WELL	WATZEK, ET AL #30-1 (API# 007-00004)
COMPANY	QUINTANA PETROLEUM CORP.
AREA	VESPER SCHOOL AREA
LOCATION	1769'S & 3935'W OF NE CORN SEC.30;T6N;R6W; WBKM
COUNTY, STATE	CLATSOP COUNTY, OREGON

J. M. TROTTER

- *W E G E* -

WESTERN GEO-ENGINEERS

"A SERVICE TO THE OIL AND GAS INDUSTRY"

RECEIVED-PTLD
JAN 26 1981
DEPT OF GEOLOGY & MINERAL

LITHOLOGY SYMBOLS

⊡	☐	⊟	⊟	Ⓞ	■	V	X	┘	◻	A	☐
Sand	Clay and Shale	Siltst.	Sandy Siltst.	Conglomerate	Lignite or Coal	Volcanic	Intrusive	Salt	Limest.	Chert	

REMARKS

WELL ELEV. GL. 870.7'
KB. 884.3'
SALINITY IN PPM CL⁻
FILTRATE IN CC/ 30 MIN.
GAS TRAP AGITATOR TYPE
MUD LIGNOSULFONATE (BAROID)

TAYDOR DRILLING RIG#4

LEGEND

MUD DATA

W WEIGHT
V VISCOSITY
F FILTRATE
FC FILTER CAKE
SD SAND IN %

S SALINITY
R RESISTIVITY
RF FILTRATE RESISTIVITY

BIT DATA

NB NEW BIT
RRB RERUN BIT

CB CORE BIT
WLCB WIRE LINE CB

OTHER DATA

TG TRIP GAS
CG CONNECTION GAS
C CARBIDE GAS

CR CIRCULATE RETURNS
NR NO RETURN
DST DRILL STEM TEST
[DST INTERVAL
] CORE INTERVAL

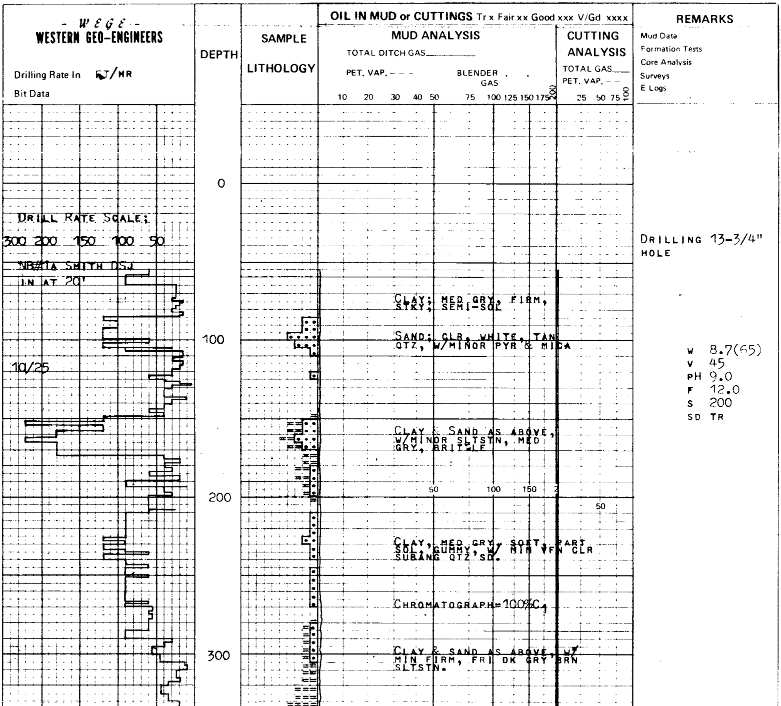
CASING

9-5/8" TO 796'
TO
TO

DATE 10/24/80 to 12/27/80

DEPTH 55' to 7069'

ENGINEERS FIELDER
IRWIN
ARMSTRONG



DRILL RATE SCALE;
300 200 150 100 50

NB#1A SMITH DSJ
IN AT 20'

10/25

DRILLING 13-3/4" HOLE

CLAY; MED GRY, FIRM, STKY; SEMI-SOL

SAND; CLR, WHITE, TAN QTZ, W/MINOR PYR & MICA

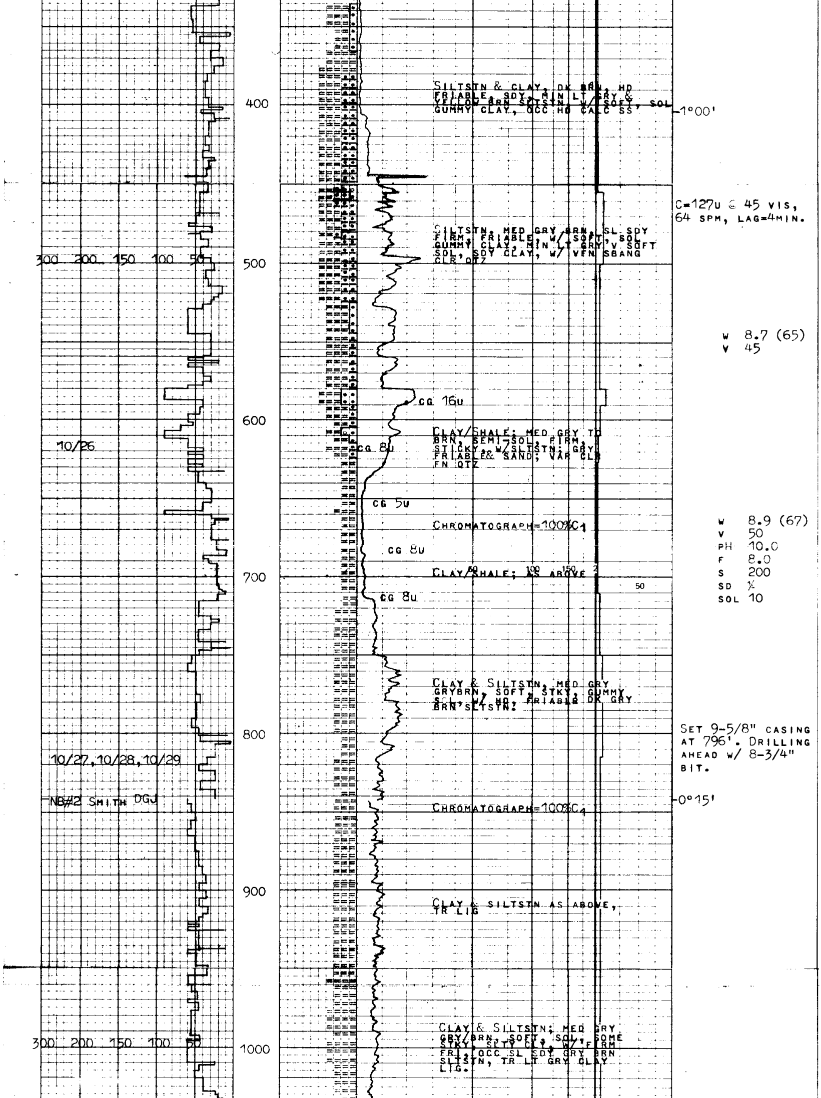
W 8.7(65)
V 45
PH 9.0
F 12.0
S 200
SD TR

