WELL	"WOLVERTON 13-31"
COMPANY	AMERICAN QUASAR PETROLEUM
AREA	JEFFERSON(EAST ALBANY)
LOCATION	1100'S & 1800'W OF NE CORN. SEC. 13,T10S;R3W
COUNTY, STATE	MARION COUNTY,OREGON

- *WEGE* -
WESTERN GEO-ENGINEERS

"A SERVICE TO THE OIL AND GAS INDUSTRY"

CEIVED
NOV 9 1981
DEPT OF GEOLOG

LITHOLOGY SYMBOLS

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

REMARKS

WELL ELEV.	GL. 234.28' KB. 245.28'
SALINITY IN	PPM CL-
FILTRATE IN	CC/30 MIN.
GAS TRAP	AGITATOR TYPE
MUD	BARIOD DRISPAK/KCL

PAUL GRAHAM RIG #1

CASING

8-7/8" TO 895'
4-1/2" TO 2498'
TO

LEGEND

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

- S SALINITY
- R RESISTIVITY
- RF FILTRATE RESISTIVITY

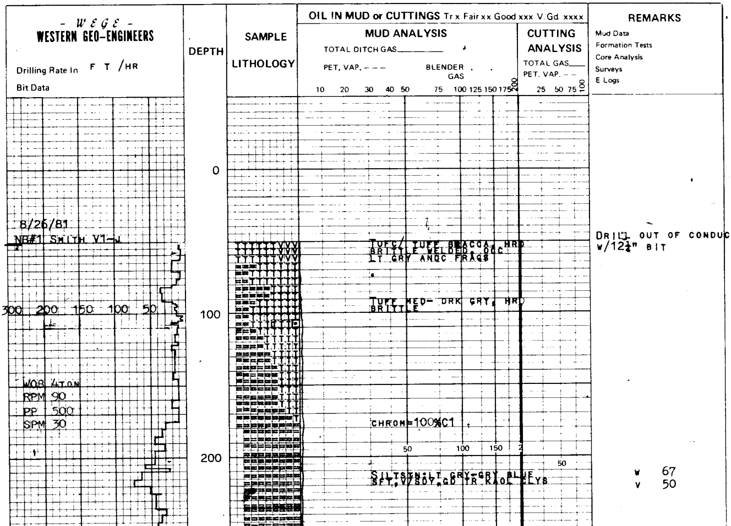
BIT DATA
- NB NEW BIT
- RRB RERUN BIT

- 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

DATE 8/26/81 TO 9/30/81 DEPTH 50' TO 4555' ENGINEERS LEE FIELDER
ROY BUTLER
JOHN KOLARIK



8/26/81
NB#1 SMITH V1-J

WOB 4TON
RPM 90
PP 500
SPM 30

TUFC/ TUFF BRACCA, HRD BRITTLE WELDED, OCC LT GRY ANDC FRAGS

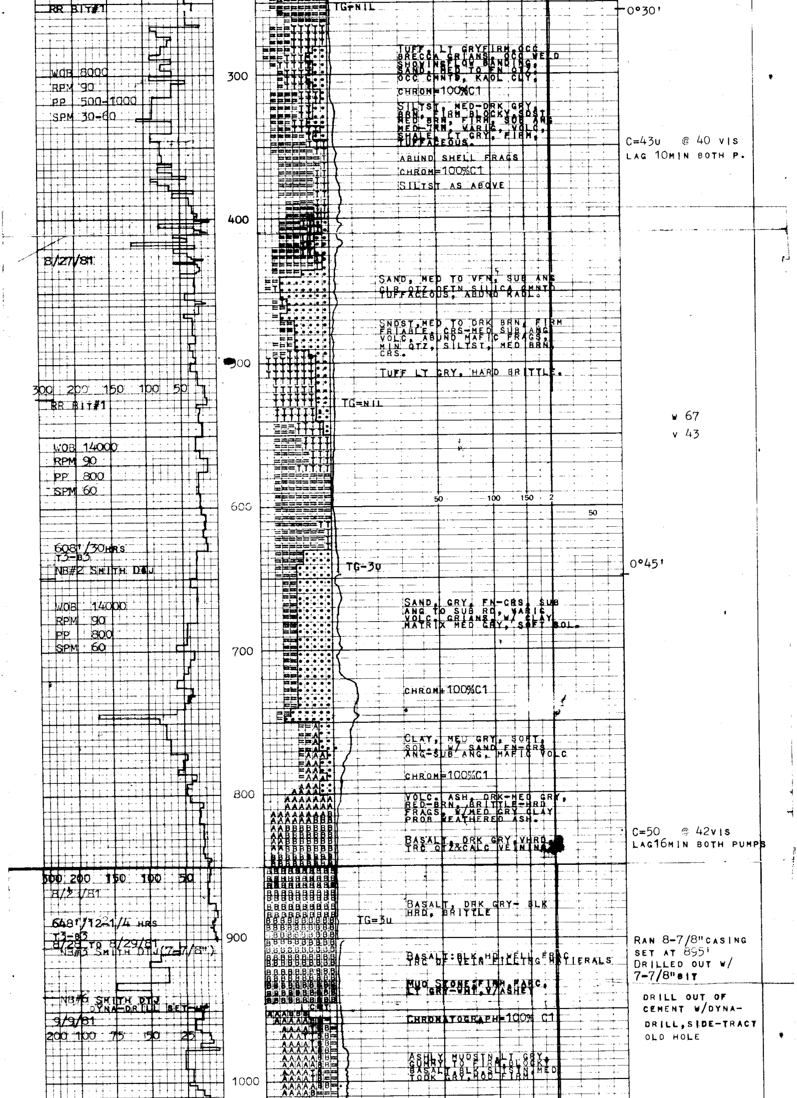
TUFF MED- DRK GRY, HRD BRITTLE

CHROM=100%C1

SILTSTN:LT GRY-GRY BLUE SFT,V/SDY,GD TR KAOL CLYS

