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**ASSESSMENT REPORT**

describing

**2006 REVERSE CIRCULATION DRILLING**

on the

**DIVISION MOUNTAIN COAL PROSPECT**

**COAL EXPLORATION LICENSE CYW 0073**

NTS 115H/08

Latitude 61°20' N, Longitude 136°02' W

Whitehorse Mining District  
Yukon Territory

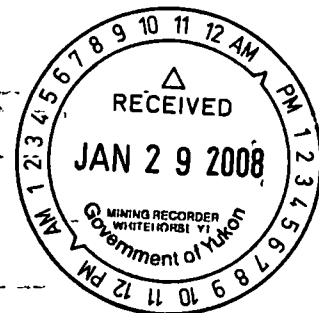
prepared by

Archer, Cathro & Associates (1981) Limited

for

**CASH MINERALS LTD.**

R.C. Carne, M Sc , P Geo  
September 25, 2006



278420

Costs associated with this report have been  
approved in the amount of \$ 353,512.82  
for assessment credit under Certificate of Work  
No. CY00073  
[Signature]  
Mining Recorder  
Whitehorse Mining District

094874

This report has been examined by  
the Geological Evaluation Unit  
under Section 53 (4) Yukon Quartz  
Mining Act and is allowed as  
representation work in the amount  
of \$ 353,512.82.



Regional Manager, Exploration and  
Geological Services for Commissioner  
of Yukon Territory

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## INTRODUCTION

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Reverse circulation drilling was conducted in 2006 to provide an assessment of the potential of the Hull Mountain and Cub Mountain areas, located 1 km southeast and 2.5 km northeast, respectively, of the Division Mountain coal deposit.

The Division Mountain area is located 85 km north-northwest of Whitehorse in south central Yukon Territory. Access is by a 31 km four-wheel drive road leaving the Klondike Highway at Braeburn. The main area of exploration interest lies 20 km west of the highway and the Yukon Energy Corporation electrical transmission grid near Braeburn. Braeburn is 280 km by highway from a year-round deep sea port at Skagway, Alaska.

Exploration at Division Mountain has been directed toward outlining sufficient resources to support an export thermal coal mine and/or a 20 MW to 50 MW generating station for a period in excess of twenty years. Exploration on the property between 1972 and 1999 consisted of 10.2 km of excavator trenching, 64 diamond drill holes totaling 10,555 m and 20 reverse circulation percussion drill holes totaling 1869 m. A March 9, 2005 resource evaluation by Norwest Corporation (Becker, 2005) calculated a National Instrument 43-101 compliant Measured and Indicated Resource of 51.6 million tonnes of High Volatile "B" bituminous coal. Calculated weighted averages for Division Mountain raw coal are 2.4% residual moisture, 27.9% ash content, 26.3% volatile matter, 43.6% fixed carbon, 0.45% sulphur and a calorific value of 5140 cal/g on an air dried basis.

A Territorial Coal Exploration Licence encompassing the Hull Mountain and Cub Mountain areas was acquired by Cash Minerals Ltd. in October 1992. It is held under renewable three year terms (current Licence CYW0073).

## PROPERTY, LOCATION AND ACCESS

The Hull Mountain and Cub Mountain coal prospects are located in Whitehorse Mining District in south central Yukon, 20 km southwest of Braeburn, Yukon near 61°20'N and 136°02'W on NTS map sheet 115H/08 (Figure 1). Braeburn is 100 km by all weather highway from Whitehorse and 280 km from the deep sea port of Skagway, Alaska.

The track-mounted percussion drill used for the 2006 exploration was moved under its own power from Braeburn along the 28 km access road to the Division Mountain area. Accommodation for the exploration crew was at the permanent Division Mountain base camp located near the Nordenskiöld River, about 7 km west of the area of drilling. Crew travel between the camp and drill was by four-wheel drive truck.

## 2006 PROGRAM

The 2006 exploration program at Hull Mountain consisted of three reverse circulation percussion drill holes totalling 85 4 m in length. The Cub Mountain drilling consisted of four holes totalling 581 5 m. Drilling was carried out between May 8 and June 14, 2006. The 2006 program was managed by Archer, Cathro & Associates (1981) Limited on behalf of Cash Minerals Ltd under the author's supervision.

Appendix I contains the Author's Statement of Qualifications. The following Archer Cathro personnel were involved in the program:

Rob Carne	Project supervisor
Dirk Moraal	Site manager
Nick Mitchell	Drill geologist
Dave Huston	Drill Geologist
Brandon Duncan	Labourer
Martine LeLevier	Cook

Drilling was contracted to Derex Drilling Services Ltd of Armstrong, B C using a Prospector self propelled, track mounted drill. The drill and all related equipment were removed from the site at the close of the program. A summary of the drilling is given in Table I following:

**TABLE I: DRILL HOLE SUMMARY**

<u>Hole</u>	<u>Area</u>	<u>Northing</u> <u>(NAD83)</u>	<u>Easting</u> <u>(NAD83)</u>	<u>Azimuth</u>	<u>Dip</u>	<u>Depth</u> <u>(m)</u>
06-89	Hull Mountain	6 795 854	446 189	040°	-60°	30 5
06-90	Hull Mountain	6 796 105	446 286	040°	-60°	32 0
06-91	Hull Mountain	6 796 426	446 305	040°	-60°	22 9
06-92	Cub Mountain	6 802 350	445 479	230°	-60°	142 3
06-93	Cub Mountain	6 802 366	445 240	230°	-60°	145 4
06-94	Cub Mountain	6 802 363	445 342	230°	-60°	102 7
06-95	Cub Mountain	6 802 477	445 155	230°	-60°	191 1

All drill cutting, sampling and logging was done on site. Drill cutting intervals were collected in whole and a 2 kg portion was archived in sample bags that are stored on the property at the camp location.

## GEOLOGY

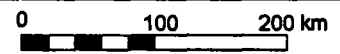
### Geomorphology

Topography in the Division Mountain area is characterized by rolling hills and broad river valleys with local regions of moderate to steep relief along northerly-trending ridges (Figure 2).

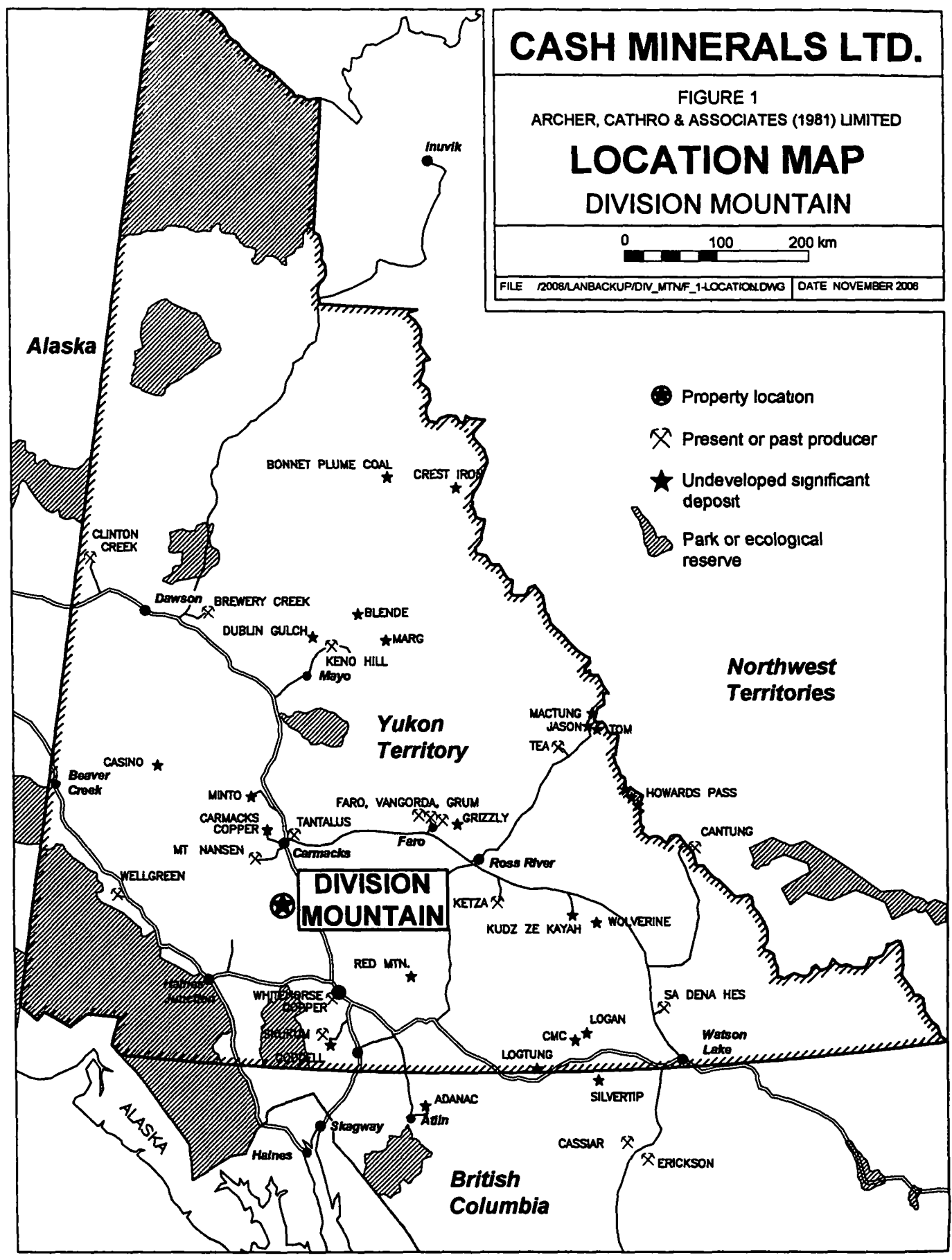
# CASH MINERALS LTD.

FIGURE 1  
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

## LOCATION MAP DIVISION MOUNTAIN



FILE /2008/LANBACKUP/DIV\_MTNF\_1-LOCATION.DWG DATE NOVEMBER 2008



- Property location
- ⌘ Present or past producer
- ★ Undeveloped significant deposit
- ▨ Park or ecological reserve

**DIVISION MOUNTAIN**

**British Columbia**

**Northwest Territories**

**Alaska**

**ALASKA**

Elevations range between 670 and 1680 m. Most of the area is mantled by glacial till and outwash between 1 and 60 m thick. Permafrost is generally restricted to poorly drained areas of moderate to dense vegetation. Natural bedrock exposure is less than 5%, especially within the generally recessive coal measures.

### **Regional Geology**

The Division Mountain area lies within Whitehorse Trough, a northwest trending, fore-arc basin comprised of Mesozoic volcanic and sedimentary rocks. Bounded by the Omineca Crystalline Belt to the east and the Coast Plutonic Complex to the west, the Whitehorse Trough constitutes the northern end of the Intermontane Belt of the Canadian Cordillera.

During Late Triassic time an island arc assemblage consisting of a 7,000 m thick succession of Lewes River Group aphyric to augite-phyric basaltic andesite flows, breccias and tuff, conglomerate, wacke, limestone and shale was deposited within Whitehorse Trough. Succeeding Jurassic basin-fill stratigraphy is more complex due to disconformities and hiatus in sedimentation and to diachronous or interfingering relationships in the shallow water and nearshore facies. In general, two coal bearing sequences are present. Lower to Upper Jurassic conglomerate and sandstone turbidites of the marine to deltaic Laberge Group, and, Upper Jurassic to Cretaceous conglomerate, sandstone and mudstone of the largely alluvial Tantalus Formation.