CLAY & SAND AS ABOVE, W/MINOR SLTSTN, MED GRY, BRITTLE

CLAY, MED GRY, SOFT, PART SOL, GUMMY, W/ MIN VFN CLR SUBANG QTZ SD.

CHROMATOGRAPH=100%C_1

CLAY & SAND AS ABOVE, W/ MIN FIRM, FRI DK GRY BRN SLTSTN.



SILTSTN & CLAY, DK BRN, HD FRIABLE, SDY, MIN LT GRY & YELLOW BRN SLTSTN, W/ SOFT, SOL GUMMY CLAY, OCC HD CALC SS

C=127u @ 45 VIS, 64 SPM, LAG=4MIN.

SILTSTN, MED GRY BRN, SL SDY FIRM, FRIABLE, W/ SOFT, SOL GUMMY CLAY, MIN LT GRY V SOFT SOL, SDY CLAY, W/ VFN SBANG CLR QTZ

W 8.7 (65)
V 45

10/26

CLAY/SHALE: MED GRY TO BRN, SEMI-SOL, FIRM, STICKY, W/SLTSTN: GRY FRIABLE & SAND; VAR CLR FN QTZ

CHROMATOGRAPH=100%C1

W 8.9 (67)
V 50
PH 10.0
F 8.0
S 200
SD ¼
SOL 10

CLAY/SHALE; AS ABOVE

CLAY & SILTSTN, MED GRY GRYBRN, SOFT, STKY, GUMMY SOL, W/ HD, FRIABLE DK GRY BRN SLTSTN.

SET 9-5/8" CASING AT 796'. DRILLING AHEAD W/ 8-3/4" BIT.

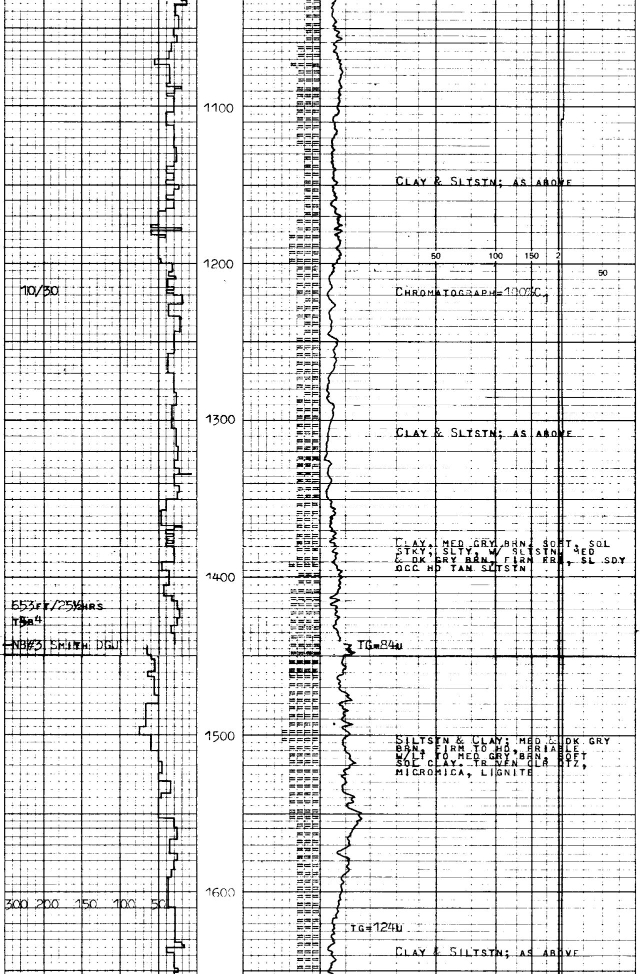
10/27, 10/28, 10/29

NB#2 SMITH DGJ

CHROMATOGRAPH=100%C1

CLAY & SILTSTN AS ABOVE, TR LIG

CLAY & SILTSTN; MED GRY GRY/BRN, SOFT, SOL, SOME STKY, SLTY CLY, W/ FIRM FRI, OCC SL SDY GRY BRN SLTSTN, TR LT GRY CLAY LIG.



