Cash Minerals Limited
Suite 1890 Oceanic Plaza, 1066 West Hastings Street
Vancouver B.C. V6E 3X1
Telephone: 604-633-9942 Fax: 604-633-9972

Assessment Report

describing

Airborne geophysics and ground exploration mapping

At the

Asap Property

Asap 1-36 YC50812-YC50847

NTS 106E/06
Latitude 65°18’N, Longitude 135°15’W
in the Mayo Mining District
Yukon Territory

Prepared by
Cash Minerals Limited

for

Cash Minerals Ltd. and Twenty-Seven Capital Corp.
by

Russell Smits MSc.
February 2008

Table of Contents

Appendices

List of Figures

List of Tables

Measurements and grid locations included in the report are in UTM NAD83, zone 8, unless otherwise stated

Introduction

The previously unexplored ASAP property lies amongst numerous mineral claims within the Wernecke Mountains which host iron oxide copper-gold (IOCG) mineralisation in discordant breccia bodies and Uranium in younger veins and fractures. Cash Minerals staked the property in August 2006 based on magnetic anomalies observed in regional geophysical surveys. Exploration of ASAP will be undertaken by Cash Minerals Ltd. as part of the Yukon Uranium Project within the Wernecke Mountains, figure 1.

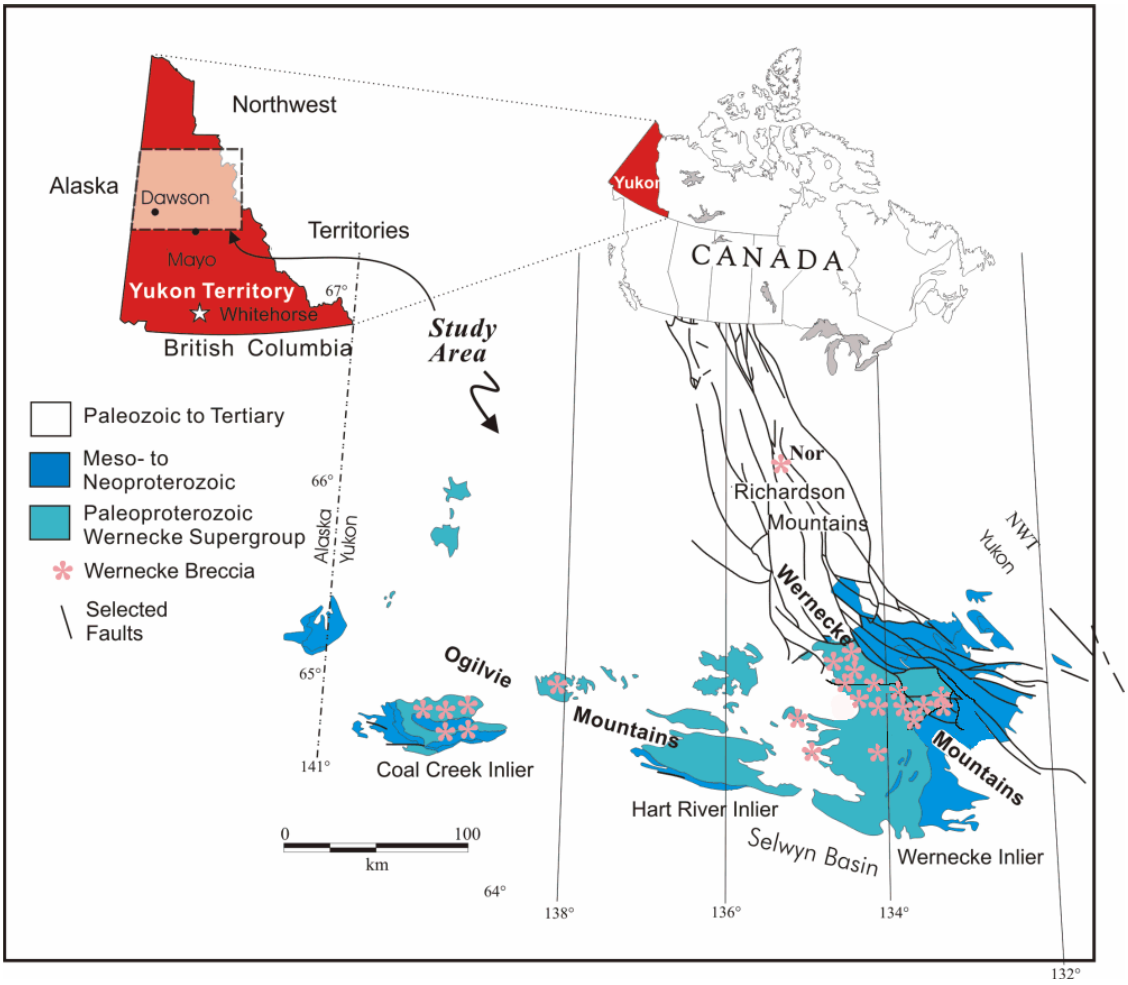

Figure 1: Regional location and geological setting of the Werneckes district.

