

Type		KCl/Polymer	KCl/Polymer							
Mud weight	ppg	9.1	9.15							
Solids	%	3.9	4.1							
Chlorides	mg/L	29500	31500							
Rm	ohm-m	N/A	N/A							
Rmf	ohm-m	N/A	N/A							
Rmc	ohm-m	N/A	N/A							
Potassium	mg/L									
Environmental data										
GR										
Mud weight	ppg	9.1	9.15							
Bit size	in	6.75	6.75							
Resistivity										
Neutron porosity										
Hole Size		N/A	N/A							
Mud weight		N/A	N/A							
Temperature		N/A	N/A							
Mud salinity		N/A	N/A							
Formation salinity		N/A	N/A							
Recording rate 1	SEC	10	10							
Recording rate 2	SEC	N/A	N/A							
Filtering GR		3pt	3pt							
Filtering density		N/A	N/A							
Filtering Neutron		N/A	N/A							
Company representative		S. Porter								
Anadrill personnel		J. Dolan	K. Handley	D. Borges	T. Harvey	G. Watkins				

DISCLAIMER

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

<p>OTHER SERVICES FOR RUN1</p> <p>Directional Drilling Directional Surveys Gamma Ray</p>	<p>OTHER SERVICES FOR RUN2</p> <p>Directional Drilling Directional Surveys Gamma Ray</p>	<p>OTHER SERVICES FOR RUN</p>
<p>REMARKS: RUN NUMBER 1</p> <p>Depth Offsets: Bit to D&I: 14.50 m Bit to GR: 15.42 m</p> <p>SlimPulse* seated in a 4 3/4" SlimPulse* Rigid Mount Collar.</p> <p>All data are presented from memory.</p> <p>SlimPulse* Gamma Ray is corrected for mud weight and bit size.</p> <p>There was KCl present in the mud system.</p> <p>Gamma Ray logged in 7 5/8" casing to 434 m resulting in attenuation.</p> <p>At 788.46 m, the Kelly Length was changed from 13.3 m to 12.0 m, resulting in a Pipe Tally correction</p> <p>POOH at 1169 m due for a Bit trip.</p>	<p>REMARKS: RUN NUMBER 2</p> <p>Depth Offsets: Bit to D&I: 14.38 m Bit to GR: 15.30 m</p> <p>SlimPulse* seated in a 4 3/4" SlimPulse* Rigid Mount Collar.</p> <p>All data are presented from memory.</p> <p>SlimPulse* Gamma Ray is corrected for mud weight and bit size.</p> <p>There was KCl present in the mud system.</p> <p>POOH at 1360 m due to TD of Seamer-1.</p>	<p>REMARKS: RUN NUMBER</p>

POOH at 1169 m due for a Bit trip.

EQUIPMENT DESCRIPTION

RUN1

RUN2

RUN

DOWNHOLE EQ

DOWNHOLE E

SlimPul

SPMA #
SPEC #
SPBA #4
DH Software:

19.7

GR — 15.4

D&I — 14.5

Float S
S/N: CMP

6 5/8" IB St
4 3/4" S/N: DO

A475XP Steera
4 3/4" S/N
7:8 Lob

SlimPul

SPMA #
SPEC #
SPBA #2
DH Software:

19.5

GR — 15.3

D&I — 14.3

Float S
S/N: CMP

6 5/8" IB St
4 3/4" S/N: DO

A475XP Steera
4 3/4" S/N
7:8 Lob

9.38

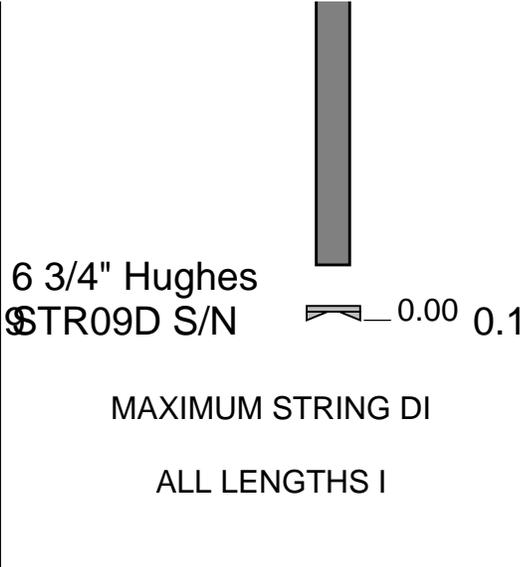
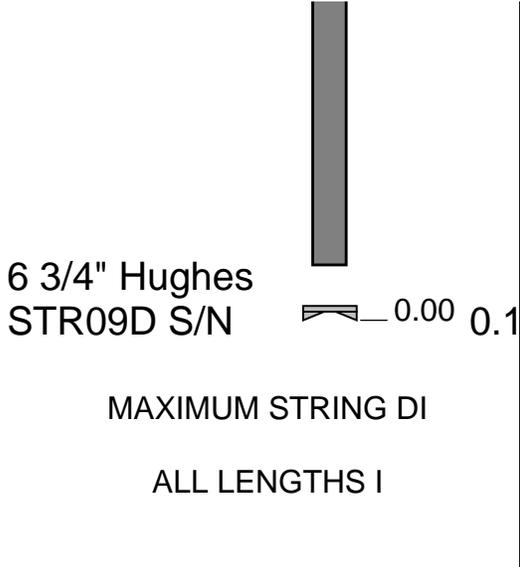
8.70

6.98

9.38

8.70

6.98



IDEAL Version: ID6_1C_10
IDF

Format: Seamer-1 RM 1:500 scale Vertical Scale: 1:500 Graphics File Created: 26-Dec-2002 09:05