CLAY & SLTSTN; AS ABOVE

10/30

CHROMATOGRAPH=100%C1

w 9.2 (69)
v 37
pH 10.5
F 12
S 350
SD ¼
SOL 6

CLAY & SLTSTN; AS ABOVE

w 9.0
v 39

CLAY, MED GRY BRN, SOFT, SOL STKY; SLTY, W/ SLTSTN, MED & DK GRY BRN, FIRM FRB, SL SDY OCC HD TAN SLTSTN

653FT/25½HRS
T5B4
NB#3 SMITH DGU

3°00'

TG=84u

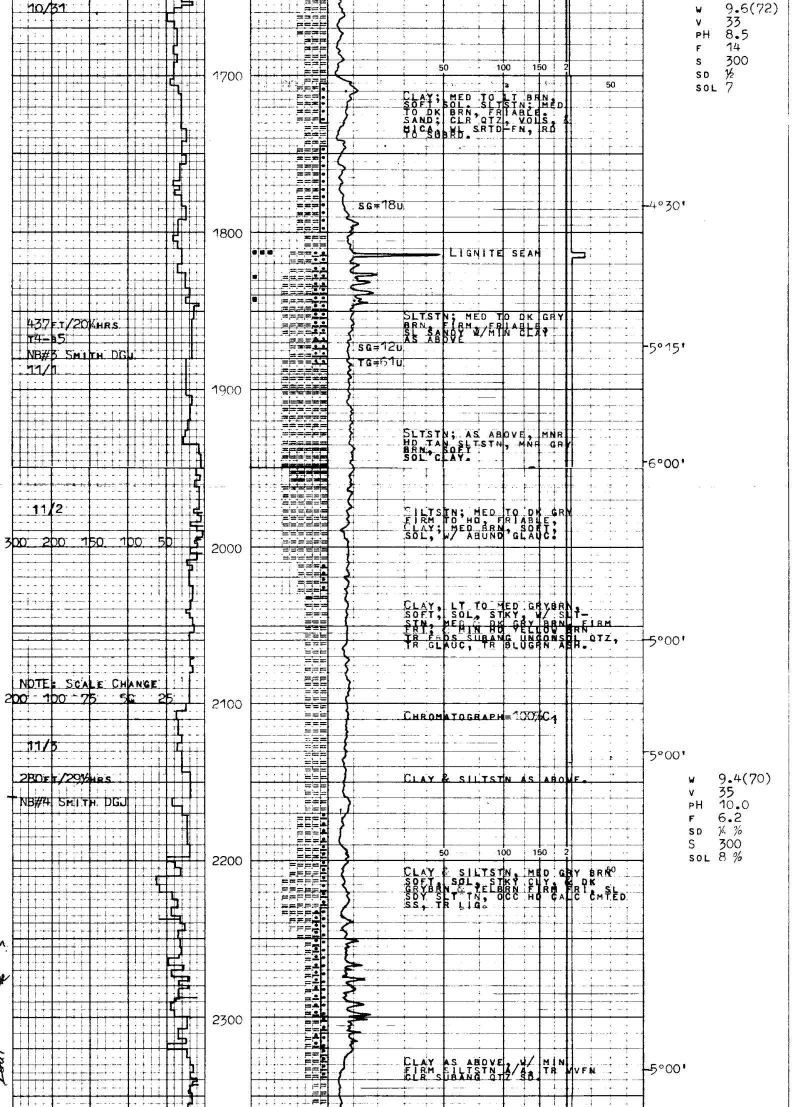
C=140u @ 39 VIS, 66SPM, LAG=7 MIN.

SILTSTN & CLAY: MED & DK GRY BRN, FIRM TO HD, FRIABLE W/LT TO MED GRY BRN, SOFT SOL CLAY. TR VFN CLR QTZ, MICROMICA, LIGNITE

TG=124u

PULLED OUT OF HOLE TO UNPLUG JETS

CLAY & SILTSTN; AS ABOVE



10/31

W	9.6(72)
V	33
pH	8.5
F	14
S	300
SD	½
SOL	7

CLAY; MED TO LT BRN, SOFT SOL. SLTSTN; MED TO DK BRN, FRIABLE. SAND; CLR QTZ, VOLS. & MICA, WL SRTD-FN, RD TO SUBRD.

SG=18U

LIGNITE SEAM

437FT/20¼HRS
T4-B5
NB#3 SMITH DGJ
11/1

SLTSTN; MED TO DK GRY BRN, FIRM, FRIABLE, SL SANDY W/MIN CLAY AS ABOVE

SG=12U
TG=61U

SLTSTN; AS ABOVE, MNR HD TAN SLTSTN, MNR GRY BRN, SOFT SOL CLAY.

11/2

SILTSTN; MED TO DK GRY FIRM TO HD, FRIABLE, CLAY; MED BRN, SOFT, SOL, W/ ABUND GLAUC.

CLAY, LT TO MED GRYBRN, SOFT, SOL, STKY, W/ SLTSTN, MED & DK GRY BRN, FIRM FRI, & MIN HD YELLOW BRN TR FROS SUBANG UNCONSOL QTZ, TR GLAUC, TR BLUGRN ASH.

NOTE: SCALE CHANGE

CHROMATOGRAPH=100%C_1

11/3

280FT/29½HRS
NB#4 SMITH DGJ

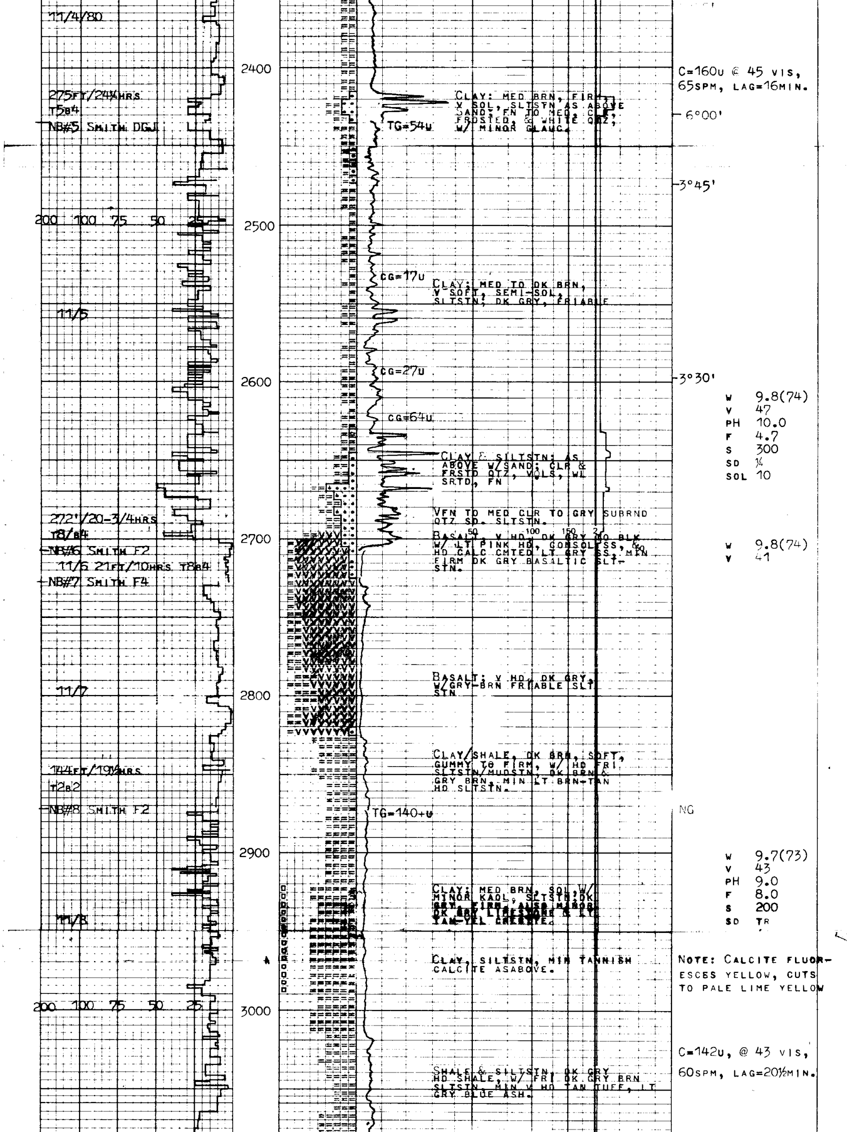
CLAY & SILTSTN AS ABOVE.

