F. S. (Stan) Borst—MI 2-2065
M. E. (Mel) Borst—MI 2-2851

Borst & Giddens Logging Service
P. O. BOX 146 — VENTURA, CALIFORNIA

Kermit Giddens
MI 2-5078

COMPANY	HUMBLE OIL & REFINING COMPANY
WELL	THOMAS CREEK UNIT, ~~BLOCK III, WELL NO.~~ 1
FIELD	LAKEVIEW AREA

LOGGING ENGINEERS
F. S. BORST
LEE HOWARD

LOCATION	400' N 925' W OF EAST 1/4 COR OF SEC 18, T36S, R18E
ELEVATION	5222' GR. 5235.4' KB
CASING	1014' – 16"
HOLE SIZE	10 5/8" FROM 1200'
DEPTH FROM	50' TO 12,093'
DATE FROM	7/25/60 TO 10/21/60

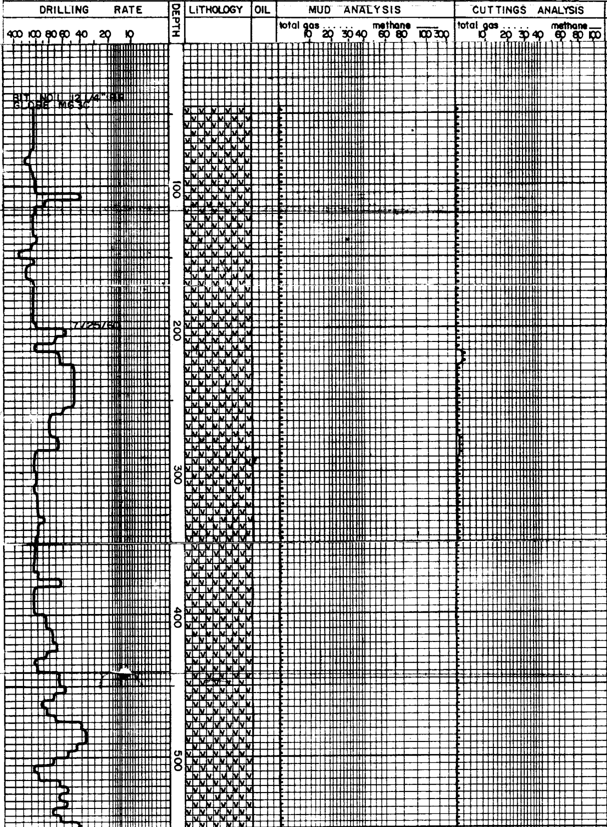
COUNTY	LAKE
STATE	OREGON

OIL SHOW EVALUATIONS CCl_4
- TRACE
- FAIR
- GOOD
- VERY GOOD

LEGEND

NB	NEW BIT
NCB	NEW CORE BIT
NR	NO RETURNS
CO	CIRCULATE OUT
DST	DRILL STEM TEST
TG	TRIP GAS
WT	MUD WEIGHT
VIS	VISCOSITY
WL	WATER LOSS
CL	CHLORIDE ION G/G

LITHOLOGY
- SAND
- VOLCS
- SHALE
- CHERT
- LIME
- CONGL



DESCRIPTION & REMARKS

volcs. brn. $ yl., biotitic, ashy

trs. gryish-purple basalt

SURVEY 0° 30'
basalt purple

volcs. lt tan, brn, yl., ashy

volcs. brn, purple, white, congl

biotite
abund. med.-cse. gn. crystals
volcs. tan, pink, brn, grn, ashy

SURVEY 0° 45'

volcs. lt brn. $ grn.
basalt blk., grn., purple

TAN PUMICE

volc. ash, tan biotitic

volc ash, whitish-tan

volc. ash, purple, wht, tan
basalt, purple, biotite, crystals
SURVEY 0° 15'

volcs purple ashy, congl

volcs slate gry $ red

volcs lt blue $ grn

SURVEY 0° 15'

volc ash gry-grn
scattered crystals $ basalt frags

volcs grn, gry $ purple
biotite

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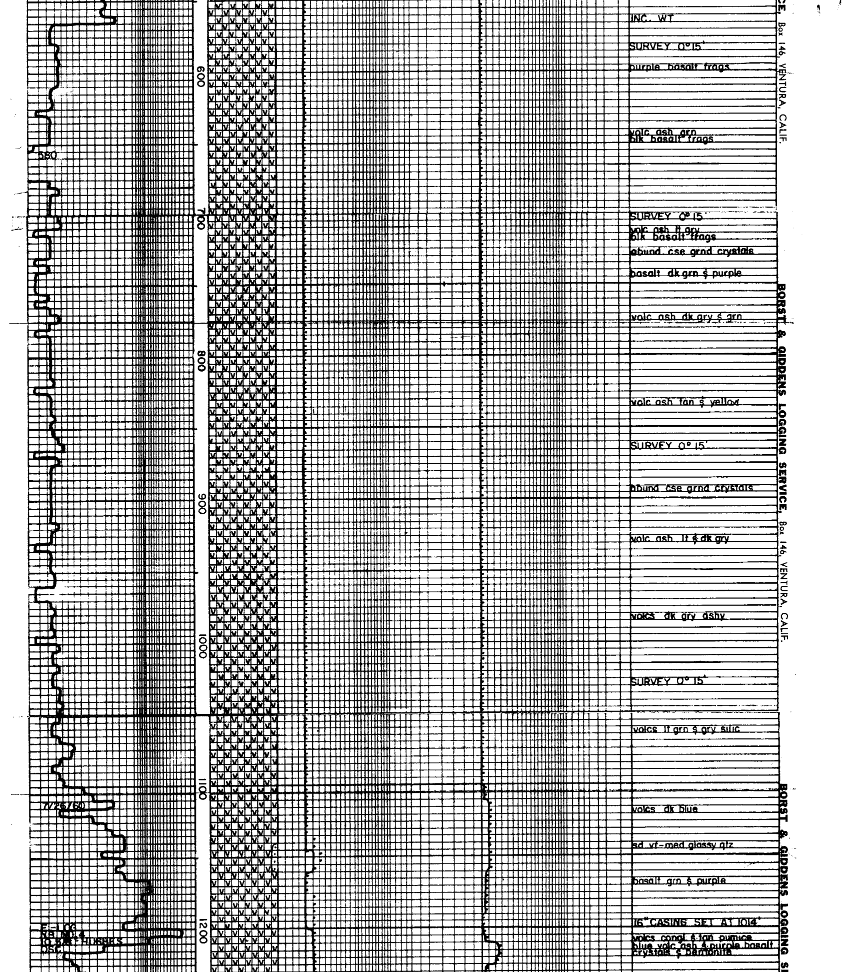
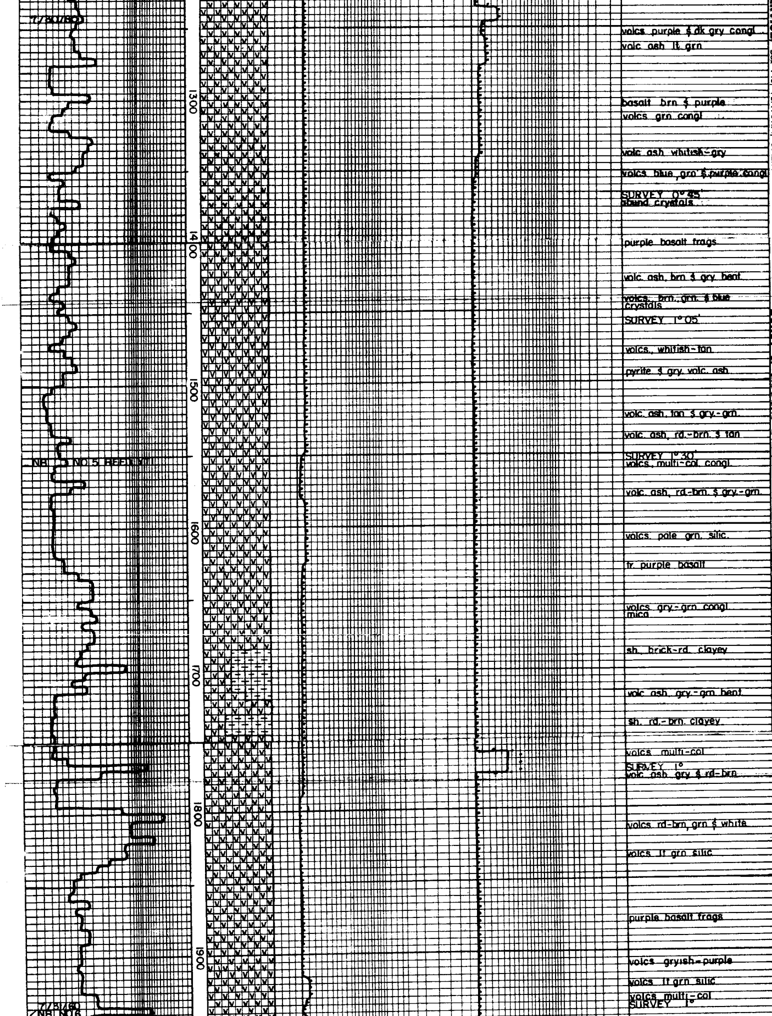
BORST & GIDDENS LOGGING SERVIC

