Watzek 30-1

Schlumberger

FOUR – ARM HIGH RESOLUTION CONTINUOUS DIPMETER

COUNTY ______
FIELD ______
LOCATION ______
WELL ______
COMPANY ______

COMPANY QUINTANA PETROLEUM CORP
WELL WATZEK 30-1
FIELD WILDCAT
COUNTY CLATSOP STATE OREGON

LOCATION 1768'S & 3935'W of NE Cor

API SERIAL NO.	SEC.	TWP	RANGE
	30	6N	6W

Other Services:
BHC - FDC/CNL
DIC -

Permanent Datum: GL ; Elev.: 870.7
Log Measured From KB 13.6 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 884.3
D.F. ____
G.L. 870.7

Date	12/24/80			
Run No.	1			
Depth—Driller	7069			
Depth—Logger (Schl.)	7048			
Btm. Log Interval	7047			
Top Log Interval	6538			
Casing—Driller	9 5/8 @ 796	@	@	@
Casing—Logger	796			
Bit Size	8.75			
Type Fluid in Hole	LIGNO			
Dens. | Visc.	11.2 | 58			
pH | Fluid Loss	9.8 | 4.4 ml	ml	ml	ml
Source of Sample	CIRC			
Rm @ Meas. Temp.	.79 @ 86 °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	2.5 @ 54 °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	2.64 @ 62 °F	@ °F	@ °F	@ °F
Source: Rmf | Rmc	M | M			
Rm @ BHT	.53 @ 128 °F	@ °F	@ °F	@ °F
TIME Circulation Stopped	12/24 1300			
TIME Logger on Bottom	12/24 0300			
Max. Rec. Temp.	129 °F	°F	°F	°F
Equip. | Location	8126 | SAC			
Recorded By	ANDERSEN			
Witnessed By Mr.				

FOLD HERE The well name, location and borehole reference data were furnished by the customer.

REMARKS: Service Order No. 135789 Magnetic Declination

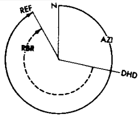
Run No.	1	2	3	4
Tool Type	HDT			
HDP	752			
DDR | TTR	– | –			
DPI	–			
HDM	754			
HDE	1756			
HDS	1726			
Adapter Head				
UG | CG | SAH	– | – | –			
5" Film | 10" Film | 60" Record	✗ | – | –			
Analog | Digital	| ✗			
TIME Circulation Stopped	12/24 1300			
TIME Schl. on Bottom				

ROLL NO.	INTERVAL

TOOL AZIMUTH AND HOLE DIRECTION CALCULATION

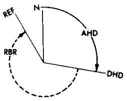
DEFINITIONS

(DHD) HIGH SIDE OF TOOL = Direction from center of tool to upper side of tool.
(N) NORTH = Direction from center of tool to Magnetic North.
(REF) REFERENCE ELECTRODE = Direction from center of tool to #1 electrode.
(AZI) AZIMUTH OF REFERENCE ELECTRODE = Clockwise angle from N to REF.
(RBR) RELATIVE BEARING = Clockwise angle from DHD to REF.
(AHD) AZIMUTH OF HOLE DEV. (TOOL AXIS) = Clockwise angle from N to DHD.



LOW ANGLE UNIT ☐

EXAMPLE
HDM - Low Angle Unit (0-36°)
AZI (solid curve) = 330°
RBR (dotted curve) = 230°
AHD = AZI − RBR = 330° − 230° = 100°



HIGH ANGLE UNIT ☐

EXAMPLE
HDM - High Angle Unit (0-72°)
AHD (solid curve) = 100°
RBR (dotted curve) = 230°
AZI = AHD + RBR = 100° + 230° = 330°

