

BC Geological Survey Coal Assessment Report 982

2014 Michel Head Exploration Program



ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: Assessment Report: 2014 Michel Head Exploration Program

TOTAL COST: \$1,284,353.67

AUTHOR(S): Dave Thompson, P.Geo.

SIGNATURE(S):

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):

CX-5-018, Approval #13-1630658-0625, issued June 25, 2013

YEAR OF WORK: 2014

PROPERTY NAME: Michel Creek Coking Coal Project, Michel Head Property

CLAIM NAME(S) (on which work was done): Coal Licence #418317

COMMODITIES SOUGHT: Coal

MINING DIVISION: FORT STEELE

NTS / BCGS: 82G/10E and 7E

LATITUDE: 49° 30' 30" N

LONGITUDE: 115° 46' 45" W (at centre of work)

UTM Zone: 11 **EASTING:** 665,000m **NORTHING:** 5,486,500m

OWNER(S): CanAus Coal Limited

MAILING ADDRESS: #5000 Hwy 43, Sparwood, BC V0B 2G1

OPERATOR(S) [who paid for the work]: CanAus Coal Limited

REPORT KEYWORDS: Jurassic/Cretaceous, Mist Mountain Formation, Coal

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT

NUMBERS: Summary Report on the Michel Head Property – 2013 Exploration Program Michel Creek Coking Coal Project



ASSESSMENT REPORT

2014 Michel Head Exploration Program



Owner and Operator: CanAus Coal Ltd.

Authorship: Dave Thompson, P.Geo.

Chief Geologist, CanAus Coal Ltd.

A portion of Section 1, all of Section 6, a portion of section 9, and Appendix D remain confidential under the terms of the Coal Act Regulation, and have been removed from the public version.

http://www.bclaws.ca/civix/document/id/complete/statreg/251_2004

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1 Introduction and Summary

This report describes the exploration work conducted on the Michel Head property owned by CanAus Coal Ltd. (CanAus) in the Michel Creek area near Sparwood, BC (Figure 1.1).

The Michel Head property was geologically mapped by Kaiser Resources in 1972. No known coal exploration drilling was undertaken, although one historical drillhole casing was located on the property.

In 2013, exploration conducted by CanAus on Michel Head included 23 reverse circulation holes and two large diameter core holes. Samples were taken during the reverse circulation geology drilling which were used to map coal seam rank variability. The large diameter core was analyzed for detailed washability and coking coal characteristics. [REDACTED]

The 2014 Exploration Program on Michel Head included 15 reverse circulation holes, four large diameter core holes (as well as two pilot holes prior to the core holes), and four HQ3 core holes. Coal samples from the large diameter holes were analyzed for detailed sizing, washability and coking coal characteristics.

The 2014 program was designed to fulfill the requirements of GSC Paper 88-21, A Standardized Coal Resource/Reserve Reporting System for Canada, for a moderate coal deposit, with drilling and coal sampling locations spaced appropriately, in preparation for pre-feasibility level study.

Construction of a 3D block model was completed and a resource estimate was calculated for areas that could potentially be mined by surface methods. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]		
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Figure 1.1 Location Plan



2 Property and Location

2.1 Ownership

Mineral rights are wholly owned by CanAus Coal Ltd. Surface rights are held by Jemi Fibre Corp. as part of their free-hold Tent Mountain Block 21. There are no oil and gas drilling activities on the property.

At this time there are no environmental liabilities identified on the property.

2.2 Property

The approximate centre point of the Michel Head property is 5,486,500N and 665,000E (UTM NAD 83). The Michel Head property, held by CanAus, represents one coal license, 418317 (Table 2.2.1). A location map shows information on the license (Figure 2.2.1).

Table 2.2.1 Michel Head Property Coal License

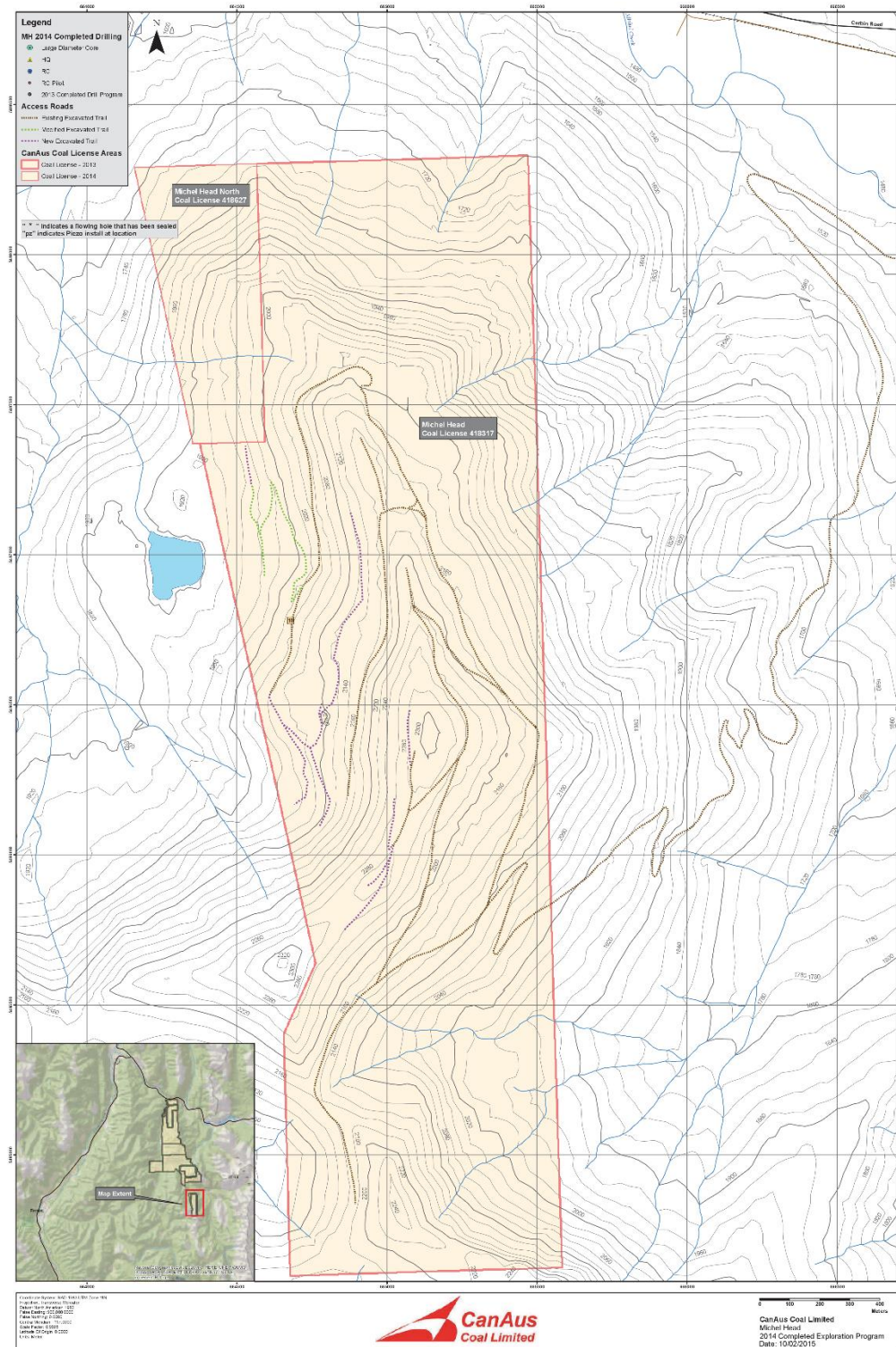
Coal License	Property Name	Approx. Area (ha)
418317	Michel Head	342
Total Area		342

The property is situated in the northwest trending Front Ranges of the Rocky Mountains physiographic region, which is characterized by a series of steep mountains running to the northwest, incised by west flowing streams. Figure 2.2.1 shows the Michel Head property as the light yellow area. Elevations range from ~1,400m along Michel Creek to a height of 2,300m on Michel Head. Michel Head has generally thin tree cover.

The Michel Head property is located 4km west of the Coal Mountain coal mine owned and operated by Teck Coal Ltd.

The climate is characterized by long, cold winters and short, cool to hot summers. In Sparwood, the temperature ranges from a record high of 39°C in the summer to a record low of -39.8°C in the winter, with a mean maximum in August of 23.6°C and a mean minimum in December of -11.6°C. Temperatures at the higher altitudes of the property would be slightly lower. The average amount of precipitation in Sparwood is 603mm with an equivalent of 248cm of that falling as snow.

Figure 2.2.1 – License Plan



2.3 Location and Access

The Michel Creek Coking Coal Project is located southeast of the town of Sparwood in the Michel Creek valley, southeast British Columbia. Primary road access to the general area is via the Crowsnest Highway (Highway 3), which is an all-weather paved major highway connecting Sparwood with Fernie in the west and communities of the Crowsnest Pass in the east. The project area is accessed by driving east from Sparwood along Highway 3 for 11km and turning south onto Corbin Road. From Corbin Road, access to the Michel Head property is a further 19km south. A network of logging and exploration trails on the property are utilized for drilling access.

3 Program Overview

3.1 Goals and Parameters

The 2014 exploration program was intended to gather sufficient geological data to support a pre-feasibility study on the Michel Head coal deposit. Coal seams of the Mist Mountain Formation have been extensively investigated to date.

This deposit is considered Moderate under the guidelines of GSC Paper 88-21, and a data point density sufficient to define a Measured Resource was used in designing the exploration program. The program was focused on obtaining tighter data point spacing (100m spatial distribution) across the deposit in an attempt to confirm the known information gathered during the 2013 exploration program.

3.2 History

Exploration in the Michel Creek area began in the late nineteenth century. The Crow's Nest Pass Coal Company began its operations in the area in 1897 and in 1908, mining at Coal Mountain, 4km east of the Michel Head Property. However, the first exploration documented in B.C. government assessment reports for the area was in 1971.

In 1972, Kaiser completed a program of road building, geological mapping and sampling in the area, which they called Taylor Mountain East, now called the Michel Head project area. In 1973, Kaiser continued the program to the south with the Taylor Mountain South program of road building, geological mapping and coal outcrop sampling. The 1970's work by Kaiser Resources on the Michel Head property, now held by CanAus, resulted in a preliminary resource estimate for this area indicating 30.1Mt.

In 2013, exploration conducted by CanAus on Michel Head included 23 reverse circulation drillholes, for a total of 2,932m and two large diameter (15cm) sonic core holes, for a total of 94.53m. These were the first recorded drillholes on the property. Samples were taken during the reverse circulation geology drilling which were used to map coal seam rank variability. The large diameter core was analyzed for detailed washability and coking coal characteristics. A 3D resource model was prepared and a resource estimate was calculated.

3.3 2014 Drilling

In 2014, 15 reverse circulation geology drillholes, 2 reverse circulation pilot drillholes for large diameter coring, 4 large diameter (15cm) core holes and 4 HQ3 (6.1cm) core holes were completed, to confirm and expand on the 2013 and historic data (Figure 3.3.1 and Table 3.3.1). A total of 3304m of drilling was completed, including 2511m of reverse circulation holes, 524m of HQ3 core holes and 269m of large diameter core holes.

All of the 2014 drill holes were geophysically logged with through-pipe density at a minimum and subsequently with open-hole density and deviation where conditions allowed.

All drill collars were surveyed with base-station corrected, differential GPS equipment. All points were surveyed to centimetre-level accuracy.

Figure 3.3.1 Michel Head Exploration Plan

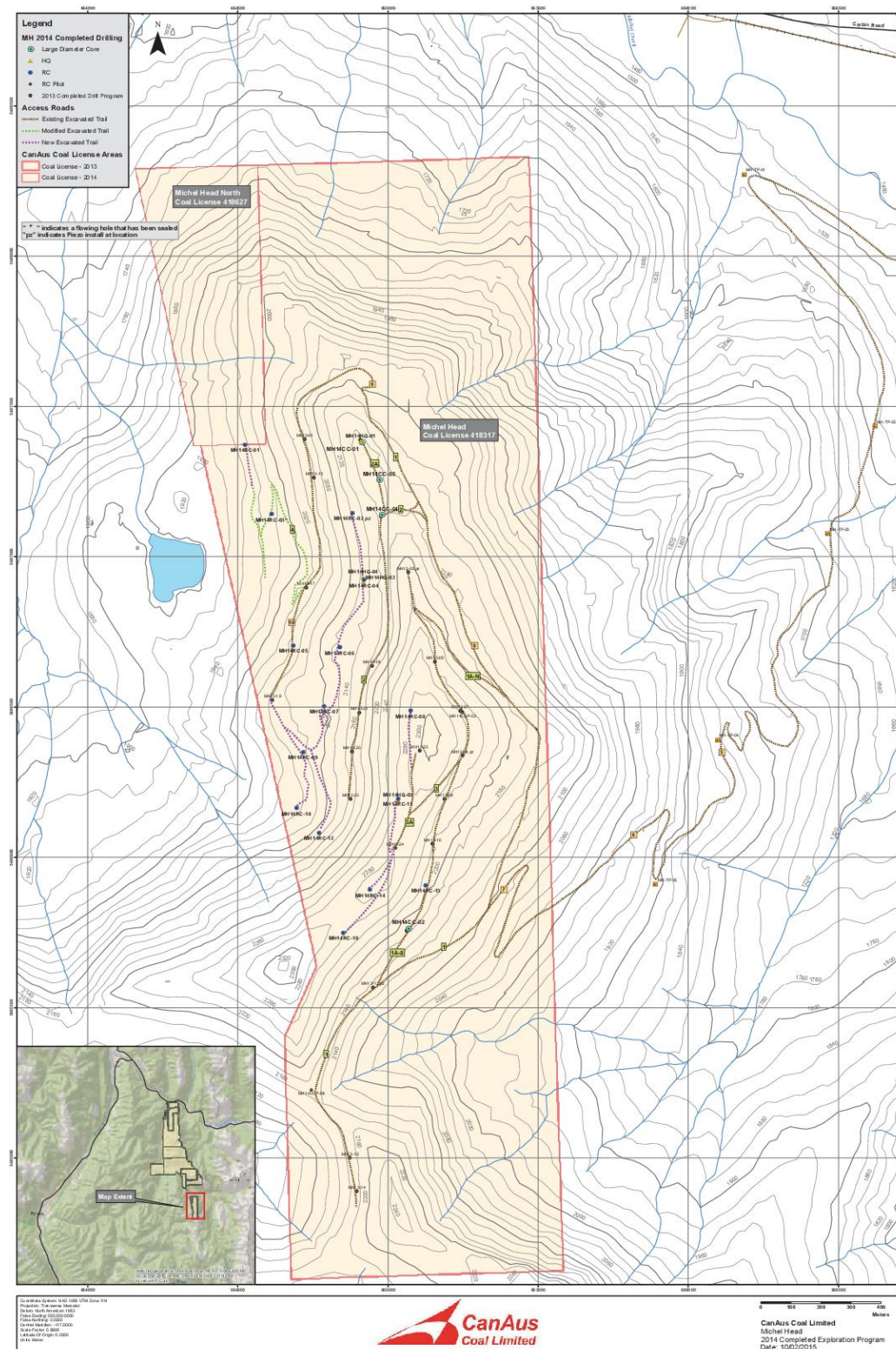


Table 3.3.1 Drillhole Locations

Hole ID	Type	Surveyed Coordinates			Azimuth	Dip (deg)	Depth (m)
		Easting	Northing	Elevation			
MH14HQ-01	HQ3 Core	664909.81	5487383.84	2158.29	45	-70	146
MH14HQ-02	HQ3 Core	664918.43	5486916.66	2114.47	135	-70	59
MH14HQ-03	HQ3 Core	665033.80	5486189.85	2255.04	180	-70	168
MH14HQ-04	HQ3 Core	664917.44	5486932.51	2114.04	115	-70	151
						Subtotal	524
MH14RC-01	RC	664524.28	5487374.00	1944.36	0	-90	100
MH14RC-02	RC	664882.11	5487146.60	2109.82	0	-90	130
MH14RC-03	RC	664613.83	5487141.74	1964.96	0	-90	100
MH14RC-04	RC	664920.38	5486923.28	2114.23	0	-90	151
MH14RC-05	RC	664685.09	5486704.86	2036.93	0	-90	125
MH14RC-06	RC	664840.17	5486698.13	2115.95	0	-90	158
MH14RC-07	RC	664787.56	5486502.59	2090.48	0	-90	100
MH14RC-08	RC	665076.13	5486488.12	2269.08	0	-90	226
MH14RC-09	RC	664716.63	5486350.43	2067.57	0	-90	100
MH14RC-10	RC	664694.46	5486164.11	2050.97	0	-90	99
MH14RC-11	RC	665033.45	5486196.32	2254.85	0	-90	208
MH14RC-12	RC	664771.46	5486082.28	2103.96	0	-90	135
MH14RC-13	RC	665126.59	5485907.43	2199.08	0	-90	151
MH14RC-14	RC	664941.44	5485891.97	2283.82	0	-90	226
MH14RC-16	RC	664852.20	5485750.37	2262.56	0	-90	200
						Subtotal	2209
MH14CCP-03	RC	665248.71	5486481.61	2243.12	0	-90	151
MH14CCP-08	RC	664745.79	5485225.85	2167.38	0	-90	151
						Subtotal	302
MH14CC-01	15cm Core	664912.65	5487379.88	2158.69	90	-90	64
MH14CC-02	15cm Core	665068.23	5485762.93	2178.78	90	-90	83
MH14CC-04	15cm Core	664980.74	5487140.19	2158.99	90	-90	74
MH14CC-05	15cm Core	664970.32	5487256.69	2159.66	90	-90	50
						Subtotal	269
					Total Drilled		3304

4 2014 Exploration Work

4.1 Drilling

A total of 3304m of drilling was completed, including 2511m of reverse circulation holes, 524m of HQ3 core holes and 269m of large diameter core holes.

Two drilling contractors were used during the course of the program: Good Earth Drilling Services Ltd., and FB Drilling Ltd.

Good Earth Drilling Services Ltd. mobilized to the site on August 17 and completed 17 reverse circulation (4.5"/11.3cm) holes and 4 large diameter (6 inch/15cm) core holes.

FB Drilling Ltd. mobilized to the site on August 20 and completed 4 HQ3-sized (6.1cm) diamond core holes.

All 2014 drill holes were cased with welded-joint steel casing. The casing was generally left in the holes and the holes left open. In some locations the casing was removed and the holes back-filled according to Mines Act regulations and mineral exploration best practice.

Drilling was completed by September 23 and the Good Earth drill remained on site until September 27 for the installation of piezometers in several open holes.

4.2 Geophysical Logging

As per industry standard, all drill holes were geophysically logged. The geophysical contractor was Century Wireline Services, based in Red Deer, Alberta.

All open holes were logged with a gamma/neutron/deviation tool (#9058) and with a gamma/density/resistivity/caliper tool (tool #9239). Through-rod logs used a gamma-gamma tool (#9068A). Attempts were made to log all of the HQ3 core holes with either an acoustic televiewer (#9804A) or an optical televiewer. Century has provided .las and .tif files of all geophysical logs as well as WellCAD files for the acoustic and optical televiewer data.

All holes were logged immediately after drilling with the exception of some of the more stable large diameter holes which were logged within a few days of drilling. Hole stability was an issue in many of the holes, where rock and coal sloughing prevented the wire-line logging tools from accessing the entire hole depths. Occasionally, holes that had sloughed or bridged had to be re-opened and additional attempts made to log the holes. Attempts to re-open holes were not always successful and through-rod gamma-gamma logs were all that were obtained.

In general, the quality of the data was found to be good.

All of the 2014 geophysical logs are included in Appendix B.

4.3 Surveying

CIMA Geomatics conducted a survey of drillhole locations for CanAus Coal Limited. Align Surveys was subcontracted to perform the field survey on site.

A static GPS survey was performed from the Priddis Canadian Active Control System monument PRDS CACS-GSD 756047 to several spikes that were placed on site. These placed spikes were used as local control benchmarks for the survey. Survey point 17 is one of these local control benchmarks and was used for the RTK survey of the drillhole locations. As an additional check for positional accuracy, a Precise Point Position (PPP) was processed for survey point 17 from the GPS data logged at that position.

The results of the PPP matched with the static survey results from PRDS CACS-GSD 756047 within 0.03m horizontally and 0.04m in elevation. The survey was performed in NAD 83 (CSRS) datum and the coordinates produced are UTM Zone 11 North. The Vertical Datum Is CGVD28 and elevations are orthometric heights. The geoid model used was GSD95.

The drillhole locations were surveyed in relation to survey point 17 (located along Corbin Road). Measurements were made to the approximate center of the drill holes at the surface entry points. Based on the terrain conditions and the survey methodology, the estimated positional accuracy of the drillhole surface locations is 0.20m in horizontal and 0.26m in vertical.

The locations of drillholes are shown in Table 3.3.1.

A LiDAR survey was also performed over the area in 2014 to provide better definition of surface features and to provide a more accurate topographic surface for modelling. The LiDAR survey was performed by Airborne Imaging of Calgary, Alberta on August 26, 2014 and covered 131.5 square kilometres at a point density of 4.5 points per square metre at a flying height of 800m. The LiDAR system used was a Leica ALS70 and was calibrated with surveyed ground points. One metre grids and topographic contours were provided of both the bare earth as well as the full features to a horizontal accuracy of 30cm and a vertical accuracy of 15cm.

4.4 Sampling and Analysis

4.4.1 Large Diameter Core Sampling

Large diameter (6"/15cm) core samples were taken from 4 drill holes on 4 coal seams during September for the purpose of coal quality analysis. The large diameter core drilling was performed by Good Earth Drilling. A total of 49.9m of coal was submitted for analysis.

Geological examination of the large diameter core took place on site, immediately after being removed from the drilling apparatus. Detailed logs included measurements of depth, recovery, loss, seam and parting widths, geological features, lithological descriptions and sample information. Photos of each drill run were also taken.

All major seams were sampled in their entirety with a 30cm hanging wall and a 30cm footwall sample taken separately. In most cases, coal and seam partings were sampled separately except where the partings were small (<30cm), in which cases the partings were included in the seam samples. This sampling technique was an attempt to simulate expected mining conditions.

Recovery of coal seams averaged 92% in all large diameter core drilling. All samples selected for analysis were considered representative of the seams intersected.

All of the large diameter core samples were sent to ALS Coal Laboratories in Richmond, BC for analysis. Individual seam component samples were air dried, crushed to -19mm and combined. The resulting composite samples were screened, washed and proximate analysis including ash content, sulphur and free swelling index (FSI) was performed. Analytical results are shown in Appendix D.

A detailed evaluation of the coal quality from the large diameter core can be found in the report: "Michel Creek Coking Coal Project – Large Diameter Coring Program 2013-2014", by Bob Leach Pty. Ltd. Leach concludes that: "While the rheological properties determined from the current samples from Michel Head are poor to moderate, the petrographic results are consistent with a higher rank hard coking coal typically produced from the Elk Valley region."

Core logs are included in Appendix A. A sampling summary is shown in Appendix C. Analytical results are shown in Appendix D. Analytical process guidelines are shown in Appendix E.

4.4.2 HQ3 Core Sampling

Four HQ3 (6.1cm) drill holes were drilled during the program, for the principal reason of geotechnical analysis. One hole (MH14HQ-02) was abandoned due to poor ground conditions and was re-drilled as MH14HQ-04 at the same dip angle but at an azimuth of 115 degrees instead of 135 degrees. The drill core was geologically logged but no samples were submitted for analysis due to poor core recovery in the coal seams.

Detailed geological and geotechnical logs were completed on the drill core. The core boxes are stored at the CanAus office location in Sparwood, BC.

Core logs are included in Appendix A.

4.4.3 Reverse Circulation Sampling

No samples were collected from the 2014 Reverse Circulation drilling.

5 Geology

5.1 Regional Structure

The East Kootenay coalfields lie in the Front Ranges of the Rocky Mountains which are characterized by north to northwest trending concentric folds and west dipping thrust faults. Tertiary normal faults, some of which are listric and probably occupy earlier thrust surfaces, are also a major feature.

The Crowsnest coalfield is a complex synclinorium in the Lewis thrust sheet. The major compressional features of the basin are the synclines linked en echelon by low-amplitude anticlines. A series of west dipping thrust faults dominate the structure of the north half of the basin. The major extensional feature is the Erickson fault system, which juxtaposes Mississippian limestone and the Kootenay Group. The fault has a minimum, west side down, displacement of 1,200m.

5.2 Stratigraphy

The Jurassic-Cretaceous Kootenay Group occupies part of a northwest trending belt of predominantly non-marine rocks comprising part of the Rocky Mountain Foothills and Front Ranges of southwestern Alberta and southeastern British Columbia. The Kootenay Group extends from just north of the United States border in the south to the North Saskatchewan River in the north (Gibson, 1985).

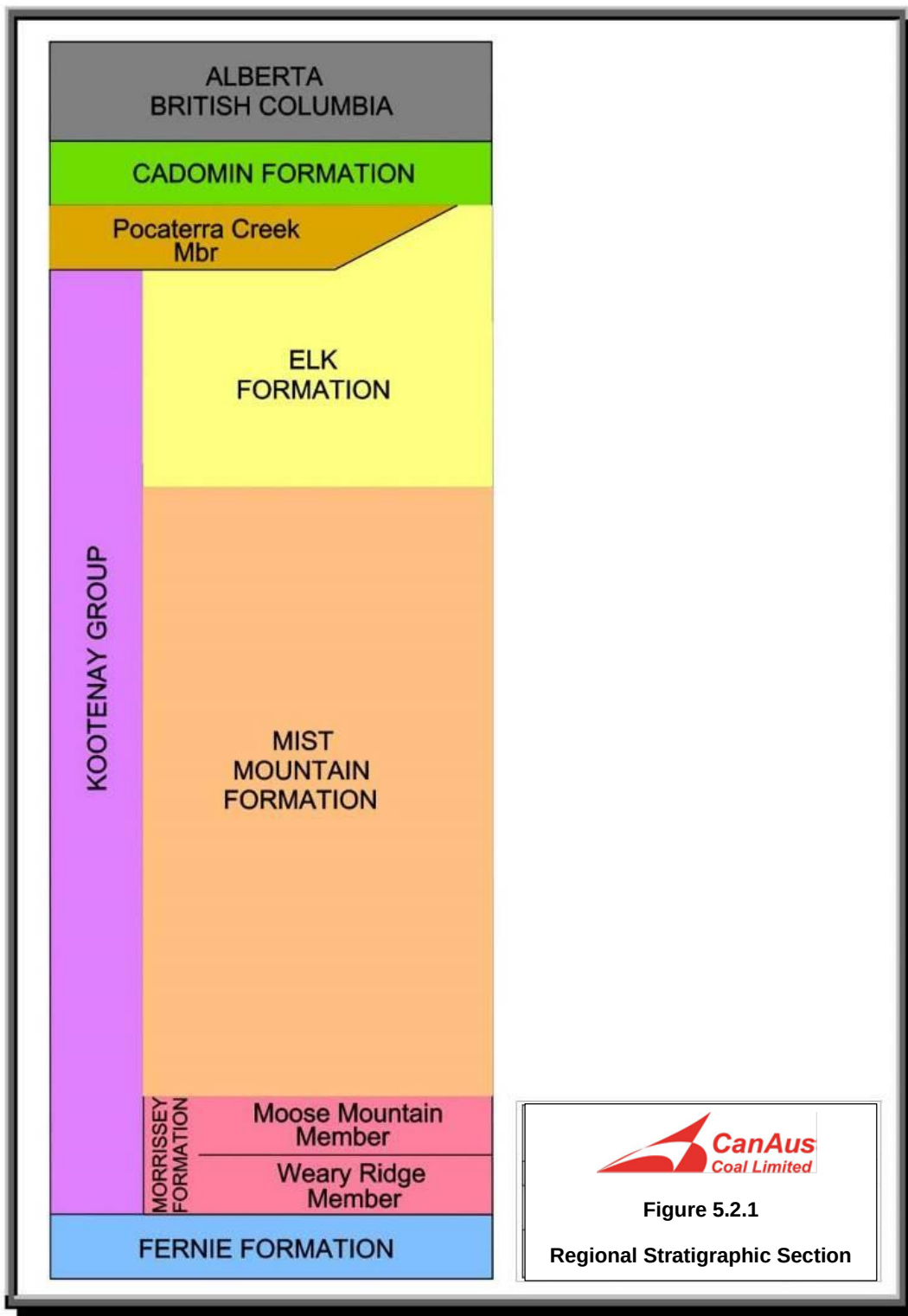
The Kootenay Group of the Rocky Mountain Foothills and Front Ranges encompasses the stratigraphic interval between the Jurassic Fernie Group below and the Lower Cretaceous Blairmore Group above (Gibson, 1985).

Three formations are recognized within the Kootenay Group, including the basal sandstone, Morrissey Formation, the coal-bearing Mist Mountain Formation, and the upper Elk Formation (Figure 5.2.1).

Knowledge and definition of the stratigraphic column is required prior to any correlation and structural work. Figure 5.3.1 has been compiled from the drilling and interpretation of the geology to date at Michel Head. The section shows eight coal seams within a section approximately 150m thick. The east Michel Creek/Mount Taylor area is somewhat anomalous in that the lower portion of the Mist Mountain Formation is dominated by up to four major sandstone horizons. Gibson, 1985, has measured a section on Mt. Taylor (west of Michel Head) which shows the Mist Mountain Formation to be just over 400m thick, but there is 190m between the top of the Fernie Group and the first important coal seam.

The drilling on Michel Head has identified a total of ten coal seams, though only eight seams report as resources as some seams are too thin, while others are intermittent. Table 5.3.1 lists the seams, the number of intercepts as well as the minimum, maximum and mean thickness of each.

Figure 5.2.1 Regional Stratigraphic Section



5.3 Geological Overview

Michel Head is on the east side of the Erickson normal fault, with the coal-bearing Mist Mountain Formation represented as an outlier thrust sheet forming Michel Head, Mount Taylor, and Tent Mountain. Michel Head has been interpreted as a simple dip-slope.

The 2014 drilling took place principally within the Mist Mountain Formation, through the coal-bearing section. Ten major coal seams from 4 to 12, are present and several subsidiary seams have been identified. Seam nomenclature is consistent with that of other mines in the area. The 2014 work permitted average thicknesses of the coal seams to be calculated over the entire deposit (Table 5.3.1).

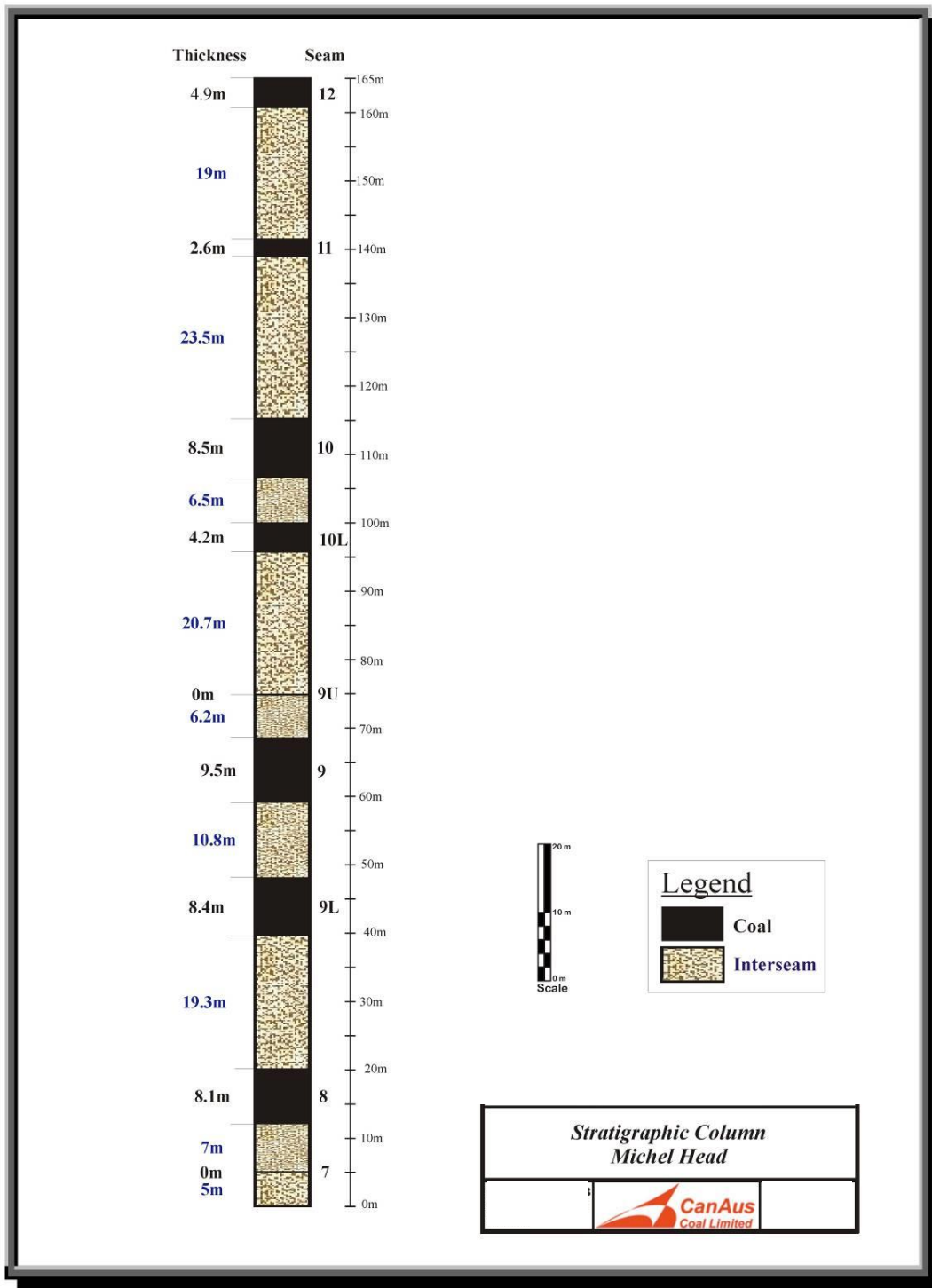
Overburden cover is generally minimal, ranging from a few centimetres thick in the exposed sub-alpine areas of the property to a few metres in the lower forested areas.

The new data gathered in 2013 assisted in the placement of drill holes in 2014.

Table 5.3.1 Michel Head Seam Data

Seam	Intercepts	Minimum (m)	Maximum (m)	Average (m)
12	5	3.34	6.92	4.85
11	12	0.11	4.59	2.65
10	38	0.56	33.18	8.5
10L	29	0.08	16.51	4.18
9U	25	0.04	4.7	0.93
9	47	0.15	29.49	9.52
9L	42	0.84	16.3	8.4
8	14	5.43	12.97	8.09
7	1	0.38	0.38	0.38
4	1	3.88	3.88	3.88

Figure 5.3.1 Typical Stratigraphic Section



7 Reclamation

CanAus policy is to keep exploration disturbance to the smallest practical area. Natural soil profiles are maintained whenever possible to enhance natural regeneration and to control erosion-causing runoff. Drill sites are recontoured and revegetated as soon as work is completed and deemed not required for further use. In addition, all exploration areas are left in a clean, safe and stable condition at the end of each field season.

Primary access in 2014 was via existing exploration and forestry trails, as described in Section 2.3. During construction, woody debris was buried or stacked to the greatest extent possible, and shoulder areas were contoured to a naturalistic form. Drainage is controlled by ditches and culverts, with some supplemental cross-ditching.

New drill trails and pads were constructed on Michel Head. Most of these were not recontoured in 2014, as it is expected that many will be reused in 2015. In addition, all areas of disturbed soil on the shoulders of the drill trails and pads were recontoured, leaving a ~3m running surface in useable condition. Steeper trails were temporarily deactivated with cross-ditches.

8 Expenditures

Actual expenditure for this work during the period June through December, 2014 was \$1,284,353.67. Major expense items are included in Table 8.1.

Table 8.1 Expenditures

Major Expense Items	
Drilling	\$630,800.41
Technical Services	\$281,476.62
Analytical	\$100,408.00
Heavy Equipment	\$154,022.00
Safety	\$83,527.50
Licences and Permits	\$17,494.50
Personnel	\$3,965.89
Miscellaneous	\$12,658.75
Total	\$1,284,353.67

Details are presented in Appendix G.

9 Conclusions

The 2014 Michel Head exploration program accomplished the goal of gathering sufficient geological data to support a pre-feasibility study on the entire Michel Head coal deposit.

At the end of the 2014 program the entire Michel Head coal deposit had been drilled at a data point spacing consistent with assurance criteria for a measured and indicated resource of moderate geology under the guidelines of GSC Paper 88-21. Twenty-five new drill holes were completed, confirming the deposit size and refining the structural and stratigraphic interpretation. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] [REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]		
			[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]			[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]

[REDACTED]

10 References

Hughes, J.D., Klatzel-Maudry, L. and Nikols, D.J. 1989: A Standardized Coal Resource/Reserve Reporting System for Canada. Geological Survey of Canada Paper 88-21, 17p.

Gibson, 1985. Jurassic-Cretaceous Kootenay Group, G.S.C. Bulletin 357.

Engler, R.F., Moose Mountain Technical Services, 2015. NI 43-101 Resource Estimate Update 2015; Michel Creek Coking Coal Project

Morris, R.J., Galbraith, J.L., Moose Mountain Technical Services, 2014. Summary Report on the Michel Head Property – 2013 Exploration Program

Leach, R. 2015. Michel Creek Coking Coal Project – Large Diameter Coring Program 2013-2014

11 Statement of Qualifications

I, David A. Thompson, BSc, P.Geo., of 14-2656 Morningstar Crescent, Vancouver BC V5S 4P4, do hereby certify that:

1. I am Chief Geologist for CanAus Coal Ltd.
2. I graduated with a B.Sc. from the University of BC in 1986.
3. I am a member of the Association of Professional Engineers and Geoscientists of British Columbia (Member ID #150701) and the Association of Professional Engineers and Geoscientists of Alberta (Member ID #184563).
4. I have worked as a geologist for a total of fourteen years since my graduation from university.
5. My past experience includes ten years working in coal exploration and mining in British Columbia and Alberta. I have managed large scale exploration programs for the definition and resource development of several complex metallurgical coal deposits up to and including the feasibility stage and mine development of those deposits. I was also the Chief Geologist in the production department at Peace River Coal's Trend Mine in Tumbler Ridge BC.
6. I am responsible for the entire Assessment Report titled "Assessment Report: 2014 Michel Head Exploration Program" dated 15 April, 2015.
7. I was on site for the entirety of the 2014 exploration program.
8. To the best of my knowledge, information and belief, the Assessment Report contains all scientific and technical information that is required to conform to the Mineral Tenure Act Regulations of British Columbia.
9. I consent to the filing of the Assessment Report with the British Columbia Ministry of Energy and Mines Geological Survey Branch.

Dated this 15th day of April, 2015.

Dave Thompson, P.Geo.
CanAus Coal Ltd.

Appendices

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Appendix G – Statement of Costs

2014 Michel Head Exploration		
Major Expense Items	Contractor	Total (\$)
Drilling	Good Earth Drilling	528,516.80
	FB Drilling	102,283.61
	Subtotal	630,800.41
Technical Services	Moose Mtn Technical Services	105,788.55
	Century Wireline	60,647.50
	Silenus Resources Management	101,422.57
	Bob Leach Pty.	9,678.00
	Cima Geomatics Land Surveying	3,000.00
	Cameron Enterprises	940.00
	Subtotal	281,476.62
Analytical	ALS Coal	35,354.00
	Other	65,054.00
	Subtotal	100,408.00
Heavy Equipment	Fiorentino Bros. Contracting	135,086.00
	Down to Earth Excavating	18,936.00
	Subtotal	154,022.00
Safety	Trucut Logging	83,527.50
	Subtotal	83,527.50
Licences and Permits	Tembec	17,494.50
	Subtotal	17,494.50
Personnel	CanAus Geologists	3,965.89
	Subtotal	3,965.89
Miscellaneous	Canada Culvert	4,705.44
	Rosenau Transport	1,263.05
	Manitoulin Transport	6,072.92
	Acklands Grainger	617.34
	Subtotal	12,658.75
Total		1,284,353.67

Legend

MH 2014 Completed Drilling

Large Diameter Core

 HQ

 RC

 RC Pilot

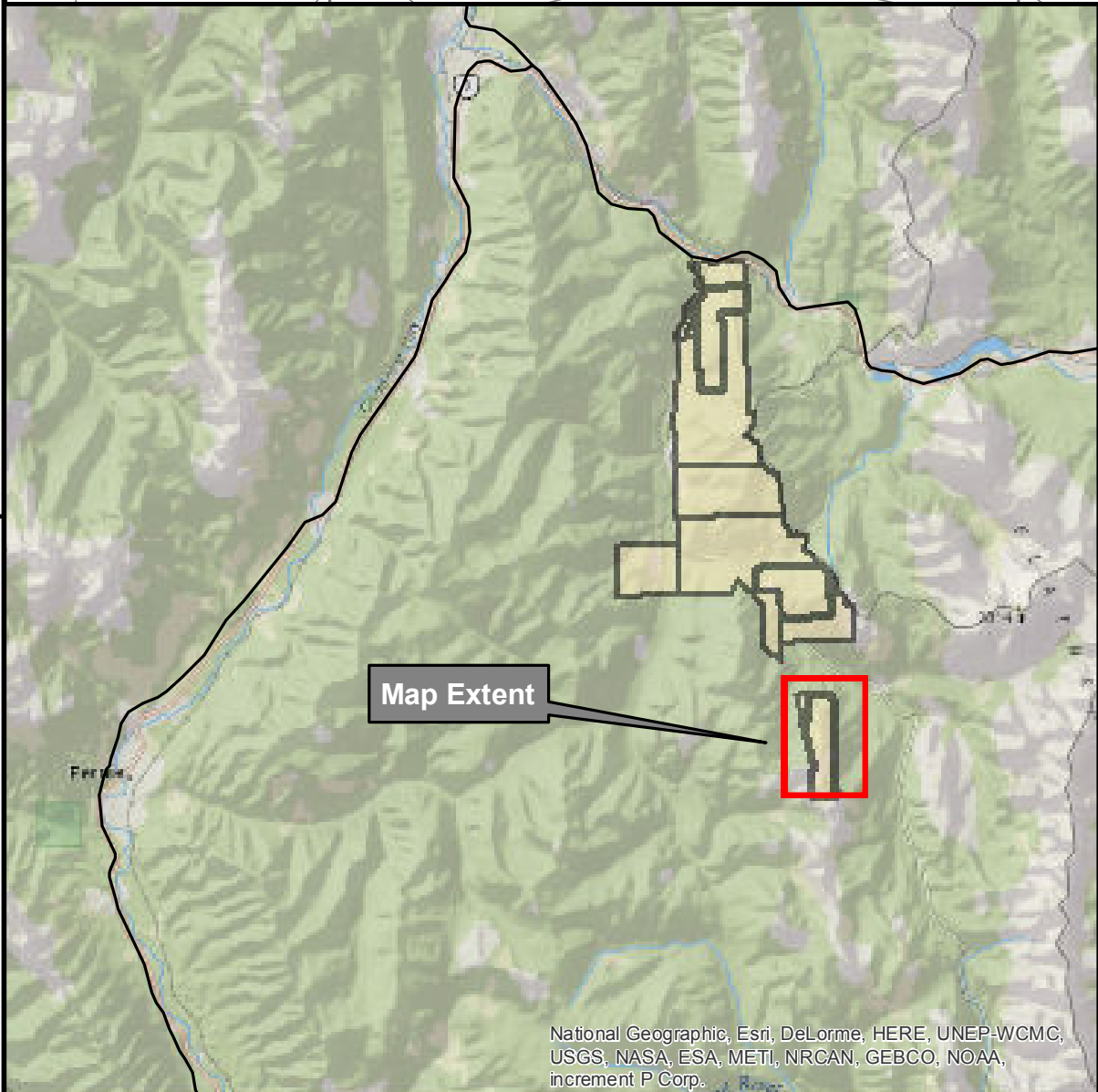
Access Roads

 Existing Excavated Trail

CanAus Coal License Areas

 Coal License - 2013

" * " indicates a flowing hole that has been sealed
"pz" indicates Piezo install at location



Coordinate System: NAD 1983 UTM Zone 11N
Projection: Transverse Mercator
Datum: North American 1983
False Easting: 500 000 0000
False Northing: 0 0000
Central Meridian: -117.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter



0 100 200 300 400
Meters

CanAus Coal Limited
Michel Head
2014 Completed Exploration Program
Date: 10/02/2015

CanAus Coal Limited

Lithological Core Logging Codes and Abbreviations

Definition Sheet

Code/Abbreviation	Definition
CGL	Conglomerate
SST	Sandstone
SLT	Siltstone
CLY	Claystone
SHL	Shale
MST/MS	Mudstone
CMST/CM	Carbonaceous mudstone
BC/BN	Boney Coal
SC	Shaley coal
CO/C	Coal
LMST	Limestone
OVB	Overburden
CL	Core loss
PY	Pyrite
CARB	Carbonates
VNLTS	Veinlets
BCN/CN	Bedding to core normal
TCA	To core axis
HW	Hanging wall
FW	Foot wall
EOH	End of hole

HQ Core Description

Hole: MH14HQ-01Page: 1 of 2Northing: 5487388Hole Orientation: 45 / -70Total Depth: 145.69mEasting: 664909 Elevation: Seam: 10, 9UTM System: NAD 83Logged by: Ian FurigayDate : 09-12 September 2014

Box #	Driller's Coring Info				Interval Corrected to Log		Length (m)	Lost (m)	Bedding (Alpha)	Sample #	Sample Mass	Sulphide %	Major Lith Code	Minor Lith Code	Seam	Description	Graphic	
	Recovered				from	to					(kg)							
	from	to	m	%														
1	0.00	1.52														Casing, no core samples		
1 to 2	1.52	4.65	3.13	100%					80-85				SLT	MST		Medium gray, moderately weathered and oxidized with limonite/iron stains in fractures, bedding at 80-85 TCA, with occasional MST thin beds (1-2cm thick), moderately indurated, medium strong rock, rare fine grained SST beds,sharp lower contact at 83 TCA, no visible sulphide mineralisation		
2	4.65	5.35	0.70	100%					80		0.1	MST				Medium to dark gray, slightly carbonaceous, poorly to moderately indurated, weak rock, brittle, bedding at 80 TCA, weathered and oxidized with limonite / iron oxide stains in fractures, rare carbonate veinlets <1%, trace of pyrite		
2 to 6	5.35	17.94	12.32	97%					75-80		0.5	SLT	MST			Medium gray with interbedded MST 2-3cm thick, partly weathered and oxidized with limonite/iron oxide stains in fractures, minor shearing at 12.50-12.70m, displays normal graded bedding (fine to medium grained-younging uphole), bedding at 75-80 TCA, carbonate veinlets 1%, weak fine grained disseminated pyrite, gradational lower contact		
6 to 7	17.94	21.75	3.81	100%					75-80		0.1	MST	SLT			Medium to dark gray, partly oxidized with limonite in fractures, occasional thin laminations of SLT <1cm thick, sharp lower contact at 74 TCA, bedding oriented 75-80 TCA, moderately indurated, medium strong rock, rare carbonate veinlets, trace of pyrite in fractures		
7	21.75	22.05	0.30	100%					80			CMST				Soft, clayey, highly carbonaceous with coal streaks/lenses, gradational lower contact		
7 to 8	22.05	26.55	4.50	100%					78				SLT	MST		Medium gray, partly oxidized with limonite/iron oxides stains in fractures, with interbedded thin MST beds 1-2cm thick, rare carbonaceous sediments in fractures, minor thin laminations of SST, bedding at 78 TCA, gradational lower contact, carbonate veinlets <1%, no visible sulphide mineralisation		
8 to 9	26.55	28.10	1.07	69%					75			CMST	CO			Medium to dark gray, soft, partly clayey, poorly indurated weak rock, gradational lower contact, with thin beds/laminations of CO, highly carbonaceous		
9 to 10	28.10	32.30	3.86	91%					70		0.1	MST	CMST			Medium to dark gray, containing interbedded carbonaceous mudstone, poorly indurated, weak rock with clayey sections, partly oxidized with limonite/iron oxide stains in fractures, rare carbonate veinlets/stringers, no visible sulphide mineralisation		
10	32.30	32.45	0.10	66%								CMST				Dark gray to black, clayey, soft, weak rock, highly carbonaceous with coal in fractures, gradational lower contact at 50 TCA		
10 to 11	32.45	39.16	0.96	14%	31.86	38.36	6.50	5.54					CO			Black, soft, clayey, highly friable, loose, shiny/bright 90% dull 10%, poor core recovery, minor pebble size fragments of BC/CMST		
11	39.16	40.38	0.47	38%							0.1	CMST				Dark gray, highly fractured, weak rock, with clayey zones, occasional pebble size angular fragments of BC/CO, partly oxidized with limonite stains, trace of pyrite		
11 to 12	40.38	42.40	1.81	89%					75-80		0.5	MST				Medium to dark gray with minor lenses of SLT/SST, bedding at 75-80 TCA, occasional carbonaceous sediments in fractures, partly oxidized with limonite stains in fractures, moderately indurated, weak to medium strong rock, weak fine grained pyrite as disseminated, lower contact is very gradational		
12 to 14	42.40	51.81	9.04	96%					75-80			1.5	SLT	MST		Light to medium gray, with thin beds and lenses of MST/SST, bedding at 75-80 TCA, well indurated, strong rock, partly oxidized down to 50.10m depth (bottom of oxidation), carbonate veinlets/stringers 1-2%, presence of oxidized pyrite veinlets, gradational lower contact, pyrite as fine grained disseminated, fracture filling and veinlets		
15 to 17	51.81	59.70	6.38	80%					75-80		0.5	MST	SLT			Medium to dark gray, shear zone from 52.10-53.60m depth - mostly of pebble size angular rock fragments with clay/gouge as matrix, rock more intact below the shear zone, occasional thin beds/lenses of SLT, partly carbonaceous, rare carbonate veinlets, weak fine grained pyrite as disseminated, coal at 54.50-55.12m was washed-out due to poor drilling technique, gradational lower contact		
17 to 18	59.70	63.80	5.89	82%					65-70				CMST	MST		Medium to dark gray with moderate lenses/streaks of coal, with occasional thin beds of MST 2-3cm thick, bedding at 65-70TCA, gradational lower contact, strong carbonaceous sediments in fractures, rare carbonate veinlets <1%, no visible sulphide mineralisation		
18	63.80	64.55	0.75	100%							0.1	MST				Medium to dark gray, massive, minor carbonaceous sediments infilled in fractures, sharp lower contact at 55 TCA, trace of fine grained pyrite		
18 to 22	64.55	76.90	12.00	97%					20-25		1.0	SST	MST			Light to medium gray, fine to medium grained, "Dirty SST" with interbedded MST 1-2cm thick, bedding from 64.55 to 70.40 mostly dipping 50-60 TCA while low angle bedding 20-25 TCA from 70.40 to 76.90m, fault/shear zone(fault gouge) at 72.50 to 73.15m, exhibits younging downhole bedding (coarse to fine) probably in syncline environment, sharp lower contact at 32 TCA, carbonate veinlets 2%, pyrite as fine grained disseminated and filling vfractures		
22 to 24	76.90	81.25	4.35	100%					20-25		0.5	MST	SST			Medium to dark gray with thin laminations of fine grained SST <1cm thick, bedding is low angle 20-25 TCA, sharp lower contact at 40 TCA, carbonate veinlets/stringers 3%, with narrow beds of slightly carbonaceous, weak fine grained disseminated pyrite		

Box #	Driller's Coring Info				Interval Corrected to Log		Length (m)	Lost (m)	Bedding (Alpha)	Sample #	Sample Mass	Sulphide %	Major Lith Code	Minor Lith Code	Seam	Description	Page 2 of 2	Graphic	
	Recovered				from	to					(kg)								
	from	to	m	%															
24 to 25	81.25	85.00	3.75	100%					55-60		1.0	SST	MST		Light to medium gray, "Dirty SST" with interbedded MST 1-2cm thick, exhibits younging downhole bedding (coarse to fine grained) probably in syncline environment, sharp lower contact at 45 TCA, minor carbonaceous sediments at the bottom, carbonate stringers/veinlets 3%, pyrite as weak disseminated				
25	85.00	85.45	0.45	100%					55-60				MST		Dark gray, generally massive with rare thin laminations of SST, bedding at 55 to 60 TCA, gradational lower contact, no visible sulphide mineralisation				
25	85.45	86.03	0.58	100%									CMST		Dark gray with strong lenses/thin beds of coal, highly carbonaceous, soft, clayey, weak rock, sharp lower contact				
25	86.03	86.86	0.16	19%	86.26	96.20	9.94	3.72 or 62%					CO		Black, soft, clayey, highly friable, loose, shiny/bright 90% dull 10%, poor core recovery				
25	86.86	88.02	0.30	25%									CMST		Rock parting, dark gray, generally dull 95%, minor pebble size fragments of coal, slightly heavy, moderate coal streaks/lenses				
25 to 26	88.02	89.45	0.67	46%									CO		Black, clayey, soft, bright/shiny 80% dull 20%, with occasional polished fracture surface, highly friable, poor core recovery				
26	89.45	90.25	0.64	80%									CMST		Dark gray, rock parting, generally dull 95%, slighly heavy containing moderate coal lenses/streaks, gradational lower contact at 77 TCA				
26	90.25	91.50	0.83	66%									CO		Black, clayey, soft, bright/shiny 80% dull 20%, with occasional polished fracture surface, highly friable, poor core recovery				
26 to 27	91.50	93.60	1.68	80%									CMST		Rock parting, dark gray, soft, clayey, generally dull 95%, minor pebble size fragments of coal, slightly heavy, moderate coal streaks/lenses				
27	93.60	95.40	1.37	76%									CO	CMST	Black, clayey, soft, bright/shiny 90% dull 20%, with occasional polished fracture surface, highly friable, occasional narrow beds of CMST, poor core recovery				
27	95.40	95.70	0.20	66%					60				CMST		Rock parting, dark gray to black, massive with moderate coal streaks/cleats, generally dull, slightly heavy				
27 to 28	95.70	96.35	0.49	75%									CO		Black, soft, clayey, shiny/bright 90% dull 10%, broken/fractured highly friable, poor core recovery, gradational lower contact				
28	96.35	98.50	2.02	93%					55-60				MST	CMST	Medium to dark gray, with minor thin beds/lenses of CMST, bedding at 55-60 TCA, with sections showing slightly carbonaceous, gradational lower contact, carbonate veinlets 1%, no visible sulphide mineralisation				
28 to 29	98.50	99.10	0.52	86%									BC		Dark gray to black, mostly dull 90%, slightly heavy with thin beds/parting of CMST/MST, gradational lower contact				
29	99.10	100.75	1.50	90%					65-70				MST	SST	Medium to dark gray with interbedded fine grained SST, bedding at 65-70 TCA, sharp lower contact at 80TCA, minor coal in fractures, moderately to well indurated, medium strong rock, no visible sulphide mineralisation				
29 to 30	100.75	104.35	3.39	94%					75-80		0.5	SST	MST		Light to medium gray, fine to medium grained, "Dirty SST", with interbedded MST 1-2cm thick, bedding at 75-80 TCA, gradational lower contact, carbonate veinlets/stringers 2%, rare carbonaceous sediments infilled in fractures, weak disseminated fine grained pyrite				
30	104.35	105.55	1.20	100%					75-80	R340343	0.5	MST	SLT		Medium to dark gray with thin laminations of SLT .1cm thick, partly carbonaceous with minor coal in fractures, carbonate veinlets <1%				
31	105.55	106.65	0.97	88%	105.30	106.20	0.90			R340344			CO		Black, soft, clayey, shiny/bright 95% dull 5%, broken/fractured highly friable, gradational lower contact, minor thin laminations of CMST (rock parting)				
32 to 34	106.65	115.20	8.55	100%					75-80	R340345	0.5	MST	SST		Medium to dark gray, slightly carbonaceous at the top sections(near coal contact), with interbedded fine grained SST <1cm thick, bedding at 75-80 TCA, rare carbonate veinlets <1%, minor carbonaceous sediments infilled in fractures, moderately to well indurated, medium strong rock, sharp lower contact at 85 TCA, weak fine grained pyrite in fractures				
34 to 39	115.20	131.85	16.65	100%					80		0.5	SST	MST		Light to dark gray, fine to medium grained, "Dirty SST" with interbedded MST 1-2cm thick, well bedded mostly dipping 80 TCA, partly oxidized with minor limonite/iron oxides staining in fractures, occasional thin wavy MST beds, minor cross bedding of MST, presence of coal lenses from 128.0 to 129.25m depth, rare carbonate veinlets/stringers, weak very fine grained pyrite in fractures, gradational lower contact				
39 to 43	131.85	145.69	13.84	100%					80		0.5	SST			Light gray, fine to medium grained, generally massive with rare bedding (fine to medium grained texture), shear/fault at 145.17-145.69m depth, partly oxidized with limonite/iron oxides stains in fractures, rare carbonaceous sediments in fractures, displays normal graded bedding, with minor rip-up fragments of SLT, weak fine grained pyrite in fractures, EOH = 145.69m				
EOH																			