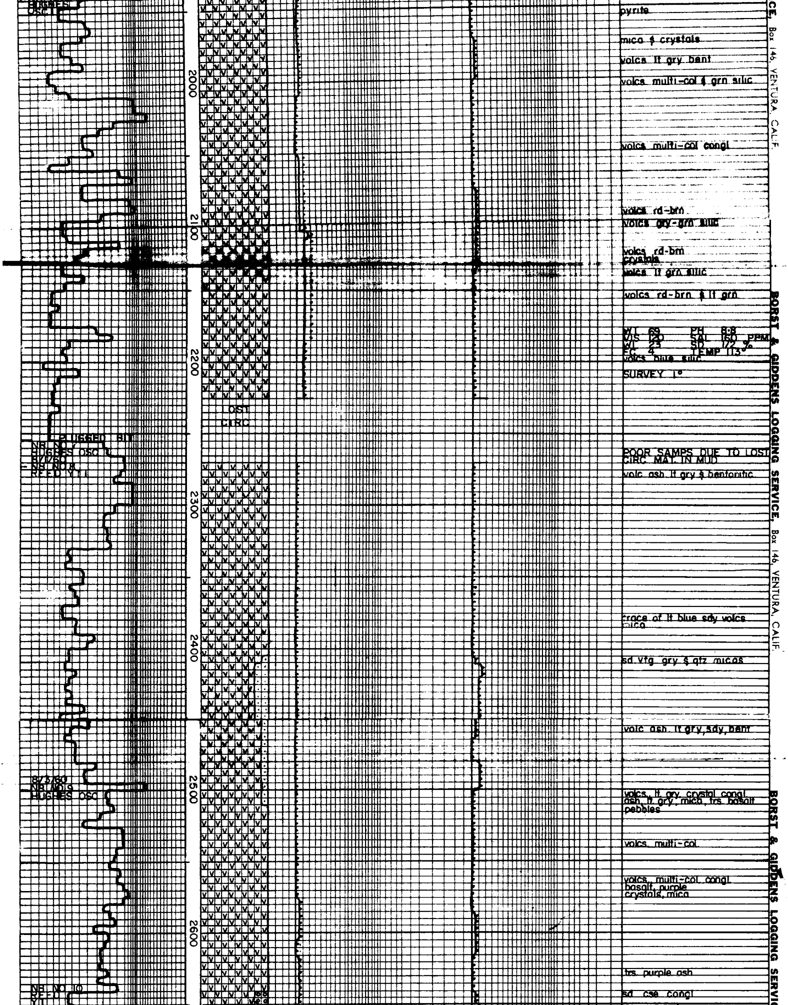


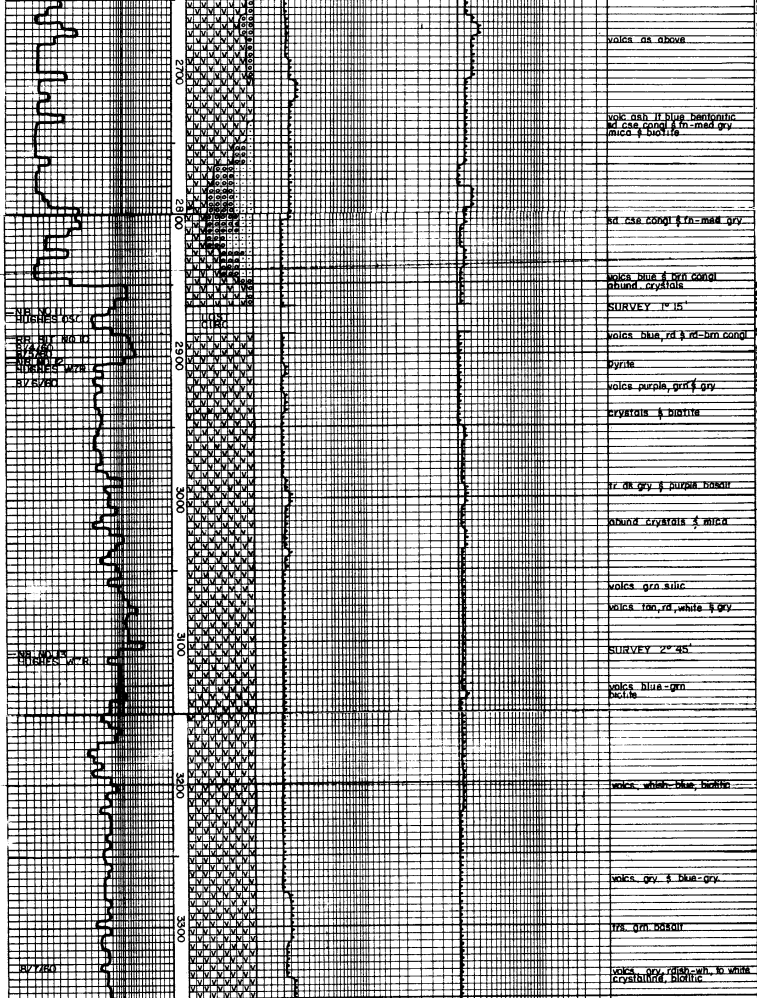


ERVICE, Box 146, VENTURA, CALIF.

BORST & GIDDENS LOGGING SERVICE, Box 146, VENTURA, CALIF.