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

ORIENTATION	DEPTHS	CORRELATION CURVES ←CONDUCTIVITY

SWS–1500-J

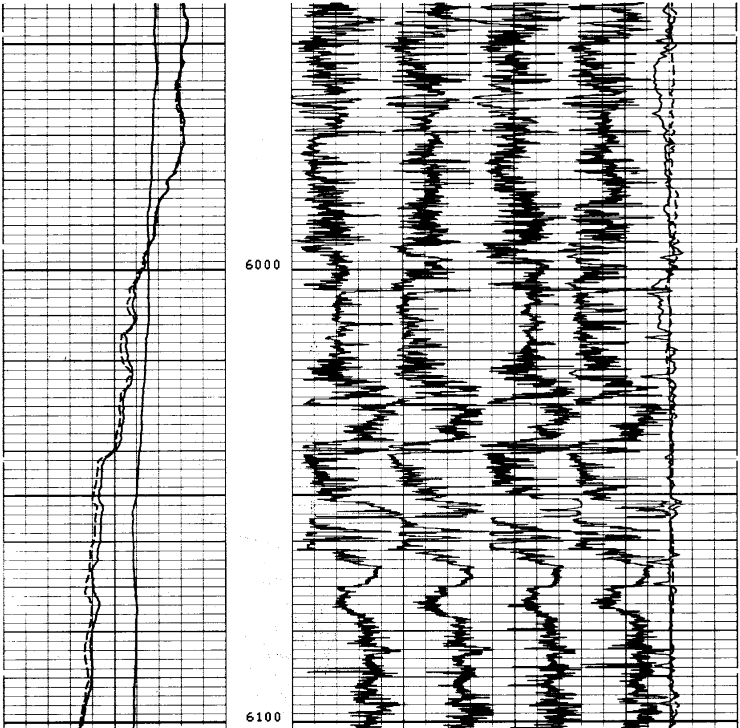
PARAMETERS

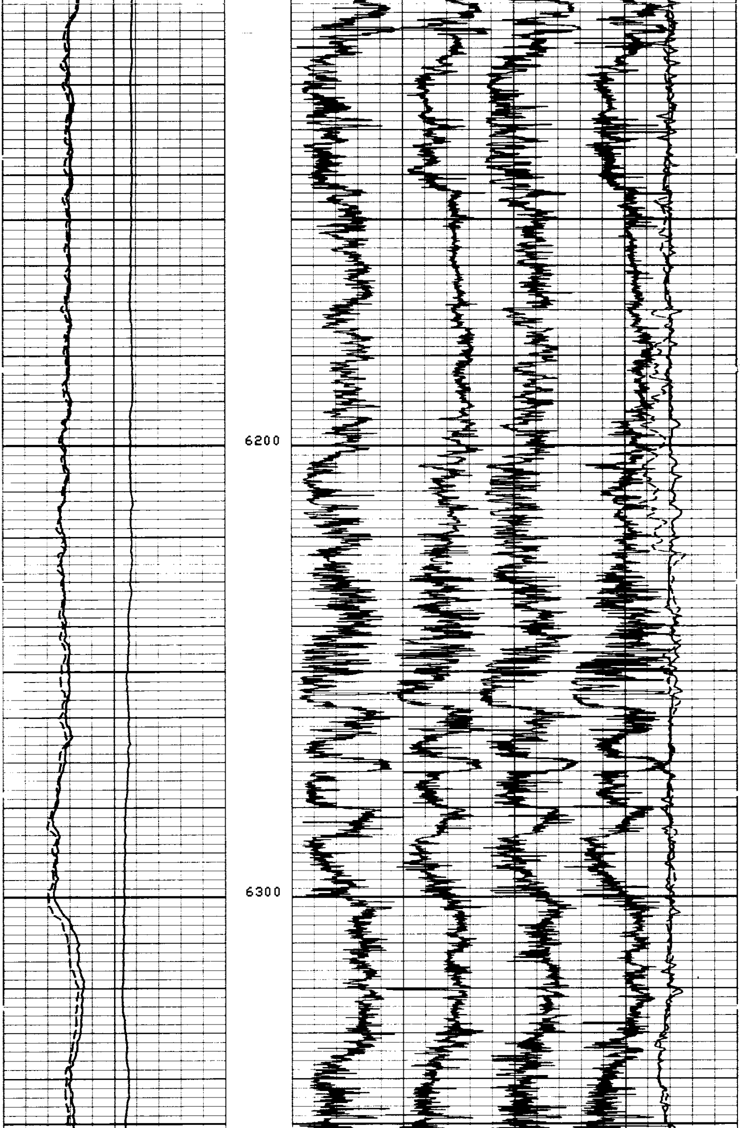
NAME	UNIT	VALUE	NAME	UNIT	VALUE	NAME	UNIT	VALUE
STYP		STAN	MCT	DEG	36	BS	INCH	8.750
DD		0.0	BHS		OPEN	FPHI		PHIX