Parameters

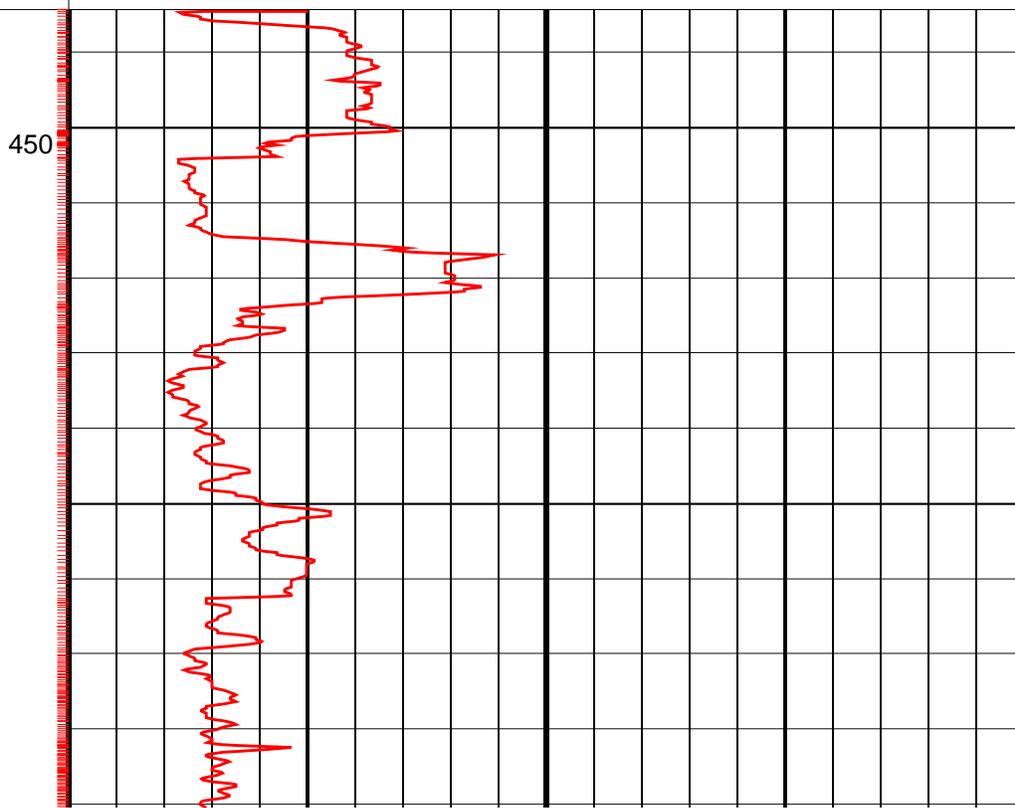
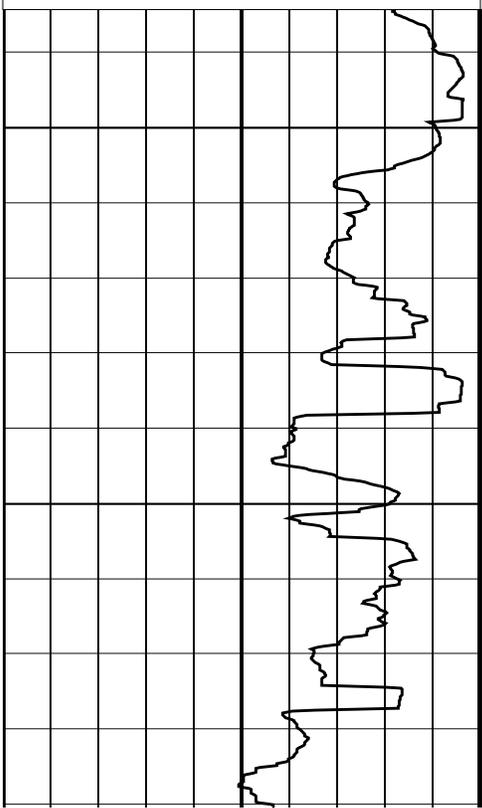
DLIS Name	Description	Value
DO	Depth Offset	0.0 m