Exploration work in 2007 focused on surface sampling of silts within the geophysically anomalous areas. Fieldwork was conducted from the Bear River camp 50km to the southeast, figure 2. This work was conducted with daily helicopter support.

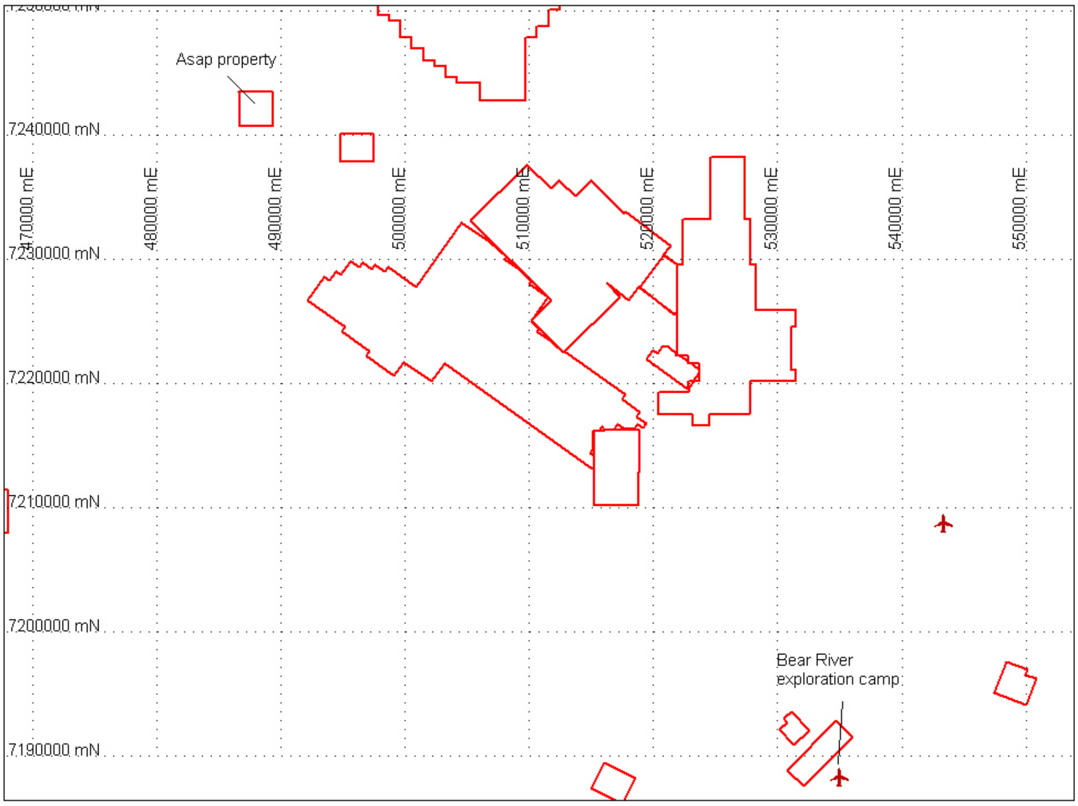

Figure 2: Location of the ASAP property, Bear River exploration camp and adjacent properties owned by Cash Minerals Ltd.

The Property Location, Claim Data and Access

The property is located in east-central Yukon at latitude 65°18'N and longitude 135°15'W on NTS map sheet 106E/08. It comprises of 36 minerals claims covering approximately 360 hectares, see figure 3. The claims were staked under the Yukon Quartz Mining Act and are registered with the Mayo Mining Record in the name of Cash Minerals Ltd, who holds the land as part of the Yukon Uranium Project.

Claim Name	Grant Number	Expiry Date
ASAP 1-36	YC50812-YC50847	August 31st, 2009

Table 1: summary of claim registration information, expiry date does not include 2007 work which has not been filed for assessment credit.

The ASAP property is located 200km northeast of the Klondike Highway and Silver Trail. Mayo is situated 407km by road north of Whitehorse. The closest road access to the property is at McQuesten Lake which lies 87km by road northeast of Mayo and 160km south of ASAP. From McQuesten Lake the Wind River Trail, an abandoned winter road leads to the Bear River exploration camp. This road passes 50km south of the ASAP property.