W	9.4(70)
V	35
pH	10.0
F	6.2
SD	¼ %
S	300
SOL	8 %

CLAY & SILTSTN, MED GRY BRN SOFT, SOL, STKY CLY, & DK GRYBRN & YELBRN FIRM FRI, SL SDY SLTSTN, OCC HD CALC CMTED SS, TR LIG.

CLAY AS ABOVE, W/ MIN FIRM SILTSTN A/A, TR VVFN CLR SUBANG QTZ SD.

Quin
Watzke



C=160u @ 45 VIS, 65SPM, LAG=16MIN.

CLAY: MED BRN, FIRM, V SOL, SLTSTN AS ABOVE SAND: FN TO MED, CLR, FROSTED, & WHITE QTZ; W/ MINOR GLAUC.

CLAY: MED TO DK BRN, V SOFT, SEMI-SOL, SLTSTN: DK GRY, FRIABLE

W 9.8(74)
V 47
PH 10.0
F 4.7
S 300
SD ¼
SOL 10

CLAY & SILTSTN: AS ABOVE W/SAND: CLR & FRSTD QTZ, VOLS, WL SRTD, FN

VFN TO MED CLR TO GRY SUBRND QTZ SD. SLTSTN.

BASALT, V HD, DK GRY TO BLK W/ LT PINK HD, CONSOL SS, & HD CALC CMTED LT GRY SS, MIN FIRM DK GRY BASALTIC SLTSTN.

W 9.8(74)
V 41

BASALT: V HD, DK GRY, W/GRY-BRN FRIABLE SLTSTN

CLAY/SHALE, DK BRN, SOFT, GUMMY TO FIRM, W/ HD FRI SLTSTN/MUDSTN, DK BRN & GRY BRN, MIN LT BRN-TAN HD SLTSTN.

W 9.7(73)
V 43
PH 9.0
F 8.0
S 200
SD TR

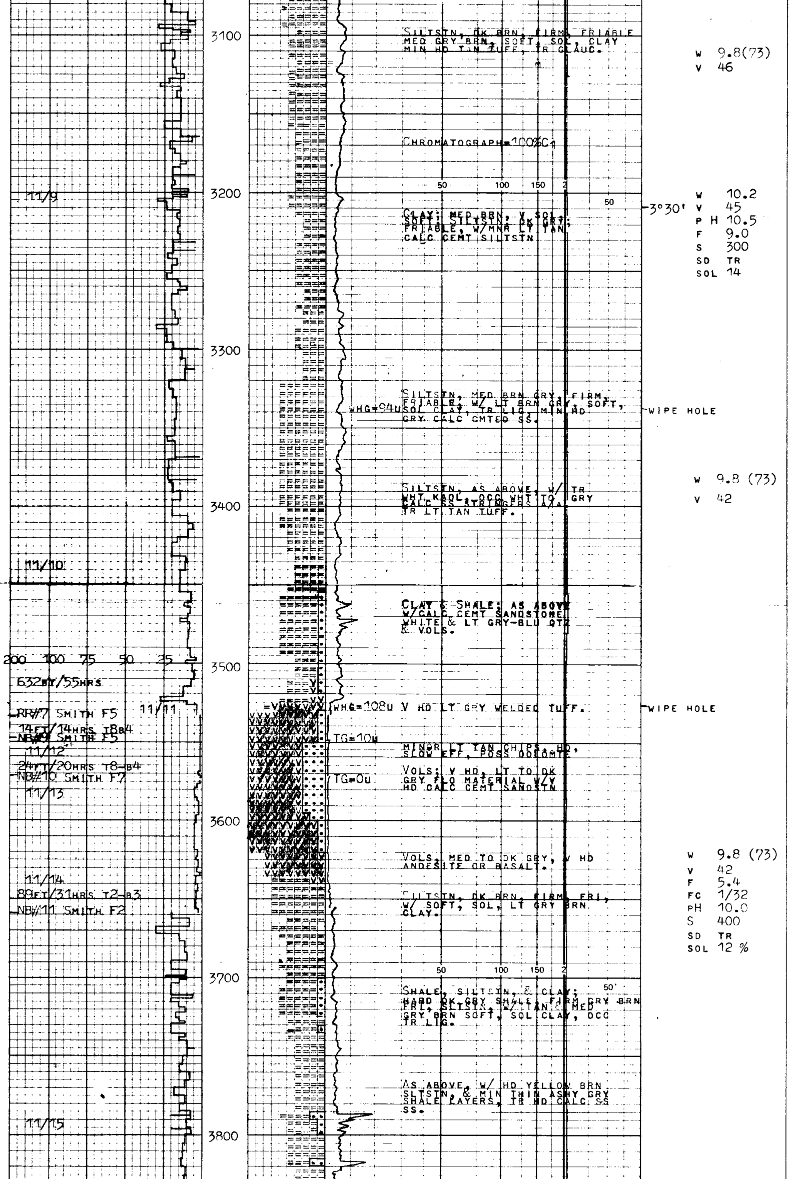
CLAY: MED BRN, SOL, W/ MINOR KAOL, SLTSTN: DK GRY, FIRM, ALSO MINOR DK GRY LIMESTONE & LT TAN-YEL CALCITE.