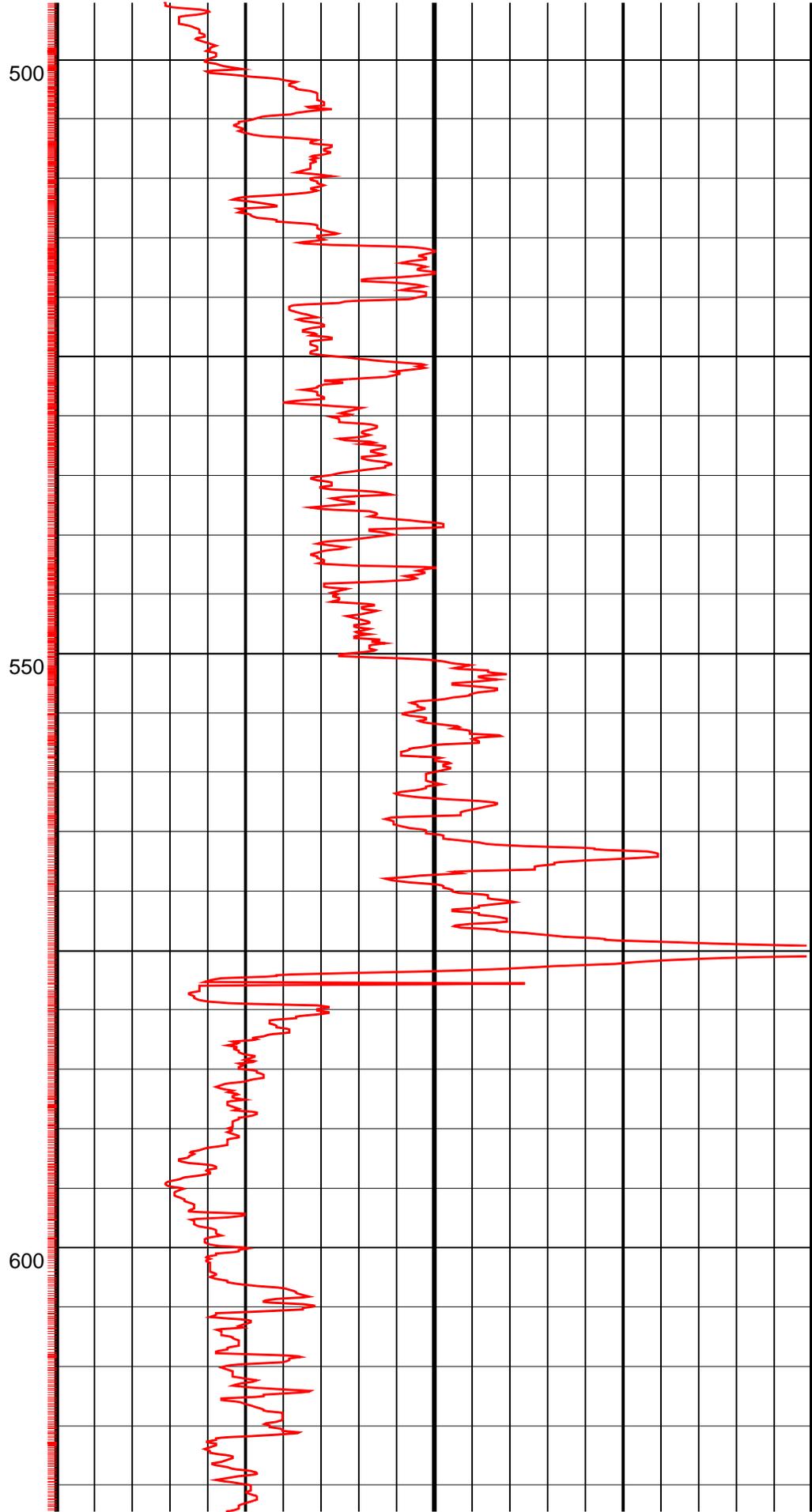
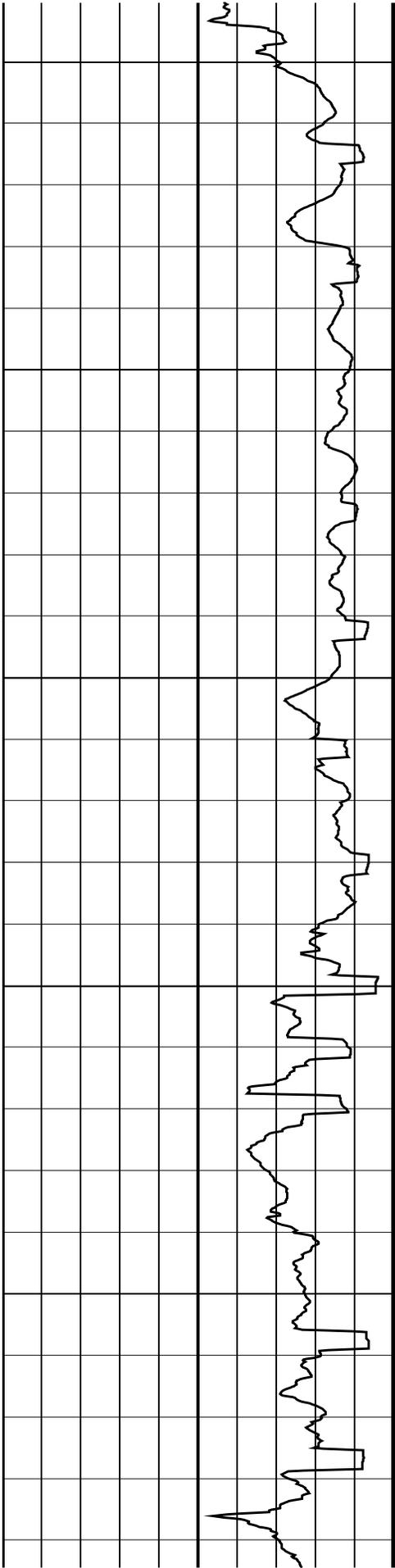
PIP SUMMARY