CanAus Coal Ltd. HQ Core Description																		
Hole:		MH14HQ-02										Page: 1 of						
Northing:		5486916.7				Hole Orientation:				135/-70				Total Depth: 52.81m				
Easting:		664918.43		Elevation:		211447%		Seam:		10								
UTM System:		NAD 83				Logged by: Jaclyn Galbraith				Date : 02-Sep-14								
Box #	Driller's Coring Info				Interval Corrected to Log		Length (m)	Lost (m)	Bedding (Alpha)	Sample #	Sample Mass	Sulphide %	Major Lith Code	Minor Lith Code	Seam	Description	Graphic	
	from	to	Recovered		from	to					(kg)							
			m	%														
1																no marker at top of box, start of core depth unknown		
1	0.00	14.36	0.98										OVB			highly weathered, soft clay with broken fragments of SLT and SST		
1 to 3	14.36	21.00	5.71	86%								2%	MST	SLT		bands, iron oxide/limonite staining on fractures and throughout, few minor laminations, py on fracture surfaces		
3	21	22.02	1.02	100%					60				SST			light grey, highly laminated, fine grained, slightly weathered, minor iron oxide staining, hard competent, gradational contact		
3 to 4	22.02	23.47	1.22	84%					60				MST			dark grey, med. Soft, very fine grained, fractures along bedding, sheared toward base, grades into CMST, moderate weathering		
4	23.47	24.23	0.78	103%					60				CMST			dark grey, soft, very fine grained, highly fractured, moderate weathering, coaly bands throughout (<1cm),		
4 to 5	24.23	29.26	4.17	83%					60				MST	CMST		broken bands of carbonaceous mudstone, very soft with coaly lenses, calcite veinlets <0.5% infilling fractures, polished fracture surfaces, few minor laminations, no visible		
5	29.26	29.45	0.20	105%									MST			very soft, clayey, brown, minor iron oxide staining, gouge?, few fragments of mudstone in the soft clay		
6	29.45	32.94	2.75	79%									MST	CMST		broken, few coaly/carbonaceous bands up to 5cm, 50 cm of soft gougey mud 30.78-31.28m, fractures along bedding plane, polished fracture surfaces		
6 to 7	32.94	33.68	0.40	54%	33.30	33.70	0.40	0					CO	CMST		Coal and carbonaceous mudstone intermixed, highly broken/powdery- pulverized, very soft, mostly dull, 2% bright, black to dark grey		
7 to 8	33.68	37.3	3.18	88%					75				MST	CMST		veinlets <1%, few carbonaceous bands, few 10cm zones of broken core, minor laminations, fractures along bedding at 75 TCA		
8	37.3	40.25	0.65	22%	38.42	39.12	0.70	0.05					CO			surfaces, minor calcite staining fracture surface, 13 cm mudstone parting in lower half of interval- dark grey, med soft, highly broken		
8	40.25	40.54	0.07	24%	39.12	39.54	0.42	0.35					MST			parting, dark grey, very fine grained, med. Soft		
8 to 9	40.54	41.76	0.83	68%	39.54	41.82	2.28	1.45					CO			black, soft, 95% dull, 5% bright, pulverized		
9	41.76	41.94	0.17	94%	41.82	42.28	0.46	0.29					CMST			parting, dark grey, very fine grained, med. Soft, polished fracture surfaces, competent		
9	41.94	47.79	1.41	24%	42.28	46.94	4.66	3.25					CO			CMST in driller's interval 43.58-44.80m- represents 43.64-43.96m parting on geophys log, very poor recovery		
9	47.79	47.85	0.06	100%	46.94	47.64	0.70	0.64					MST			dark grey, med soft, very fine grained, polished fracture surfaces		
10	47.85	49.11	0.27	21%	47.64	47.76	0.12						CMST	CO		dark grey to black, very soft, pulverized, mixture of coaly fragments and CMST, very fine grained		
10 to 11	49.11	52.42	2.10	63%	47.76	51.64	3.88	1.78	70				MST			fracture surfaces, few 10 cm zones of broken core, 15cm sheared CMST toward base of interval		
11 to 12	52.42	58.21	3.53	61%	51.64	density log ends at 52.5m							CO			black, very soft, pulverized, mostly dull (95%), few bands with more bright fragments, few 2cm CMST bands throughout		
12	58.21	58.82	0.05	8%									CMST			dark grey, very fine grained, med soft, polished fracture surfaces		
	EOH																	
12	cave in at 55.47 m		0.50										CO			50 cm of material at bottom of box marked "Cave in at 55.47m (182)"; very soft, pulverized, mostly dull, intermixed with CMST		

HQ Core Description

Hole: MH14HQ-03Page: 1 of 2Northing: 5486190Hole Orientation: 180 / -70Total Depth: 167.64mEasting: 665030 Elevation: Seam: UTM System: NAD 83Logged by: Ian FuriqayDate : 12-16 September 2014

Box #	Driller's Coring Info				Interval Corrected to Log		Length (m)	Lost (m)	Bedding (Alpha)	Sample #	Sample Mass	Sulphide %	Major Lith Code	Minor Lith Code	Seam	Description	Graphic
			Recovered		from	to											
	from	to	m	%													
1	0.00	0.90															
1 to 3	0.90	7.35	6.28	97%					65-70			0.1	SST			Drill casing, no core sample Light to medium gray, fine to medium grained, partly oxidized with limonite stains in fractures, minor carbonaceous sediments in fractures "Dirty SST", well bedded mostly dipping 65-70 TCA, carbonate veinlets/stringers 3%, trace of pyrite in fractures, some pyrite were oxidized, sharp lower contact at 85 TCA	
3	7.35	9.45	2.10	100%									MST			Medium gray, generally massive, occasional carbonaceous sediments in fractures, sharp lower contact at 60 TCA, slightly weathered and oxidized with limonite/iron oxide stains in fractures, rare carbonate veinlets, no visible sulphide mineralisation observed	
3 to 5	9.45	16.15	15.75	94%					60			0.5	SST	SLT		Light to medium gray, with thin (<1cm thick) laminations of SLT, partly oxidized/weathered with limonite/iron oxide stains in fractures, moderately to well indurated, medium strong rock, no presence of coal at 14.22-14.72m(geophysical logs), gradational lower contact at 75 TCA, rare carbonate veinlets <1%, weak fine grained pyrite in fractures	
5 to 6	16.15	19.20	2.65	86%					60-65			0.5	SST	CMST		Light to medium gray, fine to medium grained, "Dirty SST" with strong carbonaceous sediments/coal in fractures, shear / fault at 17.45 to 18.35m, thin coal beds at 19.10-19.14m depth, bedding mostly dipping 60-65 TCA, partly oxidized with limonite stains in fractures, occasional thin beds of conglomerate(coarse grained SST), sharp lower contact at 70 TCA, weak fine grained disseminated pyrite	
6	19.20	19.82	0.40	64%									CMST	CO		Dark gray, highly fractured, generally dull with thin beds of CO, highly carbonaceous, sharp lower contact at 55 TCA, no visible sulphide mineralisation	
6 to 9	19.82	27.15	7.10	96%					60-65			0.5	SST	CMST		Light to medium gray, "Dirty SST" with moderate lenses/fracture filling of coal and carbonaceous sediments, bedding at 60-65 TCA, sharp lower contact at 85 TCA, occasional narrow beds (<5cm thick) of conglomerate, partly oxidized with minor limonite/iron oxide stains in fractures, rare carbonate veinlets/stringers 2%, weak fine grained disseminated pyrite	
9	27.15	28.20	0.22	20%	26.86	27.96	1.10	0.88					CO	CMST		Black, soft, clayey, highly friable, fractured/broken, with occasional thin beds of CMST(rock parting), poor core recovery, very gradational lower contact	
9 to 10	28.20	31.15	1.60	54%					60-65				CMST	BC		Medium to dark gray, with occasional thin beds of BC, generally dull 95%, slightly heavy, gradational lower contact	
10	31.15	31.39	0.19	79%	30.50	30.64	0.14						CO			Black, soft, clayey, highly friable, fractured/broken, shiny/bright 90% dull 10%, light weight with abundant polished fractured surface, gradational lower contact	
10	31.39	32.05	0.27	40%					75				CMST			Dark gray, with moderate to strong coal lenses/streaks, poorly indurated weak rock, rare bedding dipping 75 TCA, gradational lower contact at 70 TCA, no visible sulphide mineralisation	
10 to 12	32.05	40.20	8.04	98%					65-70			0.5	SLT	MST		Light to medium gray, with intercalated laminations of MST(1-2cm thick), bedding at 65-70 TCA, partly oxidized down to 38.0m (bottom of oxidation) with minor limonite/iron oxide stains in fracture, moderately to well indurated strong rock, sharp lower contact at 70 TCA, carbonate veinlets <2%, weak fine grained disseminated pyrite	
12 to 14	40.20	44.45	4.25	100%					75-80			0.5	SST	MST		Light to medium gray, fine to medium grained, "Dirty SST" with interbedded MST 2cm thick, sharp lower contact at 78 TCA, well indurated, strong rock, carbonate veinlets/stringers 2%, rare carbonaceous sediments in fractures, weak pyrite as fine grained disseminated	
14 to 16	44.45	49.68	4.46	85%					75-80			1.0	MST	SLT		Medium to dark gray, partly carbonaceous, with thin laminations of SLT, bedding at 75-80 TCA, occasional carbonaceous sediments in fractures, moderately to well indurated, medium strong rock, gradational lower contact, rare carbonate veinlets, cubic pyrite in fractures	
16	49.68	50.70	0.55	53%	49.20	50.24	1.04						CO			Black, shiny/bright 85% dull 15%, soft, clayey, broken/loose, highly friable, poor core recovery, gradational lower contact at 60 TCA	
16 to 17	50.70	53.64	2.58	87%					75-80			1.0	MST	CMST		Medium to dark gray with interbedded CMST, carbonaceous sediments in fractures common, bedding at 75-80 TCA, poorly to moderately indurated weak rock, rare carbonate veinlets <1%, fine grained pyrite in fractures, sharp lower contact at 65 TCA	
17 to 18	53.64	57.35	3.71	100%					60-65			1.0	SST			Light to medium gray, fine to medium grained with minor thin laminations of MST <1cm thick, bedding at 60-65 TCA, carbonate veinlets 3%, gradational lower contact, rare carbonaceous sediments in fractures, pyrite as fine grained disseminated	
18 to 20	57.35	63.25	5.18	87%					65-70			0.5	MST	CMST		Medium to dark gray, with interbedded CMST <3cm thick, partly carbonaceous, carbonate veinlets/stringers 2%, bedding mostly oriented 65-70 TCA, partly oxidized with minor limonite/iron oxide stains in fractures, moderately to well indurated, medium strong rock, weak fine grained fracture filling pyrite, sharp lower contact at 85 TCA	
20	63.25	70.30	6.90	97%					65-70			0.5	SST	MST		Light to medium gray, fine grained with interbedded MST 2-3cm thick, "Dirty SST" with occasional carbonaceous sediments in fractures, bedding at 65-70 TCA, sharp lower contact at 60 TCA, carbonate veinlets/stringers 4%, weak fine grained fracture filling pyrite	
20 to 23	70.30	74.82	4.15	91%					60-65			0.1	MST	SLT		Medium to dark gray with interbedded SLT, slightly carbonaceous at the bottom, bedding at 60-65 TCA, shear zone at 71.70 to 74.54m depth, partly oxidized with limonite/iron oxide stains in fractures, gradational lower contact at 50 TCA, carbonate veinlets 2%, rare carbonaceous sediments in fractures, trace of pyrite in fractures	
23	74.82	75.35	0.15	28%	74.66	75.00	0.34	0.19					CO			Black, soft, clayey, shiny/bright 90% dull 10%, highly broken and friable, gradational lower contact	
23 to 24	75.35	76.93	1.45	91%					55-60				CMST			Dark gray, generally dull with carbonaceous sediments in fractures, highly carbonaceous, slightly heavy, bedding at 55-60 TCA, gradational lower contact, coal lenses/streaks common, no visible sulphide mineralisation	
24	76.93	77.11	0.05	27%	76.72	76.84	0.12	0.07					CO			Black, soft, clayey, fractured, friable rock, shiny/bright 80% dull 20%, lower contact is broken	

Box #	Driller's Coring Info				Interval Corrected to Log		Length (m)	Lost (m)	Bedding (Alpha)	Sample #	Sample Mass	Sulphide %	Major Lith Code	Minor Lith Code	Seam	Description	Page 2 of 2	Graphic
	from	to	Recovered		from	to					(kg)							
	m	%																
24 to 25	77.11	81.50	3.84	87%					50				MST	CMST		Medium to dark gray, poorly bedded with rare thin beds of CMST, gradational lower contact, no visible sulphide mineralisation		
25	81.50	81.65	0.03	20%	81.98	82.16	0.18	0.15					CO			Black, clayey, soft, poor core recovery, broken/loose, friable		
25 to 26	81.65	82.10	0.35	77%					50			0.1	MST	CMST		Medium to dark gray with interbedded CMST 1-2cm thick, slightly carbonaceous, bedding at 50 TCA, gradational lower contact at 65 TCA, poorly to moderately indurated weak rock, trace of pyrite in fractures		
26	82.10	83.70	0.46	28%	82.56	83.54	0.98	0.52					CO	BC		Black, with minor thin beds of BC (rock parting), shiny/bright 75% dull 25%, with zones showing soft/clayey, slightly heavy, highly friable, weak rock, poor core recovery		
26	83.70	84.80	0.99	90%									MST	CMST		Medium to dark gray, poorly to moderately laminated with thin beds of CMST, gradational lower contact, no visible sulphide mineralisation		
26	84.80	84.95	0.10	66%	84.52	84.64	0.12	0.02				0.5	CO			Black, shiny/bright 90% dull 10%, with polished fracture surface, highly friable, gradational lower contact at 85 TCA, pyrite in fractures		
26 to 28	84.94	90.40	4.56	83%					45-50			0.1	MST	CMST		Medium to dark gray, with interbedded CMST 2-3cm thick, slightly carbonaceous with carbonaceous sediments in fractures, occasional thin beds (<1cm thick)/lenses of coal, gradational lower contact at 50 TCA, rare carbonate veinlets <2%, trace of pyrite in fractures		
28	90.40	91.55	0.55	47%	90.18	91.00	0.82	0.27					CO			Black, soft, clayey, shiny/bright 85% dull 15%, friable, poor core recovery with occasional fragments of BC, polished fracture surface common		
28 to 29	91.55	94.00	2.22	90%					70-75			0.5	MST	SLT		Medium to dark gray, with interbedded SLT <1cm thick, bedding at 70-75 TCA, shows younging downhole probably located in syncline environment, slightly carbonaceous at the top, gradational lower contact at 70 TCA, rare carbonate veinlets, weak fine grained pyrite in fractures		
29 to 31	94.00	99.30	6.30	100%					65-70			1	SST			Light to medium gray, fine to medium grained with occasional thin laminations of MST (mm thick), bedding at 65-70 TCA, partly oxidized with limonite stains in fractures, rare carbonate veinlets <1% MST beds diminished to bottom, minor carbonaceous sediments in fractures, occasional cross bedding, pyrite occurs as fine grained disseminated and filling fractures, sharp lower contact at 80 TCA		
31	99.30	100.10	0.80	100%					70				MST	SST		Medium gray with interbedded SST <1cm thick, bedding at 70 TCA, partly oxidized with weak limonite stains in fractures, gradational lower contact at 65 TCA, rare carbonate veinlets, no visible sulphide mineralisation		
31 to 33	100.10	105.45	5.35	100%					75-80				SST	MST		Light to medium gray, fine to medium grained, "Dirty SST" with thin laminations of MST (mm thick size), carbonate veinlets 2%, bedding mostly dipping 75-80 TCA, occasional wavy MST beds, sharp lower contact at 70 TCA, displays normal graded bedding younging uphole, weak fine grained pyrite in fractures		
33	105.45	107.90	2.45	100%					65-70			0.5	MST	SST		Medium gray, with interbedded fine grained SST 2-3cm thick, bedding oriented 65-70 TCA, partly carbonaceous with carbonaceous sediments in fractures, gradational lower contact at 80 TCA, rare carbonate veinlets <1%, weak fine grained pyrite in fractures		
33 to 34	107.90	110.60	2.70	100%					65-70				SST	MST		Light to medium gray, generally fine grained, "Dirty SST" with interbedded MST, partly oxidized with limonite in fractures, carbonate veinlets/stringers <2%, gradational lower contact, no visible sulphide mineralisation		
34	110.60	112.60	2.00	100%					65-70			0.1	SLT	MST		Medium to dark gray, with thin laminations of MST 1-2cm thick, gradational lower contact, rare carbonate veinlets/stringers, weak carbonaceous sediments in fractures, trace of pyrite in fractures		
34 to 37	112.60	120.05	7.23	97%					60-65			1	SST	MST		Light to medium gray, fine to medium grained, "Dirty SST" with thin laminations of MST <1cm thick, carbonate veinlets/stringers 2%, well indurated medium strong rock, sharp lower contact at 70 TCA, bedding mostly dipping 60-65 TCA, pyrite occur as fine grained disseminated		
37 to 39	120.05	124.95	4.90	100%					60-65			0.5	MST	SST		Medium to dark gray with interbedded fine grained SST <3cm thick, bedding oriented 60-65 TCA, partly oxidized with limonite/iron oxide stains in fractures, carbonate veinlets/stringers 2%, rare carbonaceous sediments in fractures, SST beds exhibits normal graded bedding younging uphole, weak disseminated and filling fracture pyrite		
39	124.90	125.59	0.02	0%	124.68	125.12	0.44						CO			Coal, totally washed out during drilling, no core recovery		
39 to 41	125.59	132.10	6.51	100%					60-65			0.5	MST	SST		Medium to dark gray, well bedded mostly dipping 60-65 TCA, with occasional beds of fine grained SST, thin coal beds at 130.70-130.72m depth, partly carbonaceous with carbonaceous sediments in fractures, SST beds diminished at the bottom, gradational lower contact at 50 TCA, moderately indurated medium strong rock, rare carbonate veinlets <1%, weak fine grained fracture filling pyrite		
41 to 43	132.10	139.85	4.46	57%	131.94	140.24	8.30	3.84	80			0.1	CO			Black, soft/clayey, fractured, broken, loose, shiny/bright 90% dull 10%, highly friable, occasional thin laminations of BC 1-2cm thick, poor core recovery		
43	139.84	140.05	0.20	100%	140.24	140.42	0.18						BC			Rock parting, dark gray to black, generally dull, slightly heavy, mostly intact coal, gradational lower contact		
43	140.05	142.15	1.27	60%	140.42	141.60	1.18		75-80				CO			Black, soft, clayey, shiny/bright 85% dull 15%, friable, poor core recovery, gradational lower contact		
43 to 44	142.15	144.17	1.49	73%									MST			Medium to dark gray, generally massive with rare CMST beds, slightly carbonaceous, no visible sulphide mineralisation		
44	144.17	144.27	0.10	100%									CMST			Dark gray, soft, clayey with lenses of coal, highly carbonaceous, gradational lower contact		
44	144.27	145.50	0.92	74%						R340346	1.20	0.1	MST			Medium to dark gray, slightly carbonaceous with carbonaceous sediments in fractures, poorly indurated, weak to medium hard rock, gradational lower contact at 45 TCA, carbonate veinlets <1%, trace of pyrite in fractures		
44	145.50	147.21	0.84	49%	145.96	146.80	0.84			R340347	3.20		CO			Black, soft, clayey, shiny/bright 90% dull 10%, with polished fracture surface, highly friable, gradational lower contact at 85 TCA		
44	147.21	148.70	0.26	17%						R340348	1.0		CMST			Dark gray, soft, clayey with lenses of coal, highly carbonaceous, gradational lower contact		
44 to 45	148.70	150.00	0.24	18%									CO			Black, soft, clayey, shiny/bright 90% dull 10%, highly friable		
45	150.00	150.65	0.65	100%									MST			Medium to dark gray, slightly carbonaceous with carbonaceous sediments in fractures, weak to medium hard rock, gradational lower contact at 60 TCA, carbonate veinlets <1%, trace of pyrite in fractures		
45	150.65	151.04	0.15	38%									BC	CMST		Dark gray to black, soft, clayey with lenses of coal, slightly heavy, generally dull 95%, weak rock, gradational lower contact		
45 to 47	151.04	158.30	7.26	100%					60-65			0.5	MST	SLT		Medium to dark gray, with thin laminations of SLT 2-3cm thick, bedding at 60-65 TCA, occasional carbonaceous sediments in fractures, moderately to well indurated medium strong rock, rare carbonate veinlets <1%, trace of fine grained pyrite in fractures, gradational lower contact at 70 TCA		
47 to 50	158.30	167.64	9.12	97%					60			1	SST	MST		Light to medium gray, fine to medium grained, "Dirty SST" with thin laminations of MST <2cm thick, carbonaceous sediments in fractures common, carbonate veinlets/stringers 3%, well indurated, strong, competent rock, well bedded mostly dipping 60 TCA, pyrite as fine grained disseminated and filling fractures, EOH = 167.64m		
EOH																		

HQ Core Description

Hole: MH14HQ-04Page: 1 of 2Northing: 5486930Hole Orientation: 115° azi / -70° dipTotal Depth: 151.48mEasting: 664920 Elevation: _____

Seam: _____

UTM System: NAD 83Logged by: Ian FurigayDate : 06-09 September 2014

Box #	Driller's Coring Info				Interval Corrected to Log		Length (m)	Lost (m)	Bedding (Alpha)	Sample #	Sample Mass	Sulphide %	Major Lith Code	Minor Lith Code	Seam	Description	Graphic	
	Recovered				from	to					(kg)							
	from	to	m	%														
	0.00	2.60														Casing, no core sample		
1 to 2	2.60	9.80	4.51	62%					32			SST	MST			Light to medium gray, fine to medium grained, with thin laminations of MST (mm thick), slightly oxidized and weathered with limonite stains in fractures, carbonaceous sediments in fractures common, carbonate veinlets <1%, sharp lower contact at 45 TCA,no visible sulphide mineralisation		
2 to 3	9.80	10.75	0.54	59%					42			CMST				Dark gray to black, soft, clayey, generally dull 90%, moderately heavy, highly carbonaceous with coal lenses and streaks, rare bedding dipping 42 TCA, gradational lower contact		
3	10.75	10.97	0.22	100%	10.18	10.32	0.14					CO				Black, soft, clayey, shiny/bright 85% dull 15%, broken, highly friable, gradational lower contact		
3 to 4	10.97	14.58	3.49	96%					40		0.5	MST				Medium to dark gray, poorly to moderately bedded mostly oriented 40 TCA, slightly oxidized and weathered with limonite stains, minor shear zone at 13.75 to 14.02m, slightly carbonaceous at the lower contact, gradational lower contact, rare carbonaceous sediments in fractures, weak fracture filling pyrite		
4	14.58	15.00	0.30	71%	13.78	14.34	0.56					CO	CMST			Dark gray to black, slightly heavy, shiny/bright 60% dull 40%, with lenses/streaks of CMST,clayey with gradational lower contact		
4 to 5	15.00	18.60	3.33	92%					35-40			SLT	SST			Light to medium gray, with interbedded SST 1-2cm thick, bedding oriented 35 to 40 TCA, partly oxidized and weathered with limonite stains in fractures, carbonate veinlets/stringers <1%		
5 to 6	18.60	21.65	1.91	62%					45			CMST	MST			Medium to dark gray with interbedded MST 2-4cm thick, bedding at 45 TCA, strong coal streaks and lenses, highly carbonaceous, gradational lower contact, occasional polished fracture surface, no visible sulphide mineralisation		
6 to 7	21.65	26.45	3.61	75%					45-50		0.1	MST	CMST			Dark gray, generally massive with occasional bedding of CMST dipping 45-50 TCA, with zones showing slightly carbonaceous, gradational lower contact, poorly indurated, weak rock, trace of pyrite in fractures		
7 to 8	26.45	30.67	2.45	58%					65			CMST	MST			Dark gray, mostly dull 95%, slightly heavy with interbedded MST 2-4cm thick, thin narrow coal beds/lenses common, bedding at 65 TCA, weaky indurated, poor rock condition, gradational lower contact, highly carbonaceous, with soft/clayey sections, no visible sulphide mineralisation		
8	30.67	30.85	0.08	44%	30.32	30.44	0.12					CO				Black, soft, clayey, shiny/bright 85% dull 15%, broken, highly friable, gradational lower contact		
8	30.85	34.14	1.07	32%								CMST	BC			Dark gray to black, generally dull 90% with shiny/bright soft coal lenses/ thin beds 1-2cm thick, interbedded BC/CO, poorly indurated weak rock, slightly heavy, gradational lower contact		
8 to 9	34.14	38.23	0.62	15%	34.68	38.28	3.60					CO				Black, soft,clayey, broken, highly friable, poor core recovery, weak rock, shiny/bright 85% dull 15%, gradational lower contact		
9	38.23	38.71	0.48	100%					60			CMST	MST			Medium gray with thin laminations of MST(mm thick size), clayey, soft, gradational lower contact		
9 to 10	38.71	46.33	4.76	62%					60-65		0.5	MST	CMST			Medium to dark gray with moderate to strong interbedded CMST 2-4cm thick, bedding at 60-65 TCA, with sections showing carbonaceous sediments, gradational lower contact, poorly indurated, weak rock, weak pyrite in fractures		
10	46.33	46.64	0.08	25%	46.64	47.04	0.40					CO				Black, broken, soft weak rock, shiny/bright 80% dull 20%, gradational lower contact		
10 to 11	46.64	47.05	0.32	78%	47.04	47.68	0.64					CMST				Rock parting, dark gray to black, mostly dull 90%, slightly heavy, highly carbonaceous with strong coal lenses/streaks, gradational lower contact		
11	47.05	48.90	0.79	42%	47.68	48.90	1.22					CO				Black, shiny/bright 90% dull 10%, soft/clayey, highly friable, broken core, poorly indurated, weak rock, gradational lower contact		
11 to 12	48.90	51.51	1.89	72%					55-60			CMST	MST			Dark gray to black with interbedded MST 2-4cm thick, bedding mostly dipping 55-60 TCA, with clayey/soft zones, moderate to strong lenses of CO, shows polished fracture surface, poorly indurated, weak rock, no visible sulphide mineralisation		
12 to 15	51.51	64.05	10.73	85%					55-60		0.5	MST	CMST			Medium to dark gray with interbedded CMST beds, occasional thin SST laminations(mm thick), carbonate veinlets/stringers 2%, bedding oriented 55-60 TCA, moderately to well indurated medium strong rock, weak fine grained disseminated pyrite, gradational lower contact		
15	64.05	64.25	0.05	25%	64.12	64.30	0.18					CO				Black, soft, shiny/bright 95%, highly friable, broken, weak rock		
15	64.25	64.80	0.18	32%	64.30	64.76	0.46					CMST				Dark gray, mostly dull 95% with strong thin lenses/streaks of coal, highly carbonaceous, weak rock		
15 to 16	64.80	67.52	1.17	43%	64.76	67.00	2.24					CO				Black, soft, clayey, shiny/bright 85% dull 15%, broken, highly friable, gradational lower contact		

Box #	Driller's Coring Info				Interval Corrected to Log		Length (m)	Lost (m)	Bedding (Alpha)	Sample #	Sample Mass	Sulphide %	Major Lith Code	Minor Lith Code	Seam	Description	Page 2 of 2	Graphic	
	from	to	Recovered		from	to					(kg)								
			m	%															
16 to 18	67.62	75.10	6.91	92%					65-70		0.5	MST	SLT		Medium gray with thin laminations of SLT (1-2cm thick), bedding at 65-70 TCA, partly carbonaceous carbonate stringers/veinlets 3%, pyrite as fine grained disseminated and fracture filling, gradational lower contact				
18	75.10	75.60	0.50	100%					70			CMST			Dark gray, generally massive with rare thin laminations of MST dipping 70 TCA, highly carbonaceous with coal lenses and streaks, no visible sulphide mineralisation, gradational lower contact				
18	75.60	76.15	0.55	100%						R340340	2.8	0.5	BC		Dark gray to black, generally dull 90%, slightly heavy, massive with coal streaks / lenses, presence of weak disseminated fine grained pyrite				
18 to 19	76.15	76.75	0.48	80%	76.74	77.34	0.60			R340341	2.2	0.1	CO		Black, shiny/bright 90% dull 10%, solid/intact core, with polished fracture surface, light weight, gradational lower contact, trace of pyrite				
19 to 21	76.75	85.55	8.80	100%					75-80	R340342	2.6	1	MST	SST	Medium to dark gray, with interbedded fine grained SST (2-4cm thick), bedding oriented 75-80 TCA, carbonate veinlets/stringers 2%, rare carbonaceous sediments in fractures, moderately to well indurated, hard competent rock, sharp lower contact at 85 TCA, pyrite as fine grained disseminated and filling fractures				
21 to 25	85.55	98.00	11.98	96%					80-85			1.5	SST	MST	Light to medium gray, fine to medium grained with minor thin beds of coarse grained SST (conglomerate), "Dirty SST" with moderate to strong lenses of carbonaceous sediments from 90.20-98.0m depth, carbonate veinlets/stringers 3%, pyrite as fine grained disseminated and filling fractures, lower contact is broken/fractured				
25 to 26	98.00	99.65	1.55	93%					80			1	MST	SST	Medium gray with interbedded fine grained SST 1-2cm thick, slightly carbonaceous with carbonaceous sediments in fractures and lenses, carbonate veinlets 2%, pyrite as fine grained disseminated, lower contact is broken/fractured				
26 to 27	99.65	103.40	3.39	90%					75-80			1	SST	CMST	Light to medium gray, "Dirty SST", fine to medium grained, shear zone from 102.35 to 103.40m, with moderate to strong carbonaceous sediments lenses and in fractures, carbonate veinlets/stringers 3%, moderately indurated, medium strong rock, gradational lower contact, pyrite as disseminated and filling fractures				
27 to 31	103.40	116.75	13.35	100%					75-80			1.5	SST		Light to medium gray, "Clean SST", fine to medium grained, displays normal graded bedding (fine to medium grained- younging uphole), occasional thin conlomerate beds from 116.0 to 116.75m, carbonate veinlets 3%, well indurated, hard, competent rock, sharp lower contact at 78 TCA, pyrite as fine grained disseminated and fracture filling				
31 to 34	116.75	125.85	9.10	100%					75			1.5	MST	SLT	Medium gray, with interbedded SLT 2-3cm thick, bedding dipping 75TCA, slightly carbonaceous with lenses of carbonaceous sediments, sharp lower contact at 78 TCA, pyrite as fine grained disseminated and fracture filling, lower contact is very gradational				
34 to 38	125.85	139.13	13.28	100%					80-85			1.5	SST	MST	Light to medium gray, fine to medium grained, "Dirty SST", with interbedded MST 1-2cm thick, occasionally displays wavy and cross MST bedding, bedding oriented 80-85 TCA, gradational lower contact, carbonate stringers/veinlets 2%, well indurated, strong, competent rock, pyrite as fine grained disseminated and fracture filling				
38 to 40	139.13	146.50	7.37	100%					80			1.5	SST		Light gray, fine to medium grained, "Clean SST", bedding at 80 TCA, rare carbonaceous sediments in fractures, sharp lower contact at 83 TCA, carbonate veinlets <1%, pyrite as fine grained disseminated and minor veinlets				
41	146.50	147.30	0.80	100%					75-80			1	MST	SST	Medium to dark gray with interbedded SST, bedding at 75-80 TCA, slightly carbonaceous, sharp lower contact at 77 TCA, moderately indurated, brittle, medium strong rock, carbonate veinlets <1%, pyrite as disseminated				
41	147.30	148.55	1.25	100%					70-75			0.5	SST		Light gray, "Clean SST", medium grained, sharp lower contact at 55 TCA, occasional bedding dipping 70-75 TCA, well indurated, strong competent rock, rare carbonate veinlets, weak disseminated pyrite				
41	148.55	149.10	0.55	100%					60			0.5	MST	SST	Medium to dark gray with interbedded SST, bedding at 60 TCA, sharp lower contact at 50 TCA, weak disseminated pyrite				
41 to 42 EOH	149.10	151.48	2.38	100%					60			0.5	SST		Light gray, "Clean SST" medium grained, bedding at 60 TCA, carbonate veinlets 2%, well indurated strong competent rock, weak disseminated pyrite, EOH = 151.48m				

[illegible]

Stopped hole due to loss of circulation and poor recovery

CanAus Coal Ltd.
Large Diameter (6") Core Description

Hole ID: MH14CC-02Northing: 5485764.000UTM System: NAD 83Hole Orientation: Vertical

Property: Michel Head

Seam: **10U, 10L, 9U**

Total Depth: 82.5m

Easting: 665065.000Hole Type: 6 inch coreElevation: 2176 mLogged by: J. Galbraith/G. Shewchuck

Date: September 13-15, 2014

Run #	Driller's Coring Info		Recovered		Interval Corrected to Log			Lost (m)	BCN	Sample #	Sample Mass (kg)	Core Quality / RQD	Lith Code	Seam	Description
	from	to	m	%	from	to	Length (m)								
															Cased to: 3m
															Core Point: 23.23m
1	23.23	23.73	0.43	86%				0.07							
			0.30										CLY		Claystone- fine grained, medium soft, brown-grey, Fe oxide staining on fracture surfaces
			0.13										CMST		Carbonaceous Mudstone with coal fragments in shoe, semi-hard, polished fracture surfaces with Fe oxide stain, black-brown
2	23.73	23.83	0.32	320%				-0.22							
			0.32										SLT		Siltstone- fine grained, medium grey, hard, no Fe oxide stain
3	23.83	25.33	1.51	101%				-0.01							
			0.10										MST		Mudstone- muddy, soft, gougey, grey-brown
			0.42						30				SLT		Siltstone- laminated, hard, fine grained, medium grey, fracture at 10 degrees TCA, Fe oxide stain on fracture surface
			0.30		23.98	24.28	0.30			R339101	11.00		CMST		Carbonaceous Mudstone- very fine grained, dark grey, soft to very soft in lower 10cm, polished fracture surfaces
			0.69		24.28					R339102			CO	10U	Coal- black, soft, dull and bright(70/30), sheared, polished fracture surfaces, few <2cm carbonaceous mudstone bands in upper 0.5m, fracture at 60 degrees TCA
4	25.33	26.93	1.49	93%			1.00	0.11			24.40				
			0.31			25.28				R339102			CO	10U	Coal- soft, black, sheared, polished fracture surfaces, dull 90%/ bright 10%
			1.00		25.28	26.28	1.00			R339103	26.00		CO	10U	Coal- same as above, 5mm pyrite lense in lower 0.5m, and 1cm mudstone band- orange-brown in lower 0.5 m, and hard coal band
			0.18		26.28					R339104			CO	10U	Coal- soft, black, sheared, dull 90%/ bright 10%, polished fracture surfaces, broken material from shoe
5	26.93	28.43	1.26	84%			0.68	0.24			14.40				
			0.50			26.96			25	R339104			CO	10U	Coal- same as above, medium soft, but not broken, 1.5cm mudstone parting at base of sample
			0.76		26.96					R339105			CO	10U	Coal- black, medium soft, sheared, polished fracture surfaces, dull 90%/ bright 10%- same as above
6	28.43	29.93	1.47	98%			1.38	0.03			29.20				
			0.50			28.34			30	R339105			CO	10U	Coal- same as above, few 1-2 cm mudstone lenses, abrupt contact at 30 degrees to core normal
			0.40		28.34	28.85	0.51			R339106	18.40		SLT		Siltstone parting- hard, grey-brown, very fine grained, polished slickensided fracture surfaces- fractures at 60 degrees TCN
			0.30							R339107			CMST		Carbonaceous Mudstone- soft, very fine grained, dark grey with few coaly lenses, fractured
			0.19			29.54	0.69			R339107	18.20		SLT		Siltstone- very fine grained, grey-brown, hard, fractures at 70 degrees TCN
			0.08			29.54				R339108			CO	10U	Coal- black, soft, sheared, dull 95%/ bright 5%, broken material from shoe

Run #	Driller's Coring Info		Recovered		Interval Corrected to Log			Lost (m)	BCN	Sample #	Sample Mass (kg)	Core Quality / RQD	Lith Code	Seam	Description
	from	to	m	%	from	to	Length (m)								
Run #	Driller's Coring Info		Recovered					Lost (m)	BCN	Sample #		Core Quality / RQD	Lith Code	Seam	Description
	from	to	m	%	from	to									
7	29.93	31.43	1.37	91%			1.00	0.13			28.80				
			0.92			30.54				R339108		CO	10U		Coal- black, soft, sheared, dull 95%. Bright 5%, ~20cm hard coal band near top of interval
			0.45		30.54	30.92	0.38			R339109	10.00	CO	10U		Coal- same as above, without hard band, fractures at 40 degrees TCN
8	31.43	32.93	1.45	97%				0.05							
			0.50		30.92	31.45	0.53			R339110	20.60	CMST			Carbonaceous Mudstone- very fine grained, dark grey, soft, top 20cm is harder, polished fracture surfaces
			0.68		31.45	32.38	0.93			R339111	24.80	CMST			Carbonaceous Mudstone- same as above, top 20 cm is coaly, fractures at 60 degrees TCN
			0.27		32.38					R339112		CO	10L		Coal- black, soft, sheared, dull 95%/bright 5%, polished fracture surfaces
9	32.93	34.43	1.42	95%			1.00	0.08			24.20				
			0.73			33.38				R339112		CO	10L		Coal- same as above
			0.69		33.38	34.04	0.66			R339113	15.00	CO	10L		Coal- same as above, very soft, fracture at 70 degrees TCN
10	34.43	35.93	1.38	92%				0.12							
			1.00		34.04	35.04	1.00			R339114	24.80	CO	10L		Coal- soft, black, sheared, polished fracture surfaces, dull 90%/ bright 10%, fractures at 60 degrees TCN, 4cm carbonaceous mudstone band at top of sample
			0.38		35.04					R339115		CO	10L		Coal- same as above, no carbonaceous mudstone
11	35.93	37.43	1.47	98%			1.00	0.03			21.60				
			0.62			36.04				R339115		CO	10L		Coal- same as above, (no carbonaceous mudstone), fracture at 70 degrees TCN
			0.85		36.04					R339116		CO	10L		Coal- same as above
12	37.43	38.93	1.60	107%			1.00	-0.10			26.20				
			0.15			37.04				R339116		CO	10L		Coal- same as above, dull 80%, bright 20%
			0.90		37.04					R339117		CO	10L		Coal- same as above, fracture at 50 degrees TCN
			0.10			38.04	1.00			R339117	24.40	CMST			Carbonaceous Mudstone band at base of sample- medium soft, very fine grained, dark grey
			0.45		38.04	38.49	0.45			R339118	9.40	CO	10L		Coal- black, soft, sheared, polished fracture surfaces, dull 80%/ bright 20%
13	38.93	40.43	1.49	99%				0.01							
			1.00		38.49	39.49	1.00		70	R339119	26.80	CO	10L		Coal- black, medium soft, sheared, polished fracture surfaces, dull 90%/bright 10%, fractures at 70 degrees TCN (along bedding), 6cm mudstone band at base of sample (brown, very fine grained, hard)
			0.49		39.49					R339120		CO	10L		Coal- same as above, no parting
14	40.43	41.93	1.36	91%			1.00	0.14			17.20				
			0.51			40.49				R339120		CO	10L		Coal- same as above, semi-hard
			0.85		40.49					R339121		CO	10L		Coal- same as above, two <1cm mudstone lenses within interval
15	41.93	43.43	1.35	90%			1.15	0.15			22.00				
			0.08			41.64				R339121		CMST			Carbonaceous mudstone parting at base of sample- very fine grained, hard, dark grey-brown
			1.00		41.64	42.64	1.00			R339122	23.40	CO	10L		Coal- black, soft, sheared, polished fracture surfaces, fractures at 60 degrees TCN, dull 90%/bright 10%, two 2cm mudstone bands within sample
			0.27		42.64	42.91	0.27			R339123	7.40	CO/bone coal?	10L		Coal- very hard, black, polished fracture surfaces, ~10cm carbonaceous mudstone band at base of interval, in shoe- brown, very fine grained, hard
16	43.43	44.93	1.59	106%				-0.09							
			1.00		42.91	43.91	1.00			R339124	21.60	CO	10L		Coal- black, soft, sheared, polished fracture surfaces, fractures at 65 degrees TCN, 0.5cm mudstone lense near top of sample
			0.59		43.91					R339125		CO	10L		Coal- same as above, 1cm mudstone lense in lower half of interval
17	44.93	46.43	1.35	90%			0.94	0.15			23.40				
			0.35			44.85				R339125		CO	10L		Coal- as above, crumbly, low angle slickensided fractures, polished, clean, massive
missed photograph			1.00		44.85	45.85	1.00			R339126	24.00	CO	10L		Coal- as above, clean, blockier towards bottom, polished shiny slick surfaces, massive
18	46.43	47.93	1.20	80%				0.30							
			1.20		45.85	47.05	1.20			R339127	24.60	CO	10L		Coal- blocky to crumbly, broken at base, with soft crumbly zones, no visible partings, clean, massive, as above
19	47.93	49.43	1.42	95%				0.08							
			0.95		47.05	48.00	0.95		45	R339128	21.00	CO	10L		Coal- blocky, medium soft to crumbly, as above, bedding fractures (?) at 45 degrees TCA, massive, clean
			0.47		48.00	48.47	0.47			R339129	13.40	CO	10L		Coal- as above with calcite (1cm) vein at top, blocky to powdery, massive, clean
20	49.43	50.93	1.30	87%				0.20							
			0.25		48.47					R339130		CMST			Carbonaceous Mudstone- dk brown-black, chunky, broken, brown streak, soft, waxy
			0.17			49.44	0.97			R339130	10.20	CO	10L		Coal- soft, crumbly, muddy
			0.30		49.44	49.74	0.30			R339131	10.00	MST	FW		Mudstone- brown, blocky, carbonaceous, massive, waxy, sharp contacts, beddign at 50 degrees TCN
			0.38							50		MST			Mudstone- same as above
			0.20									CO			Coal- chunky, broken, clean, shiny
21	50.93	52.43	1.00	67%				0.50							
			1.00									CMST			Carbonaceous Mudstone with thin coal stringers ~1.0cm
hammer to next core point															
22	71.00	72.40	1.34	96%				0.06							
			1.00		70.00	71.06	1.06			R339151	25.80	CO	9U		Coal- black, sheared, semi-hard, polished fracture surfaces, bright 5%/dull 95%, fractures at 30 degrees TCN, two 1cm mudstone bands twd base of sample
			0.34		71.06					R339152		CO	9U		Coal- same as above (no Mudstone)

Run #	Driller's Coring Info		Recovered		Interval Corrected to Log			Lost (m)	BCN	Sample #	Sample Mass (kg)	Core Quality / RQD	Lith Code	Seam	Description
	from	to	m	%	from	to	Length (m)								
23	72.40	73.90	1.37	91%			1.00	0.13			26.40				
			0.76			72.06			40	R339152			CO	9U	Coal- same as above, few mudstone lenses ~1cm, lower 15cm of sample has several mudstone lenses up to 4cm thick
			0.61		72.06					R339153			CO	9U	Coal- same as above, increasing hardness- no mudstone
24	73.90	75.40	1.45	97%			1.00	0.05			24.20				
			0.39			73.06			45	R339153			CO	9U	Coal- ahrd, shiny, sheared with polished fracture surfaces, dull95%. Bright 5%, fractures at 25 degrees TCN, few <0.5 cm mudstone lenses
			0.85		73.06	73.85	0.79		65	R339154	25.80		CO	9U	Coal- same as above, few Mudstone lenses up to 2cm throughout, 2cm mudstone band at base of sample, bedding and fractures at 65 degrees TCN
			0.21		73.85					R339155	24.00		CO	9U	Coal- hard, shiny, polished, same as above, no mudstone
25	75.40	76.90	1.60	107%			3.57	-0.10			24.00				
			0.79							R339155			CO/SHC	9U	Coal/shaley coal (?) - same as above, with few carbonaceous mudstone lenses throughout
			0.62							R339156	16.40		CO/SHC	9U	Coal/shaley coal (?) - same as above, few carbonaceous mudstone lenses <0.5cm throughout
			0.19							R339157					Carbonaceous Mudstone- hard, dark grey-brown, polished fracture surfaces, highly carbonaceous, very fine grained
26	76.90	78.40	1.57	105%			3.57	-0.07			25.00				
			0.81						40	R339157					Coal/shaley coal (?) - same as above, hard, shiny, polished fracture surfaces, dull 95%/bright5%, few <1cm mudstone lenses throughout, three 2cm mudstone bands in lower 20 cm of sample- brown hard, very fine grained
			0.55			77.42				R339158	13.60		CO/SHC	9U	Coal/shaley coal (?) - same as above, few <0.5cm mudstone lenses throughout, contact is in broken shoe material but rock is solid in shoe
			0.21		77.42	77.50	0.08			R339159	5.80		MST		Mudstone- very fine grained, dark grey-brown, medium hard
27	78.40	79.90	1.34	89%			0.08	0.16							
			0.92		77.50	78.48	0.98			R339160	22.00		CO/SHC	9U	Coal/shaley coal (?) - hard, very shiny, sheared, polished fracture surfaces, dull 95%/bright 5%, lower 30cm is flakey and soft
			0.30		78.48	78.78	0.30			R339161	11.00		SLT	FW	Sandy siltstone- fine grained, medium grey, hard, competent, abrupt contact with shaley coal above at 20 degrees TCN
			0.12										SLT		Sandy siltstone- same as above, polished fracture surface at base
28	79.90	81.40	1.42	95%				0.08							
			1.42						10				SST		Sandstone- light grey, fine-medium grained, very hard, competent, laminated with siltstone, crossbedded, bedding 10 degrees TCN
29	81.40	82.50	1.21	110%				-0.11							
			0.38										SST		Sandstone- same as above, abrupt contact with coarse grained sandstone below
			0.60						20				SST		Sandstone- coarse grained, light grey, faint laminations, very hard, few calcite veinlets infilling fractures (<0.1% veinlets), fracture with calcite at 80 degrees TCN
			0.23										SLT		Siltstone- fine grained, light grey-brown, semi-soft, massive abrupt contact with sandstone above

HQ Core Description

Hole: MH14CC-04Page: 1 of 2Northing: 5487144Hole Orientation: Vertical Hole (-90 dip)Total Depth: 73.50mEasting: 664981 Elevation: Seam: 9UUTM System: NAD 83Logged by: Ian FurigayDate : 21 September 2014

Run #	Driller's Coring Info				Interval Corrected to Log		Length (m)	Lost (m)	Bedding (Alpha)	Sample #	Sample Mass	Sulphide %	Major Lith Code	Minor Lith Code	Seam	Description	Graphic	
	Recovered				from	to					(kg)							
	from	to	m	%														
	0.00	60.30	60.30													No core samples, rock hammering, casing set to 9.0m depth, core point at 60.30m		
1	60.30	61.50	0.90	75%														
	60.30	60.95	0.35	53%					45				CMST			Dark gray, highly fractured, sheared, low strength rock, lower contact at 40 TCA, mostly of angular fragments of MST/CMST set in clay matrix, gradational lower contact		
	60.95	61.50	0.55	100%					50-60				MST			highly fractured, low to medium strength rock, carbonaceous sediments in fractures, with concoidal fractures, gradational lower contact at 55 TCA		
2	61.50	63.00	1.48	98%														
	61.50	62.80	1.30	100%					50-60	R339201	12.6		MST			Same as above, gradational lower contact at 55 TCA, moderately bedded		
	62.80	63.00	0.18	90%	62.88	63.72				R339202	16.2		CO		9U	Black, shiny/bright with dull bands, minor BC beds, highly fractured, soft, partly clayey, bright 70% dull 30%		
3	63.00	64.50	1.50	100%														
	63.00	63.55	0.55	100%						R339202			CO		9U	Same as above, gradational lower contact at 40 TCA		
	63.55	64.50	0.95	100%	63.72	64.62				R339203	31.8		CMST		9U	Rock parting, dark gray with moderate to strong coal lenses/streaks, with minot BC beds, highly carbonaceous, interbanded dull and bright bands		
4	64.50	66.00	1.50	100%														
	64.50	65.50	1.00	100%	64.62	65.50				R339204	27.6		CO		9U	Black, soft/clayey, highly sheared, bright with dull bands (90-10%), highly friable, low strength rock		
	65.50	66.00	0.50	100%	65.50	66.00				R339205	14.2		CO		9U	Same as above, clayey, bright/shiny 90% dull 10%, brittle and highly friable		
5	66.00	67.50	1.40	93%														
	66.00	67.00	0.90	90%	66.00	67.00				R339206	24.8		CO		9U	Black, bright (>90%) with minor interbanded dull (10%), soft/clayey, brittle, highly friable, low strength rock, moderate polished /concordial fracture surface		
	67.00	67.50	0.50	100%	67.00	67.50				R339207	14.4		CO		9U	Same as above, highly fractured/broken, clayey, friable, mostly bright >90%		
6	67.50	69.00	1.50	100%														
	67.50	68.50	1.00	100%	67.50	68.50				R339208	28.4		CO		9U	Black, soft/clayey, bright with dull bands, fractured/broken, friable/brittle, highly sheared, low strength rock		
	68.50	69.00	0.50	100%	68.50	69.00				R339209	15.8		CO		9U	Same as above, shiny/bright 80% dull 20%, broken/loose		
7	69.00	70.50	1.50	100%														
	69.00	69.65	0.65	100%	69.00	69.40				R339210	11.0		CO		9U	Black, partly clayey, mainly dull with frequent bright bands (10-40%), mostly intact coal, highly friable, gradational lower contact at 65TCA		
	69.65	69.95	0.30	100%	69.40	69.95				R339211	16.0		CMST		9U	Dark gray to black, mostly dull with minor bright bands, moderate coal lenses/streaks, highly fractured, low to medium strength rock, gradational lower contact		
	69.95	70.50	0.55	100%					60-65				BC	CMST		Dark gray to black with interbedded CMST, mostly dull, slightly heavy, minor bright bands, gradational lower contact at 70 TCA		

Run #	Driller's Coring Info				Interval Corrected to Log		Length (m)	Lost (m)	Bedding (Alpha)	Sample #	Sample Mass	Sulphide %	Major Lith Code	Minor Lith Code	Seam	Page 2 of 2		Graphic
	Recovered				from	to												
	from	to	m	%														
8	70.50	72.00	1.50	100%														
	70.50	72.00	1.50	100%					60-70				MST	CMST			Medium to dark gray with thin laminations of CMST 1-2cm thick, moderately to well bedded mostly dipping 60-70 TCA, slightly carbonaceous towards bottom, calcite veinlets/stringers <2%	
9	72.00	73.50	1.50	100%														
	72.00	72.65	0.65	100%					70-80				MST	CMST			Same as above, gradational lower contact with occasional concoidal fractures, slightly carbonaceous	
	72.65	73.25	0.60	100%									CMST	MST			Medium to dark gray, mainly dull with rare bright bands, low strength rock, highly carbonaceous, gradational lower contact	
	73.25	73.50	0.25	100%									BC				Black, soft/ fractured, sheared with interbanded dull and bright, brittle, highly friable, EOH = 73.50m	
EOH																		

HQ Core Description

Hole: MH14CC-05Page: 1 of 2

Northing: _____

Hole Orientation: Vertical Hole (-90 dip)Total Depth: 49.50m

Easting: _____ Elevation: _____

Seam: 10LUTM System: NAD 83Logged by: Ian FurigayDate : 23 September 2014

Run #	Driller's Coring Info				Interval Corrected to Log		Length (m)	Lost (m)	Bedding (Alpha)	Sample #	Sample Mass	Sulphide %	Major Lith Code	Minor Lith Code	Seam	Description	Graphic	
	Recovered				from	to					(kg)							
	from	to	m	%														
	0.00	37.50														No core samples, rock hammering, casing set at 9.0m, core point at 37.50m		
1	37.50	38.70	1.10	91%														
	37.50	38.15	0.55	84%									CO			Black, bright/shiny 80% dull 20% with interbedded dull bands, brittle/friable, soft/clayey, gradational lower contact at 50 TCA		
	38.15	38.70	0.55	100%									MST	CMST		Dark gray with thin laminations of CMST, with polished fracture surface, low strength rock, slightly carbonaceous, carbonate veinlets <1%		
2	38.70	40.00	1.30	100%														
	38.70	39.35	0.65	100%						60-65			MST			Medium to dark gray with shear zone at 38.85-39.15m, slightly carbonaceous with rare CMST/SLT laminations, bedding at 60-65 TCA, carbonate veinlets/stringers 2%, low to medium strength rock		
	39.35	40.00	0.65	100%	40.48	40.78				60-65	R339217		MST			Same as above, with minor slickensides		
3	40.00	41.50	1.30	86%														
	40.00	40.60	0.45	75%	40.78	41.24				R339218			CO		10L	Black, shiny/bright 80%, dull 20%, soft/clayey, highly sheared, gradational lower contact, friable		
	40.60	41.10	0.50	100%	41.24	41.60				60-65	R339219		CMST		10L	Dark gray to black, highly carbonaceous with moderate to strong lenses of coal, soft/clayey, gradational lower contact at 40TCA		
	41.10	41.50	0.35	87%	41.60	42.00				R339220			CO		10L	Black, soft, clayey, highly sheared, friable		
4	41.50	42.00	0.50	100%														
	41.50	42.00	0.50	100%						R339220			CO		10L	Black with interbanded bright and dull bands, partly clayey/soft, sheared, brittle and friable, with coal cleats/polished fracture surface, low strength rock		
5	42.00	43.50	1.50	100%														
	42.00	43.00	1.00	100%	42.00	43.00				R339221			CO		10L	Black, massive, intact coal, brittle, generally bright with occasional dull bands		
	43.00	43.50	0.50	100%	43.00	43.50				R332222			CO		10L	Same as above, bright/shiny 90%, dull 10%, brittle/friable		
6	43.50	45.00	1.50	100%														
	43.50	44.50	1.00	100%	43.50	44.50				60-70	R339223		CO		10L	Black, soft/clayey, highly sheared, bright/shiny >90% with minor dull bands, bedding at 60-70 TCA, brittle/highly friable with polished fracture surface		
	44.50	45.00	0.50	100%	44.50	44.70				R339224			CO		10L	Same as above, mostly intact/solid core		
7	45.00	46.50	1.30	86%														
	45.00	45.30	0.30	100%	44.70	45.20				R339225			BC	CMST	10L	Rock parting, dark gray to black, mostly dull with frequent bright bands, occasional laminations of CMST, slightly heavy with polished fracture surface, gradational lower contact		
	45.30	46.50	1.00	83%	45.20	46.30				R339226			CO		10L	Black, soft/clayey, fractured, mostly bright/shiny 90% dull 10%, light weight, brittle and friable		
8	46.50	48.00	1.50	100%														

Run #	Driller's Coring Info				Interval Corrected to Log		Length (m)	Lost (m)	Bedding (Alpha)	Sample #	Sample Mass	Sulphide %	Major Lith Code	Minor Lith Code	Seam	Page 2 of 2	Graphic
			Recovered														
	from	to	m	%	from	to					(kg)						
	46.50	46.70	0.20	100%						R339226			CO		10L	Same as above, wit 4cm of rock parting-CMST	
	46.70	48.00	1.30	100%	46.30	46.60				R339227			MST			bedding at 60-70 TCA, slightly silty from 47.55 - 48.0m, rare carbonate veinlets, no visible sulphide mineralisation	
9	48.00	49.50	1.35	90%													
	48.00	48.65	0.65	100%									MST			Same as above, lower contact gradational at 45 TCA, strong carbonate veinlets/stringers along contact	
	48.65	49.50	0.70	82%									BO	CO		Dark gray to black, generally dull with frequent bright/shiny bands, moderate to strong lenses of coal, with polished/concoidal fractures, brittle/fragile, slightly heavy, EOH = 49.50m	
EOH																	

COMPANY
:CAN AUS

WELL
:MH14 CC-01

COUNTRY
:CANADA

PROVINCE
:BRITISH COLUMBIA

OTHER SERVICES:
DEV

COMPENSATED DENSITY
GAMMA-CALIPER-RES
MH14 CC-01

SECTION
:N/A

TOWNSHIP
:N/A

RANGE
:N/A

LICENSE NO.
:N/A

UNIQUE WELL ID
:N/A

PERMANENT DATUM
:GL

LOG MEASURED FROM
:GL

DRL MEASURED FROM
:GL

DATE
:09/17/14

DEPTH DRILLER
:63.76

BIT SIZE
:152.40

LOG TOP
:-0.08

LOG BOTTOM
:62.37

ELEVATION KB
:N/A

ELEVATION DF
:N/A

ELEVATION GL
:N/A

RIG NUMBER
:130

LOGGER TD
:62.37

ARRIVAL TIME
:11:30

DEPARTURE TIME
:13:00

CIRC STOPPED
:N/A

CASING DRILLER
:6.00

CASING TYPE
:SURFACE

BOREHOLE FLUID
:H2O

RM TEMPERATURE
:N/A

MUD RES
:N/A

MUD WEIGHT
:1.00

WITNESSED BY
:D. THOMPSON

RECORDED BY
:B. MILLAR

REMARKS 1
:VERTICAL

REMARKS 2
:POOR BOREHOLE CONDITIONS

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

DENSITY RESISTIVITY 1:100MH14 CC-0109/17/14

LOG PARAMETERS

MATRIX DENSITY : 2.65

NEUTRON MATRIX : SANDSTONE

MATRIX DELTA T : 177

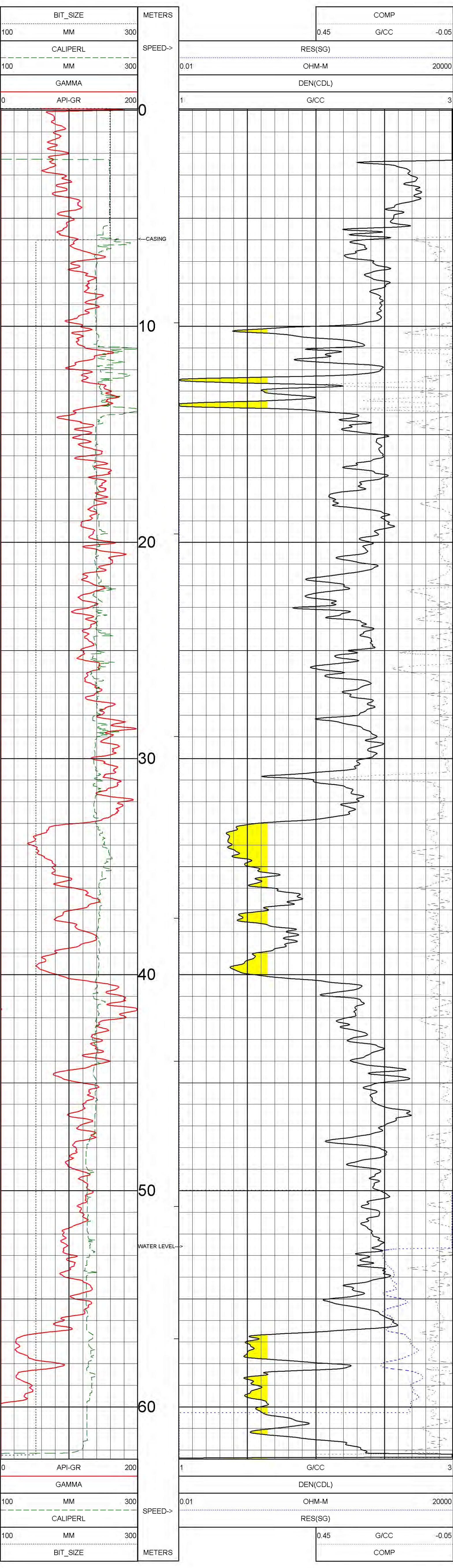
MAGNETIC DECL : 14.60

ELECT. CUTOFF : 75000

BIT SIZE : 152.40

PRESENTATION NAME/DATE = CanAus-9239-100-MH.008/19/2014

VERSION = 3.64LG



COMP

0.45G/CC-0.05

RES(SG)