BORST & GIDDENS LOGGING SERVI





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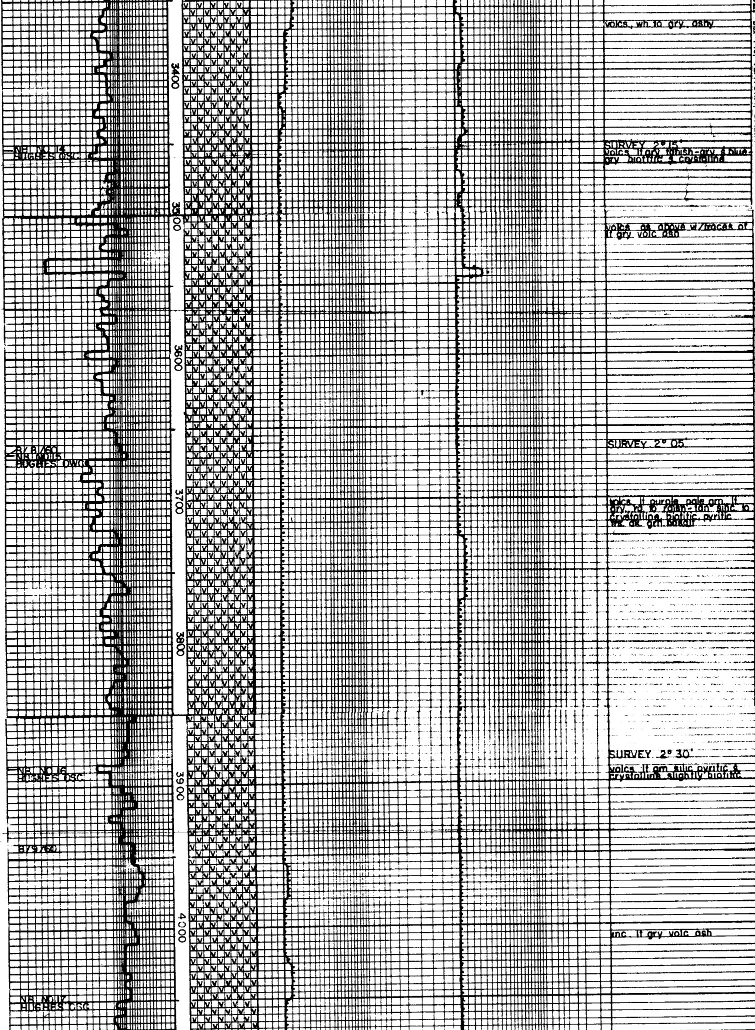

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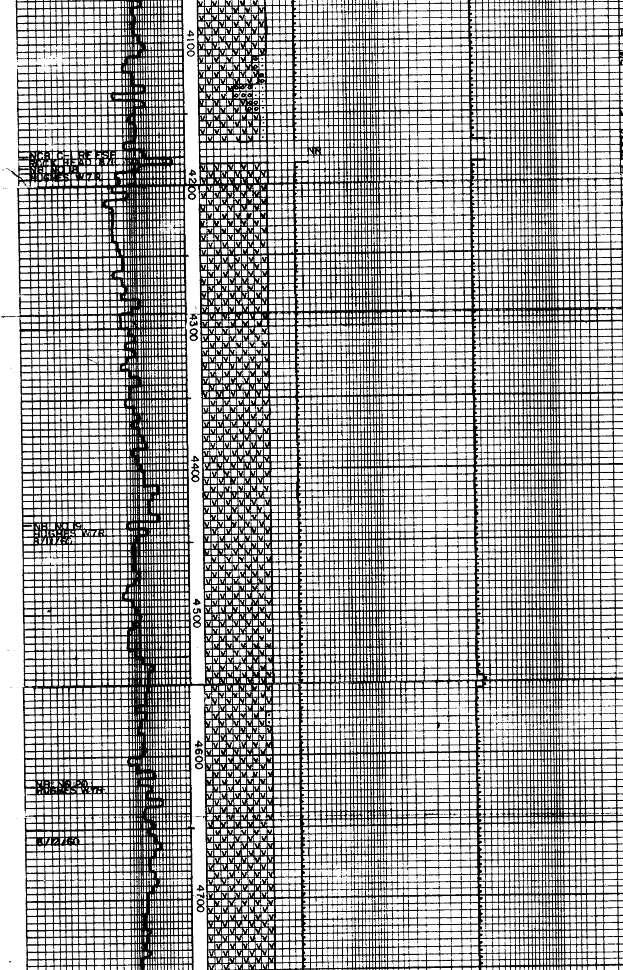

TEMP 116°

sd fn-cse gry calc $ cse
multi-col congl

volcs grn silic biot $ pyritic

SURVEY 3°
C-1 (4179'-4186') REC 7' VOLC
GRN SILIC CALC CRYSTALLINE
BIOTITIC

TEMP 118°

volcs lt grn silic $ lt gry
crystalline biotitic

volcs as above

inc white $ purple volcs

SURVEY 3°

WT	70	PH	8.0
VIS	35	SAL	100 ppm
WL	34.5	TEMP	110°
FC	4	SD	1%

abund crystals

multi-col volcs

sd cse gry $ white

volcs lt gry-grn

volcs lt gry biot $ crystalline

WT	71	PH	7.0
VIS	34	SAL	70 ppm
WL	15	TEMP	117°
FC	2	SD	1%

volcs lt grn silic

146, VENTURA, CALIF.
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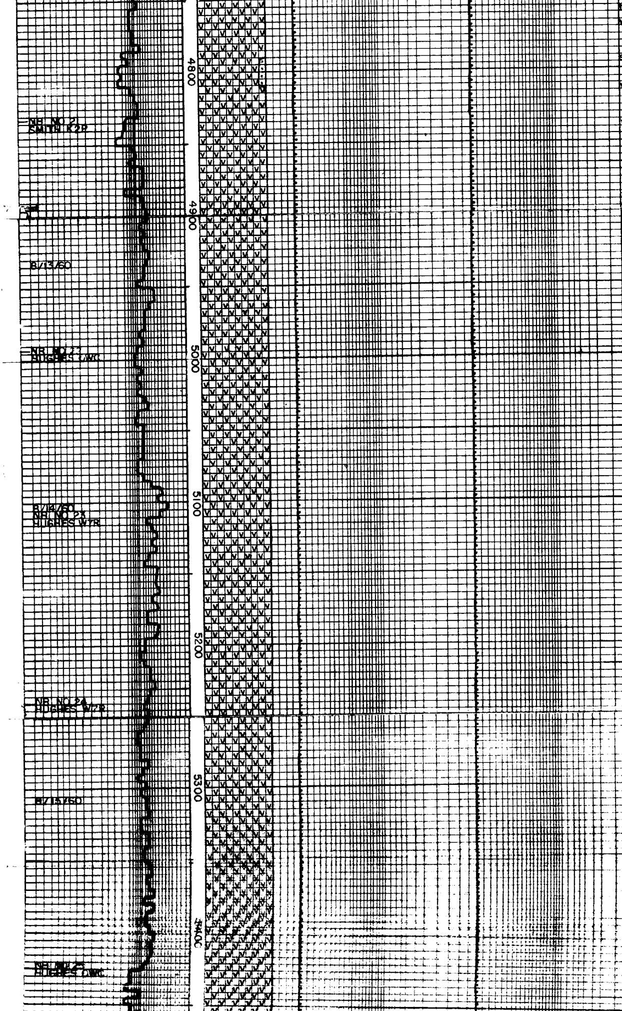


tr soft to firm gry ash

volcs multi-col

sd fn dk gry

volcs dk grn

volcs, lt grn.

