Schlumberger

FOUR – ARM HIGH RESOLUTION CONTINUOUS DIPMETER

COUNTY LINN
FIELD ALBANY
LOCATION 17-10S-3W
WELL HENSCHELL NO. 17-34
COMPANY AMERICAN QUASAR

COMPANY	AMERICAN QUASAR PETROLEUM COMPANY
WELL	HENSCHELL NO. 17-34
FIELD	ALBANY
COUNTY	LINN
STATE	OREGON
LOCATION	1320'FEL & 990'FSL
API SERIAL NO.	
SEC.	17
TWP	10S
RANGE	3W

Other Services:
DIL
BHC
FDC/CNL/GR

Permanent Datum: GL ; Elev.: 200
Log Measured From KB 10.5 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 210.5
D.F. --
G.L. 200.0

RECEIVED
JAN 1981
DEPT OF GEOLOGY

Date	12-13-80			
Run No.	ONE			
Depth—Driller	2856			
Depth—Logger (Schl.)	2856			
Btm. Log Interval	2855			
Top Log Interval	515			
Casing—Driller	7" @ 515	@	@	@
Casing—Logger	515			
Bit Size	6¼"			
Type Fluid in Hole	LIGNOSULFONATE			
Dens. | Visc.	10.6 | 40	|	|	|
pH | Fluid Loss	10 | 6 ml	| ml	| ml	| ml
Source of Sample	CIRCULATION			
Rm @ Meas. Temp.	.404 @ 65 °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	.36 @ 59 °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	.59 @ 65 °F	@ °F	@ °F	@ °F
Source: Rmf | Rmc	M | M	|	|	|
Rm @ BHT	0.3 @ 86 °F	@ °F	@ °F	@ °F
TIME Circulation Stopped	0400 12/13			
TIME Logger on Bottom	1400			
Max. Rec. Temp.	86 °F	°F	°F	°F
Equip. | Location	8126 | SAC	|	|	|
Recorded By	ANDERSEN			
Witnessed By Mr.	SMITH/MANN			

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

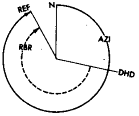
REMARKS: Service Order No. 205765 Magnetic Declination 22°E

Run No.	1	2	3	4
Tool Type	HDT			
HDP	DAM 752			
DDR | TTR	- |	|	|	|
DPI	-			
HDM	F 1726			
HDE	725			
HDS	D 1754			
Adapter Head	-			
UG | CG | SAH	- | |	| |	| |	| |
5" Film | 10" Film | 60"Record	X | |	| |	| |	| |
Analog | Digital	X | X	|	|	|
TIME Circulation Stopped	0400			
TIME Schl. on Bottom	1400			

ROLL NO.	INTERVAL

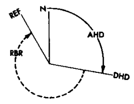
TOOL AZIMUTH AND HOLE DIRECTION CALCULATION DEFINITIONS

(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

PARAMETERS

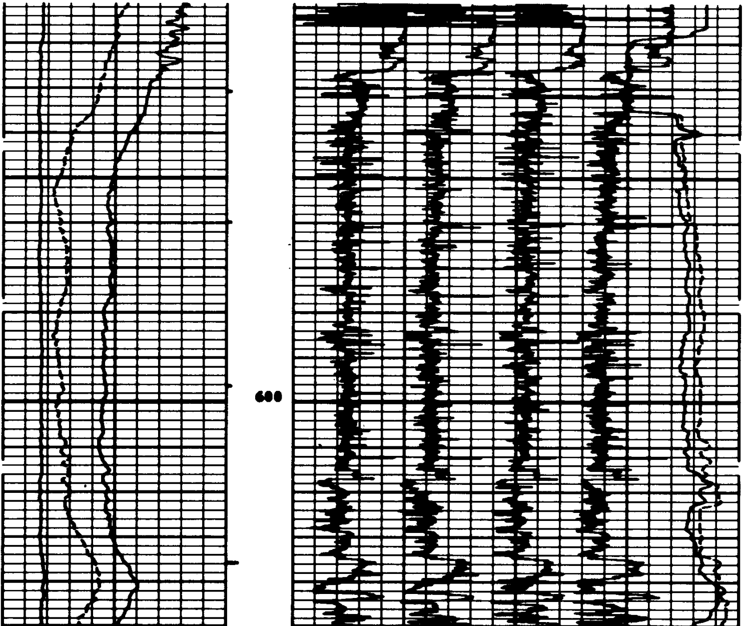
NAME	UNIT	VALUE	NAME	UNIT	VALUE	NAME	UNIT	VALUE
STYP		STAN	MCT	DEG	36	BS	INCH	6.250
DO		0.0	DHS		OPEN	FPHI		PHIX