0.0120000

OHM-M

20000

DEN(CDL)

13

G/CC

13

DENSITY RESISTIVITY 1:100MH14 CC-0109/17/14

LOG PARAMETERS

MATRIX DENSITY : 2.65

NEUTRON MATRIX : SANDSTONE

MATRIX DELTA T : 177

MAGNETIC DECL : 14.60

ELECT. CUTOFF : 75000

BIT SIZE : 152.40

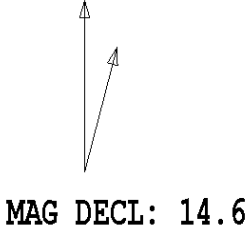
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VERSION = 3.64LG

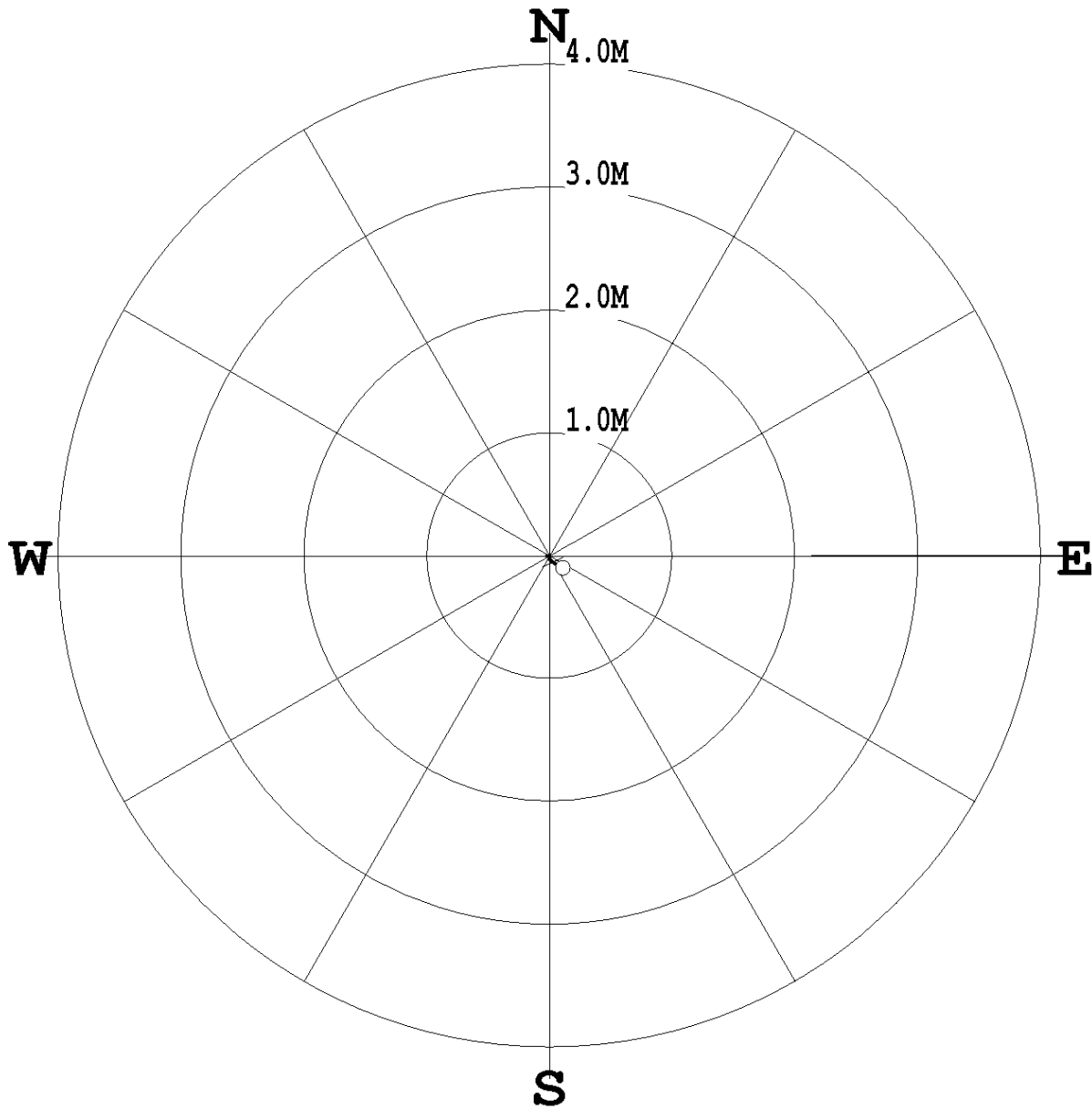
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TOOL 9239C1 TM VERSION 2025						
SERIAL NUMBER 401						
	DATE	TIME	SENSOR	STANDARD	RESPONSE	
1	May30,14	11:59:18	GAMMA	0.100 [API-GR]	1.000 [CPS]	
	May30,14	11:59:18	GAMMA	545.000 [API-GR]	550.000 [CPS]	
2	May30,14	11:35:59	VOLTAGE	27.500 [MV]	7990.000 [CPS]	
	May30,14	11:35:59	VOLTAGE	210.500 [MV]	32680.000 [CPS]	
3	Aug08,12	17:49:15	CALIPER	Default [CPS]	Default [CPS]	
	Aug08,12	17:49:15	CALIPER	Default [CPS]	Default [CPS]	
4	Jun10,14	10:26:57	DEN(LS)	1.620 [G/CC]	12681.300 [CPS]	
	Jun10,14	10:26:57	DEN(LS)	2.612 [G/CC]	1680.800 [CPS]	
5	Jun10,14	10:27:16	DEN(SS)	1.590 [G/CC]	49408.000 [CPS]	
	Jun10,14	10:27:16	DEN(SS)	2.580 [G/CC]	18447.900 [CPS]	
6	Aug08,14	12:59:43	CALIPERL	100.000 [MM]	212113.000 [CPS]	
	Aug08,14	12:59:43	CALIPERL	150.000 [MM]	261527.000 [CPS]	
7	May30,14	11:37:15	CURRENT	27.500 [UA]	5761.000 [CPS]	
	May30,14	11:37:15	CURRENT	210.500 [UA]	20941.000 [CPS]	
8	Dec15,09	09:34:24	F	Default [CPS]		
9	Dec15,09	09:34:24	X	Default [CPS]		

PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14 CC-01
DATE OF LOG: 09/17/14
PROBE: 9058A 2633



SCALE: 1 M/CM
TRUE DEPTH: 57.47 M
AZIMUTH: 131.4
DISTANCE: 0.1 M
+ = 50 M INCR
○ = BOTTOM OF HOLE

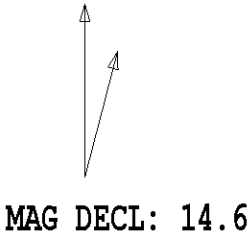


* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

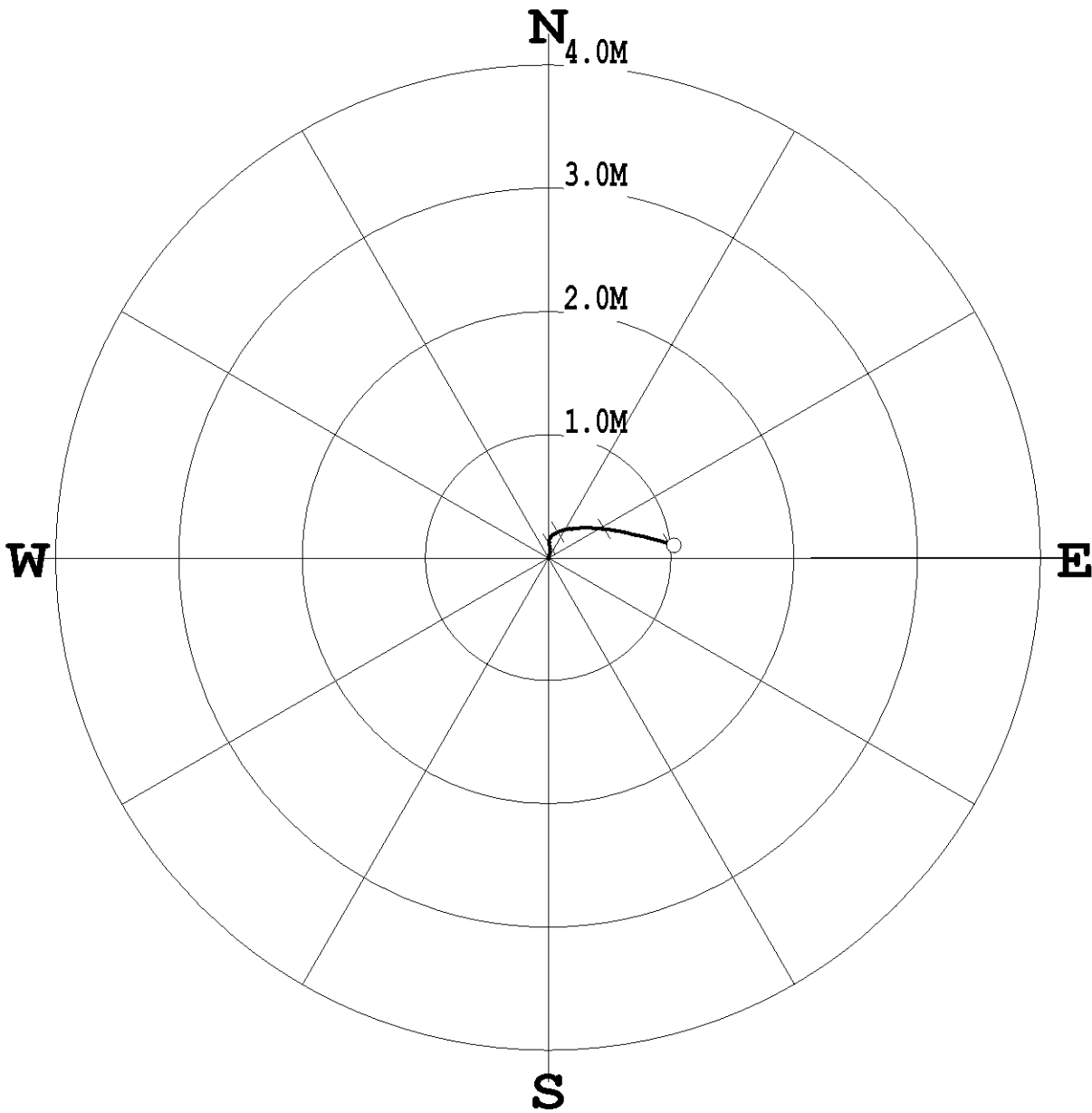
CLIENT	: CANAUS	HOLE ID.	: MH14 CC-01					
FIELD OFFICE	: CENTURY	DATE OF LOG	: 09/17/14					
DATA FROM	: N/A	PROBE	: 9058A	,	2633			
MAG. DECL.	: 14.600	DEPTH UNITS	: METERS					
LOG: MH14CC-01_09-17-14_12-11_9058A_5_10_60_RESAMPLED.log								
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB	
10.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0	
15.00	11.98	-0.00	-0.01	0.0	255.9	0.2	269.8	
20.00	17.47	-0.00	-0.02	0.0	267.7	0.1	311.2	
25.00	22.47	-0.00	-0.02	0.0	262.9	0.1	122.5	
30.00	27.47	-0.01	-0.01	0.0	227.3	0.1	128.7	
35.00	32.47	-0.01	-0.00	0.0	196.1	0.1	163.9	
40.00	37.47	-0.02	-0.00	0.0	187.9	0.1	169.1	
45.00	42.47	-0.03	0.00	0.0	172.2	0.2	141.8	
50.00	47.47	-0.05	0.02	0.1	155.6	0.4	129.3	
55.00	52.47	-0.07	0.06	0.1	141.5	0.6	118.5	
60.00	47.47	-0.05	0.02	0.1	155.6	0.4	129.3	
60.00	47.47	-0.05	0.02	0.1	155.6	0.4	129.3	

PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14CC-02
DATE OF LOG: 09/15/14
PROBE: 9058A 2633



SCALE: 1 M/CM
TRUE DEPTH: 81.25 M
AZIMUTH: 84.3
DISTANCE: 1.0 M
+ = 20 M INCR
○ = BOTTOM OF HOLE



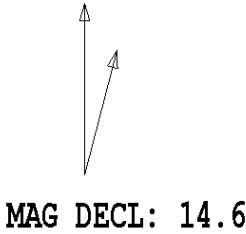
***** COMPU-LOG - VERTICAL DEVIATION *****

CLIENT : CANAUS HOLE ID. : MH14CC-02
FIELD OFFICE : CENTURY GEO DATE OF LOG : 09/15/14
DATA FROM : N/A PROBE : 9058A , 2633
MAG. DECL. : 14.600 DEPTH UNITS : METERS
LOG: MH14CC-02_09-15-14_05-39_9058A_.02_5.00_81.45_DEVI.log

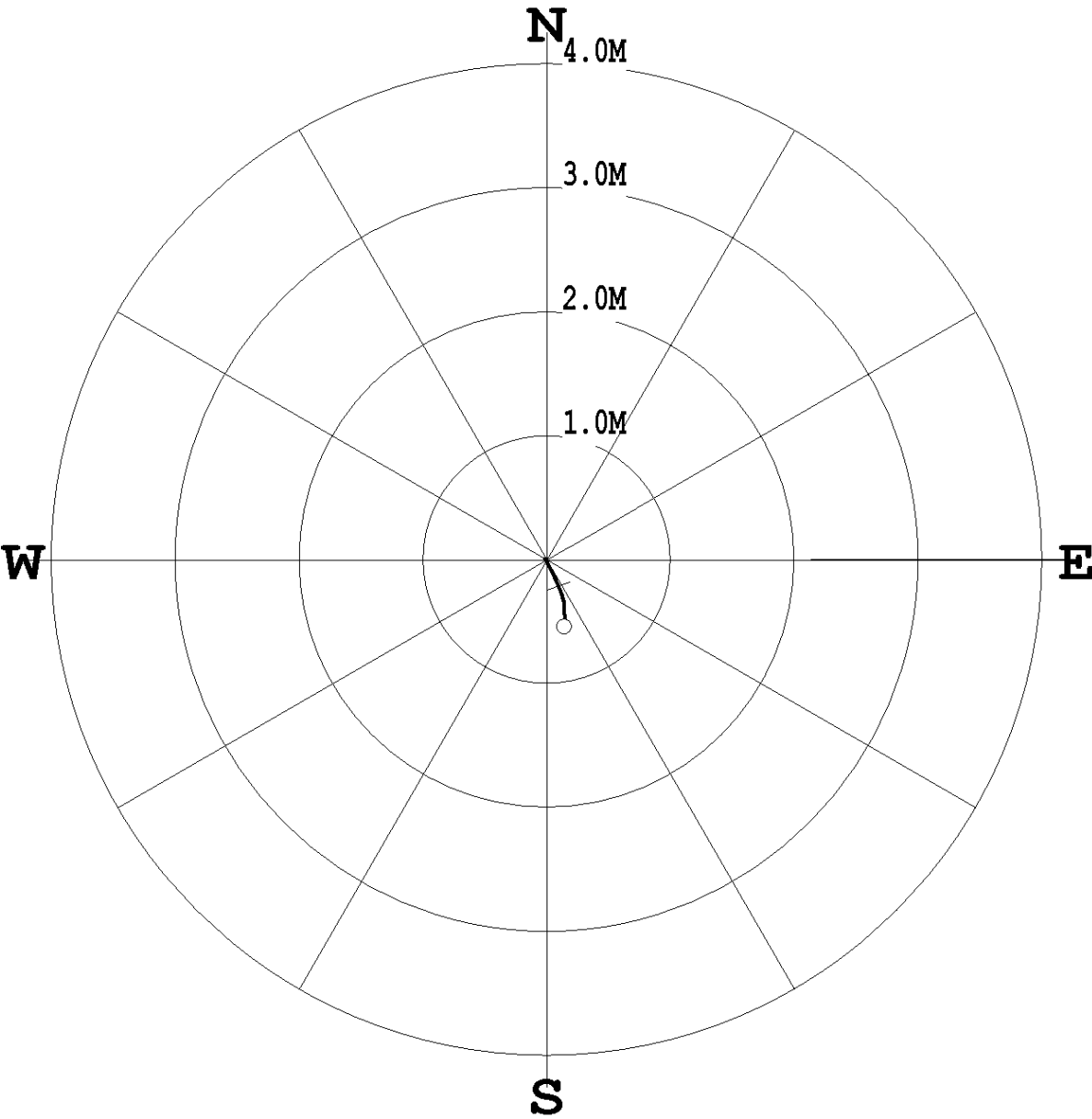
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
5.02	5.02	0.00	0.00	0.0	18.6	0.8	18.6
10.00	10.00	0.05	0.01	0.0	11.8	0.4	359.3
15.00	15.00	0.08	0.01	0.1	7.4	0.8	7.1
20.00	20.00	0.11	0.01	0.1	3.5	0.3	343.1
25.00	25.00	0.13	0.00	0.1	2.1	0.2	324.3
30.00	30.00	0.16	0.01	0.2	3.9	0.4	28.9
35.00	35.00	0.19	0.03	0.2	10.4	0.5	53.3
40.00	40.00	0.21	0.08	0.2	19.7	0.7	64.2
45.00	45.00	0.23	0.15	0.3	32.0	1.0	78.2
50.00	50.00	0.24	0.23	0.3	44.0	1.3	82.7
55.00	55.00	0.24	0.34	0.4	54.6	1.2	97.1
60.00	60.00	0.23	0.45	0.5	62.7	1.5	95.7
65.00	64.99	0.22	0.58	0.6	69.5	1.5	100.9
70.00	69.99	0.19	0.70	0.7	75.1	1.6	98.7
75.00	74.99	0.16	0.84	0.9	79.5	1.7	101.8
80.00	79.99	0.12	0.98	1.0	83.2	1.7	108.1
81.26	81.25	0.10	1.02	1.0	84.2	1.9	114.9

PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14CC-04
DATE OF LOG: 09/21/14
PROBE: 9058A 2633



SCALE: 1 M/CM
TRUE DEPTH: 72.14 M
AZIMUTH: 165.2
DISTANCE: 0.6 M
+ = 50 M INCR
○ = BOTTOM OF HOLE

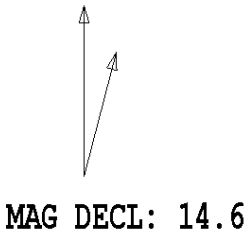


* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

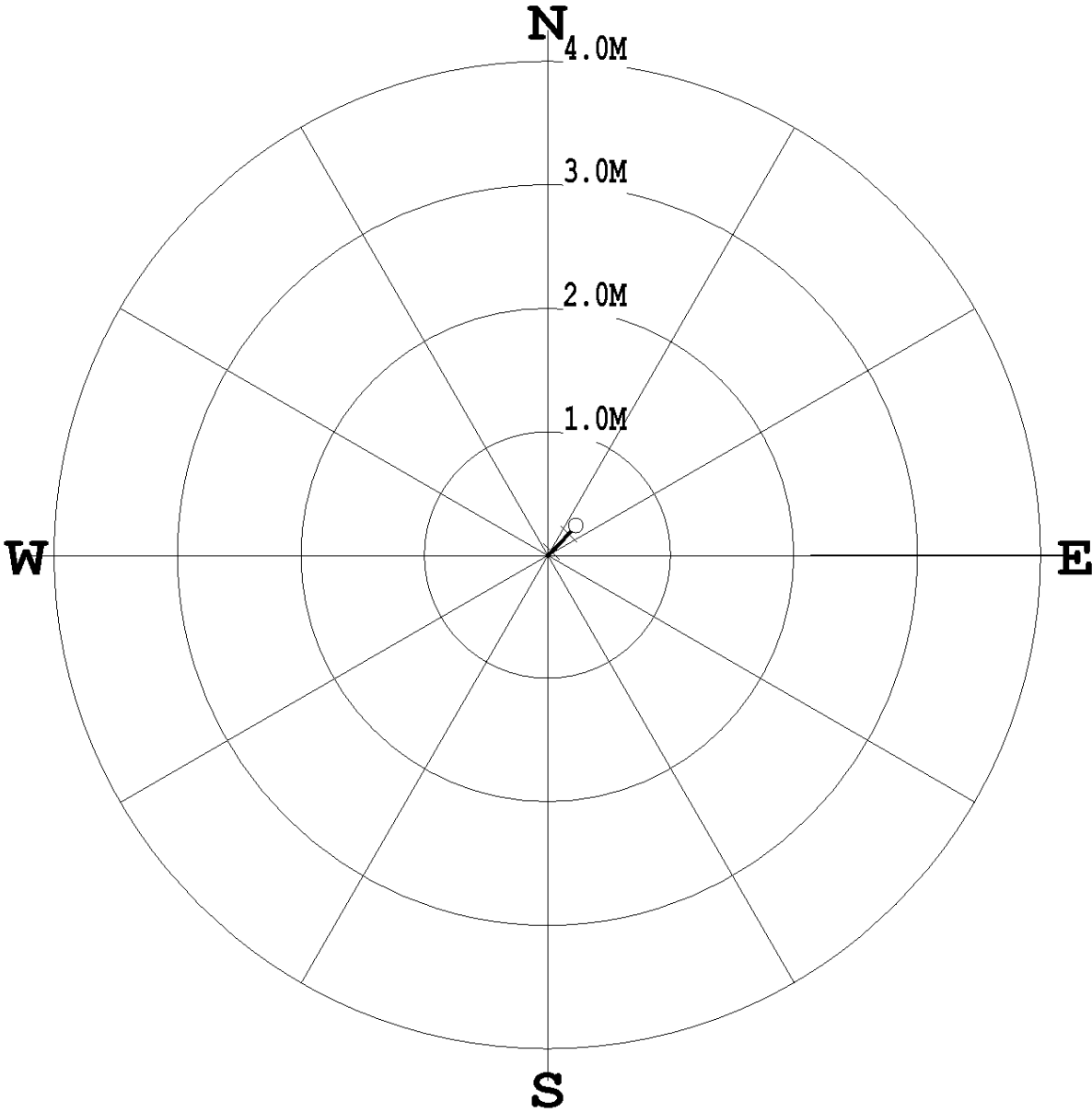
CLIENT	: CANAUS	HOLE ID.	: MH14CC-04				
FIELD OFFICE	: CENTURY	DATE OF LOG	: 09/21/14				
DATA FROM	: N/A	PROBE	: 9058A	,	2633		
MAG. DECL.	: 14.600	DEPTH UNITS	: METERS				
LOG: MH14CC-04_09-21-14_15-20_9058A_.02_11.00_72.34_DEVI.log							
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
11.02	11.02	-0.00	-0.00	0.0	257.6	0.1	257.6
16.00	16.00	0.00	-0.01	0.0	274.5	0.1	309.0
21.00	21.00	0.01	-0.02	0.0	295.2	0.0	110.0
26.00	26.00	-0.00	-0.01	0.0	263.9	0.2	157.3
31.00	31.00	-0.02	0.00	0.0	179.3	0.4	148.0
36.00	36.00	-0.05	0.02	0.1	160.1	0.4	139.7
41.00	41.00	-0.10	0.04	0.1	156.6	0.7	156.6
46.00	46.00	-0.16	0.07	0.2	156.3	0.8	155.0
51.00	51.00	-0.22	0.10	0.2	156.3	0.8	156.7
56.00	56.00	-0.29	0.12	0.3	157.0	1.0	167.1
61.00	61.00	-0.36	0.14	0.4	159.0	1.0	177.6
66.00	66.00	-0.44	0.14	0.5	162.2	0.8	177.7
71.00	71.00	-0.52	0.14	0.5	164.6	0.9	185.9
72.14	72.14	-0.54	0.14	0.6	165.2	1.2	179.7

PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14CC-05
DATE OF LOG: 09/24/14
PROBE: 9058A 2633



SCALE: 1 M/CM
TRUE DEPTH: 48.90 M
AZIMUTH: 44.1
DISTANCE: 0.3 M
+ = 20 M INCR
○ = BOTTOM OF HOLE



* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

CLIENT	: CANAUS	HOLE ID.	: MH14CC-05						
FIELD OFFICE	: CENTURY	DATE OF LOG	: 09/24/14						
DATA FROM	: N/A	PROBE	: 9058A	,	2633				
MAG. DECL.	: 14.600	DEPTH UNITS	: METERS						
LOG: \MH14CC-05_09-24-14_13-39_9058A_.02_10.00_49.09_DEVI.log									
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB		
10.02	10.02	0.00	0.00	0.0	79.0	0.1	79.0		
15.00	15.00	0.01	0.01	0.0	50.6	0.2	35.1		
20.00	20.00	0.03	0.03	0.0	47.0	0.5	45.2		
25.00	25.00	0.06	0.07	0.1	46.9	0.4	47.1		
30.00	30.00	0.10	0.10	0.1	45.9	0.6	43.0		
35.00	35.00	0.13	0.13	0.2	44.7	0.5	39.7		
40.00	40.00	0.17	0.17	0.2	44.2	0.6	47.6		
45.00	45.00	0.20	0.20	0.3	44.4	0.6	56.2		
48.90	48.90	0.24	0.23	0.3	44.1	0.6	22.6		

COMPANY	:CANADUS	OTHER SERVICES
CELL	:MHCOP03	DEV
FIELD	:MICHELLE HEAD	DEN
COUNTRY	:CANADA	
PROVINCE	:BRITISH COLUMBIA	

SU	N/A
ECTION	N/A
OWNSHIP	N/A
RANGE	N/A
CENSE NO.	N/A
NIQUE WELL ID.	N/A

DOG MEASURED FROM : GL	ELEVATION DF : N/A
R/L MEASURED FROM : GL	ELEVATION GL : N/A
DATE : 08/10/14	PIG NUMBER : RC130

DEPTH DRILLER	:151.00	LOGGERS TD	:150.98
ATT SIZE	:127.70	ARRIVAL TIME	:01:00
LOG TOP	:0.00	DEPARTURE TIME	05:30
LOG BOTTOM	:145.85	CORE STOPPED	:NA

ASING LOGGER	:6:26
ASING DRILLER	:6:00

OREHOLE FLUID	:H2O
TEMPERATURE	:N/A
UD RES	:N/A
UD WEIGHT	:1.00

EMARKS 2 :THROUGH PIPE LOG

ON NAME/DATE = CanAus-9068-100-INPIPE.0 07/12/2014 VERS

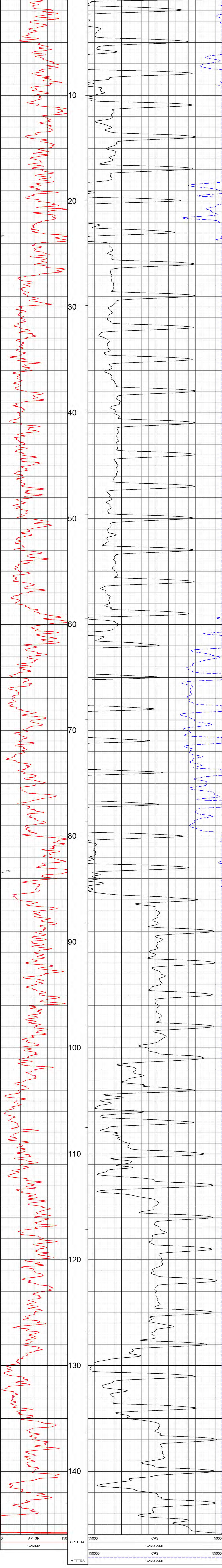
150000

GAMMA

API-GR



MH					

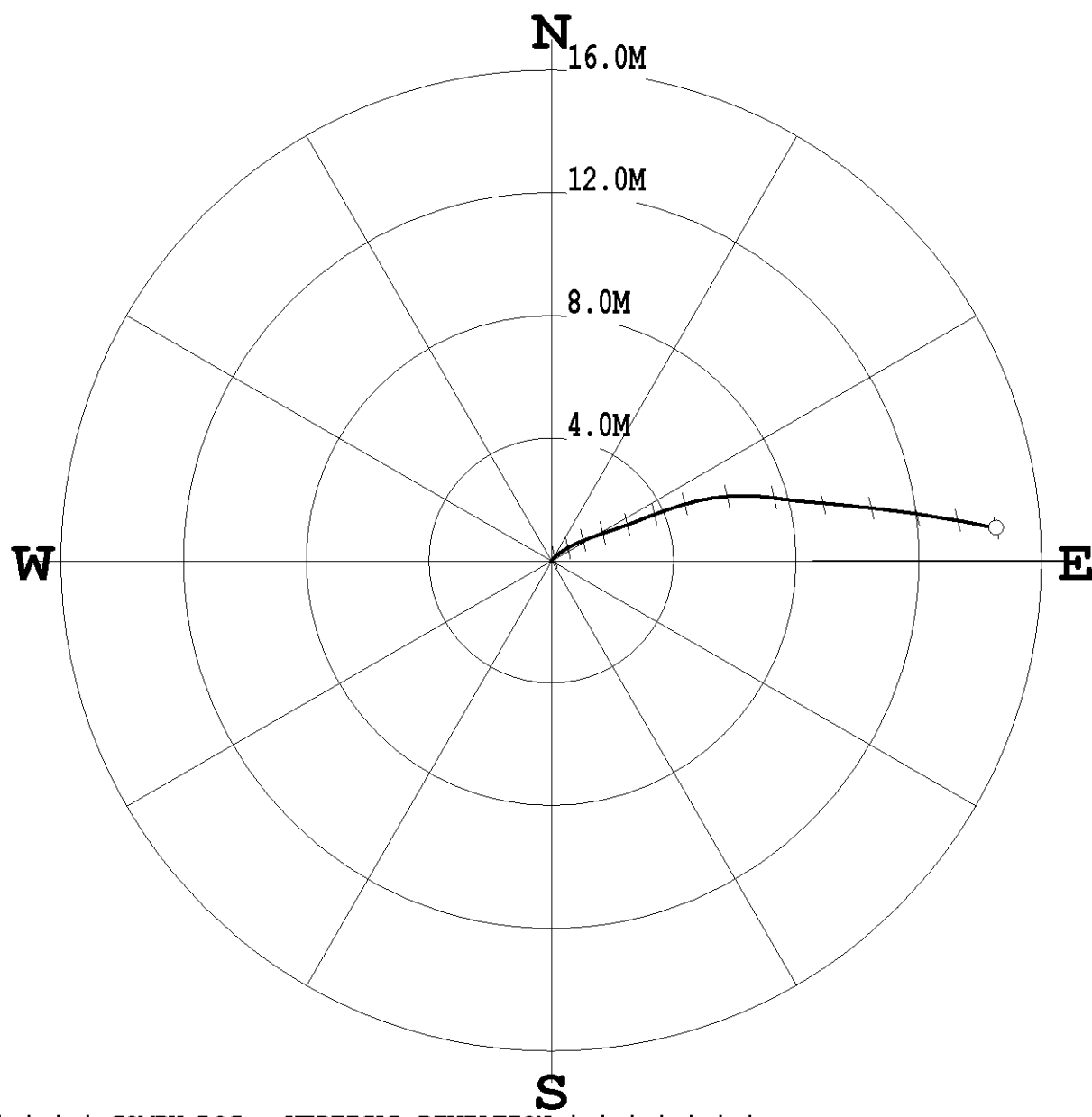


PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHELLE HEAD
HOLE ID: MH14CCP-03
DATE OF LOG: 08/19/14
PROBE: 9058A 2633

SCALE: 2 M/CM
TRUE DEPTH: 149.71 M
AZIMUTH: 85.8
DISTANCE: 14.5 M
+ = 10 M INCR
○ = BOTTOM OF HOLE

MAG DECL: 14.6



* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

CLIENT : CANAUS HOLE ID. : MH14CCP-03
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/19/14
DATA FROM : N/A PROBE : 9058A , 2633
MAG. DECL. : 14.600 DEPTH UNITS : METERS
LOG: MH14CCP-03_08-19-14_03-20_9058A_.02_15.00_150.86_DEVI.log

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
15.02	15.02	0.00	0.00	0.0	28.4	1.4	28.4
16.00	16.00	0.02	0.01	0.0	29.6	1.5	28.6
17.00	17.00	0.05	0.03	0.1	32.1	1.6	52.0
18.00	18.00	0.07	0.05	0.1	34.4	1.8	39.3
19.00	19.00	0.09	0.07	0.1	37.3	2.1	45.0
20.00	20.00	0.12	0.10	0.2	39.6	2.5	48.5
21.00	21.00	0.15	0.14	0.2	41.5	2.8	49.1
22.00	22.00	0.18	0.17	0.3	42.9	2.6	56.1
23.00	22.99	0.22	0.21	0.3	44.3	2.9	50.8
24.00	23.99	0.25	0.25	0.4	45.5	2.9	52.6
25.00	24.99	0.28	0.29	0.4	46.6	3.1	56.7
26.00	25.99	0.31	0.34	0.5	47.8	3.3	60.8
27.00	26.99	0.34	0.39	0.5	49.0	3.7	56.0
28.00	27.99	0.37	0.44	0.6	49.8	3.1	56.5
29.00	28.98	0.40	0.48	0.6	50.5	2.9	60.4
30.00	29.98	0.43	0.53	0.7	51.2	3.1	56.8
31.00	30.98	0.45	0.58	0.7	51.7	3.3	62.1
32.00	31.98	0.48	0.63	0.8	52.5	3.3	64.5
33.00	32.98	0.51	0.68	0.8	53.1	2.7	60.2
34.00	33.98	0.53	0.72	0.9	53.8	3.3	63.2
35.00	34.98	0.56	0.77	1.0	54.3	3.0	59.6
36.00	35.97	0.58	0.82	1.0	54.8	3.0	69.6
37.00	36.97	0.60	0.87	1.1	55.4	3.1	60.9
38.00	37.97	0.62	0.92	1.1	55.9	3.4	69.3
39.00	38.97	0.64	0.97	1.2	56.6	3.1	73.3
40.00	39.97	0.66	1.03	1.2	57.1	3.2	71.2
41.00	40.97	0.68	1.09	1.3	57.9	3.9	71.8
42.00	41.96	0.71	1.15	1.3	58.4	3.5	68.6
43.00	42.96	0.73	1.21	1.4	58.9	3.6	67.9
44.00	43.96	0.75	1.27	1.5	59.3	3.9	71.3
45.00	44.96	0.78	1.33	1.5	59.8	4.0	69.5
46.00	45.96	0.80	1.40	1.6	60.2	4.0	72.7
47.00	46.95	0.82	1.46	1.7	60.6	4.3	70.8
48.00	47.95	0.85	1.53	1.7	61.0	4.0	71.6
49.00	48.95	0.87	1.60	1.8	61.4	4.4	68.7
50.00	49.94	0.90	1.67	1.9	61.7	4.1	62.9
51.00	50.94	0.92	1.74	2.0	62.0	4.3	70.1
52.00	51.94	0.95	1.81	2.0	62.4	4.1	70.4
53.00	52.94	0.97	1.88	2.1	62.7	4.0	68.7
54.00	53.93	0.99	1.95	2.2	63.0	4.6	72.2
55.00	54.93	1.02	2.03	2.3	63.3	5.0	71.9
56.00	55.93	1.05	2.11	2.4	63.6	5.4	70.7
57.00	56.92	1.08	2.20	2.4	63.8	5.0	70.7
58.00	57.92	1.11	2.28	2.5	64.1	5.1	71.2
59.00	58.91	1.14	2.37	2.6	64.3	5.4	69.7
60.00	59.91	1.17	2.46	2.7	64.5	5.3	71.1
61.00	60.90	1.20	2.54	2.8	64.7	5.4	68.9
62.00	61.90	1.23	2.63	2.9	64.9	5.3	70.2
63.00	62.90	1.26	2.71	3.0	65.0	5.3	67.3
64.00	63.89	1.30	2.80	3.1	65.1	5.5	68.4
65.00	64.89	1.34	2.89	3.2	65.2	5.6	65.1
66.00	65.88	1.38	2.98	3.3	65.2	5.6	69.9
67.00	66.88	1.41	3.07	3.4	65.3	5.6	68.8
68.00	67.87	1.44	3.16	3.5	65.4	5.5	69.4
69.00	68.87	1.48	3.25	3.6	65.6	5.5	69.6
70.00	69.86	1.51	3.34	3.7	65.7	5.7	69.7
71.00	70.86	1.54	3.44	3.8	65.8	5.7	69.0
72.00	71.85	1.58	3.53	3.9	65.9	5.5	70.4
73.00	72.85	1.61	3.62	4.0	66.0	5.9	70.9
74.00	73.84	1.64	3.72	4.1	66.1	6.0	71.4
75.00	74.84	1.68	3.82	4.2	66.2	5.9	71.0
76.00	75.83	1.71	3.91	4.3	66.4	6.0	70.9
77.00	76.83	1.75	4.01	4.4	66.5	6.0	72.6
78.00	77.82	1.78	4.11	4.5	66.6	6.3	73.3
79.00	78.82	1.81	4.22	4.6	66.8	6.5	70.8
80.00	79.81	1.84	4.32	4.7	66.9	6.6	76.4
81.00	80.80	1.87	4.44	4.8	67.1	7.0	80.4
82.00	81.79	1.90	4.56	4.9	67.4	7.4	78.4
83.00	82.79	1.94	4.69	5.1	67.5	7.7	76.4
84.00	83.78	1.97	4.82	5.2	67.8	7.8	76.9
85.00	84.77	1.99	4.96	5.3	68.1	8.2	79.9
86.00	85.76	2.02	5.10	5.5	68.4	7.8	79.6
87.00	86.75	2.04	5.24	5.6	68.7	8.1	79.7
88.00	87.73	2.06	5.39	5.8	69.1	9.0	80.8
89.00	88.72	2.08	5.54	5.9	69.4	8.5	82.6
90.00	89.71	2.10	5.68	6.1	69.7	8.3	84.6
91.00	90.70	2.11	5.83	6.2	70.1	9.0	80.3
92.00	91.69	2.12	5.98	6.3	70.5	8.9	87.6
93.00	92.68	2.12	6.13	6.5	70.9	9.2	90.2
94.00	93.67	2.12	6.29	6.6	71.4	9.2	89.7
95.00	94.65	2.12	6.45	6.8	71.8	8.7	93.2
96.00	95.64	2.11	6.60	6.9	72.2	8.7	92.0
97.00	96.63	2.11	6.75	7.1	72.6	8.3	93.9
98.00	97.62	2.10	6.89	7.2	73.1	8.1	100.1
99.00	98.61	2.08	7.04	7.3	73.5	8.9	98.9
100.00	99.60	2.06	7.19	7.5	74.0	9.3	96.2
101.00	100.59	2.04	7.34	7.6	74.5	8.7	98.9
102.00	101.57	2.02	7.49	7.8	74.9	9.2	95.2
103.00	102.56	2.00	7.65	7.9	75.4	9.2	97.3
104.00	103.55	1.98	7.81	8.1	75.8	9.2	96.3
105.00	104.54	1.96	7.97	8.2	76.2	9.1	95.9
106.00	105.52	1.95	8.13	8.4	76.5	9.3	96.4
107.00	106.51	1.93	8.29	8.5	76.9	9.0	95.5
108.00	107.50	1.91	8.44	8.7	77.2	8.8	94.6
109.00	108.49	1.90	8.60	8.8	77.5	9.1	95.8
110.00	109.47	1.89	8.76	9.0	77.8	9.8	95.5
111.00	110.46	1.87	8.93	9.1	78.1	9.3	94.8
112.00	111.44	1.86	9.09	9.3	78.4	9.5	93.2
113.00	112.43	1.85	9.24	9.4	78.7	9.0	95.1
114.00	113.42	1.83	9.40	9.6	79.0	8.9	96.6
115.00	114.41	1.81	9.55	9.7	79.2	8.9	96.1
116.00	115.40	1.80	9.71	9.9	79.5	8.8	96.2
117.00	116.38	1.78	9.86	10.0	79.8	9.0	96.3
118.00	117.37	1.76	10.01	10.2	80.0	8.5	96.6
119.00	118.36	1.75	10.16	10.3	80.2	9.0	94.1
120.00	119.35	1.73	10.32	10.5	80.5	9.2	95.8
121.00	120.34	1.72	10.48	10.6	80.7	9.1	96.6
122.00	121.32	1.70	10.63	10.8	80.9	8.7	96.5
123.00	122.31	1.68	10.78	10.9	81.1	8.5	95.9
124.00	123.30	1.67	10.93	11.1	81.3	8.3	98.1
125.00	124.29	1.65	11.07	11.2	81.5	8.2	96.3
126.00	125.28	1.63	11.22	11.3	81.8	8.8	97.5
127.00	126.27	1.61	11.37	11.5	82.0	8.2	97.2
128.00	127.26	1.59	11.51	11.6	82.1	8.2	95.4
129.00	128.25	1.57	11.65	11.8	82.3	8.4	99.3
130.00	129.24	1.55	11.80	11.9	82.5	8.5	98.6
131.00	130.23	1.53	11.94	12.0	82.7	8.0	99.5
132.00	131.22	1.51	12.07	12.2	82.9	8.0	98.8
133.00	132.21	1.48	12.21	12.3	83.1	8.0	98.7
134.00	133.20	1.46	12.34	12.4	83.2	7.4	95.2
135.00	134.19	1.44	12.47	12.6	83.4	8.0	98.7
136.00	135.18	1.42	12.61	12.7	83.6	7.8	101.8
137.00	136.17	1.39	12.74	12.8	83.8	7.2	99.3
138.00	137.16	1.37	12.87	12.9	83.9	7.4	98.3
139.00	138.15	1.35	13.00	13.1	84.0	7.6	98.7
140.00	139.15	1.33	13.13	13.2	84.2	7.8	100.2
141.00	140.14	1.31	13.26	13.3	84.4	7.7	100.0
142.00	141.13	1.29	13.39	13.4	84.5	7.3	100.8
143.00	142.12	1.27	13.51	13.6	84.6	7.6	100.5
144.00	143.11	1.24	13.64	13.7	84.8	7.9	100.6
145.00	144.10	1.22	13.77	13.8	85.0	7.2	101.1
146.00	145.09	1.19	13.90	14.0	85.1	7.7	105.6
147.00	146.08	1.16	14.03	14.1	85.3	7.8	101.2
148.00	147.08	1.14	14.16	14.2	85.4	7.2	100.1
149.00	148.07	1.11	14.28	14.3	85.5	7.5	100.1
150.00	149.06	1.09	14.41	14.5	85.7	7.5	102.8
150.66	149.71	1.08	14.50	14.5	85.8	7.6	99.8

COMPENSATED DENSITY

GAMMA-CALIPER-RES

MH14CCP-08

COMPANY : CANAUS

WELL : MH14CCP-08

FIELD : MICHELLE HEAD

COUNTRY : CANADA

PROVINCE : BRITISH COLUMBIA

OTHER SERVICES: DEV

DEN TP

LOG PARAMETERS

DATE : 08/18/14

DEPTH DRILLER : 151.00

BIT SIZE : 127.70

LOG TOP : 0.00

LOG BOTTOM : 150.64

CASING LOGGER : 3.80

CASING DRILLER : 3.80

CASING TYPE : SURFACE

BOREHOLE FLUID : H2O

RM TEMPERATURE : N/A

MUD RES : N/A

MUD WEIGHT : 11.00

WITNESSED BY : D THOMPSON

RECORDED BY : R KOEBS

REMARKS 1 : VERTICAL

REMARKS 2

PERMANENT DATUM GL

ELEVATION RB : N/A

LOG MEASURED FROM : GL

ELEVATION OF : N/A

ELEVATION GL

RIS NUMBER : RG130

DATE : 08/18/14

DEPTH DRILLER : 151.00

BIT SIZE : 127.70

LOG TOP : 0.00

LOG BOTTOM : 150.64

CASING LOGGER : 3.80

CASING DRILLER : 3.80

CASING TYPE : SURFACE

BOREHOLE FLUID : H2O

RM TEMPERATURE : N/A

MUD RES : N/A

MUD WEIGHT : 11.00

WITNESSED BY : D THOMPSON

RECORDED BY : R KOEBS

REMARKS 1 : VERTICAL

REMARKS 2

LOG PARAMETERS

DATE : 08/18/14

DEPTH DRILLER : 151.00

BIT SIZE : 127.70

LOG TOP : 0.00

LOG BOTTOM : 150.64

CASING LOGGER : 3.80

CASING DRILLER : 3.80

CASING TYPE : SURFACE

BOREHOLE FLUID : H2O

RM TEMPERATURE : N/A

MUD RES : N/A

MUD WEIGHT : 11.00

WITNESSED BY : D THOMPSON

RECORDED BY : R KOEBS

REMARKS 1 : VERTICAL

REMARKS 2

PERMANENT DATUM GL

ELEVATION RB : N/A

LOG MEASURED FROM : GL

ELEVATION OF : N/A

ELEVATION GL

RIS NUMBER : RG130

DATE : 08/18/14

DEPTH DRILLER : 151.00

BIT SIZE : 127.70

LOG TOP : 0.00

LOG BOTTOM : 150.64

CASING LOGGER : 3.80

CASING DRILLER : 3.80

CASING TYPE : SURFACE

BOREHOLE FLUID : H2O

RM TEMPERATURE : N/A

MUD RES : N/A

MUD WEIGHT : 11.00

WITNESSED BY : D THOMPSON

RECORDED BY : R KOEBS

REMARKS 1 : VERTICAL

REMARKS 2

DENSITY RESISTIVITY 1:100 MH14CCP-08 08/18/14

LOG PARAMETERS

MATRIX DENSITY : 2.65

NEUTRON MATRIX : SANDSTONE

MATRIX DELTA T : 177

MAGNETIC DECL : 14.60

ELECT. CUTOFF : 99999

BIT SIZE : 127.70

PRESENTATION NAME/DATE = CanAus-9239-100.0 08/07/2014

VERSION = 3.64LG

BIT_SIZE

MM

300

CALIPERL

MM

300

GAMMA

API-GR

200

0

100

200

0

10

20

30

40

50

60

70

80

90

100

110

120

130

140

150

0

100

200

GAMMA

MM

300

CALIPERL

MM

300

BIT_SIZE

MM

300

METERS

SPEED->

RES(SG)

OHM-M

DEN(CDL)

G/CC

1

3

0.01

10000

0.45

G/CC

-0.05

COMP

LOG PARAMETERS

MATRIX DENSITY : 2.65

NEUTRON MATRIX : SANDSTONE

MATRIX DELTA T : 177

MAGNETIC DECL : 14.60

ELECT. CUTOFF : 99999

BIT SIZE : 127.70

PRESENTATION NAME/DATE = CanAus-9239-100.0 08/07/2014

VERSION = 3.64LG

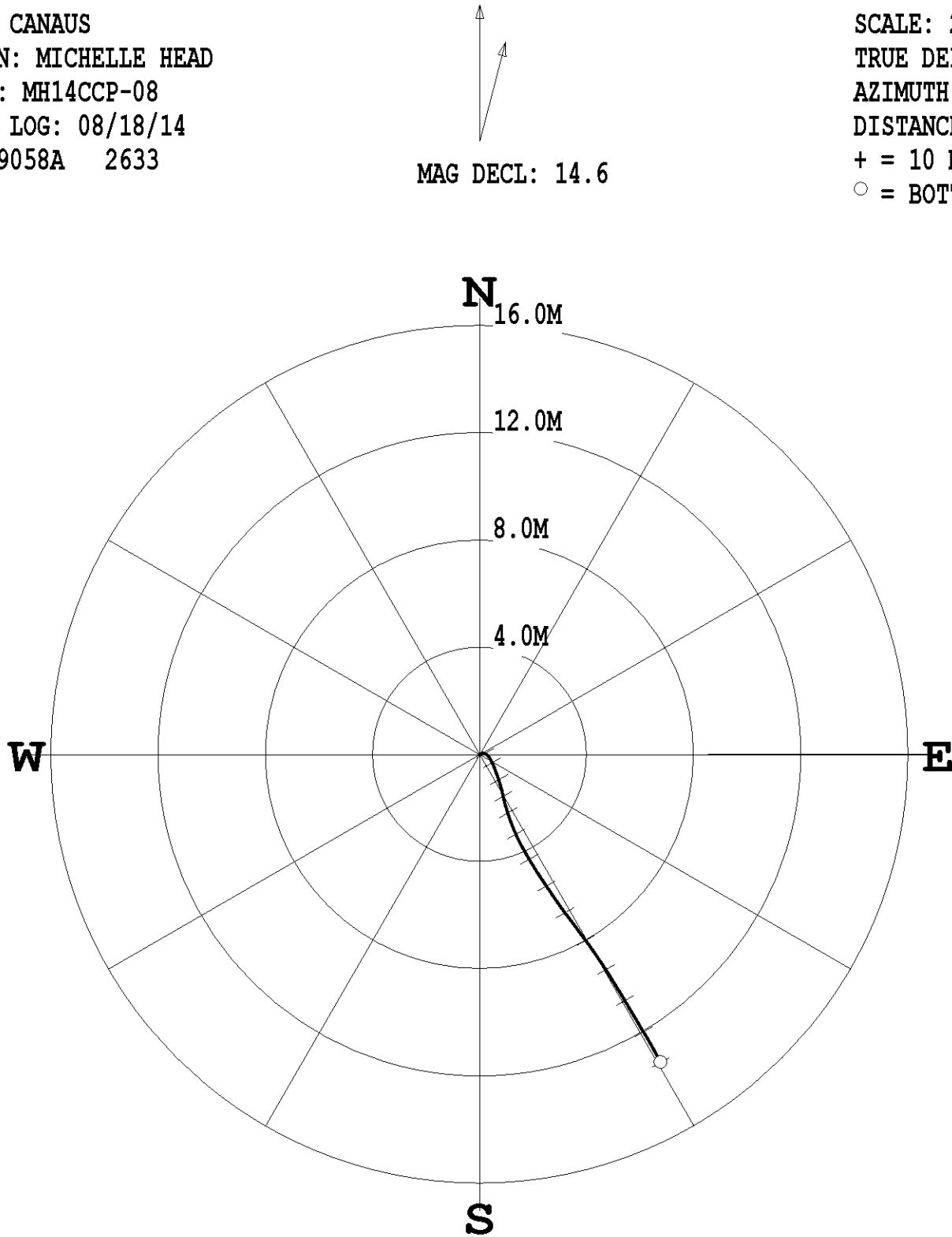
TOOL CALIBRATION MH14CCP-08 08/18/14 03:22				
TOOL 9239C TM VERSION 2025				
SERIAL NUMBER 401				
DATE	TIME	SENSOR	STANDARD	RESPONSE
1	May30,14	GAMMA	0.100	1.000 [CPS]
	May30,14	GAMMA	545.000	550.000 [CPS]
	May30,14	VOLTAGE	27.500	7990.000 [CPS]
2	May30,14	VOLTAGE	210.500	32680.000 [CPS]
	Aug08,12	CALIPER	Default	Default [CPS]
	Aug08,12	CALIPER	Default	Default [CPS]
3	Aug08,12	DEN(LS)	1.620	12681.300 [CPS]
	Jun10,14	DEN(LS)	2.612	1680.800 [CPS]
	Jun10,14	DEN(SS)	1.610	49408.000 [CPS]
4	Aug18,14	DEN(SS)	2.580	18447.900 [CPS]
	Aug08,14	CALIPERL	100.000	212113.000 [CPS]
	Aug08,14	CALIPERL	150.000	261527.000 [CPS]
5	May30,14	CURRENT	27.500	5761.000 [CPS]
	May30,14	CURRENT	210.500	20941.000 [CPS]
	Dec15,09	F X	Default	Default [CPS]

PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHELLE HEAD
HOLE ID: MH14CCP-08
DATE OF LOG: 08/18/14
PROBE: 9058A 2633

MAG DECL: 14.6

SCALE: 2 M/CM
TRUE DEPTH: 149.64 M
AZIMUTH: 149.6
DISTANCE: 13.3 M
+ = 10 M INCR
○ = BOTTOM OF HOLE



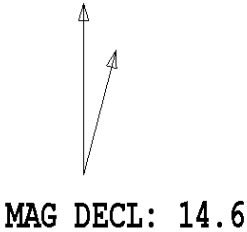
* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

CLIENT : CANAUS HOLE ID. : MH14CCP-08
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/18/14
DATA FROM : N/A PROBE : 9058A , 2633
MAG. DECL. : 14.600 DEPTH UNITS : METERS
LOG: MH14CCP-08_08-18-14_02-47_9058A_02_10.00_150.60_DEVI.log