volcs, dk gry biotitic

volcs grn $ grnish-gry crystalline

volcs multi-col

volcs gry $ gry-grn silic crystalline

SURVEY 2°

WT 71 PH 7.0
VIS 35 SAL 70 ppm
WL 16 TEMP 128°
FC 3 SD 1/2 %

volcs as above

SURVEY 1°

volcs lt gry $ grn silic, biot

tr of lt gry ash

WT 71 PH 7.5
VIS 45 SAL 70 ppm
WL 13 TEMP 124°
FC 2 SD 1/2 %

volcs multi-col $ congl

SURVEY 0° 45'

volcs lt grn silic $ crystalline
tr ash, biotite $ hornblend

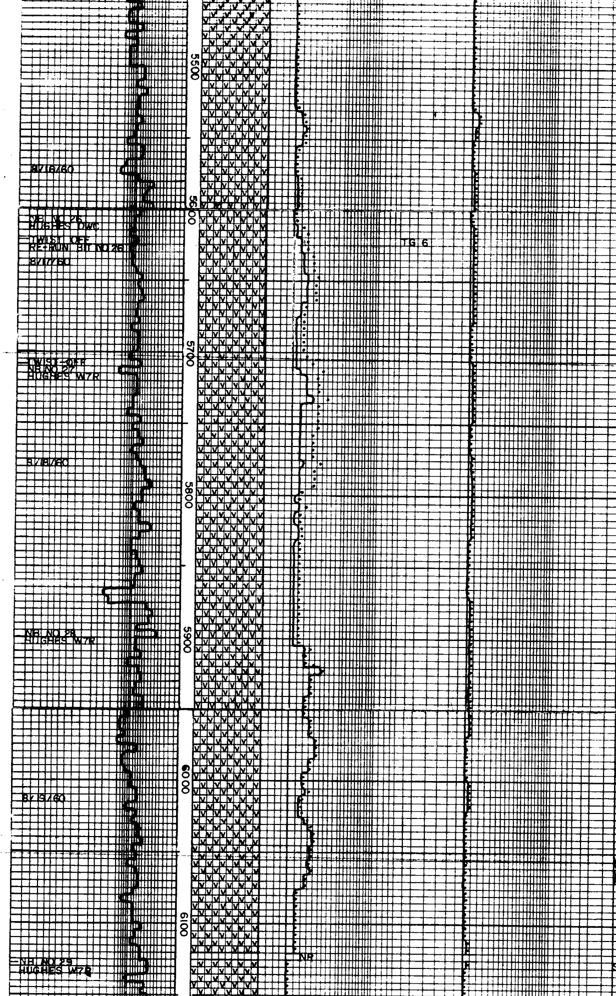
volcs multi-col

WT 72 PH 7.0
VIS [illegible] SAL 70 ppm
WL [illegible] TEMP [illegible]
FC 2 SD 1/2 %

volcs lt gry silic

mica, pyrite $ biotite
SURVEY 1° 15'

trace fn glassy qtz



volcs., dk. gry., congl., calc.

frs. of red ashy volcs.

volcs., lt. $ dk. gry., silic.

SURVEY 1° 30'

volcs., lt. gry., silic., crystalline

abund. crystals

WT 71 SAL 70 p.p.m.
VIS 48 PH 8
WL 13.2 TEMP 128°
FC 2 SD 1/2 %

volcs. gry-grn silic pyritic $ micas W/white ash. Some biot.

LOST CIRC.

volcs. lt gry silic biotitic $ crystalline

WT 69 PH 8.0
VIS 50 SAL 70 ppm
WL 12 TEMP 117°
FC 2 SD 1/2 %

SURVEY 2°

volcs lt gry $ grn silic, biot, micas $ crystalline

pyrite

volcs lt gry $ grn silic, micas, biot $ crystalline

WT 70 PH 8.0
VIS 45 SAL 70 ppm
WL 12.4 TEMP 130°
FC 2 SD 1/2 %

SURVEY 1° 45'

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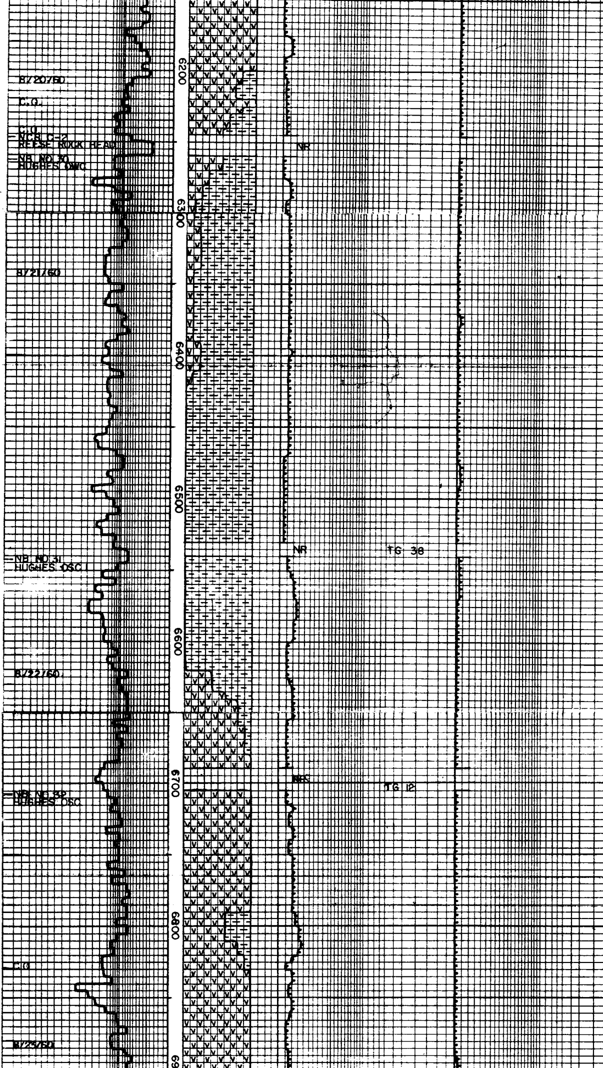


volcs as above

WT	70·5	PH	8·0
VIS	55	SAL	100 ppm
WL	12·4	TEMP	134°
FC	2	SD	17.2 %

claystone $ clayey sh. dk rd-brn calc.

C-2 (6248'-6263') REC 15' SLTST & MUDST. DK RD-BRN, VOLC. HIGHLY FRACTURED. FRACS FROM 30° TO VERT. & FILLED WITH CALCITE NO SHOWS

sltst dk purplish-gry, congl.

sltst $ claystone . dk brn, calcite

WT	70	PH	8·0
VIS	50	SAL	100 ppm
WL	13·6	TEMP	133°
FC	2	SD	17.2 %

sltst $ claystone brn $ dk gry

volcs, grn, purple, lt grn, lt gry; congl, lt gry, ash

volcs multi-col congl $ crystalline

SURVEY 2° 15'