CLAY, SILTSTN, MIN TANNISH CALCITE ASABOVE.

NOTE: CALCITE FLUORESCES YELLOW, CUTS TO PALE LIME YELLOW

C=142U, @ 43 VIS, 60SPM, LAG=20½MIN.

SHALE & SILTSTN, DK GRY HD SHALE, W/ FRI DK GRY BRN SLTSTN, MIN V HD TAN TUFF, LT GRY BLUE ASH.



SILTSTN, DK BRN, FIRM, FRIABLE MED GRY BRN, SOFT, SOL, CLAY MIN HD TAN TUFF, TR GLAUC.

W 9.8(73)
V 46

CHROMATOGRAPH=100%C_1

CLAY; MED BRN, V SOL, SOFT; SILTSTN; DK GRY; FRIABLE, W/MNR LT TAN CALC CEMT SILTSTN

W 10.2
V 45
PH 10.5
F 9.0
S 300
SD TR
SOL 14

SILTSTN, MED BRN GRY, FIRM, FRIABLE, W/ LT BRN GRY, SOFT, SOL CLAY, TR LIG, MIN HD GRY CALC CMTED SS.

SILTSTN, AS ABOVE, W/ TR WHT KAOL, OCC WHT TO GRY CALC SS STRINGERS A/A TR LT TAN TUFF.

W 9.8 (73)
V 42

CLAY & SHALE; AS ABOVE W/CALC CEMT SANDSTONE WHITE & LT GRY-BLU QTZ & VOLS.

V HD LT GRY WELDED TUFF.

MINOR LT TAN CHIPS, HD, SLOW EFF, POSS DOLOMITE.

VOLS; V HD, LT TO DK GRY FLO MATERIAL W/V HD CALC CEMT SANDSTN

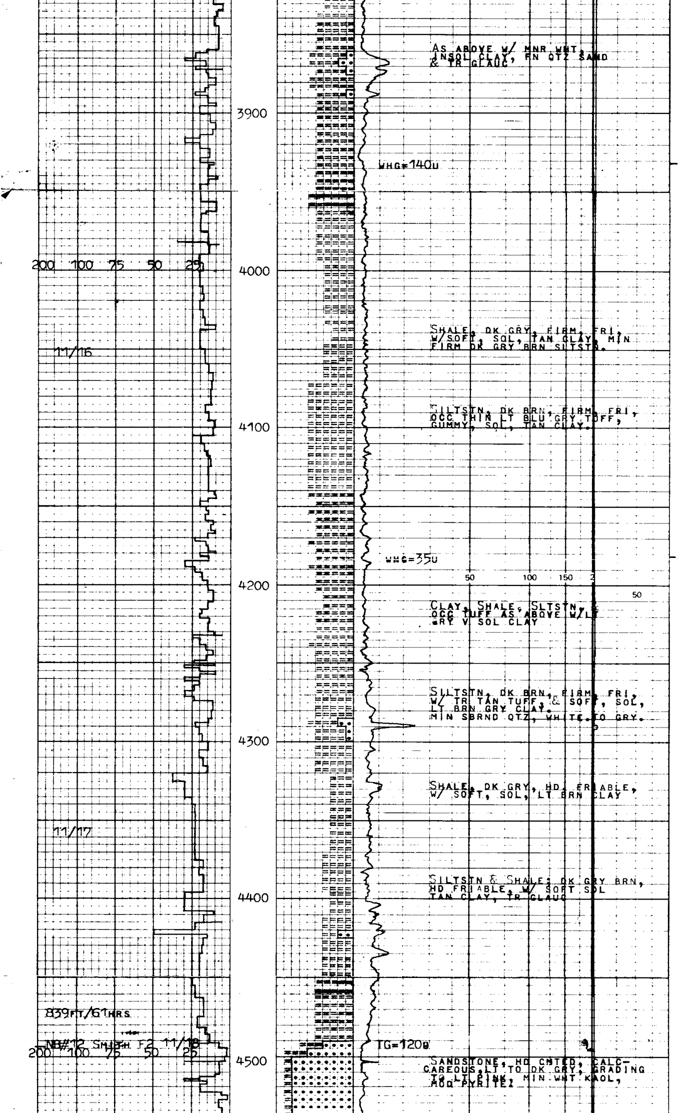
VOLS, MED TO DK GRY, V HD ANDESITE OR BASALT.

SILTSTN, DK BRN, FIRM, FRI, W/ SOFT, SOL, LT GRY BRN CLAY.

W 9.8 (73)
V 42
F 5.4
FC 1/32
PH 10.0
S 400
SD TR
SOL 12 %

SHALE, SILTSTN, & CLAY; HARD DK GRY SHALE, FIRM GRY BRN FRI, SLTSTN, W/ TAN & MED GRY BRN SOFT, SOL CLAY, OCC TR LIG.

AS ABOVE, W/ HD YELLOW BRN SLTSTN, & MIN THIN ASHY GRY SHALE LAYERS, TR HD CALC SS SS.



AS ABOVE W/ MNR WHT, INSOL CLAY, FN QTZ SAND & TR GLAUC,

W 10.1
V 45

WIPE HOLE

W 10.0
V 43

SHALE, DK GRY, FIRM, FRI, W/SOFT, SOL, TAN CLAY, MIN FIRM DK GRY BRN SILTSTN.

SILTSTN, DK BRN, FIRM, FRI, OCC THIN LT BLU GRY TUFF, GUMMY, SOL, TAN CLAY.