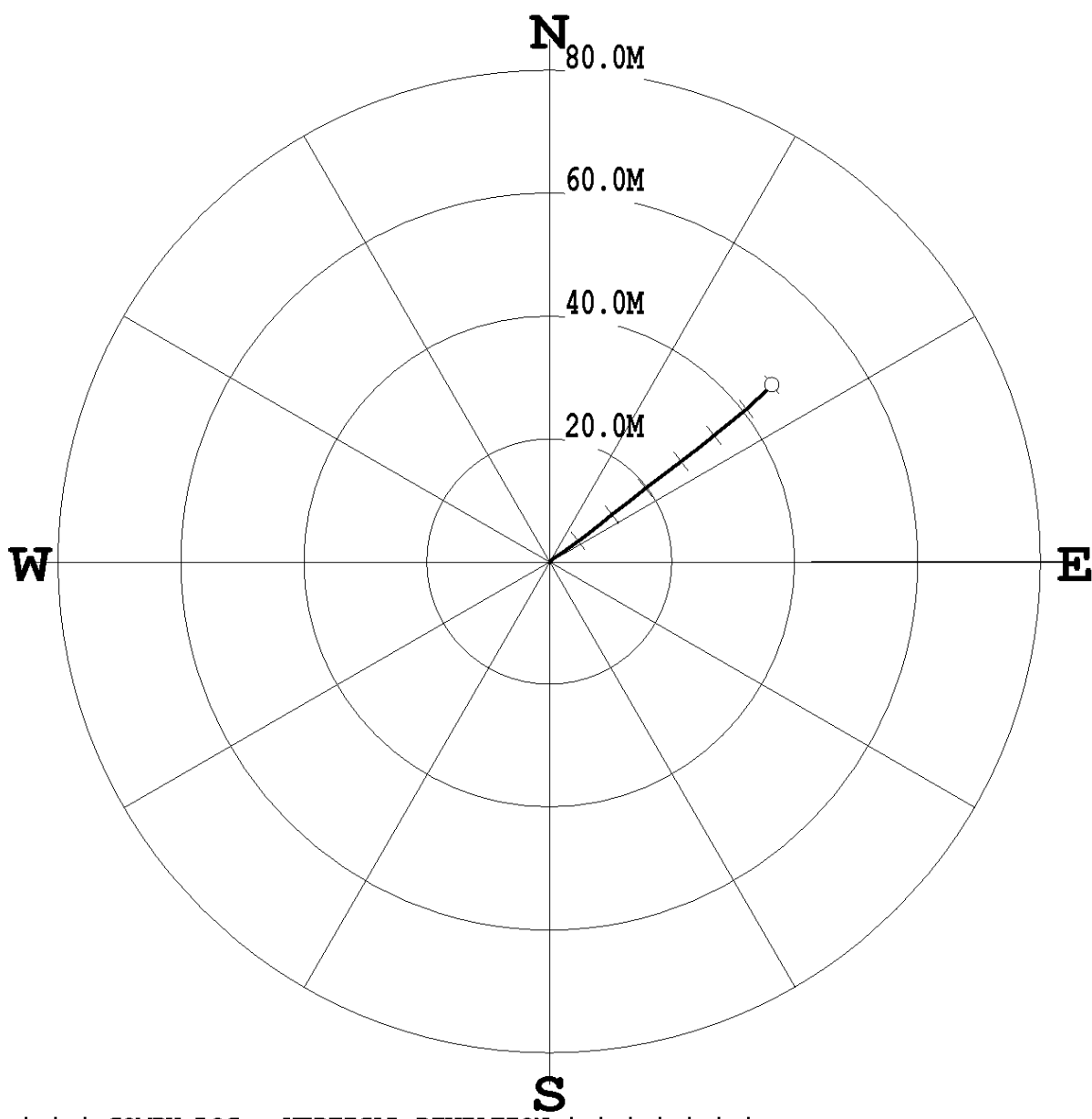
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
10.02	10.02	0.00	0.00	0.0	37.9	0.7	37.9
11.00	11.00	0.01	0.01	0.0	44.0	1.1	44.2
12.00	12.00	0.02	0.03	0.0	46.8	1.0	58.1
13.00	13.00	0.03	0.04	0.1	52.7	1.0	67.3
14.00	14.00	0.04	0.06	0.1	55.7	1.2	68.5
15.00	15.00	0.05	0.08	0.1	57.1	1.2	77.0
16.00	16.00	0.06	0.10	0.1	60.8	1.5	83.2
17.00	17.00	0.06	0.12	0.1	64.0	1.6	92.1
18.00	18.00	0.06	0.14	0.2	68.2	1.3	113.5
19.00	19.00	0.05	0.17	0.2	72.6	1.4	122.3
20.00	20.00	0.04	0.19	0.2	77.8	1.8	114.1
21.00	21.00	0.02	0.23	0.2	83.7	2.3	116.3
22.00	22.00	0.00	0.26	0.3	89.7	2.4	125.3
23.00	23.00	-0.02	0.29	0.3	94.4	2.0	134.0
24.00	23.99	-0.05	0.32	0.3	99.6	2.5	138.7
25.00	24.99	-0.08	0.34	0.4	103.8	2.3	138.7
26.00	25.99	-0.12	0.37	0.4	108.2	2.5	153.1
27.00	26.99	-0.16	0.39	0.4	112.4	2.8	149.7
28.00	27.99	-0.20	0.41	0.5	116.5	2.9	153.3
29.00	28.99	-0.25	0.43	0.5	120.2	3.1	154.5
30.00	29.99	-0.30	0.46	0.5	123.4	3.4	154.0
31.00	30.99	-0.36	0.48	0.6	126.3	3.3	169.3
32.00	31.98	-0.41	0.51	0.7	129.0	3.8	154.6
33.00	32.98	-0.47	0.54	0.7	131.4	3.8	158.7
34.00	33.98	-0.54	0.56	0.8	133.7	4.0	155.2
35.00	34.98	-0.61	0.59	0.8	135.9	4.4	157.8
36.00	35.97	-0.68	0.61	0.9	137.8	4.2	160.4
37.00	36.97	-0.74	0.64	1.0	139.4	4.0	160.7
38.00	37.97	-0.81	0.66	1.0	140.7	4.0	158.9
39.00	38.97	-0.87	0.68	1.1	141.9	4.3	158.8
40.00	39.96	-0.94	0.71	1.2	143.0	4.0	161.7
41.00	40.96	-1.00	0.73	1.2	144.1	4.0	162.6
42.00	41.96	-1.07	0.75	1.3	145.1	3.8	162.1
43.00	42.96	-1.13	0.76	1.4	145.9	3.5	161.2
44.00	43.96	-1.19	0.78	1.4	146.6	3.9	162.0
45.00	44.95	-1.25	0.80	1.5	147.4	3.8	167.6
46.00	45.95	-1.31	0.82	1.5	148.1	3.6	168.1
47.00	46.95	-1.38	0.83	1.6	148.9	3.9	166.8
48.00	47.95	-1.44	0.85	1.7	149.5	3.4	167.4
49.00	48.95	-1.49	0.86	1.7	150.1	3.5	162.7
50.00	49.94	-1.55	0.87	1.8	150.7	3.6	168.8
51.00	50.94	-1.61	0.89	1.8	151.2	3.5	167.2
52.00	51.94	-1.67	0.90	1.9	151.7	3.1	176.6
53.00	52.94	-1.73	0.91	2.0	152.3	3.9	170.0
54.00	53.94	-1.79	0.93	2.0	152.7	3.5	160.6
55.00	54.93	-1.85	0.94	2.1	153.0	3.7	160.2
56.00	55.93	-1.91	0.96	2.1	153.2	3.9	159.4
57.00	56.93	-1.97	0.98	2.2	153.5	3.9	169.8
58.00	57.93	-2.04	1.00	2.3	153.8	4.0	171.2
59.00	58.92	-2.11	1.02	2.3	154.1	4.1	157.1
60.00	59.92	-2.17	1.04	2.4	154.3	4.0	166.5
61.00	60.92	-2.24	1.07	2.5	154.5	4.6	162.7
62.00	61.92	-2.32	1.10	2.6	154.8	4.8	163.4
62.00	62.91	-2.40	1.12	2.6	155.0	4.3	160.6
64.00	63.91	-2.47	1.14	2.7	155.2	4.9	164.3
65.00	64.91	-2.54	1.17	2.8	155.2	4.6	161.9
66.00	65.90	-2.62	1.20	2.9	155.4	5.1	161.0
67.00	66.90	-2.71	1.24	3.0	155.5	5.3	159.8
68.00	67.90	-2.79	1.27	3.1	155.5	5.1	153.5
69.00	68.89	-2.87	1.30	3.1	155.6	5.3	151.1
70.00	69.89	-2.96	1.34	3.2	155.6	5.7	157.5
71.00	70.88	-3.04	1.38	3.3	155.6	5.3	153.2
72.00	71.88	-3.13	1.42	3.4	155.6	5.4	152.8
73.00	72.87	-3.22	1.47	3.5	155.5	5.9	155.2
74.00	73.87	-3.32	1.51	3.6	155.5	6.2	155.2
75.00	74.86	-3.41	1.56	3.8	155.4	6.1	149.2
76.00	75.86	-3.50	1.61	3.9	155.2	6.0	150.6
77.00	76.85	-3.59	1.67	4.0	155.1	6.5	147.8
78.00	77.84	-3.69	1.72	4.1	155.0	6.3	153.0
79.00	78.84	-3.79	1.78	4.2	154.9	6.3	148.6
80.00	79.83	-3.88	1.84	4.3	154.7	6.6	145.4
81.00	80.82	-3.99	1.90	4.4	154.6	6.6	152.7
82.00	81.82	-4.08	1.96	4.5	154.4	6.8	146.0
83.00	82.81	-4.19	2.02	4.6	154.3	6.8	150.6
84.00	83.80	-4.28	2.08	4.8	154.1	6.7	152.9
85.00	84.80	-4.38	2.14	4.9	154.0	6.7	147.0
86.00	85.79	-4.48	2.21	5.0	153.8	6.8	145.7
87.00	86.78	-4.58	2.27	5.1	153.6	6.7	150.5
88.00	87.78	-4.68	2.34	5.2	153.5	6.8	145.5
89.00	88.77	-4.77	2.40	5.3	153.3	6.9	141.4
90.00	89.76	-4.87	2.47	5.5	153.2	6.7	147.4
91.00	90.75	-4.97	2.53	5.6	153.0	6.7	141.7
92.00	91.75	-5.07	2.60	5.7	152.8	6.9	146.2
93.00	92.74	-5.16	2.66	5.8	152.7	6.8	146.6
94.00	93.73	-5.26	2.73	5.9	152.6	7.2	142.2
95.00	94.73	-5.37	2.80	6.1	152.4	7.2	144.1
96.00	95.72	-5.47	2.87	6.2	152.3	7.1	142.1
97.00	96.71	-5.57	2.94	6.3	152.1	6.7	138.2
98.00	97.70	-5.66	3.01	6.4	152.0	7.1	144.1
99.00	98.70	-5.77	3.08	6.5	151.9	7.0	144.3
100.00	99.69	-5.87	3.15	6.7	151.7	7.0	145.7
101.00	100.68	-5.96	3.23	6.8	151.6	7.3	140.1
102.00	101.67	-6.06	3.31	6.9	151.4	7.2	141.9
103.00	102.66	-6.16	3.38	7.0	151.2	7.4	141.2
104.00	103.66	-6.27	3.46	7.2	151.1	7.4	142.1
105.00	104.65	-6.37	3.54	7.3	151.0	7.3	143.0
106.00	105.64	-6.47	3.61	7.4	150.8	7.4	141.9
107.00	106.63	-6.58	3.69	7.5	150.7	7.4	143.9
108.00	107.62	-6.68	3.77	7.7	150.6	7.4	144.5
109.00	108.61	-6.78	3.84	7.8	150.5	7.7	143.2
110.00	109.61	-6.89	3.92	7.9	150.4	7.2	142.6
111.00	110.60	-6.99	3.99	8.0	150.3	7.5	145.0
112.00	111.59	-7.09	4.07	8.2	150.1	7.4	143.6
113.00	112.58	-7.20	4.15	8.3	150.1	7.4	145.0
114.00	113.57	-7.31	4.22	8.4	150.0	7.5	143.5
115.00	114.56	-7.41	4.30	8.6	149.9	7.4	146.1
116.00	115.56	-7.52	4.37	8.7	149.8	7.6	150.0
117.00	116.55	-7.63	4.44	8.8	149.8	7.6	140.7
118.00	117.54	-7.74	4.52	9.0	149.7	7.8	144.9
119.00	118.53	-7.85	4.59	9.1	149.7	7.5	147.0
120.00	119.52	-7.96	4.67	9.2	149.6	7.9	147.4
121.00	120.51	-8.07	4.74	9.4	149.6	7.6	148.4
122.00	121.50	-8.18	4.81	9.5	149.6	7.7	147.3
123.00	122.49	-8.30	4.88	9.6	149.6	7.7	148.2
124.00	123.48	-8.41	4.95	9.8	149.5	7.6	147.2
125.00	124.48	-8.52	5.02	9.9	149.5	7.8	146.8
126.00	125.47	-8.64	5.09	10.0	149.5	7.9	148.1
127.00	126.46	-8.75	5.16	10.2	149.5	7.7	148.9
128.00	127.45	-8.87	5.23	10.3	149.5	7.8	149.9
129.00	128.44	-8.99	5.31	10.4	149.4	7.8	149.0
130.00	129.43	-9.10	5.37	10.6	149.4	7.7	149.8
131.00	130.42	-9.22	5.44	10.7	149.4	7.4	149.3
132.00	131.41	-9.33	5.51	10.8	149.4	7.3	151.6
133.00	132.40	-9.44	5.57	11.0	149.5	7.7	154.4
134.00	133.39	-9.56	5.64	11.1	149.5	7.8	148.4
135.00	134.38	-9.68	5.71	11.2	149.4	7.6	148.2
136.00	135.38	-9.79	5.78	11.4	149.4	7.9	149.4
137.00	136.37	-9.91	5.85	11.5	149.4	8.0	147.7
138.00	137.36	-10.02	5.92	11.6	149.4	7.7	151.2
139.00	138.35	-10.14	5.99	11.8	149.4	7.8	150.5
140.00	139.34	-10.26	6.06	11.9	149.4	7.6	147.8
141.00	140.33	-10.37	6.13	12.0	149.4	7.6	148.6
142.00	141.32	-10.48	6.20	12.2	149.4	7.7	148.8
143.00	142.31	-10.60	6.26	12.3	149.4	7.5	152.4
144.00	143.30	-10.71	6.33	12.4	149.4	7.9	150.9
145.00	144.29	-10.83	6.40	12.6	149.4	7.8	151.4
146.00	145.28	-10.95	6.47	12.7	149.4	7.7	149.2
147.00	146.28	-11.07	6.53	12.8	149.5	7.8	152.4
148.00	147.27	-11.19	6.59	13.0	149.5	8.0	152.6
149.00	148.26	-11.31	6.66	13.1	149.5	8.3	152.2
150.00	149.25	-11.43	6.72	13.3	149.5	7.2	151.4
150.40	149.64	-11.47	6.75	13.3	149.5	7.2	153.1

PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14HQ-01
DATE OF LOG: 08/30/14
PROBE: 9058A 2633



SCALE: 10 M/CM
TRUE DEPTH: 136.70 M
AZIMUTH: 51.5
DISTANCE: 46.3 M
+ = 20 M INCR
○ = BOTTOM OF HOLE



* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

CLIENT : CANAUS HOLE ID. : MH14HQ-01
FIELD OFFICE : CENTURY DATE OF LOG : 08/30/14
DATA FROM : N/A PROBE : 9058A , 2633
MAG. DECL. : 14.600 DEPTH UNITS : METERS
LOG: MH14HQ-01_08-30-14_20-16_9058A_1_3_145_RESAMPLED.log

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
3.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0
4.00	3.46	0.12	0.11	0.2	42.9	18.9	44.6
5.00	4.41	0.33	0.36	0.5	47.0	19.2	50.9
6.00	5.35	0.53	0.62	0.8	49.2	19.2	53.5
7.00	6.30	0.73	0.89	1.1	50.6	19.2	54.6
8.00	7.24	0.92	1.16	1.5	51.6	19.2	55.3
9.00	8.18	1.10	1.43	1.8	52.3	19.2	55.3
10.00	9.13	1.29	1.70	2.1	52.8	19.2	55.5
11.00	10.07	1.48	1.97	2.5	53.1	19.1	55.3
12.00	11.02	1.66	2.24	2.8	53.4	19.1	55.2
13.00	11.96	1.85	2.50	3.1	53.6	19.1	55.0
14.00	12.91	2.04	2.77	3.4	53.7	19.2	54.5
15.00	13.85	2.23	3.04	3.8	53.8	19.1	54.8
16.00	14.80	2.42	3.31	4.1	53.8	19.1	54.4
17.00	15.74	2.61	3.57	4.4	53.9	19.1	54.5
18.00	16.69	2.80	3.84	4.7	53.9	19.1	54.2
19.00	17.63	2.99	4.10	5.1	53.9	19.1	54.3
20.00	18.58	3.18	4.37	5.4	54.0	19.1	54.2
21.00	19.52	3.37	4.63	5.7	54.0	19.1	54.3
22.00	20.47	3.56	4.90	6.1	54.0	19.2	53.9
23.00	21.41	3.76	5.17	6.4	54.0	19.3	53.5
24.00	22.35	3.96	5.43	6.7	53.9	19.4	53.2
25.00	23.30	4.16	5.70	7.1	53.9	19.4	52.6
26.00	24.24	4.36	5.96	7.4	53.8	19.4	52.2
27.00	25.18	4.56	6.22	7.7	53.8	19.4	52.2
28.00	26.13	4.77	6.49	8.0	53.7	19.5	51.9
29.00	27.07	4.97	6.75	8.4	53.6	19.5	51.9
30.00	28.01	5.18	7.01	8.7	53.6	19.5	51.8
31.00	28.96	5.39	7.27	9.1	53.5	19.5	51.7
32.00	29.90	5.59	7.54	9.4	53.4	19.5	51.9
33.00	30.84	5.80	7.80	9.7	53.4	19.4	51.2
34.00	31.78	6.01	8.06	10.0	53.3	19.4	50.9
35.00	32.73	6.22	8.31	10.4	53.2	19.5	50.7
36.00	33.67	6.43	8.57	10.7	53.1	19.4	50.1
37.00	34.61	6.64	8.83	11.0	53.0	19.6	50.9
38.00	35.55	6.86	9.09	11.4	53.0	19.7	50.4
39.00	36.50	7.07	9.35	11.7	52.9	19.6	50.2
40.00	37.44	7.28	9.61	12.1	52.8	19.6	51.3
41.00	38.38	7.49	9.87	12.4	52.8	19.6	51.5
42.00	39.32	7.70	10.13	12.7	52.8	19.5	51.8
43.00	40.26	7.91	10.39	13.1	52.7	19.5	52.1
44.00	41.21	8.11	10.66	13.4	52.7	19.4	52.4
45.00	42.15	8.31	10.92	13.7	52.7	19.4	52.7
46.00	43.09	8.51	11.19	14.1	52.7	19.4	53.3
47.00	44.04	8.71	11.45	14.4	52.7	19.3	53.0
48.00	44.98	8.91	11.72	14.7	52.7	19.3	53.0
49.00	45.92	9.11	11.98	15.1	52.8	19.3	53.0
50.00	46.87	9.31	12.24	15.4	52.8	19.3	52.9
51.00	47.81	9.51	12.51	15.7	52.8	19.3	52.7
52.00	48.76	9.71	12.77	16.0	52.8	19.3	52.3
53.00	49.70	9.91	13.03	16.4	52.7	19.3	52.0
54.00	50.64	10.12	13.29	16.7	52.7	19.3	52.1
55.00	51.59	10.32	13.55	17.0	52.7	19.2	51.6
56.00	52.53	10.53	13.81	17.4	52.7	19.3	51.3
57.00	53.48	10.73	14.07	17.7	52.7	19.3	50.9
58.00	54.42	10.94	14.32	18.0	52.6	19.3	51.1
59.00	55.36	11.15	14.58	18.4	52.6	19.3	51.3
60.00	56.31	11.35	14.84	18.7	52.6	19.2	51.4
61.00	57.25	11.56	15.09	19.0	52.6	19.2	51.3
62.00	58.20	11.77	15.35	19.3	52.5	19.2	51.3
63.00	59.14	11.98	15.60	19.7	52.5	19.2	49.5
64.00	60.08	12.18	15.86	20.0	52.5	19.2	51.4
65.00	61.03	12.39	16.12	20.3	52.5	19.2	52.0
66.00	61.97	12.59	16.38	20.7	52.5	19.2	53.1
67.00	62.92	12.79	16.64	21.0	52.5	19.2	53.3
68.00	63.86	12.98	16.91	21.3	52.5	19.2	53.1
69.00	64.81	13.18	17.17	21.6	52.5	19.2	53.2
70.00	65.75	13.38	17.43	22.0	52.5	19.2	53.2
71.00	66.69	13.57	17.70	22.3	52.5	19.2	53.3
72.00	67.64	13.77	17.96	22.6	52.5	19.2	53.4
73.00	68.58	13.97	18.22	23.0	52.5	19.2	53.2
74.00	69.53	14.16	18.49	23.3	52.5	19.2	52.9
75.00	70.47	14.36	18.75	23.6	52.5	19.2	52.7
76.00	71.42	14.56	19.01	23.9	52.5	19.2	52.8
77.00	72.36	14.76	19.27	24.3	52.6	19.2	53.0
78.00	73.31	14.96	19.53	24.6	52.6	19.2	52.8
79.00	74.25	15.16	19.79	24.9	52.6	19.2	52.7
80.00	75.19	15.36	20.06	25.3	52.6	19.2	52.8
81.00	76.14	15.55	20.32	25.6	52.6	19.1	52.8
82.00	77.08	15.75	20.58	25.9	52.6	19.1	52.7
83.00	78.03	15.95	20.84	26.2	52.6	19.1	52.8
84.00	78.97	16.15	21.10	26.6	52.6	19.1	52.6
85.00	79.92	16.35	21.36	26.9	52.6	19.1	52.6
86.00	80.86	16.55	21.62	27.2	52.6	19.1	52.7
87.00	81.81	16.74	21.88	27.6	52.6	19.2	52.7
88.00	82.75	16.94	22.14	27.9	52.6	19.1	52.7
89.00	83.70	17.14	22.40	28.2	52.6	19.1	52.6
90.00	84.64	17.34	22.66	28.5	52.6	19.1	52.6
91.00	85.59	17.54	22.92	28.9	52.6	19.1	52.6
92.00	86.53	17.74	23.18	29.2	52.6	19.1	52.7
93.00	87.48	17.94	23.44	29.5	52.6	19.0	52.8
94.00	88.42	18.13	23.70	29.8	52.6	19.0	52.2
95.00	89.37	18.33	23.96	30.2	52.6	19.0	51.9
96.00	90.31	18.54	24.21	30.5	52.6	19.0	52.0
97.00	91.26	18.74	24.47	30.8	52.6	19.0	51.6
98.00	92.21	18.94	24.72	31.1	52.5	19.0	51.3
99.00	93.15	19.14	24.98	31.5	52.5	19.0	51.1
100.00	94.10	19.35	25.23	31.8	52.5	19.0	51.0
101.00	95.04	19.55	25.48	32.1	52.5	19.0	51.0
102.00	95.99	19.76	25.74	32.4	52.5	19.0	51.0
103.00	96.93	19.96	25.99	32.8	52.5	19.0	51.1
104.00	97.88	20.17	26.24	33.1	52.5	19.0	51.2
105.00	98.82	20.37	26.50	33.4	52.4	19.0	51.1
106.00	99.77	20.58	26.75	33.7	52.4	19.0	50.9
107.00	100.72	20.78	27.00	34.1	52.4	18.9	51.1
108.00	101.66	20.98	27.25	34.4	52.4	18.9	51.0
109.00	102.61	21.19	27.51	34.7	52.4	18.9	51.0
110.00	103.55	21.39	27.76	35.0	52.4	18.9	50.9
111.00	104.50	21.60	28.01	35.4	52.4	18.9	50.9
112.00	105.45	21.80	28.26	35.7	52.4	18.9	51.0
113.00	106.39	22.01	28.51	36.0	52.3	18.9	51.0
114.00	107.34	22.21	28.77	36.3	52.3	18.9	51.0
115.00	108.28	22.41	29.02	36.7	52.3	18.9	50.9
116.00	109.23	22.62	29.27	37.0	52.3	18.9	50.9
117.00	110.18	22.82	29.52	37.3	52.3	18.9	51.0
118.00	111.12	23.03	29.77	37.6	52.3	18.9	50.8
119.00	112.07	23.23	30.02	38.0	52.3	18.8	51.2
120.00	113.01	23.43	30.27	38.3	52.3	18.8	51.1
121.00	113.96	23.63	30.52	38.6	52.3	18.8	51.2
122.00	114.91	23.84	30.78	38.9	52.2	18.8	51.2
123.00	115.85	24.04	31.03	39.2	52.2	18.8	51.3
124.00	116.80	24.24	31.28	39.6	52.2	18.8	51.3
125.00	117.75	24.44	31.53	39.9	52.2	18.8	51.1
126.00	118.70	24.64	31.78	40.2	52.2	18.8	50.8
127.00	119.64	24.85	32.02	40.5	52.2	18.7	49.3
128.00	120.59	25.06	32.27	40.9	52.2	18.7	47.8
129.00	121.54	25.28	32.50	41.2	52.1	18.7	47.3
130.00	122.48	25.50	32.74	41.5	52.1	18.7	46.4
131.00	123.43	25.72	32.97	41.8	52.0	18.7	46.1
132.00	124.38	25.94	33.20	42.1	52.0	18.7	46.3
133.00	125.33	26.16	33.43	42.4	52.0	18.7	46.6
134.00	126.27	26.38	33.66	42.8	51.9	18.6	46.6
135.00	127.22	26.60	33.89	43.1	51.9	18.6	46.6
136.00	128.17	26.82	34.13	43.4	51.8	18.6	46.6
137.00	129.12	27.04	34.36	43.7	51.8	18.6	46.7
138.00	130.06	27.26	34.59	44.0	51.8	18.6	46.7
139.00	131.01	27.48	34.82	44.4	51.7	18.6	46.7
140.00	131.96	27.70	35.05	44.7	51.7	18.6	46.6
141.00	132.91	27.92	35.29	45.0	51.7	18.6	46.7
142.00	133.85	28.13	35.52	45.3	51.6	18.5	46.7
143.00	134.80	28.35	35.75	45.6	51.6	18.5	46.8
144.00	135.75	28.57	35.98	45.9	51.6	18.5	46.8
145.00	134.80	28.35	35.75	45.6	51.6	18.5	46.8
145.00	134.80	28.35	35.75	45.6	51.6	18.5	46.8

COMPANY

WELL

FIELD

COUNTRY

PROVINCE

LSD

SECTION

TOWNSHIP

RANGE

LICENSE NO.

UNIQUE WELL ID.

PERMANENT DATUM

LOG MEASURED FROM

DRL MEASURED FROM

DATE

DEPTH DRILLER

BIT SIZE

LOG TOP

LOG BOTTOM

CASING LOGGER

CASING DRILLER

CASING TYPE

BOREHOLE FLUID

RM TEMPERATURE

MUD RES

MUD WEIGHT

WITNESSED BY

RECORDED BY

REMARKS 1

REMARKS 2

COMPENSATED DENSITY

GAMMA-CALIPER-RES

MH14HQ-02

OTHER SERVICES:

DEV

Century

WIRELINE SERVICES

: CANAUS

: MH14HQ-02

: MICHEL HEAD

: CANADA

: BRITISH COLUMBIA

: N/A

: N/A

: N/A

: N/A

: N/A

: N/A

: N/A

: GL

: GL

: GL

: 08/24/14

: 59.13

: 94.94

: 0.00

: 52.70

: 13.01

: 13.41

: SURFACE

: H2O

: N/A

: N/A

: 1.00

: D. THOMPSON

: R. KOEBS

: HOLE DRILLED AT 70 DEGREES

: HOLE BRIDGED AT 52.91M

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

DENSITY RESISTIVITY 1:100

MH14HQ-02

08/24/14

LOG PARAMETERS

MATRIX DENSITY : 2.65

NEUTRON MATRIX : SANDSTONE

MATRIX DELTA T : 177

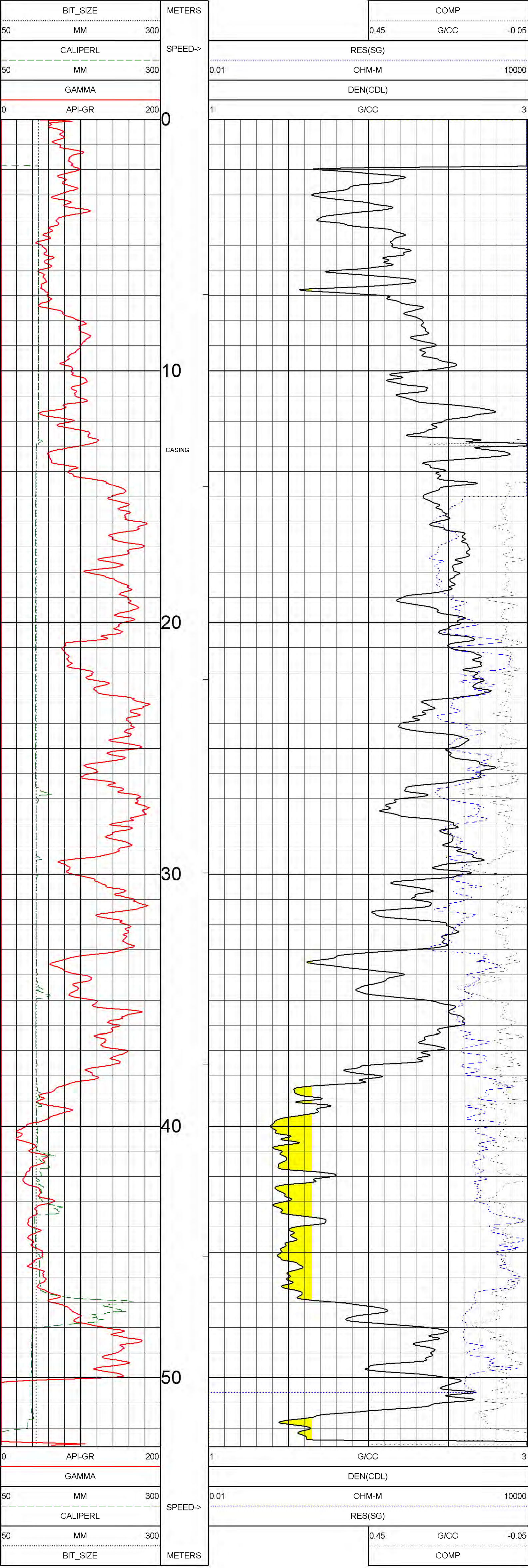
MAGNETIC DECL : 14.60

ELECT. CUTOFF : 99999

BIT SIZE : 94.94

PRESENTATION NAME/DATE = CanAus-9239-100.0 08/07/2014

VERSION = 3.64LG



DENSITY RESISTIVITY 1:100

MH14HQ-02

08/24/14

LOG PARAMETERS

MATRIX DENSITY : 2.65

NEUTRON MATRIX : SANDSTONE

MATRIX DELTA T : 177

MAGNETIC DECL : 14.60

ELECT. CUTOFF : 99999

BIT SIZE : 94.94

PRESENTATION NAME/DATE = CanAus-9239-100.0 08/07/2014

VERSION = 3.64LG

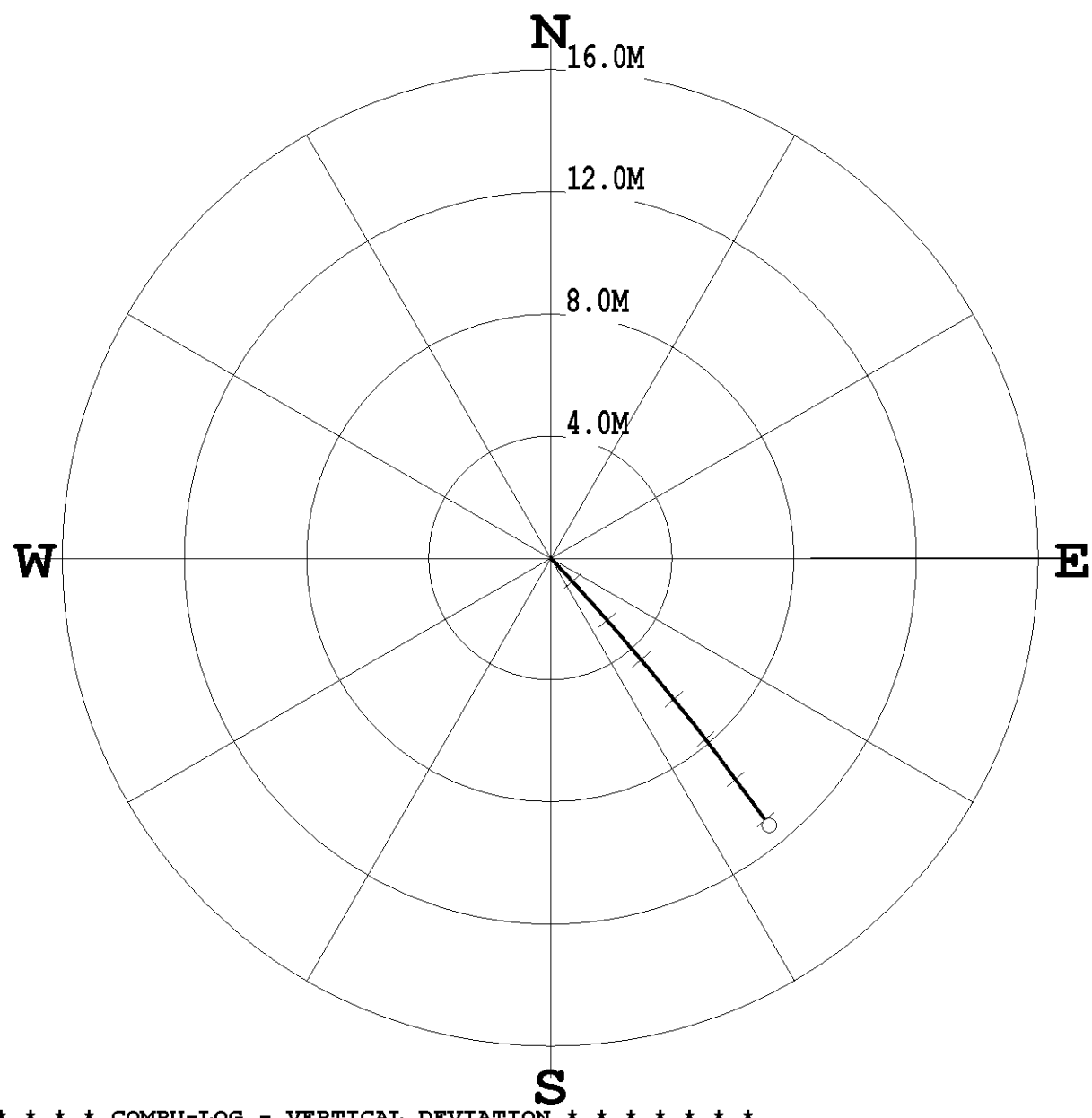
TOOL CALIBRATION MH14HQ-02 08/24/14 16:32						
TOOL 9239C1 TM VERSION 2025						
SERIAL NUMBER 401						
	DATE	TIME	SENSOR	STANDARD	RESPONSE	
1	May30,14	11:59:18	GAMMA	0.100 [API-GR]	1.000	[CPS]
	May30,14	11:59:18	GAMMA	545.000 [API-GR]	550.000	[CPS]
2	May30,14	11:35:59	VOLTAGE	27.500 [MV]	7990.000	[CPS]
	May30,14	11:35:59	VOLTAGE	210.500 [MV]	32680.000	[CPS]
3	Aug08,12	17:49:15	CALIPER	Default [CPS]	Default	[CPS]
	Aug08,12	17:49:15	CALIPER	Default [CPS]	Default	[CPS]
4	Jun10,14	10:26:57	DEN(LS)	1.620 [G/CC]	12681.300	[CPS]
	Jun10,14	10:26:57	DEN(LS)	2.612 [G/CC]	1680.800	[CPS]
5	Aug25,14	13:44:33	DEN(SS)	1.610 [G/CC]	49408.000	[CPS]
	Jun10,14	10:27:16	DEN(SS)	2.580 [G/CC]	18447.900	[CPS]
6	Aug08,14	12:59:43	CALIPERL	100.000 [MM]	212113.000	[CPS]
	Aug08,14	12:59:43	CALIPERL	150.000 [MM]	261527.000	[CPS]
7	May30,14	11:37:15	CURRENT	27.500 [UA]	5761.000	[CPS]
	May30,14	11:37:15	CURRENT	210.500 [UA]	20941.000	[CPS]
8	Dec15,09	09:34:24	F	Default [CPS]		
9	Dec15,09	09:34:24	X	Default [CPS]		

PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14HQ-02
DATE OF LOG: 08/24/14
PROBE: 9058A 2633



SCALE: 2 M/CM
TRUE DEPTH: 50.71 M
AZIMUTH: 140.7
DISTANCE: 11.3 M
+ = 5 M INCR
O = BOTTOM OF HOLE



***** COMPU-LOG - VERTICAL DEVIATION *****

CLIENT : CANAUS HOLE ID. : MH14HQ-02
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/24/14
DATA FROM : N/A PROBE : 9058A , 2633
MAG. DECL. : 14.600 DEPTH UNITS : METERS
LOG: MH14HQ-02_08-24-14_16-14_9058A_.02_17.00_52.75_DEVI.log

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
17.02	17.02	-0.00	0.00	0.0	135.7	19.1	135.7
18.00	17.94	-0.24	0.23	0.3	136.1	19.1	136.7
19.00	18.89	-0.47	0.45	0.7	136.5	19.1	137.6
20.00	19.84	-0.72	0.67	1.0	136.8	19.0	137.6
21.00	20.78	-0.96	0.89	1.3	137.1	19.0	138.0
22.00	21.73	-1.20	1.11	1.6	137.2	18.9	138.1
23.00	22.67	-1.44	1.33	2.0	137.3	18.9	137.6
24.00	23.62	-1.68	1.54	2.3	137.4	18.8	138.6
25.00	24.57	-1.92	1.75	2.6	137.6	18.8	138.9
26.00	25.51	-2.16	1.97	2.9	137.7	18.8	138.6
27.00	26.46	-2.41	2.18	3.2	137.8	18.8	136.7
28.00	27.41	-2.65	2.39	3.6	138.0	18.5	140.3
29.00	28.35	-2.90	2.60	3.9	138.1	18.8	140.2
30.00	29.30	-3.14	2.81	4.2	138.2	18.7	139.8
31.00	30.25	-3.38	3.01	4.5	138.3	18.8	139.7
32.00	31.19	-3.63	3.22	4.9	138.4	18.8	138.0
33.00	32.14	-3.88	3.43	5.2	138.5	18.4	144.4
34.00	33.09	-4.12	3.63	5.5	138.6	18.6	139.5
35.00	34.04	-4.37	3.83	5.8	138.7	18.5	140.8
36.00	34.98	-4.62	4.03	6.1	138.9	18.5	143.1
37.00	35.93	-4.86	4.23	6.4	139.0	18.5	139.5
38.00	36.88	-5.11	4.43	6.8	139.1	18.5	141.1
39.00	37.83	-5.36	4.63	7.1	139.2	18.4	142.1
40.00	38.78	-5.60	4.82	7.4	139.3	18.3	141.7
41.00	39.73	-5.85	5.02	7.7	139.4	18.2	142.0
42.00	40.68	-6.10	5.21	8.0	139.5	18.1	143.0
43.00	41.63	-6.35	5.39	8.3	139.6	18.4	141.6
44.00	42.58	-6.60	5.58	8.6	139.8	18.2	146.7
45.00	43.53	-6.85	5.77	9.0	139.9	17.9	144.0
46.00	44.48	-7.10	5.95	9.3	140.0	18.1	143.1
47.00	45.43	-7.36	6.14	9.6	140.2	18.7	142.0
48.00	46.37	-7.61	6.33	9.9	140.3	18.6	142.9
49.00	47.32	-7.86	6.51	10.2	140.4	18.0	143.8
50.00	48.27	-8.11	6.70	10.5	140.5	18.0	144.0
51.00	49.22	-8.36	6.88	10.8	140.6	18.1	143.9
52.00	50.17	-8.62	7.07	11.1	140.6	18.3	143.8
52.56	50.71	-8.76	7.17	11.3	140.7	18.2	144.3

Century
WIRELINE SERVICES

COMPENSATED DENSITY
GAMMA-CALIPER-RES
MH14HQ-03

COMPANY :CANUS
WELL :MH14HQ-03
FIELD :MICHEL HEAD
COUNTRY :CANADA
PROVINCE :BRITISH COLUMBIA

OTHER SERVICES
DEN TP
DEV

ISD :N/A
SECTION :N/A
TOWNSHIP :N/A
RANGE :N/A
LICENSE NO. :N/A
UNIQUE WELL ID :N/A

PERMANENT DATUM :GL
LOG MEASURED FROM :GL
DRL MEASURED FROM :GL

ELEVATION M3 :N/A
ELEVATION D3 :N/A
ELEVATION GL :N/A

DATE :09/04/14
DEPTH DRILLER :EF-50
BIT SIZE :94.94

RIG NUMBER :167.46
LOGGED TO :12.00
ARRIVAL TIME :17:00

LOG TOP :0.00
LOG BOTTOM :167.26
CIRC STOPPED :N/A

CASING DRILLER :1.48
CASING TYPE :SURFACE
BOREHOLE FLUID :H2O
RM TEMPERATURE :N/A
MUD RES :N/A
MUD WEIGHT :1.00
WITNESSED BY :D THOMPSON
RECORDED BY :R KOEBS
REMARKS 1 :HOLE DRILLED AT 70 DEGREES
REMARKS 2 :ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

DENSITY RESISTIVITY 1:100MH14HQ-0309/04/14

LOG PARAMETERS

MATRIX DENSITY : 2.65
MAGNETIC DECL : 14.60
PRESENTATION NAME/DATE = CanAus-9239-100.008/07/2014

NEUTRON MATRIX : SANDSTONE
ELECT. CUTOFF : 99999
VERSION = 3.64LG

MATRIX DELTA T : 177
BIT SIZE : 94.94
VERSION = 3.64LG

COMP0.45G/CCL-0.05

RES(SG)0.0110000

OHM-M

DEN(CDL)13

G/CCL

BIT_SIZE50MM300

CALIPERL50MM300

GAMMA0200

API-GR0200

METERS

SPEED->

0102030405060708090100110120130140150160

METERS

SPEED->

API-GR

GAMMA

MM

CALIPERL

MM

BIT_SIZE

DENSITY RESISTIVITY 1:100MH14HQ-0309/04/14

LOG PARAMETERS

MATRIX DENSITY : 2.65
MAGNETIC DECL : 14.60
PRESENTATION NAME/DATE = CanAus-9239-100.008/07/2014

NEUTRON MATRIX : SANDSTONE
ELECT. CUTOFF : 99999
VERSION = 3.64LG

MATRIX DELTA T : 177
BIT SIZE : 94.94
VERSION = 3.64LG

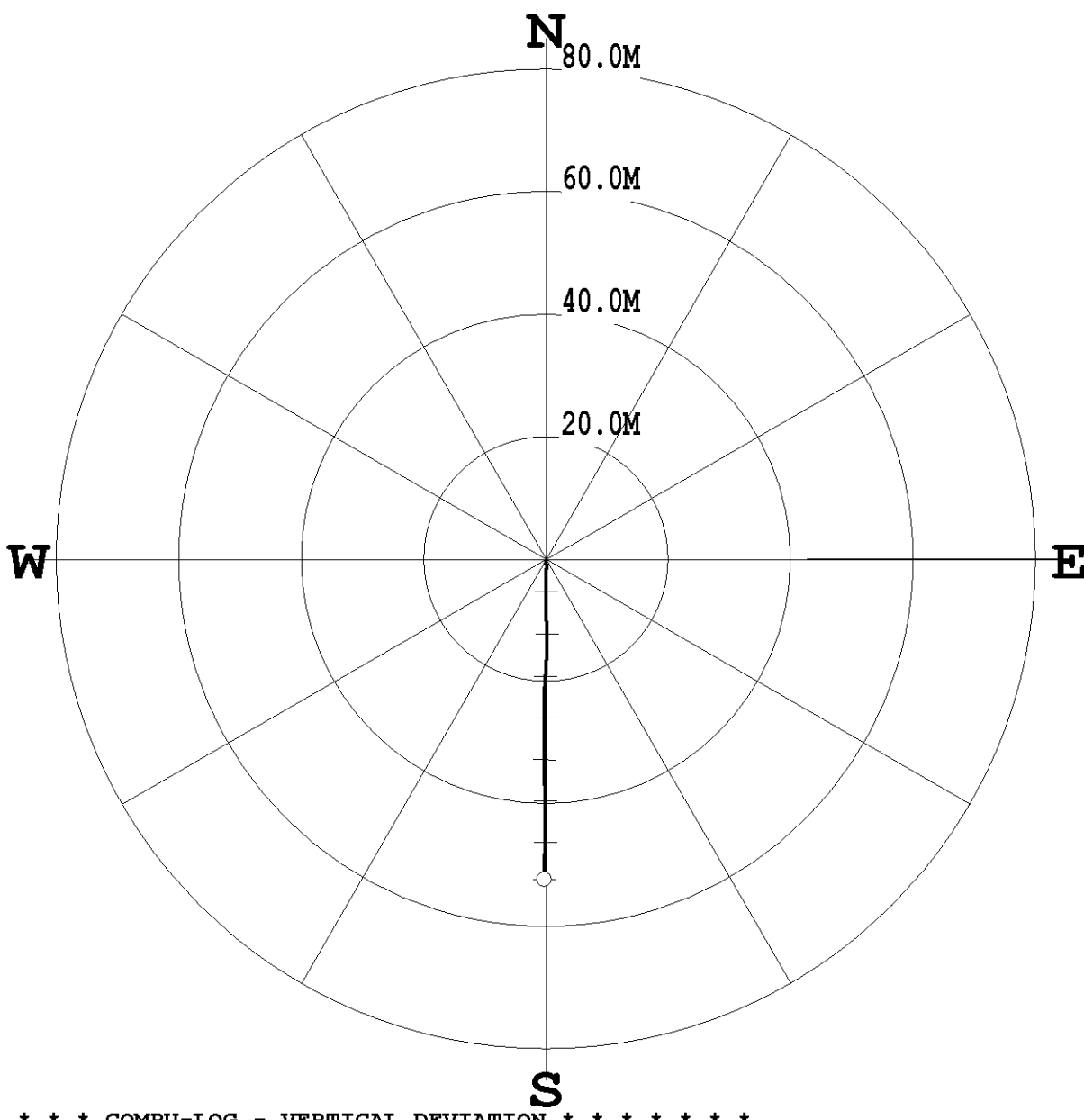
TOOL CALIBRATION MH14HQ-03 09/04/14 14:36					
TOOL 9239C1 TM VERSION 2025					
SERIAL NUMBER 401					
DATE	TIME	SENSOR	STANDARD	RESPONSE	
1	May30,14 11:59:18	GAMMA	0.100 [API-GR]	1.000	[CPS]
	May30,14 11:59:18	GAMMA	545.000 [API-GR]	550.000	[CPS]
2	May30,14 11:35:59	VOLTAGE	27.500 [MV]	7990.000	[CPS]
	May30,14 11:35:59	VOLTAGE	210.500 [MV]	32680.000	[CPS]
3	Aug08,12 17:49:15	CALIPER	Default [CPS]	Default	[CPS]
	Aug08,12 17:49:15	CALIPER	Default [CPS]	Default	[CPS]
4	Jun10,14 10:26:57	DEN(LS)	1.620 [G/CC]	12681.300	[CPS]
	Jun10,14 10:26:57	DEN(LS)	2.612 [G/CC]	1680.800	[CPS]
5	Sep05,14 10:32:56	DEN(SS)	1.610 [G/CC]	48408.900	[CPS]
	Jun10,14 10:27:16	DEN(SS)	2.580 [G/CC]	18447.900	[CPS]
6	Aug08,14 12:59:43	CALIPERL	100.000 [MM]	212113.000	[CPS]
	Aug08,14 12:59:43	CALIPERL	150.000 [MM]	261527.000	[CPS]
7	May30,14 11:37:15	CURRENT	27.500 [UA]	5761.000	[CPS]
	May30,14 11:37:15	CURRENT	210.500 [UA]	20941.000	[CPS]
8	Dec15,09 09:34:24	F	Default [CPS]		
	Dec15,09 09:34:24	X	Default [CPS]		

PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14HQ-03
DATE OF LOG: 09/04/14
PROBE: 9058A 2633

SCALE: 10 M/CM
TRUE DEPTH: 158.18 M
AZIMUTH: 180.4
DISTANCE: 52.2 M
+ = 20 M INCR
○ = BOTTOM OF HOLE

MAG DECL: 14.6



* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

CLIENT : CANAUS HOLE ID. : MH14HQ-03
FIELD OFFICE : CENTURY GEO DATE OF LOG : 09/04/14
DATA FROM : N/A PROBE : 9058A , 2633
MAG. DECL. : 14.600 DEPTH UNITS : METERS
LOG: MH14HQ-03_09-04-14_13-29_9058A_.02_5.00_167.06_DEVI.log

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
5.02	5.02	-0.01	0.00	0.0	178.2	19.4	178.2
6.00	5.94	-0.33	0.01	0.3	177.8	19.4	177.7
7.00	6.89	-0.66	0.02	0.7	178.1	19.4	178.3
8.00	7.83	-1.00	0.03	1.0	178.3	19.7	183.2
9.00	8.77	-1.33	0.03	1.3	178.8	19.5	182.3
10.00	9.71	-1.66	0.02	1.7	179.2	19.5	181.0
11.00	10.66	-2.00	0.02	2.0	179.4	19.5	179.7
12.00	11.60	-2.33	0.02	2.3	179.6	19.5	181.3
13.00	12.54	-2.66	0.01	2.7	179.8	19.3	171.5
14.00	13.49	-3.00	0.01	3.0	179.9	19.5	185.8
15.00	14.43	-3.33	-0.00	3.3	180.0	19.3	182.3
16.00	15.37	-3.66	-0.01	3.7	180.2	19.4	180.7
17.00	16.32	-3.99	-0.02	4.0	180.3	19.3	184.2
18.00	17.26	-4.32	-0.02	4.3	180.3	19.3	182.5
19.00	18.20	-4.64	-0.03	4.6	180.4	19.3	182.5
20.00	19.15	-4.97	-0.05	5.0	180.5	19.3	182.9
21.00	20.09	-5.30	-0.06	5.3	180.7	19.2	184.5
22.00	21.04	-5.63	-0.06	5.6	180.6	19.2	179.2
23.00	21.98	-5.96	-0.06	6.0	180.6	19.2	179.1
24.00	22.93	-6.28	-0.05	6.3	180.5	19.3	179.4
25.00	23.87	-6.61	-0.05	6.6	180.4	19.2	178.8
26.00	24.82	-6.94	-0.04	6.9	180.3	19.2	179.1
27.00	25.76	-7.27	-0.04	7.3	180.3	19.1	179.1
28.00	26.71	-7.60	-0.03	7.6	180.2	19.0	178.7
29.00	27.65	-7.92	-0.02	7.9	180.2	19.1	178.9
30.00	28.60	-8.25	-0.02	8.2	180.1	19.0	178.9
31.00	29.54	-8.58	-0.01	8.6	180.1	19.0	178.9
32.00	30.49	-8.90	-0.00	8.9	180.0	19.1	178.7
33.00	31.43	-9.23	0.01	9.2	180.0	19.0	178.6
34.00	32.38	-9.55	0.01	9.6	179.9	19.1	179.2
35.00	33.32	-9.88	0.02	9.9	179.9	19.1	178.6
36.00	34.27	-10.21	0.03	10.2	179.8	19.0	177.4
37.00	35.21	-10.53	0.04	10.5	179.8	19.0	177.8
38.00	36.16	-10.86	0.05	10.9	179.7	19.0	177.5
39.00	37.10	-11.18	0.06	11.2	179.7	18.9	176.2
40.00	38.05	-11.51	0.07	11.5	179.6	19.0	178.6
41.00	38.99	-11.83	0.08	11.8	179.6	19.0	178.4
42.00	39.94	-12.16	0.09	12.2	179.6	19.0	178.7
43.00	40.89	-12.49	0.10	12.5	179.6	19.0	178.6
44.00	41.83	-12.81	0.11	12.8	179.5	19.0	178.4
45.00	42.78	-13.14	0.12	13.1	179.5	19.0	177.2
46.00	43.72	-13.46	0.13	13.5	179.4	19.0	180.0
47.00	44.67	-13.79	0.14	13.8	179.4	19.0	178.2
48.00	45.61	-14.11	0.15	14.1	179.4	19.2	171.7
49.00	46.56	-14.44	0.13	14.4	179.5	19.1	182.6
50.00	47.50	-14.76	0.12	14.8	179.5	18.9	183.8
51.00	48.45	-15.09	0.10	15.1	179.6	19.1	185.9
52.00	49.39	-15.41	0.09	15.4	179.7	19.0	183.2
53.00	50.34	-15.74	0.07	15.7	179.8	19.0	183.4
54.00	51.28	-16.06	0.05	16.1	179.8	19.1	181.7
55.00	52.23	-16.39	0.03	16.4	179.9	19.0	182.9
56.00	53.18	-16.71	0.01	16.7	180.0	19.0	183.4
57.00	54.12	-17.04	-0.01	17.0	180.0	18.9	183.2
58.00	55.07	-17.37	-0.03	17.4	180.1	19.0	182.7
59.00	56.01	-17.69	-0.05	17.7	180.2	19.0	185.2
60.00	56.96	-18.01	-0.07	18.0	180.2	19.0	183.4
61.00	57.90	-18.34	-0.10	18.3	180.3	19.0	184.0
62.00	58.85	-18.66	-0.12	18.7	180.4	19.0	183.7
63.00	59.79	-18.99	-0.14	19.0	180.4	19.0	183.6
64.00	60.74	-19.31	-0.16	19.3	180.5	19.0	183.5
65.00	61.68	-19.64	-0.18	19.6	180.5	19.0	183.4
66.00	62.63	-19.96	-0.20	20.0	180.6	19.0	184.7
67.00	63.58	-20.29	-0.22	20.3	180.6	19.0	184.9
68.00	64.52	-20.61	-0.24	20.6	180.7	18.9	185.3
69.00	65.47	-20.94	-0.26	20.9	180.7	19.0	183.2
70.00	66.41	-21.26	-0.28	21.3	180.8	18.9	183.6
71.00	67.36	-21.59	-0.30	21.6	180.8	19.1	183.1
72.00	68.30	-21.91	-0.32	21.9	180.8	19.0	183.5
73.00	69.25	-22.24	-0.34	22.2	180.9	18.9	180.1
74.00	70.20	-22.56	-0.36	22.6	180.9	18.8	176.4
75.00	71.14	-22.89	-0.37	22.9	180.9	18.9	183.3
76.00	72.09	-23.21	-0.38	23.2	180.9	18.9	182.4
77.00	73.03	-23.53	-0.38	23.5	180.9	18.9	180.9
78.00	73.98	-23.86	-0.38	23.9	180.9	18.9	180.0
79.00	74.93	-24.18	-0.37	24.2	180.9	18.8	178.7
80.00	75.87	-24.50	-0.37	24.5	180.9	18.9	179.8
81.00	76.82	-24.83	-0.37	24.8	180.8	18.8	178.9
82.00	77.76	-25.15	-0.36	25.2	180.8	18.8	179.1
83.00	78.71	-25.47	-0.36	25.5	180.8	18.9	180.6
84.00	79.66	-25.79	-0.36	25.8	180.8	18.9	179.7
85.00	80.60	-26.12	-0.36	26.1	180.8	18.9	179.7
86.00	81.55	-26.44	-0.35	26.4	180.8	18.8	179.6
87.00	82.50	-26.76	-0.35	26.8	180.8	18.8	179.6
88.00	83.44	-27.09	-0.35	27.1	180.7	18.8	179.6
89.00	84.39	-27.41	-0.34	27.4	180.7	18.8	179.6
90.00	85.34	-27.73	-0.34	27.7	180.7	18.8	179.7
91.00	86.28	-28.05	-0.34	28.1	180.7	18.8	179.7
92.00	87.23	-28.37	-0.34	28.4	180.7	18.8	179.6
93.00	88.18	-28.70	-0.34	28.7	180.7	18.8	179.7
94.00	89.12	-29.02	-0.33	29.0	180.7	18.8	178.9
95.00	90.07	-29.34	-0.33	29.3	180.6	18.8	179.7
96.00	91.02	-29.66	-0.33	29.7	180.6	18.8	179.6
97.00	91.96	-29.99	-0.33	30.0	180.6	18.8	179.6
98.00	92.91	-30.31	-0.32	30.3	180.6	18.8	179.7
99.00	93.86	-30.63	-0.32	30.6	180.6	18.8	179.6
100.00	94.80	-30.95	-0.32	31.0	180.6	18.8	179.7
101.00	95.75	-31.27	-0.32	31.3	180.6	18.8	179.7
102.00	96.70	-31.59	-0.32	31.6	180.6	18.7	179.6
103.00	97.64	-31.91	-0.32	31.9	180.6	18.7	179.7
104.00	98.59	-32.24	-0.31	32.2	180.6	18.7	179.6
105.00	99.54	-32.56	-0.31	32.6	180.6	18.7	179.7
106.00	100.49	-32.88	-0.31	32.9	180.5	18.7	179.8
107.00	101.43	-33.20	-0.31	33.2	180.5	18.7	179.7
108.00	102.38	-33.52	-0.31	33.5	180.5	18.7	179.5
109.00	103.33	-33.84	-0.31	33.8	180.5	18.7	179.7
110.00	104.27	-34.16	-0.30	34.2	180.5	18.7	179.5
111.00	105.22	-34.48	-0.30	34.5	180.5	18.7	179.6
112.00	106.17	-34.80	-0.30	34.8	180.5	18.8	178.6
113.00	107.12	-35.12	-0.29	35.1	180.5	18.7	179.1
114.00	108.06	-35.44	-0.29	35.4	180.5	18.7	179.2
115.00	109.01	-35.76	-0.28	35.8	180.4	18.7	178.6
116.00	109.96	-36.08	-0.27	36.1	180.4	18.6	177.6
117.00	110.91	-36.40	-0.26	36.4	180.4	18.7	178.4
118.00	111.85	-36.72	-0.26	36.7	180.4	18.7	178.9
119.00	112.80	-37.04	-0.25	37.0	180.4		

COMPENSATED DENSITY

GAMMA-CALIPER-RES

MH14 HQ-04

N/A

Century

WIRELINE SERVICES

COMPANY: CANAUS

WELL: MH14-HQ-04/NA

FIELD: MICHEL HEAD

COUNTRY: CANADA

PROVINCE: BRITISH COLUMBIA

OTHER SERVICES:

DEV

DEN TP

ATV

LOGS

SECTION: N/A

TOWNSHIP: N/A

RANGE: N/A

LICENSE NO.: N/A

UNIQUE WELL ID: N/A

PERMANENT DATUM: 3GL

ELEVATION 4B: N/A

LOG MEASURED FROM: 3GL

ELEVATION 4C: N/A

ELEVATION 4L: N/A

DEL MEASURED FROM: 3GL

DATE: 08/27/14

RIG NUMBER: EF50

DEPT# DRILLER: 15148

LOGGERS TO: 15180

BIT SIZE: 94.94

ARRIVAL TIME: 00:30

DEPARTURE TIME: 07:00

LOG TOP: 0:00

LOG BOTTOM: 151.90

CASING LOGGER: 12.40

CIRC STOPPED: N/A

CASING DRILLER: 12.19

CASING TYPE: SURFACE

BOREHOLE FLUID: H2O

RM TEMPERATURE: N/A

MUD RES: N/A

MUD WEIGHT: 1.00

WITNESSED BY: J THOMPSON

RECORDED BY: S MILLAR

REMARKS 1: 70 DEGREE

REMARKS 2: WATER LEVEL @ 20.65

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

DENSITY RESISTIVITY 1:100MH14 HQ-0408/27/14

N/ALOG PARAMETERS

MATRIX DENSITY : 2.65NEUTRON MATRIX : SANDSTONEMATRIX DELTA T : 177

MAGNETIC DECL. : 14.60ELECT. CUTOFF : 75000BIT SIZE : 94.94

PRESENTATION NAME/DATE = CanAus-9239-100-MH-008/19/2014VERSION = 3.64LG

COMP

0.45

G/CC

-0.05

RES(SG)

OHM-M

20000

DEN(CDL)

G/CC

1

3

BIT_SIZE

MM

300

CALIPERL

MM

300

GAMMA

API-GR

200

0

10

20

30

40

50

60

70

80

90

100

110

120

130

140

150

WATER LEVEL

0

10

20

30

40

50

60

70

80

90

100

110

120

130

140

150

API-GR

200

GAMMA

MM

300

CALIPERL

MM

300

BIT_SIZE

METERS

0.01

RES(SG)

20000

DEN(CDL)