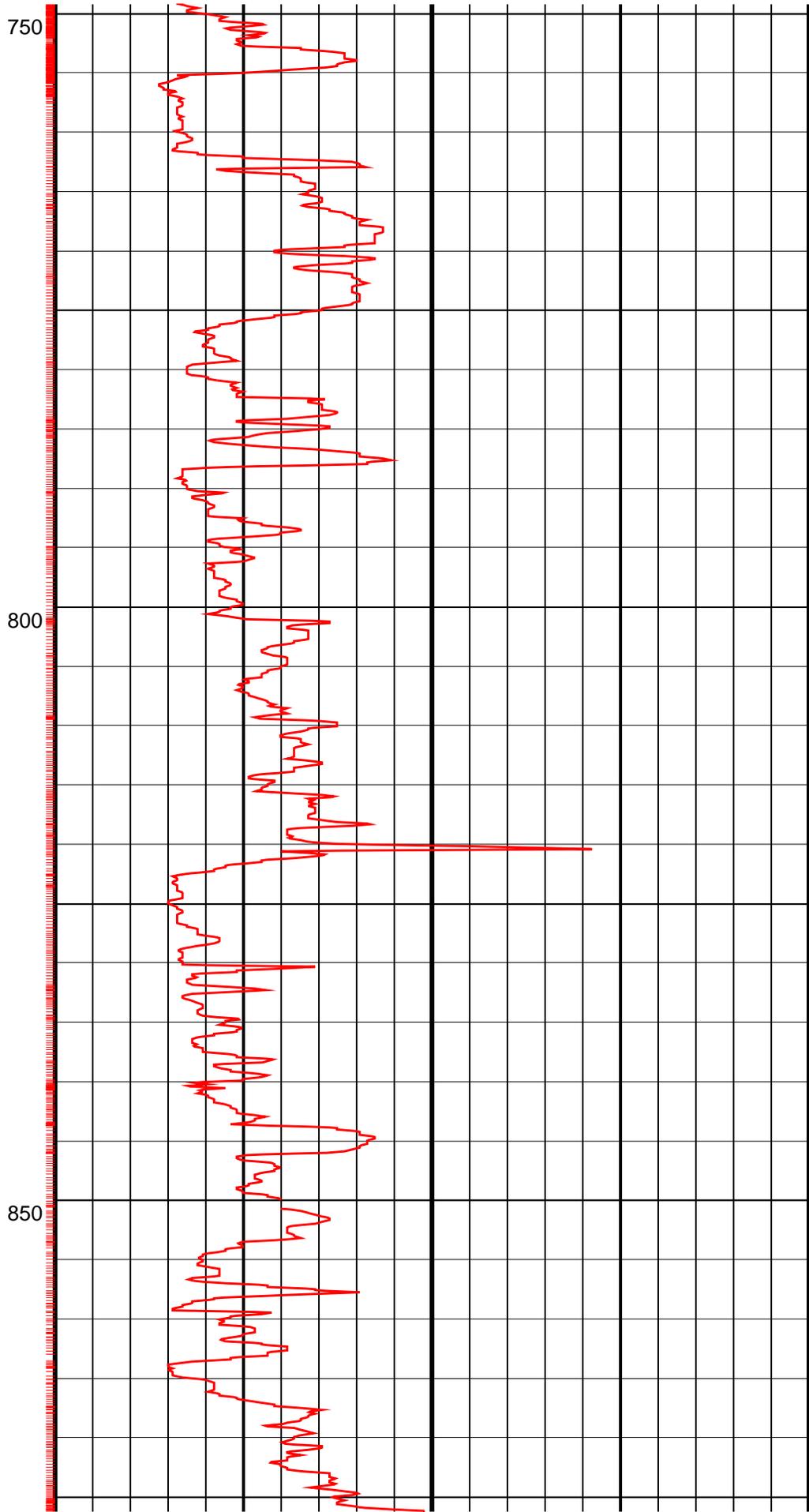
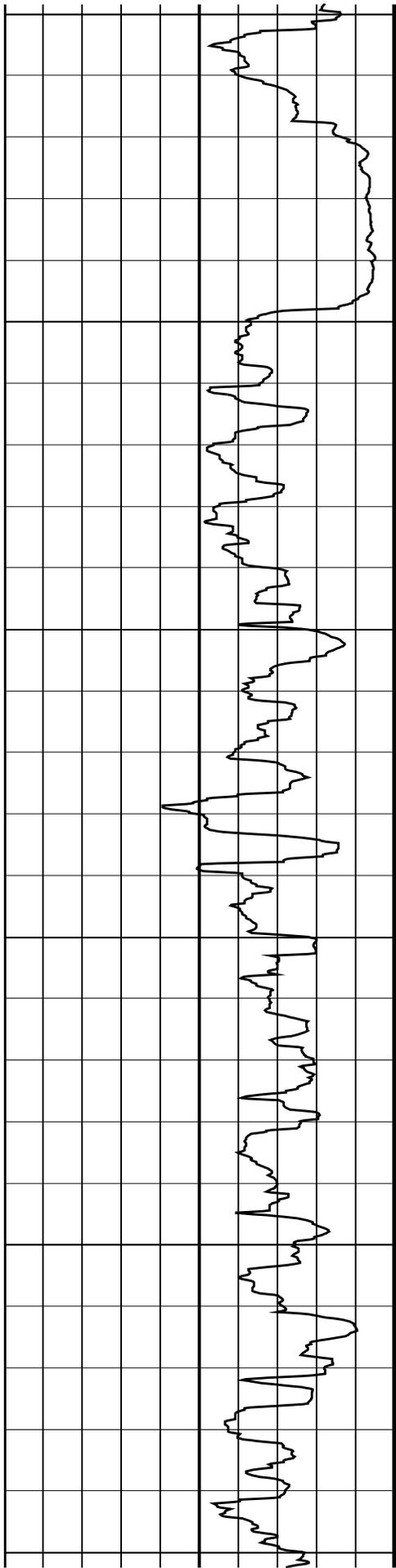
⊕ Gamma-Ray Samples