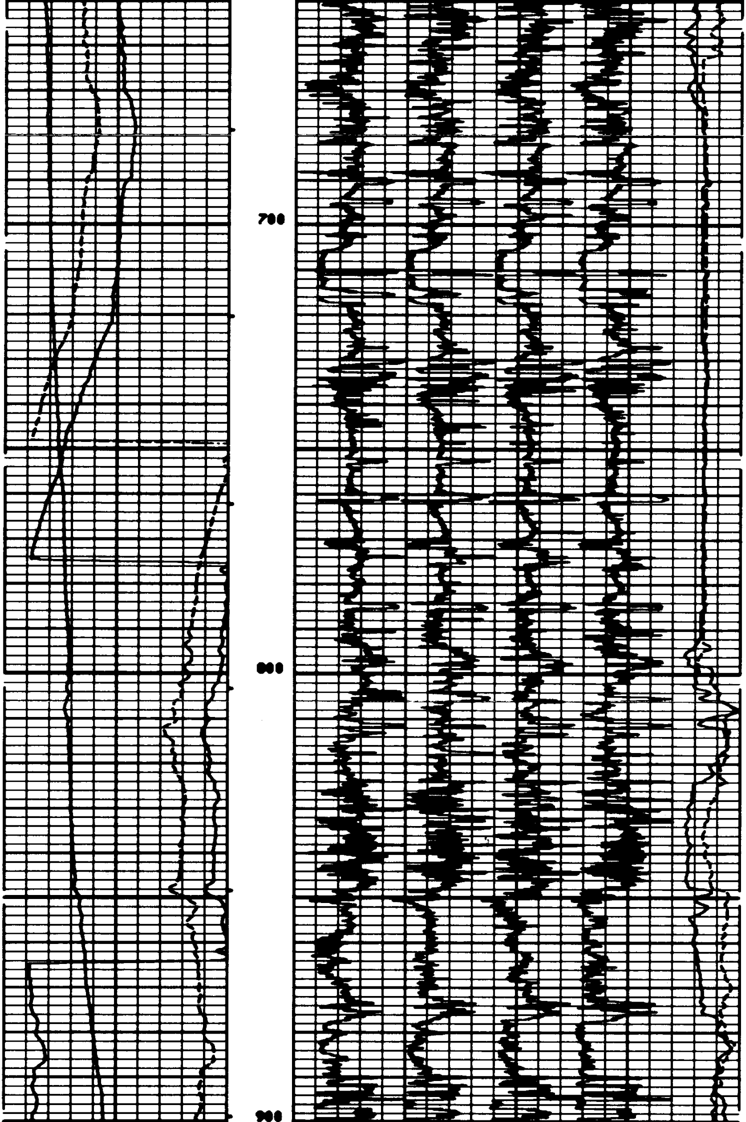
DEVI(DEG)
-1.000 9.000
RB (DEG)
-40.00 360.0
AZIM(DEG)
-40.00 360.0

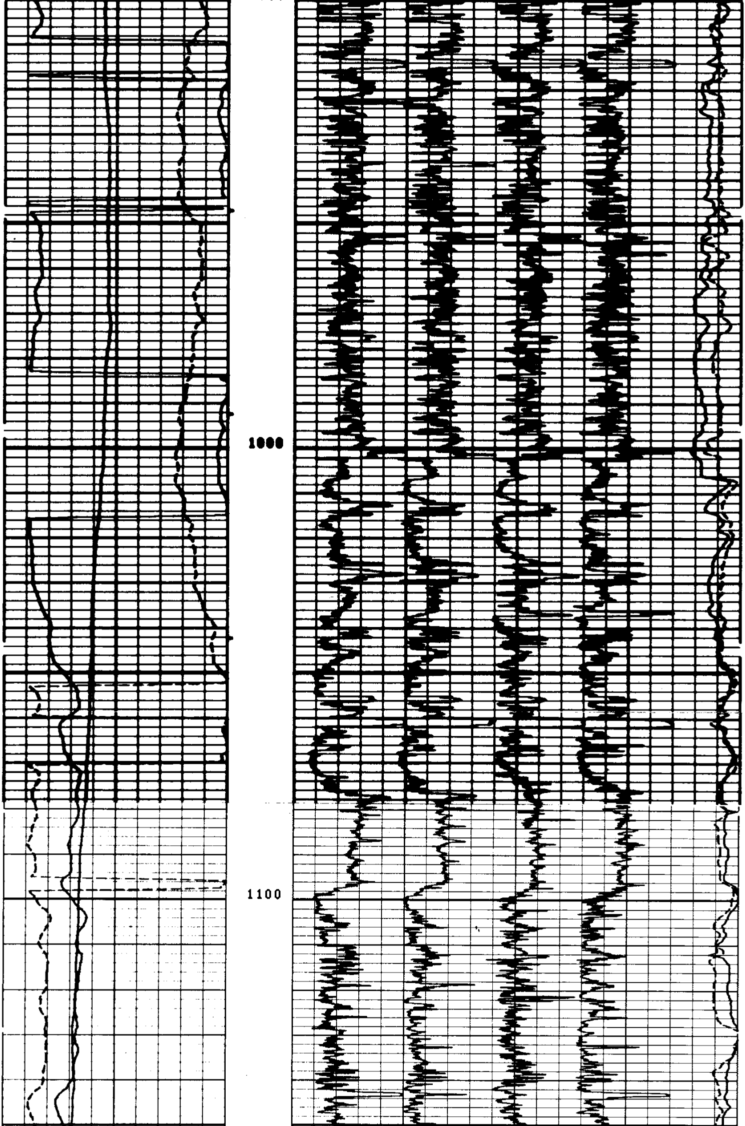
C2 (INCH)
25.00 5.000
C1 (INCH)
25.00 5.000

