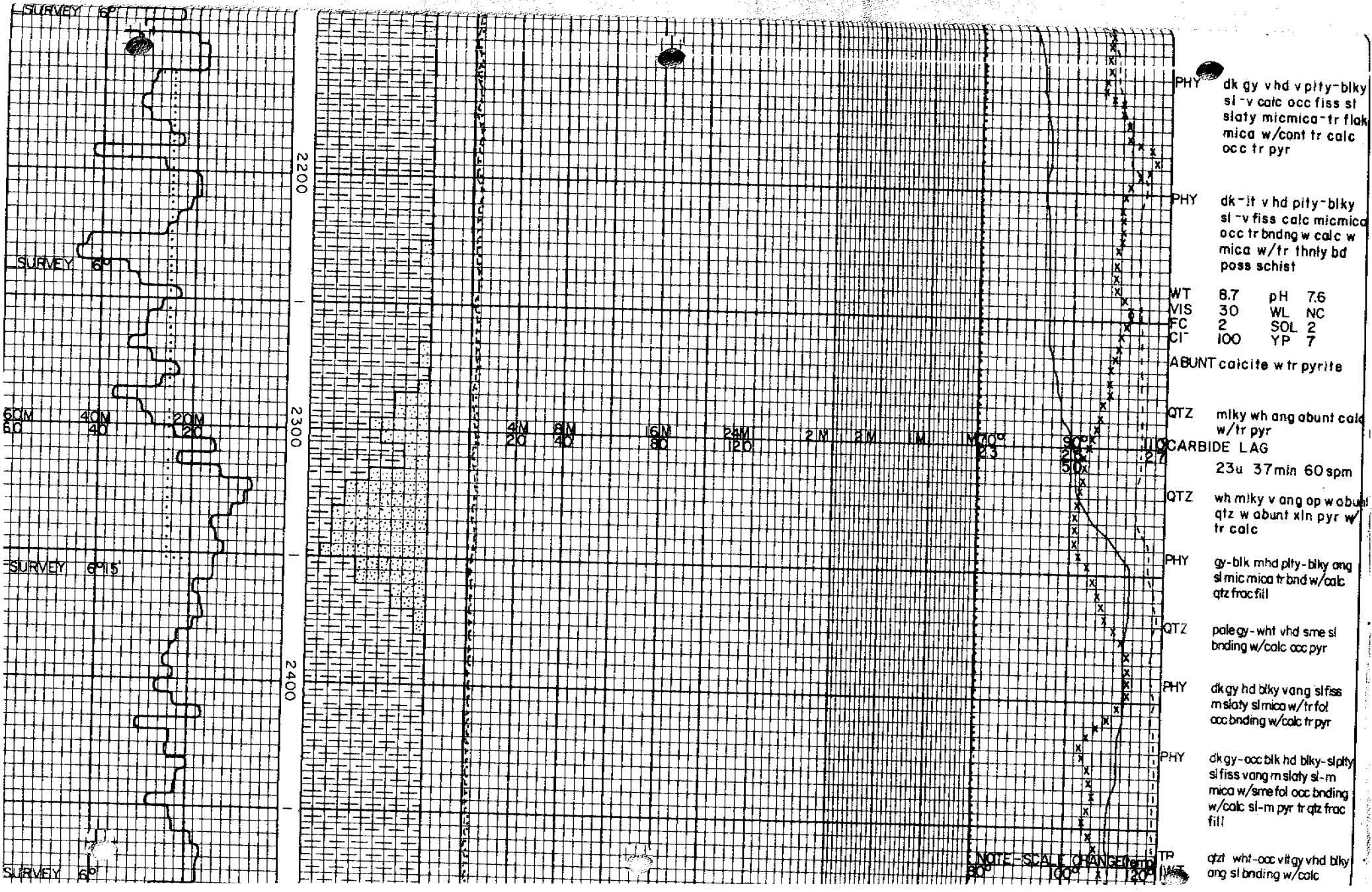
PHYLLITE LIMESTONE DOLOMITE FELSIC INTRUSIVE SERICITE

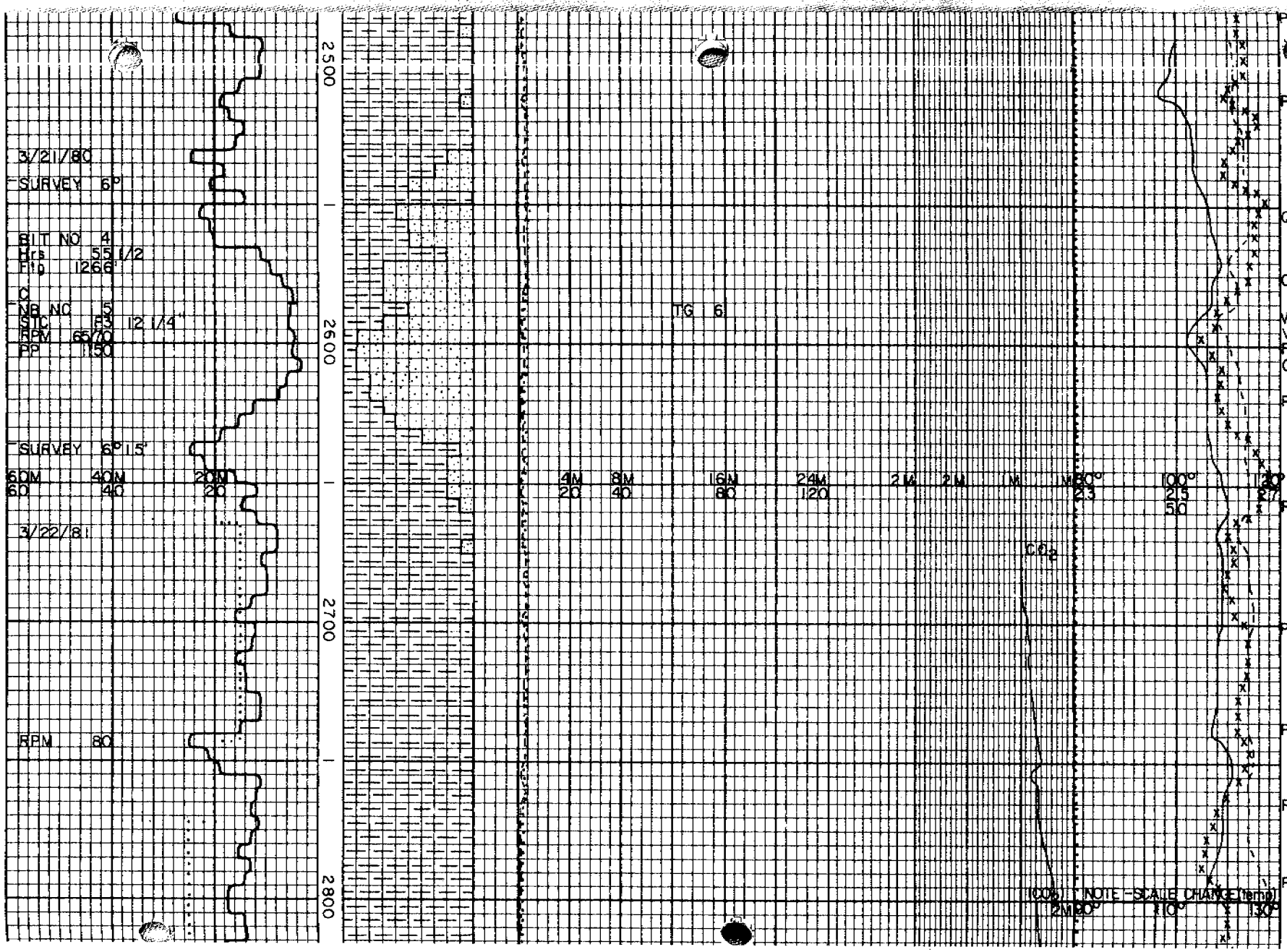
DRILLING RATE	LITHOLOGY	OIL	MUD GAS ANALYSIS—CHROMATOGRAPH IN PPM					CUTTINGS ANALYSIS	DESCRIPTION AND REMARKS
DRILL RATE (FT/HR OR MIN/FT) BIT WT IN THOUS		dod	C-1 ---- TOTAL GAS ····	C-2	C-3	C-4	CO_2	TOTAL ·····	