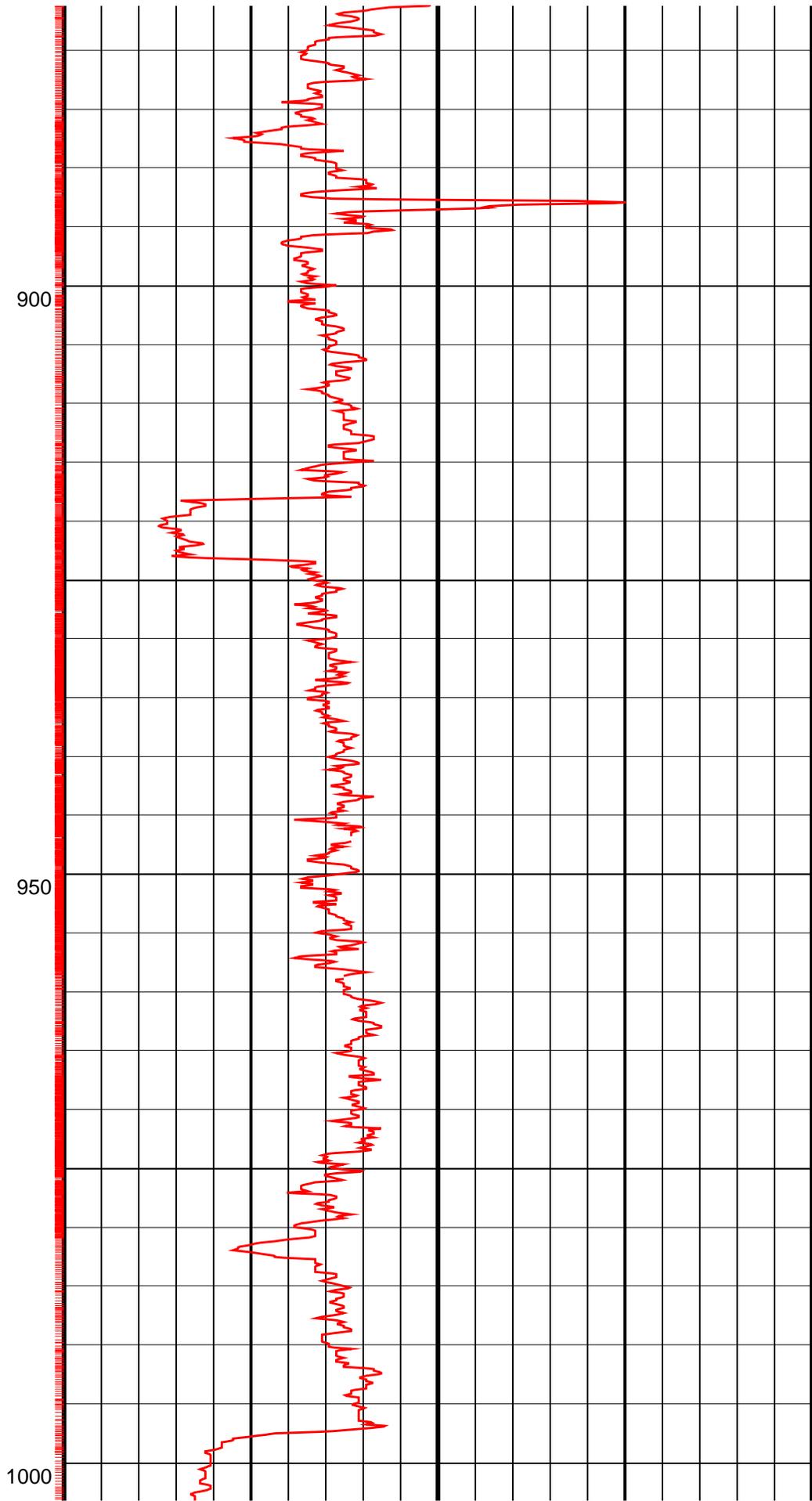
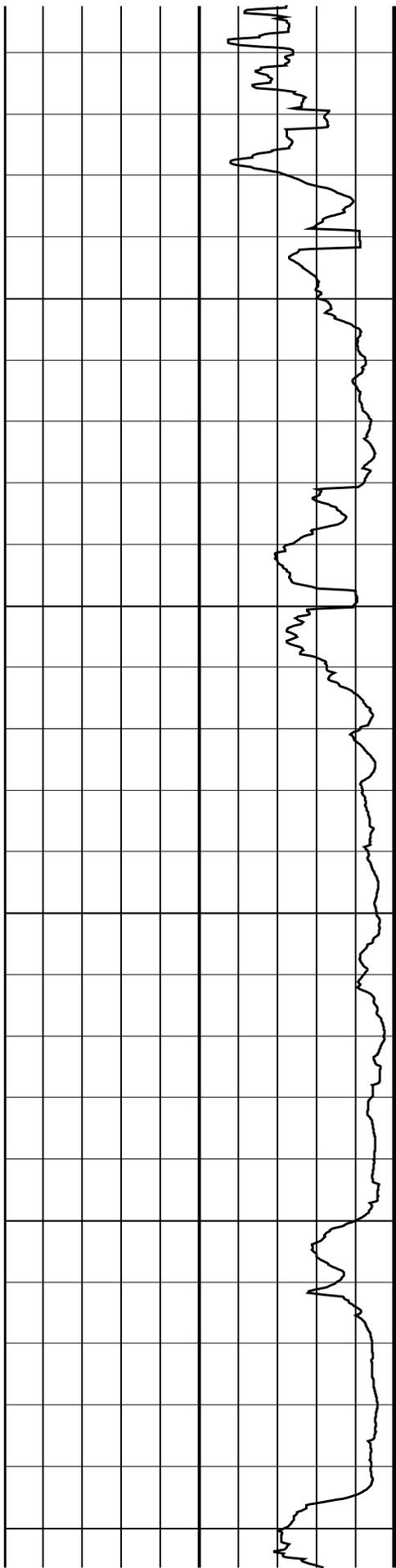
Rate of Penetration, Averaged over Last
5ft (ROP5_RM)
200 (M/HR) 0

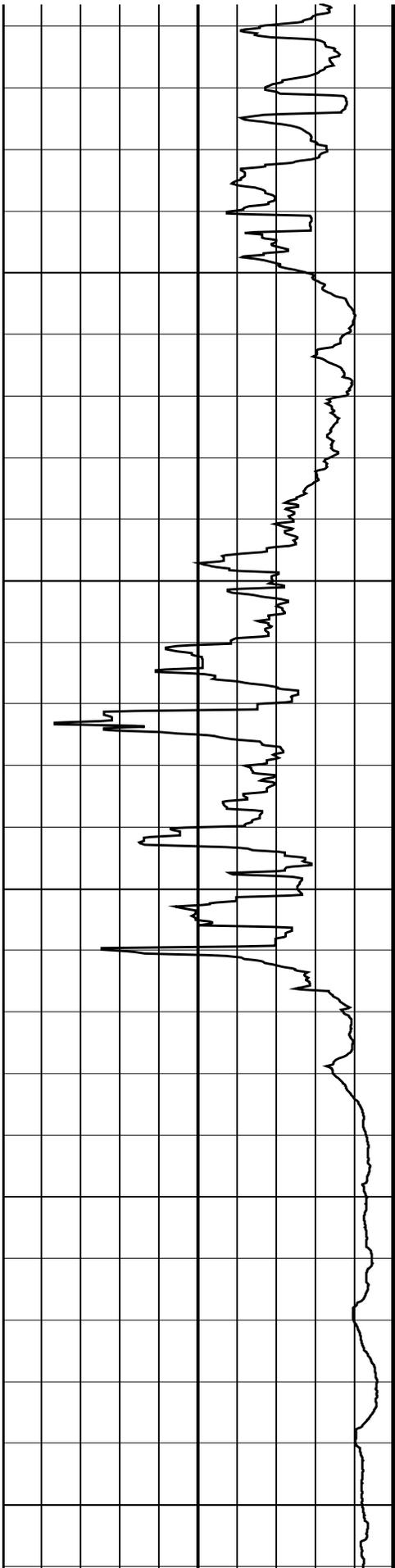
SLIMPULSE BHC Gr (GR_SPULSE_DH)
(GAPI) 0 200