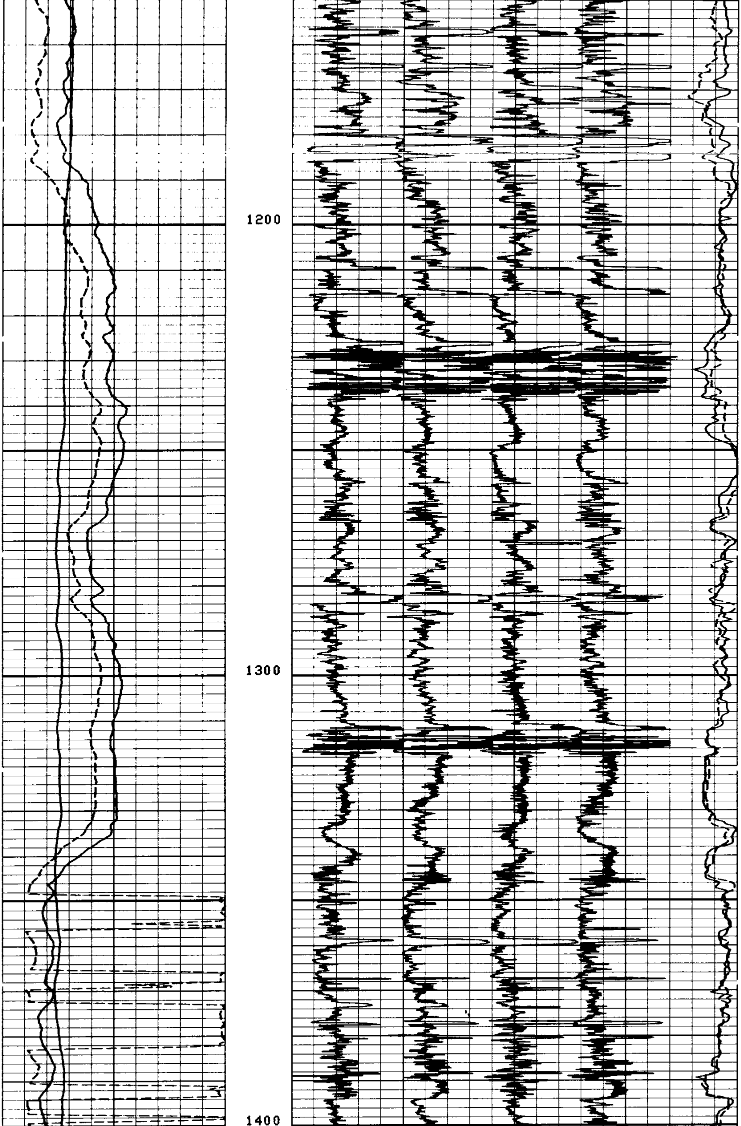
FILE

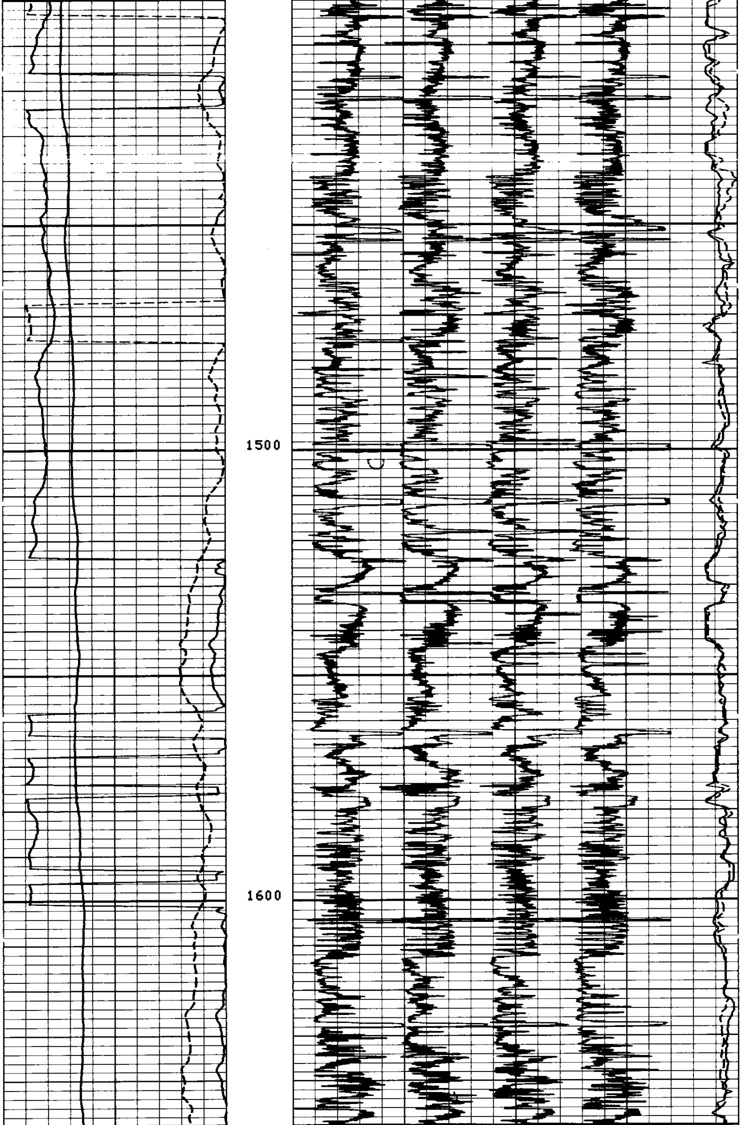
5

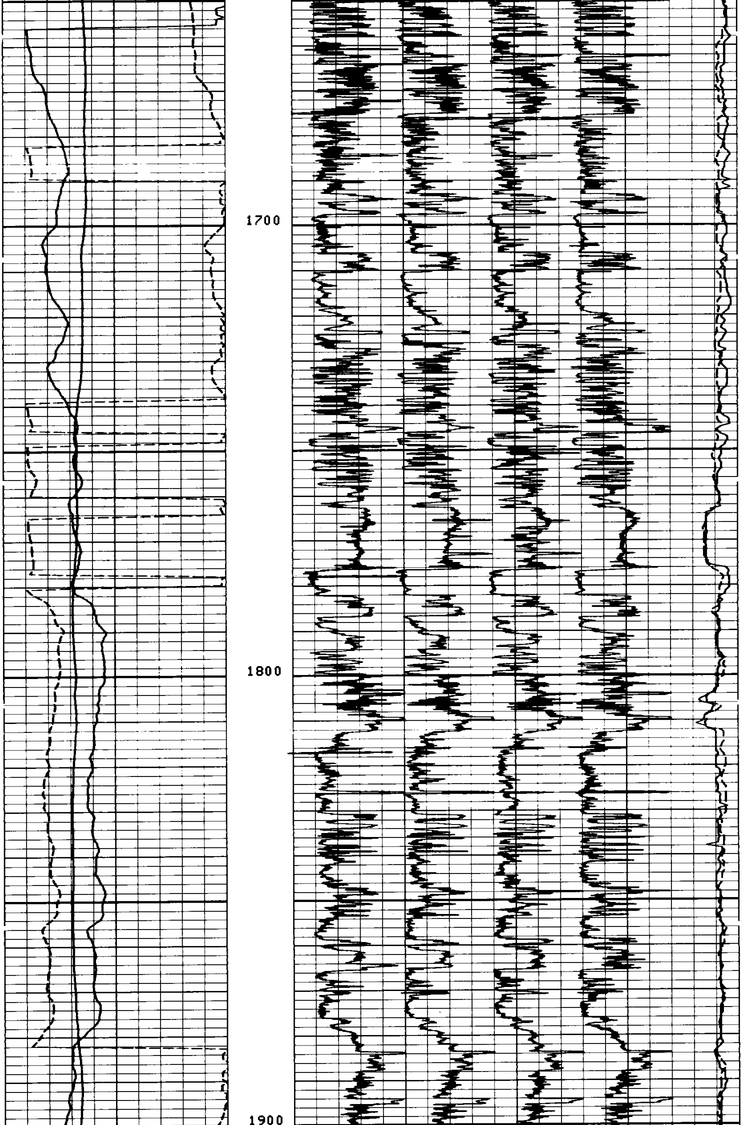


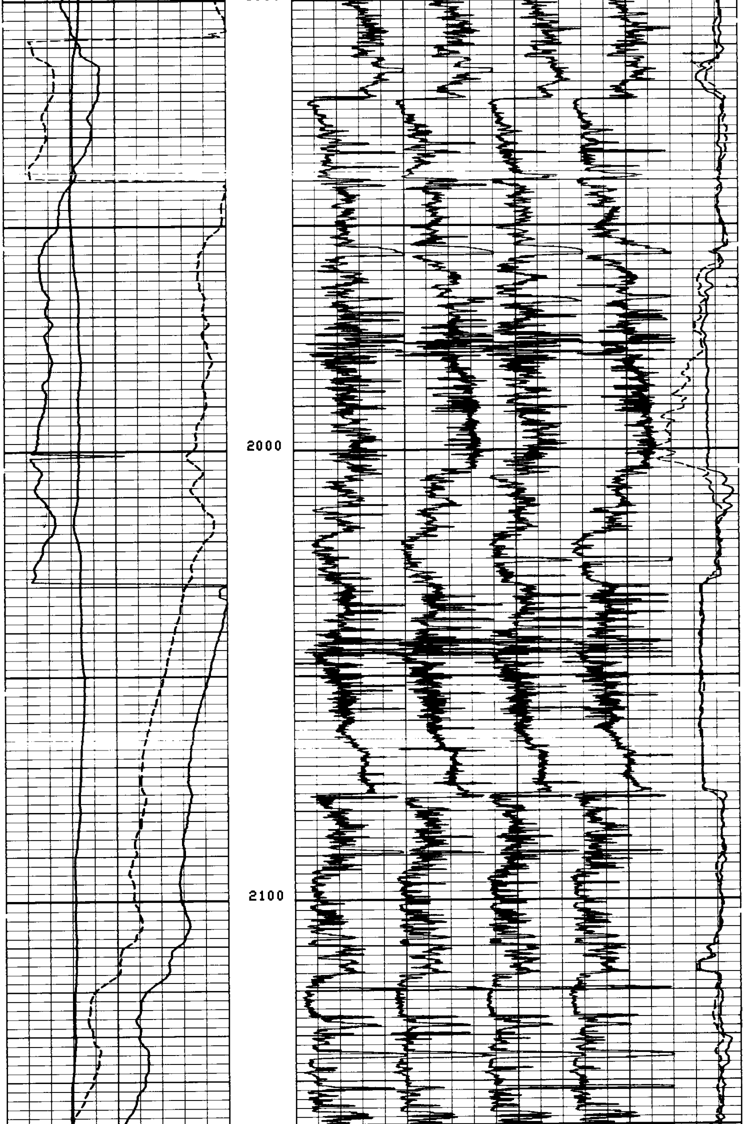