DRILLING DATA
H2S
TEMP IN — OUT
BULK DENSITY xxxxx
Start logging 3/17/81 at 1215'
Set 13 3/8" csg shoe at 1213'
NB NO 3
STC DGJ 12 1/4"
PP 400
RPM 80
60M 40M 20M
60 40 20
3/18/81
BIT NO 3
Hrs 6
Ftg 105'
C SURVEY 2°
NB NO 4
STC E-2 12 1/4"
PP 800
RPM 60/65
1200
1300
1400
TG 42
TG 36
4M 8M 16M 24M 2M 2M 1M 1M
20 40 80 120
70°
90°
110°
MUD TYPE
GEL/WATER w BEI
SLATE dk gy tr lt gy v hd bl
ang sl mica v calc o
qtz veins w/tr pyr
QTZ mlk wh cir vein qtz
sl grdag to qtzite w
sl tr pyr
SLATE dk gy v hd v ang blky
sl plty v calc sl mica
bcmng sl phyllitic w
abunt qtz w calc vein
filling w/tr pyr
PHY dk gy-blk vhd vang blky-
sub plty mic mica grdg to
slate sme qtz & calc vns
occ intbdd w/qtz
TR qztz wht vhd blky ang
abnt pyr
SLATE dk gy-occ blk m-vhd van
sub blky-plty si-m mica
grdg to phy sme qtz & calc
frac fill w/tr pyr
PH blk-occ dk gy vhd vang


SURVEY 2°45
1500
1600
1700
60M 40M 20M
60 40 20
RPM 80
3/19/80
4M 8M 6M 24M 2M 2M 1M 1M
20 40 80 120
70°
23
90°
25
50
100°
27
& calc vns occ intbdd w/ qztz
QTZ wht vhd blky v ang vpyr
SLATE dk gy m-vhd blky v ang grdg to phy smeqtz & calc frac fill w/tr pyr
CARBIDE LAG
36U 28Min 61SPM
WT 8.6 pH 12
VIS 30 WL NC
FC 1 SOL 2
Cl- 2 YP 7
PHY dk gy v hd v ang sl-v slaty v blky sl-v micm v calc w/occ calc fra fill w/sl tr pyr
PHY dk gy v hd blky-sl plty lam ang v calc micmic w/abunt qtz w calc frac fill
SLATE dk gy v hd blky-sl plty sl fiss v calc w sl-abu calc frac fill sl-m phy
PHY dk gy v hd blky-occ fiss sl-v slaty m-v micmica w/sl tr pyr fr frac
PHY dk gy v hd blky-plty occ fiss v calc slaty occ v micmica w/calc frac fill w/tr pyr
PHY dk gy v hd plty-blky ang sl fiss slaty v mica w/occ calc tr pyr tr qtz frag fill
WT 8.7 pH 10.5
35 WL NC
2 SOL 2


BR 1200
SURVEY 4°S0°
1800
1900
2000
2100
60M 60
40M 40
20M 20
4M 20
8M 40
16M 80
24M 120
2M
2M
1M
1M
70°
23
90°
25
50
110°
27
SURVEY 6°
LAT
TG 12
QTZ mlky clr vein w/occ abunt calc tr pyr
PHY dk gy v hd blky-sl plty v ang sl fiss v slaty v calc w/tr calc w sl tr qtz
PHY dk gy vhd blky-sl plty vang sl fiss sl-m slaty tr calc & qtz fracfill w/sme pyr v mica w/occ fol
PHY dk gy vhd blky-sl plty vang sl fiss sl-m slaty sme qtz vns calc fracfill sl tr pyr v mica w/occ fol
TR qztz wht hd v calc blky vang
PHY dk gy-blk vhd blky-sl plty vang sl fiss sl slty sme qtz & calc vns sl pyr v mica w/occ fol sme intbdd w/qztz
PHY dk gy-blk vhd blky-sl plty vang sl fiss sl slaty occ qtz & calc vns w/sme pyr v mica w/occ fol tr intbdd qztz
PHY dk gy-blk vhd blky-sl plty vang sl fiss sl slaty occ qtz & calc vns w/sme pyr mica w/occ fol tr intbdd qztz
CALC wht hd ang
QTZ ltgy-wht sme ltbn hd blky v ang calc
PHY dk gy-blk vhd calc blky-sub plty vang sl fiss m slaty sme qtz & calc frac fill w/ tr pyr v mica w/occ fol
QTZ gn wht rd hd blky calc v ang sme pyr
Trip for washout in hwy wall
3420'/8 ll