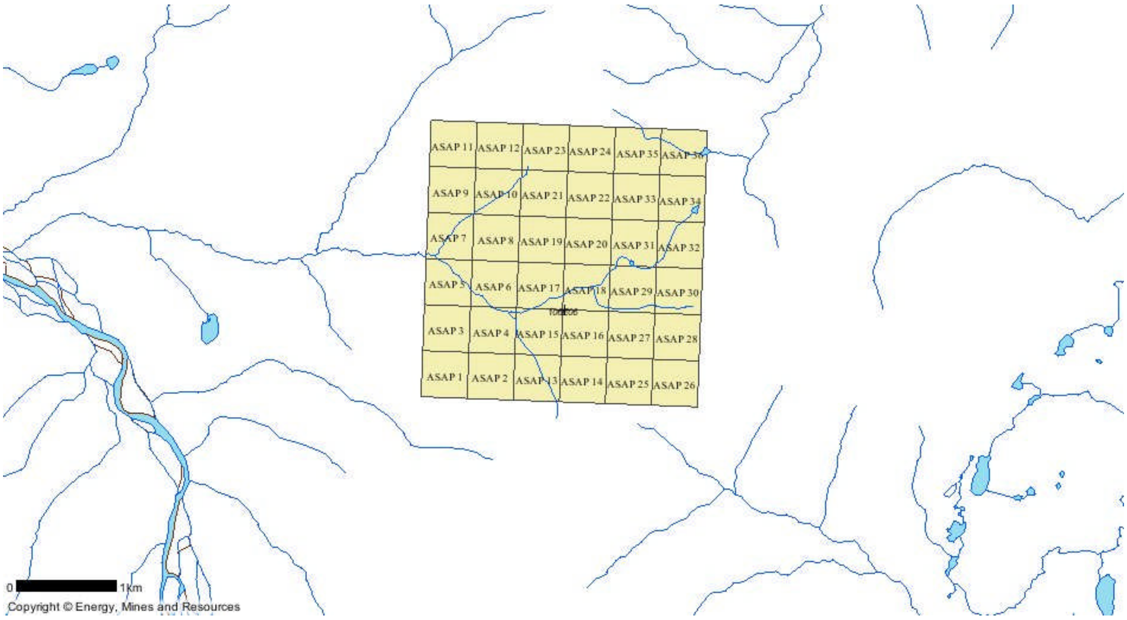

Figure 3: Claims map for the ASAP property.

Access to the property in 2007 was accomplished using a Hughes 500D Helicopter based at the Bear River exploration camp and operated by Fireweed Helicopters of Whitehorse. Fuel was flown from Mayo to Bear River airstrip using a Britten-Norman Islander operated by Sifton Air of Haines Junction.

Regional

The first report of Mineralisation in the Wernecke Mountains was the discovery of hematite rich float in gravels by prospectors' enroute to the Klondike Goldfields in 1898. A few copper and gold prospects were and staked prior to the 1960's, but no serious exploration was conducted. After the discovery of the Crest Iron Deposit by California Standard Company Ltd. in 1961, several hematite bodies were staked and briefly explored. This wave of exploration coupled with improved access spurred by construction of the Wind River Trail led to new copper discoveries in the mid 1960's, some of which were drilled or bulldozer trenched (Deklerk and Traynor, 2004)

Uranium was first discovered in the Wernecke Mountains in 1974 at the Igor property by Ogilvie Joint Venture (Chevron Canada Ltd., Marietta Resources International Ltd. and Aquitaine Company of Canada Ltd.) The following summer Wernecke Joint Venture (Chevron and Aquitaine) conducted helicopter borne radiometric reconnaissance throughout the district and staked a number of other properties based on ground radiometric follow up. Most of these occurrences are associated with large iron oxide rich breccias that are informally known as the Wernecke Breccias. Eldorado Nuclear optioned Wernecke Joint Venture's properties and regional exploration rights in 1976. It conducted property and regional exploration in 1976 and 1977 along with a number of other companies, notably Noranda Minerals Ltd. and Pan Ocean Oil Ltd. Wernecke Joint Venture resumed exploration in 1978 after Eldorado Nuclear began to drop its optioned properties. Systematic Uranium exploration by various parties continued in the Wernecke Mountains until 1982, when uranium prices fell (Eaton and Wober, 2005).

Another wave of regional and property exploration occurred in the mid 1990's when Westmin Resources Ltd. and Newmont Exploration Limited explored some of the Wernecke Breccias for copper and gold using the IOCG model.