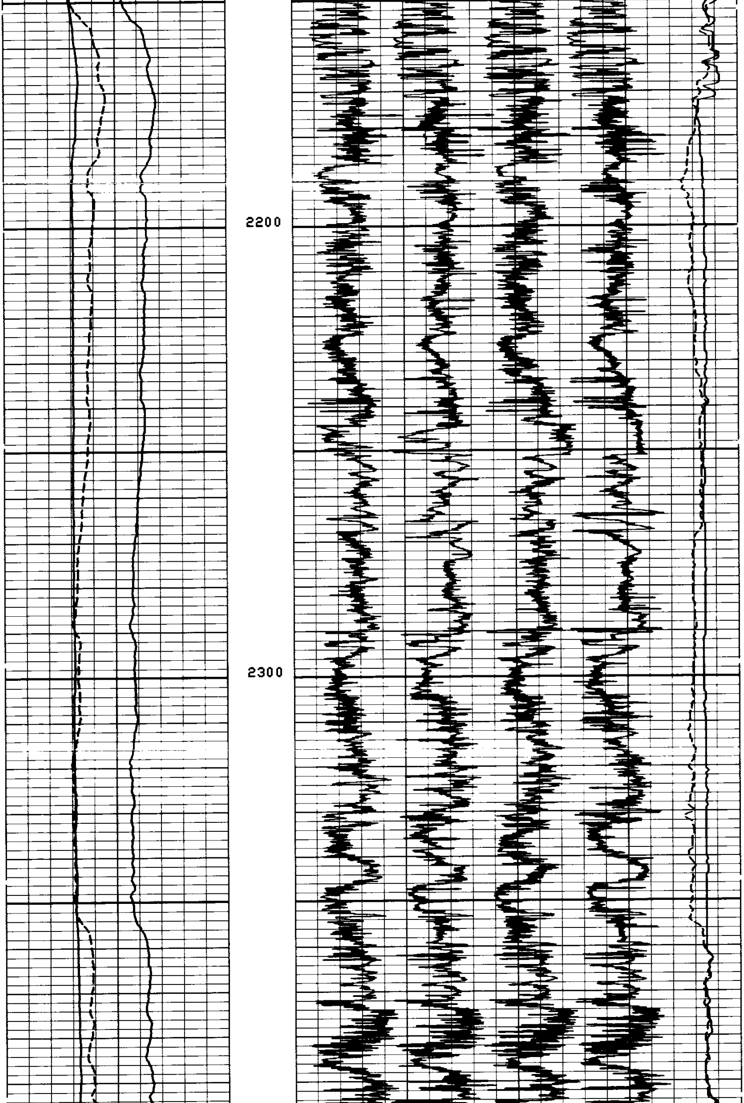


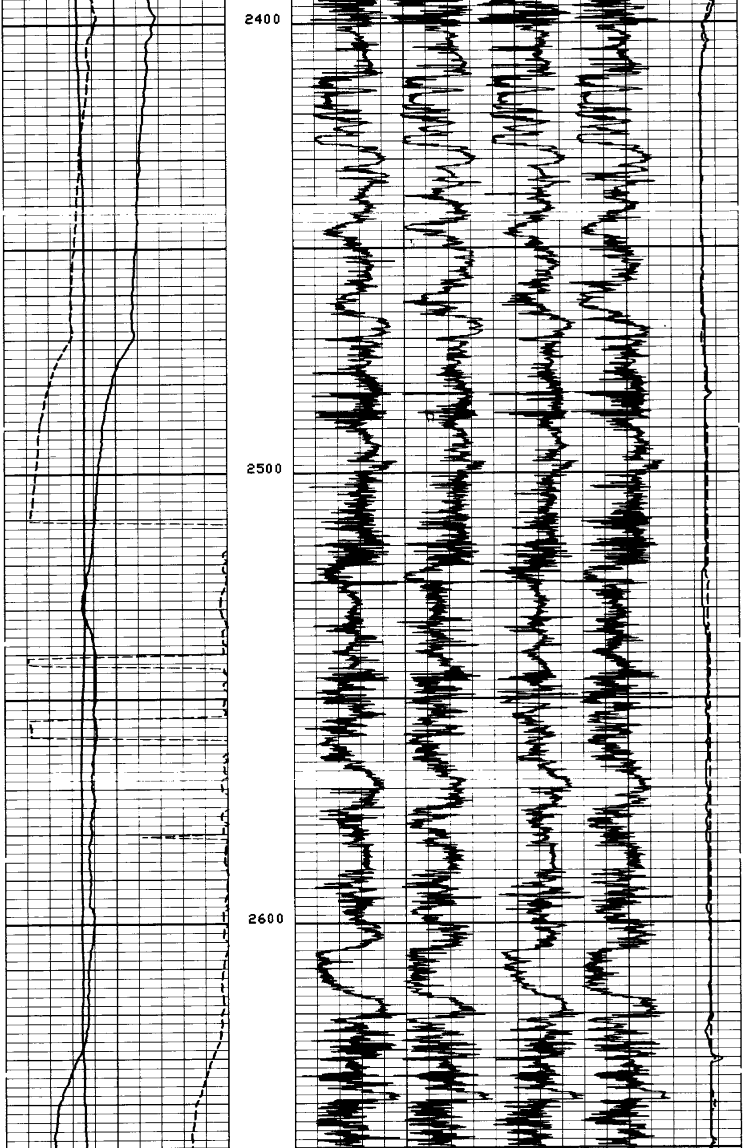


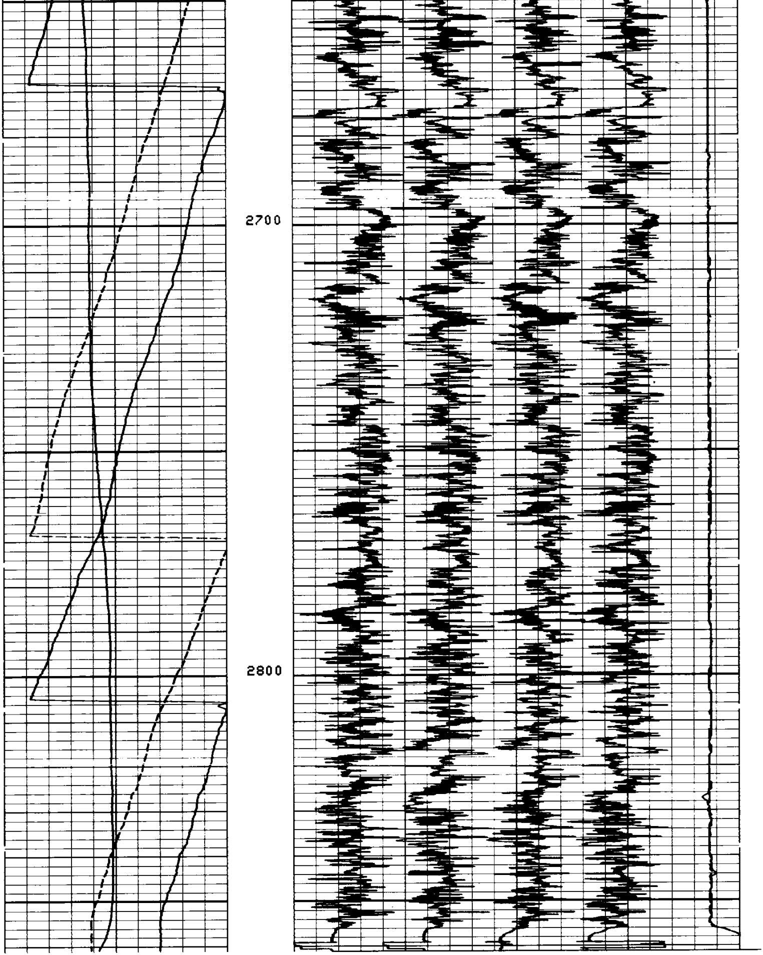












FILE

5

DEVI(DEG)			C2 (INCH)	