SURVEY 6°
SURVEY 6°
SURVEY 6°15'
SURVEY 6°
60M 60
40M 40
20M 20
2200
2300
2400
4M 20
8M 40
16M 80
24M 120
2M
2M
1M
1M 70° 23
90° 25 50
110 27
NOTE - SCALE CHANGE (temp)
80°
100°
120°
PHY dk gy v hd v plty-blky sl-v calc occ fiss sl slaty micmica-tr flak mica w/cont tr calc occ tr pyr
PHY dk-lt v hd plty-blky sl-v fiss calc micmica occ tr bndng w calc w mica w/tr thnly bd poss schist
WT 8.7 pH 7.6
VIS 30 WL NC
FC 2 SOL 2
Cl⁻ 100 YP 7
ABUNT calcite w tr pyrite
QTZ mlky wh ang abunt calc w/tr pyr
CARBIDE LAG
23u 37min 60spm
QTZ wh mlky v ang op w abunt qtz w abunt xln pyr w/ tr calc
PHY gy-blk mhd plty-blky ang sl mic mica tr bnd w/calc qtz frac fill
QTZ pale gy-wht vhd sme sl bnding w/calc occ pyr
PHY dk gy hd blky v ang sl fiss m slaty sl mica w/tr fol occ bnding w/calc tr pyr
PHY dk gy-occ blk hd blky-sl plty sl fiss v ang m slaty sl-m mica w/sme fol occ bnding w/calc sl-m pyr tr qtz frac fill
TR qtzt wht-occ vlt gy vhd blky ang sl bnding w/calc



PHY dk gy-blk hd blky-sl plty sl fiss vang m slaty sl mica w/ tr fol sme bndlng w/calc tr pyr & qtz frac fill

PHY dk-m gy v hd blky-plt occ sl fiss v-sl calc sl-v slaty occ v micmi tr fol w bndng w/tr py qtzt

QTZ mlky wh smky blky trns op w/xln pyr tr calc

CARBIDE LAG
26u 42 min 60 spm

WT	8.9	pH	8.6
VIS	35	WL	NC
FC	2	SOL	2
Cl^-	100	YP	7

PHY dk gy-blk m-vhd plty-blky sme sl fiss vang m slaty sl-m micmica tr pyr w qtz & calc vns