Property History

To the knowledge of the author no previous exploration has been undertaken in the immediate area.

Physiography and Geomorphology

The ASAP property is located within the Wernecke Mountains and is drained by a tributary of the Bonnet Plume River, which flows into the Peel River and ultimately the Arctic Ocean via the Mackenzie River.

The climate in the Wernecke Mountains is typical of northern continental regions with long, cold winters, truncated fall and spring seasons and short, cool summers. Average temperatures in January are about -25°C and in July about 10C. Total annual precipitation is approximately 30cm, mainly occurring as rain during the summer months. Maximum snow pack averages about 40cm. Although summers are relatively mild, arctic cold fronts occasionally cover the area and snowfall can happen in any month. Sunlight ranges from 22hrs per day in late June to approximately six hours per day in late December. The property is relatively snow-free from late May until late September.

The main area of interest is located within a west trending creek canyon, which divides the property. From late May to June, runoff from the surrounding hills floods this canyon making it inaccessible. Local elevations range from 720m within the canyon to 1420m on a peak near the northern edge of the property. Outcrop is abundant along the canyon wall and near ridge crest, but is rare elsewhere. The slopes typically range between 30 and 50°. Vegetation consists of stunted spruce and moss at lower elevations with grasses and moss at higher elevations. There is no commercial timber on the property. No suitable campsites are located on the property but there is abundant water in the creeks till August for drilling purposes.

Geological Setting

The Wernecke, Hart River and Coal Creek Inliers are exposed within the Cordilleran fold and thrust belt of northwestern Canada (figure 1) (Thorkelson *et al.* 2005). Deformation associated with Cordilleran orogenesis has largely shaped the modern geological configuration of the region. The Canadian Cordillera formed along the western margin of ancestral North America from the Devonian to the Early Cainozoic (Cook *et al.* 2004). Mesozoic – Cainozoic cordilleran orogenesis resulted in the accretion of several allocthonous and pericratonic terranes that incorporated existing Paleoproterozoic terranes with Paleozoic marginal strata, and lead to the formation of syn-orogenic and post-orogenic igneous and sedimentary successions (Gabrielse *et al.* 1991).

Wernecke Supergroup strata are geographically separated from cratonic North America within a series of Inliers (figure 1); thought to represent large-scale structural culminations that have been preferentially exhumed (Thorkelson *et al.* 2005). Smaller outcrops of Early Proterozoic strata are considered to be the cores of folds produced during late Mesozoic shortening (Laramide orogenesis) (Norris 1984). Surrounding the inliers are younger Neoproterozoic to Cenozoic rocks that now comprise part of the Mackenzie platform (figure 1) (Thorkelson *et al.* 2005). This sub-region of Cordilleran foreland belt is associated with Neoproterozoic to Paleozoic platformal assemblages (figure 1) (Gordey & Anderson 1993; Norris 1997). This platformal sequence is juxtaposed to the south of the Dawson Fault by the Selwyn Basin (figure 1), a package of basinal strata also of Neoproterozoic to Lower Paleozoic age (Gordey & Makepeace 1999).

The Wernecke Inlier is crosscut by the Richardson fault array (figure 1) (Thorkelson 2000), a series of deep-seated structures that are continuous for over 600 km that mark the boundary between the deformed Cordilleran fold and thrust belt and the relatively undeformed Northern Interior Platform (Delaney 1981; Norris 1997; Thorkelson 2000). This region represents a zone of weakened crust within the North American craton – possibly an Early Proterozoic terrane boundary (Thorkelson 2000) – that has been re-activated during the Late Proterozoic and the Tertiary (Hall & Cook 1998) manifested as strike-slip, thrust and normal faults (Norris 1981; Hall & Cook 1998). To the south, the Richardson Fault Array splays to become the Fairchild Lake Fault (Norris 1981). This fault is a major structure in the Wernecke Inlier that intersects strata of the Wernecke Supergroup (Thorkelson 2000). The Fairchild Lake Fault has been interpreted as a normal fault (with possible minor strike-slip motion) with an east-side-down sense of movement (Thorkelson 2000). Early fault activity occurred during the Middle to Late Proterozoic, given by the differential preservation of Early and Mesoproterozoic strata on adjacent sides of the Fairchild Lake fault (Thorkelson 2000). Fault displacement and erosion associated with the Fairchild Lake Fault could control the configuration of many Proterozoic and Paleozoic successions in the region (Thorkelson 2000).