G/CC

1

3

0.45

G/CC

-0.05

COMP

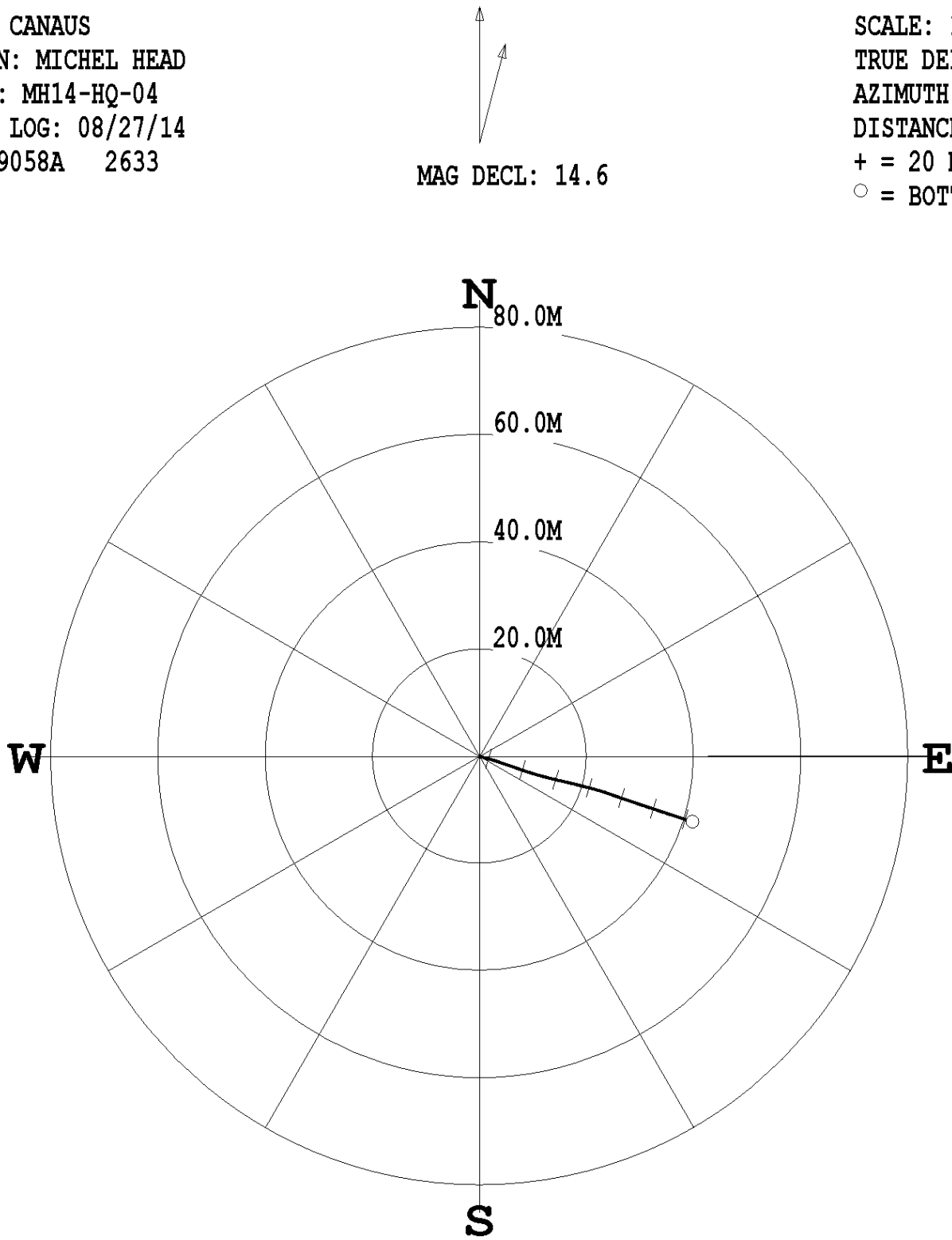
TOOL CALIBRATION MH14 HQ-04 08/27/14 04:12				
TOOL 9239C1 TM VERSION 2025				
SERIAL NUMBER 401				
DATE	TIME	SENSOR	STANDARD	RESPONSE
1	May30,14 11:59:18	GAMMA	0.100 [API-GR]	1.000 [CPS]
	May30,14 11:59:18	GAMMA	545.000 [API-GR]	550.000 [CPS]
2	May30,14 11:35:59	VOLTAGE	27.500 [MV]	7990.000 [CPS]
	May30,14 11:35:59	VOLTAGE	210.500 [MV]	32680.000 [CPS]
3	Aug08,12 17:49:15	CALIPER	Default [CPS]	Default [CPS]
	Aug08,12 17:49:15	CALIPER	Default [CPS]	Default [CPS]
4	Jun10,14 10:26:57	DEN(LS)	1.620 [G/CC]	12681.300 [CPS]
	Jun10,14 10:26:57	DEN(LS)	2.612 [G/CC]	1680.800 [CPS]
5	Jun10,14 10:27:16	DEN(SS)	1.590 [G/CC]	49408.000 [CPS]
	Jun10,14 10:27:16	DEN(SS)	2.580 [G/CC]	18447.900 [CPS]
6	Aug08,14 12:59:43	CALIPERL	100.000 [MM]	212113.000 [CPS]
	Aug08,14 12:59:43	CALIPERL	150.000 [MM]	261527.000 [CPS]
7	May30,14 11:37:15	CURRENT	27.500 [UA]	5761.000 [CPS]
	May30,14 11:37:15	CURRENT	210.500 [UA]	20941.000 [CPS]
8	Dec15,09 09:34:24	F	Default [CPS]	
9	Dec15,09 09:34:24	X	Default [CPS]	

PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14-HQ-04
DATE OF LOG: 08/27/14
PROBE: 9058A 2633

MAG DECL: 14.6

SCALE: 10 M/CM
TRUE DEPTH: 144.89 M
AZIMUTH: 107.1
DISTANCE: 41.6 M
+ = 20 M INCR
○ = BOTTOM OF HOLE



* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

CLIENT : CANAUS HOLE ID. : MH14-HQ-04
FIELD OFFICE : CENTURY DATE OF LOG : 08/27/14
DATA FROM : N/A PROBE : 9058A , 2633
MAG. DECL. : 14.600 DEPTH UNITS : METERS
LOG: MH14-HQ-04_08-27-14_03-28_9058A_.02_15.00_151.60_DEVI.log

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
15.02	15.02	-0.00	0.01	0.0	104.1	18.8	104.1
16.00	15.95	-0.08	0.31	0.3	105.2	18.8	105.0
17.00	16.89	-0.17	0.62	0.6	105.1	18.8	105.1
18.00	17.84	-0.25	0.94	1.0	105.1	18.8	104.8
19.00	18.79	-0.34	1.25	1.3	105.1	18.9	105.0
20.00	19.73	-0.42	1.56	1.6	105.1	18.9	105.7
21.00	20.68	-0.50	1.87	1.9	105.1	19.0	104.9
22.00	21.62	-0.59	2.18	2.3	105.1	18.9	107.1
23.00	22.57	-0.69	2.49	2.6	105.4	18.8	108.1
24.00	23.52	-0.79	2.80	2.9	105.7	18.7	107.6
25.00	24.46	-0.89	3.10	3.2	105.9	18.7	108.3
26.00	25.41	-0.99	3.41	3.5	106.2	18.7	109.3
27.00	26.36	-1.09	3.71	3.9	106.4	18.7	109.4
28.00	27.31	-1.20	4.01	4.2	106.6	18.6	109.9
29.00	28.25	-1.30	4.31	4.5	106.8	18.5	109.2
30.00	29.20	-1.41	4.61	4.8	107.0	18.5	108.9
31.00	30.15	-1.51	4.91	5.1	107.1	18.5	108.7
32.00	31.10	-1.61	5.21	5.5	107.2	18.5	109.2
33.00	32.05	-1.71	5.51	5.8	107.3	18.3	109.1
34.00	33.00	-1.82	5.81	6.1	107.4	18.2	109.0
35.00	33.95	-1.92	6.10	6.4	107.5	18.2	108.9
36.00	34.90	-2.02	6.40	6.7	107.5	18.2	109.3
37.00	35.85	-2.12	6.69	7.0	107.6	18.1	109.1
38.00	36.80	-2.23	6.98	7.3	107.7	18.1	109.0
39.00	37.75	-2.33	7.28	7.6	107.7	18.0	109.9
40.00	38.70	-2.43	7.57	7.9	107.8	18.0	108.9
41.00	39.65	-2.53	7.86	8.3	107.8	18.0	108.5
42.00	40.60	-2.63	8.15	8.6	107.9	18.0	108.5
43.00	41.55	-2.73	8.44	8.9	107.9	17.9	108.4
44.00	42.51	-2.82	8.74	9.2	107.9	17.9	108.5
45.00	43.46	-2.92	9.03	9.5	107.9	17.9	108.5
46.00	44.41	-3.02	9.32	9.8	107.9	17.9	108.3
47.00	45.36	-3.11	9.61	10.1	107.9	17.8	108.8
48.00	46.31	-3.20	9.91	10.4	107.9	17.9	106.2
49.00	47.26	-3.29	10.20	10.7	107.9	17.9	106.5
50.00	48.21	-3.38	10.50	11.0	107.8	17.9	106.3
51.00	49.17	-3.46	10.79	11.3	107.8	17.8	106.5
52.00	50.12	-3.55	11.09	11.6	107.7	17.9	105.4
53.00	51.07	-3.63	11.38	11.9	107.7	17.9	105.6
54.00	52.02	-3.71	11.68	12.3	107.6	17.9	104.3
55.00	52.97	-3.79	11.98	12.6	107.5	18.0	105.1
56.00	53.92	-3.86	12.28	12.9	107.5	18.0	104.3
57.00	54.87	-3.94	12.58	13.2	107.4	18.0	104.5
58.00	55.83	-4.02	12.88	13.5	107.3	18.0	104.4
59.00	56.78	-4.10	13.18	13.8	107.3	18.0	103.0
60.00	57.73	-4.17	13.47	14.1	107.2	17.9	104.0
61.00	58.68	-4.24	13.77	14.4	107.1	17.9	103.9
62.00	59.63	-4.32	14.07	14.7	107.1	17.9	103.7
63.00	60.58	-4.39	14.37	15.0	107.0	17.9	103.4
64.00	61.53	-4.46	14.67	15.3	106.9	17.9	103.2
65.00	62.49	-4.53	14.97	15.6	106.8	17.9	103.3
66.00	63.44	-4.60	15.27	15.9	106.8	17.9	102.9
67.00	64.39	-4.67	15.57	16.3	106.7	18.0	102.8
68.00	65.34	-4.74	15.87	16.6	106.6	18.0	103.3
69.00	66.29	-4.81	16.17	16.9	106.6	17.8	103.4
70.00	67.24	-4.88	16.47	17.2	106.5	17.9	103.2
71.00	68.19	-4.95	16.77	17.5	106.4	17.9	103.6
72.00	69.15	-5.02	17.07	17.8	106.4	17.8	103.8
73.00	70.10	-5.09	17.36	18.1	106.3	17.7	103.7
74.00	71.05	-5.16	17.66	18.4	106.3	17.7	103.0
75.00	72.00	-5.23	17.96	18.7	106.3	17.7	103.7
76.00	72.96	-5.31	18.25	19.0	106.2	17.7	104.6
77.00	73.91	-5.38	18.54	19.3	106.2	17.6	105.5
78.00	74.86	-5.46	18.84	19.6	106.2	17.5	105.5
79.00	75.81	-5.54	19.13	19.9	106.1	17.6	105.5
80.00	76.77	-5.62	19.42	20.2	106.1	17.7	104.7
81.00	77.72	-5.69	19.72	20.5	106.1	17.7	104.6
82.00	78.67	-5.77	20.01	20.8	106.1	17.6	104.7
83.00	79.63	-5.85	20.30	21.1	106.1	17.6	104.7
84.00	80.58	-5.92	20.60	21.4	106.0	17.7	104.6
85.00	81.53	-6.00	20.89	21.7	106.0	17.6	104.5
86.00	82.49	-6.08	21.18	22.0	106.0	17.6	104.8
87.00	83.44	-6.16	21.47	22.3	106.0	17.5	104.9
88.00	84.39	-6.23	21.76	22.6	106.0	17.5	104.8
89.00	85.35	-6.31	22.05	22.9	106.0	17.5	105.0
90.00	86.30	-6.39	22.34	23.2	106.0	17.6	106.2
91.00	87.25	-6.47	22.63	23.5	106.0	17.5	106.8
92.00	88.21	-6.56	22.92	23.8	106.0	17.6	106.5
93.00	89.16	-6.66	23.21	24.1	106.0	17.6	109.3
94.00	90.11	-6.76	23.49	24.4	106.0	17.6	107.9
95.00	91.07	-6.86	23.78	24.7	106.1	17.5	109.9
96.00	92.02	-6.96	24.06	25.0	106.1	17.7	109.4
97.00	92.97	-7.06	24.35	25.4	106.2	17.6	110.0
98.00	93.93	-7.16	24.63	25.7	106.2	17.6	109.4
99.00	94.88	-7.26	24.92	26.0	106.2	17.5	106.8
100.00	95.83	-7.36	25.20	26.3	106.3	17.5	109.0
101.00	96.79	-7.45	25.49	26.6	106.3	18.2	105.5
102.00	97.74	-7.55	25.77	26.9	106.3	17.5	109.7
103.00	98.69	-7.65	26.06	27.2	106.4	17.5	109.0
104.00	99.65	-7.75	26.34	27.5	106.4	17.5	110.6
105.00	100.60	-7.85	26.62	27.8	106.4	17.5	109.3
106.00	101.56	-7.95	26.91	28.1	106.5	17.5	108.6
107.00	102.51	-8.04	27.19	28.4	106.5	17.5	108.8
108.00	103.46	-8.14	27.48	28.7	106.5	17.5	109.0
109.00	104.42	-8.24	27.76	29.0	106.5	17.5	108.9
110.00	105.37	-8.33	28.04	29.3	106.6	17.5	109.0
111.00	106.33	-8.43	28.33	29.6	106.6	17.4	109.0
112.00	107.28	-8.53	28.61	29.9	106.6	17.4	108.6
113.00	108.23	-8.62	28.90	30.2	106.6	17.4	108.3
114.00	109.19	-8.72	29.18	30.5	106.6	17.5	108.6
115.00	110.14	-8.82	29.46	30.8	106.7	17.4	108.3
116.00	111.10	-8.91	29.75	31.1	106.7	17.4	108.9
117.00	112.05	-9.01	30.03	31.4	106.7	17.4	108.9
118.00	113.00	-9.10	30.31	31.6	106.7	17.4	109.1
119.00	113.96	-9.20	30.60	31.9	106.7	17.4	108.5
120.00	114.91	-9.29	30.88	32.2	106.7	17.4	108.1
121.00	115.87	-9.39	31.16	32.5	106.8	17.4	108.2
122.00	116.82	-9.48	31.45	32.8	106.8	17.4	108.1
123.00	117.78	-9.57	31.73	33.1	106.8	17.4	108.3
124.00	118.73	-9.67	32.01	33.4	106.8	17.4	108.8
125.00	119.69	-9.76	32.30	33.7	106.8	17.4	108.8
126.00	120.64	-9.86	32.58	34.0	106.8	17.4	108.7
127.00	121.59	-9.95	32.86	34.3	106.8	17.4	108.3
128.00	122.55	-10.05	33.15	34.6	106.9	17.4	108.4
129.00	123.50	-10.14	33.43	34.9	106.9	17.4	108.4
130.00	124.46	-10.24	33.71	35.2	106.9	17.3	108.5
131.00	125.41	-10.33	34.00	35.5	106.9	17.4	108.3
132.00	126.37	-10.42	34.28	35.8	106.9	17.4	108.3
133.00	127.32	-10.52	34.56	36.1	106.9	17.4	108.3
134.00	128.27	-10.61	34.85	36.4	106.9	17.4	108.3
135.00	129.23	-10.70	35.13	36.7	106.9	17.4	108.3
136.00	130.18	-10.80	35.41	37.0	107.0	17.4	108.1
137.00	131.14	-10.89	35.70	37.3	107.0	17.4	108.5
138.00	132.09	-10.98	35.98	37.6	107.0	17.4	108.2
139.00	133.05	-11.08	36.26	37.9	107.0	17.4	108.1
140.00	134.00	-11.17	36.55	38.2	107.0	17.3	108.3
141.00	134.96	-11.26	36.83	38.5	107.0	17.3	108.2
142.00	135.91	-11.36	37.11	38.8	107.0	17.3	108.2
143.00	136.87	-11.45	37.40	39.1	107.0	17.3	108.3
144.00	137.82	-11.54	37.68	39.4	107.0	17.3	108.4
145.00	138.77	-11.64	37.96	39.7	107.0	17.3	108.2
146.00	139.73	-11.73	38.24	40.0	107.1	17.3	108.2
147.00	140.68	-11.82	38.53	40.3	107.1	17.3	108.2
148.00	141.64	-11.92	38.81	40.6	107.1	17.2	109.1
149.00	142.59	-12.01	39.09	40.9	107.1	17.3	108.1
150.00	143.55	-12.10	39.37	41.2	107.1	17.3	108.2
151.00	144.50	-12.19	39.65	41.5	107.1	17.3	108.2
151.40	144.89	-12.23	39.77	41.6	107.1	17.3	108.2

COMPENSATED DENSITY
GAMMA-CALIPER-RES
MH14RC-01

COMPANY: CANAUS

WELL: MH14RC-01

FIELD: MICHEL HEAD

COUNTRY: CANADA

PROVINCE: B.C.

LSD: N/A

SECTION: N/A

TOWNSHIP: N/A

RANGE: N/A

LICENSE NO.: N/A

UNIQUE WELL ID.: N/A

PERMANENT DATUM: G.L.

LOG MEASURED FROM: G.L.

DRL MEASURED FROM: G.L.

DATE: 08/27/14

DEPTH DRILLER: LOGGER TD

BIT SIZE: 123.83

LOG TOP: 0.00

LOG BOTTOM: 84.71

CASING LOGGER: 10.28

CASING DRILLER: 6.00

BOREHOLE TYPE: SURFACE

BOREHOLE FLUID: KIM

RT TEMPERATURE: N/A

MUD RES: N/A

MUD WEIGHT: 1.01

WITNESSED BY: D. THOMPSON

RECORDED BY: D. SINKWICH

REMARKS 1: BOTTOM SUFFED IN

REMARKS 2:

OTHER SERVICES:
DEN TP
DEV

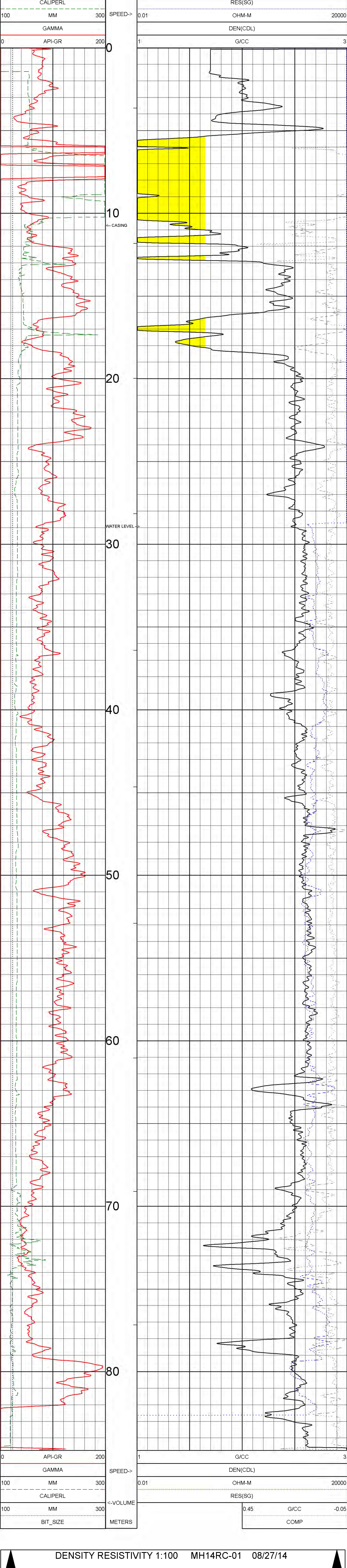
DENSITY RESISTIVITY 1:100 MH14RC-01 08/27/14

LOG PARAMETERS

MATRIX DENSITY : 2.65
MAGNETIC DECL : 14.60
PRESENTATION NAME/DATE = CanAus-9239-100-MH.0 08/19/2014

NEUTRON MATRIX : SANDSTONE
ELECT. CUTOFF : 75000

MATRIX DELTA T : 177
BIT SIZE : 123.83
VERSION = 3.64LG



DENSITY RESISTIVITY 1:100 MH14RC-01 08/27/14

LOG PARAMETERS

MATRIX DENSITY : 2.65
MAGNETIC DECL : 14.60
PRESENTATION NAME/DATE = CanAus-9239-100-MH.0 08/19/2014

NEUTRON MATRIX : SANDSTONE
ELECT. CUTOFF : 75000

MATRIX DELTA T : 177
BIT SIZE : 123.83
VERSION = 3.64LG

TOOL CALIBRATION MH14RC-01 08/27/14 10:14					
TOOL 9239C1 TM VERSION 2025					
SERIAL NUMBER 401					
DATE	TIME	SENSOR	STANDARD	RESPONSE	
1	May30,14 11:59:18	GAMMA	0.100 [API-GR]	1.000	[CPS]
	May30,14 11:59:18	GAMMA	545.000 [API-GR]	550.000	[CPS]
2	May30,14 11:35:59	VOLTAGE	27.500 [mV]	7990.000	[CPS]
	May30,14 11:35:59	VOLTAGE	210.500 [mV]	32680.000	[CPS]
3	Aug08,12 17:49:15	CALIPER	Default [CPS]	Default	[CPS]
	Aug08,12 17:49:15	CALIPER	Default [CPS]	Default	[CPS]
4	Jun10,14 10:26:57	DEN(LS)	1.620 [G/CC]	12681.300	[CPS]
	Jun10,14 10:26:57	DEN(LS)	2.612 [G/CC]	1680.800	[CPS]
5	Jun10,14 10:27:16	DEN(SS)	1.590 [G/CC]	49408.000	[CPS]
	Jun10,14 10:27:16	DEN(SS)	2.580 [G/CC]	18447.900	[CPS]
6	Aug08,14 12:59:43	CALIPERL	100.000 [MM]	212113.000	[CPS]
	Aug08,14 12:59:43	CALIPERL	150.000 [MM]	261527.000	[CPS]
7	May30,14 11:37:15	CURRENT	27.500 [uA]	5761.000	[CPS]
	May30,14 11:37:15	CURRENT	210.500 [uA]	20941.000	[CPS]
8	Dec15,09 09:34:24	F	Default [CPS]		
9	Dec15,09 09:34:24	X	Default [CPS]		

Century
WIRELINE SERVICES

GAMMA-DENSITY (CPS)
IN PIPE
MH14RC-01

COMPANY : CANAUS
WELL : MH14RC-01
FIELD : MICHEL HEAD
COUNTRY : CANADA
PROVINCE : B.C.

OTHER SERVICES:
DEV
DEN

LSD : N/A
SECTION : N/A
TOWNSHIP : N/A
RANGE : N/A
LICENSE NO. : N/A
UNIQUE WELL ID. : N/A

PERMANENT DATUM : G.L.
LOG MEASURED FROM : G.L.
DRL MEASURED FROM : G.L.

ELEVATION KB : N/A
ELEVATION DF : N/A
ELEVATION GL : N/A

DATE : 08/27/14
DEPTH DRILLER : 100.00
BIT SIZE : 123.825
LOG TOP : 0.00
LOG BOTTOM : 92.26
CIRG STOPPED : 22.30

RIG NUMBER : N/A
LOGGER TD : 92.26
ARRIVAL TIME : 07.30
DEPARTURE TIME : 15.00
CIRG STOPPED : 22.30

CASING DRILLER : 6.00
CASING TYPE : SURFACE
BOREHOLE FLUID : KIM
RM TEMPERATURE : N/A
MUD RES : N/A
MUD WEIGHT : 1.01
WITNESSED BY : D. THOMPSON
RECORDED BY : D. SINKWICH
REMARKS 1 :
REMARKS 2 :

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

DENSITY THRU PIPE 1:100MH14RC-0108/27/14

LOG PARAMETERS

MATRIX DENSITY : 2.65
MAGNETIC DECL : 14.60
PRESENTATION NAME/DATE =

NEUTRON MATRIX : SANDSTONE
ELECT. CUTOFF : 75000
CanAus-9068-100-INPIPE.0

MATRIX DELTA T : 177
BIT SIZE : 123.825
VERSION = 3.64LG

0

0

The log plot displays three primary data series against depth in meters (0 to 90m):

- GAMMA (Red line):** Represents gamma-ray density, ranging from 0 to 150.
- API-GR (Black line):** Represents API gamma-ray, ranging from 0 to 150.
- SPEED (Black line):** Represents log speed, ranging from 0 to 110,000 CPS.

The plot is titled "DENSITY THRU PIPE 1:100 MH14RC-01 08/27/14" and includes "LOG PARAMETERS" at the top. The plot shows a significant increase in gamma-ray density and API-GR values starting around 10 meters depth, indicating a change in formation lithology. The speed data shows a sharp peak around 10 meters depth, followed by a gradual decline.

DENSITY THRU PIPE 1:100MH14RC-0108/27/14

LOG PARAMETERS

MATRIX DENSITY : 2.65
MAGNETIC DECL : 14.60
PRESENTATION NAME/DATE =

NEUTRON MATRIX : SANDSTONE
ELECT. CUTOFF : 75000
CanAus-9068-100-INPIPE.0

MATRIX DELTA T : 177
BIT SIZE : 123.825
VERSION = 3.64LG

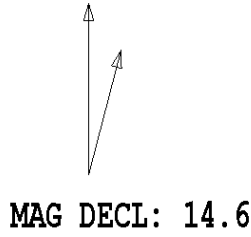
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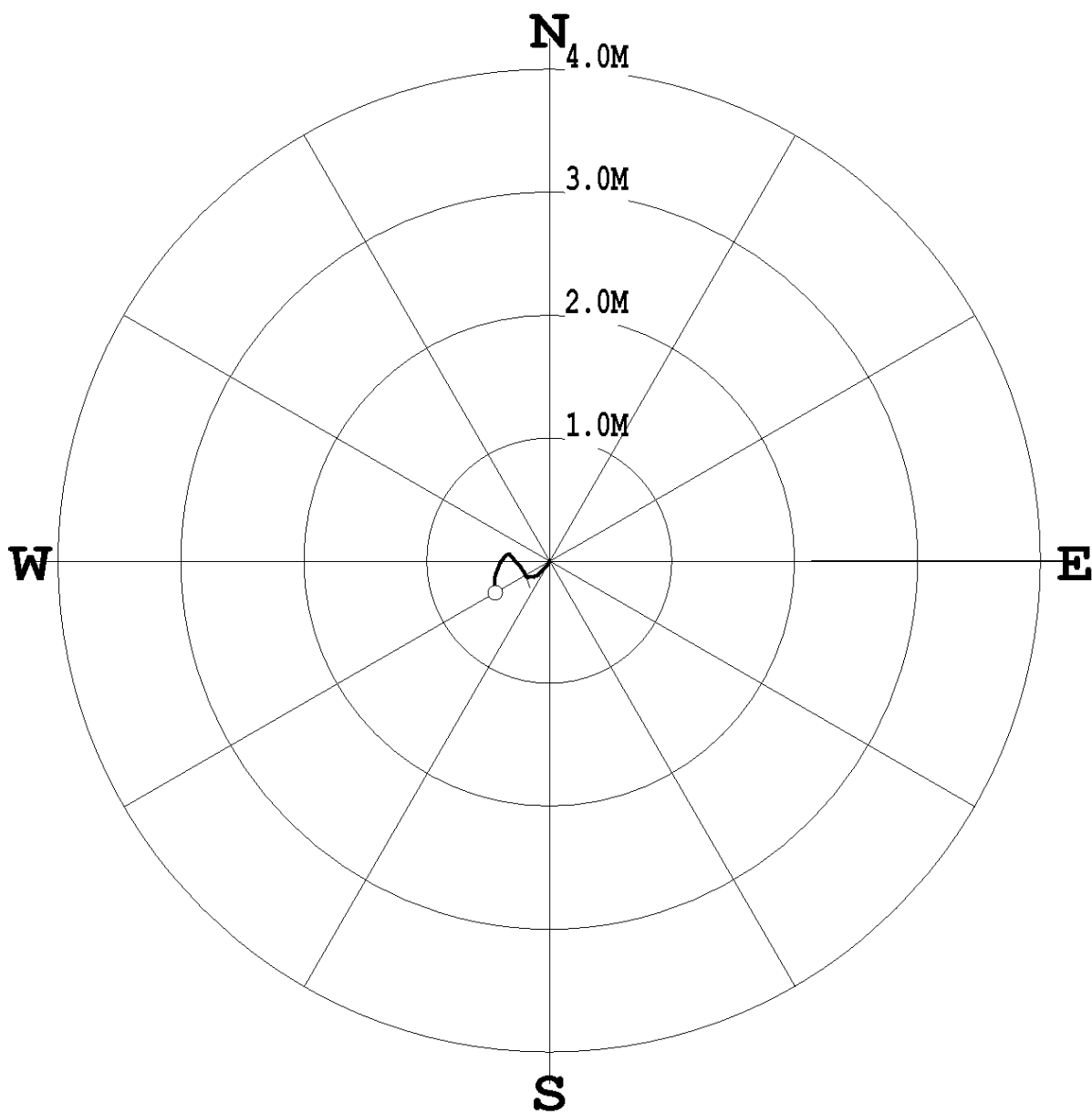
TOOL CALIBRATION MH14RC-01 08/27/14 08:17					
TOOL 9068A TM VERSION 1					
SERIAL NUMBER 640					
DATE	TIME	SENSOR	STANDARD	RESPONSE	
1 Jun12,14	09:34:13	GAMMA	0.100	[API-GR]	1.000 [CPS]
Jun12,14	09:34:13	GAMMA	545.000	[API-GR]	225.000 [CPS]

PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14RC-01
DATE OF LOG: 08/27/14
PROBE: 9058A 2633



SCALE: 1 M/CM
TRUE DEPTH: 88.65 M
AZIMUTH: 238.9
DISTANCE: 0.5 M
+ = 50 M INCR
○ = BOTTOM OF HOLE



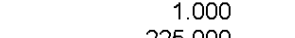
* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

CLIENT	: CANAUS	HOLE ID.	: MH14RC-01
FIELD OFFICE	: CENTURY	DATE OF LOG	: 08/27/14
DATA FROM	: N/A	PROBE	: 9058A , 2633
MAG. DECL.	: 14.600	DEPTH UNITS	: METERS
LOG:	MH14RC-01_08-27-14_09-37_9058A_.02_13.00_88.85_DEVI.log		

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
13.04	13.04	-0.00	-0.00	0.0	209.7	1.2	209.7
14.00	14.00	-0.02	-0.01	0.0	207.3	1.0	209.4
15.00	15.00	-0.03	-0.01	0.0	208.1	0.4	214.6
16.00	16.00	-0.03	-0.02	0.0	210.1	0.6	207.1
17.00	17.00	-0.05	-0.03	0.1	215.4	1.0	218.2
18.00	18.00	-0.06	-0.04	0.1	217.2	1.0	217.2
19.00	19.00	-0.07	-0.06	0.1	218.6	1.0	224.2
20.00	20.00	-0.08	-0.07	0.1	219.3	1.0	218.9
21.00	21.00	-0.09	-0.08	0.1	219.7	0.6	226.6
22.00	22.00	-0.10	-0.08	0.1	219.9	0.5	228.7
23.00	23.00	-0.11	-0.09	0.1	220.0	0.3	220.2
24.00	24.00	-0.11	-0.09	0.1	219.9	0.3	211.2
25.00	25.00	-0.11	-0.09	0.1	219.9	0.5	233.1
26.00	26.00	-0.12	-0.10	0.2	220.7	0.4	243.2
27.00	27.00	-0.12	-0.11	0.2	221.6	0.4	243.4
28.00	28.00	-0.12	-0.11	0.2	222.5	0.1	285.8
29.00	29.00	-0.12	-0.11	0.2	223.4	0.3	269.1
30.00	30.00	-0.12	-0.12	0.2	224.3	0.4	242.3
31.00	31.00	-0.13	-0.12	0.2	224.9	0.4	230.6
32.00	32.00	-0.13	-0.13	0.2	224.5	0.2	196.8
33.00	33.00	-0.13	-0.13	0.2	224.1	0.0	100.7
34.00	34.00	-0.13	-0.13	0.2	224.2	0.1	314.7
35.00	35.00	-0.13	-0.13	0.2	225.1	0.2	284.8
36.00	36.00	-0.13	-0.13	0.2	226.1	0.2	293.3
37.00	37.00	-0.13	-0.14	0.2	227.1	0.2	282.2
38.00	38.00	-0.13	-0.14	0.2	228.5	0.4	265.6
39.00	39.00	-0.13	-0.15	0.2	229.8	0.4	269.7
40.00	40.00	-0.13	-0.16	0.2	231.2	0.5	273.9
41.00	41.00	-0.13	-0.17	0.2	232.5	0.4	266.2
42.00	42.00	-0.13	-0.17	0.2	233.0	0.2	230.4
43.00	43.00	-0.13	-0.17	0.2	232.8	0.2	267.0
44.00	44.00	-0.13	-0.18	0.2	233.2	0.2	273.5
45.00	45.00	-0.13	-0.18	0.2	233.9	0.2	281.3
46.00	46.00	-0.13	-0.18	0.2	234.7	0.2	290.4
47.00	47.00	-0.13	-0.19	0.2	235.5	0.2	276.8
48.00	48.00	-0.13	-0.19	0.2	236.4	0.2	308.6
49.00	49.00	-0.13	-0.19	0.2	237.0	0.1	293.0
50.00	50.00	-0.12	-0.19	0.2	237.4	0.1	340.5
51.00	51.00	-0.12	-0.19	0.2	238.1	0.3	9.6
52.00	52.00	-0.12	-0.19	0.2	239.1	0.4	346.2
53.00	53.00	-0.11	-0.20	0.2	240.4	0.3	323.0
54.00	54.00	-0.11	-0.20	0.2	241.7	0.5	316.4
55.00	55.00	-0.10	-0.20	0.2	243.2	0.5	342.0
56.00	56.00	-0.09	-0.21	0.2	245.5	0.6	327.0
57.00	57.00	-0.09	-0.21	0.2	248.0	0.6	324.4
58.00	58.00	-0.08	-0.22	0.2	250.5	0.7	335.7
59.00	59.00	-0.07	-0.22	0.2	253.5	0.8	330.5
60.00	60.00	-0.06	-0.23	0.2	256.7	0.8	325.7
61.00	61.00	-0.04	-0.24	0.2	259.6	0.8	321.1
62.00	62.00	-0.03	-0.25	0.3	262.3	0.7	318.4
63.00	63.00	-0.02	-0.26	0.3	264.4	0.9	320.9
64.00	64.00	-0.01	-0.27	0.3	266.9	0.7	316.0
65.00	65.00	-0.00	-0.28	0.3	269.0	0.8	319.1
66.00	66.00	0.00	-0.28	0.3	270.8	0.6	314.0
67.00	67.00	0.01	-0.29	0.3	272.8	0.9	323.7
68.00	68.00	0.03	-0.30	0.3	275.1	0.9	319.3
69.00	69.00	0.04	-0.31	0.3	277.1	0.8	318.0
70.00	70.00	0.05	-0.32	0.3	278.6	0.6	318.5
71.00	71.00	0.06	-0.33	0.3	279.6	0.3	332.1
72.00	72.00	0.06	-0.33	0.3	280.0	0.1	339.1
73.00	73.00	0.06	-0.33	0.3	279.7	1.1	234.1
74.00	74.00	0.05	-0.34	0.3	278.9	0.5	248.7
75.00	75.00	0.05	-0.35	0.4	277.9	0.6	235.5
76.00	76.00	0.04	-0.36	0.4	276.2	0.9	222.2
77.00	77.00	0.03	-0.37	0.4	274.2	1.0	221.6
78.00	78.00	0.01	-0.38	0.4	271.8	1.2	214.5
79.00	79.00	-0.01	-0.40	0.4	269.0	1.3	215.9
80.00	80.00	-0.03	-0.41	0.4	266.1	1.3	201.9
81.00	81.00	-0.05	-0.42	0.4	263.1	1.5	201.2
82.00	82.00	-0.07	-0.43	0.4	260.1	1.4	203.5
83.00	83.00	-0.10	-0.44	0.4	257.5	1.3	202.3
84.00	83.99	-0.12	-0.44	0.5	254.9	1.4	194.8
85.00	84.99	-0.15	-0.45	0.5	252.0	1.6	191.7
86.00	85.99	-0.17	-0.45	0.5	249.0	1.7	172.6
87.00	86.99	-0.20	-0.45	0.5	245.5	1.8	174.2
88.00	87.99	-0.24	-0.44	0.5	241.6	2.2	172.2
88.66	88.65	-0.26	-0.44	0.5	238.9	2.2	172.9

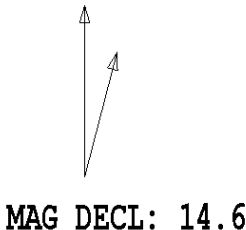
ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

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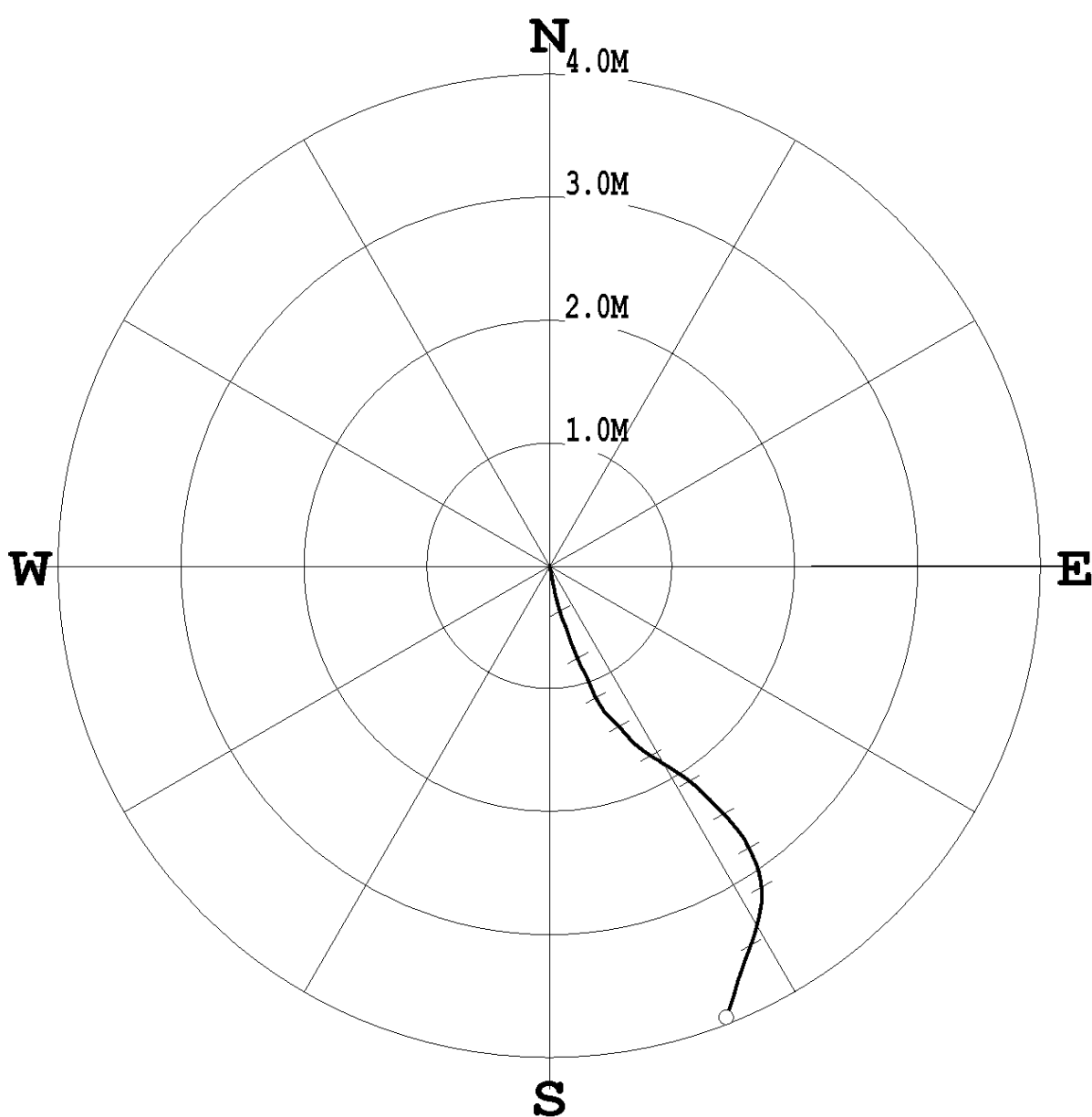


PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14-RC-02
DATE OF LOG: 08/29/14
PROBE: 9058A 2633



SCALE: 1 M/CM
TRUE DEPTH: 128.63 M
AZIMUTH: 158.6
DISTANCE: 3.9 M
+ = 10 M INCR
○ = BOTTOM OF HOLE



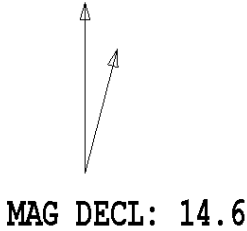
* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

CLIENT	: CANAUS	HOLE ID.	: MH14-RC-02
FIELD OFFICE	: CENTURY	DATE OF LOG	: 08/29/14
DATA FROM	: N/A	PROBE	: 9058A , 2633
MAG. DECL.	: 14.600	DEPTH UNITS	: METERS
LOG: MH14-RC-02_08-29-14_05-51_9058A_1_20_128_RESAMPLED.log			

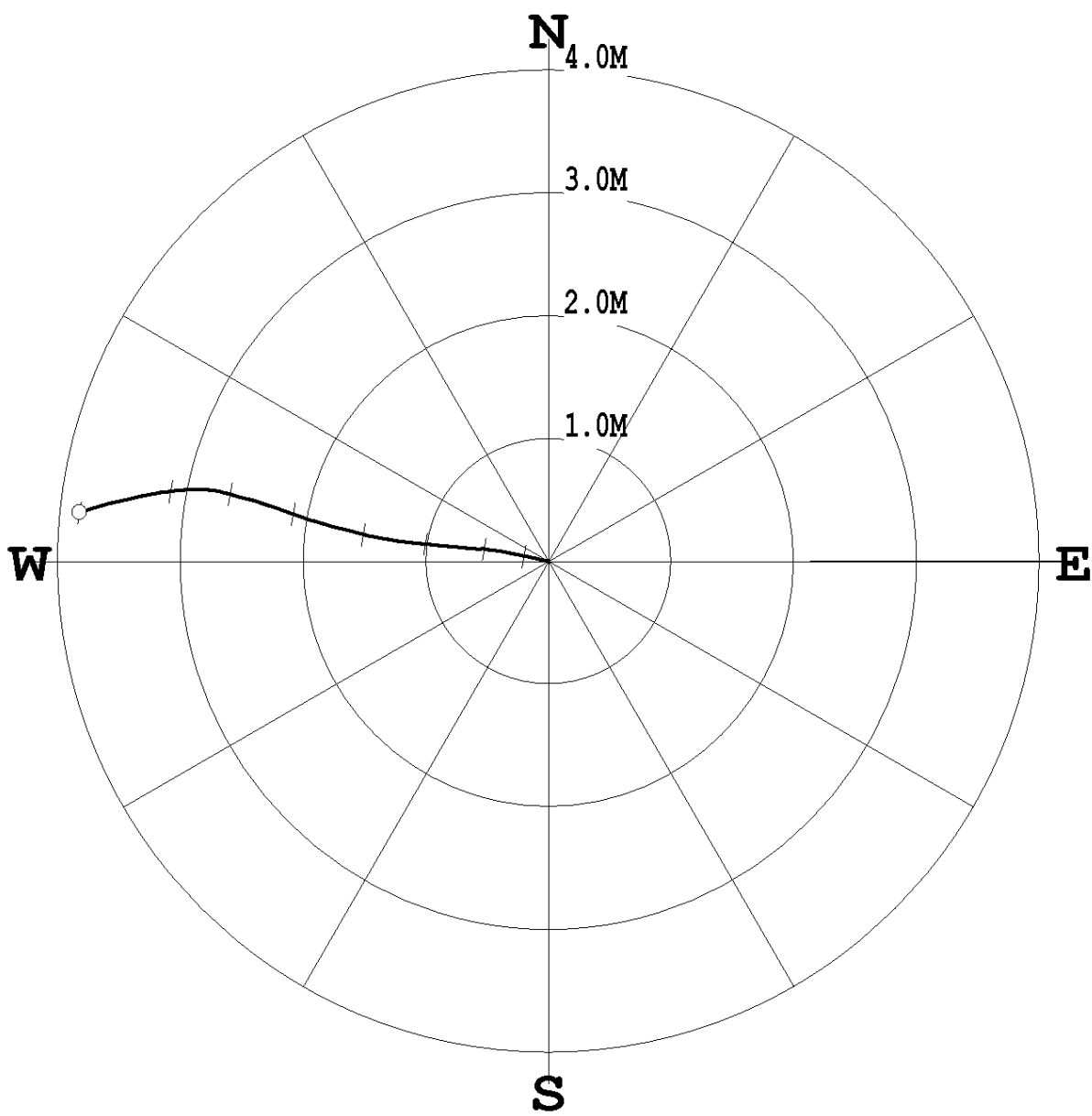
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
20.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0
21.00	20.49	-0.01	0.00	0.0	165.1	1.6	165.2
22.00	21.49	-0.04	0.01	0.0	168.6	1.9	169.4
23.00	22.49	-0.08	0.02	0.1	168.8	2.1	168.8
24.00	23.49	-0.11	0.02	0.1	169.0	2.0	169.6
25.00	24.49	-0.15	0.03	0.2	169.0	2.1	168.6
26.00	25.49	-0.18	0.04	0.2	168.9	2.0	168.1
27.00	26.49	-0.22	0.04	0.2	168.9	2.1	168.9
28.00	27.49	-0.26	0.05	0.3	168.5	2.8	165.5
29.00	28.48	-0.30	0.06	0.3	168.0	2.6	164.6
30.00	29.48	-0.35	0.08	0.4	167.5	2.4	164.0
31.00	30.48	-0.39	0.09	0.4	167.1	2.3	162.4
32.00	31.48	-0.43	0.10	0.4	166.5	2.6	159.5
33.00	32.48	-0.47	0.12	0.5	165.6	2.7	157.0
34.00	33.48	-0.51	0.14	0.5	165.0	2.7	160.4
35.00	34.48	-0.56	0.15	0.6	164.7	2.5	161.8
36.00	35.48	-0.59	0.16	0.6	164.5	2.2	162.2
37.00	36.48	-0.63	0.18	0.7	164.3	2.1	157.8
38.00	37.48	-0.66	0.19	0.7	163.9	2.2	157.9
39.00	38.48	-0.70	0.20	0.7	163.6	2.1	158.4
40.00	39.47	-0.73	0.22	0.8	163.4	2.0	155.8
41.00	40.47	-0.76	0.23	0.8	163.0	2.0	156.6
42.00	41.47	-0.79	0.25	0.8	162.8	1.8	160.0
43.00	42.47	-0.82	0.26	0.9	162.5	2.0	149.9
44.00	43.47	-0.86	0.28	0.9	162.0	2.6	151.2
45.00	44.47	-0.90	0.30	0.9	161.6	2.4	154.5
46.00	45.47	-0.93	0.32	1.0	161.3	2.2	157.3
47.00	46.47	-0.97	0.33	1.0	161.2	2.2	156.5
48.00	47.47	-1.00	0.34	1.1	161.0	1.8	157.2
49.00	48.47	-1.03	0.36	1.1	160.9	1.7	157.8
50.00	49.47	-1.06	0.37	1.1	160.8	1.6	152.8
51.00	50.47	-1.08	0.38	1.1	160.5	1.8	149.6
52.00	51.47	-1.11	0.40	1.2	160.2	1.7	149.2
53.00	52.47	-1.13	0.41	1.2	160.0	1.4	147.0
54.00	53.47	-1.16	0.43	1.2	159.7	1.9	148.9
55.00	54.47	-1.18	0.45	1.3	159.4	1.8	140.2
56.00	55.47	-1.20	0.47	1.3	158.8	1.8	136.4
57.00	56.46	-1.23	0.49	1.3	158.3	1.5	135.8
58.00	57.46	-1.24	0.51	1.3	157.9	1.5	134.4
59.00	58.46	-1.26	0.53	1.4	157.4	1.9	134.9
60.00	59.46	-1.29	0.55	1.4	156.9	2.0	137.1
61.00	60.46	-1.31	0.57	1.4	156.4	1.9	134.8
62.00	61.46	-1.34	0.60	1.5	156.0	1.9	141.8
63.00	62.46	-1.36	0.62	1.5	155.6	1.9	136.8
64.00	63.46	-1.39	0.64	1.5	155.3	2.0	139.3
65.00	64.46	-1.42	0.66	1.6	154.9	2.0	136.8
66.00	65.46	-1.44	0.69	1.6	154.5	1.8	132.7
67.00	66.46	-1.46	0.71	1.6	154.0	2.1	127.8
68.00	67.46	-1.49	0.74	1.7	153.4	2.2	130.3
69.00	68.46	-1.51	0.77	1.7	152.9	2.1	123.0
70.00	69.46	-1.53	0.80	1.7	152.2	2.2	125.2
71.00	70.46	-1.55	0.84	1.8	151.7	2.1	124.2
72.00	71.46	-1.57	0.87	1.8	151.1	2.0	117.6
73.00	72.46	-1.59	0.90	1.8	150.5	2.2	124.8
74.00	73.45	-1.61	0.93	1.9	150.0	2.2	120.4
75.00	74.45	-1.63	0.96	1.9	149.4	2.2	121.4
76.00	75.45	-1.65	0.99	1.9	148.9	2.0	124.6
77.00	76.45	-1.67	1.02	2.0	148.5	2.1	123.6
78.00	77.45	-1.69	1.05	2.0	148.0	2.3	121.6
79.00	78.45	-1.71	1.09	2.0	147.5	2.3	125.4
80.00	79.45	-1.73	1.12	2.1	147.1	2.2	127.0
81.00	80.45	-1.76	1.15	2.1	146.8	2.3	128.7
82.00	81.45	-1.78	1.18	2.1	146.5	2.1	130.4
83.00	82.45	-1.80	1.20	2.2	146.3	1.8	136.3
84.00	83.45	-1.83	1.23	2.2	146.1	2.3	135.2
85.00	84.45	-1.86	1.26	2.2	145.9	2.6	131.8
86.00	85.45	-1.89	1.29	2.3	145.6	2.2	133.2
87.00	86.44	-1.92	1.32	2.3	145.4	2.3	137.1
88.00	87.44	-1.95	1.35	2.4	145.3	2.3	135.7
89.00	88.44	-1.98	1.38	2.4	145.1	2.3	137.2
90.00	89.44	-2.00	1.40	2.4	145.0	1.9	131.5
91.00	90.44	-2.02	1.43	2.5	144.8	1.9	138.0
92.00	91.44	-2.05	1.45	2.5	144.7	2.0	137.1
93.00	92.44	-2.07	1.47	2.5	144.7	2.0	139.9
94.00	93.44	-2.10	1.49	2.6	144.6	1.9	140.3
95.00	94.44	-2.13	1.51	2.6	144.5	2.0	140.8
96.00	95.44	-2.16	1.54	2.6	144.5	2.0	141.8
97.00	96.44	-2.18	1.56	2.7	144.5	2.0	143.0
98.00	97.44	-2.21	1.58	2.7	144.5	2.0	146.5
99.00	98.44	-2.24	1.59	2.7	144.5	1.9	155.1
100.00	99.44	-2.27	1.61	2.8	144.7	2.1	152.9
101.00	100.44	-2.30	1.63	2.8	144.8	1.9	151.0
102.00	101.44	-2.33	1.64	2.9	144.9	1.9	154.7
103.00	102.43	-2.36	1.66	2.9	145.0	1.9	157.4
104.00	103.43	-2.39	1.67	2.9	145.1	1.9	155.9
105.00	104.43	-2.42	1.68	3.0	145.2	2.0	159.3
106.00	105.43	-2.46	1.69	3.0	145.4	1.9	160.5
107.00	106.43	-2.49	1.70	3.0	145.6	1.9	166.9
108.00	107.43	-2.52	1.71	3.0	145.9	2.1	167.5
109.00	108.43	-2.56	1.72	3.1	146.1	2.0	168.5
110.00	109.43	-2.59	1.72	3.1	146.4	2.0	176.9
111.00	110.43	-2.63	1.72	3.1	146.7	2.4	176.7
112.00	111.43	-2.67	1.73	3.2	147.1	2.2	177.8
113.00	112.43	-2.71	1.73	3.2	147.5	2.2	183.0
114.00	113.43	-2.75	1.72	3.2	147.9	2.4	187.1
115.00	114.43	-2.79	1.72	3.3	148.4	2.6	190.1
116.00	115.43	-2.83	1.71	3.3	149.0	2.7	191.3
117.00	116.42	-2.88	1.70	3.3	149.5	3.0	194.0
118.00	117.42	-2.94	1.68	3.4	150.2	3.2	195.1
119.00	118.42	-2.99	1.67	3.4	150.9	3.4	196.4
120.00	119.42	-3.05	1.65	3.5	151.6	3.4	200.1
121.00	120.42	-3.10	1.63	3.5	152.3	3.5	200.1
122.00	121.42	-3.16	1.61	3.5	153.1	3.6	200.7
123.00	122.41	-3.22	1.58	3.6	153.9	3.9	199.7
124.00	123.41	-3.29	1.56	3.6	154.6	3.9	198.9
125.00	124.41	-3.35	1.54	3.7	155.4	4.0	198.4
126.00	125.41	-3.42	1.52	3.7	156.1	4.3	195.7
127.00	126.40	-3.49	1.50	3.8	156.8	4.6	197.2
128.00	125.41	-3.42	1.52	3.7	156.1	4.3	195.7
128.00	125.41	-3.42	1.52	3.7	156.1	4.3	195.7

PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14-RC-03
DATE OF LOG: 08/28/14
PROBE: 9058A 2633



SCALE: 1 M/CM
TRUE DEPTH: 99.85 M
AZIMUTH: 275.9
DISTANCE: 3.8 M
+ = 10 M INCR
○ = BOTTOM OF HOLE



* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

CLIENT : CANAUS

FIELD OFFICE : CENTURY

DATA FROM : N/A

MAG. DECL. : 14.600

LOG: MH14-RC-03_08-28-14_06-41_9058A_.02_23.00_100.16_DEVI.log

HOLE ID. : MH14-RC-03

DATE OF LOG : 08/28/14

PROBE : 9058A , 2633

DEPTH UNITS : METERS

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
23.00	23.00	0.00	-0.00	0.0	283.7	2.1	283.7
24.00	24.00	0.01	-0.03	0.0	283.4	1.8	283.5
25.00	25.00	0.01	-0.06	0.1	283.5	1.6	282.2
26.00	26.00	0.02	-0.09	0.1	283.0	1.7	283.4
27.00	27.00	0.03	-0.12	0.1	283.0	1.7	283.2
28.00	28.00	0.03	-0.14	0.1	283.0	1.9	282.5
29.00	29.00	0.04	-0.17	0.2	282.8	1.7	279.9
30.00	30.00	0.04	-0.20	0.2	282.3	2.0	281.7
31.00	31.00	0.05	-0.23	0.2	282.3	1.8	283.7
32.00	32.00	0.06	-0.27	0.3	282.2	2.1	279.7
33.00	33.00	0.06	-0.30	0.3	282.1	2.0	281.4
34.00	33.99	0.07	-0.33	0.3	282.1	1.6	278.6
35.00	34.99	0.08	-0.36	0.4	282.1	1.9	281.1
36.00	35.99	0.08	-0.39	0.4	282.0	1.7	281.9
37.00	36.99	0.09	-0.42	0.4	281.7	1.6	277.2
38.00	37.99	0.09	-0.46	0.5	281.2	2.2	277.6
39.00	38.99	0.10	-0.49	0.5	281.0	1.9	281.1
40.00	39.99	0.10	-0.52	0.5	280.9	2.0	277.4
41.00	40.99	0.10	-0.56	0.6	280.2	2.4	268.3
42.00	41.99	0.10	-0.60	0.6	279.7	2.6	275.5
43.00	42.99	0.11	-0.65	0.7	279.3	2.7	275.9
44.00	43.99	0.11	-0.70	0.7	279.1	2.6	276.2
45.00	44.99	0.12	-0.74	0.8	278.9	2.6	275.6
46.00	45.99	0.12	-0.79	0.8	278.7	3.0	278.2
47.00	46.98	0.13	-0.84	0.9	278.5	3.0	277.6
48.00	47.98	0.13	-0.89	0.9	278.3	3.1	274.3
49.00	48.98	0.14	-0.95	1.0	278.2	3.3	277.1
50.00	49.98	0.14	-1.00	1.0	278.0	3.0	274.3
51.00	50.98	0.15	-1.05	1.1	277.9	2.9	274.2
52.00	51.98	0.15	-1.10	1.1	277.8	2.6	273.6
53.00	52.98	0.16	-1.15	1.2	277.7	3.1	279.0
54.00	53.97	0.16	-1.20	1.2	277.7	3.1	274.6
55.00	54.97	0.17	-1.25	1.3	277.7	2.8	281.2
56.00	55.97	0.18	-1.30	1.3	277.8	3.2	277.1
57.00	56.97	0.19	-1.36	1.4	277.9	3.3	280.6
58.00	57.97	0.20	-1.41	1.4	278.0	3.3	276.6
59.00	58.97	0.21	-1.46	1.5	278.1	2.7	282.3
60.00	59.97	0.22	-1.51	1.5	278.3	2.8	283.9
61.00	60.97	0.23	-1.56	1.6	278.5	3.3	286.3
62.00	61.96	0.25	-1.61	1.6	278.7	3.3	282.3
63.00	62.96	0.26	-1.67	1.7	278.9	3.2	283.5
64.00	63.96	0.27	-1.72	1.7	279.0	3.2	288.1
65.00	64.96	0.29	-1.78	1.8	279.2	3.5	288.0
66.00	65.96	0.31	-1.84	1.9	279.5	3.5	288.5
67.00	66.95	0.33	-1.90	1.9	279.7	3.7	285.7
68.00	67.95	0.34	-1.96	2.0	279.9	3.3	290.2
69.00	68.95	0.36	-2.02	2.1	280.2	3.8	290.6
70.00	69.95	0.38	-2.08	2.1	280.5	3.2	285.7
71.00	70.95	0.40	-2.13	2.2	280.7	2.9	289.3
72.00	71.95	0.42	-2.17	2.2	280.9	2.9	291.3
73.00	72.94	0.44	-2.22	2.3	281.1	3.0	286.9
74.00	73.94	0.45	-2.27	2.3	281.3	3.1	287.3
75.00	74.94	0.47	-2.33	2.4	281.4	3.0	287.6
76.00	75.94	0.49	-2.38	2.4	281.6	3.5	289.3
77.00	76.94	0.50	-2.43	2.5	281.7	3.1	283.1
78.00	77.94	0.52	-2.49	2.5	281.7	3.4	284.1
79.00	78.94	0.53	-2.54	2.6	281.8	3.2	286.6
80.00	79.93	0.55	-2.59	2.6	281.9	2.9	285.1
81.00	80.93	0.56	-2.64	2.7	281.9	2.6	283.8
82.00	81.93	0.57	-2.68	2.7	282.0	2.5	281.8
83.00	82.93	0.58	-2.72	2.8	281.9	2.4	274.3
84.00	83.93	0.58	-2.77	2.8	281.9	2.6	280.3
85.00	84.93	0.59	-2.81	2.9	281.8	2.5	266.4
86.00	85.93	0.59	-2.85	2.9	281.6	2.5	275.5
87.00	86.93	0.59	-2.90	3.0	281.4	2.6	268.0
88.00	87.93	0.58	-2.95	3.0	281.2	3.3	264.2
89.00	88.92	0.58	-3.01	3.1	280.9	3.6	260.8
90.00	89.92	0.57	-3.07	3.1	280.5	3.8	262.3
91.00	90.92	0.56	-3.14	3.2	280.2	3.3	264.7
92.00	91.92	0.55	-3.20	3.2	279.8	3.7	258.3
93.00	92.92	0.54	-3.26	3.3	279.4	4.2	260.4
94.00	93.91	0.53	-3.34	3.4	278.9	4.6	259.2
95.00	94.91	0.51	-3.42	3.5	278.4	5.0	257.6
96.00	95.91	0.49	-3.51	3.5	277.9	5.0	258.7
97.00	96.90	0.47	-3.59	3.6	277.4	4.8	253.3
98.00	97.90	0.44	-3.67	3.7	276.9	4.8	248.0
99.00	98.89	0.42	-3.75	3.8	276.4	4.4	251.7
100.00	99.89	0.40	-3.82	3.8	275.9	0.0	0.0
99.96	99.85	0.40	-3.82	3.8	275.9	4.7	252.5

Century

WIRELINE SERVICES

GAMMA-DENSITY (CPS)

IN PIPE

MH14RC-04

COMPANY

CAN AUS

WELL

MH14RC-04

FIELD

MICHEL HEAD

COUNTRY

CANADA

PROVINCE

BRITISH COLUMBIA

OTHER SERVICES:

SECTION

N/A

TOWNSHIP

N/A

RANGE

N/A

LICENSE NO.