DRILL OUT OF CONDUC. W/12¼" BIT

W 67
V 50



WOB 8000
RPM 90
PP 500-1000
SPM 30-60

TUFF, LT GRYFIRM,OCC BRECCA GRIANS, OCC WELD SHOWINGFLOW BANDING, SAND, MED TO FN QTZ, OCC CMNTD, KAOL CLY,

CHROM=100%C1

SILTST, MED-DRK GRY, BRN, FIRM BLOCKY,SDST MED BRN, FIRM, SUB ANG MED-7RN, VARIC, VOLC, SHALE, LT GRY, FIRM, TUFFACEOUS.

C=43u @ 40 VIS
LAG 10MIN BOTH P.

ABUND SHELL FRAGS

CHROM=100%C1

SILTST AS ABOVE

SAND, MED TO VFN, SUB ANG CLR QTZ,DETN SILICA CMNTD TUFFACEOUS, ABUND KAOL.

SNDST,MED TO DRK BRN, FIRM FRIABLE, CRS-MED SUB ANG VOLC, ABUND MAFIC FRAGS, MIN QTZ, SILTST, MED BRN, CRS.

TUFF LT GRY, HARD BRITTLE.

WOB 14000
RPM 90
PP 800
SPM 60

WOB 14000
RPM 90
PP 800
SPM 60

SAND, GRY, FN-CRS, SUB ANG TO SUB RD, VARIC VOLC, GRIANS, W/ CLAY MATRIX MED GRY, SOFT SOL.

CHROM=100%C1

CLAY, MED GRY, SOFT, SOL., W/ SAND FN-CRS ANG-SUB ANG, MAFIC VOLC

CHROM=100%C1

VOLC. ASH, DRK-MED GRY, RED-BRN, BRITTLE-HRD FRAGS, W/MED GRY CLAY PROB WEATHERED ASH.

BASALT, DRK GRY,VHRD, TRC QTZ&CALC VEINING

C=50 @ 42VIS
LAG16MIN BOTH PUMPS

BASALT, DRK GRY- BLK HRD, BRITTLE

648'/12-21/4 HRS
T3-B3
8/28 TO 8/29/81
NB#3 SMITH DTJ(7-7/8")