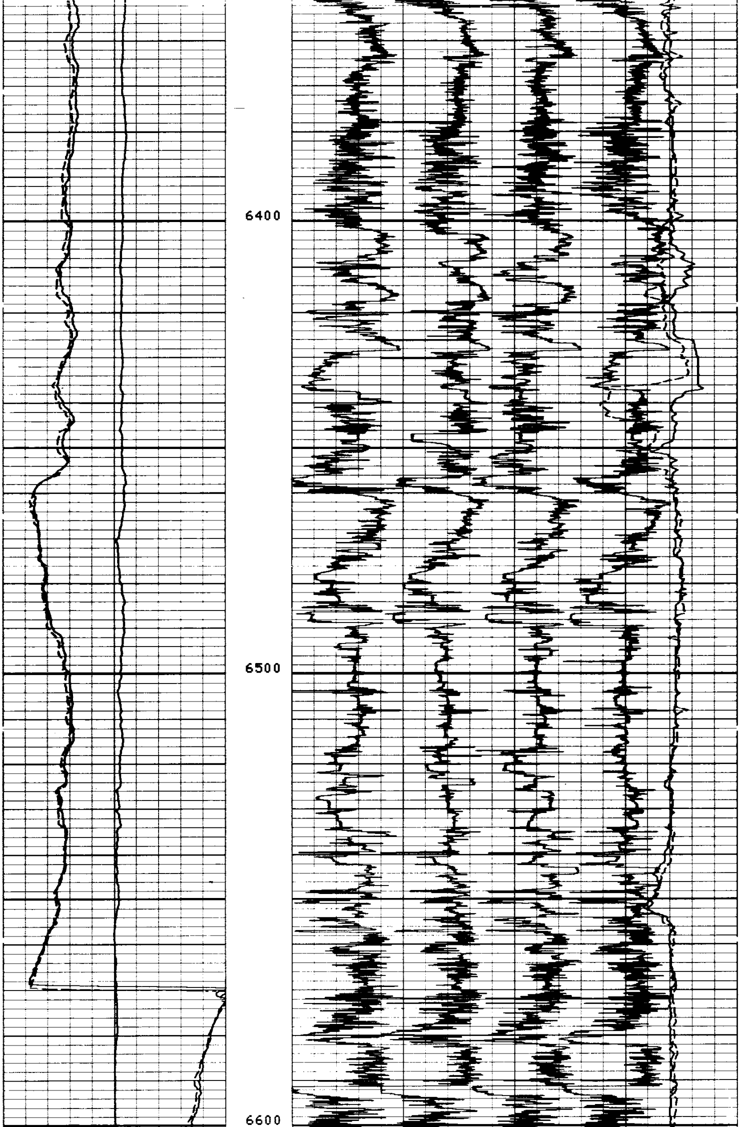
DEVI(DEG)			C2 (INCH)	
-1.000	9.000			
RB (DEG)				
-40.00	360.0		26.00	6.000
AZIM(DEG)			C1 (INCH)	
-40.00	360.0		26.00	6.000