N/A

UNIQUE WELL ID

N/A

PERMANENT DATUM

GL

LOG MEASURED FROM

GL

DRL MEASURED FROM

GL

DATE

09/08/14

DEPTH DRILLER

LOGGERS

LOG TOP

127.70

LOG BOTTOM

146.05

CASING LOGGER

CASING TYPE

SURFACE

BOREHOLE FLUID

H2O

RM TEMPERATURE

N/A

MUD RES

N/A

MUD WEIGHT

1.00

WITNESSED BY

D THOMPSON

RECORDED BY

R KOEBS

REMARKS 1

VERTICAL

REMARKS 2

THROUGH PIPE LOG

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

DENSITY TP 1:100MH14RC-0409/08/14

LOG PARAMETERS

MATRIX DENSITY : 2.65

NEUTRON MATRIX : SANDSTONE

MATRIX DELTA T : 177

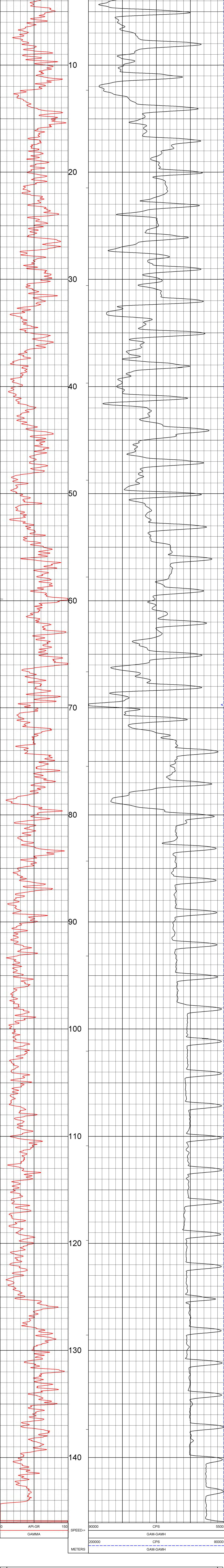
MAGNETIC DECL : 14.60

ELECT. CUTOFF : 99999

BIT SIZE : 127.70

PRESENTATION NAME/DATE = CanAus-9068-100-INPIPE.007/12/2014

VERSION = 3.64LG



DENSITY TP 1:100MH14RC-0409/08/14

LOG PARAMETERS

MATRIX DENSITY : 2.65

NEUTRON MATRIX : SANDSTONE

MATRIX DELTA T : 177

MAGNETIC DECL : 14.60

ELECT. CUTOFF : 99999

BIT SIZE : 127.70

PRESENTATION NAME/DATE = CanAus-9068-100-INPIPE.007/12/2014

VERSION = 3.64LG

TOOL CALIBRATION MH14RC-04 09/08/14 08:01				RESPONSE			
TOOL 9068A TM VERSION 1							
SERIAL NUMBER 640							
DATE	TIME	SENSOR	STANDARD				
1	Jun12,14	GAMMA	0.100	[API-GR]	1.000	[CPS]	
	Jun12,14	GAMMA	545.000	[API-GR]	225.000	[CPS]	

DENSITY (CPS)
IN PIPE
H14RC-06

COMPANY	CANALS	1/1
OTHER SERVICES:		

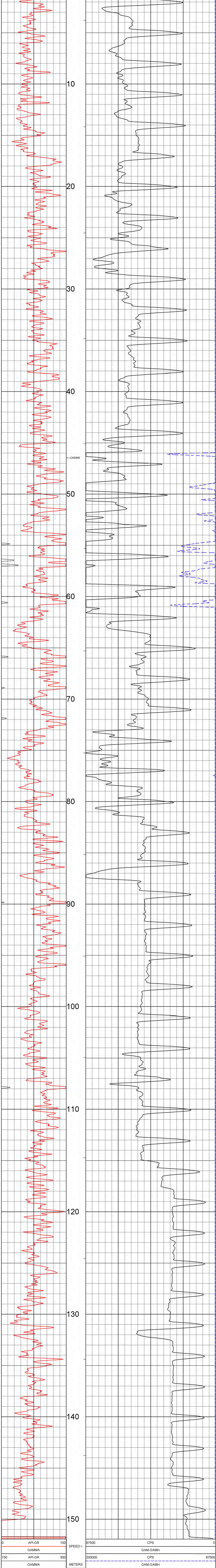
FIELD	:MICHEL HEAD
COUNTRY	:CANADA
PROVINCE	:BRITISH COLUMBIA

NAME	DATE	TIME	LOCATION	STATUS	REMARKS
JOHN DOE	2023-10-27	14:30	Room 101	Present	Arrived on time, no issues.
JANE SMITH	2023-10-27	15:00	Room 101	Absent	Not present, call missed.
DAVID BROWN	2023-10-27	15:30	Room 101	Present	Arrived late, 15:45.
EMILY GREEN	2023-10-27	16:00	Room 101	Present	Arrived on time, no issues.
MICHAEL WHITE	2023-10-27	16:30	Room 101	Absent	Not present, call missed.
SARAH BLACK	2023-10-27	17:00	Room 101	Present	Arrived on time, no issues.
CHRISTOPHER GRAY	2023-10-27	17:30	Room 101	Present	Arrived on time, no issues.
AMANDA PINK	2023-10-27	18:00	Room 101	Absent	Not present, call missed.
KEVIN BLUE	2023-10-27	18:30	Room 101	Present	Arrived on time, no issues.
STEPHANIE YELLOW	2023-10-27	19:00	Room 101	Present	Arrived on time, no issues.
DANIEL PURPLE	2023-10-27	19:30	Room 101	Absent	Not present, call missed.
ASHLEY BROWN	2023-10-27	20:00	Room 101	Present	Arrived on time, no issues.
JUSTIN GREEN	2023-10-27	20:30	Room 101	Present	Arrived on time, no issues.
BRIAN BLUE	2023-10-27	21:00	Room 101	Absent	Not present, call missed.
HEATHER RED	2023-10-27	21:30	Room 101	Present	Arrived on time, no issues.
ANDREW BLACK	2023-10-27	22:00	Room 101	Present	Arrived on time, no issues.
CHRISTINA GRAY	2023-10-27	22:30	Room 101	Absent	Not present, call missed.
ANTHONY WHITE	2023-10-27	23:00	Room 101	Present	Arrived on time, no issues.
LAUREN PINK	2023-10-27	23:30	Room 101	Present	Arrived on time, no issues.
RYAN BLUE	2023-10-27	00:00	Room 101	Absent	Not present, call missed.
KYRA YELLOW	2023-10-27	00:30	Room 101	Present	Arrived on time, no issues.
ERIC PURPLE	2023-10-27	01:00	Room 101	Present	Arrived on time, no issues.
ADAM BROWN	2023-10-27	01:30	Room 101	Absent	Not present, call missed.
CHLOE GREEN	2023-10-27	02:00	Room 101	Present	Arrived on time, no issues.
JOHN DOE	2023-10-27	02:30	Room 101	Present	Arrived on time, no issues.

PERMANENT DATUM	GL	ELEVATION KB	N/A
MEASURED FROM: GL	GL	ELEVATION DF	N/A
RL MEASURED FROM: GL	GL	ELEVATION GL	N/A

MA	METERS	GAM-GAMH
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200000



PRESENTATION NAME/DATE = CanAus-9068-100-INPIPE.0 08/29/2014 VERSION = 3.64LG

TOOL CALIBRATION MH14RC-06 08/31/14 10:28
 TOOL 9068A TM VERSION 1
 SERIAL NUMBER 640

	DATE	TIME	SENSOR	STANDARD	RESPONSE
1	Jun12,14	09:34:13	GAMMA	0.100 [API-GR]	1.000 [CPS]
	Jun12,14	09:34:13	GAMMA	545.000 [API-GR]	275.000 [CPS]

Century

WIRELINE SERVICES

COMPENSATED DENSITY
GAMMA-CALIPER-RS
MH14RC-08

COMPANY : CANUS

WELL : MH14RC-08

COUNTRY : CANADA

PROVINCE : BRITISH COLUMBIA

SECTION : N/A

TOWNSHIP : N/A

RANGE : N/A

LICENSE NO. : N/A

UNIQUE WELL ID. : N/A

PERMANENT DATUM : GL

LOG MEASURED FROM : GL

DATE : 08/26/14

DEPTH DRILLER : 226.00

BIT SIZE : 127.70

LOG TOP : 0.00

LOG BOTTOM : 226.07

CASING LOGGER : 9.08

CASING TYPE : 9.00

CASING DRILLER : SURFACE

ROD/LOG FLUID : H2O

ROD TEMP. : N/A

ROD TEMP. : N/A

ROD RES : N/A

MOD. WEIGHT : 1.00

WITNESSED BY : J. THOMPSON

RECORDED BY : R. KOBES

REMARKS 1 : VERTICAL

REMARKS 2 :

OTHER SERVICES : DEY

DENSITY RESISTIVITY 1:100 MH14RC-08 08/26/14

LOG PARAMETERS

MATRIX DENSITY : 2.65

MAGNETIC DECL : 14.60

PRESENTATION NAME/DATE = CanAus-9239-100-MH-0 08/19/2014

NEUTRON MATRIX : SANDSTONE

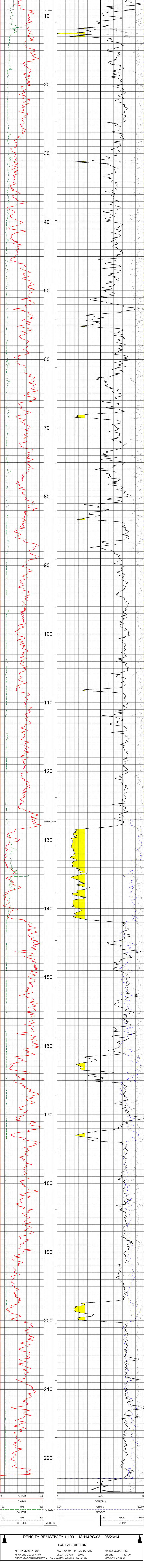
ELECT. CUTOFF : 99999

LOG MEASURED FROM : GL

MATRIX DELTA T : 177

BIT SIZE : 127.70

VERSION = 3.64LG

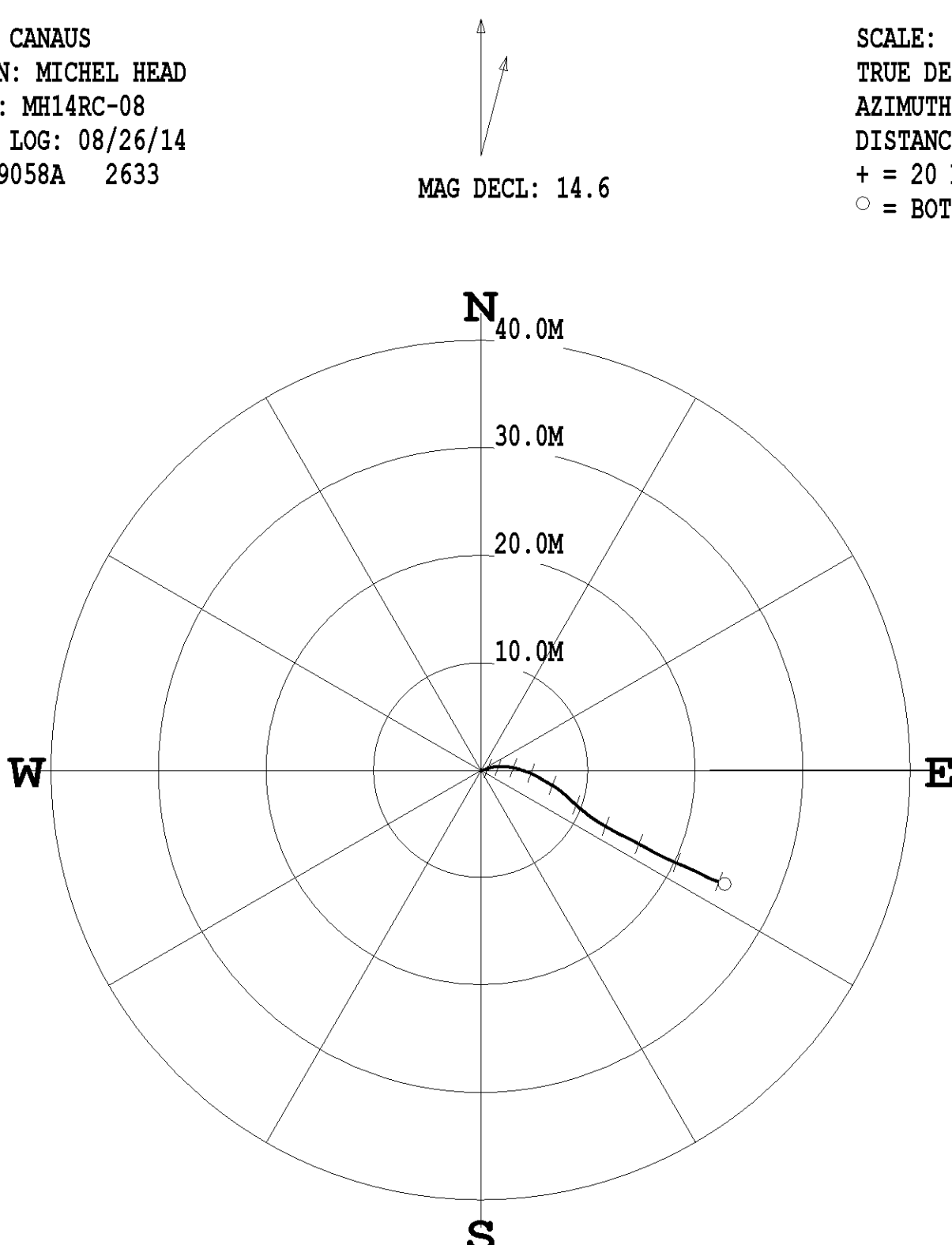


PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14RC-08
DATE OF LOG: 08/26/14
PROBE: 9058A 2633

MAG DECL: 14.6

SCALE: 5 M/CM
TRUE DEPTH: 222.98 M
AZIMUTH: 115.0
DISTANCE: 25.1 M
+ = 20 M INCR
○ = BOTTOM OF HOLE



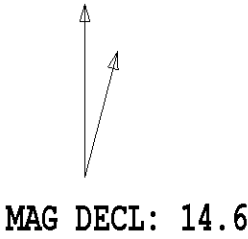
* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

CLIENT : CANAUS HOLE ID. : MH14RC-08
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/26/14
DATA FROM : N/A PROBE : 9058A , 2633
MAG. DECL. : 14.600 DEPTH UNITS : METERS
LOG: MH14RC-08_08-26-14_06-17_9058A_02_20.00_225.17_DEVI.log

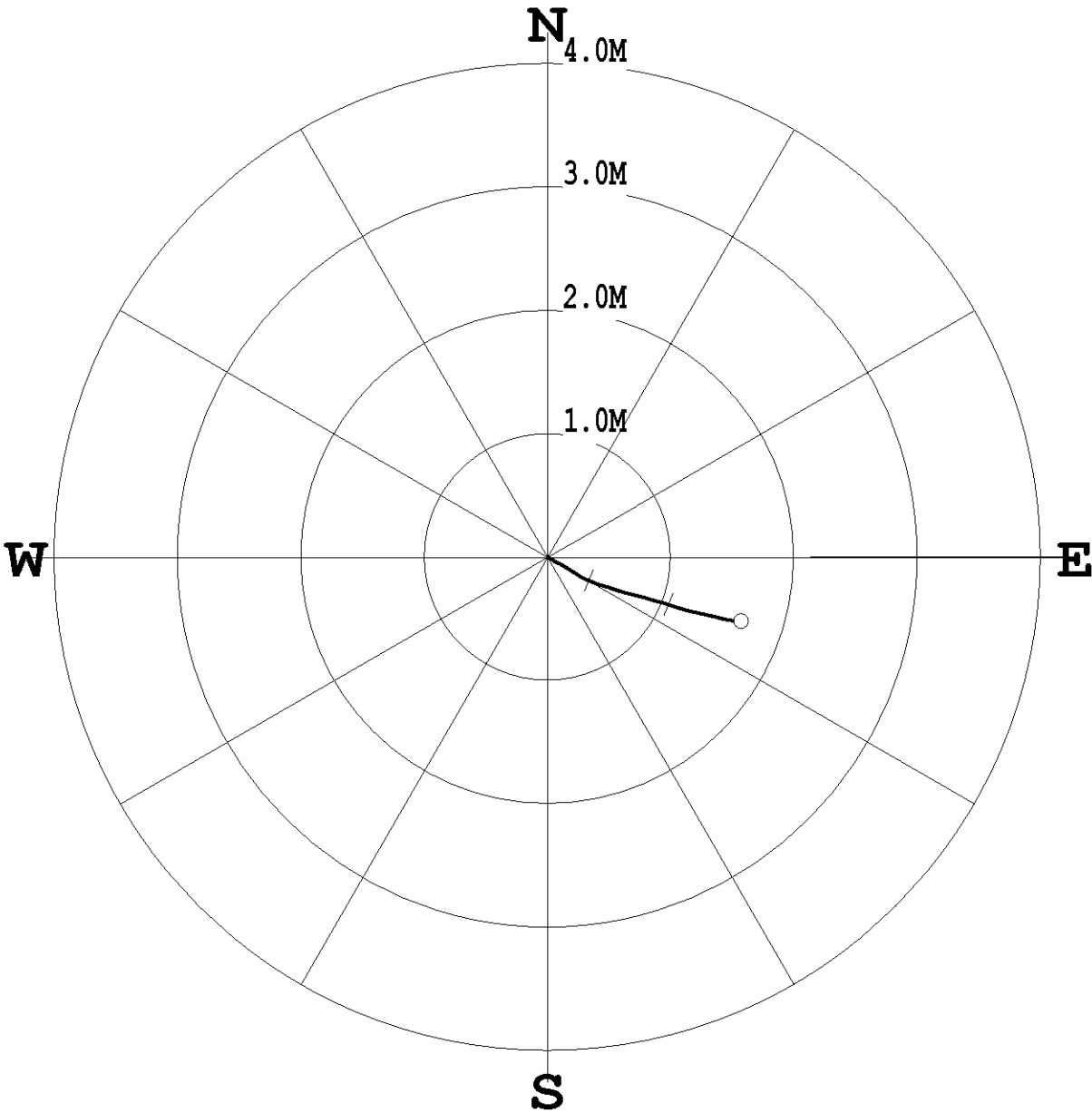
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
20.02	20.02	-0.00	0.00	0.0	129.1	0.7	129.1
21.00	21.00	-0.01	0.01	0.0	113.1	0.8	104.3
22.00	22.00	-0.01	0.03	0.0	108.2	0.8	101.6
23.00	23.00	-0.01	0.04	0.0	102.7	1.1	90.1
24.00	24.00	-0.01	0.06	0.1	98.6	1.3	88.9
25.00	25.00	-0.01	0.09	0.1	95.1	1.7	88.4
26.00	26.00	-0.00	0.12	0.1	90.2	1.9	78.9
27.00	27.00	0.01	0.15	0.1	85.7	2.2	60.5
28.00	28.00	0.02	0.18	0.2	82.4	1.9	70.0
29.00	29.00	0.03	0.21	0.2	81.2	1.8	83.4
30.00	30.00	0.04	0.25	0.2	80.9	2.0	80.3
31.00	31.00	0.05	0.28	0.3	80.8	2.5	79.5
32.00	31.99	0.05	0.32	0.3	80.7	2.2	78.5
33.00	32.99	0.06	0.36	0.4	80.5	2.3	77.1
34.00	33.99	0.07	0.40	0.4	79.8	2.4	66.8
35.00	34.99	0.08	0.44	0.5	79.2	2.5	71.3
36.00	35.99	0.10	0.48	0.5	78.6	2.6	70.7
37.00	36.99	0.11	0.52	0.5	78.1	2.4	70.6
38.00	37.99	0.12	0.56	0.6	77.5	2.3	64.3
39.00	38.99	0.14	0.60	0.6	76.7	2.4	67.8
40.00	39.99	0.16	0.64	0.7	76.3	2.7	65.6
41.00	40.99	0.18	0.68	0.7	75.6	3.0	66.6
42.00	41.99	0.20	0.73	0.8	75.0	3.1	66.4
43.00	42.98	0.22	0.78	0.8	74.5	3.0	66.1
44.00	43.98	0.23	0.83	0.9	74.2	2.7	74.7
45.00	44.98	0.25	0.87	0.9	74.1	3.0	70.7
46.00	45.98	0.26	0.93	1.0	74.1	3.2	74.1
47.00	46.98	0.28	0.98	1.0	73.9	2.8	73.3
48.00	47.98	0.30	1.02	1.1	73.8	2.7	72.5
49.00	48.98	0.31	1.07	1.1	74.0	2.7	79.5
50.00	49.97	0.32	1.12	1.2	74.0	2.8	72.9
51.00	50.97	0.33	1.16	1.2	74.1	2.5	75.9
52.00	51.97	0.34	1.21	1.3	74.3	2.8	80.7
53.00	52.97	0.35	1.25	1.3	74.5	2.9	78.5
54.00	53.97	0.35	1.30	1.4	74.8	2.9	84.2
55.00	54.97	0.36	1.35	1.4	75.1	2.9	81.0
56.00	55.97	0.37	1.41	1.5	75.3	3.0	82.9
57.00	56.97	0.37	1.46	1.5	75.8	3.2	87.3
58.00	57.96	0.37	1.51	1.6	76.1	3.2	92.5
59.00	58.96	0.37	1.57	1.6	76.6	3.4	89.6
60.00	59.96	0.38	1.63	1.7	77.0	3.6	86.5
61.00	60.96	0.38	1.69	1.7	77.5	3.5	91.9
62.00	61.96	0.37	1.75	1.8	77.9	3.5	93.2
63.00	62.96	0.37	1.81	1.9	78.4	3.5	90.8
64.00	63.95	0.37	1.87	1.9	78.8	3.4	92.5
65.00	64.95	0.37	1.94	2.0	79.3	3.8	96.2
66.00	65.95	0.36	2.00	2.0	79.8	4.1	91.6
67.00	66.95	0.36	2.08	2.1	80.2	4.1	89.5
68.00	67.94	0.36	2.15	2.2	80.5	4.1	91.0
69.00	68.94	0.35	2.22	2.2	80.9	4.1	95.4
70.00	69.94	0.35	2.29	2.3	81.4	4.1	92.0
71.00	70.94	0.34	2.36	2.4	81.8	4.1	97.5
72.00	71.93	0.33	2.43	2.5	82.2	3.8	100.0
73.00	72.93	0.33	2.50	2.5	82.5	4.1	93.4
74.00	73.93	0.32	2.58	2.6	82.9	4.5	94.1
75.00	74.93	0.31	2.65	2.7	83.3	4.3	97.5
76.00	75.92	0.30	2.73	2.7	83.7	4.2	96.8
77.00	76.92	0.29	2.80	2.8	84.0	4.2	98.5
78.00	77.92	0.28	2.87	2.9	84.4	4.2	100.1
79.00	78.92	0.27	2.94	3.0	84.8	3.9	102.2
80.00	79.91	0.25	3.01	3.0	85.2	4.4	105.9
81.00	80.91	0.24	3.08	3.1	85.6	3.9	102.1
82.00	81.91	0.22	3.15	3.2	86.0	4.0	106.3
83.00	82.91	0.20	3.22	3.2	86.4	4.0	107.1
84.00	83.90	0.19	3.29	3.3	86.8	4.5	105.6
85.00	84.90	0.17	3.37	3.4	87.2	4.4	104.7
86.00	85.90	0.15	3.44	3.4	87.6	4.4	108.1
87.00	86.89	0.12	3.52	3.5	88.0	4.6	108.1
88.00	87.89	0.10	3.60	3.6	88.4	4.7	109.1
89.00	88.89	0.07	3.67	3.7	88.9	4.8	110.8
90.00	89.88	0.04	3.75	3.8	89.3	4.8	106.7
91.00	90.88	0.02	3.83	3.8	89.7	5.3	109.4
92.00	91.88	-0.01	3.92	3.9	90.2	5.6	108.1
93.00	92.87	-0.04	4.01	4.0	90.6	5.5	106.7
94.00	93.87	-0.07	4.10	4.1	91.0	5.4	107.9
95.00	94.86	-0.10	4.19	4.2	91.4	5.3	106.3
96.00	95.86	-0.13	4.28	4.3	91.8	5.5	106.0
97.00	96.85	-0.17	4.37	4.4	92.2	5.8	109.6
98.00	97.85	-0.20	4.46	4.5	92.6	5.6	111.0
99.00	98.84	-0.23	4.55	4.6	92.9	5.1	112.0
100.00	99.84	-0.27	4.64	4.6	93.3	6.0	110.2
101.00	100.83	-0.31	4.73	4.7	93.7	6.0	114.6
102.00	101.83	-0.35	4.83	4.8	94.2	6.0	117.7
103.00	102.82	-0.40	4.92	4.9	94.7	6.0	116.0
104.00	103.82	-0.45	5.01	5.0	95.1	6.1	116.7
105.00	104.81	-0.50	5.11	5.1	95.5	6.2	115.9
106.00	105.81	-0.54	5.20	5.2	96.0	5.8	120.9
107.00	106.80	-0.60	5.29	5.3	96.5	6.2	120.9
108.00	107.79	-0.65	5.39	5.4	96.9	6.3	120.7
109.00	108.79	-0.71	5.48	5.5	97.4	6.2	118.0
110.00	109.78	-0.77	5.57	5.6	97.8	6.3	122.5
111.00	110.78	-0.83	5.67	5.7	98.3	6.9	121.6
112.00	111.77	-0.89	5.77	5.8	98.7	6.6	120.6
113.00	112.76	-0.94	5.87	5.9	99.1	6.4	120.4
114.00	113.76	-1.00	5.97	6.0	99.5	6.7	114.6
115.00	114.75	-1.06	6.07	6.2	99.9	7.3	121.4
116.00	115.74	-1.12	6.18	6.3	100.3	7.0	120.7
117.00	116.73	-1.19	6.28	6.4	100.7	7.2	118.7
118.00	117.72	-1.25	6.39	6.5	101.1	7.3	120.7
119.00	118.72	-1.31	6.50	6.6	101.4	7.4	117.9
120.00	119.71	-1.38	6.62	6.8	101.8	7.4	121.1
121.00	120.70	-1.45	6.73	6.9	102.1	7.5	120.1
122.00	121.69	-1.51	6.84	7.0	102.5	7.4	121.9
123.00	122.68	-1.58	6.95	7.1	102.8	7.6	123.6
124.00	123.67	-1.66	7.06	7.3	103.2	8.0	122.1
125.00	124.66	-1.74	7.18	7.4	103.6	8.4	127.7
126.00	125.65	-1.83	7.29	7.5	104.1	8.0	124.2
127.00	126.64	-1.91	7.41	7.6	104.5	8.0	129.4
128.00	127.63	-2.00	7.51	7.8	104.9	8.1	128.9
129.00	128.62	-2.09	7.62	7.9	105.3	8.1	129.3
130.00	129.61	-2.18	7.73	8.0	105.8	8.0	131.5
131.00	130.60	-2.28	7.83	8.2	106.2	8.2	132.2
132.00	131.59	-2.37	7.94	8.3	106.6	8.2	132.9
133.00	132.58	-2.47	8.05	8.4	107.1	8.3	132.3
134.00	133.57	-2.57	8.15	8.5	107.5	8.4	132.0
135.00	134.56	-2.67	8.26	8.7	107.9	8.3	131.8
136.00	135.55	-2.77	8.37	8.8	108.3		

PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14RC-09
DATE OF LOG: 09/06/14
PROBE: 9058A 2633



SCALE: 1 M/CM
TRUE DEPTH: 67.93 M
AZIMUTH: 108.3
DISTANCE: 1.7 M
+ = 10 M INCR
○ = BOTTOM OF HOLE



* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

CLIENT : CANAUS HOLE ID. : MH14RC-09
FIELD OFFICE : CENTURY GEO DATE OF LOG : 09/06/14
DATA FROM : N/A PROBE : 9058A , 2633
MAG. DECL. : 14.600 DEPTH UNITS : METERS
LOG: MH14RC-09_09-06-14_12-26_9058A_.02_40.00_68.18_DEVI.log

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
40.02	40.02	-0.00	0.00	0.0	115.0	1.9	115.0
41.00	41.00	-0.01	0.03	0.0	114.8	1.5	116.5
42.00	42.00	-0.03	0.05	0.1	118.5	1.7	125.9
43.00	43.00	-0.04	0.07	0.1	119.9	1.6	115.7
44.00	44.00	-0.05	0.10	0.1	118.0	2.1	112.5
45.00	45.00	-0.08	0.14	0.2	118.7	2.3	121.7
46.00	46.00	-0.10	0.17	0.2	119.4	2.5	121.4
47.00	47.00	-0.12	0.21	0.2	119.8	2.5	122.1
48.00	47.99	-0.14	0.25	0.3	120.2	2.4	121.8
49.00	48.99	-0.17	0.28	0.3	120.3	2.9	116.6
50.00	49.99	-0.19	0.33	0.4	119.5	3.2	112.4
51.00	50.99	-0.21	0.38	0.4	118.7	2.7	112.9
52.00	51.99	-0.23	0.43	0.5	117.9	3.0	106.5
53.00	52.99	-0.24	0.48	0.5	116.5	3.6	106.6
54.00	53.99	-0.26	0.54	0.6	115.7	3.4	109.8
55.00	54.98	-0.28	0.60	0.7	114.9	4.0	108.6
56.00	55.98	-0.30	0.67	0.7	114.0	4.4	101.0
57.00	56.98	-0.32	0.75	0.8	112.9	4.6	106.3
58.00	57.97	-0.34	0.83	0.9	112.3	4.6	108.3
59.00	58.97	-0.36	0.90	1.0	111.8	4.5	103.7
60.00	59.97	-0.38	0.98	1.0	111.4	4.6	108.2
61.00	60.97	-0.41	1.06	1.1	111.1	4.7	107.0
62.00	61.96	-0.43	1.13	1.2	110.8	4.2	104.0
63.00	62.96	-0.45	1.21	1.3	110.4	4.6	103.0
64.00	63.96	-0.47	1.29	1.4	109.9	4.6	104.0
65.00	64.95	-0.48	1.36	1.4	109.5	4.2	105.0
66.00	65.95	-0.50	1.43	1.5	109.3	4.3	102.9
67.00	66.95	-0.51	1.51	1.6	108.8	4.0	97.5
68.00	67.95	-0.52	1.57	1.7	108.3	0.0	0.0
67.98	67.93	-0.52	1.57	1.7	108.3	4.0	95.4

Century
WIRELINE SERVICES

GAMMA-DENSITY (CPS)
IN PIPE
MH14RC-10

COMPANY : CANAUS

WELL : MH14RC-10

FIELD : MICHEL HEAD

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

OTHER SERVICES:
DEV
DEN

PERMANENT DATUM : GL

LOG MEASURED FROM : GL

DRL MEASURED FROM : GL

DATE : 09/04/14

DEPTH DRILLER : 127.70

BIT SIZE : 0.00

LOG TOP : 0.00

LOG BOTTOM : 88.87

CASING LOGGER : 20.95

CASING DRILLER : 21.00

CASING TYPE : SURFACE

BOREHOLE FLUID : H2O

RM TEMPERATURE : N/A

MUD RES : N/A

MUD WEIGHT : 1.00

WITNESSED BY : D THOMPSON

RECORDED BY : R KOEBS

REMARKS 1 : VERTICAL

REMARKS 2 : THROUGH PIPE LOG

ELEVATION KB : N/A

ELEVATION DF : N/A

ELEVATION GL : N/A

RIG NUMBER : RC130

LOGGER TD : 99.00

ARRIVAL TIME : 06:30

DEPARTURE TIME : 11:30

CIRC STOPPED : N/A

DENSITY TP 1:100 MH14RC-10 09/04/14

LOG PARAMETERS

MATRIX DENSITY : 2.65

NEUTRON MATRIX : SANDSTONE

MATRIX DELTA T : 177

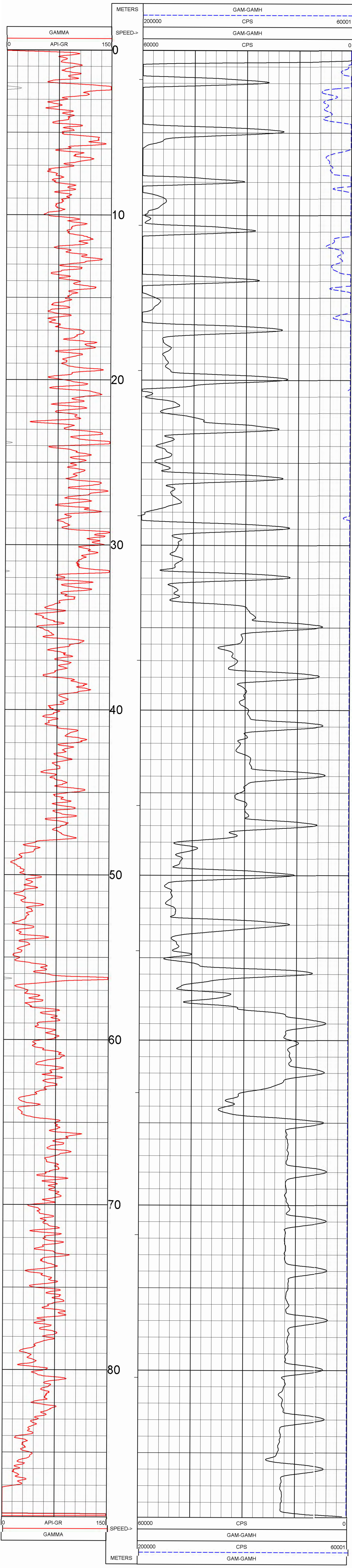
MAGNETIC DECL : 14.60

ELECT. CUTOFF : 99999

BIT SIZE : 127.70

PRESENTATION NAME/DATE = CanAus-9068-100-INPIPE.0 07/12/2014

VERSION = 3.64LG



DENSITY TP 1:100 MH14RC-10 09/04/14

LOG PARAMETERS

MATRIX DENSITY : 2.65

NEUTRON MATRIX : SANDSTONE

MATRIX DELTA T : 177

MAGNETIC DECL : 14.60

ELECT. CUTOFF : 99999

BIT SIZE : 127.70

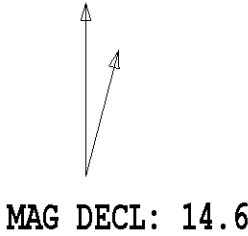
PRESENTATION NAME/DATE = CanAus-9068-100-INPIPE.0 07/12/2014

VERSION = 3.64LG

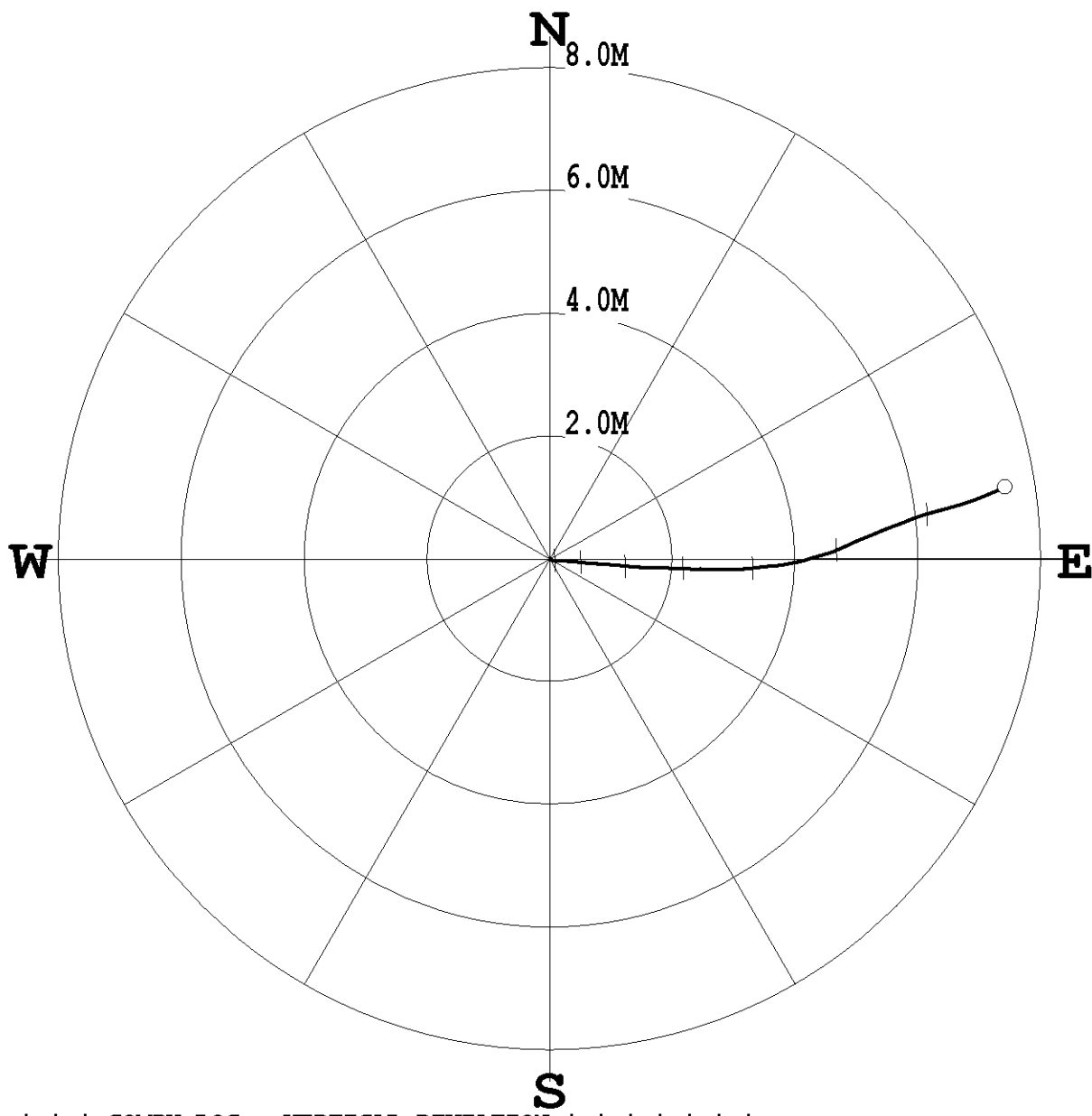
TOOL CALIBRATION MH14RC-10 09/04/14 08:15			
TOOL 9068A TM VERSION 1			
SERIAL NUMBER 640			
DATE	TIME	SENSOR	STANDARD
Jun12,14	09:34:13	GAMMA	0.100 [API-GR]
Jun12,14	09:34:13	GAMMA	545.000 [API-GR]
		RESPONSE	
		1.000	[CPS]
		225.000	[CPS]

PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14RC-10
DATE OF LOG: 09/04/14
PROBE: 9058A 2633



SCALE: 1 M/CM
TRUE DEPTH: 98.20 M
AZIMUTH: 81.1
DISTANCE: 7.5 M
+ = 10 M INCR
○ = BOTTOM OF HOLE



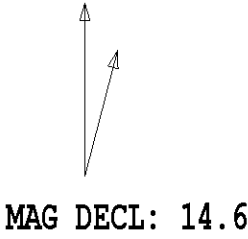
* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

CLIENT : CANAUS
FIELD OFFICE : CENTURY GEO
DATA FROM : N/A
MAG. DECL. : 14.600
LOG: MH14RC-10_09-04-14_10-19_9058A_.02_25.00_98.88_DEVI.log
HOLE ID. : MH14RC-10
DATE OF LOG : 09/04/14
PROBE : 9058A , 2633
DEPTH UNITS : METERS

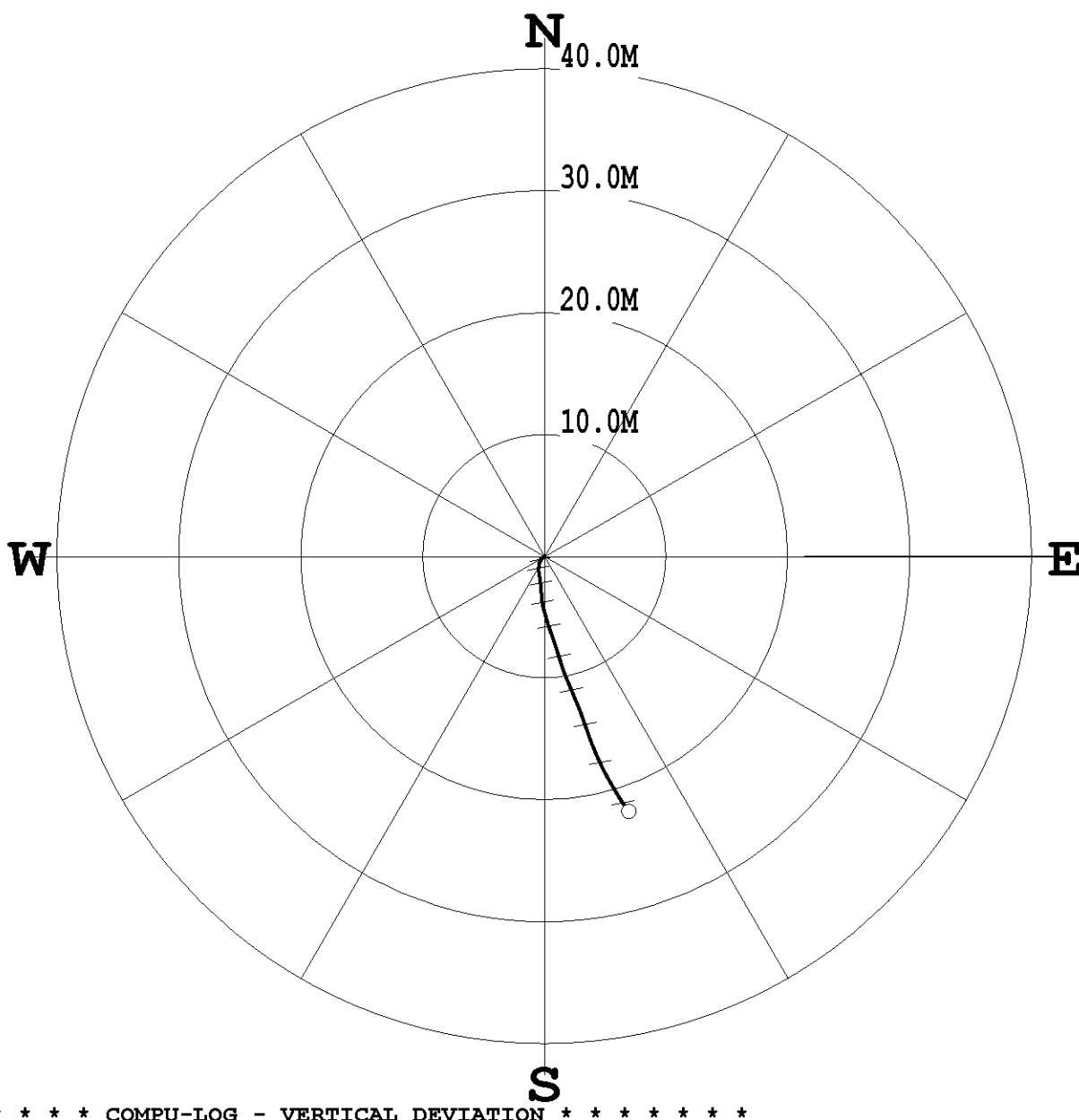
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
25.00	25.00	-0.00	0.00	0.0	95.1	0.6	95.1
26.00	26.00	-0.01	0.01	0.0	117.5	0.9	113.1
27.00	27.00	-0.01	0.03	0.0	118.2	0.9	116.4
28.00	28.00	-0.02	0.04	0.0	115.3	0.8	101.0
29.00	29.00	-0.02	0.06	0.1	111.4	1.1	96.1
30.00	30.00	-0.03	0.08	0.1	108.0	1.2	95.2
31.00	31.00	-0.03	0.11	0.1	105.0	1.7	95.1
32.00	32.00	-0.03	0.14	0.1	102.5	1.6	91.7
33.00	33.00	-0.03	0.17	0.2	100.6	2.1	92.8
34.00	34.00	-0.03	0.21	0.2	98.9	2.5	89.8
35.00	35.00	-0.03	0.25	0.3	97.7	2.2	91.6
36.00	36.00	-0.04	0.29	0.3	97.1	2.2	95.9
37.00	36.99	-0.04	0.34	0.3	96.7	2.6	93.9
38.00	37.99	-0.04	0.39	0.4	96.5	3.2	94.9
39.00	38.99	-0.05	0.44	0.4	96.4	3.4	96.8
40.00	39.99	-0.05	0.50	0.5	96.2	3.6	98.6
41.00	40.99	-0.06	0.57	0.6	96.2	3.5	98.1
42.00	41.99	-0.07	0.63	0.6	96.4	3.5	97.0
43.00	42.98	-0.08	0.69	0.7	96.3	3.8	90.4
44.00	43.98	-0.08	0.76	0.8	95.8	4.4	90.2
45.00	44.98	-0.08	0.84	0.8	95.7	4.3	93.1
46.00	45.98	-0.09	0.91	0.9	95.5	4.5	90.6
47.00	46.97	-0.09	0.99	1.0	95.4	4.6	94.1
48.00	47.97	-0.10	1.07	1.1	95.3	4.6	98.2
49.00	48.97	-0.11	1.15	1.2	95.3	4.4	98.3
50.00	49.96	-0.11	1.23	1.2	95.3	4.8	96.1
51.00	50.96	-0.12	1.31	1.3	95.3	5.1	94.0
52.00	51.96	-0.13	1.40	1.4	95.3	5.1	95.2
53.00	52.95	-0.14	1.49	1.5	95.2	5.4	94.4
54.00	53.95	-0.14	1.58	1.6	95.1	5.5	93.8
55.00	54.94	-0.14	1.67	1.7	94.9	5.3	91.1
56.00	55.94	-0.14	1.77	1.8	94.7	5.7	87.9
57.00	56.93	-0.15	1.87	1.9	94.5	5.5	92.8
58.00	57.93	-0.15	1.96	2.0	94.3	5.5	93.2
59.00	58.92	-0.15	2.06	2.1	94.2	5.4	93.7
60.00	59.92	-0.16	2.16	2.2	94.2	5.8	95.8
61.00	60.91	-0.16	2.26	2.3	94.1	5.9	91.6
62.00	61.91	-0.16	2.36	2.4	94.0	6.2	89.7
63.00	62.90	-0.16	2.47	2.5	93.8	6.4	91.0
64.00	63.90	-0.17	2.58	2.6	93.7	6.2	91.8
65.00	64.89	-0.17	2.69	2.7	93.7	6.3	89.2
66.00	65.88	-0.17	2.81	2.8	93.5	6.6	90.5
67.00	66.88	-0.17	2.93	2.9	93.4	6.4	88.7
68.00	67.87	-0.17	3.04	3.0	93.2	6.4	86.0
69.00	68.86	-0.16	3.16	3.2	92.9	6.9	87.3
70.00	69.85	-0.15	3.28	3.3	92.6	7.3	82.2
71.00	70.85	-0.14	3.41	3.4	92.3	7.4	83.0
72.00	71.84	-0.12	3.54	3.5	91.9	7.5	82.1
73.00	72.83	-0.11	3.68	3.7	91.7	7.6	86.0
74.00	73.82	-0.09	3.81	3.8	91.4	7.7	79.2
75.00	74.81	-0.07	3.94	3.9	91.0	8.0	79.0
76.00	75.80	-0.04	4.08	4.1	90.6	7.8	77.9
77.00	76.79	-0.00	4.21	4.2	90.0	8.0	73.3
78.00	77.78	0.04	4.35	4.4	89.5	8.6	74.2
79.00	78.77	0.08	4.50	4.5	88.9	8.4	75.3
80.00	79.76	0.13	4.63	4.6	88.4	8.2	61.6
81.00	80.75	0.19	4.77	4.8	87.8	8.8	67.5
82.00	81.74	0.25	4.91	4.9	87.1	9.0	61.8
83.00	82.72	0.32	5.06	5.1	86.4	9.1	66.2
84.00	83.71	0.38	5.21	5.2	85.8	9.1	66.2
85.00	84.70	0.44	5.35	5.4	85.3	8.6	62.2
86.00	85.68	0.50	5.50	5.5	84.8	9.4	68.2
87.00	86.67	0.55	5.65	5.7	84.4	8.8	71.0
88.00	87.66	0.61	5.79	5.8	84.0	9.0	69.2
89.00	88.65	0.67	5.93	6.0	83.6	9.1	71.6
90.00	89.63	0.72	6.09	6.1	83.3	9.0	76.6
91.00	90.62	0.76	6.24	6.3	83.1	9.2	73.4
92.00	91.61	0.80	6.39	6.4	82.8	9.4	75.2
93.00	92.60	0.84	6.54	6.6	82.6	9.2	74.0
94.00	93.58	0.89	6.70	6.8	82.4	8.9	74.3
95.00	94.57	0.94	6.85	6.9	82.2	9.0	60.8
96.00	95.56	1.00	7.00	7.1	81.9	9.9	68.9
97.00	96.54	1.06	7.16	7.2	81.6	9.4	68.7
98.00	97.53	1.12	7.31	7.4	81.3	9.4	67.4
98.68	98.20	1.17	7.41	7.5	81.1	9.4	67.1

PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14RC-11
DATE OF LOG: 08/24/14
PROBE: 9058A 2633



SCALE: 5 M/CM
TRUE DEPTH: 204.57 M
AZIMUTH: 161.7
DISTANCE: 22.0 M
+ = 20 M INCR
○ = BOTTOM OF HOLE



* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

CLIENT	: CANAUS	HOLE ID.	: MH14RC-11
FIELD OFFICE	: CENTURY GEO	DATE OF LOG	: 08/24/14
DATA FROM	: N/A	PROBE	: 9058A , 2633
MAG. DECL.	: 14.600	DEPTH UNITS	: METERS
LOG: MH14RC-11_08-24-14_20-53_9058A_02_5.00_206.34_DEVI.log			

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
5.02	5.02	-0.00	-0.00	0.0	234.8	1.0	234.8
6.00	6.00	-0.01	-0.02	0.0	233.7	1.3	232.3
7.00	7.00	-0.02	-0.03	0.0	234.2	1.3	237.2
8.00	8.00	-0.04	-0.05	0.1	235.1	1.5	234.3
9.00	9.00	-0.05	-0.08	0.1	235.7	1.4	235.6
10.00	10.00	-0.07	-0.10	0.1	235.8	1.4	234.0
11.00	11.00	-0.08	-0.12	0.1	236.1	1.6	242.7
12.00	12.00	-0.10	-0.15	0.2	236.4	1.7	237.3
13.00	13.00	-0.11	-0.17	0.2	236.5	1.7	235.8
14.00	14.00	-0.13	-0.19	0.2	236.5	1.7	239.0
15.00	15.00	-0.14	-0.22	0.3	236.6	1.3	229.3
16.00	16.00	-0.15	-0.23	0.3	236.7	1.1	201.7
17.00	17.00	-0.17	-0.26	0.3	236.7	1.9	230.6
18.00	18.00	-0.19	-0.28	0.3	236.4	1.4	241.3
19.00	19.00	-0.20	-0.30	0.4	236.0	1.5	258.0
20.00	19.99	-0.22	-0.32	0.4	235.1	1.5	222.3
21.00	20.99	-0.24	-0.33	0.4	233.9	1.0	211.5
22.00	21.99	-0.26	-0.34	0.4	232.7	1.8	215.4
23.00	22.99	-0.29	-0.36	0.5	231.3	2.0	201.2
24.00	23.99	-0.32	-0.37	0.5	229.5	1.9	201.2
25.00	24.99	-0.35	-0.39	0.5	227.7	1.9	198.0
26.00	25.99	-0.38	-0.40	0.6	225.9	2.0	194.9
27.00	26.99	-0.42	-0.41	0.6	224.3	2.0	197.8
28.00	27.99	-0.45	-0.42	0.6	222.6	2.1	198.1
29.00	28.99	-0.49	-0.43	0.7	221.0	2.3	192.7
30.00	29.99	-0.53	-0.44	0.7	219.4	2.2	191.6
31.00	30.99	-0.57	-0.44	0.7	218.0	2.3	189.0
32.00	31.99	-0.61	-0.45	0.8	216.6	2.3	190.9
33.00	32.99	-0.65	-0.46	0.8	215.3	2.3	190.0
34.00	33.99	-0.69	-0.46	0.8	214.1	2.3	188.2
35.00	34.98	-0.73	-0.47	0.9	212.9	2.4	188.4
36.00	35.98	-0.77	-0.47	0.9	211.6	2.5	187.1
37.00	36.98	-0.81	-0.48	0.9	210.4	2.6	179.7
38.00	37.98	-0.86	-0.48	1.0	209.1	2.8	183.9
39.00	38.98	-0.91	-0.48	1.0	208.1	2.6	179.9
40.00	39.98	-0.95	-0.49	1.1	207.1	2.9	187.9
41.00	40.98	-1.00	-0.49	1.1	206.1	3.0	182.8
42.00	41.98	-1.06	-0.49	1.2	205.1	3.0	179.7
43.00	42.98	-1.11	-0.49	1.2	204.0	2.7	169.2
44.00	43.97	-1.16	-0.49	1.3	202.8	3.2	173.2
45.00	44.97	-1.22	-0.48	1.3	201.6	3.3	170.5
46.00	45.97	-1.28	-0.48	1.4	200.4	3.3	171.5
47.00	46.97	-1.34	-0.47	1.4	199.3	3.4	175.4
48.00	47.97	-1.40	-0.46	1.5	198.3	3.5	172.8
49.00	48.97	-1.46	-0.45	1.5	197.2	3.5	170.4
50.00	49.96	-1.52	-0.44	1.6	196.2	3.6	170.0
51.00	50.96	-1.58	-0.43	1.6	195.2	3.6	168.8
52.00	51.96	-1.64	-0.42	1.7	194.3	3.6	169.4
53.00	52.96	-1.70	-0.41	1.7	193.5	3.7	172.3
54.00	53.96	-1.76	-0.40	1.8	192.7	3.6	172.7
55.00	54.95	-1.83	-0.39	1.9	191.9	3.7	167.5
56.00	55.95	-1.89	-0.38	1.9	191.3	3.7	173.5
57.00	56.95	-1.96	-0.37	2.0	190.7	3.9	171.1
58.00	57.95	-2.02	-0.36	2.1	190.1	4.0	170.6
59.00	58.94	-2.09	-0.35	2.1	189.5	3.9	173.2
60.00	59.94	-2.16	-0.34	2.2	189.0	3.9	172.2
61.00	60.94	-2.23	-0.33	2.3	188.5	4.0	176.6
62.00	61.94	-2.30	-0.32	2.3	188.0	4.1	175.0
63.00	62.93	-2.37	-0.32	2.4	187.6	4.1	176.2
64.00	63.93	-2.44	-0.31	2.5	187.2	4.2	174.4
65.00	64.93	-2.52	-0.30	2.5	186.8	4.2	175.0
66.00	65.93	-2.59	-0.30	2.6	186.5	4.3	175.0
67.00	66.92	-2.67	-0.29	2.7	186.3	4.5	177.2
68.00	67.92	-2.74	-0.29	2.8	186.1	4.3	176.1
69.00	68.92	-2.82	-0.29	2.8	185.9	4.2	177.5
70.00	69.92	-2.89	-0.29	2.9	185.7	4.1	172.4
71.00	70.91	-2.96	-0.28	3.0	185.4	4.5	173.1
72.00	71.91	-3.05	-0.27	3.1	185.1	5.2	177.4
73.00	72.90	-3.14	-0.26	3.1	184.8	4.9	172.3
74.00	73.90	-3.22	-0.26	3.2	184.5	4.8	175.9
75.00	74.90	-3.30	-0.25	3.3	184.3	4.9	174.2
76.00	75.89	-3.39	-0.24	3.4	184.0	4.9	173.8
77.00	76.89	-3.47	-0.23	3.5	183.8	5.2	175.0
78.00	77.89	-3.56	-0.22	3.6	183.5	5.2	174.3
79.00	78.88	-3.65	-0.21	3.7	183.3	5.2	168.6
80.00	79.88	-3.75	-0.19	3.8	183.0	5.3	171.2
81.00	80.87	-3.84	-0.18	3.8	182.7	5.4	170.2
82.00	81.87	-3.93	-0.16	3.9	182.4	5.5	169.6
83.00	82.86	-4.02	-0.14	4.0	182.0	5.5	167.2
84.00	83.86	-4.12	-0.12	4.1	181.7	5.5	167.8
85.00	84.86	-4.21	-0.10	4.2	181.4	5.6	167.4
86.00	85.85	-4.31	-0.08	4.3	181.0	5.6	163.8
87.00	86.85	-4.40	-0.05	4.4	180.7	5.5	165.9
88.00	87.84	-4.49	-0.02	4.5	180.3	5.8	163.5
89.00	88.84	-4.59	0.00	4.6	179.9	5.8	163.8
90.00	89.83	-4.69	0.03	4.7	179.6	5.8	166.3
91.00	90.83	-4.79	0.06	4.8	179.3	5.8	167.2
92.00	91.82	-4.88	0.08	4.9	179.0	5.9	166.1
93.00	92.81	-4.98	0.11	5.0	178.7	6.0	164.9
94.00	93.81	-5.09	0.14	5.1	178.4	5.9	165.9
95.00	94.80	-5.19	0.16	5.2	178.2	6.0	165.3
96.00	95.80	-5.29	0.19	5.3	177.9	6.0	163.0
97.00	96.79	-5.39	0.22	5.4	177.6	5.9	167.0
98.00	97.79	-5.49	0.25	5.5	177.4	5.9	160.7
99.00	98.78	-5.58	0.28	5.6	177.1	5.9	165.3
100.00	99.78	-5.68	0.32	5.7	176.8	6.0	159.8
101.00	100.77	-5.78	0.36	5.8	176.5	6.2	160.4
102.00	101.76	-5.89	0.39	5.9	176.2	6.6	162.1
103.00	102.76	-6.00	0.43	6.0	175.9	6.8	157.5
104.00	103.75	-6.11	0.47	6.1	175.6	6.9	160.2
105.00	104.74	-6.22	0.51	6.2	175.3	7.0	160.0
106.00	105.74	-6.33	0.56	6.4	175.0	7.0	158.2
107.00	106.73	-6.45	0.60	6.5	174.7	7.2	162.8
108.00	107.72	-6.57	0.64	6.6	174.4	7.4	158.0
109.00	108.71	-6.69	0.68	6.7	174.2	7.4	162.9
110.00	109.70	-6.82	0.72	6.9	174.0	7.5	161.8
111.00	110.69	-6.94	0.76	7.0	173.8	7.6	161.7
112.00	111.69	-7.07	0.80	7.1	173.5	7.8	161.8
113.00	112.68	-7.20	0.84	7.2	173.3	7.8	162.8
114.00	113.67	-7.33	0.88	7.4	173.1	7.8	161.0
115.00	114.66	-7.45	0.93	7.5	172.9	7.8	162.0
116.00	115.65	-7.59	0.97	7.6	172.7	8.1	164.0
117.00	116.64	-7.72	1.01	7.8	172.5	8.0	161.4
118.00	117.63	-7.85	1.05	7.9	172.4	8.0	161.3
119.00	118.62	-7.98	1.10	8.1	172.2	8.0	160.8
120.00	119.61	-8.12	1.14	8.2	172.0	8.2	161.5
121.00	120.60	-8.					