RAN 8-7/8"CASING SET AT 895'
DRILLED OUT W/ 7-7/8"BIT

BASALT:BLK,HD,WELL FRAC TRC OF VEIN FILLING MATIERALS

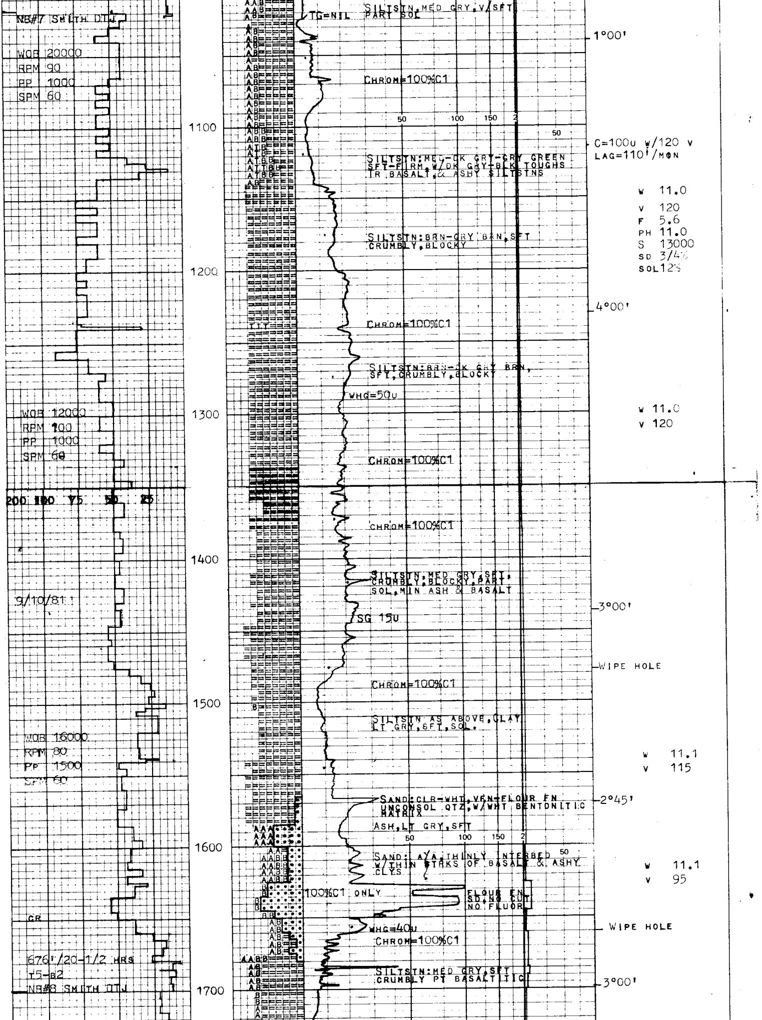
MUD STONE:FIRM,FARC, LT GRY-WHT,V/ASHEY

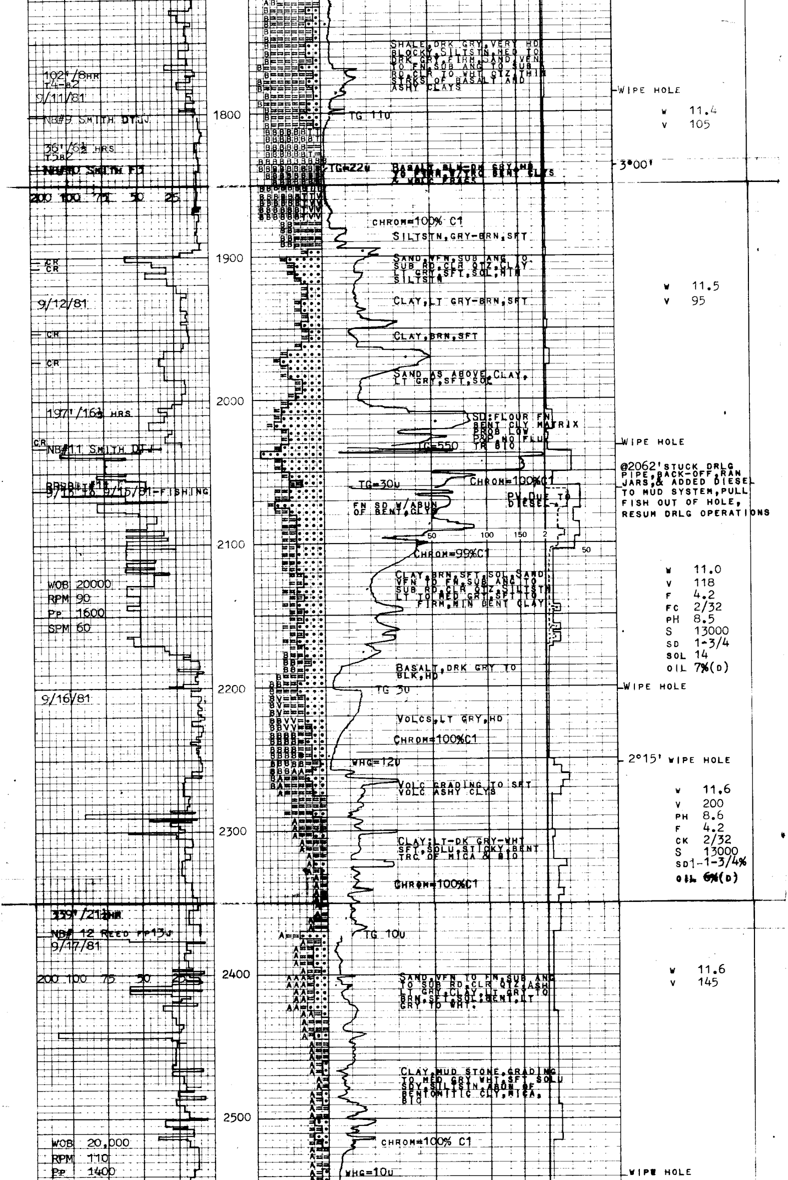
NB#6 SMITH DTJ
DYNA-DRILL SET
9/9/81

DRILL OUT OF CEMENT W/DYNA-DRILL,SIDE-TRACT OLD HOLE

CHROMATOGRAPH=100% C1

ASHLY MUDSTN,LT GRY, GUMMY TO FIRM,BLOCKY BASALT,BLK,SLISTN,MED TODK GRY,MOD FIRM





102'/8HR
T4-B2
9/11/81

NB#9 SMITH DTJJ

36'/6½ HRS
T5B2

NB#10 SMITH F3

SHALE,DRK GRY,VERY HD BLOCKY,SILTSTN,MED TO DRK GRY,FIRM,SAND,VFN TO FN,SUB ANG TO SUB RD,CLR TO WHT QTZ,THIN STRKS OF BASALT AND ASHY CLAYS

WIPE HOLE

w 11.4
v 105

3°00'

BASALT,BLK-DK GRY,HD TO FIRM,W/TRC BENT CLYS & VOLC FRAGS

CHROM=100% C1

SILTSTN,GRY-BRN,SFT

SAND,VFN,SUB ANG TO SUB RD,CLR QTZ,CLAY LT GRY,SFT,SOL,MIN SILTSTN

