Century WIRELINE SERVICES

DIPMETER ANALYSIS
DHGH-14-08

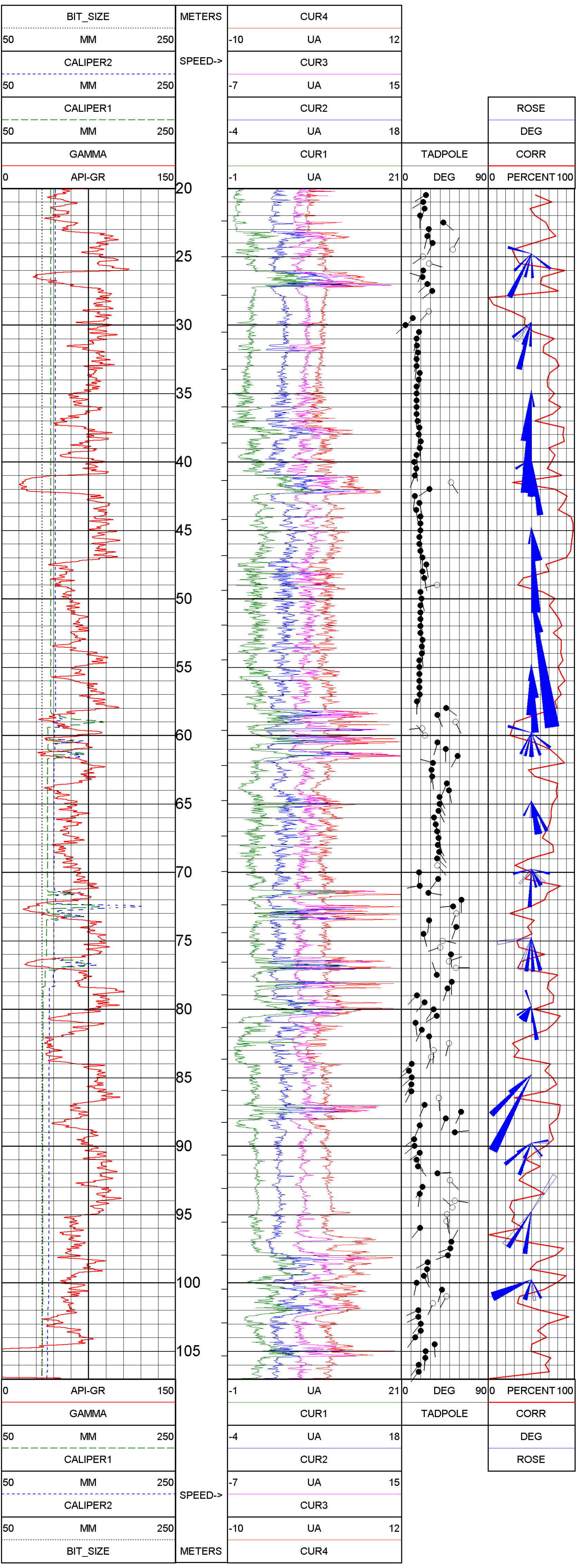
COMPANY	ATRUM COAL	OTHER SERVICES:	DENSITY NEUTRON SONIC
WELL	DHGH-14-08		
FIELD	GROUNDHOG		
COUNTRY	CANADA		
PROVINCE	BRITISH COLUMBIA		
LSD	GROUNDHOG		
SECTION	N/A		
TOWNSHIP	N/A		
RANGE	N/A		
LICENSE NO.	N/A		
UNIQUE WELL ID.	N/A		
PERMANENT DATUM	GL	ELEVATION KB	N/A
LOG MEASURED FROM GL		ELEVATION DF	N/A
DRL MEASURED FROM GL		ELEVATION GL	N/A
DATE	06/05/14	RIG NUMBER	2
DEPTH DRILLER	108.81	LOGGER TD	107.54
BIT SIZE	97.0	ARRIVAL TIME	19:00
LOG TOP	5.22	DEPARTURE TIME	7:30
LOG BOTTOM	107.00	CIRC STOPPED	N/A
CASING LOGGER	7.32		
CASING DRILLER	7.32		
CASING TYPE	STEEL		
BOREHOLE FLUID	WATER		
RM TEMPERATURE	N/A		
MUD RES	N/A		
MUD WEIGHT	1.00		
WITNESSED BY	N/A		
RECORDED BY	T. NEAL		
REMARKS 1	VERTICAL		
REMARKS 2	:		

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

FORMATION DIPMETER 1:200 DHGH-14-08 06/05/14

LOG PARAMETERS

MATRIX DENSITY : 2.65	NEUTRON MATRIX : SANDSTONE	MATRIX DELTA T : 177
MAGNETIC DECL : 19.5	ELECT. CUTOFF : 75000	BIT SIZE : 97.0
PRESENTATION NAME/DATE = Atrum_9411-2.0 04/13/2014		VERSION = 3.64KX