### **Stratigraphy**

Generalized geology of the Division Mountain area is given on Figure 2.

The Laberge Group in the Division Mountain area is represented by the shallow marine Lower Member of the Tanglefoot Formation and the fluvial-deltaic, coal-bearing Upper Member of the Tanglefoot Formation. The lithologically distinctive Lower Member serves as an easily recognizable base for the overlying coal measures. Brown weathering black mudstone, with wispy siltstone to fine sandstone laminae in the form of low amplitude cross-stratification, alternates with thick (>10 m) intervals of massive brown weathering calcareous sandstone. A Lower to Middle Jurassic depositional span is recorded elsewhere in Whitehorse Trough for the unit but since this sequence is likely diachronous, being a record of a nearshore facies that migrated with basin fill, the precise age of the Lower Member in this area will remain unknown until it can be locally constrained by paleontological data.

Middle to Upper Jurassic Tanglefoot Formation Upper Member strata in the Division Mountain area record a complex fluvial-deltaic depositional environment. In general the unit consists of upwardly fining sequences of alternating sandstone-conglomerate beds and black shale or shaly mudstone, the latter commonly associated with coaly shale or coal seams. A section measured at Red Ridge, northwest of Division Mountain consists of 15 sedimentary cycles, each on the order of approximately 10 m thick. From base to top, a typical cycle consists of

- a scour-based arkosic pebble conglomerate containing fossils, twigs and branches lying transverse to paleoflow along 1 to 2 m trough foresets,
- conglomerate lags infilling troughs as lenticular beds,
- a fining-upward zone of medium to fine grained arkose containing trough cross-beds which exhibit an upward decrease in set size,
- grey organic rich shale or shaly mudstone containing leaves, grasses and *Metasequoia* needles and twigs,
- coaly shale to shaly coal, commonly rich in coalified twigs and branches,
- banded coal, and,
- either a transition back to grey shale or an abrupt termination by the basal pebbly conglomerate bed of the next cycle

The depositional environment was one of a rapidly aggrading flood-dominated delta. Cross-bedded conglomerate-sandstone cycles represent point-bar deposits from a high energy fluvial system. Paleocurrent variance supports a meandering river interpretation. Of particular interest is that, despite the generally coarse grained nature of the channel sandstones and conglomerates, the overbank deposits and related coals are relatively thick and demonstrate remarkable lateral continuity. The coal seams were deposited in long-lived delta plain swamps that served as collection sites for transported organic material and for generation of peat bogs. Toward the Tanglefoot-Tantalus contact, coal becomes less abundant. Instead, grey shale and coaly shale predominates as much thinner beds than the coal seams lower in the succession.

Resistant beds of thick-bedded chert pebble conglomerate of the Upper Jurassic to Lower Cretaceous Tantalus Formation cap the Tanglefoot Formation Upper Member coal bearing sequence, forming prominent topographic highs in the region. Depositional environment of the Tantalus Formation appears to be one of an active flood plain. Coal has previously been mined at the base of the Tantalus conglomerates 100 km to the north of Division Mountain in the Carmacks region. Coal float has been found in the vicinity of gopher holes in areas underlain by the Tantalus Formation at Division Mountain and Red Ridge but to date none has been found in bedrock.

Small stocks, dykes and sills of porphyritic basalt, andesite and dacite intrude the Tanglefoot Formation coal measures. The presence of glassy chill zones and rare amygdaloidal textures are indicative of emplacement in a near-surface setting. Age of the intrusions is unknown but they are probably related to regionally extensive volcanic rocks of the Upper Cretaceous Carmacks Group, which unconformably overlie the Laberge and Tantalus stratigraphy in the Division Mountain area.

## **Structural Geology**

Deformation in the Whitehorse Trough occurred primarily as flexural slip folding during the Middle Cretaceous. Synclinal and anticlinal axes trend north-northwest, parallel to the trough axis. Fold wavelengths are generally between 500 m and 2 km, although complex tight folds with wavelengths less than 3 m have been noted. The coal bearing Carnes Syncline forms the core of the Division Mountain coal deposit. It trends 310° and plunges 9° to the northwest (Figure 2). The syncline limbs dip between 25 and 72°. Diamond drilling in 1997 concentrated on the coal rich east limb of the Division Mountain Syncline about 2 km south of the Carnes Syncline. This syncline also trends approximately 310° with the east limb dipping 45 to 55° to the southwest. Exploration to date has not yet defined either the fold nose or the western limb of the Division Mountain Syncline.

The folded stratigraphy has only been slightly modified by northwest and northeast trending normal faults with minor dip slip displacements.

## **2006 DRILL PROGRAM RESULTS**

Drilling was conducted at the Hull Mountain target to assess whether the coal seams that form the Division Mountain coal deposit continue to the southeast beneath the Klusha Creek valley, a distance of 1400 m. The drill was set up on the Dawson Trail to mitigate the environmental impact of the work. None of the three holes was completed through glacial outwash overburden that exceeds 20 m depth in this location.

Four holes were drilled along the Division Mountain north access road in the Cub Mountain area to explore the Upper Member of the Tanglefoot Formation for coal. Coal float is present nearby although the likely source of this material is the upper part of the Tanglefoot Formation Upper Member or the Lower Member of the overlying Tantalus Formation. However, the thickest and most continuous coal seams forming the Division Mountain resource are located near the base of the Tanglefoot Formation Upper Member. Previous attempts to evaluate the Cub Mountain coal float occurrences with excavator trenching were frustrated by deep overburden and permafrost.

Locations of the four Cub Mountain reverse circulation drill holes are shown on Figure 2. Hole locations were placed to explore the base of the Tanglefoot Formation Upper Member that is otherwise not well enough exposed on the hillside to the north of the access road to determine its coal potential. Drill hole chip logs are given in Appendix II while the geophysical logs are located in Appendix III. Geophysical logging was not completed on Hole 06-95 because the hole walls collapsed when the drill rods were removed.

The Cub Mountain reverse circulation drill holes intersected sandstone and mudstone intervals that are characteristic of the coal measures at Division Mountain. Recovery of drill cuttings was poor in softer lithologies, especially below the water table. Consequently, no reliably

uncontaminated samples were available for coal quality analyses. The best indicator of coal in the stratigraphy intersected by the drilling is the geophysical survey data, in particular the electron bulk density logs. For reference, Division Mountain "clean" coal with an ash content of 14% (air dried) has a density of 1.50 g/cc.

Apparent coal intersections as documented in the geophysical logs are

- 1 Hole 06-92      20 cm of coal at 77.3 m, density = 1.79 g/cc  
                    20 cm of coal at 84.0 m, density = 1.52 g/cc
- 2 Hole 06-93      2.4 m of coal from 45.2 m to 47.6 m, two intervals separated by a 20 cm parting. upper interval density = 1.54 g/cc, lower interval density = 1.76 g/cc  
                    30 cm of coal at 54.8 m density = 1.90 g/cc
- 3 Hole 06-94      50 cm of coal at 56.2 m density = 1.91 g/cc
- 4 Hole 06-95      not logged

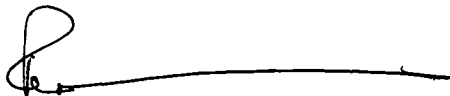
### RECOMMENDATIONS

The Hull Mountain area was selected as a target for reverse circulation drilling in 2006 to assess whether the relatively abundant and thick coal seams that form the Division Mountain coal resource continue beneath the Klusha Creek valley from the main deposit, a distance of 1400 m. None of the three holes was completed through overburden that exceeds 20 m depth in this location. Notwithstanding this, further exploration in the form of geological mapping and excavator trenching is warranted on the northwest slope of Hull Mountain where overburden depths may be thinner.

The combination of bedrock exposure afforded by the steep south western slope of Cub Mountain, results of previous excavator trenching and the 2006 reverse circulation drill program data are sufficient to provide a reasonably accurate evaluation of the area for its coal potential. A relatively small number of thin coal seams are present within the Upper Member of the Tanglefoot Formation, the host of the nearby Division Mountain coal resource. The only significant intersection is a 1.6 m coal seam with low to moderate apparent ash content and a 20 cm internal parting. The relatively thin steeply dipping seam, in isolation from other significant accumulations of coal, is not significant enough to justify further exploration in this area.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED



R. C. Carne, M.Sc., P. Geo.

**REFERENCES**

Becker, T C

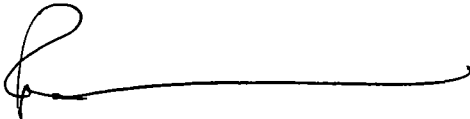
- 2005 Geologic evaluation and resources calculation on the Division Mountain Property, Yukon Territory, Canada, available at the SEDAR website ([http //www sedar com/DisplayCompanyDocuments do?lang=EN&issuerNo=0000 5620](http://www.sedar.com/DisplayCompanyDocuments.do?lang=EN&issuerNo=00005620))

**APPENDIX I**  
**AUTHOR'S STATEMENT OF QUALIFICATIONS**

## STATEMENT OF QUALIFICATIONS

I, Robert C Carne, geologist, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia and residential address in Burnaby, British Columbia, hereby certify that

- 1 I graduated from the University of British Columbia in 1974 with a B Sc and in 1979 with a M Sc majoring in Geological Sciences
- 2 I am a Professional Geoscientist registered with the Association of Professional Engineers and Geoscientists of the Province of British Columbia (registration number 19868)
- 3 From 1974 to present, I have been actively engaged as a geologist in mineral exploration in British Columbia and Yukon Territory
- 4 I have personally participated in or supervised the field work reported herein and have interpreted all data resulting from this work



Robert C Carne, M Sc , P Geo

**APPENDIX II**  
**REVERSE CIRCULATION DRILL LOGS**







**REVERSE CIRCULATION DRILL LOG**  
**DIVISION MOUNTAIN PROPERTY**

 Hole 06-92 Zone Cub Mtn Section           

 Easting 445 479 Northing 6 802 350 Elevation 770 m Depth 142.3 m Logger Dirk Moraal  
 Drilling Dates March 20, 2006

Depth	Collar			
Azimuth	230			
Dip	-60			
Method	Brunton			

From (m)	To (m)	Interval (m)	Unit	Comments	From (m)	To (m)	Interval (m)	Sample No	Recovery %
0 00	3 05	3 05	OVCN	casing					
3 05	4 57	4 57	OVCN	casing					
4 57	7 62	3 05	SASN					189501	
7 62	10 66	3 05	SASN					189502	
10 66	13 72	3 05	ANDS					189503	
13 72	17 37	3 65	SHAL					189504	
17 37	20 42	3 05	ANDS					189505	
20 42	23 45	3 05	ANDS					189506	
23 45	26 52	3 05	ANDS					189507	
26 52	29 56	3 05	ANDS					189508	
29 56	32 61	3 05	ANDS	water 31m				189509	
32 61	35 66	3 05	ANDS					189510	
35 66	38 71	3 05	ANDS					189511	
38 71	41 75	3 05	ANDS					189512	
41 75	44 80	3 05	ANDS					189513	
44 80	47 95	3 05	ANDS					189514	
47 95	50 90	3 05	ANDS					189515	
50 90	53 95	3 05	ANDS					189516	
53 95	56 99	3 05	ANDS	low recovery				189517	
56 99	60 04	3 05	ANDS	very little recovery				189518	
60 05	63 09	3 05		no recovery				189519	
63 09	66 14	3 05		no recovery				189520	
66 14	69 20	3 05	ANDS	muck				189521	
69 20	72 24	3 05	ANDS	more brown ANDS?				189522	
72 24	75 28	3 05	ANDS					189523	
75 28	78 33	3 05	SHAL	coaly shale and coal, poor recovery; geophysical log 20 cm possible coal at 77.3 m				189524	
78 33	81 38	3 05	SHAL	dark shale				189525	
81 38	84 42	3 05	SHAL	coaly shale and coal, poor recovery; geophysical log 20 cm possible coal at 84.0 m				189526	
84 42	87 47	3 05	ANDS	dark				189527	
87 47	90 62	3 05	ANDS					189528	
90 62	93 57	3 05	ANDS					189529	