9/12/81

w 11.5
v 95

CLAY,LT GRY-BRN,SFT

CLAY,BRN,SFT

SAND AS ABOVE,CLAY,LT GRY,SFT,SOL

197'/16½ HRS

SD:FLOUR FN BENT CLY MATRIX PROB LOW P&P,NO FLU TR BIO

WIPE HOLE

NB#11 SMITH DTJ

@2062'STUCK DRLG PIPE,BACK-OFF,RAN JARS,& ADDED DIESEL TO MUD SYSTEM,PULL FISH OUT OF HOLE, RESUM DRLG OPERATIONS

RRB#11
9/13 TO 9/15/81-FISHING

CHROM=100%C1

PV DUE TO DIESEL

FN SD W/ABUN OF BENT,CLYS

CHROM=99%C1

CLAY,BRN,SFT,SOL,SAND VFN TO FN,SUB ANG TO SUB RD,CLR QTZ,SILTSTN LT TO MED GRY,SFT TO FIRM,MIN BENT CLAY

WOB 20000
RPM 90
Pp 1600
SPM 60

w 11.0
v 118
F 4.2
FC 2/32
pH 8.5
S 13000
SD 1-3/4
SOL 14
OIL 7%(D)

BASALT,DRK GRY TO BLK,HD

WIPE HOLE

9/16/81

VOLCS,LT GRY,HD

CHROM=100%C1

2°15' WIPE HOLE

VOLC GRADING TO SFT VOLC ASHY CLYS

w 11.6
v 200
PH 8.6
F 4.2
CK 2/32
S 13000
SD 1-1-3/4%
OIL 6%(D)