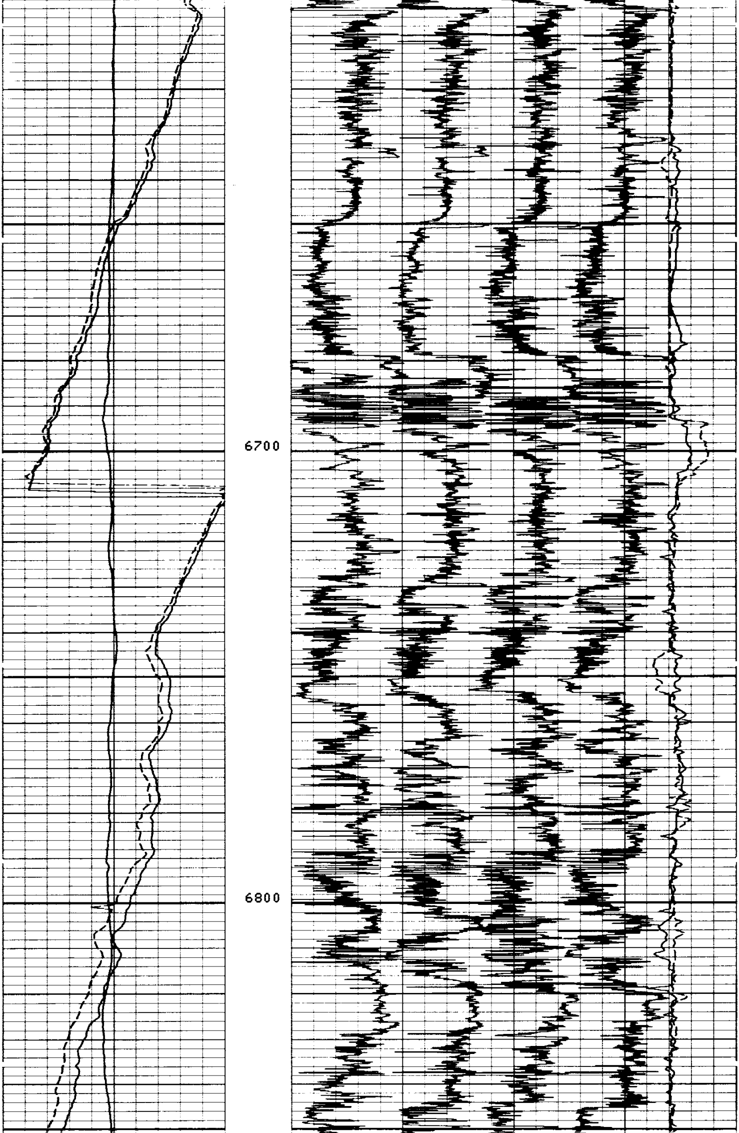
FILE

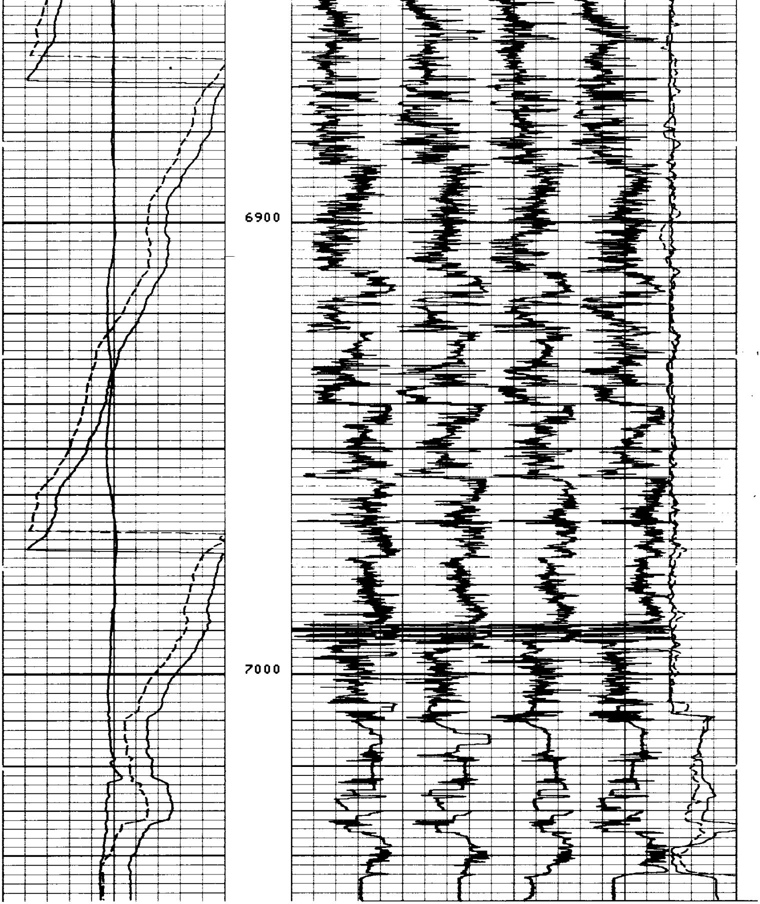
5











FILE

5

```
      DEVI(DEG )
-1.000           9.000
      RB  (DEG )                                   C2  (INCH)
-40.00           360.0        26.00                                      6.000
      AZIM(DEG )                                   C1  (INCH)
-40.00           360.0        26.00                                      6.000
```

```
                              PARAMETERS

   NAME  UNIT  VALUE        NAME  UNIT  VALUE        NAME  UNIT  VALUE


   STYP        STAN         MCT   DEG   36           BS    INCH  8.750
   DO          0.0          BHS         OPEN         FPHI        PHIX
```

```
                              PARAMETERS

   NAME  UNIT  VALUE        NAME  UNIT  VALUE        NAME  UNIT  VALUE


   STYP        STAN         MCT   DEG   36           BS    INCH  8.750
   DO          0.0          BHS         OPEN         FPHI        PHIX
```

```
      DEVI(DEG )
-1.000           9.000
      RB  (DEG )                                   C2  (INCH)
-40.00           360.0        26.00                                      6.000
      AZIM(DEG )                                   C1  (INCH)
-40.00           360.0        26.00                                      6.000
```