IA-DENSITY (CPS)

N

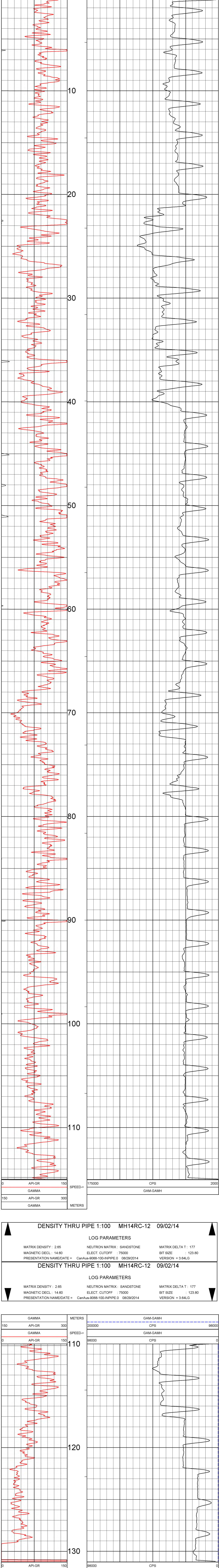
COMPANY		CANALS		OTHER SERVICES:	
				DEN DEV	
WELL	MH14RC-12				
FIELD	MICHEL HEAD				
COUNTRY	CANADA				
PROVINCE	BRITISH COLUMBIA				
SD	N/A				
SECTION	N/A				
OWNERSHIP	N/A				
MANAGE	N/A				
CENSUS NO.	N/A				
UNIQUE WELL ID.	N/A				
PERMAMENT DATUM	GL	ELEVATION K3	N/A		
GL MEASURED FROM GL		ELEVATION OF	N/A		
RL MEASURED FROM GL		ELEVATION GL	N/A		
DATE	09/02/14	RIG NUMBER	130		
DEPTH DRILLER	100.00	LOGGER TD	134.17		
BIT SIZE	123.80	ARRIVAL TIME	18.30		
DOG TOP	-0.47	DEPARTURE TIME	21.00		
DOG BOTTOM	131.00	CIRC STOPPED	N/A		
ASING LOGGER	21.20				
ASING DRILLER	35.00				
ASING TYPE	SURFACE				
OREHOLE FLUID	H2O				
TEMPERATURE	N/A				
UD RES	N/A				
UD WEIGHT	1.00				
TESTED BY	D THOMPSON				
RECORDED BY	B MILLAR				
REMARKS 1	VERTICAL				
REMARKS 2	WATER LEVEL @112.80				

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS.

DENSITY THRU PIPE 1:100 MH14RC-12 09/02/14

IDENTIFICATION NAME/DATE = CanAus-9068-100-INPIPE.0 08/29/2014 VERSION = 3

API-GR	30
GAMMA	
API-GR	15

[illegible][illegible][illegible]

DENSITY THRU PIPE 1:100 MH14RC-12 09/02/14

NEUTRON MATRIX: SANDS

PRESENTATION NAME/D.

us-9068-100-INPIPE.0 08/29/2014

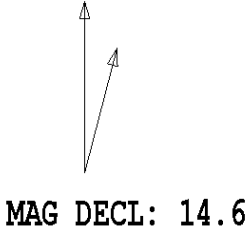
VERSION = 3.64LG

CALIBRATION MH14RC-12 09/02/14 18:50

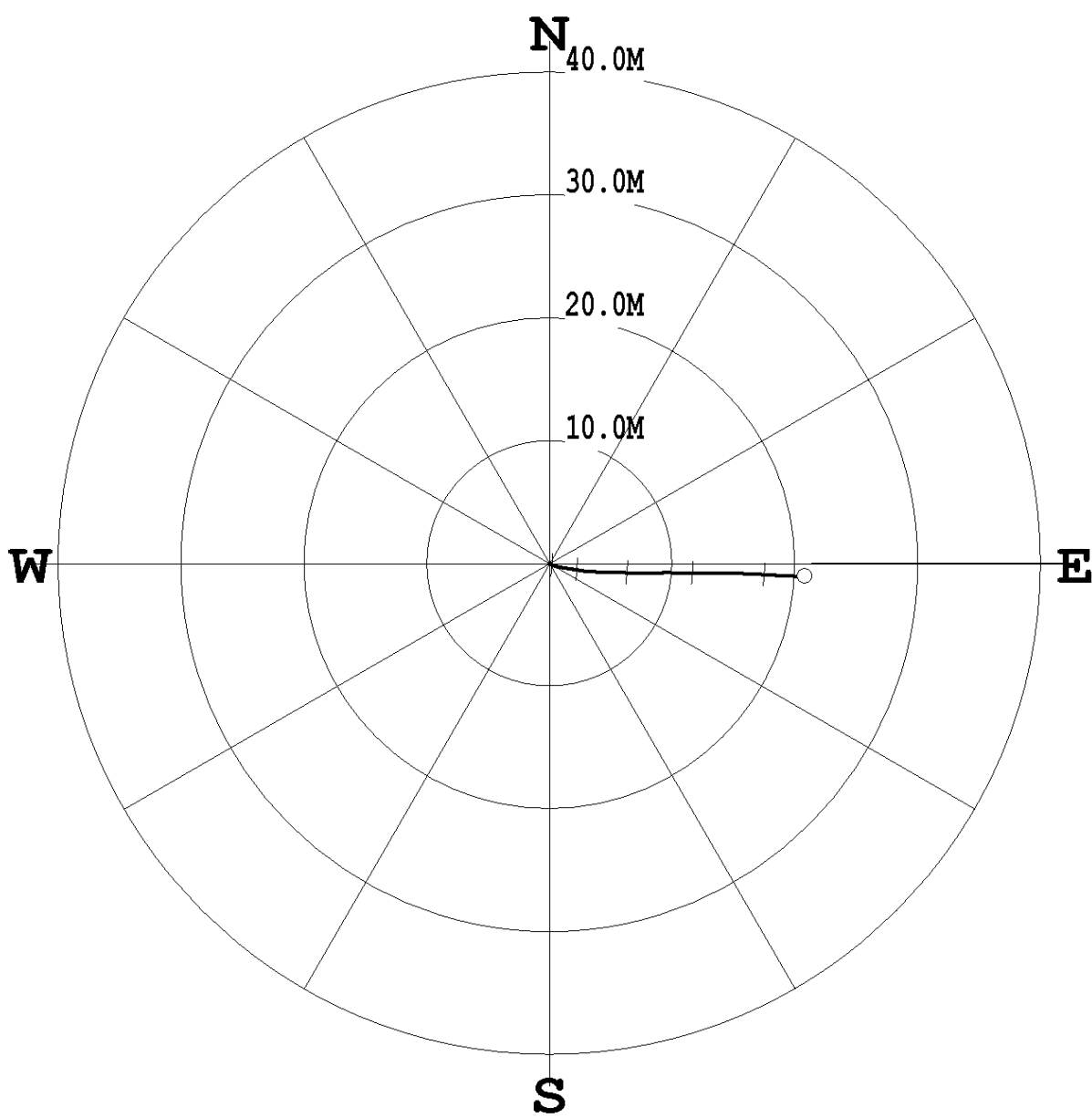
TOOL 9068A		TM VERSION 1			
SERIAL NUMBER 640					
	DATE	TIME	SENSOR	STANDARD	RESPONSE
1	Jun12,14	09:34:13	GAMMA	0.100 [API-GR]	1.000 [CPS]
	Jun12,14	09:34:13	GAMMA	545.000 [API-GR]	225.000 [CPS]

PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14RC-12
DATE OF LOG: 09/02/14
PROBE: 9058A 2633



SCALE: 5 M/CM
TRUE DEPTH: 131.40 M
AZIMUTH: 92.8
DISTANCE: 20.8 M
+ = 20 M INCR
○ = BOTTOM OF HOLE



* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

CLIENT	: CANAUS	HOLE ID.	: MH14RC-12
FIELD OFFICE	: CENTURY	DATE OF LOG	: 09/02/14
DATA FROM	: N/A	PROBE	: 9058A , 2633
MAG. DECL.	: 14.600	DEPTH UNITS	: METERS
LOG: MH14RC-12_09-02-14_20-35_9058A_.02_25.00_134.17_DEVI.log			

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
25.00	25.00	-0.00	-0.00	0.0	249.9	0.2	249.9
26.00	26.00	-0.00	-0.00	0.0	257.8	0.2	235.0
27.00	27.00	-0.00	-0.01	0.0	239.5	0.2	213.2
28.00	28.00	-0.01	-0.01	0.0	230.2	0.2	205.1
29.00	29.00	-0.01	-0.01	0.0	224.2	0.2	196.5
30.00	30.00	-0.01	-0.01	0.0	217.0	0.1	125.9
31.00	31.00	-0.02	-0.01	0.0	203.7	0.3	124.4
32.00	32.00	-0.02	0.00	0.0	178.9	0.4	118.5
33.00	33.00	-0.02	0.01	0.0	154.8	0.6	117.9
34.00	34.00	-0.03	0.02	0.0	141.3	1.0	119.7
35.00	35.00	-0.04	0.04	0.1	133.1	1.5	111.6
36.00	36.00	-0.05	0.06	0.1	128.2	1.3	114.6
37.00	37.00	-0.06	0.08	0.1	125.2	1.6	114.7
38.00	38.00	-0.07	0.11	0.1	123.6	1.8	121.2
39.00	39.00	-0.08	0.13	0.2	122.1	1.6	115.2
40.00	40.00	-0.10	0.17	0.2	120.8	2.3	115.1
41.00	41.00	-0.12	0.21	0.2	119.3	3.0	109.8
42.00	42.00	-0.13	0.25	0.3	118.3	2.6	109.7
43.00	42.99	-0.15	0.30	0.3	116.8	3.0	103.9
44.00	43.99	-0.17	0.35	0.4	115.5	3.5	107.4
45.00	44.99	-0.19	0.41	0.5	114.6	3.8	111.3
46.00	45.99	-0.21	0.48	0.5	113.9	4.0	110.3
47.00	46.99	-0.23	0.55	0.6	113.1	4.2	105.0
48.00	47.98	-0.25	0.62	0.7	112.1	4.7	101.2
49.00	48.98	-0.27	0.71	0.8	111.0	5.4	97.5
50.00	49.97	-0.29	0.80	0.9	109.8	5.5	108.4
51.00	50.97	-0.30	0.90	1.0	108.7	6.0	106.5
52.00	51.96	-0.32	1.01	1.1	107.6	6.5	96.2
53.00	52.96	-0.34	1.13	1.2	106.7	7.1	102.7
54.00	53.95	-0.36	1.26	1.3	105.9	7.8	102.9
55.00	54.94	-0.39	1.40	1.4	105.5	8.3	100.7
56.00	55.92	-0.41	1.55	1.6	104.9	9.1	97.4
57.00	56.91	-0.43	1.70	1.8	104.3	8.8	98.7
58.00	57.90	-0.45	1.86	1.9	103.7	8.9	98.0
59.00	58.89	-0.48	2.01	2.1	103.4	9.4	101.4
60.00	59.87	-0.51	2.18	2.2	103.1	9.6	100.5
61.00	60.86	-0.54	2.34	2.4	102.9	9.9	98.9
62.00	61.84	-0.56	2.52	2.6	102.6	9.7	100.8
63.00	62.83	-0.59	2.68	2.7	102.4	9.7	104.0
64.00	63.81	-0.61	2.86	2.9	102.0	10.8	92.1
65.00	64.80	-0.63	3.05	3.1	101.6	10.9	95.9
66.00	65.78	-0.64	3.24	3.3	101.2	11.5	93.4
67.00	66.76	-0.66	3.43	3.5	100.8	11.3	94.7
68.00	67.74	-0.67	3.63	3.7	100.4	11.4	93.2
69.00	68.72	-0.68	3.82	3.9	100.1	11.4	93.6
70.00	69.70	-0.69	4.02	4.1	99.7	11.6	91.9
71.00	70.68	-0.69	4.22	4.3	99.3	11.4	96.1
72.00	71.66	-0.70	4.43	4.5	99.0	11.9	89.9
73.00	72.64	-0.71	4.63	4.7	98.7	12.1	92.6
74.00	73.61	-0.71	4.85	4.9	98.4	12.3	90.4
75.00	74.59	-0.72	5.06	5.1	98.0	12.5	92.3
76.00	75.57	-0.72	5.27	5.3	97.8	12.3	99.6
77.00	76.54	-0.73	5.50	5.5	97.5	12.8	90.3
78.00	77.52	-0.73	5.71	5.8	97.3	12.5	89.4
79.00	78.49	-0.73	5.94	6.0	97.0	12.9	90.2
80.00	79.47	-0.74	6.16	6.2	96.8	12.9	91.5
81.00	80.44	-0.74	6.38	6.4	96.6	12.9	92.2
82.00	81.41	-0.74	6.61	6.7	96.4	13.4	91.2
83.00	82.39	-0.74	6.85	6.9	96.2	13.5	90.3
84.00	83.36	-0.74	7.08	7.1	96.0	13.4	88.0
85.00	84.33	-0.74	7.33	7.4	95.8	14.2	88.8
86.00	85.30	-0.74	7.57	7.6	95.6	14.3	90.8
87.00	86.27	-0.75	7.82	7.9	95.5	14.0	91.9
88.00	87.24	-0.75	8.07	8.1	95.3	14.5	88.6
89.00	88.20	-0.75	8.32	8.4	95.1	14.9	90.3
90.00	89.17	-0.74	8.58	8.6	95.0	15.1	89.8
91.00	90.14	-0.74	8.84	8.9	94.8	15.0	93.3
92.00	91.10	-0.74	9.10	9.1	94.6	15.4	89.0
93.00	92.06	-0.74	9.37	9.4	94.5	15.7	89.8
94.00	93.03	-0.73	9.63	9.7	94.4	15.3	90.1
95.00	93.99	-0.74	9.90	9.9	94.3	15.6	88.6
96.00	94.95	-0.74	10.17	10.2	94.2	15.9	90.5
97.00	95.92	-0.74	10.44	10.5	94.1	15.6	91.2
98.00	96.88	-0.75	10.71	10.7	94.0	16.0	90.4
99.00	97.84	-0.75	10.99	11.0	93.9	16.3	89.1
100.00	98.80	-0.75	11.26	11.3	93.8	16.1	89.4
101.00	99.76	-0.74	11.54	11.6	93.7	16.1	87.5
102.00	100.72	-0.75	11.81	11.8	93.6	15.9	89.8
103.00	101.69	-0.75	12.09	12.1	93.5	16.0	90.2
104.00	102.65	-0.75	12.37	12.4	93.5	16.1	90.7
105.00	103.61	-0.75	12.64	12.7	93.4	16.2	91.6
106.00	104.57	-0.76	12.92	12.9	93.4	15.7	91.3
107.00	105.53	-0.76	13.19	13.2	93.3	15.9	90.2
108.00	106.49	-0.76	13.46	13.5	93.2	16.0	89.9
109.00	107.45	-0.76	13.74	13.8	93.2	16.4	89.0
110.00	108.41	-0.76	14.03	14.0	93.1	16.5	92.6
111.00	109.37	-0.76	14.31	14.3	93.1	16.4	90.7
112.00	110.33	-0.77	14.59	14.6	93.0	16.7	92.5
113.00	111.29	-0.78	14.88	14.9	93.0	16.3	92.3
114.00	112.25	-0.79	15.16	15.2	93.0	16.6	95.5
115.00	113.21	-0.80	15.44	15.5	93.0	16.4	91.8
116.00	114.17	-0.81	15.73	15.7	93.0	16.6	92.3
117.00	115.12	-0.83	16.01	16.0	93.0	16.6	92.7
118.00	116.08	-0.84	16.29	16.3	93.0	16.4	92.3
119.00	117.04	-0.86	16.58	16.6	93.0	16.5	92.7
120.00	118.00	-0.87	16.86	16.9	92.9	16.5	92.4
121.00	118.96	-0.88	17.14	17.2	92.9	16.4	94.7
122.00	119.92	-0.90	17.42	17.4	93.0	16.3	92.8
123.00	120.88	-0.91	17.70	17.7	93.0	16.4	91.7
124.00	121.84	-0.93	17.98	18.0	93.0	16.2	94.2
125.00	122.80	-0.95	18.26	18.3	93.0	16.0	92.7
126.00	123.76	-0.96	18.54	18.6	93.0	16.0	93.8
127.00	124.72	-0.98	18.81	18.8	93.0	15.8	93.3
128.00	125.69	-0.99	19.08	19.1	93.0	15.9	93.8
129.00	126.65	-1.01	19.36	19.4	93.0	16.1	94.0
130.00	127.61	-1.02	19.64	19.7	93.0	15.8	94.3
131.00	128.57	-1.03	19.92	19.9	93.0	16.2	92.7
132.00	129.53	-1.03	20.20	20.2	92.9	16.2	89.5
133.00	130.49	-1.03	20.48	20.5	92.9	16.5	90.8
134.00	131.44	-1.02	20.76	20.8	92.8	0.0	0.0
133.96	131.40	-1.02	20.76	20.8	92.8	16.8	88.8

Century

WIRELINE SERVICES

GAMMA-DENSITY (CPS)

IN PIPE

MH14RC-13

COMPANY

CAN AUS

WELL

MH14RC-13

FIELD

MICHEL HEAD

COUNTRY

CANADA

PROVINCE

BRITISH COLUMBIA

OTHER SERVICES:

DEN

DEV

SECTION

N/A

TOWNSHIP

N/A

RANGE

N/A

LICENSE NO.

N/A

UNIQUE WELL ID

N/A

PERMANENT DATUM

GL

ELEVATION AB

N/A

LOG MEASURED FROM

GL

ELEVATION DF

N/A

DRL MEASURED FROM

GL

ELEVATION GL

N/A

DATE

08/20/14

DEPTH DRILLER

LOG NUMBER

RC130

DEPTH DRILLER

LOGGER TD

151.00

BIT SIZE

LOGGER TD

127.70

LOG TOP

ARRIVAL TIME

08:00

LOG BOTTOM

DEPARTURE TIME

12:00

CASING LOGGER

CIRC STOPPED

N/A

CASING DRILLER

CASING LOGGER

5.84

CASING TYPE

SURFACE

BOREHOLE FLUID

H2O

RM TEMPERATURE

N/A

MUD RES

N/A

MUD WEIGHT

1.00

WITNESSED BY

D THOMPSON

RECORDED BY

R ROBES

REMARKS 1

VERTICAL

REMARKS 2

THROUGH PIPE LOG

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

DENSITY TP 1:100MH14RC-1308/20/14

LOG PARAMETERS

MATRIX DENSITY : 2.65

NEUTRON MATRIX : SANDSTONE

MATRIX DELTA T : 177

MAGNETIC DECL : 14.60

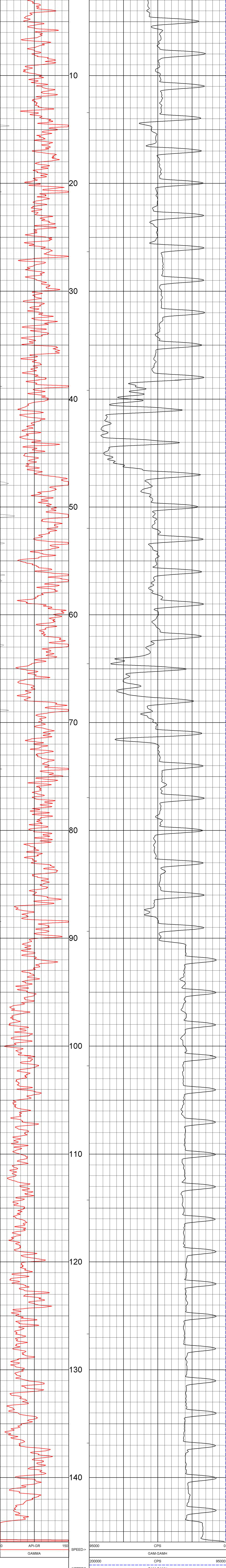
ELECT. CUTOFF : 99999

BIT SIZE : 127.70

PRESENTATION NAME/DATE = CanAus-9068-100-INPIPE.0

07/12/2014

VERSION = 3.64LG



DENSITY TP 1:100MH14RC-1308/20/14

LOG PARAMETERS

MATRIX DENSITY : 2.65

NEUTRON MATRIX : SANDSTONE

MATRIX DELTA T : 177

MAGNETIC DECL : 14.60

ELECT. CUTOFF : 99999

BIT SIZE : 127.70

PRESENTATION NAME/DATE = CanAus-9068-100-INPIPE.0

07/12/2014

VERSION = 3.64LG

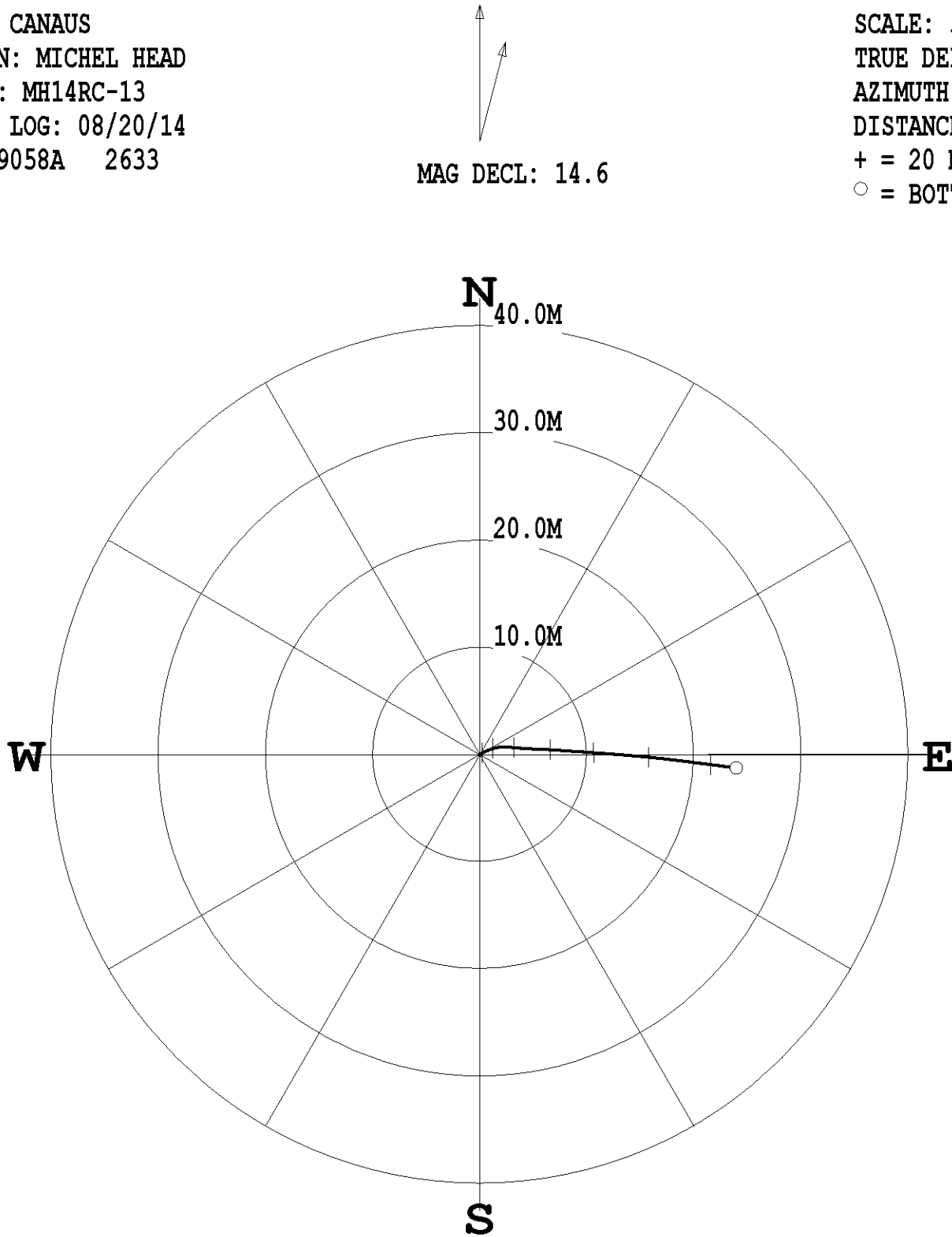
TOOL CALIBRATION MH14RC-13 08/20/14 09:35				RESPONSE	
TOOL 9068A TM VERSION 1				[CPS]	
SERIAL NUMBER 640				[CPS]	
DATE	TIME	SENSOR	STANDARD		
1 Jun12,14	09:34:13	GAMMA	0.100 [API-GR]	1.000	[CPS]
Jun12,14	09:34:13	GAMMA	545.000 [API-GR]	225.000	[CPS]

PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14RC-13
DATE OF LOG: 08/20/14
PROBE: 9058A 2633

MAG DECL: 14.6

SCALE: 5 M/CM
TRUE DEPTH: 147.85 M
AZIMUTH: 93.0
DISTANCE: 24.0 M
+ = 20 M INCR
○ = BOTTOM OF HOLE



* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

CLIENT	: CANAUS	HOLE ID.	: MH14RC-13
FIELD OFFICE	: CENTURY GEO	DATE OF LOG	: 08/20/14
DATA FROM	: N/A	PROBE	: 9058A , 2633
MAG. DECL.	: 14.600	DEPTH UNITS	: METERS
LOG:	MH14RC-13_08-20-14_11-15_9058A_.02_10.00_150.74_DEVI.log		

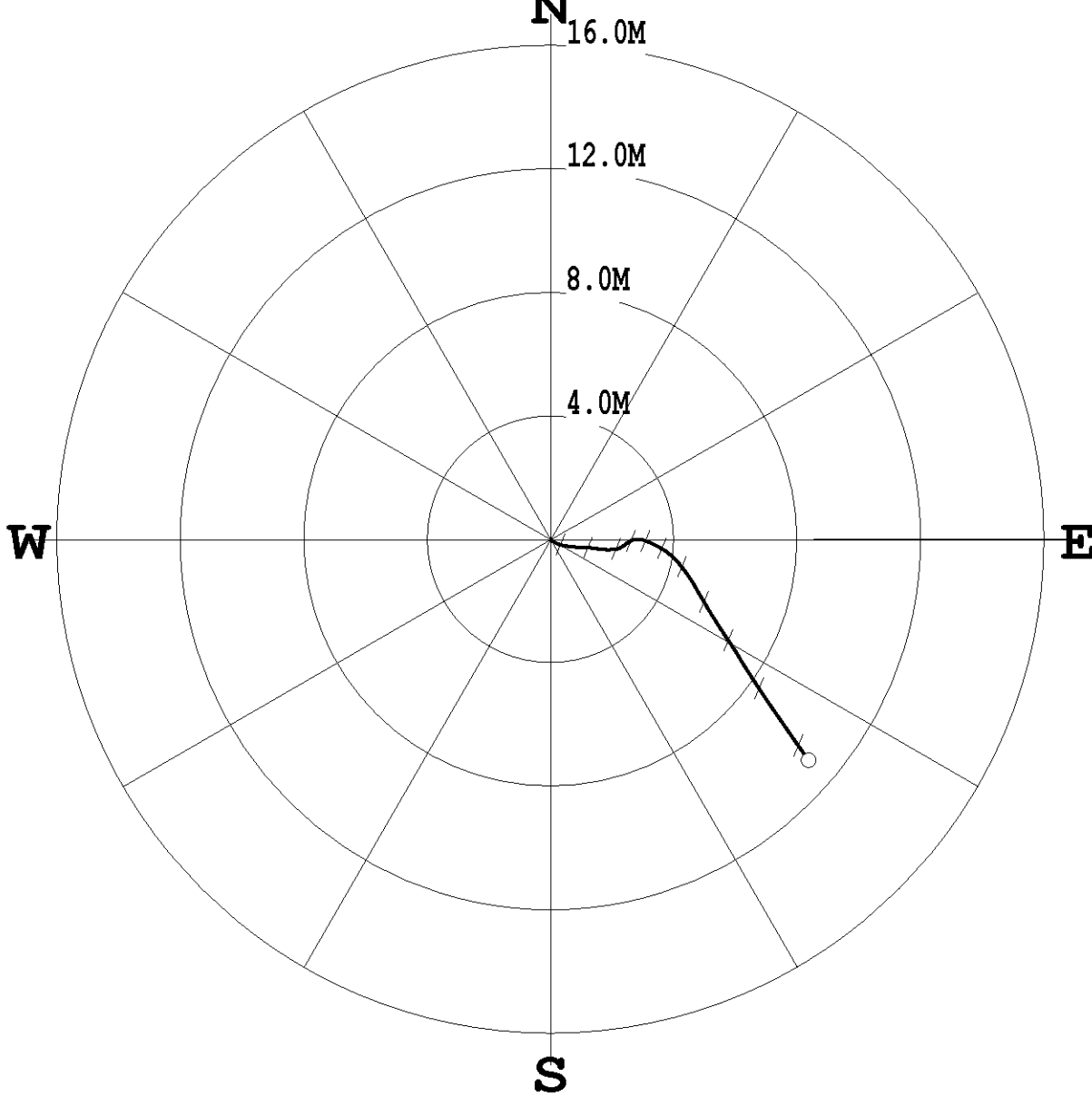
CABLE DEPTH	TRUE DEPTH	NORTH	DEV.	EAST	DEV.	DISTANCE	AZIMUTH	SANG	SANGB
10.02	10.02		0.00		0.00	0.0	47.8	1.2	47.8
11.00	11.00		0.01		0.02	0.0	49.7	1.2	52.1
12.00	12.00		0.03		0.03	0.0	50.2	0.9	44.0
13.00	13.00		0.04		0.05	0.1	49.8	1.2	52.9
14.00	14.00		0.05		0.07	0.1	50.7	1.7	55.3
15.00	15.00		0.07		0.09	0.1	52.1	1.2	55.7
16.00	16.00		0.08		0.10	0.1	52.4	1.3	50.2
17.00	17.00		0.10		0.13	0.2	53.2	1.9	59.0
18.00	18.00		0.11		0.16	0.2	53.9	2.0	59.4
19.00	19.00		0.13		0.19	0.2	54.5	2.3	59.0
20.00	20.00		0.15		0.22	0.3	55.2	2.3	64.2
21.00	21.00		0.17		0.26	0.3	56.1	2.6	61.5
22.00	21.99		0.20		0.30	0.4	56.7	2.6	62.7
23.00	22.99		0.22		0.34	0.4	57.2	3.0	59.3
24.00	23.99		0.24		0.38	0.5	57.8	2.5	62.5
25.00	24.99		0.26		0.43	0.5	58.6	3.1	69.8
26.00	25.99		0.28		0.48	0.6	59.4	2.9	67.1
27.00	26.99		0.30		0.52	0.6	60.2	2.9	67.6
28.00	27.99		0.32		0.57	0.7	60.7	3.0	66.3
29.00	28.99		0.34		0.62	0.7	61.2	3.2	66.6
30.00	29.98		0.36		0.67	0.8	61.6	2.9	66.8
31.00	30.98		0.38		0.72	0.8	62.3	2.9	68.7
32.00	31.98		0.39		0.77	0.9	62.7	3.1	70.7
33.00	32.98		0.41		0.82	0.9	63.1	3.3	68.9
34.00	33.98		0.43		0.87	1.0	63.6	3.3	71.3
35.00	34.98		0.46		0.93	1.0	63.9	3.6	66.9
36.00	35.97		0.47		0.98	1.1	64.2	3.2	70.6
37.00	36.97		0.49		1.04	1.1	64.5	3.5	69.1
38.00	37.97		0.52		1.10	1.2	64.7	3.7	68.7
39.00	38.97		0.54		1.16	1.3	65.0	3.6	70.6
40.00	39.97		0.56		1.21	1.3	65.3	3.7	65.0
41.00	40.96		0.58		1.28	1.4	65.6	3.7	70.2
42.00	41.96		0.60		1.34	1.5	66.0	3.9	74.2
43.00	42.96		0.61		1.41	1.5	66.4	3.9	71.6
44.00	43.96		0.63		1.47	1.6	66.7	3.7	72.7
45.00	44.96		0.65		1.54	1.7	67.1	4.2	81.3
46.00	45.95		0.66		1.61	1.7	67.7	4.9	87.1
47.00	46.95		0.67		1.70	1.8	68.4	5.1	81.9
48.00	47.94		0.69		1.79	1.9	68.9	4.9	82.8
49.00	48.94		0.69		1.87	2.0	69.6	5.2	96.1
50.00	49.94		0.70		1.97	2.1	70.4	5.6	87.7
51.00	50.93		0.71		2.07	2.2	71.2	5.8	87.5
52.00	51.93		0.71		2.17	2.3	72.0	6.1	87.9
53.00	52.92		0.71		2.28	2.4	72.8	6.6	91.4
54.00	53.91		0.71		2.40	2.5	73.6	6.6	91.2
55.00	54.91		0.70		2.51	2.6	74.4	7.0	94.9
56.00	55.90		0.70		2.64	2.7	75.2	7.2	91.7
57.00	56.89		0.69		2.76	2.8	76.0	7.2	94.5
58.00	57.88		0.68		2.89	3.0	76.8	6.9	99.7
59.00	58.87		0.67		3.02	3.1	77.5	7.9	95.2
60.00	59.86		0.65		3.15	3.2	78.3	8.4	94.2
61.00	60.85		0.64		3.30	3.4	79.0	8.6	95.2
62.00	61.84		0.63		3.46	3.5	79.7	9.0	96.3
63.00	62.83		0.61		3.61	3.7	80.4	9.0	95.0
64.00	63.82		0.60		3.77	3.8	81.0	9.0	94.6
65.00	64.80		0.59		3.92	4.0	81.5	9.0	95.7
66.00	65.79		0.57		4.08	4.1	82.0	9.2	97.0
67.00	66.78		0.56		4.24	4.3	82.5	9.3	94.4
68.00	67.77		0.55		4.41	4.4	82.9	9.3	92.9
69.00	68.75		0.54		4.57	4.6	83.3	9.4	94.4
70.00	69.74		0.53		4.73	4.8	83.6	9.6	92.7
71.00	70.72		0.52		4.90	4.9	84.0	9.5	93.9
72.00	71.71		0.51		5.06	5.1	84.3	9.4	94.3
73.00	72.70		0.49		5.23	5.2	84.6	9.9	91.0
74.00	73.68		0.49		5.39	5.4	84.8	9.6	90.1
75.00	74.67		0.49		5.57	5.6	85.0	10.1	89.4
76.00	75.65		0.48		5.74	5.8	85.2	10.3	93.1
77.00	76.64		0.48		5.92	5.9	85.4	10.5	89.4
78.00	77.62		0.47		6.11	6.1	85.6	10.9	91.3
79.00	78.60		0.46		6.30	6.3	85.8	11.5	93.5
80.00	79.58		0.45		6.50	6.5	86.0	11.1	93.1
81.00	80.56		0.44		6.69	6.7	86.2	10.9	97.7
82.00	81.54		0.43		6.88	6.9	86.4	11.0	93.7
83.00	82.53		0.42		7.06	7.1	86.6	10.9	93.8
84.00	83.51		0.40		7.25	7.3	86.8	11.0	95.6
85.00	84.49		0.39		7.45	7.5	87.0	11.2	93.6
86.00	85.47		0.38		7.64	7.6	87.2	11.1	93.9
87.00	86.45		0.36		7.83	7.8	87.4	11.3	94.0
88.00	87.43		0.35		8.03	8.0	87.5	11.3	92.0
89.00	88.41		0.34		8.22	8.2	87.6	11.0	94.6
90.00	89.39		0.33		8.41	8.4	87.8	11.6	94.0
91.00	90.37		0.32		8.61	8.6	87.9	11.4	92.1
92.00	91.36		0.30		8.80	8.8	88.0	11.0	92.6
93.00	92.34		0.29		9.00	9.0	88.2	11.4	97.2
94.00	93.31		0.27		9.20	9.2	88.3	11.9	93.9
95.00	94.29		0.26		9.41	9.4	88.4	11.7	92.6
96.00	95.27		0.25		9.61	9.6	88.5	11.8	95.2
97.00	96.25		0.23		9.81	9.8	88.7	11.6	95.1
98.00	97.23		0.21	10.01	10.0	88.8	11.6	102.8	
99.00	98.21		0.20	10.22	10.2	88.9	12.5	92.5	
100.00	99.18		0.19	10.44	10.4	89.0	12.9	96.4	
101.00	100.16		0.17	10.66	10.7	89.1	12.9	95.4	
102.00	101.14		0.15	10.88	10.9	89.2	12.6	93.7	
103.00	102.11		0.14	11.10	11.1	89.3	12.9	95.0	
104.00	103.08		0.12	11.32	11.3	89.4	13.2	95.2	
105.00	104.06		0.11	11.56	11.6	89.5	13.4	93.2	
106.00	105.03		0.09	11.79	11.8	89.5	14.0	97.2	
107.00	106.00		0.08	12.03	12.0	89.6	14.4	94.5	
108.00	106.97		0.05	12.29	12.3	89.7	14.7	93.4	
109.00	107.94		0.04	12.53	12.5	89.8	14.2	94.4	
110.00	108.91		0.01	12.78	12.8	89.9	14.2	96.5	
111.00	109.87		-0.01	13.03	13.0	90.0	14.6	94.9	
112.00	110.84		-0.03	13.28	13.3	90.1	15.1	93.9	
113.00	111.81								

PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14RC-16
DATE OF LOG: 08/23/14
PROBE: 9058A 2633

MAG DECL: 14.6

SCALE: 2 M/CM
TRUE DEPTH: 224.68 M
AZIMUTH: 130.6
DISTANCE: 11.0 M
+ = 20 M INCR
○ = BOTTOM OF HOLE



* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

CLIENT : CANAUS HOLE ID. : MH14RC-16
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/23/14
DATA FROM : N/A PROBE : 9058A , 2633
MAG. DECL. : 14.600 DEPTH UNITS : METERS
LOG: MH14RC-14_08-23-14_06-48_9058A_.02_5.00_225.31_DEVI.log

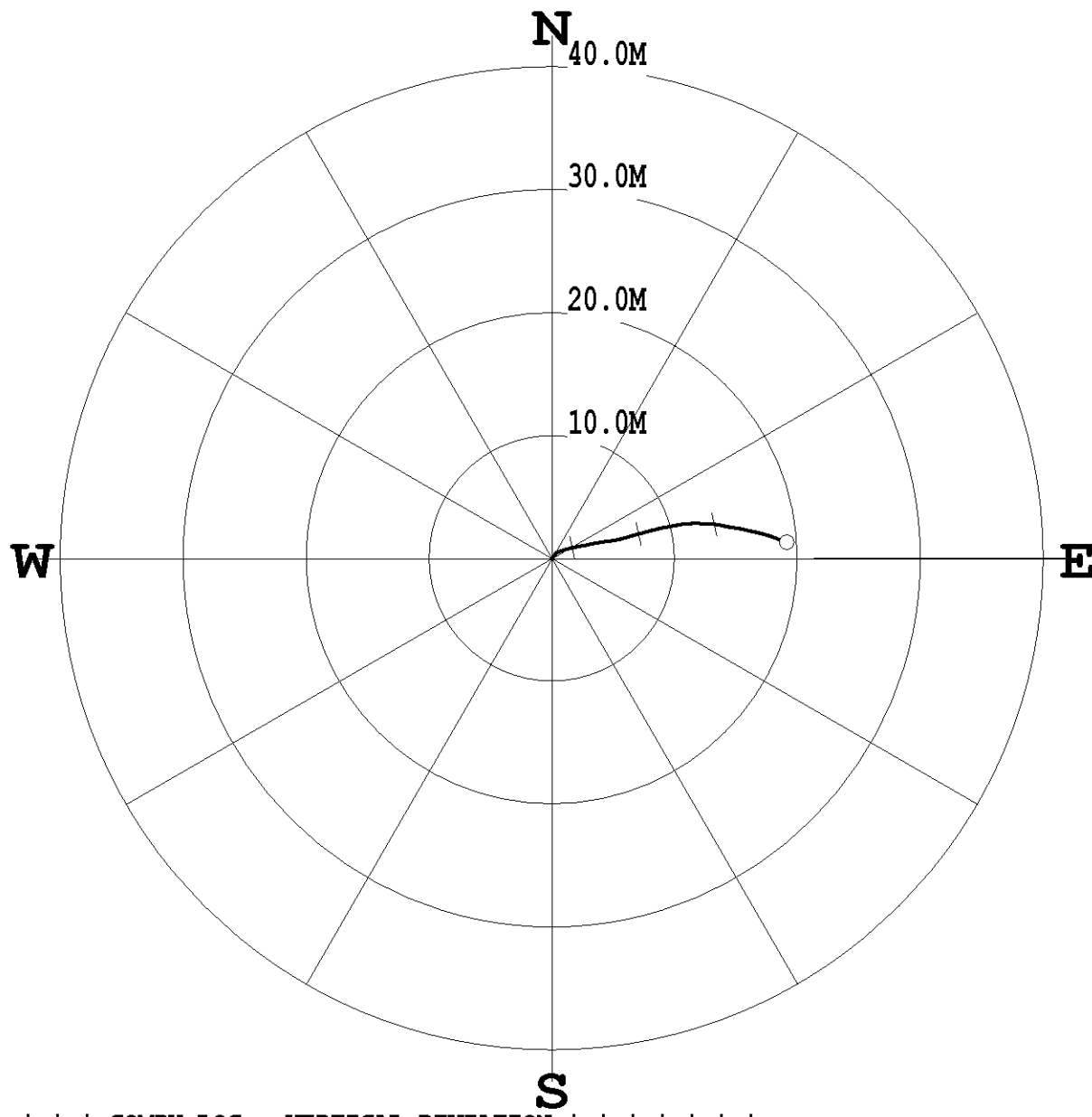
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
5.02	5.02	-0.00	0.00	0.0	125.8	0.6	125.8
6.00	6.00	-0.01	0.01	0.0	126.4	0.9	129.9
7.00	7.00	-0.02	0.02	0.0	126.3	1.0	125.6
8.00	8.00	-0.03	0.04	0.0	125.5	1.0	131.0
9.00	9.00	-0.04	0.05	0.1	127.2	1.3	136.1
10.00	10.00	-0.05	0.07	0.1	128.2	1.2	131.8
11.00	11.00	-0.07	0.08	0.1	128.1	1.0	119.2
12.00	12.00	-0.08	0.10	0.1	126.8	1.6	117.3
13.00	13.00	-0.09	0.13	0.2	125.3	1.7	117.5
14.00	14.00	-0.10	0.15	0.2	124.6	1.6	119.3
15.00	15.00	-0.12	0.18	0.2	123.8	1.5	114.7
16.00	16.00	-0.13	0.20	0.2	122.8	1.6	109.8
17.00	17.00	-0.14	0.22	0.3	121.8	1.7	123.6
18.00	18.00	-0.15	0.25	0.3	120.9	1.5	100.7
19.00	19.00	-0.16	0.28	0.3	119.5	1.9	80.0
20.00	20.00	-0.17	0.31	0.4	118.2	2.0	112.0
21.00	20.99	-0.18	0.34	0.4	117.3	2.0	105.2
22.00	21.99	-0.19	0.38	0.4	116.2	2.3	99.9
23.00	22.99	-0.19	0.42	0.5	114.9	2.6	100.7
24.00	23.99	-0.20	0.46	0.5	113.5	2.8	93.0
25.00	24.99	-0.21	0.51	0.5	112.4	2.5	95.3
26.00	25.99	-0.22	0.55	0.6	111.4	2.6	97.7
27.00	26.99	-0.22	0.59	0.6	110.4	2.4	99.1
28.00	27.99	-0.23	0.63	0.7	109.7	2.2	97.8
29.00	28.99	-0.23	0.68	0.7	108.7	2.9	94.2
30.00	29.99	-0.23	0.73	0.8	107.9	2.6	93.8
31.00	30.99	-0.24	0.77	0.8	107.1	2.6	93.7
32.00	31.98	-0.24	0.82	0.9	106.4	2.8	91.6
33.00	32.98	-0.24	0.86	0.9	105.7	2.7	96.7
34.00	33.98	-0.24	0.91	0.9	104.9	2.8	91.7
35.00	34.98	-0.24	0.96	1.0	104.3	2.7	91.8
36.00	35.98	-0.25	1.01	1.0	103.7	2.7	92.3
37.00	36.98	-0.25	1.05	1.1	103.2	2.8	96.6
38.00	37.98	-0.25	1.10	1.1	102.8	2.9	98.2
39.00	38.98	-0.25	1.15	1.2	102.4	2.8	107.3
40.00	39.98	-0.26	1.20	1.2	102.1	2.9	94.9
41.00	40.97	-0.26	1.25	1.3	101.9	3.0	97.0
42.00	41.97	-0.27	1.30	1.3	101.7	3.0	99.0
43.00	42.97	-0.28	1.35	1.4	101.5	3.0	95.9
44.00	43.97	-0.28	1.40	1.4	101.3	2.8	98.1
45.00	44.97	-0.29	1.45	1.5	101.2	2.9	93.5
46.00	45.97	-0.29	1.50	1.5	101.0	2.9	100.7
47.00	46.97	-0.30	1.55	1.6	100.9	3.0	96.3
48.00	47.96	-0.30	1.60	1.6	100.8	3.1	93.1
49.00	48.96	-0.31	1.66	1.7	100.6	3.0	92.4
50.00	49.96	-0.32	1.71	1.7	100.5	2.9	98.2
51.00	50.96	-0.32	1.75	1.8	100.4	2.4	96.5
52.00	51.96	-0.32	1.79	1.8	100.3	2.2	92.8
53.00	52.96	-0.33	1.83	1.9	100.1	2.5	94.5
54.00	53.96	-0.33	1.87	1.9	99.9	2.5	89.1
55.00	54.96	-0.32	1.92	1.9	99.6	2.4	82.1
56.00	55.96	-0.32	1.96	2.0	99.3	2.4	88.6
57.00	56.96	-0.32	2.00	2.0	99.1	2.3	88.0
58.00	57.96	-0.31	2.04	2.1	98.7	2.3	79.4
59.00	58.95	-0.31	2.08	2.1	98.4	2.3	82.3
60.00	59.95	-0.30	2.11	2.1	98.2	2.0	84.7
61.00	60.95	-0.30	2.14	2.2	98.0	1.8	83.7
62.00	61.95	-0.30	2.17	2.2	97.8	1.6	80.7
63.00	62.95	-0.29	2.20	2.2	97.5	1.3	70.1
64.00	63.95	-0.28	2.22	2.2	97.2	1.5	68.2
65.00	64.95	-0.27	2.25	2.3	96.9	1.7	59.6
66.00	65.95	-0.26	2.27	2.3	96.4	1.7	59.3
67.00	66.95	-0.24	2.29	2.3	96.0	1.5	57.4
68.00	67.95	-0.23	2.32	2.3	95.5	1.5	57.7
69.00	68.95	-0.21	2.34	2.3	95.1	1.4	55.6
70.00	69.95	-0.20	2.36	2.4	94.8	1.4	51.6
71.00	70.95	-0.18	2.38	2.4	94.3	1.5	49.8
72.00	71.95	-0.16	2.40	2.4	93.9	1.7	56.6
73.00	72.95	-0.15	2.42	2.4	93.5	1.7	55.6
74.00	73.95	-0.13	2.45	2.5	93.0	1.7	53.4
75.00	74.95	-0.11	2.47	2.5	92.6	1.6	57.5
76.00	75.95	-0.10	2.50	2.5	92.3	1.6	59.7
77.00	76.95	-0.08	2.52	2.5	91.9	1.6	57.5
78.00	77.95	-0.07	2.54	2.5	91.6	1.5	57.9
79.00	78.95	-0.06	2.57	2.6	91.2	1.6	61.0
80.00	79.95	-0.04	2.59	2.6	90.9	1.6	61.5
81.00	80.95	-0.03	2.62	2.6	90.6	1.7	62.2
82.00	81.95	-0.02	2.64	2.6	90.4	1.5	69.8
83.00	82.94	-0.01	2.67	2.7	90.2	1.4	72.5
84.00	83.94	0.00	2.69	2.7	90.0	1.4	71.0
85.00	84.94	0.00	2.71	2.7	89.9	1.2	77.7
86.00	85.94	0.01	2.73	2.7	89.8	1.3	74.7
87.00	86.94	0.01	2.75	2.8	89.8	1.3	83.0
88.00	87.94	0.01	2.78	2.8	89.8	1.3	87.0
89.00	88.94	0.01	2.80	2.8	89.8	1.4	88.2
90.00	89.94	0.01	2.82	2.8	89.8	1.3	93.8
91.00	90.94	0.01	2.85	2.8	89.8	1.4	94.2
92.00	91.94	0.01	2.87	2.9	89.9	1.4	96.4
93.00	92.94	0.00	2.90	2.9	89.9	1.5	99.2
94.00	93.94	-0.00	2.92	2.9	90.0	1.5	98.5
95.00	94.94	-0.00	2.95	2.9	90.1	1.5	100.6
96.00	95.94	-0.01	2.97	3.0	90.2	1.5	100.9
97.00	96.94	-0.01	3.00	3.0	90.3	1.3	100.1
98.00	97.94	-0.02	3.02	3.0	90.4	1.3	109.2
99.00	98.94	-0.03	3.04	3.0	90.5	1.4	105.2
100.00	99.94	-0.03	3.07	3.1	90.7	1.4	113.5
101.00	100.94	-0.05	3.09	3.1	90.8	1.4	114.2
102.00	101.94	-0.05	3.11	3.1	91.0	1.3	113.8
103.00	102.94	-0.06	3.13	3.1	91.2	1.4	114.3
104.00	103.94	-0.07	3.15	3.2	91.4	1.4	115.1
105.00	104.94	-0.08	3.18	3.2	91.5	1.4	112.9
106.00	105.94	-0.09	3.20	3.2	91.7	1.5	107.1
107.00	106.94	-0.10	3.23	3.2	91.8	1.4	109.6
108.00	107.94	-0.11	3.25	3.3	92.0	1.6	114.6
109.00	108.94	-0.12	3.27	3.3	92.1	1.6	120.0
110.00	109.94	-0.14	3.30	3.3	92.4	1.7	114.3
111.00	110.94	-0.15	3.33	3.3	92.5	1.6	111.5
112.00	111.94	-0.16	3.35	3.4	92.7	1.5	118.4
113.00	112.94	-0.18	3.38	3.4	93.0	1.8	114.5
114.00	113.93	-0.19	3.41	3.4	93.2	1.8	115.3
115.00	114.93	-0.20	3.44	3.4	93.4	1.9	116.9
116.00	115.93	-0.22	3.47	3.5	93.6	1.9	121.7
117.00	116.93	-0.24	3.50	3.5	93.9	2.1	121.3
118.00	117.93	-0.25	3.53	3.5	94.1	2.0	119.7
119.00	118.93	-0.27	3.56	3.6	94.4	2.1	120.1
120.00	119.93	-0.29	3.59	3.6	94.7	2.1	122.0
121.00	120.93	-0.31	3.62	3.6	94.9	2.1	119.5
122.00	121.93	-0.33	3.65	3.7	95.1	2.1	

PLAN VIEW
COMPU-LOG DEVIATION

CLIENT: CANAUS
LOCATION: MICHEL HEAD
HOLE ID: MH14RC-16
DATE OF LOG: 08/21/14
PROBE: 9058A 2633

SCALE: 5 M/CM
TRUE DEPTH: 197.04 M
AZIMUTH: 86.1
DISTANCE: 19.1 M
+ = 50 M INCR
○ = BOTTOM OF HOLE

MAG DECL: 14.6



* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

CLIENT : CANAUS HOLE ID. : MH14RC-16
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/21/14
DATA FROM : N/A PROBE : 9058A , 2633
MAG. DECL. : 14.600 DEPTH UNITS : METERS
LOG: MH14RC-16_08-21-14_22-19_9058A_02_14.50_198.40_DEVI.log