WIPE HOLE

W 10.1
V 44
PH 10.0
F 5.8
S 500
SD ¼
SOL 12

CLAY, SHALE, SLTSTN, & OCC TUFF AS ABOVE W/LT GRY V SOL CLAY

SILTSTN, DK BRN, FIRM, FRI, W/ TR TAN TUFF, & SOFT, SOL, LT BRN GRY CLAY. MIN SBRND QTZ, WHITE TO GRY.

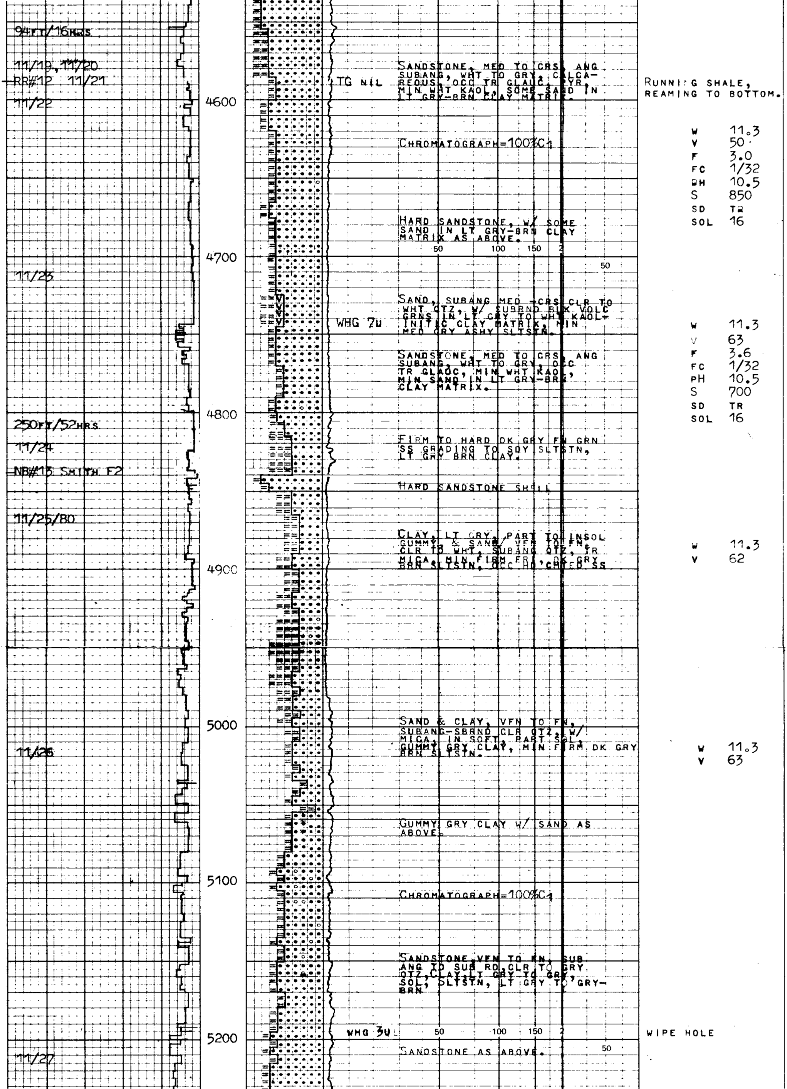
SHALE, DK GRY, HD, FRIABLE, W/ SOFT, SOL, LT BRN CLAY

SILTSTN & SHALE; DK GRY BRN, HD FRIABLE, W/ SOFT SOL TAN CLAY, TR GLAUC

W 10.0
V 45
F 5.4
FC 1/32
PH 10.5
S 500
SD TR
SOL 13 %

W 10.3
V 46
F 4.0
FC 1/32
PH 10.0
S 600
SD TR
SOL 14 %

SANDSTONE, HD CMTED, CALCAREOUS, LT TO DK GRY; GRADING TO LT PINK, MIN WHT KAOL, MOD PYRITE.



94FT/16HRS

11/19, 11/20

RR#12 11/21

11/22

LTG NIL

SANDSTONE, MED TO CRS, ANG SUBANG, WHT TO GRY, CALCAREOUS, OCC TR GLAUC, PYR, MIN WHT KAOL, SOME SAND IN LT GRY-BRN CLAY MATRIX.

RUNNING SHALE, REAMING TO BOTTOM.

CHROMATOGRAPH=100%C_1

W	11.3
V	50
F	3.0
FC	1/32
PH	10.5
S	850
SD	TR
SOL	16

HARD SANDSTONE, W/ SOME SAND IN LT GRY-BRN CLAY MATRIX AS ABOVE.

11/23

WHG 7U

SAND, SUBANG MED - CRS CLR TO WHT QTZ, W/ SUBRND BLK VOLC GRNS IN LT GRY TO WHT KAOLINITIC CLAY MATRIX, MIN MED GRY ASHY SLTSTN.

W	11.3
V	63
F	3.6
FC	1/32
pH	10.5
S	700
SD	TR
SOL	16

SANDSTONE, MED TO CRS, ANG SUBANG, WHT TO GRY, OCC TR GLAUC, MIN WHT KAOL, MIN SAND IN LT GRY-BRN CLAY MATRIX.

250FT/52HRS

11/24

FIRM TO HARD DK GRY FN GRN SS GRADING TO SDY SLTSTN, LT GRY BRN CLAY.

NB#13 SMITH F2

HARD SANDSTONE SHELL

11/25/80

CLAY, LT GRY, PART TO INSOL GUMMY, & SAND VFN TO FN, CLR TO WHT, SUBANG QTZ, TR MICA, MIN FIRM FRI, DK GRY BRN SLTSTN, OCC HD CMTED SS

W	11.3
V	62

SAND & CLAY, VFN TO FN, SUBANG-SBRND CLR QTZ, W/ MICA, IN SOFT, PART SOL, GUMMY GRY CLAY, MIN FIRM DK GRY BRN SLTSTN.

11/26

W	11.3
V	63

GUMMY GRY CLAY W/ SAND AS ABOVE.