CLAY:LT-DK GRY-WHT SFT,SOLU,STICKY,BENT TRC OF MICA & BIO

CHROM=100%C1

339'/21½HR

NB# 12 REED FP13J
9/17/81

w 11.6
v 145

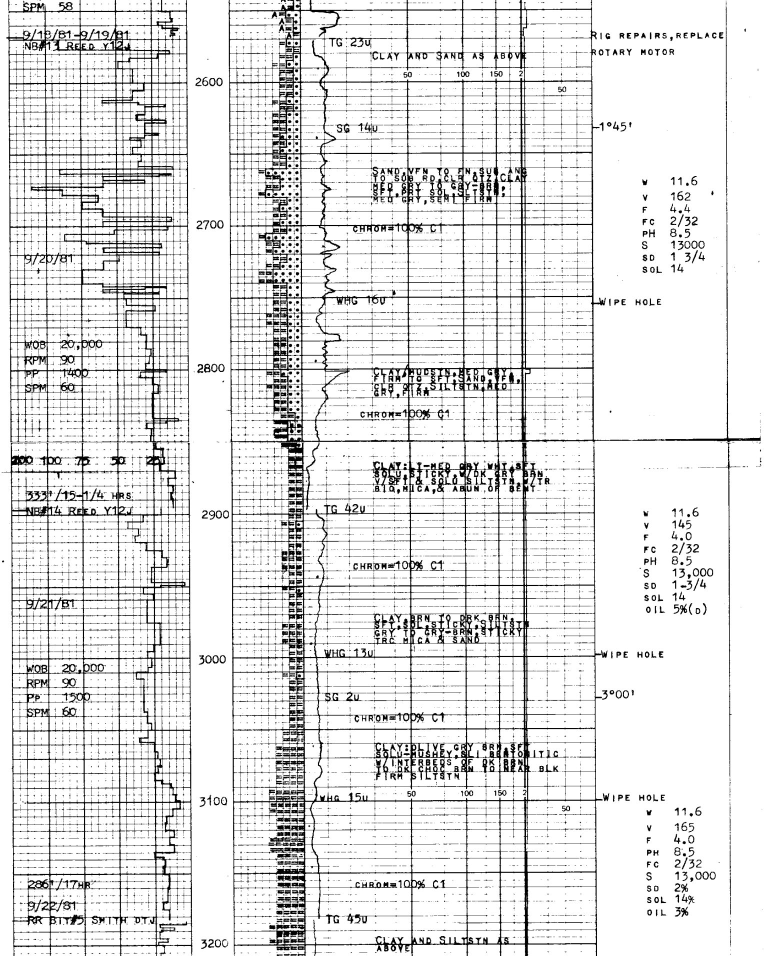
SAND,VFN TO FN,SUB ANG TO SUB RD,CLR QTZ,ASH LT GRY,CLAY,LT GRY TO BRN,SFT,SOL;BENT,LT GRY TO WHT.