-1.000	9.000			
RB (DEG)			25.00	5.000
-40.00	360.0		C1 (INCH)	
AZIM(DEG)				
-40.00	360.0		25.00	5.000

PARAMETERS

NAME	UNIT	VALUE	NAME	UNIT	VALUE	NAME	UNIT	VALUE
STYP		STAN	MCT	DEG	36	BS	INCH	6.250
DO		0.0	BHS		OPEN	FPHI		PHIX

REPEAT SECTION REPEAT SECTION REPEAT SECTION REPEAT SECTION

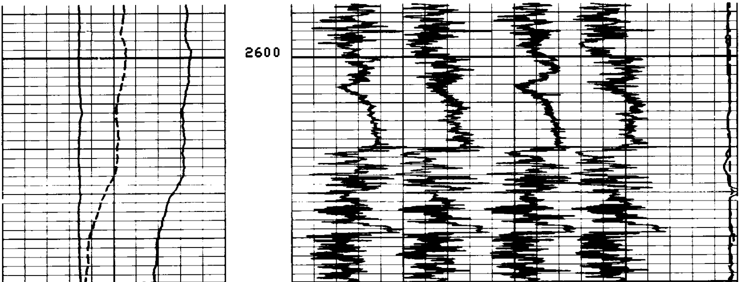