CHROMATOGRAPH=100%C_1

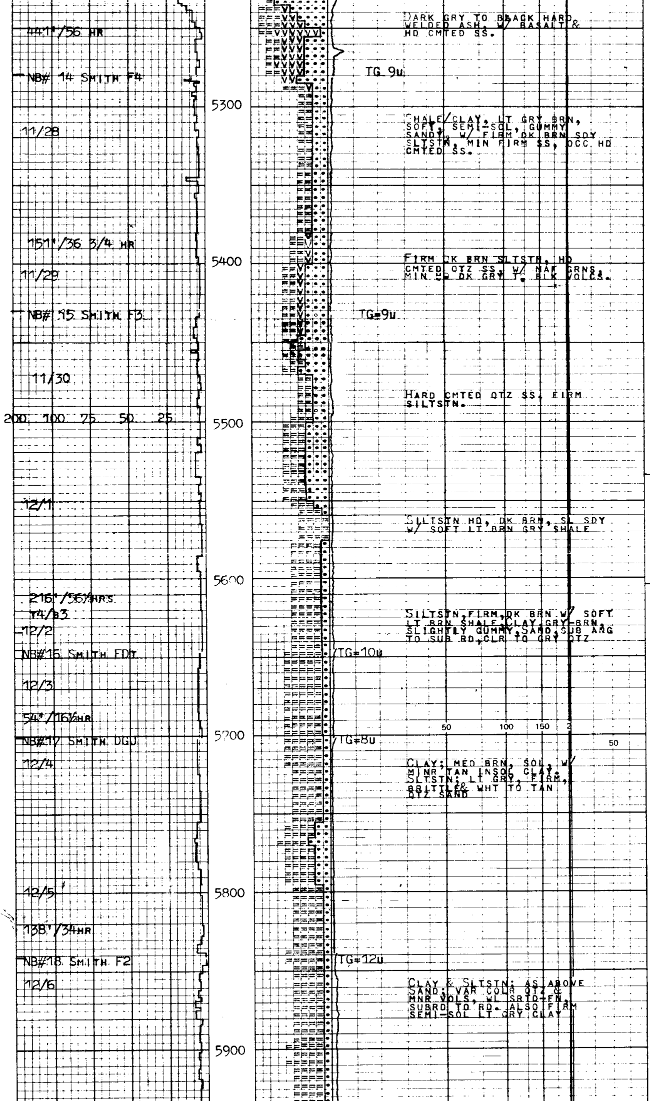
SANDSTONE, VFN TO FN, SUB ANG TO SUB RD, CLR TO GRY QTZ, CLAY, LT GRY TO GRY, SOL; SLTSTN, LT GRY TO GRY-BRN

WHG 3U

WIPE HOLE

11/27

SANDSTONE AS ABOVE.



DARK GRY TO BLACK HARD WELDED ASH, W/ BASALT & HD CMTED SS.

W 11.3
V 62

SHALE/CLAY, LT GRY BRN, SOFT, SEMI-SOL, GUMMY SANDY, W/ FIRM DK BRN SDY SLTSTN, MIN FIRM SS, OCC HD CMTED SS.

W 11.3
V 60
F 3.0
FC 2/32
S 500
SD 1 %
SOL 19 %

FIRM DK BRN SLTSTN, HD CMTED QTZ SS, W/ NAF GRNS, MIN [illegible] DK GRY T BLK VOLCS.

HARD CMTED QTZ SS, FIRM SILTSTN.