CLAY,MUD STONE,GRADING TO MED GRY WHT,SFT SOLU SDY,SILTSTN,ABUN OF BENTONITIC CLY,MICA,BIO

CHROM=100% C1

WOB 20,000
RPM 110
Pp 1400

WIPE HOLE



SPM 58

9/18/81-9/19/81
NB#13 REED Y12J

9/20/81

WOB 20,000
RPM 90
PP 1400
SPM 60

333'/15-1/4 HRS
NB#14 REED Y12J

9/21/81

WOB 20,000
RPM 90
PP 1500
SPM 60

286'/17HR

9/22/81
RR BIT#5 SMITH DTJ

CLAY AND SAND AS ABOVE

SAND,VFN TO FN,SUB ANG TO SUB RD,CLR QTZ,CLAY MED GRY TO GRY-BRN, SFT,PRT SOL,SLTSTN; MED GRY,SEMI FIRM

CHROM=100% C1

CLAY/MUDSTN,MED GRY, FIRM TO SFT;SAND,VFN, CLR QTZ,SILTSTN,MED GRY,FIRM

CHROM=100% C1

CLAY:LT-MED GRY WHT,SFT SOLU,STICKY,W/DK GRY BRN V/SFT & SOLU SILTSTN,W/TR BIO,MICA,& ABUN OF BENT

CHROM=100% C1

CLAY,BRN TO DRK BRN, SFT,SOL,STICKY,SILTSTN GRY TO GRY-BRN,STICKY TRC MICA & SAND

CHROM=100% C1

CLAY:OLIVE GRY BRN,SFT SOLU-MUSHEY,SLI BENTONITIC W/INTERBEDS OF DK BRN TO DK CHOC BRN TO NEAR BLK FIRM SILTSTN

CHROM=100% C1

CLAY AND SILTSTN AS ABOVE

RIG REPAIRS,REPLACE ROTARY MOTOR

1°45'

W 11.6
V 162
F 4.4
FC 2/32
PH 8.5
S 13000
SD 1 3/4
SOL 14

WIPE HOLE

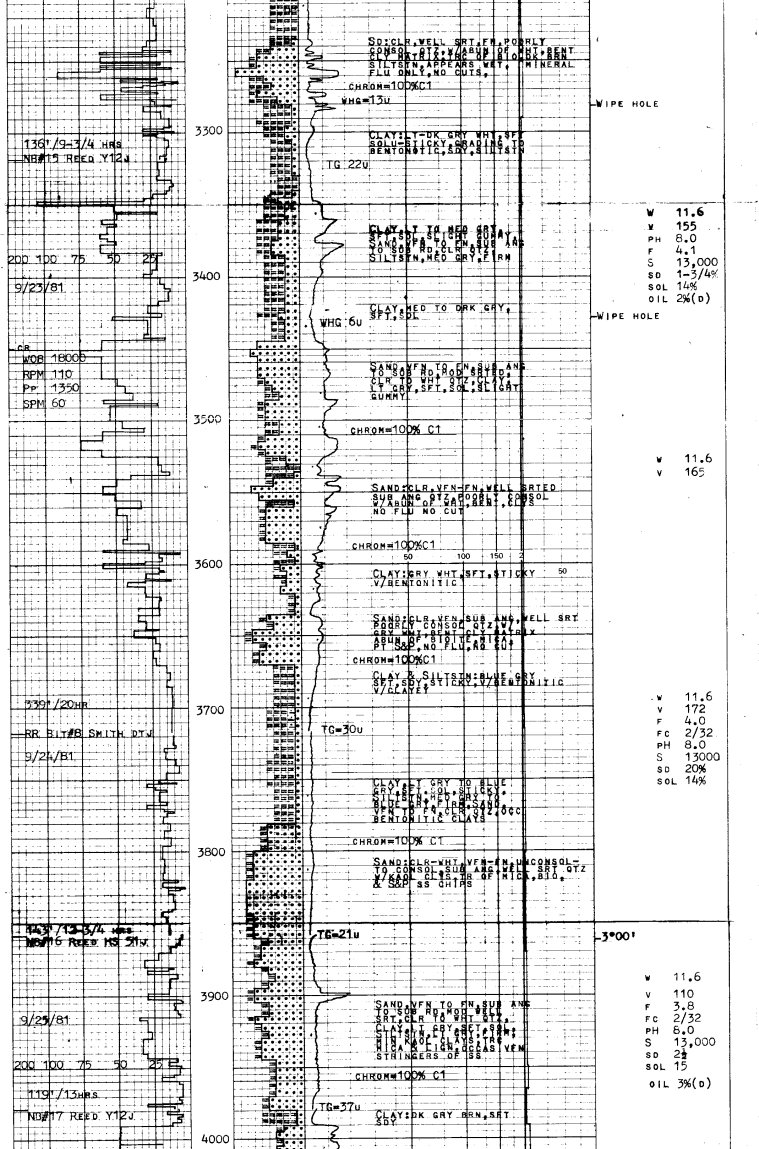
W 11.6
V 145
F 4.0
FC 2/32
PH 8.5
S 13,000
SD 1-3/4
SOL 14
OIL 5%(D)

WIPE HOLE

3°00'

WIPE HOLE

W 11.6
V 165
F 4.0
PH 8.5
FC 2/32
S 13,000
SD 2%
SOL 14%
OIL 3%



SD:CLR,WELL SRT,FN,POORLY CONSOL QTZ,W/ABUN OF WHT,BENT CLY MATRIX,TRC OF BIO,DK BRN SILTSTN,APPEARS WET, MINERAL FLU ONLY,NO CUTS,