PARAMETERS

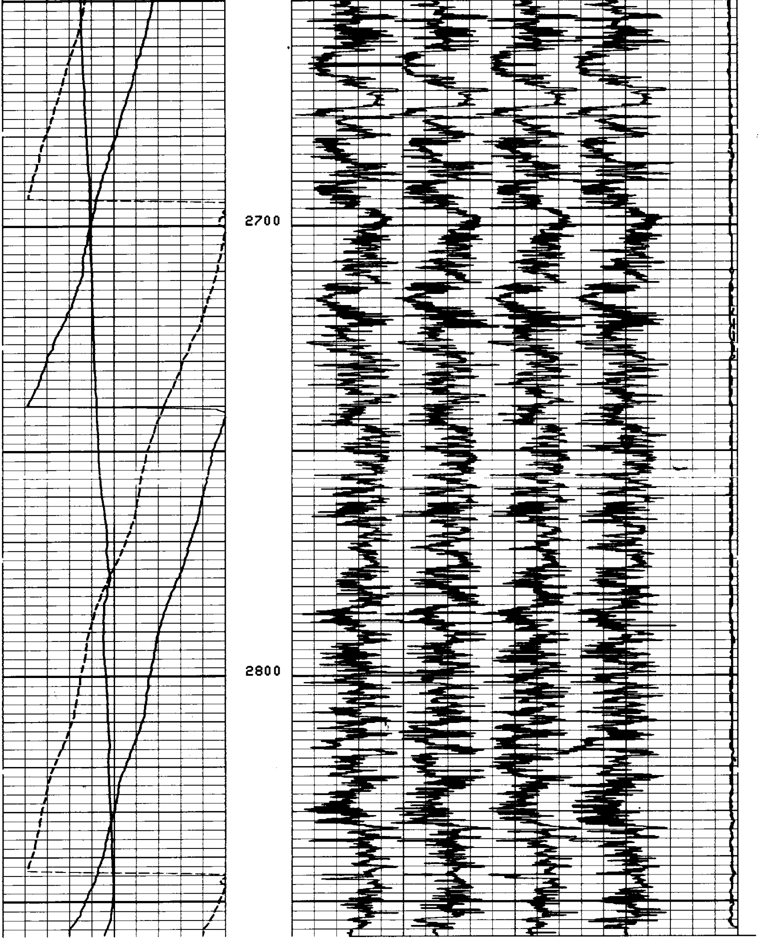
NAME	UNIT	VALUE	NAME	UNIT	VALUE	NAME	UNIT	VALUE
STYP		STAN	MCT	DEG	36	BS	INCH	6.250
DO		0.0	BHS		OPEN	FPHI		PHIX