WIPE HOLE

W 11.3
V 62
F 3.1
FC 2/32
S 500
pH 10.4
SD 1 %
SOL 20 %

SILTSTN HD, DK BRN, SL SDY W/ SOFT LT BRN GRY SHALE

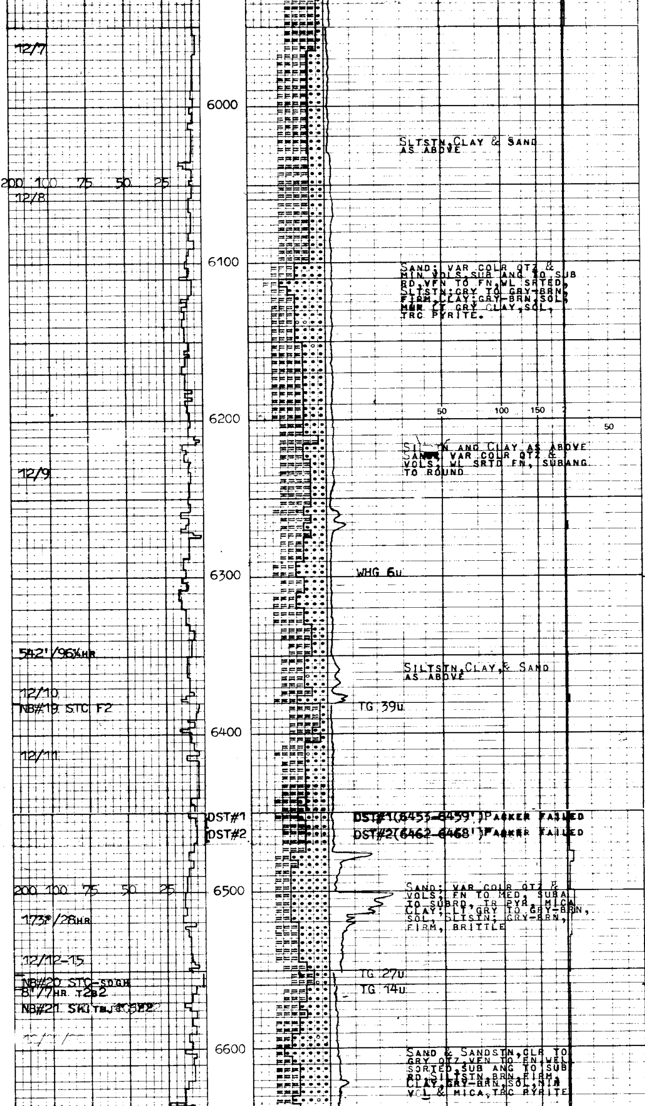
WIPE HOLE

SILTSTN, FIRM, DK BRN W/ SOFT LT BRN SHALE, CLAY, GRY-BRN, SLIGHTLY GUMMY, SAND, SUB ANG TO SUB RD, CLR TO GRY QTZ

CLAY; MED BRN, SOL, W/ MINR TAN INSOL CLAY. SLTSTN; LT GRY, FIRM, BRITTLE & WHT TO TAN QTZ SAND

W 11.3
V 60
pH 10.5
F 3.2
S 500
SD 1
SOL 20

CLAY & SLTSTN; AS ABOVE SAND; VAR COLR QTZ & MNR VOLS, WL SRTD-FN, SUBRD TO RD. ALSO FIRM SEMI-SOL LT GRY CLAY



W	11.3
V	62
pH	10.5
F	3.1
S	500
SD	1
SOL	20

SLTSTN, CLAY & SAND AS ABOVE

SAND: VAR COLR QTZ & MIN VOLS, SUB ANG TO SUB RD, VFN TO FN, WL SRTED, SLTSTN: GRY TO GRY-BRN, FIRM, CLAY: GRY-BRN, SOL, MNR LT GRY CLAY, SOL, TRC PYRITE.

W	11.3
V	60
pH	10.5
F	3.0
S	500
SD	1
SOL	19

SILTSTN AND CLAY AS ABOVE
SAND; VAR COLR QTZ & VOLS, WL SRTD FN, SUBANG TO ROUND

WIPE HOLE

SILTSTN, CLAY, & SAND AS ABOVE

W	11.3
V	65

DST#1(6453-6459')PACKER FAILED
DST#2(6462-6468')PACKER FAILED

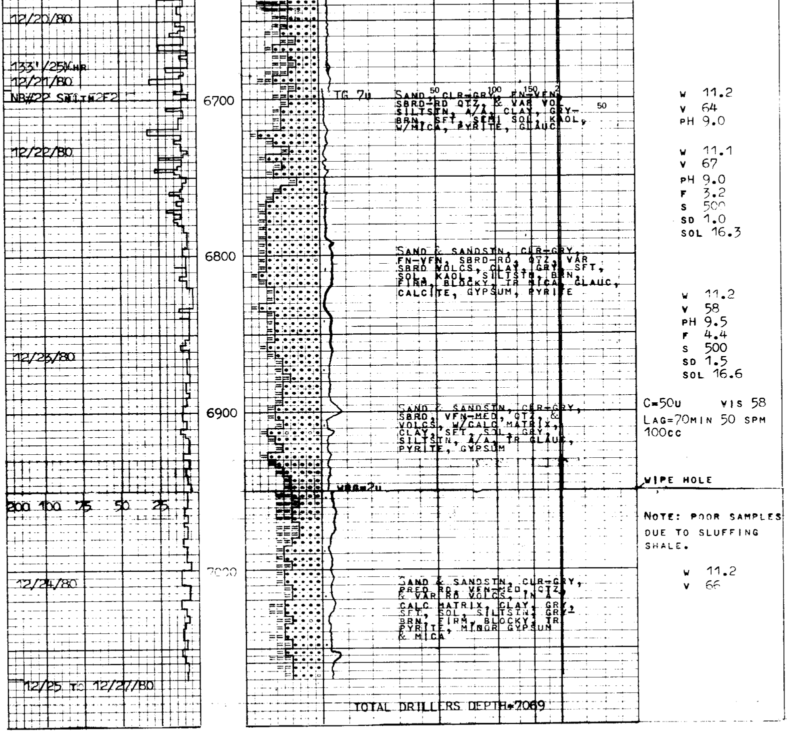
12-15 TO 12-20 USED FOR OPEN HOLE TESTING

SAND; VAR COLR QTZ & VOLS; FN TO MED, SUBA TO SUBRD, TR PYR, MICA CLAY; LT GRY TO GRY-BRN, SOL, SLTSTN; GRY-BRN, FIRM, BRITTLE

RAN SCHLUMBERGER: DIFL, FDC-CNL-GR, DIP METER, VELOCITY SURVEY, RFT, SWC
RAN MILL TOOL ON SWS LEFT IN HOLE

W	11
V	59

SAND & SANDSTN, CLR TO GRY QTZ, VFN TO FN, WEL SORTED, SUB ANG TO SUB RD, SILTSTN, BRN, FIRM, CLAY, GRY-BRN, SOL, MIN VOL & MICA, TRC PYRITE



SAND, CLR-GRY, FN-VFN, SBRD-RD QTZ, & VAR VOL SILTSTN, A/A, CLAY, GRY-BRN, SFT, SEMI SOL, KAOL, W/MICA, PYRITE, GLAUC

w 11.2
v 64
pH 9.0

w 11.1
v 67
pH 9.0
F 3.2
s 500
sd 1.0
sol 16.3

SAND & SANDSTN, CLR-GRY, FN-VFN, SBRD-RD, QTZ, VAR SBRD VOLCS, CLAY, GRY, SFT, SOL, KAOL, SILTSTN, BRN, FIRM, BLOCKY, TR MICA, GLAUC, CALCITE, GYPSUM, PYRITE

w 11.2
v 58
pH 9.5
F 4.4
s 500
sd 1.5
sol 16.6

SAND & SANDSTN, CLR-GRY, SBRD, VFN-MED, QTZ, & VOLCS, W/CALC MATRIX, CLAY, SFT, SOL, GRY, SILTSTN, A/A, TR GLAUC, PYRITE, GYPSUM

C=50u VIS 58
LAG=70MIN 50 SPM
100cc

WIPE HOLE

NOTE: POOR SAMPLES DUE TO SLUFFING SHALE.

w 11.2
v 66

SAND & SANDSTN, CLR-GRY, PRED RD, VFN-MED, QTZ, & VAR RD VOLCS, IN A CALC MATRIX, CLAY, GRY, SFT, SOL, SILTSTN, GRY, BRN, FIRM, BLOCKY, TR PYRITE, MINOR GYPSUM & MICA

TOTAL DRILLERS DEPTH=7069

QUINTANA PETROLEUM CORP. "WATZEK, ET & AL #30-1";, VESPER SCHOOL AREA CLATSOP COUNTY, OREGON
1769'S & 3935'W OF NE CORNER OF SEC. 30; T6N; R6W, WB&M
(API# 007-00004), KB.=884.3', GL.=870.7'