CABLE DEPTH	TRUE DEPTH	NORTH	DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
14.52	14.52	0.00	0.00	0.00	0.0	27.9	0.9	27.9
15.50	15.50	0.01	0.01	0.01	0.0	32.1	1.1	40.8
16.50	16.50	0.03	0.02	0.02	0.0	34.0	1.2	31.8
17.50	17.50	0.05	0.03	0.03	0.1	31.8	1.2	13.1
18.50	18.50	0.08	0.04	0.04	0.1	30.5	2.0	21.6
19.50	19.50	0.10	0.06	0.06	0.1	30.2	1.6	24.3
20.50	20.50	0.13	0.08	0.08	0.2	31.6	2.0	41.5
21.50	21.50	0.16	0.10	0.10	0.2	32.0	2.1	28.3
22.50	22.50	0.19	0.12	0.12	0.2	32.3	2.1	37.5
23.50	23.50	0.22	0.14	0.14	0.3	33.0	2.3	38.1
24.50	24.49	0.25	0.17	0.17	0.3	33.8	2.8	47.3
25.50	25.49	0.29	0.20	0.20	0.4	34.9	2.8	46.3
26.50	26.49	0.33	0.23	0.23	0.4	35.4	3.1	39.5
27.50	27.49	0.37	0.27	0.27	0.5	35.7	3.0	40.4
28.50	28.49	0.41	0.30	0.30	0.5	36.3	3.2	47.8
29.50	29.49	0.45	0.34	0.34	0.6	37.5	3.2	49.7
30.50	30.49	0.48	0.38	0.38	0.6	38.7	3.1	53.0
31.50	31.49	0.51	0.43	0.43	0.7	39.9	2.9	61.2
32.50	32.48	0.53	0.47	0.47	0.7	41.4	3.2	69.3
33.50	33.48	0.56	0.52	0.52	0.8	43.2	3.4	63.4
34.50	34.48	0.58	0.58	0.58	0.8	44.9	3.5	71.4
35.50	35.48	0.60	0.63	0.63	0.9	46.6	3.5	70.0
36.50	36.48	0.62	0.69	0.69	0.9	47.9	3.3	65.1
37.50	37.47	0.64	0.75	0.75	1.0	49.5	3.8	71.9
38.50	38.47	0.66	0.82	0.82	1.1	50.8	4.1	70.4
39.50	39.47	0.69	0.89	0.89	1.1	52.2	4.1	71.6
40.50	40.47	0.71	0.95	0.95	1.2	53.4	3.9	77.0
41.50	41.47	0.72	1.02	1.02	1.2	54.5	4.0	72.5
42.50	42.46	0.74	1.08	1.08	1.3	55.5	3.3	75.5
43.50	43.46	0.76	1.15	1.15	1.4	56.4	4.3	75.6
44.50	44.46	0.78	1.22	1.22	1.5	57.3	3.9	74.9
45.50	45.46	0.80	1.29	1.29	1.5	58.1	3.8	76.6
46.50	46.45	0.82	1.36	1.36	1.6	59.0	4.7	75.5
47.50	47.45	0.84	1.44	1.44	1.7	59.8	4.9	77.4
48.50	48.45	0.86	1.52	1.52	1.7	60.6	4.8	75.3
49.50	49.44	0.88	1.60	1.60	1.8	61.2	4.3	77.9
50.50	50.44	0.90	1.68	1.68	1.9	61.9	4.8	77.9
51.50	51.44	0.91	1.76	1.76	2.0	62.5	5.1	71.1
52.50	52.43	0.93	1.84	1.84	2.1	63.2	5.2	74.4
53.50	53.43	0.95	1.94	1.94	2.2	63.9	5.5	76.6
54.50	54.42	0.97	2.03	2.03	2.3	64.5	5.7	76.5
55.50	55.42	0.98	2.13	2.13	2.3	65.2	5.8	82.6
56.50	56.41	1.00	2.23	2.23	2.4	65.9	5.9	78.8
57.50	57.41	1.02	2.33	2.33	2.5	66.4	5.9	79.0
58.50	58.40	1.04	2.43	2.43	2.6	66.9	5.9	78.4
59.50	59.40	1.05	2.53	2.53	2.7	67.4	6.1	80.1
60.50	60.39	1.07	2.64	2.64	2.8	67.9	5.7	75.1
61.50	61.39	1.09	2.73	2.73	2.9	68.2	5.7	78.1
62.50	62.38	1.11	2.84	2.84	3.0	68.6	6.0	79.6
63.50	63.38	1.13	2.93	2.93	3.1	68.9	6.0	76.9
64.50	64.37	1.15	3.04	3.04	3.3	69.2	6.2	81.0
65.50	65.36	1.18	3.14	3.14	3.4	69.5	5.8	77.1
66.50	66.36	1.20	3.24	3.24	3.5	69.7	5.8	77.6
67.50	67.35	1.22	3.34	3.34	3.6	69.9	5.7	78.5
68.50	68.35	1.24	3.44	3.44	3.7	70.1	5.6	81.2
69.50	69.34	1.26	3.53	3.53	3.8	70.4	5.6	76.2
70.50	70.34	1.28	3.63	3.63	3.8	70.6	5.8	78.8
71.50	71.33	1.30	3.73	3.73	3.9	70.8	5.6	81.6
72.50	72.33	1.31	3.83	3.83	4.0	71.1	6.0	78.6
73.50	73.32	1.33	3.93	3.93	4.1	71.3	6.1	79.1
74.50	74.32	1.34	4.03	4.03	4.3	71.6	6.2	83.1
75.50	75.31	1.36	4.14	4.14	4.4	71.8	6.2	82.4
76.50	76.31	1.37	4.25	4.25	4.5	72.1	6.2	82.8
77.50	77.30	1.39	4.36	4.36	4.6	72.3	6.3	81.4
78.50	78.29	1.40	4.46	4.46	4.7	72.6	6.2	77.6
79.50	79.29	1.41	4.58	4.58	4.8	72.8	6.7	82.9
80.50	80.28	1.43	4.69	4.69	4.9	73.0	6.4	81.5
81.50	81.27	1.45	4.80	4.80	5.0	73.2	6.7	82.4
82.50	82.27	1.47	4.92	4.92	5.1	73.4	6.8	79.0
83.50	83.26	1.48	5.04	5.04	5.3	73.6	7.1	81.1
84.50	84.25	1.50	5.16	5.16	5.4	73.7	7.1	75.3
85.50	85.25	1.53	5.27	5.27	5.5	73.9	6.8	80.0
86.50	86.24	1.55	5.40	5.40	5.6	74.0	7.2	78.6
87.50	87.23	1.58	5.52	5.52	5.7	74.0	7.3	76.4
88.50	88.22	1.61	5.64	5.64	5.9	74.1	7.0	78.7
89.50	89.22	1.64	5.76	5.76	6.0	74.1	6.7	71.5
90.50	90.21	1.67	5.87	5.87	6.1	74.1	6.9	74.4
91.50	91.20	1.71	5.99	5.99	6.2	74.1	7.2	73.1
92.50	92.19	1.75	6.11	6.11	6.4	74.1	7.7	74.4
93.50	93.18	1.78	6.24	6.24	6.5	74.1	7.2	73.5
94.50	94.18	1.82	6.36	6.36	6.6	74.0	7.0	72.9
95.50	95.17	1.85	6.47	6.47	6.7	74.0	6.9	74.1
96.50	96.16	1.89	6.59	6.59	6.9	74.0	6.8	77.1
97.50	97.15	1.92	6.70	6.70	7.0	74.0	7.0	72.9
98.50	98.15	1.95	6.82	6.82	7.1	74.0	6.9	71.4
99.50	99.14	1.99	6.93	6.93	7.2	74.0	7.2	73.3
100.50	100.13	2.02	7.05	7.05	7.3	74.0	6.9	77.1
101.50	101.12	2.05	7.17	7.17	7.5	74.1	7.1	76.2
102.50	102.12	2.07	7.29	7.29	7.6	74.1	7.0	77.9
103.50	103.11	2.10	7.40	7.40	7.7	74.1	7.2	73.0
104.50	104.10	2.14	7.52	7.52	7.8	74.1	6.7	73.1
105.50	105.10	2.17	7.64	7.64	7.9	74.1	6.9	77.8
106.50	106.09	2.20	7.76	7.76	8.1	74.2	7.1	76.3
107.50	107.08	2.23	7.88	7.88	8.2	74.2	7.1	75.9
108.50	108.07	2.26	8.00	8.00	8.3	74.2	7.2	74.6
109.50	109.06	2.29	8.12	8.12	8.4	74.2	7.0	75.3
110.50	110.06	2.33	8.24	8.24	8.6	74.2	7.2	75.3
111.50	111.05	2.36	8.36	8.36	8.7	74.3	7.3	70.8
112.50	112.04	2.39	8.49	8.49	8.8	74.3	7.6	74.8
113.50	113.03	2.42	8.61	8.61	8.9	74.3	7.3	77.2
114.50	114.02	2.45	8.73	8.73	9.1	74.3	7.3	77.1
115.50	115.02	2.48	8.86	8.86	9.2	74.4	7.2	77.0
116.50	116.01	2.50	8.98	8.98	9.3	74.4	7.3	79.0
117.50	117.00	2.53	9.11	9.11	9.5	74.5	7.5	78.7
118.50	117.99	2.55	9.24	9.24	9.6	74.6	7.5	81.2
119.50	118.98	2.57	9.36	9.36	9.7	74.6	7.2	80.2
120.50	119.97	2.60	9.49	9.49	9.8	74.7	7.5	78.4
121.50	120.97	2.62	9.62	9.62	10.0	74.8	8.0	80.4
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			DH Collar Info			DH survey info			Sample Manifest Information											
Year	Hole Type	Hole ID	Easting (Collar)	Northing (Collar)	Elevation (Collar)	TD (m)	Azimuth	Dip	Sample Tag No Information			Recovered Length (m)	Rough Corrected From (m)	Geophysical Log Depths To (m)	Thickness (m)	Sample Mass (kg)	Sample manifest Composite No.	Samples shipped for analysis? blank = shipped, n/s = not shipped	Date of Shipment	Date Received by Lab
2014	HQ	MH14HQ-01	664909.809	5487383.84	2158.28852	145	45	-70	12-Sep-14	R340343	105.25	105.55	0.55	105	105.3	0.3		N/S		
2014	HQ	MH14HQ-01							12-Sep-14	R340344	105.55	106.65	0.46	105.3	106.2	0.9		N/S		
2014	HQ	MH14HQ-01							12-Sep-14	R340345	106.65	106.95	0.3	106.2	106.5	0.3		N/S		
2014	HQ	MH14HQ-03	665033.8	5486189.85	2255.03571	166.86	180	-70	15-Sep-14	R340346	145.2	145.5	0.3	145.66	145.96	0.3	1.2	N/S		
2014	HQ	MH14HQ-03							15-Sep-14	R340347	145.5	147.21	0.84	145.96	146.8	0.84	3.2	N/S		
2014	HQ	MH14HQ-03							15-Sep-14	R340348	147.21	147.51	0.3	146.8	147.1	0.3	1	N/S		
2014	HQ	MH14HQ-04	664917.444	5486932.51	2114.04103	151.4	105	-70	07-Sep-14	R340340	75.6	76.15	0.55	76.19	76.74	0.55	2.8	N/S		
2014	HQ	MH14HQ-04							07-Sep-14	R340341	76.15	76.75	0.46	76.74	77.34	0.6	2.2	N/S		
2014	HQ	MH14HQ-04							07-Sep-14	R340342	76.75	77.05	0.3	77.34	77.64	0.3	2.6	N/S		
2014	CC	MH14CC-01	664912.652	5487379.88	2158.694	62.37	90	-90	16-Sep-14	R341301	32.77	33.1	0.3	32.68	32.98	0.3	14.6		22-Sep-14	
2014	CC	MH14CC-01							16-Sep-14	R341302	33.1	34.48	1.01	32.98		2.57	26.2		22-Sep-14	
2014	CC	MH14CC-01							16-Sep-14	R341303	34.48	35.53	1.05		35.55		28		22-Sep-14	
2014	CC	MH14CC-01							16-Sep-14	R341304	35.53	36.22	0.39	35.55	35.98	0.43	9.8		22-Sep-14	
2014	CC	MH14CC-01							16-Sep-14	R341305	36.22	37.22	1	35.98	37.04	1.06	34.2		22-Sep-14	
2014	CC	MH14CC-01							16-Sep-14	R341306	37.22	38.07	0.78	37.04		3.04	21.2		22-Sep-14	
2014	CC	MH14CC-01							16-Sep-14	R341307	38.07	39.24	1				30.4		22-Sep-14	
2014	CC	MH14CC-01							16-Sep-14	R341308	39.24	40.48	1.12		40.08		25.6		22-Sep-14	
2014	CC	MH14CC-01							16-Sep-14	R341309	40.48	40.78	0.3	40.08	40.38	0.3	13.2		22-Sep-14	
2014	CC	MH14CC-01							16-Sep-14	R341310	58.08	58.38	0.3	58.1	58.4	0.3	11		22-Sep-14	
2014	CC	MH14CC-01							17-Sep-14	R341311	58.38	59.68	1	58.4		2.9	22.8		22-Sep-14	
2014	CC	MH14CC-01							17-Sep-14	R341312	59.68	61.63	0.78		61.3		23		22-Sep-14	
2014	CC	MH14CC-01							17-Sep-14	R341313	61.63	62.08	0.25	61.3	61.55	0.25	10.2		22-Sep-14	
2014	CC	MH14CC-02	665068.23	5485762.93	2178.78175	81.26	90	-90	13-Sep-14	R339101	24.35	24.65	0.3	23.98	24.28	0.3	11		22-Sep-14	
2014	CC	MH14CC-02							13-Sep-14	R339102	24.65	25.64	1	24.28	25.28	1	24.4		22-Sep-14	
2014	CC	MH14CC-02							13-Sep-14	R339103	25.64	26.64	1	25.28	26.28	1	26		22-Sep-14	
2014	CC	MH14CC-02							13-Sep-14	R339104	26.64	27.43	0.68	26.28	26.96	0.68	14.4		22-Sep-14	
2014	CC	MH14CC-02							13-Sep-14	R339105	27.43	28.93	1.26	26.96	28.34	1.38	29.2		22-Sep-14	
2014	CC	MH14CC-02							13-Sep-14	R339106	28.93	29.33	0.4	28.34	28.85	0.51	18.4		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339107	29.33	29.82	0.49	28.85	29.54	0.69	18.2		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339108	29.82	30.85	1	29.54	30.54	1	28.8		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339109	30.85	31.43	0.45	30.54	30.92	0.38	10		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339110	31.43	31.93	0.5	30.92	31.45	0.53	20.6		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339111	31.93	32.61	0.68	31.45	32.38	0.93	24.8		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339112	32.61	33.66	1	32.38	33.38	1	24.2		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339113	33.66	34.35	0.69	33.38	34.04	0.66	15		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339114	34.35	35.35	1	34.04	35.04	1	24.8		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339115	35.35	36.55	1	35.04	36.04	1	21.6		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339116	36.55	37.58	1	36.04	37.04	1	26.2		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339117	37.58	38.58	1	37.04	38.04	1	24.4		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339118	38.58	38.93	0.45	38.04	38.49	0.45	9.4		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339119	38.93	39.93	1	38.49	39.49	1	26.8		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339120	39.93	40.94	1	39.49	40.49	1	17.2		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339121	40.94	42.01	0.93	40.49	41.64	1.15	22		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339122	42.01	43.01	1	41.64	42.64	1	23.4		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339123	43.01	43.43	0.27	42.64	42.91	0.27	7.4		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339124	43.43	44.43	1	42.91	43.91	1	21.6		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339125	44.43	45.28	0.94	43.91	44.85	0.94	23.4		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339126	45.28	46.43	1	44.85	45.85	1	24		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339127	46.43	47.93	1.2	45.85	47.05	1.2	24.6		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339128	47.93	48.88	0.95	47.05	48	0.95	21		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339129	48.88	49.43	0.47	48	48.47	0.47	13.4		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339130	49.43	49.85	0.42	48.47	49.44	0.97	10.2		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339131	49.85	50.15	0.3	49.44	49.74	0.3	10		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339151	71	72	1	70	71.06	1.06	25.8		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339152	72	73.16	1.1	71.06	72.06	1	26.4		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339153	73.16	74.29	1	72.06	73.06	1	24.2		22-Sep-14	
2014	CC	MH14CC-02							14-Sep-14	R339154	74.29	75.14	0.85	73.06	73.85	0.79	25.8		22-Sep-14	
2014	CC	MH14CC-02							15-Sep-14	R339155	75.14	76.19	1	73.85			24		22-Sep-14	
2014	CC	MH14CC-02							15-Sep-14	R339156	76.19	76.81	0.62				16.4		22-Sep-14	
2014	CC	MH14CC-02							15-Sep-14	R339157	76.81	77.71	1				25		22-Sep-14	
2014	CC	MH14CC-02							15-Sep-14	R339158	77.71	78.26	0.55		77.42		13.6		22-Sep-14	
2014	CC	MH14CC-02							15-Sep-14	R339159	78.26	78.4	0.21	77.42	77.5	0.08	5.8		22-Sep-14	
2014	CC	MH14CC-02							15-Sep-14	R339160	78.4	79.32	0.92	77.5	78.48	0.98	22		22-Sep-14	
2014	CC	MH14CC-02							15-Sep-14	R339161	79.32	79.62	0.3	78.48	78.78	0.3	11		22-Sep-14	

			DH Collar info			DH survey info			Sample Manifest Information												
Year	Hole Type	Hole ID	Easting (Collar)	Northing (Collar)	Elevation (Collar)	TD (m)	Azimuth	Dip	Sample Tag No Information			Recovered Length (m)	Rough Corrected Geophysical Log Depths			Sample Mass (kg)	Sample manifest Composite No.	Samples shipped for analysis? blank = shipped, n/s = not shipped	Date of Shipment	Date Received by Lab	
									Date	Tag No	From (m)	To (m)		From (m)	To (m)	Thickness (m)					
2014	CC	MH14CC-04	664980.736	5487140.19	2158.98854	72.34	90	-90	20-Sep-14	R339201	62.5	62.8	0.3	62.58	62.88	0.3	12.6		23-Sep-14		
2014	CC	MH14CC-04							20-Sep-14	R339202	62.8	63.55	0.75	62.88	63.72	0.84	16.2		23-Sep-14		
2014	CC	MH14CC-04							20-Sep-14	R339203	63.55	64.5	0.95	63.72	64.62	0.9	31.8		23-Sep-14		
2014	CC	MH14CC-04							20-Sep-14	R339204	64.5	65.5	1	64.62	65.5	1.38	27.6		23-Sep-14		
2014	CC	MH14CC-04							20-Sep-14	R339205	65.5	66	0.5	65.5	66	0.5	14.2		23-Sep-14		
2014	CC	MH14CC-04							20-Sep-14	R339206	66	67	1	66	67	1	24.8		23-Sep-14		
2014	CC	MH14CC-04							20-Sep-14	R339207	67	67.5	0.5	67	67.5	0.5	14.4		23-Sep-14		
2014	CC	MH14CC-04							20-Sep-14	R339208	67.5	68.5	1	67.5	68.5	1	28.4		23-Sep-14		
2014	CC	MH14CC-04							20-Sep-14	R339209	68.5	69	0.5	68.5	69	0.5	15.8		23-Sep-14		
2014	CC	MH14CC-04							20-Sep-14	R339210	69	69.65	0.65	69	69.4	0.4	11		23-Sep-14		
2014	CC	MH14CC-04							20-Sep-14	R339211	69.65	69.95	0.3	69.4	69.95	0.55	16.6		23-Sep-14		
2014	CC	MH14CC-04							20-Sep-14	R339212	69.95	70.5						N/S			
2014	CC	MH14CC-04							20-Sep-14	R339213	70.5	70.8						N/S			
2014	CC	MH14CC-05	664970.318	5487256.69	2159.65935	49	90	-90	21-Sep-14	R339214	37.5	38.15							N/S		
2014	CC	MH14CC-05							21-Sep-14	R339215	38.15	38.7							N/S		
2014	CC	MH14CC-05							21-Sep-14	R339216	38.7	39.35								N/S	
2014	CC	MH14CC-05							21-Sep-14	R339217	39.35	40	0.3	40.58	40.88	0.3	27.4		23-Sep-14		
2014	CC	MH14CC-05							21-Sep-14	R339218	40	40.6	0.45	40.88	41.2	0.32	10.4		23-Sep-14		
2014	CC	MH14CC-05							21-Sep-14	R339219	40.6	41.1	0.5	41.2	41.58	0.38	20.4		23-Sep-14		
2014	CC	MH14CC-05							21-Sep-14	R339220	41.1	42	0.85	41.58	42.35	0.77	28.4		23-Sep-14		
2014	CC	MH14CC-05							21-Sep-14	R339221	42	43	1	42.35	43.2	0.85	22.8		23-Sep-14		
2014	CC	MH14CC-05							21-Sep-14	R339222	43	43.5	0.5	43.2	43.55	0.35	16.4		23-Sep-14		
2014	CC	MH14CC-05							21-Sep-14	R339223	43.5	44.5	1	43.55	44.3	0.75	25.4		23-Sep-14		
2014	CC	MH14CC-05							21-Sep-14	R339224	44.5	45	0.5	44.3	44.66	0.36	13.4		23-Sep-14		
2014	CC	MH14CC-05							21-Sep-14	R339225	45	45.3	0.3	44.66	45.2	0.54	8.8		23-Sep-14		
2014	CC	MH14CC-05							21-Sep-14	R339226	45.3	46.7	1.2	45.2	46.28	1.08	30.6		23-Sep-14		
2014	CC	MH14CC-05	21-Sep-14	R339227	46.7	47	0.3	46.28	46.58	0.3	15		23-Sep-14								

Appendix E

Analytical Process Guidelines

Large Diameter (15cm) Core Samples

The analytical program was developed and managed by Bob Leach Pty Ltd. The samples were shipped to the ALS Lab in Vancouver for analytical testing. The raw coal sections were reduced by Drop Shatter and Wet Attrition to simulate size degradation in mining and processing. The plus 2mm fraction, 2mm x 1mm fraction, and the 1mm x 0.25mm fractions were tested for float/sink separation at gravities from 1.30 through 2.00 to build a full washability profile on the coarse through fines sizes. The ultra-fine minus 0.25mm fraction was processed by a modified froth floatation process to simulate column floatation cells.

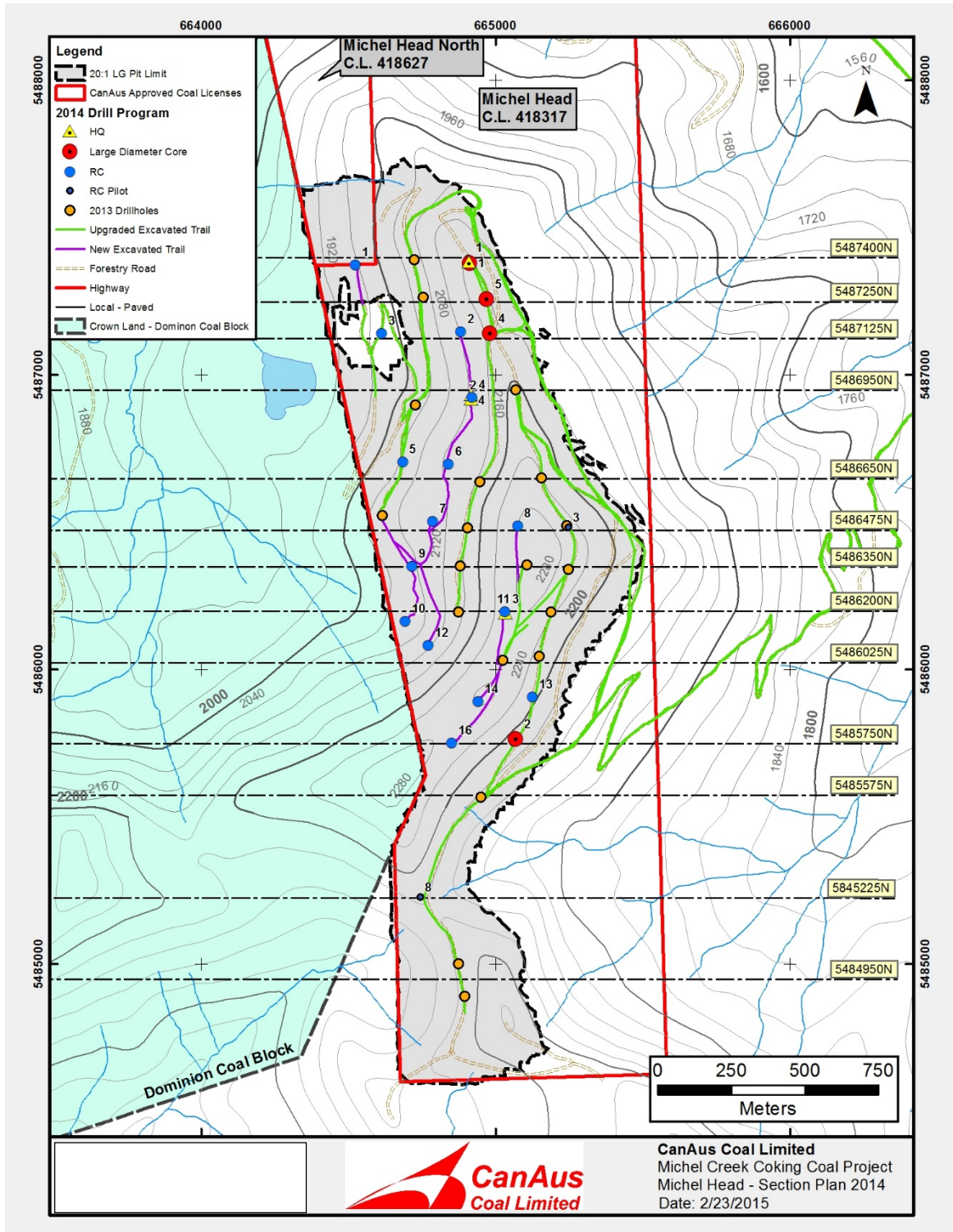
Raw coal subsamples of the crushed materials were analysed for Proximate, Sulphur FSI, and relative density. Roof and floors were also subjected to attrition breakage or crushing prior to, with a subsample from each of the crushed samples analysed for Proximate, total sulphur and relative density.

Most sections were processed using attrition procedures, while others were crushed. Raw coal subsamples of the crushed materials were analysed for proximates, FSI, total sulphur, and relative density. Roof and floors were also subjected to attrition breakage or crushing prior to analysis in the 2014 program, with a subsample from each of the crushed samples analysed for proximates, total sulphur, and relative density.

Clean coal products were constructed from the washability and flotation products and analysed for a range of coking coal properties such as Proximates, Total Sulphur, FSI, Fluidity, Dilatation, Ultimates, Ash Chemistry and Petrography.

A more detailed description of the sample preparation and analytical procedures can be found in the report: “Michel Creek Coking Coal Project – Large Diameter Coring Program 2013-2014”, by Bob Leach Pty. Ltd.

Appendix F – Cross Sections



Michel Head Cross Section Plan

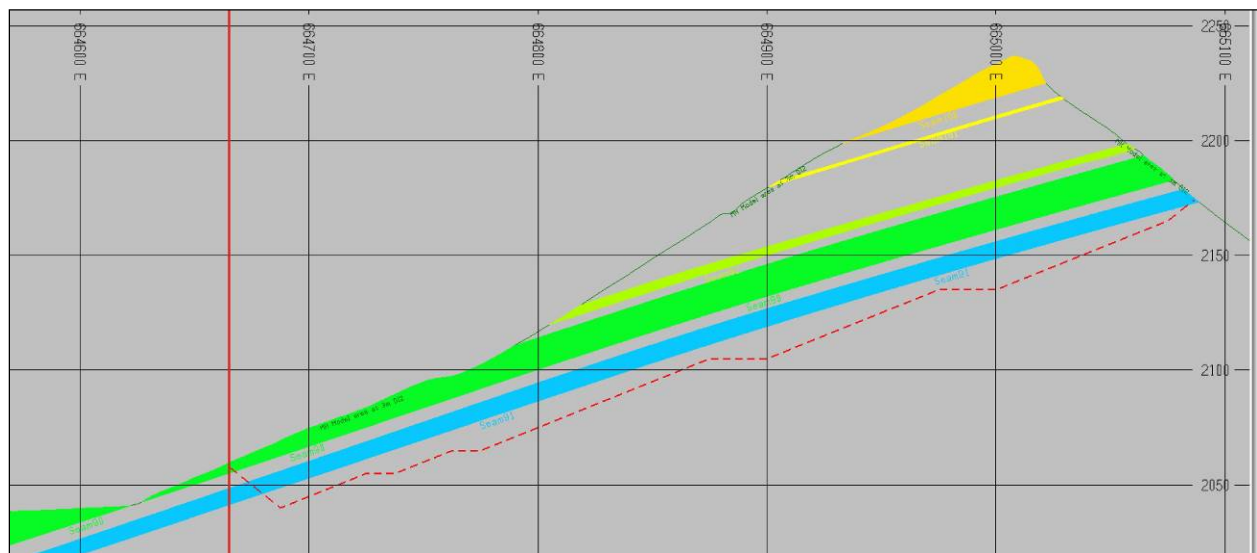
Michel Head Cross Sections

Illustrated:

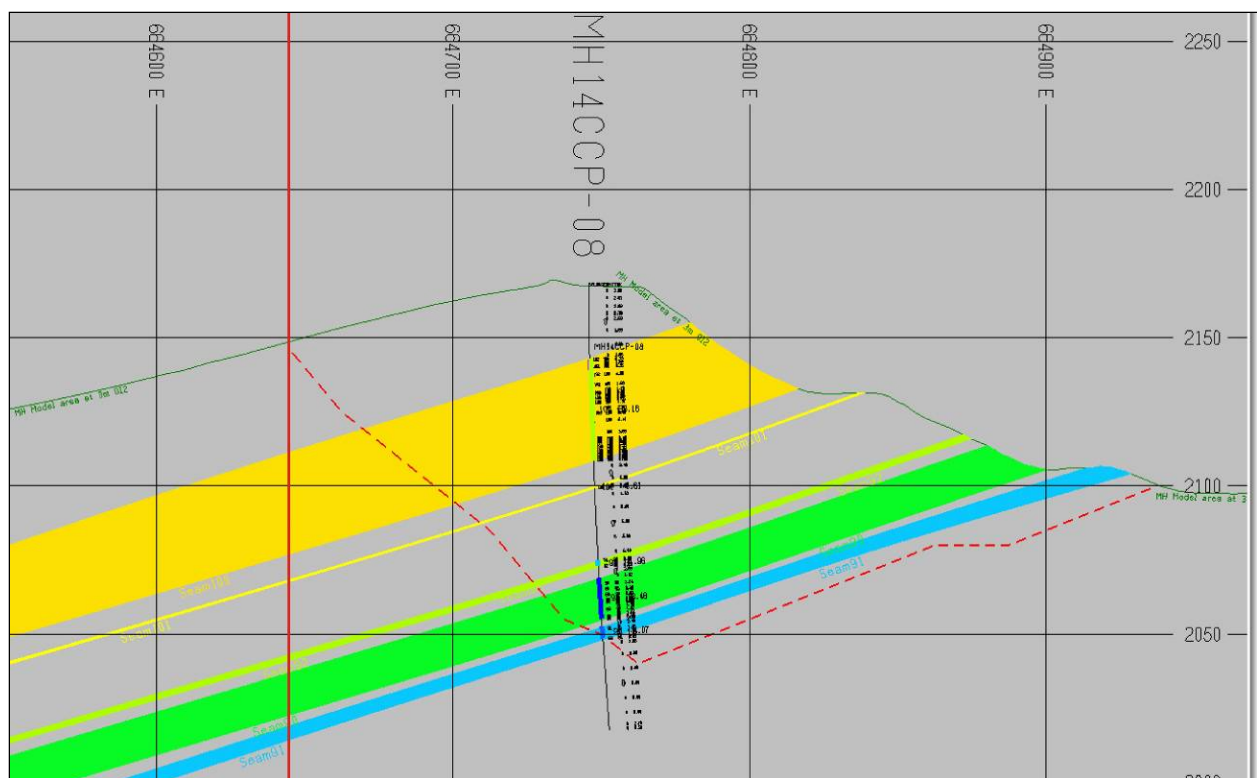
- the topography profile along the section line,
- the drillholes,
- the red line on the west of the sections represents the eastern boundary of the Dominion Government Block, Parcel 82,
- the coal seams and their interpolated thickness,
- the 20:1 pit is outlined as a red dashed line

The coal seam colours are:

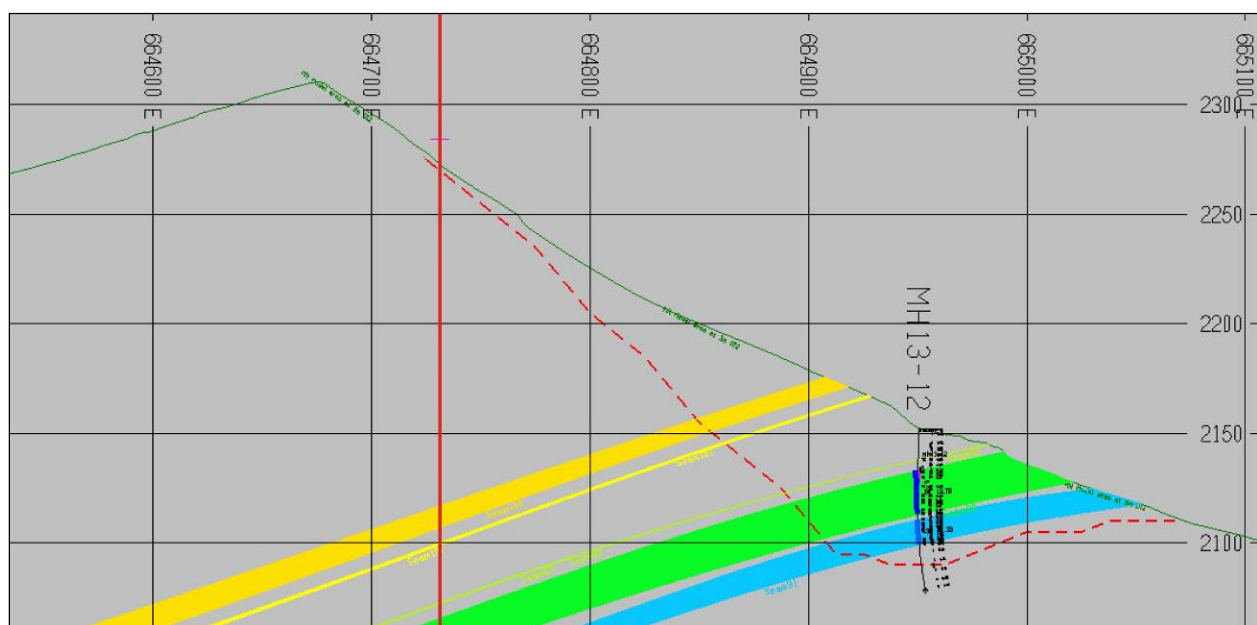
- | | |
|---------------|------------|
| □ dark yellow | - seam 10 |
| □ yellow | - seam 10L |
| □ light green | - seam 9U |
| □ green | - seam 9 |
| □ blue | - seam 9L |



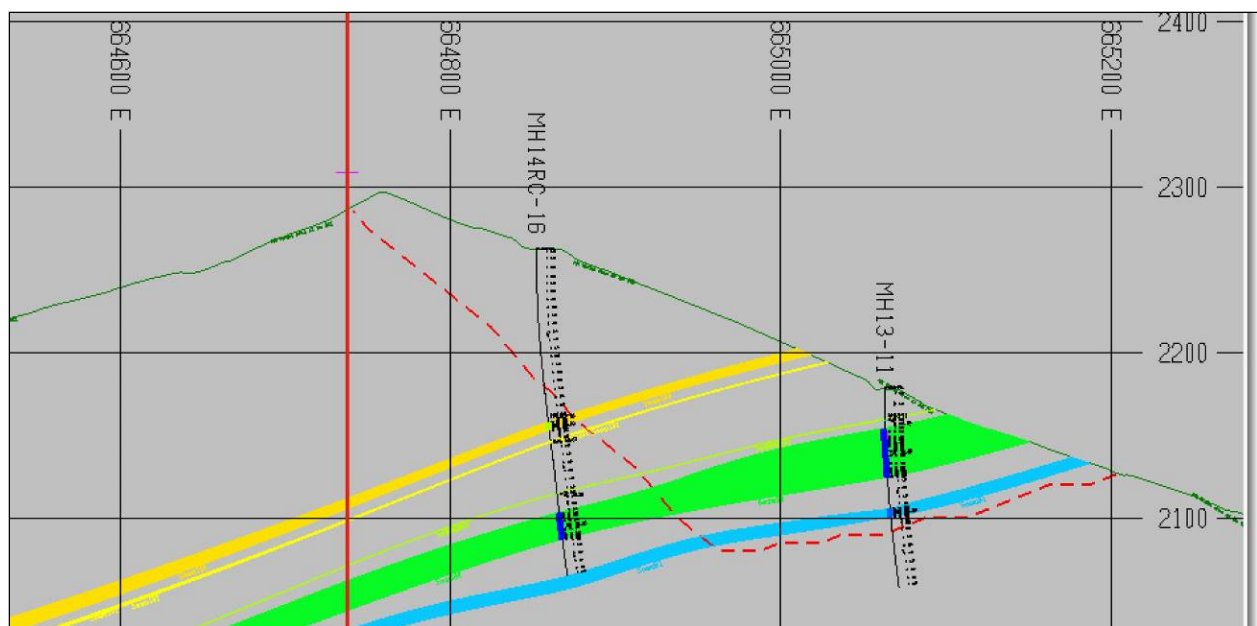
Michel Head Cross-section 5484950N



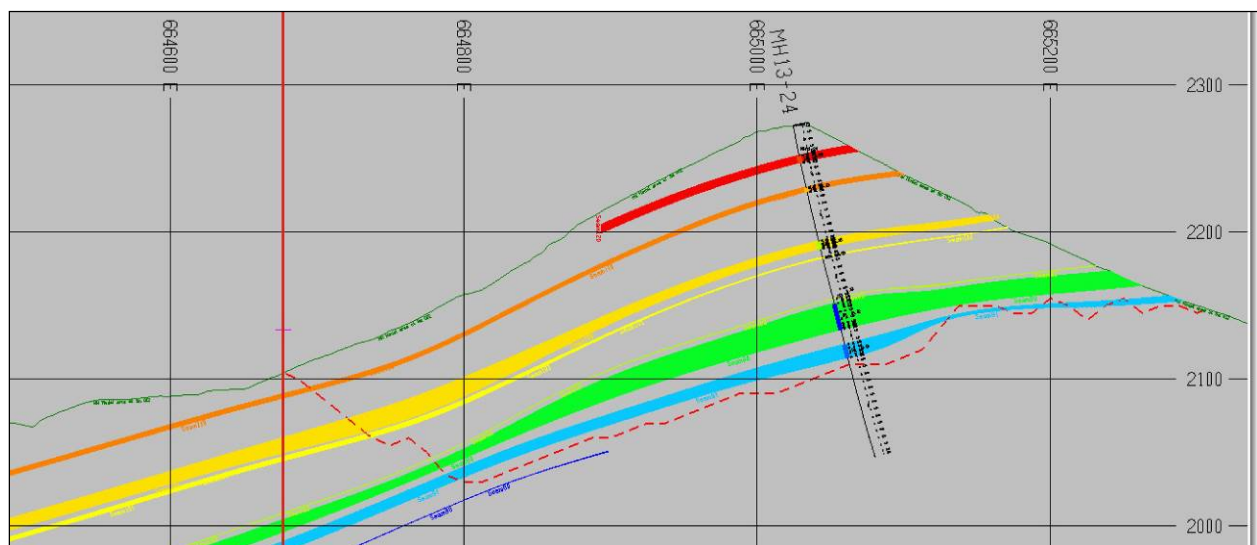
Michel Head Cross-section 5485225N



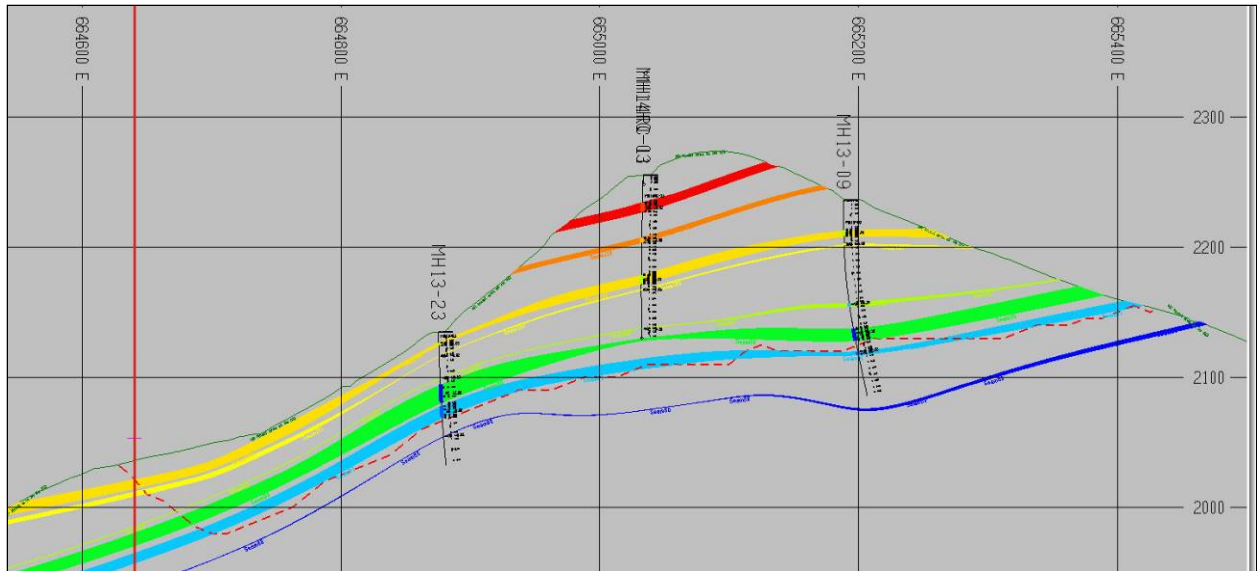
Michel Head Cross-section 5485575N



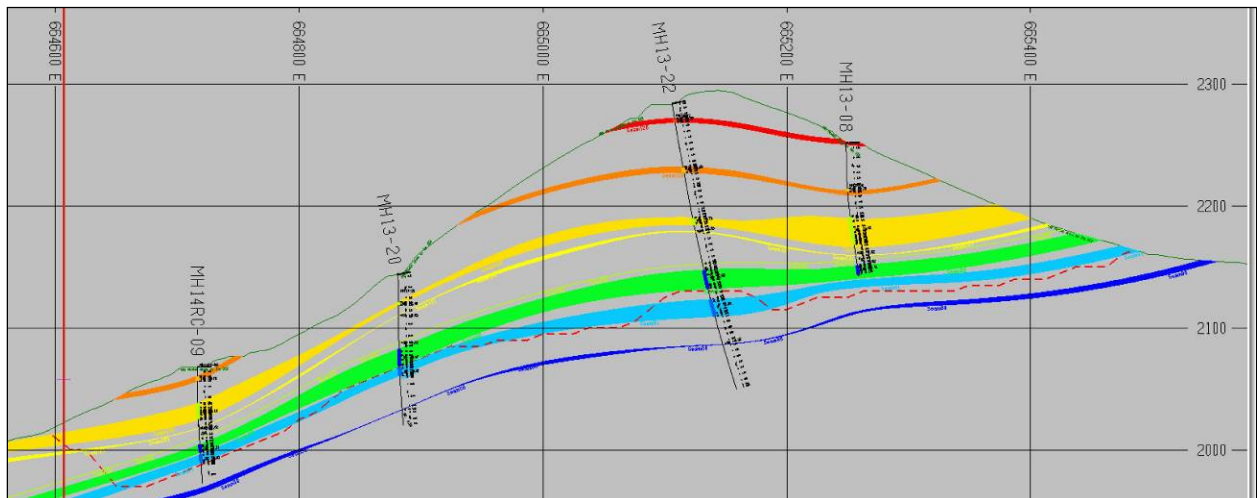
Michel Head Cross-section 5485750N



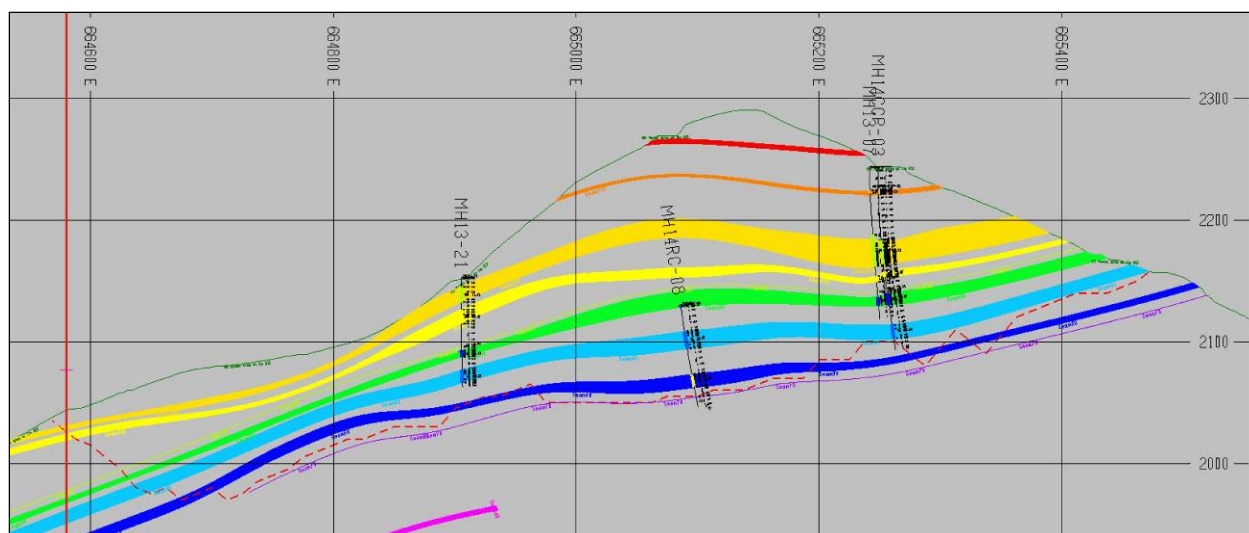
Michel Head Cross-section 5486025N



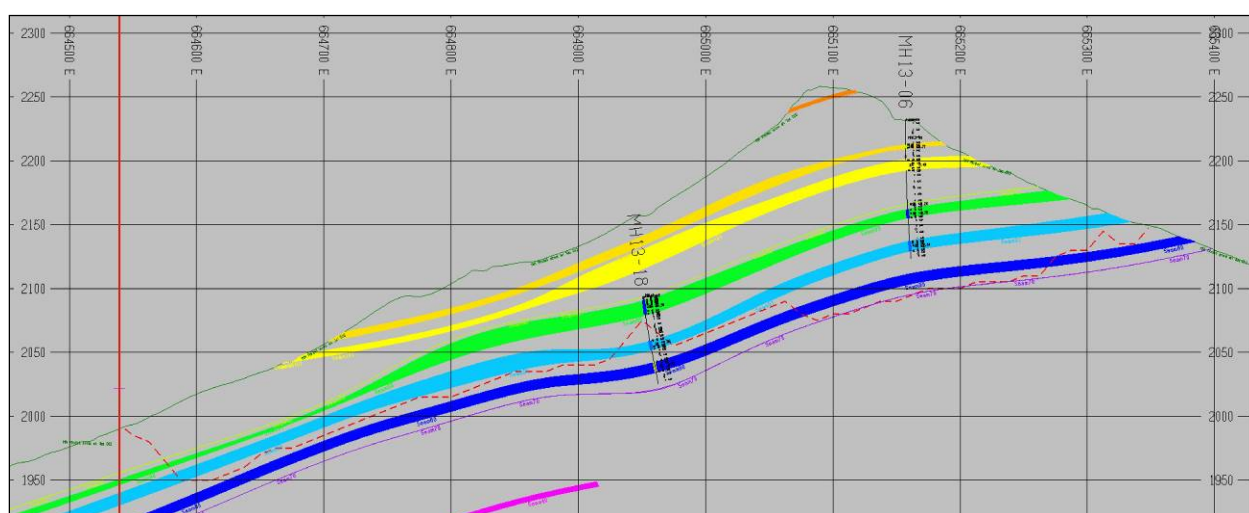
Michel Head Cross-section 5486200N



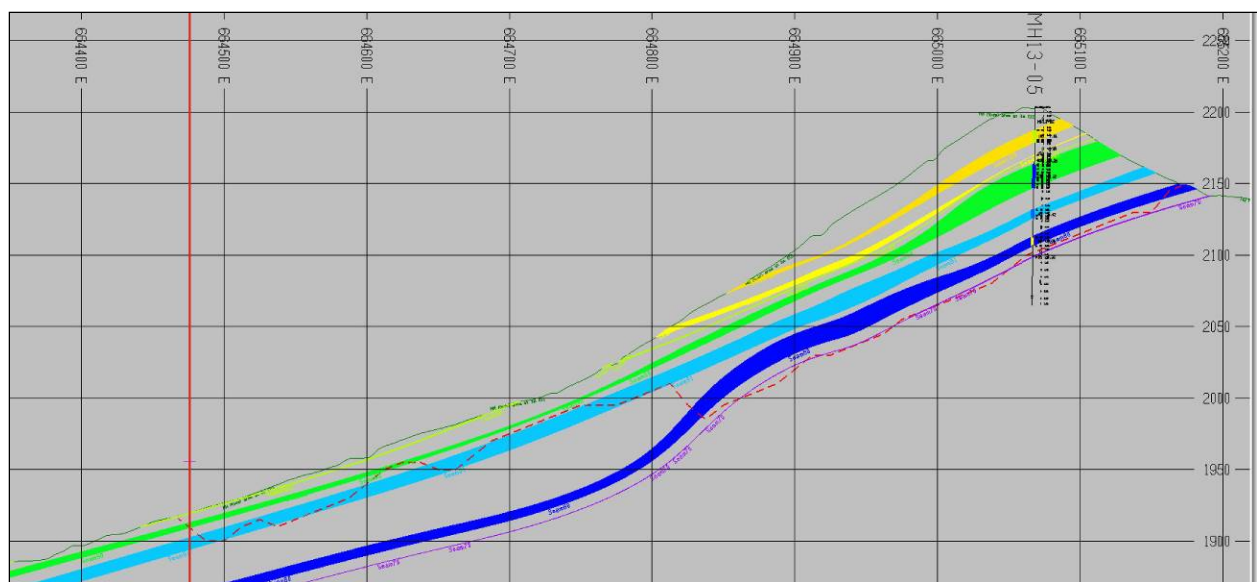
Michel Head Cross-section 5486350N



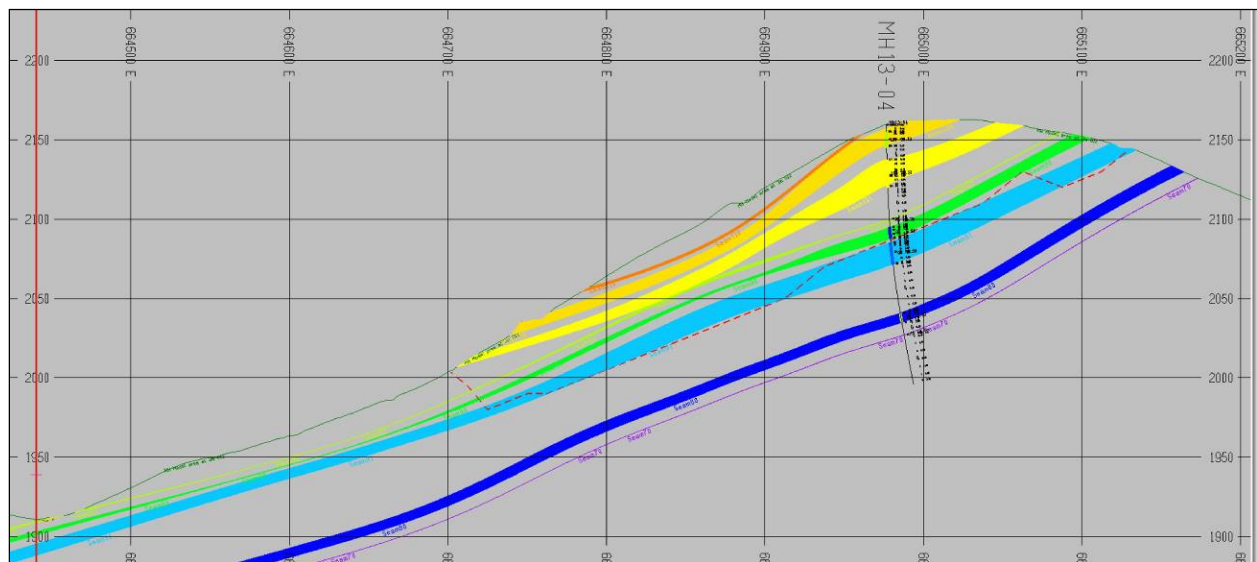
Michel Head Cross-section 5486475N



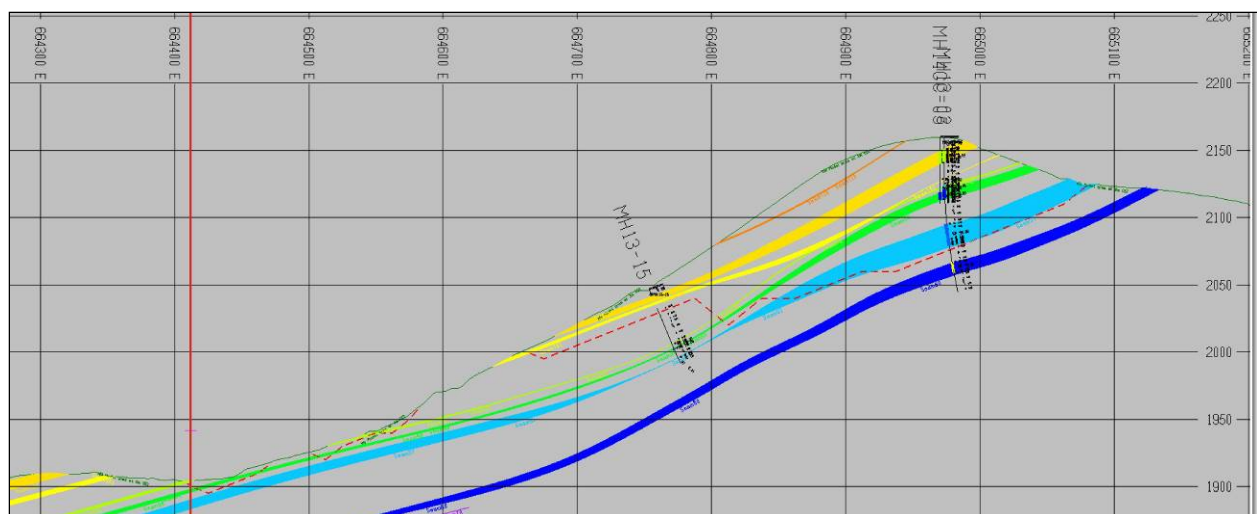
Michel Head Cross-section 5486650N



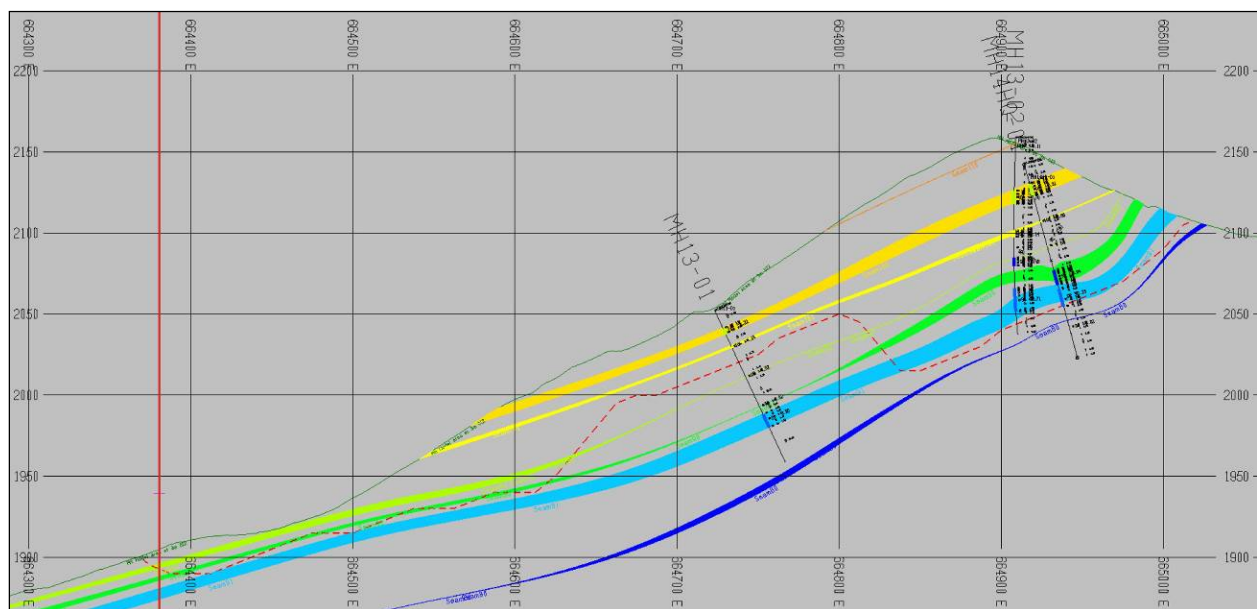
Michel Head Cross-section 5486950N



Michel Head Cross-section 5487125N



Michel Head Cross-section 5487250N



Michel Head Cross-section 5487400N