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

FILE

4





FILE

4

DEVI(DEG)
-1.000 9.000
RB (DEG)
-40.00 360.0
AZIM(DEG)
-40.00 360.0

C2 (INCH)
26.00 6.000
C1 (INCH)
26.00 6.000

PARAMETERS

NAME	UNIT	VALUE	NAME	UNIT	VALUE	NAME	UNIT	VALUE
STYP		STAN	MCT	DEG	36	BS	INCH	6.250
DO		0.0	BHS		OPEN	FPHI		PHIX

CALIBRATION RECORD

PARAMETERS

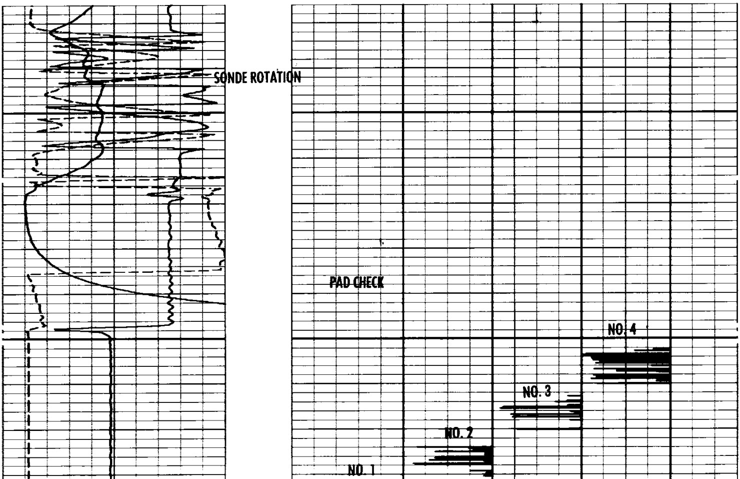
NAME	UNIT	VALUE	NAME	UNIT	VALUE	NAME	UNIT	VALUE
STYP		STAN	MCT	DEG	36	BS	INCH	6.250
DO		0.0	BHS		OPEN	FPHI		PHIX

DEVI(DEG)
-1.000 9.000
RB (DEG)
-40.00 360.0
AZIM(DEG)
-40.00 360.0

C2 (INCH)
26.00 6.000
C1 (INCH)
26.00 6.000

FILE

3



FILE

3

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

PARAMETERS

NAME	UNIT	VALUE	NAME	UNIT	VALUE	NAME	UNIT	VALUE
STYP		STAN	MCT	DEG	36	BS	INCH	6.250
DO		0.0	BHS		OPEN	FPHI		PHIX

CALIBRATION BEFORE SURVEY

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              BEFORE SURVEY CALIBRATION SUMMARY


   PERFORMED:      80/12/13
   PROGRAM FILE: HDT    (VERSION    18.2    80/ 4/29)


  HDT              CALIPER CALIBRATION SUMMARY

               MEASURED                   CALIBRATED
             SMALL   LARGE             SMALL      LARGE        UNITS
       C1     6.5    13.4               6.0       12.0          IN
       C2     6.5    13.2               6.0       12.0          IN
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FILE

2

ORIENTATION	DEPTHS	CORRELATION CURVES ←CONDUCTIVITY

COMPANY AMERICAN QUASAR PETROLEUM COMPANY

WELL HENSCHELL NO. 17-34

FIELD ALBANY

COUNTY LINN STATE OREGON

HIGH RESOLUTION DIPMETER CALIBRATION CODING

1. MECHANICAL ZERO
2. ELECTRICAL ZERO
3. FULL SCALE ADJUST
4. CALIPER ADJUST AT 6" AND 16" CALIPER 1-3 IS CODED
5. CALIPER ADJUST AT 6" AND 16" CALIPER 2-4 IS SOLID
6. PAD #1 RESPONSE CHECK
7. PAD #2 RESPONSE CHECK
8. PAD #3 RESPONSE CHECK
9. PAD #4 RESPONSE CHECK
10. SONDE HANGING VERTICALLY
11. TOOL AND PAD #1 POINTED NORTH
12. TOOL ROTATING