CHROM=100%C1

WHG=13u

-WIPE HOLE

CLAY:LT-DK GRY WHT,SFT SOLU-STICKY,GRADING TO BENTONOTIC,SDY,SILTSTN

136'/9-3/4 HRS
NB#15 REED Y12J

TG 22u

W 11.6
V 155
PH 8.0
F 4.1
S 13,000
SD 1-3/4%
SOL 14%
OIL 2%(D)

CLAY,LT TO MED GRY, SFT,SOL,SLIGHT GUMMY, SAND,VFN TO FN,SUB ANG TO SUB RD,CLR QTZ, SILTSTN,MED GRY,FIRM

9/23/81

CLAY,MED TO DRK GRY, SFT,SOL

WHG 6u

-WIPE HOLE

WOB 18000
RPM 110
Pp 1350
SPM 60

SAND,VFN TO FN,SUB ANG TO SUB RD,MOD SRTED, CLR TO WHT QTZ,CLAY, LT GRY,SFT,SOL,SLIGHT GUMMY

CHROM=100% C1

W 11.6
V 165

SAND:CLR,VFN-FN,WELL SRTED SUB ANG QTZ,POORLY CONSOL W/ABUN OF WHT,BENT,CLYS NO FLU NO CUT

CHROM=100%C1

CLAY:GRY WHT,SFT,STICKY V/BENTONITIC

SAND:CLR,VFN,SUB ANG,WELL SRT POORLY CONSOL QTZ,W/ GRY WHT,BENT CLY MATRIX ABUN OF BIOITE,MICA, PT S&P,NO FLU,NO CUT

CHROM=100%C1

CLAY & SILTSTN:BLUE GRY SFT,SDY,STICKY,V/BENTONITIC V/CLAYEY

339'/20HR
RR BIT#8 SMITH DTJ
9/24/81

TG=30u

W 11.6
V 172
F 4.0
FC 2/32
PH 8.0
S 13000
SD 20%
SOL 14%

CLAY,LT GRY TO BLUE GRY,SFT,SOL,STICKY, SILTSTN,MED GRY TO BLUE GRY,FIRM,SAND, VFN TO FN,CLR QTZ,OCC BENTONITIC CLAYS

CHROM=100% C1

SAND:CLR-WHT,VFN-FN,UNCONSOL-TO CONSOL,SUB ANG,WELL SRT QTZ W/KAOL CLYS,TR OF MICA,BIO, & S&P SS CHIPS

443'/13-3/4 HRS
NB#16 REED HS 51J

TG=21u

-3°00'

W 11.6
V 110
F 3.8
FC 2/32
PH 8.0
S 13,000
SD 2½
SOL 15
OIL 3%(D)

SAND,VFN TO FN,SUB ANG TO SUB RD,MOD WELL SRT,CLR TO WHT QTZ, CLAY,LT GRY,SFT,SOL, SILTSTN,LT GRY,FIRM, MIN KAOL CLAYS,TRC MICA & LIGN,OCCAS VFN STRINGERS OF SS