**REVERSE CIRCULATION DRILL LOG**  
**DIVISION MOUNTAIN**

 Hole 08-93 Zone Hull Mtn Section         

 Easting 445 240 Northing 6 802 366 Elevation 770 m Depth 145 4 m Logger Nick Mitchell  
 Drilling Dates March 20 to 22, 2006

Depth	Collar			
Azimuth	230			
Dip	-80			
Method	Brunton			

From (m)	To (m)	Interval (m)	Unit	Comments	From (m)	To (m)	Interval (m)	Sample No	Recovery %
0 00	14 32	14 32	OVCN	casing					
14 32	17 37	3 05	SHAL					189546	
17 37	20 42	3 05	SHAL					189547	
20 42	23 46	3 05	SASN					189548	
23 46	26 41	3 05	SASN					189549	
26 41	29 56	3 05	SASN					189550	
29 56	32 61	3 05	SASN					189551	
32 61	35 66	3 05	ANDS					189552	
35 66	38 92	3 05	ANDS					189553	
39 92	41 70	3 05	SLSN	dust				ns	
41 70	44 80	3 05	SLSN	dust				ns	
44 80	47 85	3 05	SHAL	coaly shale, geophysical log possible coal 45 2 - 47 6 m				189554	
47 85	50 90	3 05	SHAL					189555	
50 90	53 94	3 05	MDSN					189556	
53 94	56 99	3 05	MDSN	geophysical log 30 cm coal at 54 8 m				189557	
56 99	60 04	3 05	MDSN					189558	
60 04	63 09	3 05	MDSN	>30% sandstone				189559	
63 09	66 14	3 05	SASN	>25% siltstone				189560	
66 14	69 19	3 05	MDSN	>30% siltstone				189561	
69 19	72 23	3 05	SLSN					189562	
72 23	75 28	3 05	SHAL	>20% siltstone				189563	
75 28	78 33	3 05	SHAL	>20% siltstone				189564	
78 33	81 36	3 05	MDSN					189565	
81 36	84 40	3 05	MDSN	>20% sandstone >1mm				189566	
84 40	87 47	3 05	MDSN	mix with sand >2mm				189567	
87 47	90 52	3 05	MDSN	possible minor coal seam				189568	
90 52	93 57	3 05	SLSN	>10% sandstone				189569	
93 57	96 62	3 05	SLSN	poor sample				189570	
96 62	99 66	3 05	ANDS	chlonte and homblende				189571	
99 66	102 71	3 05	ANDS	chlonte and homblende				189572	
102 71	105 76	3 05	SLSN	no sample, no recovery				ns	



**REVERSE CIRCULATION DRILL LOG**  
**DIVISION MOUNTAIN**

 Hole 06-04 Zone Cub Mtn Section \_\_\_\_\_  
 Easting 445 342 Northing 6 802 363 Elevation NA Depth 102 7 m Logger Dirk Moraal  
 Drilling Dates March 28, 2006

Depth	Collar			
Azimuth	230			
Dip	-60			
Method	Brunton			

From (m)	To (m)	Interval (m)	Unit	Comments	From (m)	To (m)	Interval (m)	Sample No	REC %
0 00	5 18	5 18	OVBN	overburden					
5 18	8 22	3 05	SLSN					189584	
8 22	11 27	3 05	SLSN					189585	
11 27	14 32	3 05	SLSN					189586	
14 32	17 37	3 05	SLSN	minor sand >5%				189567	
17 37	20 42	3 05	SLSN					189588	
20 42	23 46	3 05	SLSN					189589	
23 46	26 57	3 05	SLSN	minor shale fragments				189590	
26 57	29 56	3 05	SLSN	minor shale fragments				189591	
29 56	32 61	3 05	ANDS					189592	
32 61	35 66	3 05	ANDS	change from ANDS to SHAL over 12 feet				189593	
35 66	38 70	3 05	SHAL					189594	
38 74	41 75	3 05	SLSN	wet mud				189595	
41 75	44 80	3 05	SLSN	wet mud				189596	
44 80	47 85	3 05	SLSN	wet mud, shale pebbles				189597	
47 85	50 90	3 05	SLSN	water, sandstone pebbles >10%				189598	
50 90	53 94	3 05	SASN					189599	
53 94	56 99	3 05	SASN	geophysical log 50 cm coal at 56 2 m				189600	
56 99	60 04	3 05	SASN	very hard				189601	
60 04	63 09	3 05	SASN	shale from up hole??				189602	
63 09	66 14	3 05	ANDS	shale from up hole??				189603	
66 14	69 18	3 05	SASN	loose poorly sorted sand				189604	
69 18	72 23	3 05	SASN					189605	
72 23	75 28	3 05	SASN	grey muddy sand, minor coal frags				189606	
75 28	78 33	3 05	SASN	pale buff sand coaly shale frags				189607	
78 33	81 38	3 05	SASN	pale buff sand coaly shale frags				189608	
81 38	84 42	3 05	SASN	light grey sand, coaly shale flakes				189609	
84 42	87 47	3 05	SASN	grey to buff sand, flakes of coaly shale				189610	
87 47	90 52	3 05	SASN	light grey sand, flakes of coaly shale				189611	
90 52	93 57	3 05	SASN	light grey sand, coaly film on water				189612	
93 57	96 62	3 05	SASN	light grey sand, shale chips, minor coal chips				189613	



**REVERSE CIRCULATION DRILL LOG**  
**DIVISION MOUNTAIN**

 Hole 06-95 Zone Cub Mtn Section \_\_\_\_\_

Eastng	Northing	Elevation	Depth	Logger	Drilling Dates
445 155	6 802 477	NA	191 1 m	Dirk Moraal	March 28, 2006

Depth	Collar			
Azimuth	230			
Dip	-60			
Method	Brunton			

From (m)	To (m)	Interval (m)	Unit	Comments	From (m)	To (m)	Interval (m)	Sample No	Recovery %
0 00	11 27	11 27	OVCN	casing					
11 27	14 32	3 05	SLSN	dry				189616	
14 32	17 37	3 05	SLSN	mudstone chips				189617	
17 37	20 42	3 05	SLSN	mudstone chips				189618	
20 42	23 47	3 05	ANDS	with minor shale chips				189619	
23 40	26 51	3 05	SHAL	mix of shale/siltstone with andesite chips				189620	
26 51	29 56	3 05	MDSN	mix mudstone shale				189621	
29 56	32 61	3 05	SHAL					189622	
32 61	35 66	3 05	SLSN					189623	
35 66	38 70	3 05	SLSN					189624	
38 7	41 75	3 05	MDSN	with silt component				189625	
41 75	44 80	3 05	MDSN	blocked cyclone and hose				189626	
44 8	47 46	3 05	SHAL	poor return, brown mud				189627	
47 46	50 90	3 05	SHAL	brown mud, coaly mud, few coal chips				189628	
50 90	53 95	3 05	ANDS	brown mud				189629	
53 95	56 99	3 05	ANDS	brown mud and andesite chips				189630	
56 99	60 04	3 05	ANDS	brown mud and andesite chips				189631	
60 04	63 09	3 05	SHAL	contaminated				189632	
63 09	66 14	3 05	SHAL	coal chips, coaly shale, contamination				189633	
66 14	69 18	3 05	SHAL	buff and brown mud, coal, shaly coal				189634	
69 18	72 23	3 05	ANDS					189635	
72 23	75 28	3 05	ANDS	andesite and mudstone below				189636	
75 28	78 33	3 05	ANDS	andesite chips, shaly coal fragments				189537	
78 33	81 38	3 05	ANDS					189638	
				note contamination was from frozen material in plugged cyclone and blocked discharge hose					
81 38	84 45	3 05	SASN	loose, unconsolidated, chloritic				189639	
84 45	87 47	3 05	SLSN	with shale chips <10%				189640	
87 47	90 25	3 05	SLSN	with shale chips <10%				189641	
90 25	93 57	3 05	SLSN	with shale chips <10%, sand (uphole??) >10%				189642	
93 57	96 62	3 05	SLSN	with sand from uphole <10%				189643	
96 62	99 66	3 05	SLSN	with minor coal flakes, shale, mudstone, >10%				189644	

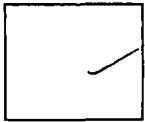
From (m)	To (m)	Interval (m)	Unit	Comments	From (m)	To (m)	Interval (m)	Sample No	Recovery %
99 66	102 72	3 05	SLSN	very poor recovery loose sand <5%				189645	
102 72	105 76	3 05	SASN	siltstone ~ >40%				189646	
105 76	108 81	3 05	SLSN	fine grained loose sand				189647	
108 81	111 86	3 05	SASN	shale chips <2%, poor recovery				189648	
111 86	114 91	3 05	SASN	shale chips <25%, sand, unconsolidated				189649	
114 91	117 96	3 05	SLSN	loose sand, <10%, senctic siltstone poor recovery				189650	
117 96	121 00	3 05	SLSN	loose sand, <10%, senctic siltstone poor recovery				189651	
121 00	124 05	3 05	SLSN	loose sand 30%				189652	
124 05	127 10	3 05	SLSN	loose sand 30%				189653	
127 10	130 15	3 05	SLSN	loose sand 20% poor recovery				189354	
130 15	133 20	3 05	MDSN					189655	
133 20	136 24	3 05	SASN	loose sand				189656	
136 24	139 29	3 05	SASN	loose sand				189657	
139 29	142 34	3 05	SASN	medium grey sand				189658	
142 34	145 39	3 05	SASN	medium grey sand, minor coal flakes				189659	
145 39	148 44	3 05	SASN	light grey sand, few coal flakes				189660	
148 55	151 48	3 05	SASN	light grey loose sand				189661	
151 48	154 53	3 05	SASN	light grey loose sand with shale fragments				189662	
154 53	157 58	3 05	SASN	light grey loose sand with shale fragments				189553	
157 58	160 62	3 05	SASN	light grey loose sand with shale fragments				189664	
160 62	163 67	3 05	SASN	light grey loose sand with shale fragments				189665	
163 67	166 72	3 05	SASN	light grey loose sand with shale fragments				189666	
166 72	169 77	3 05	SASN	light grey loose sand with shale fragments				189667	
169 77	172 82	3 05	SASN	light grey loose sand with shale fragments				189668	
172 82	175 87	3 05	SASN	light grey loose sand with shale fragments				189669	
175 87	178 91	3 05	SASN	light grey loose sand with silt component				189670	
178 91	181 96	3 05	SASN	light grey loose sand with silt component				189671	
181 96	185 01	3 05	SASN	dark grey loose sand with silt component				189672	
185 01	188 06	3 05	SLSN	with weak sand component <5%				189673	
188 06	191 10	3 05	SASN	sand and frozen clumps, from uphole				189674	
				EOH, hole collapsed after rods pulled, no geophysical log					

**APPENDIX III  
GEOPHYSICAL LOGS**

Document Separator

Start

Stop



Levels

	1	2	3	4	5	6	7	8
Binder								
Folder								
Staple								
Paper Clip								
Binder Clip								
Plastic Protector		✓						
Elastic Bands								
TABS								
OTHER _____								

Special Instructions

*assorted docs*

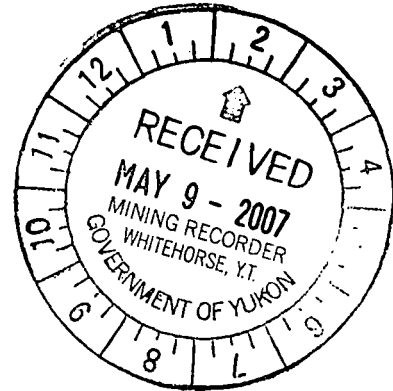
094 874

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED  
1016 - 510 West Hastings Street  
Vancouver, B.C. V6B 1L8

Telephone: 604-688-2568

Fax: 604-688-2578

AFFIDAVIT




I, Joan Mariacher, of Vancouver, B.C. make oath and say:

That to the best of my knowledge the attached Statement of Expenditures for exploration work on CYW0073 mineral claims on Claim Sheet 115H/8 is accurate.