calcite

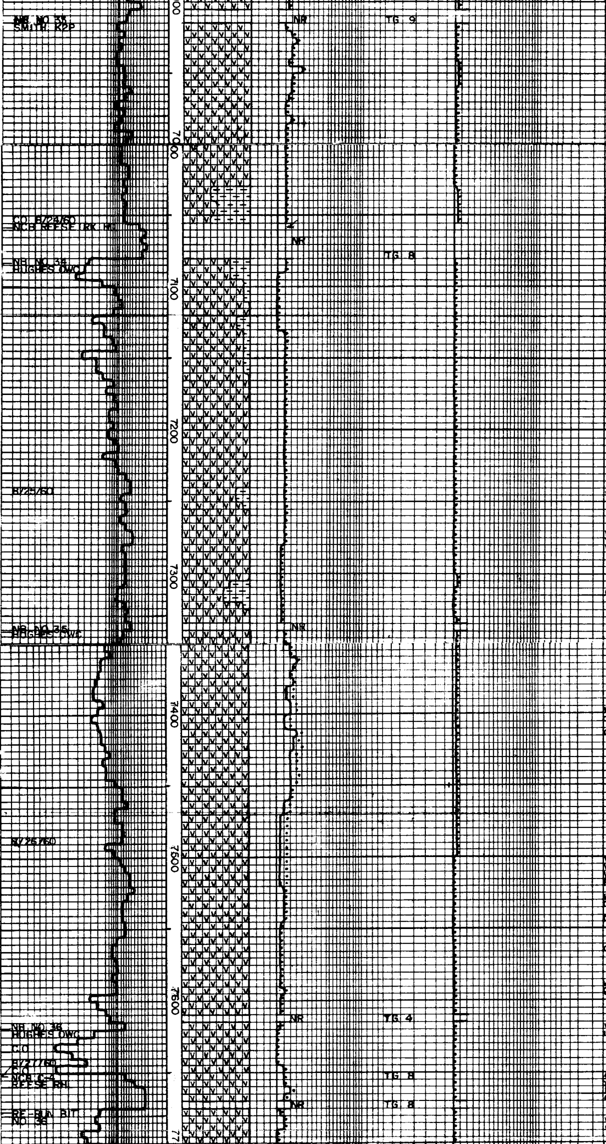
WT	70	PH	8·0
VIS	53	SAL	100 ppm
WL	15	TEMP	134°
FC	2	SD	17.2 %

volcs lt grn silic pyrite

claystone, rd-brn volcs

volc ash lt gry

volcs, multi-col, ashy, silic, crystalline



WT 69 PH 8.0
VIS 65 SAL 100 ppm
WL 16.8 TEMP 138°
FC 2 SD 1/2%

volcs, multi-col, cryst

lge calcite frags

clayst, rd-brn
sltst, dk gry volc

C-3(7058-7084) REC 3'
volcs, dk gry-grn $ blk silic tuff breccia w/multi-col ang & sub-ang volc frags
no show

WT 69 PH 8.0
VIS 42 SAL 100 ppm
WL 20.4 TEMP 128°
FC 2 SD 1/2%

volcs multi-col, ashy, silic
rd-brn volc sltst

clayst, rd-brn volc

WT 70 PH 8.0
VIS 45 SAL 100 ppm
WL 18 TEMP 129°
FC 2 SD 1/2%

clayst $ sltst, dk brn volc

volcs dk gry $ lt gry silic $ ashy

abund crystals

WT 69.5 PH 8.0
VIS 40 SAL 100 ppm
WL 20 TEMP 137°
FC 2 SD 1/2%

volcs multi-col silic, pyritic, crystalline

blk basalt frags

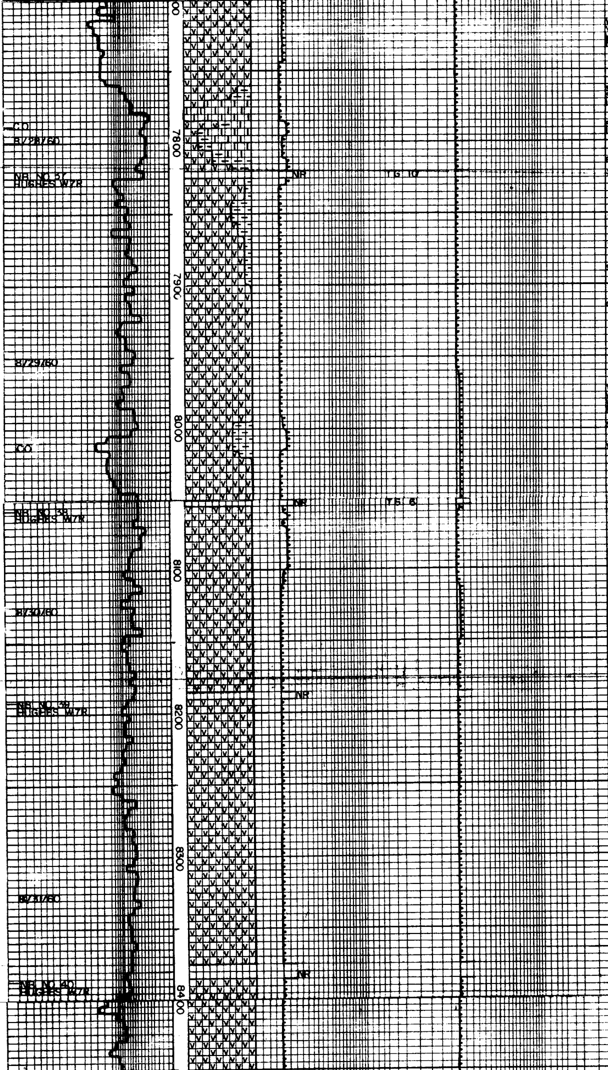
calcite

volcs as above $ abund gry-grn $ dk gry ash

volc ash, gry-grn w/rnded interbedded volc pebbles

C-4(7652-7677) REC-5'
volc tuff grnish-gry to blk w/ lt grn $ blk ang frags, thin calcite veinlets, no show

volcs, dk gry, ashy, pyritic
calcite



WT 70·5 PH 8·0
VIS 41 SAL 100 ppm
WL 17·3 TEMP 128°
FC 2 SD 1/2 %

sh. rd-brn volc, ashy $ blk
silic volcs
limestone whitish-gry, firm

sltst rd-brn volc
limestone lt grn, volc

sltst multi-col, volc

SURVEY 3°

sltst, gry, brn, $ blk volc.

volcs., gry congl. slty.

sh brn ashy

abund crystals

WT 69 PH 8·0
VIS 36 SAL 100 ppm
WL 15·8 TEMP 132
FC 2 SD 1/2 %

sltst rd-brn to brn volc clayey

volcs multi-col ashy

volcs lt grn silic, dk gry
slty crystalline blk. $ grn.
basalt frags, pyrite

volcs., lt gry $ lt grn. ashy.
abund crystals

WT 68 PH 8.0
VIS 44 SAL 100 ppm
WL 16 TEMP 140°
FC 2 SD 1/2 %

volcs., dk gry crystalline

volcs, lt gry ashy. pyritic

volcs. grn. silic, blk $ gry
crystalline

volcs. lt to dk gry. ashy, lt to
dk grn $ dk gry silic
frs. xln. volcs.