FORMATION DIPMETER 1:200 DHGH-14-08 06/05/14

LOG PARAMETERS

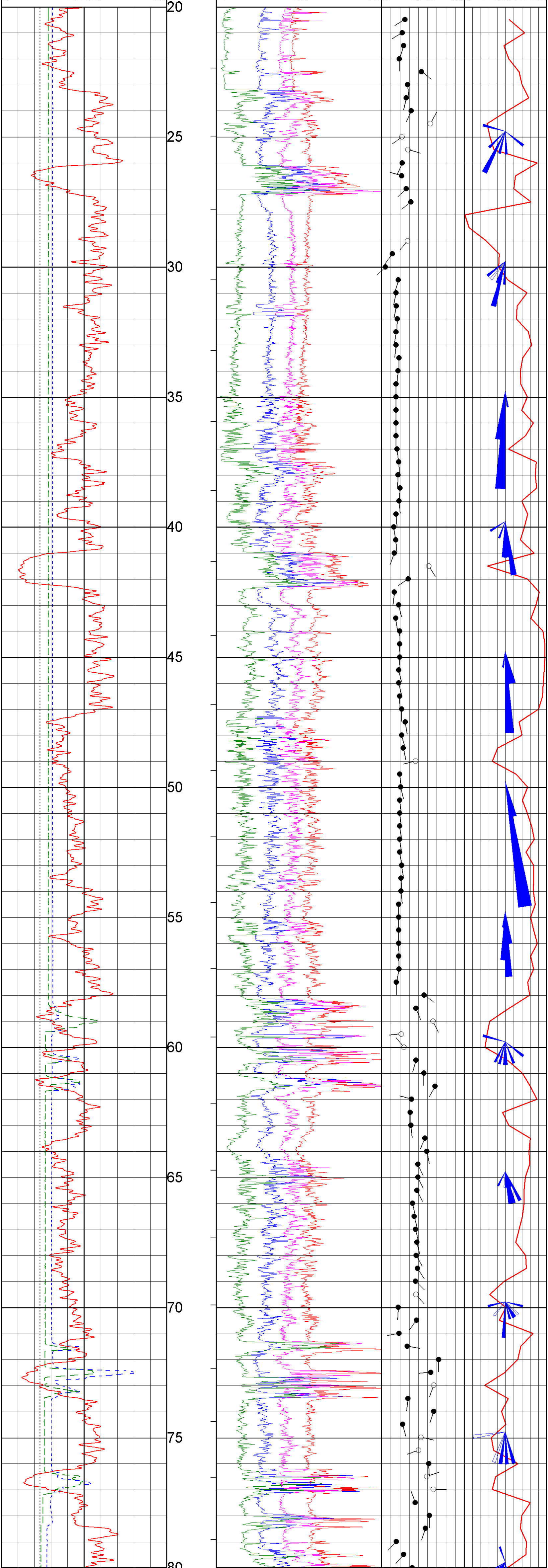
MATRIX DENSITY : 2.65	NEUTRON MATRIX : SANDSTONE	MATRIX DELTA T : 177
MAGNETIC DECL : 19.5	ELECT. CUTOFF : 75000	BIT SIZE : 97.0
PRESENTATION NAME/DATE = Atrum_9411-2.0 04/13/2014		VERSION = 3.64KX