  
Joan Mariacher

Sworn before me at Vancouver, B.C.

this 17th day of April 2007.

  
Gregory P. Bruce  
Barrister & Solicitor  
1030 - 510 West Hastings  
Vancouver, B.C. V6B 1L8

094874

Statement of Expenditures  
CYW0073  
April 17, 2007

Labour

R. Carne – geologist – 127 hours January, February and March at \$90/hr plus 20 hours March at \$100/hr	\$ 14,370.01
N. Mitchell – geologist – February and March 16 days at \$560/day	9,587.20
M. Phillips – geologist – February – 10 hours at \$70/hr	749.00
D. Huston – geologist – February and March 26 days at \$480/day	13,353.60
D. Moraal – camp manager – February and March 38 1/2 days at \$440/day	18,125.80
B. Duncan – field assistant – February and March 16 days at \$320/day	5,478.40
M. LeLevier – camp cook – March 25 days at \$560/day	14,980.00
J. Mariacher – January, February and March 68 1/2 hours at \$65/hr	<u>4,764.18</u>
	81,408.19

Expenses

Field room and board - 186 1/4 days at \$125/day	24,910.94
DEREX Drilling	113,014.89
Career Industries	3,193.44
Berdoe Enterprises	4,419.10
Versatile Rentals	4,274.65
Roke Oil	<u>40,883.42</u>
	190,696.44
	<u>\$272,104.63</u>

*Expenses + labour  
= 353,812.82*

# ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

In Account With

Project *DIVISION MOUNTAIN PROJECT*  
 Date *JANUARY 1 - FEBRUARY 28, 2006*

LABOUR			
Field	Name - Hours at Rate	Month	Amount
✓	R CARNE - 48 HRS AT 90/HRL	JAN	4320.00
	- 39 HRS AT 90/HRL	FEB	3510.00
	D EATON - 2 HRS AT 80/HRL	JAN	160.00
	- 2 HRS AT 80/HRL	FEB	160.00
✓	N MITCHELL - 8 HRS AT 70/HRL		560.00
✓	M PHILLIPS - 10 HRS AT 70/HRL		700.00
✓	D HUSTON - 7 DAYS AT 480/DAY	FEB	3360.00
✓	D MORAL - 9 1/2 DAYS AT 440/DAY		4180.00
✓	B SINCAN - 8 HRS AT 40/HRL		320.00
	J PORTER - 3 1/4 HRS AT 40/HRL	JAN	130.00
	- 3 1/4 HRS AT 40/HRL	FEB	130.00
	K YEUNG - 2 3/4 HRS AT 38.50/HRL	FEB	105.88
Accounting and Expediting	J Manacher - 23 3/4 hrs at \$65/hr	JAN	1543.75
	25 1/2 HRS AT 65/HRL	FEB	1657.50
			20837.13
OTHER SERVICES			
Room and Board in Whitehorse	days at \$100 / day		
Field equipment from AC stock			
Printing	Photocopies @ 15		
Rentals from AC			
EXPENSES			
Petty Cash			
Telephone			
CORPORATE COURIER			8.26
J GARDIN ENVIRONMENTAL CONSULTING			2248.24
MILLS BASIS			11.11
FEDEX			30.91
			2298.56
Management	6% on Expenses		137.91
	on Field A/C		12.84
			150.75
			20286.44
GST (R100247667)	7% on 20286.44		1630.05
			24916.49

# ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

In Account With

Project DIVISION MOUNTAIN PROJECT

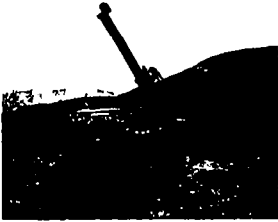
Date MARCH 31, 2006

LABOUR			
Field	R CARRE - 40 HRS AT 90/HRL - 20 HRS AT 100/HRL	3600 00 2000 00	
	✓ N MITCHELL - 15 DAYS AT 560/DAY	8400 00	
	✓ D HUSTON - 19 DAYS AT 480/DAY	9120 00	
	✓ D MORRIS - 29 DAYS AT 440/DAY	12760 00	
	✓ B. DUNNAN - 15 DAYS AT 320/DAY	4800 00	
	✓ M LELEVEL - 25 DAYS AT 560/DAY	14000 00	
	D HUSTON - 1/4 DAY FEB OVERCHARGE	(240.00)	
	J PORTER - 4 1/2 HRS AT 40/HRL	180 00	
	K YEUNG - 2 HRS AT 38.50/HRL	77 00	
Accounting and Expediting	J Manacher - 19 1/2 hrs at \$65/hr	1251 25	55948 25
<b>OTHER SERVICES</b>			
Room and Board in Whitehorse	days at \$100 / day		
Field equipment from AC stock	168 8991 AT 51/DAY	9240 00	
Printing	Photocopies @ 15		
Rentals from AC	DHL - 1 @ 23 75 + 14 1/4 @ 14 85	235 08	9479 08
<b>EXPENSES</b>			
Petty Cash	18 98 00 + 12 00 00	30 98	
Telephone	JOAN M EXPENSES - 300 36 01 + 317 67 03 CORPORATE COURIER - 20 65 + 37 95 D HUSTON EXPENSES BERBEE ENTERPRISES - 2925 00 + 1195 00 VERSATILE RENTALS GREYHOUND COURIER INDUSTRIAL ELECTRIC - 1696 11 + 750 CALMANS HOTEL AIR NORTH - 95 57 + 21 79 YULON TIRE AQUA TECH HOME HARDWARE - 72 65 + 1100 05 MACHINERY RENTALS - 676 64 01 + 1447 44 NORTH GO LETRO - 1280 00 01 + 648 00 04 + 1572 00 01 SILVERM DRUG MART SURPRISE SERVICE DAREEL INDUSTRIES - 1563 32 + 1421 20 ROBE OIL - 27814 14 + 10394 66 BUILDERS SUPPLY LAND AKLANDS SCAMBER M LELEVEL EXPENSES N MITCHELL EXPENSES	DI 8 00 DI 4130 00 K 3975 00 29 67 2446 11 111 70 117 36 605 13 866 16 1172 70 2124 08 17100 00 126 88 52 34 2984 52 38208 80 31 84 32 12 DI 40 00 DI 20 90	7490 92
Management	6% on Expenses on Field A/C	4494 66 20623 24	25167 90 165506 15
GST (R100247667)	7% on 165506 15		11595 43 177091 58

# DEREX Drilling Services Ltd.

B C. Toll Free 1-888-549-3130  
 (250) 546-3402  
 Box 536  
 Armstrong, B C V0E 1B0  
 www.derex.ca

094 874



## INVOICE

**Client:**

Cash Minerals Ltd  
 Surte 1016 - 510 West Hastings Street  
 Vancouver, BC  
 V6B 1L8

**Date:**

Mar 12 - 21, 2006

**Drilling At:**

Division Mountain Project

Invoice #	Purchase Order	Job ID	GST No	
# 3010-06	Division Mountain	RIG #2	85249 0374 RT0001	
Description	Unit Price	Quantity	Total	
Mob & Demob to site	145 00	23	3,335 00	
Overburden drilling - <6° - vertical - O D E X	17 00			
Overburden drilling - <6° - angle - O D E X	21 50	155	3,332.50	
Bedrock DHH drilling - <5 5° - vertical - 0-100m	10 50			
Bedrock DHH drilling - <5 5° - vertical - 100-200m	11 00			
Bedrock DHH drilling - <5 5° - vertical - 200-300m	12 50			
Bedrock DHH drilling - <5 5° - angle - 0-100m	11 50	267	3,070 50	
Bedrock DHH drilling - <5 5° - angle - 100-200m	12 25			
Bedrock DHH drilling - <5 5° - angle - 200-300m	14 50			
Drilling to core point for 6" core	350 00			
PQ size - conng	350 00			
PQ size - bits				
Rig time - moving between sites, tripping, welding, etc	205 00	63 25	12,966 25	
Rig time - stand-by	145 00			
Casing	60 88	200	11,592 00 <i>12176</i>	
Drive shoe	136 85	6	676 27 <i>821 10</i>	
Additional materials, rotary bits, & supplies				
Foam - per pail	125 00			
Nightly charge - cold weather	50 00	8	400 00	
Subsistence		20		
Travel to site daily	55 00	21 5	1,182.50	
Service Pickup Trucks w/tank, radio, whip	175 00	10	1,750 00	
High pressure Booster	550 00			

*57 96 OK ATT*  
*112.71 OK ATT*

Subtotal	38,305 02	<i>J</i>
GST	2,681 35	
<b>TOTAL DUE</b>	<b>\$40,986.37</b>	<i>X</i>

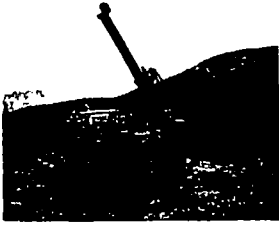
**Terms**  
 Payment due on receipt of invoice.  
 Interest at 24% per annum after 10 days.

THANK YOU FOR YOUR BUSINESS!

# DEREX Drilling Services Ltd.

B.C Toll Free 1-888-549-3130  
 (250) 546-3402  
 Box 536  
 Armstrong, B.C. V0E 1B0  
 www.derex.ca

094874



## INVOICE

**Client:**

Cash Minerals Ltd  
 Suite 1016 - 510 West Hastings Street  
 Vancouver, BC  
 V6B 1L8

**Date:**

Mar 22 - 28, 2006

**Drilling At:**

Division Mountain Project

<b>Invoice</b>	<b>Purchase Order</b>	<b>Job ID</b>	<b>GST No.</b>
# 3011-06	Division Mountain	RIG #2	85249 0374 RT0001

Description	Unit Price	Quantity	Total
Overburden drilling- <6" - vertical - O D E X	17 00		
Overburden drilling-<6" -angle - O D E X	21 50	222	4,773 00 ✓
Bedrock DHH drilling - <5 5"- vertical - 0-100m	10 50		
Bedrock DHH drilling - <5 5"- vertical - 100-200m	11 00		
Bedrock DHH drilling - <5 5"- vertical - 200-300m	12 50		
Bedrock Rotary drilling - <5 5"- vertical - per hour	205 00		
Bedrock DHH drilling - <5 5"- angle - 0-100m	11 50	512	5,888 00 ✓
Bedrock DHH drilling - <5 5"- angle - 100-200m	12 25	288	3,528 00 ✓
Bedrock DHH drilling - <5 5"-angle- 200-300m	14 50		
Drilling to core point for 6" core	350 00		
PQ size - conng	350 00		
Rig time - moving between sites, tripping, welding, etc	205 00	26	5,330 00 ✓
Rig time - stand-by	145 00		
Casing	60 88	160	9,273 60 9740 80
Drive shoe	136 85	6	676 27 821 10
Foam - per pail	125 00		
Nightly charge - cold weather	50 00	7	350 00 ✓
Subsistence		14	
Travel to site daily	55 00	9	495 00 ✓
Service Pickup Trucks w/tank,radio,whip	175 00	7	1,225 00 ✓
		<b>Subtotal</b>	<b>31,538 87</b>
		<b>GST</b>	<b>2,207 72</b>
		<b>TOTAL DUE</b>	<b>\$33,746.59 ✓</b>

**Terms**

Payment due on receipt of invoice.  
 Interest at 24% per annum after 10 days.