WT 67.5 PH 8.0
VIS 38 SAL 100 ppm
WL 16.5 TEMP 134°
FC 2 SD 1/2 %

volcs. rd.-brn. to brn. congl.
slty

volcs., gry. ashy

volcs., lt gry-grn. xln., ashy

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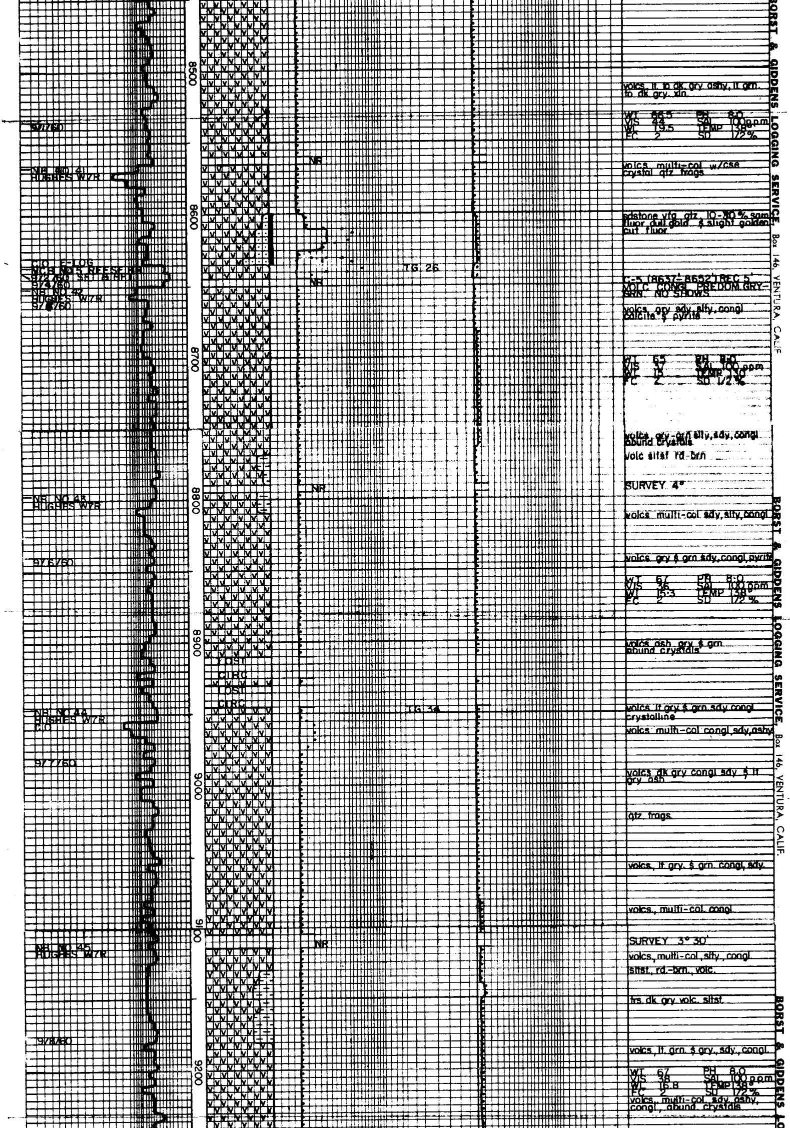

volcs. lt. to dk. gry ashy, lt grn.
to dk gry. xln.

WT 66.5 PH 8.0
VIS 44 SAL 100ppm
WL 19.5 TEMP 138°
FC 2 SD 1/2%

volcs multi-col w/cse
crystal qtz frags

sdstone vfg qtz, 10-30% samp
fluor dull gold & slight golden
cut fluor

C-5 (8637'-8652') REC 5'
VOLC CONGL PREDOM GRY-GRN NO SHOWS

volcs gry sdy, slty, congl
calcite & pyrite

WT 65 PH 8.0
VIS 37 SAL 100 ppm
WL 15 TEMP 130
FC 2 SD 1/2%

volcs gry-grn slty, sdy, congl
abund crystals

volc sltst rd-brn

SURVEY 4°

volcs multi-col sdy, slty, congl

volcs gry & grn sdy, congl, pyrite

WT 67 PH 8.0
VIS 36 SAL 100 ppm
WL 15.3 TEMP 138°
FC 2 SD 1/2 %

volcs ash gry & grn
abund crystals

volcs lt gry & grn sdy congl
crystalline

volcs multi-col congl, sdy, ashy

volcs dk gry congl sdy & lt
gry ash

qtz frags

volcs, lt gry. & grn. congl, sdy.

volcs., multi-col. congl

SURVEY 3° 30'

volcs, multi-col, slty, congl

sltst., rd.-brn., volc.

frs. dk gry volc. sltst

volcs, lt. grn. & gry., sdy., congl.

WT 67 PH 8.0
VIS 38 SAL 100 p.p.m.
WL 16.8 TEMP 138°
FC 2 SD 1/2 %

volcs., multi-col. sdy, ashy,
congl., abund crystals

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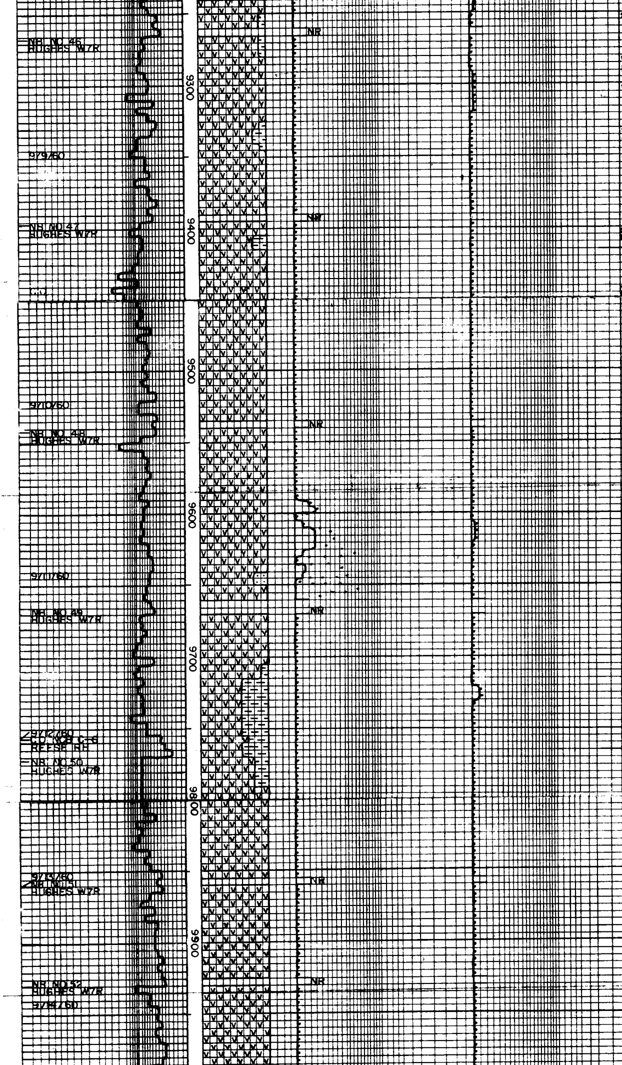


sltst, rd-brn volc.

volcs., lt. grn. silic., sdy.
pyrite, crystals

volcs., dk. gry., biot., sdy.

sltst., rd-brn. volc.
ash, rd-brn to lt gry

volcs., multi-col., congl.

abund. calcite

abund. crystals
sltst brn volc

volcs multi-col sdy ashy $ crystalline

volcs., lt $ dk gry congl

volcs., lt. grn. xln.

volcs. multi-col. silic. congl.
abund. crystals $ pyrite

SURVEY 3° 45'
volcs., lt gry. congl., xln.

calcite

volcs. dk. gry. congl., slty.