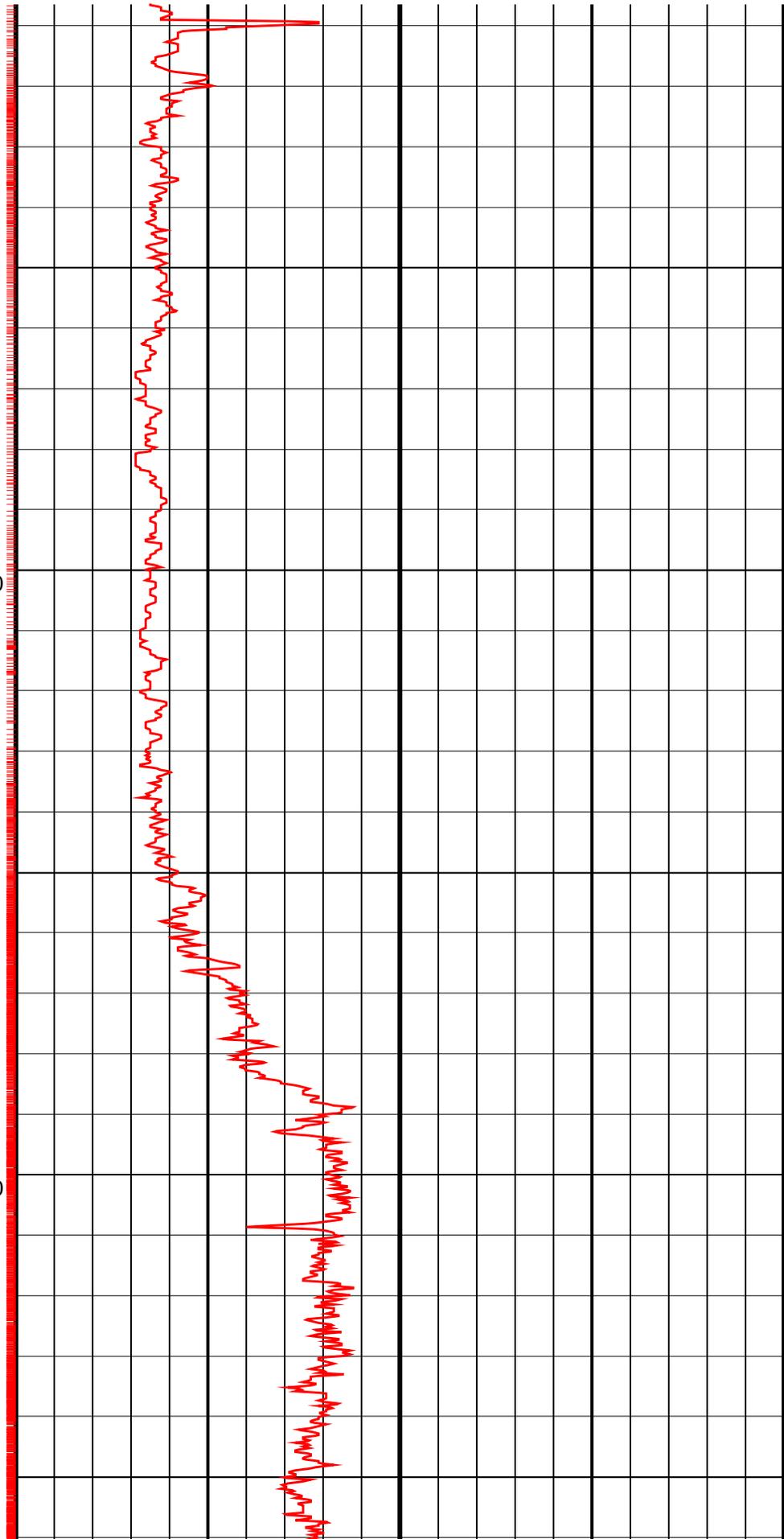


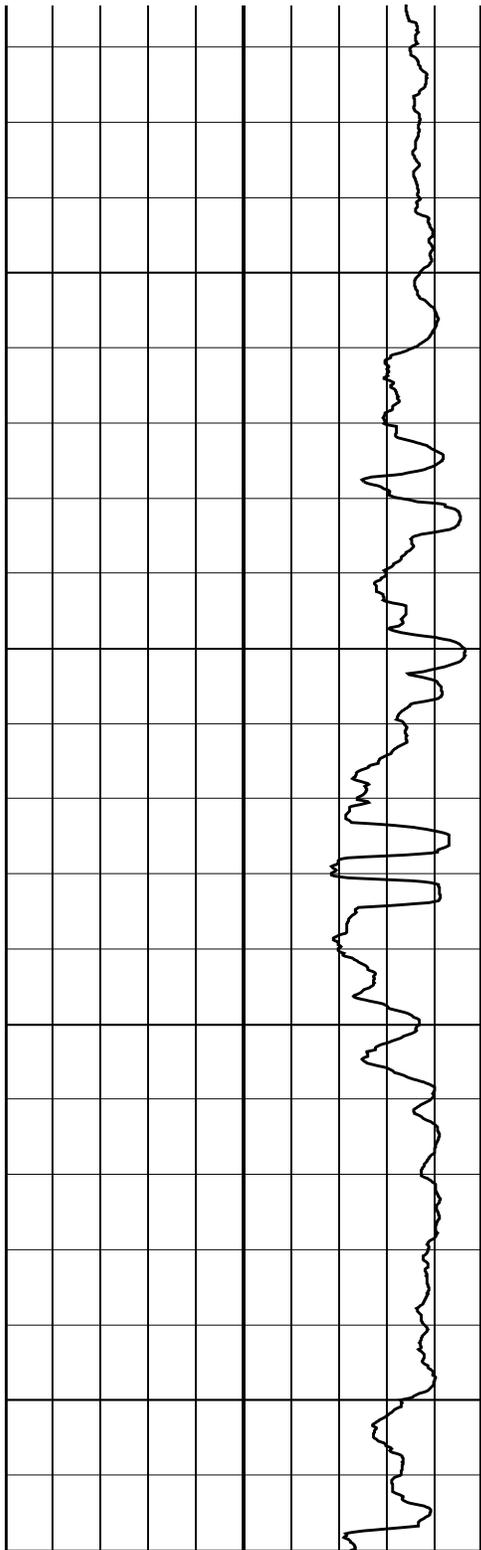




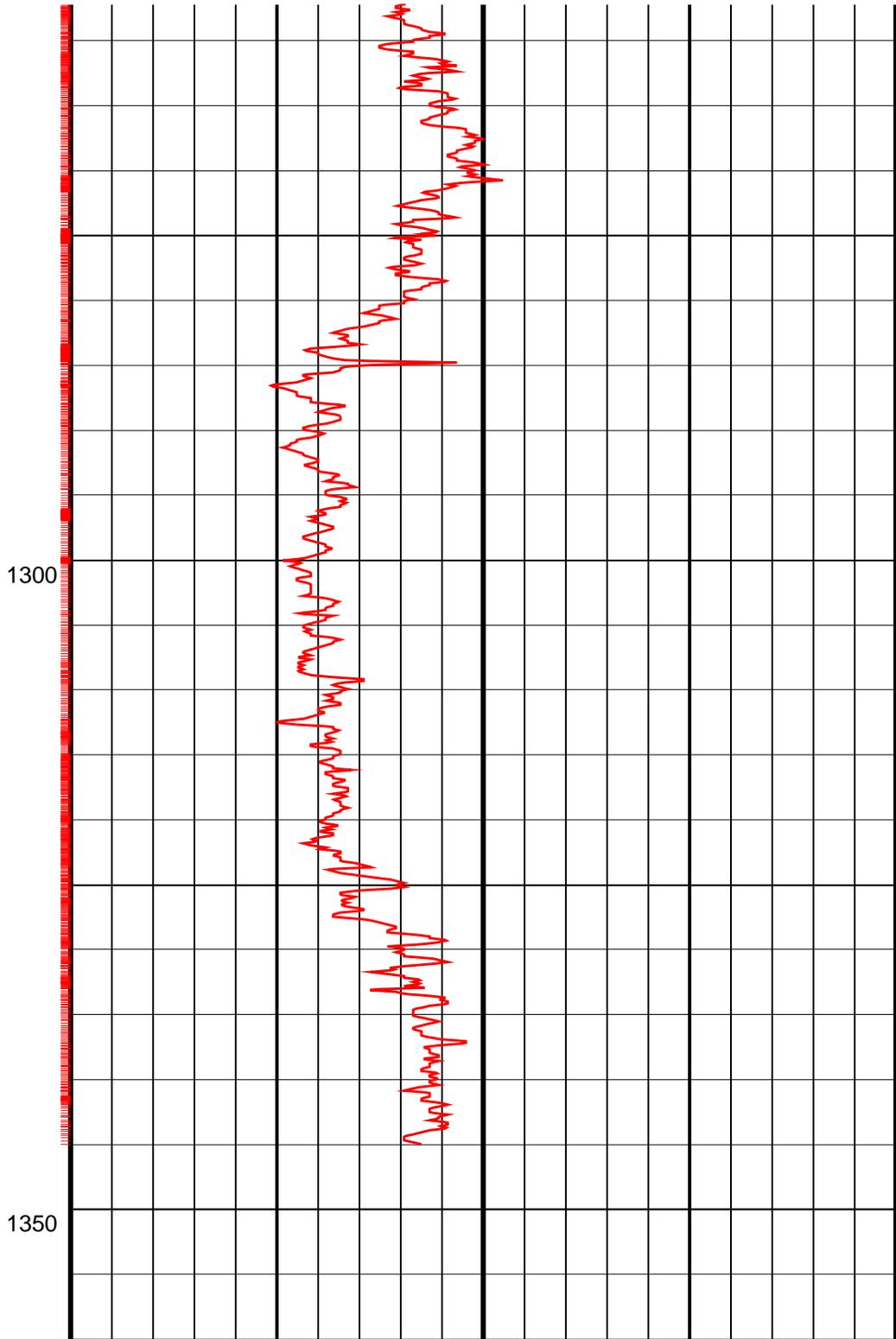
1050

1100





Rate of Penetration, Averaged over Last
5ft (ROP5_RM)
200 (M/HR) 0



SLIMPULSE BHC Gr (GR_SPULSE_DH)
0 (GAPI) 200

PIP SUMMARY

+ Gamma-Ray Samples

IDEAL Version: ID6_1C_10
IDF

ANADRILL
SCHLUMBERGER

Survey report 26-Dec-2002 04:31:57 Page 1 of 3

Client.....: SANTOS Ltd.
Field.....: Otway Basin

Well.....: Seamer-1
API number.....:
Engineer.....: J.Dolan, K.Handley, D.Borges

Spud date.....: 18-Dec-02
Last survey date.....: 26-Dec-02
Total accepted surveys...: 33
MD of first survey.....: 431.00 m
MD of last survey.....: 1360.00 m

COUNTY.....: Century 11
STATE.....: VICTORIA

----- Survey calculation methods-----
Method for positions.....: Minimum curvature
Method for DLS.....: Mason & Taylor

----- Geomagnetic data -----
Magnetic model.....: BGGM version 2002
Magnetic date.....: 21-Dec-2002