THANK YOU FOR YOUR BUSINESS!

# DEREX Drilling Services Ltd.

094874

B C. Toll Free 1-888-549-3130

(250) 546-3402

Box 536

Armstrong, B C V0E 1B0

www.derexca



## INVOICE

**Client:**

Cash Minerals Ltd  
 Suite 1016 - 510 West Hastings Street  
 Vancouver, BC  
 V6B 1L8

**Date:**

Mar 29 - Apr 5, 2006

**Drilling At**

Division Mountain Project

<b>Invoice</b>	<b>Purchase Order</b>	<b>Job ID</b>	<b>GST No.</b>
# 3012-06	Division Mountain	RIG #2	85249 0374 RT0001

Description	Unit Price	Quantity	Total
Mob & Demob to site	145 00	23	3,335 00
Overburden drilling-<6° - vertical - O D E X.	17 00		
Overburden drilling-<6° -angle - O D E X.	21 50	95	2,042 50
Bedrock DHH drilling - <5 5°- vertical - 0-100m	10 50		
Bedrock DHH drilling - <5 5°- vertical - 100-200m	11 00		
Bedrock DHH drilling - <5 5°- vertical - 200-300m	12 50		
Bedrock Rotary drilling - <5 5°- vertical - per hour	205 00		
Bedrock DHH drilling - <5 5°- angle - 0-100m	11 50	391	4,496 50
Bedrock DHH drilling - <5 5°- angle - 100-200m	12 25	311	3,809 75
Bedrock DHH drilling - <5 5°-angle- 200-300m	14 50		
Drilling to core point for 6" core	350 00		
PQ size - conng	350 00		
Rig time - moving between sites, tripping, welding, etc	205 00	91 75	18,808 75
Rig time - stand-by	145 00		
Casing	60 88		
Drive shoe	136 85		
Foam - per pail	125 00		
Nightly charge - cold weather	50 00		
Subsistence			
Travel to site daily	55 00	12	660 00
Service Pickup Trucks w/tank,radio,whip	175 00	15	2,625 00

**Subtotal** 35,777 50

**GST** 2,504 43

**TOTAL DUE** \$38,281.93

**Terms**

Payment due on receipt of invoice.  
 Interest at 24% per annum after 10 days.

THANK YOU FOR YOUR BUSINESS!

**TABLE OF FORMATIONS**

<b>QUATERNARY</b>	
<b>Q</b>	Unconsolidated sand, silt and gravel
<b>UPPER CRETACEOUS?</b>	
<b>CARMACKS GROUP?</b>	
<b>Kc<sub>sd</sub></b>	Green to light greyish-red feldspar and hornblende porphyry sills, dykes and flows
<b>Kc<sub>av</sub></b>	Maroon feldspar porphyry; greyish-red feldspar porphyry and breccia
<b>Kc<sub>bv</sub></b>	Amygdaloidal to vesicular basalt and extrusive flows
<b>Kc<sub>mz</sub></b>	Greenish black monzodiorite
<b>Kc</b>	Undivided Carmacks Group
<b>UPPER JURASSIC TO LOWER CRETACEOUS</b>	
<b>Tantalus Formation</b>	
<b>JKTu</b>	Upper Member - Clast-supported chert pebble conglomerate, resistant and thick bedded; with intercalated medium- to coarse-grained sandstone beds composed of quartz, feldspar and chert grains. Clasts are typically 1 to 3 cm across; subrounded to well rounded and moderate to well sorted
<b>JKTl</b>	Lower Member - Matrix-supported chert pebble conglomerate, consisting of predominantly coarse- to very coarse-grained sandstone; composed of quartz, feldspar and chert grains. This member is recessive. Also contains subordinate fine-grained, grey to brown weathering, laminated, plant remain-rich sandstone; minor coal seams
<b>JKT</b>	Undivided Tantalus Formation
<b>LOWER TO UPPER JURASSIC</b>	
<b>LABERGE GROUP</b>	
<b>Tanglefoot Formation</b>	
<b>JTu</b>	Upper Member - Yellowish-grey to bleached white, coarse- to very coarse-grained sandstone, grit and pebbly grit with conspicuous quartz and feldspar granules within a white to buff chalky cement. Other lithologies include grey interlaminate siltstone and very fine-grained sandstone, carbonaceous shale and coal seams
<b>JTi</b>	Lower Member - Light olive grey, fine- to very coarse-grained quartz-rich sandstone, grit, heterolithic conglomerate and laminated siltstone. Fining-up packages commonly include the above lithologies. Macerated plant debris is common at the top of sequences. The conglomerate is matrix- to clast-supported with clasts ranging from pebbles to boulders, subangular to rounded, and include vein quartz, felsic granite and porphyry
<b>Nordenskiold / Conglomerate Formation</b>	
<b>JN</b>	Nordenskiold Formation - Steel grey to medium greenish tuff, weathers dark brown; medium- to coarse-crystalline, well indurated, massive; locally calcareous Conglomerate Formation - Olive grey, heterolithic conglomerate, clasts range from pebbles to boulders including predominantly granitic rocks up to 30 cm across; subrounded to well rounded The Nordenskiold and Conglomerate Formation are lateral equivalents of the Tanglefoot Formation Lower Member
<b>JL</b>	Undivided Laberge Group
<b>UPPER TRIASSIC</b>	
<b>LEWIS RIVER GROUP</b>	
<b>uLRl</b>	Massive, white weathering, light grey limestone with abundant stromatoporoids and other fossils; occurs mainly as lenticular reefoid bodies
<b>uLRs</b>	Recessive weathering, thin bedded dark brown argillite, siltstone and sandstone with minor conglomerate
<b>KLOTASSIN GRANODIORITE SUITE</b>	
<b>Rgdm</b>	Dark grey weathering, coarse-grained equigranular biotite hornblende granodiorite to quartz monzonite; commonly shows protoclinal foliation by alignment of mafic minerals

**SYMBOLS**

	Geological contact (defined, approximate, assumed)
	Fault (symbol on downthrown side where sense of displacement is assumed)
	Limit of deep Quaternary cover
	Extent of 1:50,000 scale mapping by Archer Cathro or Yukon Geological Survey (Open File 2001-3)
	Anticline axis
	Syncline axis
	Bedding attitude
	Bedding form line transferred from satellite photo
	Coal seam
	Coal float
	Percussion drill hole (2006 holes labelled)
	Diamond drill hole (2006 holes labelled)

**LAND STATUS**

	Coal Mining Lease		First Nation Category B Land
	Coal Exploration Licence		Agricultural Lease
	Quartz Claim		Parks and Special Management Areas
	First Nation Category A Land		Surveyed Lot

115H/09	105E/12	105E/11
115H/08	105E/05	105E/06
115H/01	105E/04	105E/03

UTM Zone 8; NAD 83

094 874

**CASH MINERALS LTD.**

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

FIGURE 2

**GEOLOGY**  
DIVISION MOUNTAIN AREA

Scale 1:50 000

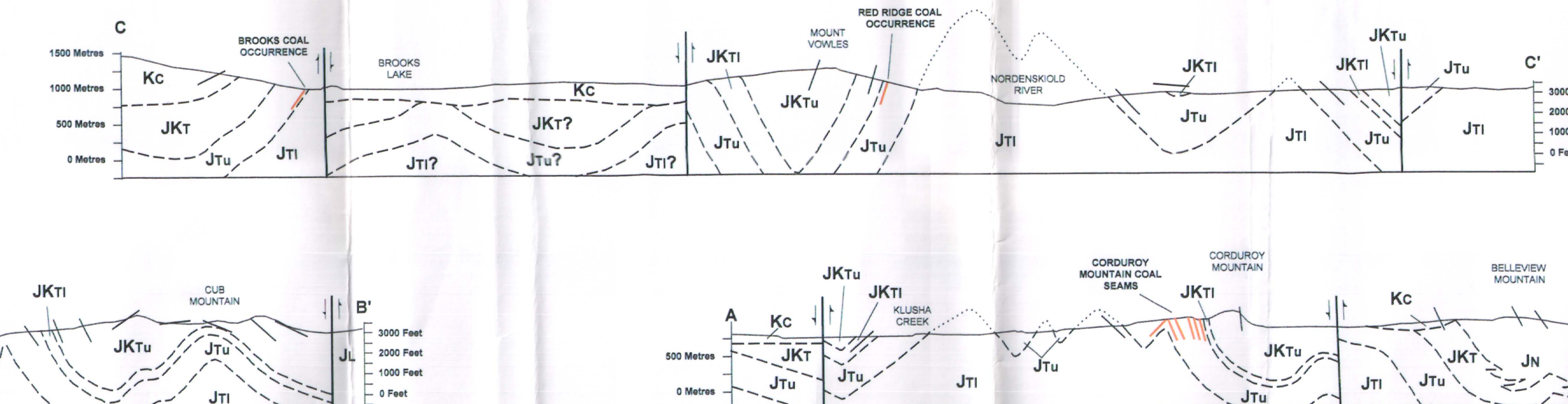
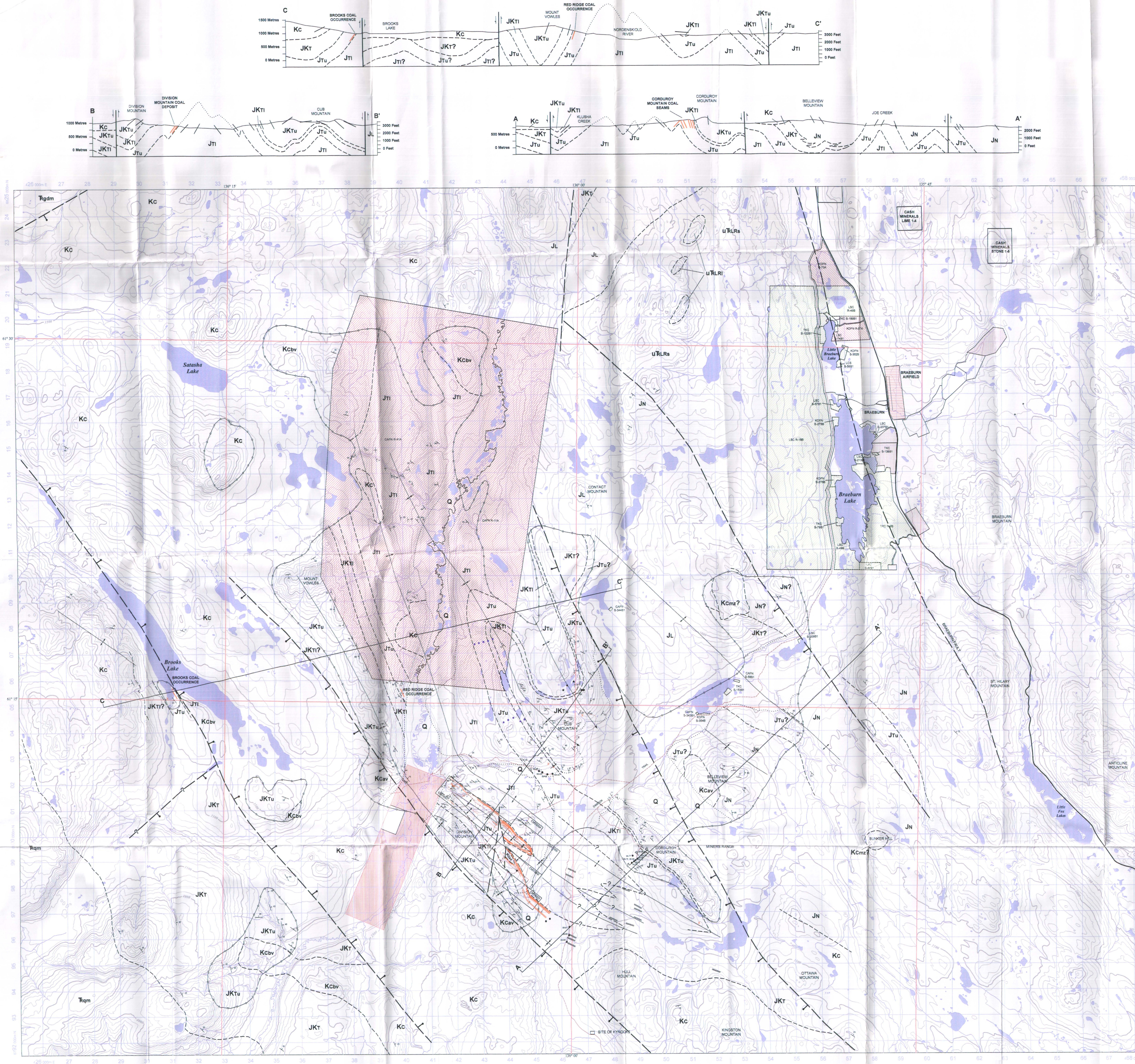