FILE

4

FILE

4

```
      DEVI(DEG )
-1.000           9.000
      RB  (DEG )                                   C2  (INCH)
-40.00           360.0        26.00                                      6.000
      AZIM(DEG )                                   C1  (INCH)
-40.00           360.0        26.00                                      6.000
```

```
                              PARAMETERS

   NAME  UNIT  VALUE        NAME  UNIT  VALUE        NAME  UNIT  VALUE


   STYP        STAN         MCT   DEG   36           BS    INCH  8.750
   DO          0.0          BHS         OPEN         FPHI        PHIX
```

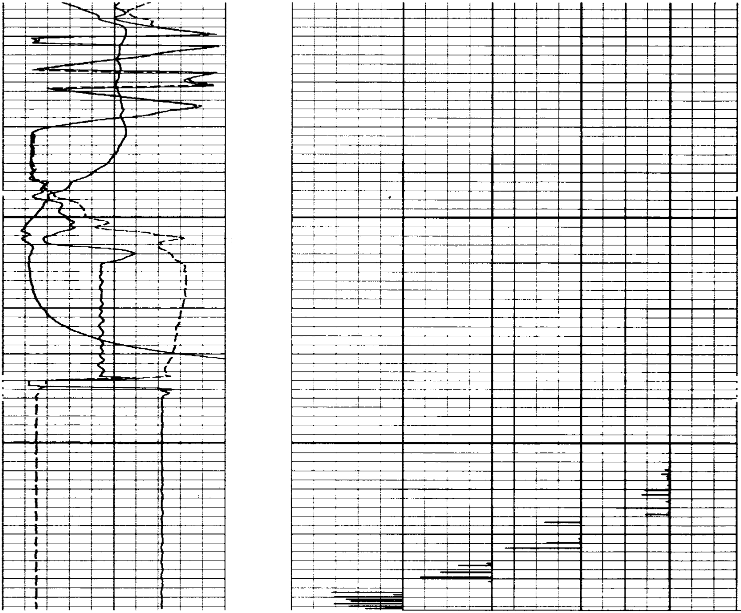
PARAMETERS

NAME	UNIT	VALUE	NAME	UNIT	VALUE	NAME	UNIT	VALUE
STYP		STAN	MCT	DEG	36	BS	INCH	8.750
DO		0.0	BHS		OPEN	FPHI		PHIX

DEVI(DEG)		C2 (INCH)	
-1.000	9.000		
RB (DEG)			
-40.00	360.0	26.00	6.000
AZIM(DEG)		C1 (INCH)	
-40.00	360.0	26.00	6.000

FILE

3



FILE

3

```
      DEVI(DEG )
 -1.000              9.000
      RB   (DEG )                                          C2   (INCH)
 -40.00              360.0            26.00                                                6.000
      AZIM(DEG )                                           C1   (INCH)
 -40.00              360.0            26.00                                                6.000

                                   PARAMETERS

   NAME   UNIT   VALUE         NAME   UNIT   VALUE         NAME   UNIT   VALUE


   STYP          STAN          MCT    DEG    36            BS     INCH   8.750
   DO            0.0           BHS           OPEN          FPHI          PHIX
```

```
                    BEFORE SURVEY CALIBRATION SUMMARY

       PERFORMED:      80/12/24
       PROGRAM FILE: HDT    (VERSION    18.2    80/ 4/29)

      HDT              CALIPER CALIBRATION SUMMARY

                 MEASURED                          CALIBRATED
               SMALL   LARGE                     SMALL     LARGE        UNITS
        C1      6.6     13.3                      6.0       12.0         IN
        C2      6.3     13.3                      6.0       12.0         IN
                          FILE

                            2
```