Century Wireline Services

DIPMETER ANALYSIS

DHGH-14-30

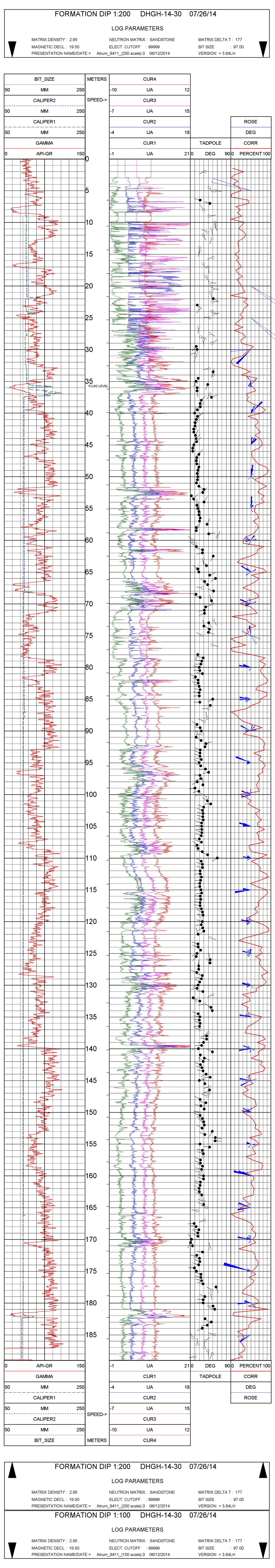
COMPANY	ATRUM COAL	OTHER SERVICES:	NEU,SON DEN
WELL	DHGH-14-30		
FIELD	GROUNDHOG		
COUNTRY	CANADA		
PROVINCE	BRITISH COLUMBIA		
LSD	N/A		
SECTION	N/A		
TOWNSHIP	N/A		
RANGE	N/A		
LICENSE NO.	N/A		
UNIQUE WELL ID.	N/A		
PERMANENT DATUM	GL	ELEVATION KB	N/A
LOG MEASURED FROM GL		ELEVATION DF	N/A
DRL MEASURED FROM GL		ELEVATION GL	N/A
DATE	07/26/14	RIG NUMBER	2
DRILLER TD	289.24	LOGGER TD	289.16
BIT SIZE	97.00	ARRIVAL TIME	09:30
LOG TOP	0.00	DEPARTURE TIME	19:00
LOG BOTTOM	189.00	CIRC STOPPED	09:00
LOGGER CASING	9.14		
DRILLER CASING	9.14		
CASING TYPE	SURFACE		
BOREHOLE FLUID	H2O		
RM TEMPERATURE	N/A		
MUD RES	N/A		
MUD WEIGHT	1.01		
WITNESSED BY	H.MCKENZIE		
RECORDED BY	JSTAPELBERG		
REMARKS 1	DIPMETER BRIDGED AT 190 M		
REMARKS 2	FLUID LEVEL AT 35.58 M		

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

FORMATION DIP 1:200 DHGH-14-30 07/26/14

LOG PARAMETERS

MATRIX DENSITY : 2.65 NEUTRON MATRIX : SANDSTONE MATRIX DELTA T : 177
MAGNETIC DECL : 19.50 ELECT. CUTOFF : 99999 BIT SIZE : 97.00
PRESENTATION NAME/DATE = Atrum_9411_(200 scale).0 06/12/2014 VERSION = 3.64LH



FORMATION DIP 1:200 DHGH-14-30 07/26/14


LOG PARAMETERS

MATRIX DENSITY : 2.65 NEUTRON MATRIX : SANDSTONE MATRIX DELTA T : 177
MAGNETIC DECL : 19.50 ELECT. CUTOFF : 99999 BIT SIZE : 97.00
PRESENTATION NAME/DATE = Atrum_9411_(200 scale).0 06/12/2014 VERSION = 3.64LH

FORMATION DIP 1:100 DHGH-14-30 07/26/14

LOG PARAMETERS

MATRIX DENSITY : 2.65 NEUTRON MATRIX : SANDSTONE MATRIX DELTA T : 177
MAGNETIC DECL : 19.50 ELECT. CUTOFF : 99999 BIT SIZE : 97.00
PRESENTATION NAME/DATE = Atrum_9411_(100 scale).0 06/12/2014 VERSION = 3.64LH



FORMATION DIP 1:100 DHGH-14-30 07/26/14

LOG PARAMETERS

MATRIX DENSITY : 2.65 NEUTRON MATRIX : SANDSTONE MATRIX DELTA T : 177
MAGNETIC DECL : 19.50 ELECT. CUTOFF : 99999 BIT SIZE : 97.00
PRESENTATION NAME/DATE = Atrum_9411_(100 scale).0 06/12/2014 VERSION = 3.64LH

TOOL CALIBRATION DHGH-14-30 07/26/14 17:31
TOOL 9411A TM VERSION 6
SERIAL NUMBER 4504

	DATE	TIME	SENSOR	STANDARD		RESPONSE	
1	Sep04,13	18:17:51	GAMMA	0.100	[API-GR]	0.000	[CPS]
	Sep04,13	18:17:51	GAMMA	545.000	[API-GR]	519.000	[CPS]
2	May04,10	14:04:32	VOLTAGE	50.000	[MV]	400.000	[CPS]
	May04,10	14:04:32	VOLTAG	280.000	[MV]	1900.000	[CPS]
3	Jan13,14	10:54:46	CUR1	5.580	[UA]	8180.000	[CPS]
	Jan13,14	10:54:46	CUR1	13.250	[UA]	22864.000	[CPS]
4	Jan13,14	10:54:56	CUR2	5.580	[UA]	9045.000	[CPS]
	Jan13,14	10:54:56	CUR2	13.250	[UA]	22151.000	[CPS]
5	Jan13,14	10:55:08	CUR3	5.580	[UA]	8711.000	[CPS]
	Jan13,14	10:55:08	CUR3	13.250	[UA]	21601.000	[CPS]
6	Jan13,14	10:55:14	CUR4	5.580	[UA]	8241.000	[CPS]
	Jan13,14	10:55:14	CUR4	13.250	[UA]	23064.000	[CPS]
7	Dec07,13	22:40:24	CALIPER	100.000	[INCH]	5085.000	[CPS]
	Dec07,13	22:40:24	CALIPER	152.000	[INCH]	6983.000	[CPS]
8	Dec07,13	22:40:54	CALIPER	100.000	[INCH]	3877.000	[CPS]
	Dec07,13	22:40:54	CALIPER	152.000	[INCH]	5952.000	[CPS]