DRAWN/REVISED BY: RCC


PROJECT:

FILE: DIV MTN GEOL.dwg

DATE: AUGUST 31, 2006

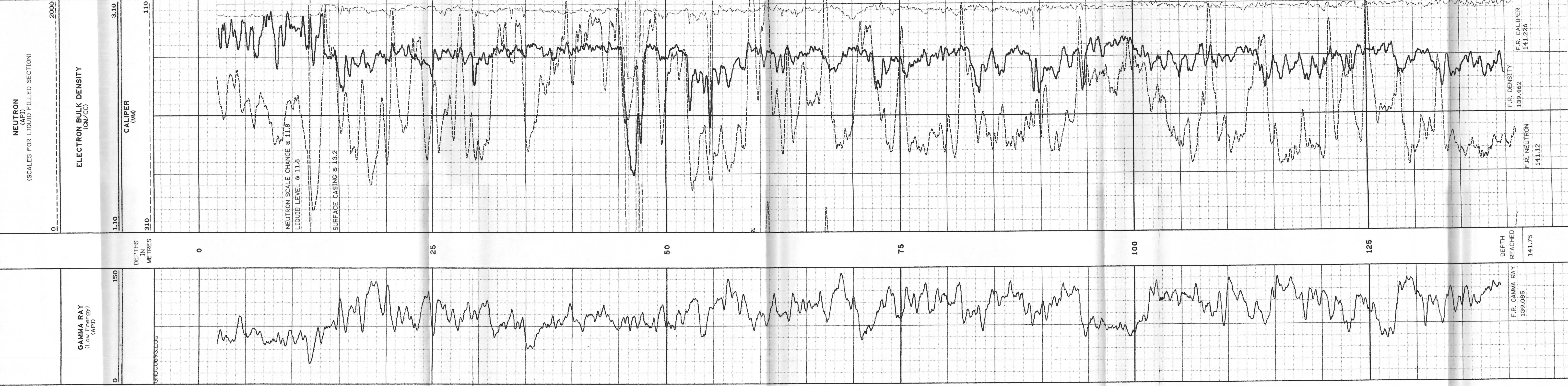


094874

 <b>GAMMA RAY NEUTRON DENSITY CALIPER LOG</b> LOGGED OPEN HOLE	
OIL ENTERPRISES LTD. CALGARY, ALBERTA, CANADA Company: ARCHER CATHRO AND ASSOCIATES (1981) LIMITED Well: 06-93 Location: E445246 N6802415 Field: DIVISION MOUNTAIN Province: YUKON	
Unique Well Identifier: Permanent Datum: GROUND LEVEL Elev: 758.34 metres K.B. m Log Measured From: GROUND LEVEL m Above Perm. Datum C.F. m Well Depths Measured From: GROUND LEVEL G.L. 758.34 m Other Services: GSR GNDC.HDG	
Run No.	ONE
Date	27-MARCH-06
First Reading	141.226
Last Reading	2.0
Footage Logged	139.226
Depth Reached	141.75
Depth Driller	142.34
Casing Roke	13.2
Casing Driller	15.24
Fluid Type	WATER/AIR
Liquid Level	11.8
Mn. Diameter	114.3 MM
Rm @ degrees C	OHMM @ C
Operating Time	13:20-15:15
Truck No.	52
Recorded By	J. GRANT
Witnessed By	D. MORAAL

<b>EQUIPMENT</b> SURFACE EQUIPMENT LOGGING UNIT: 52 / NIMS COMPUTER: 06 / 08 / 03 / CABLE MONITOR: 06 / INTEL COMPUTER: L4 / L7 / LINE PWR MODULE: 310 310 310 / QLS2 / 5.25 FLOPPY: / / RECORDER: / HARD DRIVE: / 3.50 FLOPPY: / /	
DOWNHOLE EQUIPMENT CALIPER (CAL): 460 GAMMA RAY NEUTRON (GR07) 312 DENSITY (DENS): 829 GR-SP-RES: C1 1C785C06, C2 2C460A06, D1 1D829A0W N1 1N07N171, N2 2N10N171, R1 1R312TB1, R2 2R176TB1	

**GAMMA RAY - NEUTRON - DENSITY - CALIPER**  
 DATA FROM GRN, DENSITY, & CALIPER SONDES  
 LOGGED OPEN HOLE  
 200 METRIC



LOG PARAMETERS  
 QLS V2.0

IN07N171.CAL	CP1	CP2	CP3	CP4	CP5	CP6
0	2.265	2	0.95	0	0.1	0.1
0	0.33	3	0.206	0	0	0
2C460A06.CAL	CP1	CP2	CP3	CP4	CP5	CP6
0	0.384	2	10.94	-52.7	0.04	0.04
D-1A11.CAL	CP1	CP2	CP3	CP4	CP5	CP6
0	1.058	2	1	0	0	0.04
N-1A11.PRG	PP1	PP2	PP3	PP4	PP5	PP6
4	0	0	0	0	0	0
12	0	0	0	0	0	0
N-1B11.PRG	PP1	PP2	PP3	PP4	PP5	PP6
12	0	0	0	0	0	0
C-1A21.PRG	PP1	PP2	PP3	PP4	PP5	PP6
40	0	0	0	0	0	0
41	114.3	0	0	0	0	0
10822A0W.PRG	PP1	PP2	PP3	PP4	PP5	PP6
30	7.8568	0.84409	0	0	0	0

GNDC.PAR	SNS	ZER	LWB	LWB	LT	LC	LD1	LD2	DB
NEW	0	0	0	10	T	S	100	0	0
N-1	100	13	13	33	T	S	16	16	0
GR-1B	15	0	0	10	T	S	16	16	0
N-1B	250	10	13	33	N	S	25	25	7
CAL	-10	44	13	33	N	S	100	100	0
BS	-10	44	13	33	N	S	100	100	0
DEN	0.1	2	13	33	E	S	100	100	0

EKOR RAW DATA FILE(S): N-1A11.RAW C-1A21.RAW D-1A11.RAW  
 ASCII(LAS) FILE: GNDC0693.LAS  
 LOG FIGURE FILE: GNDC.FIG

# GAMMA RAY NEUTRON DENSITY CALIPER LOG

LOGGED OPEN HOLE

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA, CANADA

Company: ARCHER CATRO AND ASSOCIATES (1981) LIMITED  
 Well: 06-92  
 Location: E445480 N6802354  
 Field: DIVISION MOUNTAIN  
 Province: YUKON

Permanent Datum: GROUND LEVEL Elev: 767.4 metres  
 Log Measured From: GROUND LEVEL m Above Perm. Datum  
 Well Depths Measured From: GROUND LEVEL  
 Other Services: GSR

Run No. ONE  
 Date: 24-MARCH-06  
 First Reading: 105.326  
 Last Reading: 2  
 Footage Logged: 103.326  
 Depth Reached: 105.85  
 Depth Driller: 142.34  
 Casing Role: 4.3  
 Casing Driller: 5.15  
 Fluid Type: WATER/AIR  
 Liquid Level: 23.0  
 Mn. Diameter: 114.3 MM

LOGGING UNIT: 52 / NIMS COMPUTER: 05 / 08  
 CABLE MONITOR: 06 / INTEL COMPUTER: L4 / L7  
 LINE PWR MODULE: 310 310 / SOFTWARE: 0LS2 /  
 RECORDER: HARD DRIVE:

Operating Time: 09:30-12:00  
 Truck No.: 52  
 Recorded By: J. GRANT  
 Witnessed By: N. MITCHELL

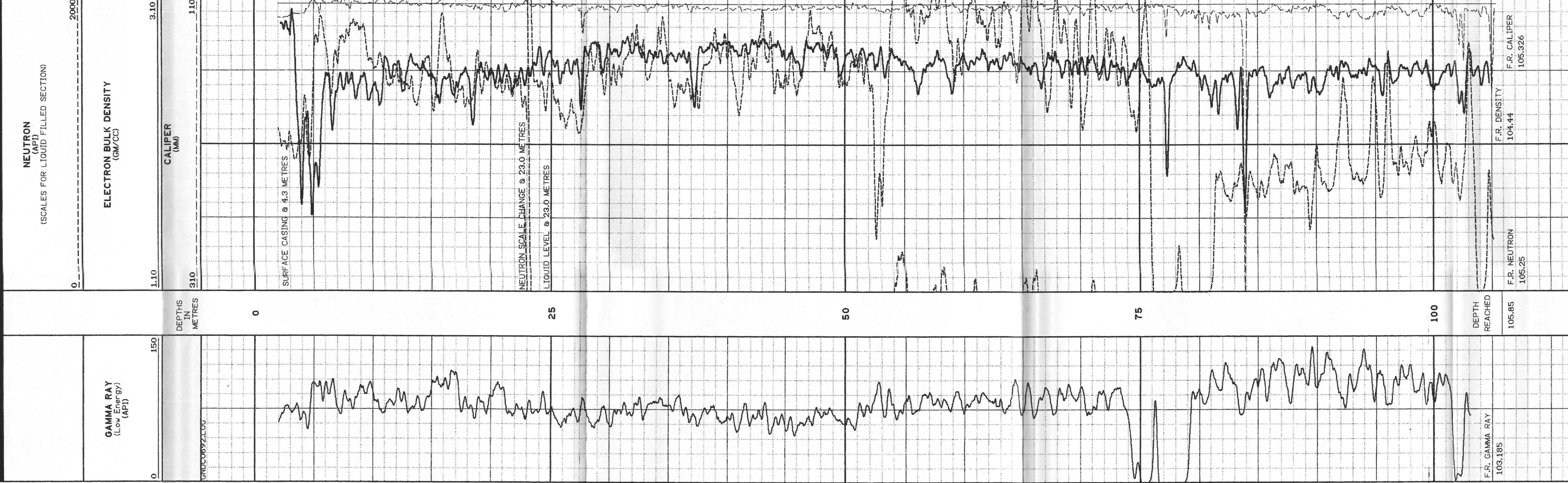
**EQUIPMENT**

**SURFACE EQUIPMENT**  
 LOGGING UNIT: 52 / NIMS COMPUTER: 05 / 08  
 CABLE MONITOR: 06 / INTEL COMPUTER: L4 / L7  
 LINE PWR MODULE: 310 310 / SOFTWARE: 0LS2 /  
 RECORDER: HARD DRIVE:

**DOWNHOLE EQUIPMENT**  
 CALIPER (CAL): 460  
 DENSITY (DENS): 829  
 C1 1C785C06, C2 2C460A06, D1 1D829A0W  
 N1 1N07N171, N2 2N10N171, R1 1R3121B1, R2 2R1761B1

## GAMMA RAY - NEUTRON - DENSITY - CALIPER

DATA FROM GRN, DENSITY, & CALIPER SONDES



**LOG PARAMETERS**  
 QLS V2.0

FOR RAW DATA FILE(S): C-1A21.RAW D-1A11.RAW N-1A11.RAW  
 ASCII(LAS) FILE: GND0692.LAS  
 LOG FIGURE FILE: GND06.FIG

2C460A06.CAL	CP1	0	0.384	CP2	2	CP3	2	CP4	10.94	CP5	-52.7	CP6	0.04
D-1A11.CAL	CP1	0	1.058	CP2	2	CP3	2	CP4	1	CP5	0	CP6	0.04
1N07N171.CAL	CP1	0	2.265	CP2	3	CP3	3	CP4	0.95	CP5	0	CP6	0.11
C-1A21.PRG	PP1	0	0.33	PP2	0	PP3	0	PP4	0.206	PP5	0	PP6	0.1
40	PP1	0	0	PP2	0	PP3	0	PP4	0	PP5	0	PP6	0
41	PP1	114.3	0	PP2	0	PP3	0	PP4	0	PP5	0	PP6	0
1D829A0W.PRG	PP1	0	0	PP2	0.84409	PP3	0	PP4	0	PP5	0	PP6	0
30	PP1	7.8568	0	PP2	0	PP3	0	PP4	0	PP5	0	PP6	0
N-1A11.PRG	PP1	0	0	PP2	0	PP3	0	PP4	0	PP5	0	PP6	0
4	PP1	0	0	PP2	0	PP3	0	PP4	0	PP5	0	PP6	0
12	PP1	0	0	PP2	0	PP3	0	PP4	0	PP5	0	PP6	0
N-1B11.PRG	PP1	0	0	PP2	0	PP3	0	PP4	0	PP5	0	PP6	0
4	PP1	0	0	PP2	0	PP3	0	PP4	0	PP5	0	PP6	0
12	PP1	0	0	PP2	0	PP3	0	PP4	0	PP5	0	PP6	0

**GND06.PAR**

NEW	SNS	ZLR	LWB	RWB	LT	LC	LD1	LD2	DB
SAL	-10	44	13	33	N	S	100	25	0
DEN	0.1	2	13	33	E	S	100	0	0
GR-1	15	0	0	10	T	D	100	0	0
N-1	100	13	13	33	T	D	16	16	6
GR-1B	15	0	10	10	T	D	100	0	0
N-1B	250	8	13	33	T	D	16	16	6

094874

**GAMMA RAY SP - RESISTANCE LOG**  
LOGGED OPEN HOLE

**ROKE** OIL ENTERPRISES LTD. CALGARY, ALBERTA, CANADA

LSD Company: ARCHER CATHRO AND ASSOCIATES (1981) LIMITED  
 SEC Well: 06-92  
 TWP Location: E445480 N6802354  
 RGE Field: DIVISION MOUNTAIN  
 W M Province: YUKON

Unique Well Identifier:  
 Permanent Datum: GROUND LEVEL Elev: 767.4 metres K.B. m  
 Log Measured From: GROUND LEVEL m Above Perm. Datum C.F. m  
 Well Depths Measured From: GROUND LEVEL G.L. 767.4 m  
 Other Services: GNDC GSR.HDG

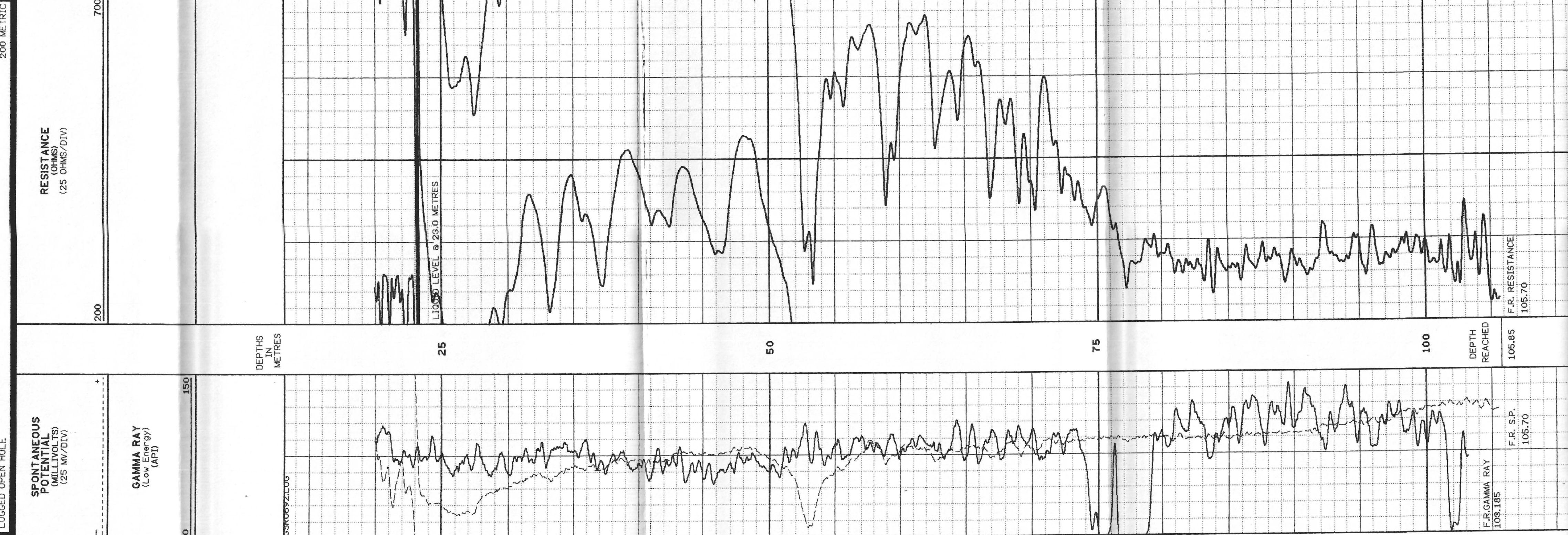
Run No.	ONE
Date	24-MARCH-06
First Reading	105.326
Last Reading	2
Footage Logged	103.326
Depth Reached	105.85
Depth Driller	142.34
Casing Roke	4.3
Casing Driller	5.15
Fluid Type	WATER/AIR
Liquid Level	23.0
Mn. Diameter	114.3 MM
Rm @ degrees C	OHMM @ C
Operating Time	09:30-12:00
Truck No.	52
Recorded By	J. GRANT
Witnessed By	N. MITCHELL

**EQUIPMENT**

**SURFACE EQUIPMENT**  
 LOGGING UNIT: 03 / /  
 CABLE MONITOR: 05 / 08  
 LINE PWR MODULE: 310 / 310  
 RECORDER: 0LS2 / /  
 5.25 FLOPPY: / /  
 3.50 FLOPPY: / /

**DOWNHOLE EQUIPMENT**  
 CALIPER (CAL): 460  
 DENSITY (DENS): 829  
 GAMMA RAY NEUTRON (GR007)  
 GR-SP-RES: 312  
 C1 1C785C06, C2 2C460A06, D1 1D829A0W  
 N1 1N07N171, N2 2N10N171, R1 1R312TB1, R2 2R176TB1

**GAMMA RAY - SP-RESISTANCE**  
DATA FROM GRN & SP RESISTANCE SONDES



**LOG PARAMETERS**  
OLS V2.0

IR312TB1.CAL	CP1	CP2	CP3	CP4	CP5	CP6
	0	0.139	3	1.81	-14797.2	0.01
	0	0.139	1	9.77	-21.9	0.01
	0	0.575	2	1.1904	0	0.1
1N07N171.CAL	CP1	CP2	CP3	CP4	CP5	CP6
	0	2.265	2	0.95	0	0.1
	0	0.33	3	0.206	0	0.1
R-2A11.PRG	PP1	PP2	PP3	PP4	PP5	PP6
	4	0	0	0	0	0
	32	0	0	0	0	0
	33	0	0	0	0	0
N-1A11.PRG	PP1	PP2	PP3	PP4	PP5	PP6
	4	0	0	0	0	0
	12	0	0	0	0	0
GSR.PAR	SNS	ZER	LWB	RWB	LT	LD1
	25	18	0	10	N	27
	SP-1	25	5	13	E	100
	RES-1	25	0	33	S	0
	GR-1	15	0	10	S	0
						DB
						8

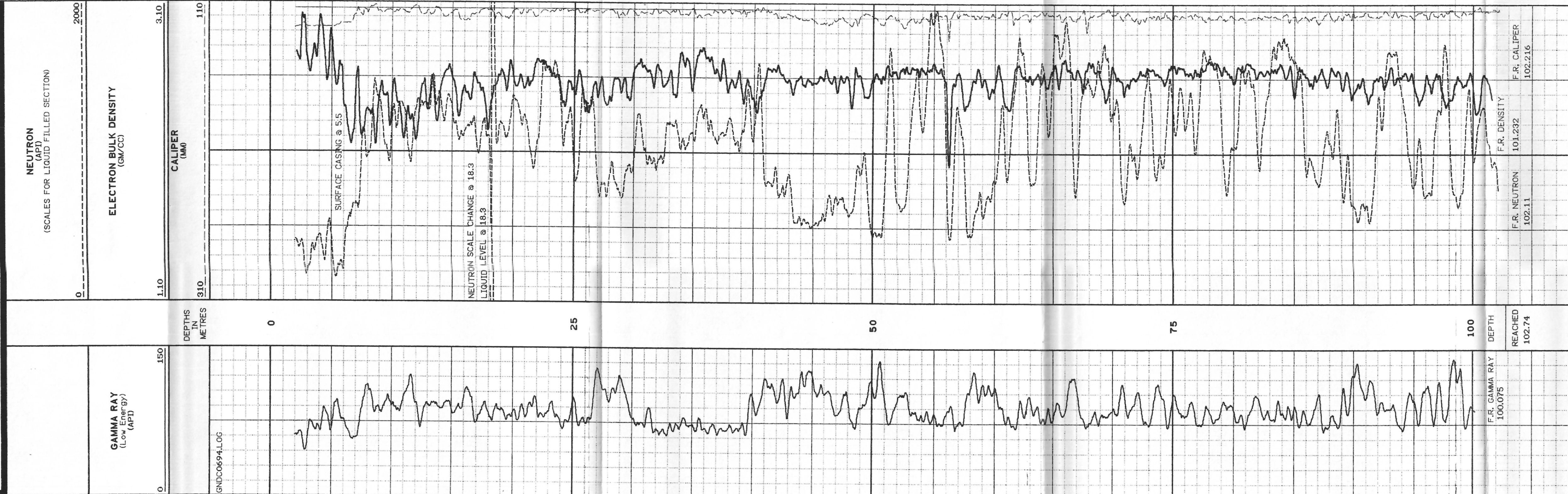
EKOR RAW DATA FILE(S): R-2A11.RAW N-1A11.RAW  
 ASCII(LAS) FILE: GSR0692.LAS  
 LOG FIGURE FILE: GSR.FIG