Magnetic field strength...: 1216.99 HCNT
Magnetic dec (+E/W-).....: 10.95 degrees
Magnetic dip.....: -69.75 degrees

----- Depth reference -----
Permanent datum.....: GROUND LEVEL
Depth reference.....:
GL above permanent.....: 58.51 m
KB above permanent.....: 64.01 m
DF above permanent.....: 63.71 m

----- MWD survey Reference Criteria -----
Reference G.....: 1000.06 mGal
Reference H.....: 1216.99 HCNT
Reference Dip.....: -69.75 degrees
Tolerance of G.....: (+/-) 2.50 mGal
Tolerance of H.....: (+/-) 6.00 HCNT
Tolerance of Dip.....: (+/-) 0.45 degrees

----- Vertical section origin-----
Latitude (+N/S-).....: 0.00 m
Departure (+E/W-).....: 0.00 m

----- Platform reference point-----
Latitude (+N/S-).....: -304.57 m
Departure (+E/W-).....: -304.57 m

----- Corrections -----
Magnetic dec (+E/W-).....: 10.95 degrees
Grid convergence (+E/W-)..: -1.26 degrees
Total az corr (+E/W-).....: 12.21 degrees
(Total az corr = magnetic dec - grid conv)
Sag applied (Y/N).....: No degree: 0.00