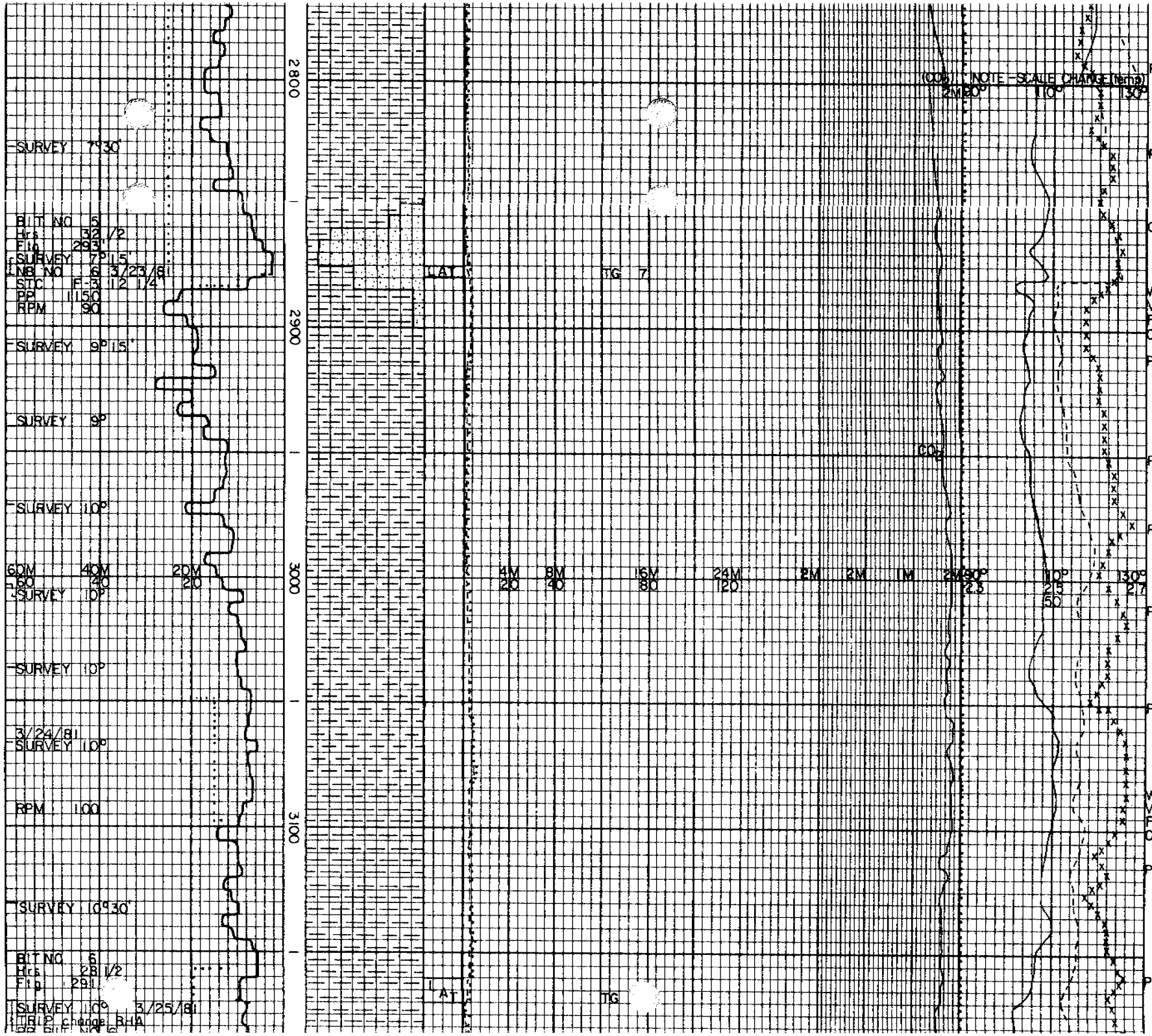
PHY dk gy blk v hd plty-blky occ sl fiss bcmng v slaty sl-tr v micmica sl-m calc w/qtzt tr py tr calc

PHY dk gy blk v hd blky-sl plty tr fiss v slaty sl micmica calc w/cont tr pyr calc qtzt

PHY dk gy blk v hd sl plty-blky v slaty sl micmica calc w/tr pyr calc

PHY dk gy-blk vhd plty-blky m slaty m-occ sl mica tr calc-pyr-qtz

PHY blk-occ dk gy m-vhd plty-blky sme sl fiss m slaty sl-m mica w/tr fol tr pyr tr qtz vns



slaty m-occ sl mica tr calc-pyr-qtz

PHY blk-occ dk gy m-vhd plty-blky sme sl fiss m slaty sl-m mica w/tr fol tr pyr tr qtz vns

PHY blk-dk gy m-vhd plty-blky sme sl fiss m-v ang m slaty sl-m mica w/tr fol tr pyr tr qtz vns

QTZT lt-dk gn dk gy tr wht v hd ang trnsl-op w/pyr & mafic inclu poss abunt chlorite

WT	8.8	pH	8.3
VIS	35	WL	NC
FC	2	SOL	3
Cl⁻	100	YP	10

PHY dk gy blk v hd plty-blky sl fiss v slaty sl-m mic mica calc v frac w calc frac fill w/occ qtz tr cn sl tr pyr

PHY dk gy-blk hd blky sme fiss ang occ pyr mic mica qtz & calc frac fill

PHY dk gy-blk m-vhd blky-plty v ang m slaty sl-mod mica w/tr fol sme qtz & calc frac fill

PHY dk gy-occ blk vhd blky-sl plty m brit v ang m-v slaty sl-m mica w/sme fol occ mic pyr sme qtz vns

PHY dk gy blk v hd blky v ang sl fiss sl-v mica v slaty sl frac w tr calc frac fill w/sl tr pyr

WT	8.8	pH	8.4
VIS	35	WL	NC
FC	2	SOL	3
Cl⁻	100	YP	6

PHY dk-m gy v hd plty-blky sl fiss m-v micmica slaty calc w/sl tr pyr qtz calc chlor

PHY dk gy blk v hd blky-sl plty sl-occ v micmica v slaty calc occ sl frac w tr calc frac fill w/occ