094874

<b>GAMMA RAY NEUTRON DENSITY CALIPER LOG</b>	
LOGGED OPEN HOLE	
<b>ROKE</b>	OIL ENTERPRISES LTD. CALGARY, ALBERTA, CANADA
ISD	Company: ARCHER CATHRO AND ASSOCIATES (1981) LIMITED
EC	Well: 06-94
WP	Location: E445349 N6802367
RE	Field: DIVISION MOUNTAIN
W	Province: YUKON
SCALES <b>200 METRIC</b>	
Unique Well Identifier:	
Permanent Datum:	GROUND LEVEL Elev: 767.18 metres K.B. m
Log Measured From:	GROUND LEVEL m Above Perm. Datum C.F. m
Well Depths Measured From:	GROUND LEVEL G.L. 767.18 m
Other Services:	GSR GNDG.HDG
Run No.	ONE
Date	29-MARCH-06
First Reading	102.216
Last Reading	2.0
Footage Logged	100.216
Depth Reached	102.74
Depth Driller	102.74
Casing Roke	5.5
Casing Driller	5.5
Fluid Type	WATER/AIR
Liquid Level	18.3
W. Diameter	114.3 MM
Rh @ degrees C	OHMM @ C
Operating Time	18:00-19:35
Truck No.	52
Recorded By	J. GRANT
Witnessed By	D. MORAAL

<b>EQUIPMENT</b>	
SURFACE EQUIPMENT	LOGGING UNIT: 03 / /
CABLE MONITOR:	NIMS COMPUTER: 05 / 08
LINE PWR MODULE:	INTEL COMPUTER: L4 / L7
RECORDER:	SOFTWARE: QLS2 / /
	HARD DRIVE: 3.50 FLOPPY: / /
<b>DOWNHOLE EQUIPMENT</b>	
CALIPER (CAL):	460
DENSITY (DENS):	829
C1 1C785C06, C2 2C460A06, D1 1D899A0W	GAMMA RAY NEUTRON (GR007) 312
N1 1N07N171, N2 2N10N171, R1 1R3121B1, R2 2R1761B1	GR-SP-RES:

**GAMMA RAY - NEUTRON - DENSITY - CALIPER**  
DATA FROM GRN, DENSITY, & CALIPER SONDES




LOG PARAMETERS  
QLS V2.0

EKOR RAW DATA FILE(SH: C-1A21RAW D-1A11RAW N-1A11RAW)  
ASCII(LAS) FILE: GNDG0694.LAS  
LOG FIGURE FILE: GNDG.FIG

2C460A06.CAL	CP1	CP2	CP3	CP4	CP5	CP6
	0	0.384	2	10.94	-52.7	0.04
D-1A11.CAL	CP1	CP2	CP3	CP4	CP5	CP6
	0	1.058	2	1	0	0.04
1N07N171.CAL	CP1	CP2	CP3	CP4	CP5	CP6
	0	2.265	2	0.95	0	0.1
	0	0.33	3	0.206	0	0.1
C-1A21.PRG	PP1	PP2	PP3	PP4	PP5	PP6
	40	0	0	0	0	0
	41	114.3	0	0	0	0
1D829A0W.PRG	PP1	PP2	PP3	PP4	PP5	PP6
	30	7.8568	0.84409	0	0	0
D-1A11.PRG	PP1	PP2	PP3	PP4	PP5	PP6
	12	0	0	0	0	0
N-1B11.PRG	PP1	PP2	PP3	PP4	PP5	PP6
	4	0	0	0	0	0
	12	0	0	0	0	0
GNDG.PAR	SNS	ZER	LWB	RWB	LT	LD1
	CAL	-10	44	33	N	25
	BS	-10	44	33	S	100
	DEN	0.1	2	33	N	0
	GR-1	15	0	10	S	0
	N-1	120	13	33	T	16
	GR-1B	15	0	10	S	0
	N-1B	250	4	13	T	16



 <b>GAMMA RAY SP - RESISTANCE LOG</b> LOGGED OPEN HOLE		Company: ARCHER CATHRO AND ASSOCIATES (1981) LIMITED Well: 06-93 Location: E445246 N6802415 Field: DIVISION MOUNTAIN Province: YUKON	
		SCALES 200 METRIC	
Unique Well Identifier:			
Permanent Datum: GROUND LEVEL Elev: 758.34 metres K.B. m Log Measured From: GROUND LEVEL m Above Perm. Datum C.F. m Well Depths Measured From: GROUND LEVEL G.L. 758.34 m		Other Services: GNDC GSR,HDC	
Run No.	ONE		
Date	27-MARCH-06		
First Reading	141.226		
Last Reading	2.0		
Footage Logged	139.226		
Depth Reached	141.75		
Depth Driller	142.34		
Casing Roke	13.2		
Casing Driller	15.24		
Fluid Type	WATER/AIR		
Liquid Level	11.8		
Mn. Diameter	114.3 MM		
Rm @ degrees C	OHMM @ C		
Operating Time	13:20-15:15		
Truck No.	52		
Recorded By	J. GRANT		
Witnessed By	D. MORAAL		

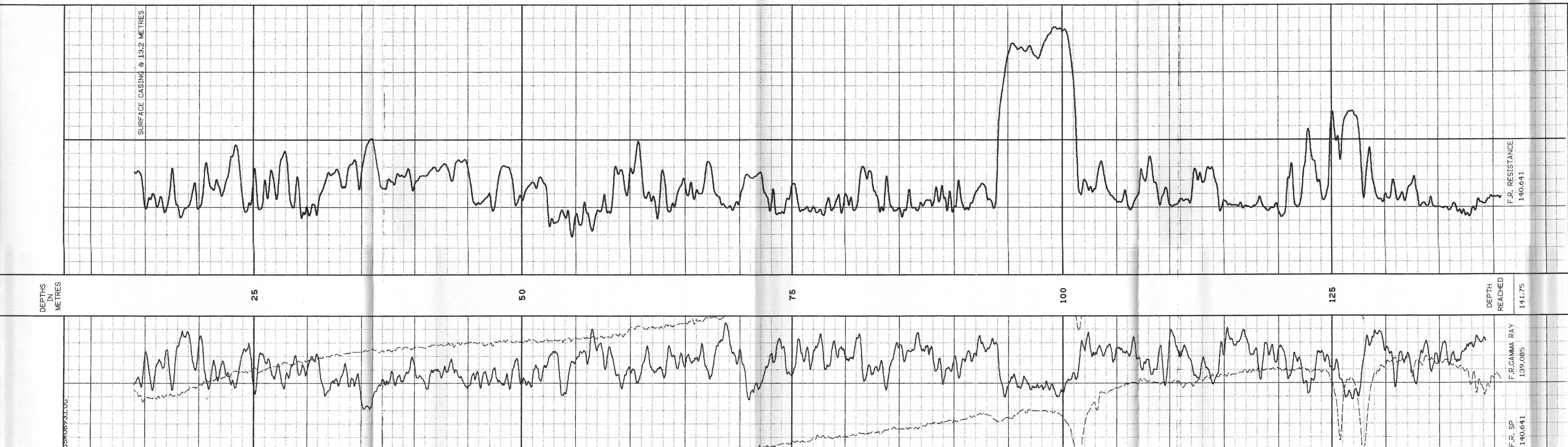
**EQUIPMENT**

SURFACE EQUIPMENT  
 LOGGING UNIT: NIMS COMPUTER: 05 / 08  
 CABLE MONITOR: INTEL COMPUTER: L4 / L7  
 LINE PWR MODULE: 310 / 310  
 RECORDER: SOFTWARE: QLS2 / QLS2  
 HARD DRIVE:

DOWNHOLE EQUIPMENT  
 CALIPER (CAL): 460  
 DENSITY (DENS): 829  
 C1 1C785C06, C2 2C460A06, D1 1D829A0W  
 N1 1N07N171, N2 2N10N171, R1 1R312TB1, R2 2R176TB1  
 GAMMA RAY NEUTRON (GR007)  
 GR-SP-RES: 312

**GAMMA RAY - SP-RESISTANCE**  
 DATA FROM GRN & SP RESISTANCE SONDES

LOGGED OPEN HOLE  
 200 METRIC  
 RESISTANCE (OHMS) (25 OHMS/DIV)  
 SPONTANEOUS POTENTIAL (MILLIVOLTS) (25 MV/DIV)  
 GAMMA RAY (API) (APY)



LOG PARAMETERS QLS V2.0

IN07N171.LCAL	CP1	CP2	CP3	CP4	CP5	CP6
	0	2.265	2	0.95	0	0.1
	0	0.33	3	0.206	0	0.1
IR912TB1.LCAL	CP1	CP2	CP3	CP4	CP5	CP6
	0	0.139	3	1.31	-14.972	0.01
	0	0.139	1	9.17604	-21.9	0.01
	0	0.375	2	1.1904	0	0.1
N-1A11.PRG	PP1	PP2	PP3	PP4	PP5	PP6
	0	0	0	0	0	0
	12	0	0	0	0	0
R-1A11.PRG	PP1	PP2	PP3	PP4	PP5	PP6
	0	0	0	0	0	0
	4	0	0	0	0	0
	32	0	0	0	0	0
	33	0	0	0	0	0
GSR.PAR	SNS	ZER	LWB	RWB	LTC	LD1
	15	0	0	10	0	100
	GR-1	18	0	10	0	27
	SP-1	5	13	33	0	27
	RES-1	.25	0	0	0	0
						LD2
						08
						0

EKOR RAW DATA FILE(S): N-1A11.RAW R-1A11.RAW  
 ASCII(LAS) FILE: GSR0693.LAS  
 LOG FIGURE FILE: GSR.FIG  
 IN07N171.LCAL  
 CP1 2.265 2 0.95 0 0.1  
 CP2 0 0.33 3 0.206 0 0.1  
 IR912TB1.LCAL  
 CP1 0.139 3 1.31 -14.972 0.01  
 CP2 0 0.139 1 9.17604 -21.9 0.01  
 CP3 0 0.375 2 1.1904 0 0.1  
 N-1A11.PRG  
 PP1 0 0 0 0 0 0  
 PP2 0 0 0 0 0 0  
 PP3 0 0 0 0 0 0  
 PP4 0 0 0 0 0 0  
 PP5 0 0 0 0 0 0  
 PP6 0 0 0 0 0 0  
 R-1A11.PRG  
 PP1 0 0 0 0 0 0  
 PP2 0 0 0 0 0 0  
 PP3 0 0 0 0 0 0  
 PP4 0 0 0 0 0 0  
 PP5 0 0 0 0 0 0  
 PP6 0 0 0 0 0 0  
 GSR.PAR  
 SNS 15 0 10 0 100  
 GR-1 18 0 10 0 27  
 SP-1 5 13 33 0 27  
 RES-1 .25 0 0 0 0