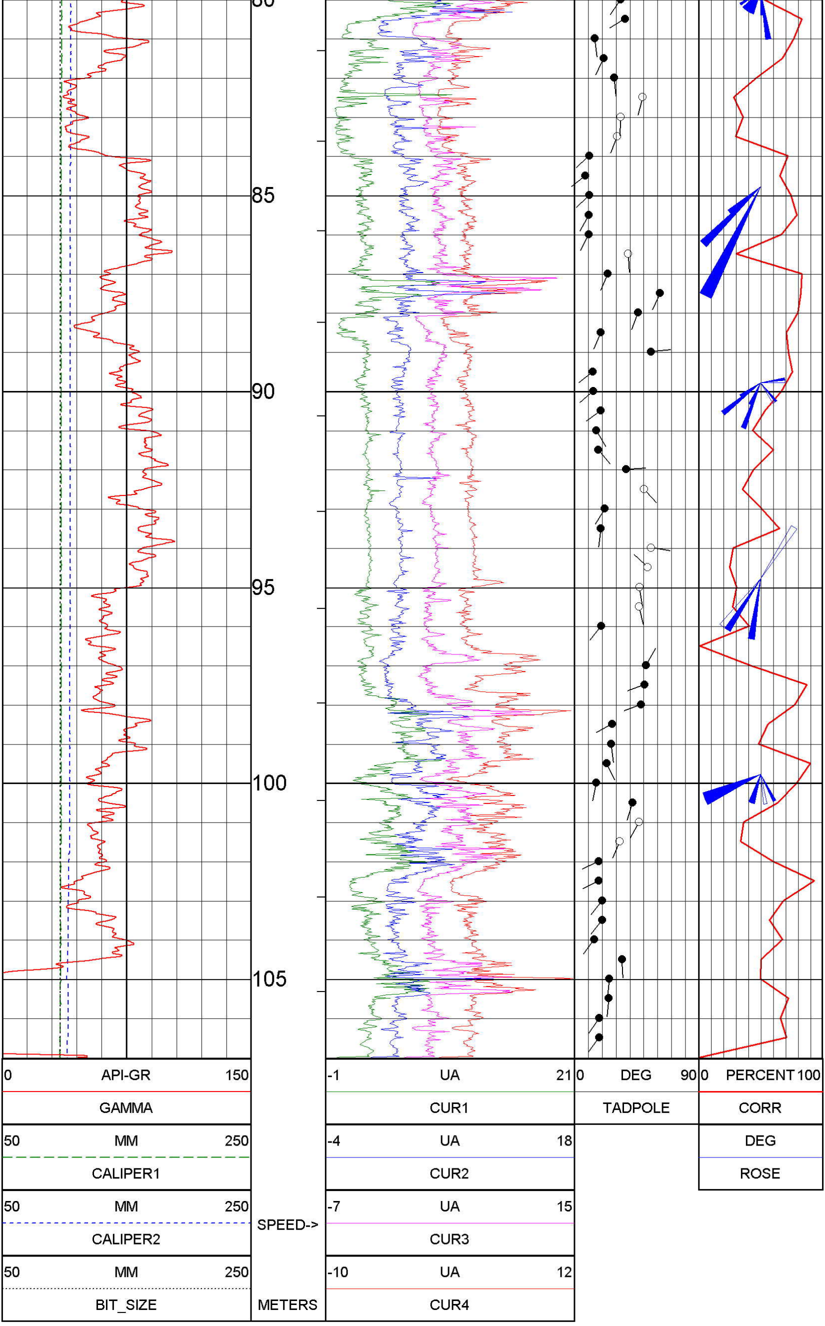
FORMATION DIPMETER 1:100 DHGH-14-08 06/05/14

LOG PARAMETERS

MATRIX DENSITY : 2.65	NEUTRON MATRIX : SANDSTONE	MATRIX DELTA T : 177
MAGNETIC DECL : 19.5	ELECT. CUTOFF : 75000	BIT SIZE : 97.0
PRESENTATION NAME/DATE = Atrum_9411_1.0 06/05/2014		VERSION = 3.64KX

BIT_SIZE 50 MM 250	METERS	CUR4 -10 UA 12		
CALIPER2 50 MM 250	SPEED->	CUR3 -7 UA 15		
CALIPER1 50 MM 250		CUR2 -4 UA 18		ROSE DEG
GAMMA 0 API-GR 150		CUR1 -1 UA 21	TADPOLE 0 DEG 90	CORR 0 PERCENT 100





FORMATION DIPMETER 1:100 DHGH-14-08 06/05/14

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MATRIX DENSITY : 2.65
NEUTRON MATRIX : SANDSTONE
MATRIX DELTA T : 177
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BIT SIZE : 97.0
PRESENTATION NAME/DATE = Atrum_9411_1.0 06/05/2014
VERSION = 3.64KX

TOOL CALIBRATION DHGH-14-08 06/05/14 00:16
TOOL 9411A TM VERSION 6
SERIAL NUMBER 4504

	DATE	TIME	SENSOR	STANDARD		RESPONSE	
1	Sep04,13	17:17:51	GAMMA	0.100	[API-GR]	0.000	[CPS]
	Sep04,13	17:17:51	GAMMA	545.000	[API-GR]	519.000	[CPS]
2	May04,10	13:04:32	VOLTAGE	50.000	[MV]	400.000	[CPS]
	May04,10	13:04:32	VOLTAG	280.000	[MV]	1900.000	[CPS]
3	Jan13,14	09:54:46	CUR1	5.580	[UA]	8180.000	[CPS]
	Jan13,14	09:54:46	CUR1	13.250	[UA]	22864.000	[CPS]
4	Jan13,14	09:54:56	CUR2	5.580	[UA]	9045.000	[CPS]
	Jan13,14	09:54:56	CUR2	13.250	[UA]	22151.000	[CPS]
5	Jan13,14	09:55:08	CUR3	5.580	[UA]	8711.000	[CPS]
	Jan13,14	09:55:08	CUR3	13.250	[UA]	21601.000	[CPS]
6	Jan13,14	09:55:14	CUR4	5.580	[UA]	8241.000	[CPS]
	Jan13,14	09:55:14	CUR4	13.250	[UA]	23064.000	[CPS]
7	Dec07,13	21:40:24	CALIPER	100.000	[INCH]	5085.000	[CPS]
	Dec07,13	21:40:24	CALIPER	152.000	[INCH]	6983.000	[CPS]
8	Dec07,13	21:40:54	CALIPER	100.000	[INCH]	3877.000	[CPS]
	Dec07,13	21:40:54	CALIPER	152.000	[INCH]	5952.000	[CPS]