WT 66.5 PH 8.0
VIS 40 SAL 100 p.p.m
WL 16 TEMP 142°
FC 2 SD 1/2 %

sdst. gry. slty., abund crystals

SURVEY 4°

sltst rd-brn volc w/frags of
blue volcs

WT 66 PH 8.0
VIS 42 SAL 100 ppm
WL 19.5 TEMP 138°
FC 2 SD 1/2 %

C-6 (9757'-9772') REC 7'
GRY-GRN & RD-BRN VOLC
CONGL. NO SHOWS

volcs gry-grn congl

volcs dk gry xln $ congl

volcs multi-col xln, slty $ congl

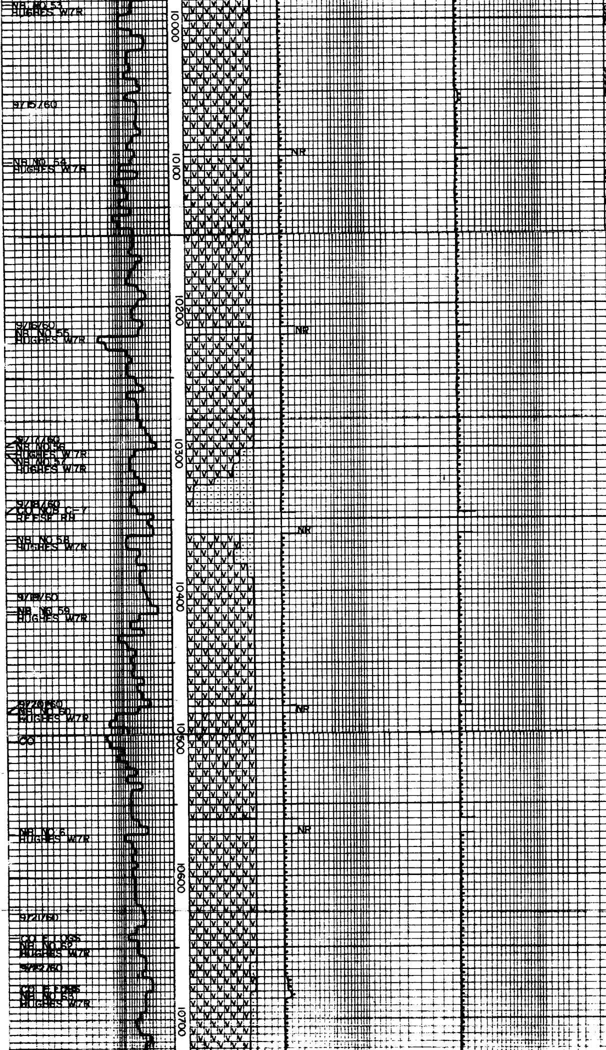
WT 66.5 PH 8.0
VIS 38 SAL 100 ppm
WL 19.5 TEMP 146°
FC 2 SD 1/2 %

pyrite

volcs gry $ gry-grn, xln, sdy
congl

SURVEY 4° 30'

WT 66.5 PH 8.0
VIS 48 SAL 100 ppm
WL 17 TEMP 148°
FC 2 SD 1/2 %



calcite $ pyrite
volcs dk gry congl sdy, xln
blk basalt frags

WT 66·5 PH 8·0
VIS 40 SAL 100 ppm
WL 19·8 TEMP 153°
FC 2 SD 1/2°

volcs grn $ gry slty, sdy, pyrite

volcs gry $ gry-grn congl, xln
sdy pyritic

cse frags of qtz

volcs, gry $ grn. slty, sdy.
ashy

abund calcite crystals

WT 70 PH 8·0
VIS 45 SAL 100 ppm
WL 24 TEMP 141°
FC 2 SD 1/2 %

volcs multi-col xln sdy congl

DRLING ON JUNK
sdstone vfg white, ashy $ grn
silic

WT 69 PH 8·0
VIS 55 SAL 100 ppm
WL 24·7 TEMP 144°
FC 3 SD 1/2 %

C-7 (10,345'-10,363') REC 5'
VOLC CONGL GRY-GRN W/
RD GRY & GRN VOLC ROCKS
INCLUDED. NO SHOWS

volcs, dk.grn. $ gry congl, sdy,
pyritic

SURVEY 4°30'

volc ash, abund crystals

volcs, gry $ gry-grn. congl.
sdy.

volcs., multi-col. ashy, slty, sdy,
lt grn. xln.

volcs gry slty, sdy, congl.
abund crystals, pyrite $ calcite

WT 66.5 PH 8.0
VIS 43 SAL 100 p.p.m
WL 30 TEMP 150°
FC 3 SD 1/2 %

trs. of v.fn. gn. grn. sdst

SURVEY 5° 30'

volcs, gry $ gry-grn. xln, congl
very sdy.

WT 66.5 PH 8.0
VIS 45 SAL 100 p.p.m
WL 32 TEMP 148°
FC 3 SD 1/2 %

volcs, gry $ gry.-grn sdy
congl., xln

sdst. wh.-gry. v. fn. gn.

VICE, Box 146, VENTURA, CALIF.
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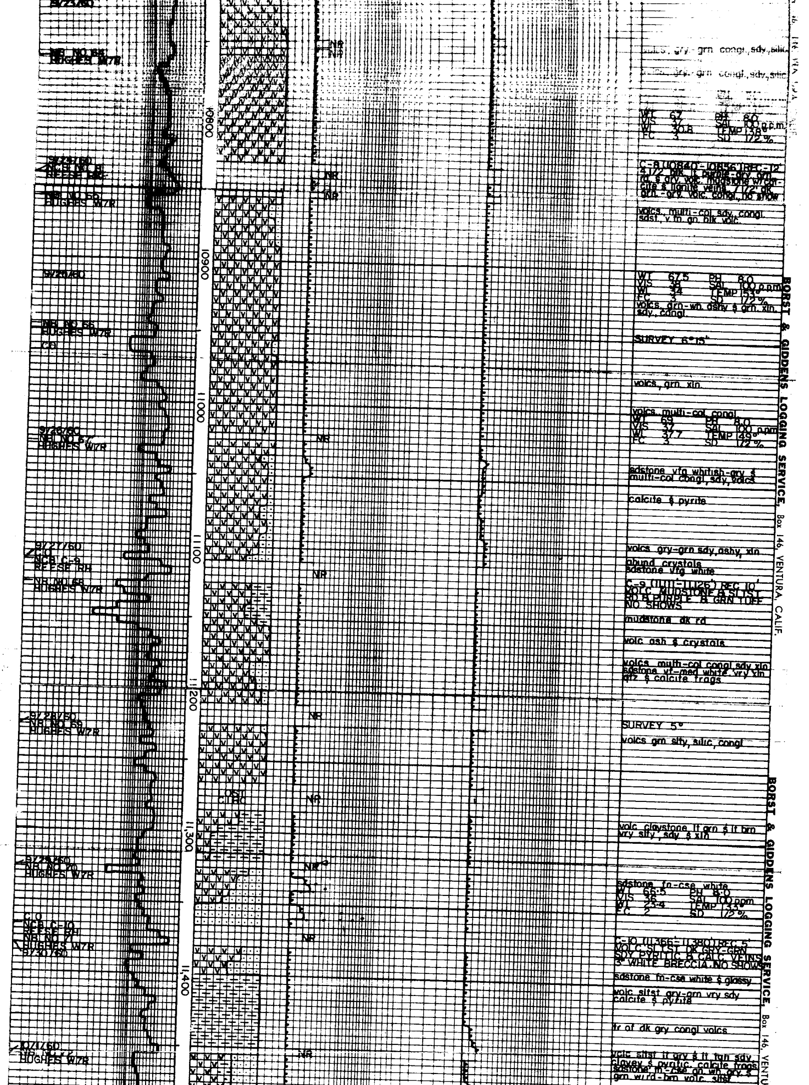


volcs, gry-grn congl, sdy, silic.

volcs, gry-grn congl, sdy, silic

WT 67 PH 8.0
VIS 37 SAL 100 p.p.m.
WL 30.8 TEMP 138°
FC 3 SD 172 %

C-8 (10840'-10856') REC 12' 4 1/2' blk, lt purple-gry, grn, rd, & gry volc. mudstone w/calcite & lignite veins, 7 1/2' dk grn-gry volc. congl, no show

volcs, multi-col sdy, congl. sdst, v fn gn blk volc.