Azimuth from rotary table to target: 180.02 degrees

[(c)2002 Anadrill IDEAL ID6_1C_10]
ANADRILL SCHLUMBERGER Survey Report

26-Dec-2002 04:31:57 Page 2 of 3

Seq #	Measured depth (m)	Incl angle (deg)	Azimuth angle (deg)	Course length (m)	TVD depth (m)	Vertical section (m)	Displ +N/S- (m)	Displ +E/W- (m)	Total displ (m)	At Azim (deg)	DLS (deg/10m)	Srvy tool type	Tool qual type
1	431.00	0.50	167.00	0.00	430.99	1.41	-1.41	2.46	2.83	119.87	0.00	TIP	-
2	452.36	0.20	31.69	21.36	452.35	1.47	-1.47	2.50	2.90	120.48	0.92	SP	6-axis
3	481.66	0.14	39.77	29.30	481.65	1.40	-1.40	2.55	2.91	118.78	0.07	SP	6-axis
4	510.70	0.18	271.49	29.04	510.69	1.37	-1.37	2.53	2.87	118.50	0.30	SP	6-axis
5	528.02	0.14	236.07	17.32	528.01	1.38	-1.38	2.48	2.84	119.13	0.18	SP	6-axis
6	559.15	0.18	280.02	31.13	559.14	1.39	-1.39	2.40	2.78	120.16	0.12	SP	6-axis
7	606.26	4.50	178.12	47.11	606.20	3.23	-3.23	2.39	4.02	143.52	2.89	SP	6-axis
8	635.88	4.41	177.58	29.62	635.73	5.53	-5.53	2.47	6.06	155.89	0.10	SP	6-axis
9	665.22	6.06	179.96	29.34	664.94	8.20	-8.21	2.52	8.58	162.91	1.70	SP	6-axis
10	694.69	8.48	183.87	29.47	694.18	11.93	-11.93	2.38	12.16	168.73	2.51	SP	6-axis
11	723.61	11.02	187.79	28.92	722.68	16.80	-16.80	1.86	16.90	173.68	2.72	SP	6-axis
12	752.98	14.82	187.88	29.37	751.30	23.30	-23.30	0.96	23.32	177.63	3.88	SP	6-axis
13	782.44	17.23	187.39	29.46	779.61	31.36	-31.36	-0.11	31.36	180.21	2.46	SP	6-axis
14	810.75	20.27	188.27	28.31	806.41	40.37	-40.37	-1.36	40.40	181.93	3.24	SP	6-axis
15	839.97	20.70	180.97	29.22	833.79	50.55	-50.55	-2.18	50.59	182.46	2.66	SP	6-axis
16	869.13	20.56	181.56	29.16	861.08	60.82	-60.82	-2.40	60.87	182.26	0.26	SP	6-axis
17	898.76	20.19	181.06	29.63	888.86	71.13	-71.13	-2.64	71.18	182.12	0.41	SP	6-axis
18	927.77	20.17	181.17	29.01	916.09	81.14	-81.14	-2.83	81.19	182.00	0.01	SP	6-axis
19	956.71	19.30	177.87	28.94	943.33	90.91	-90.90	-2.76	90.95	181.74	1.47	SP	6-axis
20	983.47	19.14	176.82	26.76	968.60	99.71	-99.71	-2.35	99.73	181.35	0.43	SP	6-axis
21	1002.89	19.00	176.75	19.42	986.95	106.04	-106.04	-1.99	106.06	181.08	0.22	SP	6-axis
22	1033.63	19.44	176.51	30.74	1015.98	116.14	-116.14	-1.40	116.15	180.69	0.44	SP	6-axis
23	1062.66	18.67	175.18	29.03	1043.42	125.60	-125.60	-0.71	125.60	180.33	0.91	SP	6-axis
24	1091.58	18.19	175.22	28.92	1070.85	134.70	-134.70	0.05	134.71	179.98	0.50	SP	6-axis
25	1120.49	18.32	174.69	28.91	1098.31	143.73	-143.73	0.85	143.73	179.66	0.22	SP	6-axis
26	1149.65	18.05	174.71	29.16	1126.01	152.79	-152.79	1.69	152.80	179.37	0.28	SP	6-axis
27	1178.33	18.61	175.35	28.68	1153.24	161.77	-161.77	2.47	161.79	179.13	0.62	SP	6-axis
28	1207.32	18.25	175.48	28.99	1180.74	170.91	-170.91	3.20	170.94	178.93	0.37	SP	6-axis
29	1236.55	18.47	174.85	29.23	1208.48	180.08	-180.08	3.98	180.13	178.73	0.30	SP	6-axis
30	1265.29	18.99	175.78	28.74	1235.70	189.28	-189.28	4.73	189.34	178.57	0.63	SP	6-axis

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ANADRILL SCHLUMBERGER Survey Report

26-Dec-2002 04:31:57 Page 3 of 3

Seq #	Measured depth (m)	Incl angle (deg)	Azimuth angle (deg)	Course length (m)	TVD depth (m)	Vertical section (m)	Displ +N/S- (m)	Displ +E/W- (m)	Total displ (m)	At Azim (deg)	DLS (deg/10m)	Srvy tool type	Tool qual type
31	1294.56	19.08	176.12	29.27	1263.37	198.80	-198.80	5.40	198.88	178.44	0.15	SP	6-axis
32	1323.38	19.56	175.58	28.82	1290.57	208.31	-208.31	6.10	208.40	178.32	0.53	SP	6-axis
33	1360.00	19.76	175.70	36.62	1325.05	220.60	-220.60	7.03	220.71	178.17	0.17	Projection to TD	

[(c)2002 Anadrill IDEAL ID6_1C_10]

Company: **SANTOS Ltd**

Well: **Seamer-1**

Field: **Exploration (Otway Basin)**

Rig: **Century 11**

State: **Victoria**

IDEAL services from **Anadrill**

SlimPulse* GR
Measured Depth 1:500 scale
Recorded Mode Memory

Schlumberger