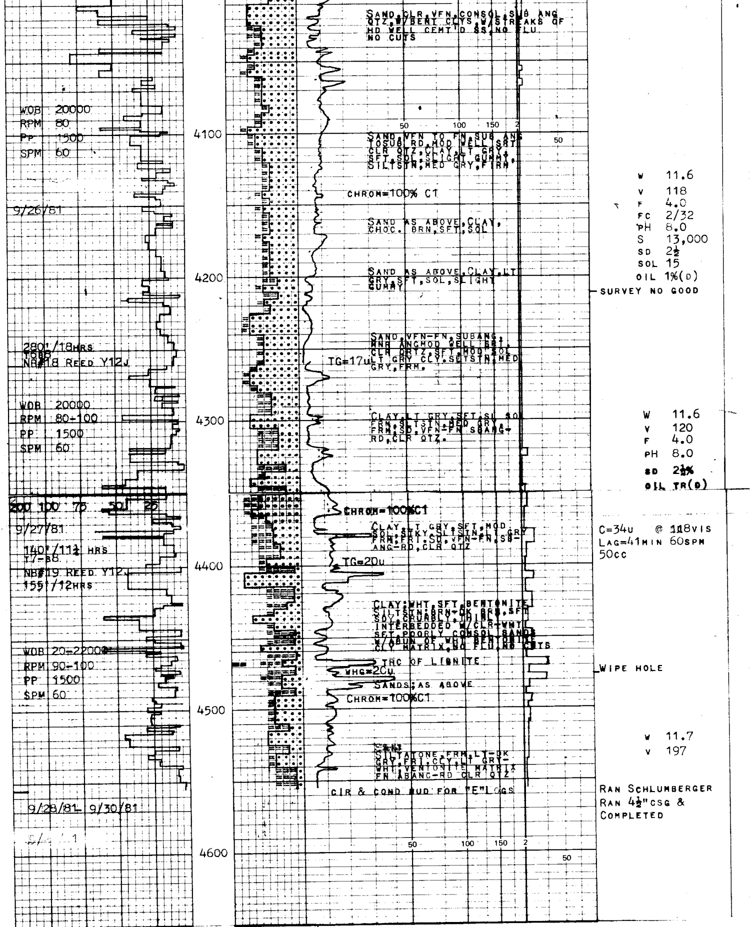
9/25/81

CHROM=100% C1

119'/13HRS
NB#17 REED Y12J

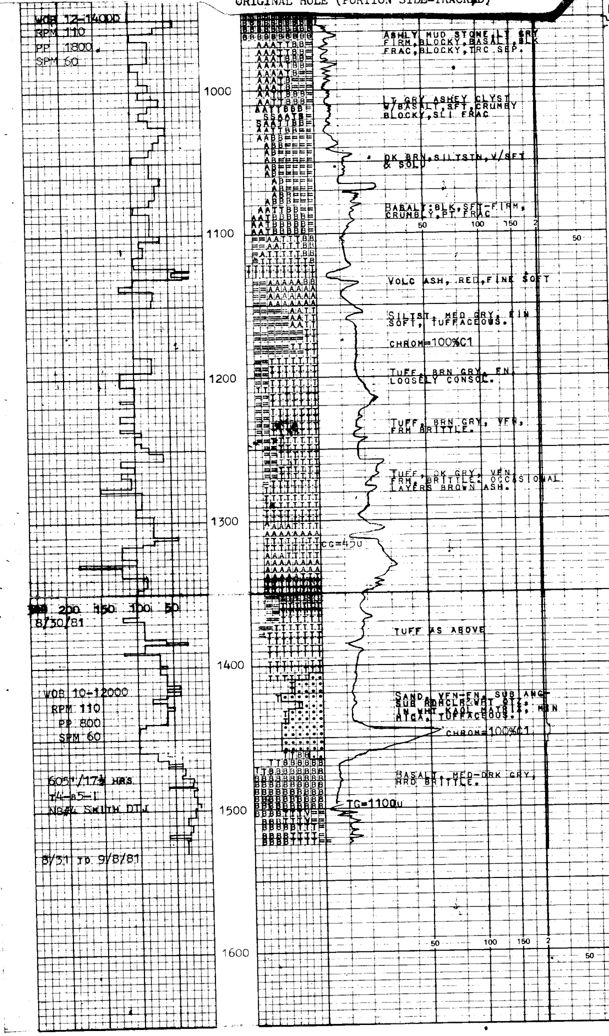
TG=37u

CLAY:DK GRY BRN,SFT SDY



AMERICAN QUASAR PETROLEUM, "WOLVERTON 13-31, 1100'S & 1800'W OF NE CORNER, MARION COUNTY, OREGON
SEC. 13, T10S; R3W.

ORIGINAL HOLE (PORTION SIDE-TRACKED)



C=200u w/39v
LAG=10MIN,w/60SPM
0°45'

W	9.0
V	40
F	7.2
FC	1/32
PH	10.0
S	15000
CA	160
SD	1
SOL	5

W 9.0
V 40

3°00'
HOLE SLUFFING,BEGAN
BUILDING MW TO 10#
AFTER TRIP
STUCK DRILL PIPE
BACK OFF,TRIED TO
RECOVER FISH,PLUGGE
BACK,FOR SIDE-TRACT