WT 67.5 PH 8.0
VIS 38 SAL 100 p.pm
WL 34 TEMP 153°
FC 3 SD 172 %

volcs, grn-wh ashy & grn xln, sdy, congl.

SURVEY 6°15'

volcs, grn xln

volcs, multi-col congl.

WT 69 PH 8.0
VIS 37 SAL 100 p.pm
WL 37.7 TEMP 149°
FC 3 SD 172 %

sdstone vfg whitish-gry & multi-col congl, sdy, volcs

calcite & pyrite

volcs gry-grn sdy, ashy, xln

abund crystals

sdstone vfg white

C-9 (11111'-11126') REC 10' VOLC. MUDSTONE & SLTST RD & PURPLE & GRN TUFF NO SHOWS

mudstone dk rd

volc ash & crystals

volcs multi-col congl sdy xln sdstone vf-med white vry xln qtz & calcite frags

SURVEY 5°

volcs grn slty, silic, congl

volc claystone lt grn & lt brn vry slty, sdy & xln

sdstone fn-cse white

WT 66.5 PH 8.0
VIS 36 SAL 100 ppm
WL 23.4 TEMP 133°
FC 2 SD 172 %

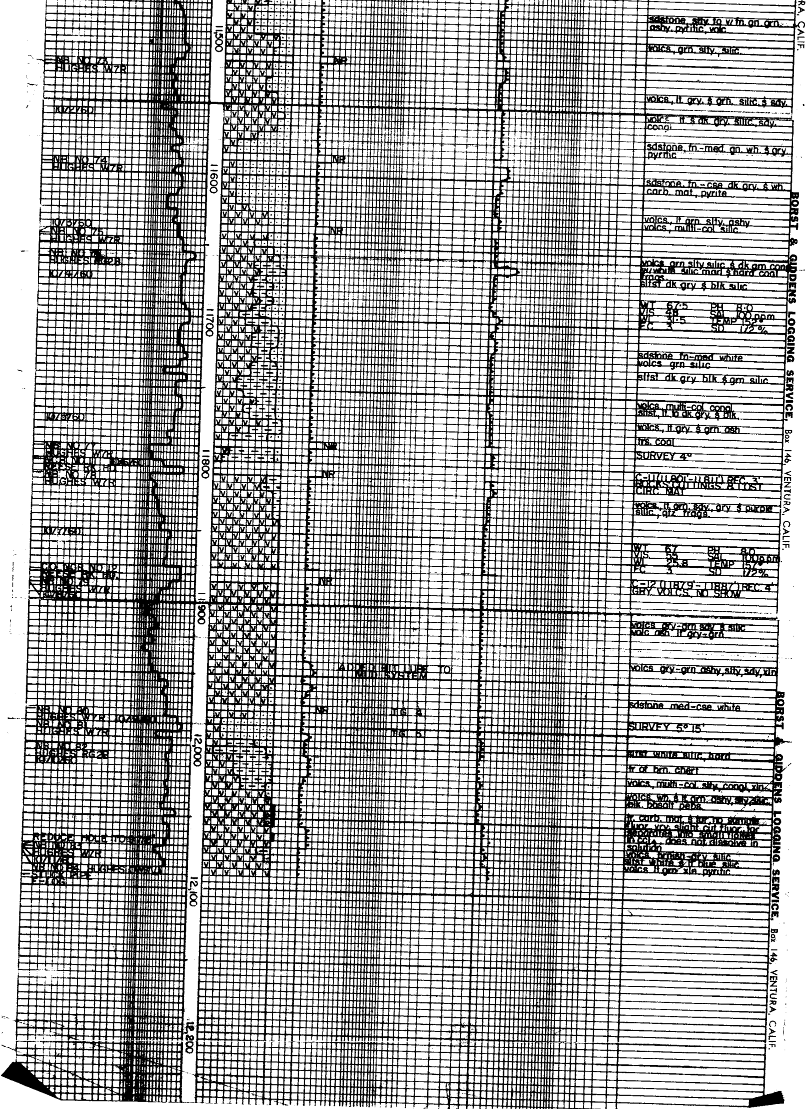
C-10 (11366'-11380') REC 5' VOLC. SLTST DK GRY-GRN SDY PYRITIC & CALC. VEINS 3" WHITE BRECCIA. NO SHOWS

sdstone fn-cse white & glossy

volc sltst gry-grn vry sdy calcite & pyrite

tr of dk gry congl volcs

volc sltst lt gry & lt tan sdy, clayey & pyritic, calcite frags sdstone fn-cse gn wh gry & grn w/rd-brn volc. sltst



NB NO 73
HUGHES W7R

1072760

NB NO 74
HUGHES W7R

1073760
NB NO 75
HUGHES W7R

NB NO 76
HUGHES RG2B

1074760

1075760

NB NO 77
HUGHES W7R
MCB NO 11 1076760
REESE RK HD
NB NO 78
HUGHES W7R

1077760

COL NCB NO 12
REESE RK HD
NB NO 79
HUGHES W7R
1078760

NB NO 80
HUGHES W7R 1079760
NB NO 81
HUGHES W7R

NB NO 82
HUGHES RG2R
1071060

REDUCE HOLE TO 8 7/8"
NB NO 83
HUGHES W7R
1071760
NB NO 84 HUGHES OWSV
STUCK PIPE
E-LOG

ADDED BIT LUBE TO
MUD SYSTEM

sdstone, slty to v/ fn. gn. grn.
ashy, pyritic, volc

volcs., grn. slty., silic.

volcs., lt. gry. $ grn. silic. $ sdy.

volcs. lt $ dk gry. silic., sdy.
congl

sdstone, fn.-med. gn. wh. $ gry.
pyritic

sdstone, fn.-cse dk gry. $ wh.
carb. mat., pyrite

volcs., lt grn. slty. ashy
volcs., multi-col. silic.

volcs grn slty silic $ dk grn cong
w/white silic marl $ hard coal
frags.
sltst dk gry $ blk silic

WT	67.5	PH	8.0
VIS	48	SAL	100 ppm
WL	31.5	TEMP	152°
FC	3	SD	172 %

sdstone fn-med white
volcs grn silic

sltst dk gry blk $ grn silic

volcs., multi-col. congl.
sltst, lt. to dk gry. $ blk.

volcs., lt gry $ grn. ash

trs. coal

SURVEY 4°

C-11 (11,801'-11,811') REC. 3'
ROCKS CUTTINGS & LOST
CIRC. MAT

volcs., lt. grn. sdy., gry $ purple
silic., qtz frags.

WT	67	PH	8.0
VIS	55	SAL	100 ppm
WL	25.8	TEMP	157°
FC	3	SD	172%

C-12 (11879'-11887') REC. 4'
GRY VOLCS, NO SHOW

volcs gry-grn sdy $ silic
volc ash lt gry-grn

volcs gry-grn ashy, slty, sdy, xln

sdstone med-cse white

SURVEY 5° 15'

sltst white silic, hard

tr of brn. chert

volcs., multi-col. slty, congl., xln

volcs wh. $ lt grn. ashy, slty, silic.
blk. basalt pebs.

tr. carb. mat. $ tar, no sample
fluor, vry. slight cut fluor, tar
separates into small flakes
in CCl_4, does not dissolve in
solution
volcs. brnish-gry silic
sltst white $ lt blue silic
volcs lt grn xln pyritic

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