The Wernecke Supergroup is comprised of a roughly 13 km thick package of marine sedimentary and carbonate sediments (Delaney 1981) deposited prior to 1.71 Ga (Thorkelson 2000). The Wernecke Supergroup consists of three major successions known from oldest to youngest as the Fairchild Lake Group, Quartet Group and the Gillespie Lake Group (Delaney 1981; Thorkelson 2000), that are dominated by mudstone, siltstone and dolomite (Thorkelson *et al.* 2001b).

Fairchild Lake Group *(FLG)* sediments represent the oldest supracrustal sedimentary succession within the Cordillera, and forms the basal section of the Wernecke Supergroup (Thorkelson 2000). The lower contact of the Fairchild Lake Group is nowhere exposed, but is thought to be structurally decoupled with the crystalline basement as a result of contractional deformation (Thorkelson 2000). Thorkelson (2000) differentiated the ~ 200 m thick upper FLG (uFLG) from the ~ 4.6 km thick lower FLG on the basis of lithological character. Lower FLG strata are generally composed of weakly to moderately metamorphosed (Thorkelson *et al.* 2003) finely laminated to cross-laminated siltstone, mudstone and fine-grained sandstone with locally intercalated dolomite (Thorkelson 2000). Upper FLG sediments generally consist of monotonous alternating sequences of dolomite and siltstone (Thorkelson 2000).

Fairchild Lake Group strata often exhibit a variably intense slaty cleavage (Thorkelson *et al.* 2003), with local zones of higher strain – often the cores of tight folds – producing chlorite and muscovite-rich phyllite to fine grained chlorite-muscovite-chlorite schist, often with additional chloritoid or garnet porphyroblasts (Thorkelson *et al.* 2003).

The Quartet Group *(QG)*- conformably overlies the uppermost Fairchild Lake Group and represents the middle sequence of the Wernecke Supergroup (Thorkelson 2000; Hunt *et al.* 2005). The ~ 5 km thick sequence has been divided into a basal Q-1 unit and an overlying Q-2 unit by Delaney (1981). Q-1 consists of black carbonaceous shale in conformable with contact with an upward coarsening sequence of intercalated pyritic shale, siltstone and fine grained sandstone termed Q-2 (Delaney 1981). Within the uppermost Q-2 sequence, this fine grained sandstone becomes interlayered with buff-brown weathering silty dolomite; indicating the onset of Gillespie Lake Group sedimentation (Thorkelson 2000).

The Gillespie Lake Group *(GLG)*- conformably overlies the upper Quartet Group and represents the uppermost layer of the Wernecke Supergroup as ~ 4 km of shallow water sediments (Delaney 1981). Delaney (1981) subdivided the GLG into seven conformable units known from bottom to top as units G-TR and G-2 to G-7. The basal G-TR unit is delineated from the upper QG on the pronounced increase in the abundance of buff-weathering dolomite that appear as distinctive alternating bands of dolomite and siltstone (Thorkelson 2000). The remainder of the succession (units G2-G7, of Delaney, 1981) is composed of orange-weathering dolomite and silty dolomite sediments; interpreted as deposition in a shallow to intertidal environment (Thorkelson 2000).

Wernecke Breccia *(WBX)*- Voluminous hydrothermal activity occurred in the Yukon during the Early to Middle Proterozoic, that resulted in the formation of extensive zones of fragmental rocks within the Wernecke Supergroup, termed the Wernecke Breccia (figures 1) (Thorkelson *et al.* 2001b). Brecciation occurred in the Wernecke inlier and 300 km to the west in the Coal Creek inlier, hosted predominantly within strata of the Wernecke Supergroup (Figure 1) (Thorkelson *et al.* 2001b). Breccia bodies are present as numerous curvilinear belts over an area of ~ 48,000 km^2 (figure 1) (Archer & Schmidt 1978; Delaney 1981; Bell 1986b; Lane 1990; Wheeler & McFeely 1991; Thorkelson 2000).

Wernecke Breccia typically consists of variably metasomatised angular to sub-angular clasts, surrounded by a matrix of hydrothermal minerals (Thorkelson *et al.* 2001b). Specular hematite is abundant both within fractures and as disseminations within most breccia occurrences (Thorkelson 2000; Thorkelson *et al.* 2001b)

Breccia clasts are sourced predominantly from Wernecke Supergroup dolomites, siltstones, slates, phyllites and schists (Thorkelson 2000). Where brecciation has intersected the Bonnet Plume River intrusions, breccias contain locally abundant igneous clasts. Megaclasts and clasts of volcanic material are found at one locality (Slab occurrence) where brecciation engulfed the Slab volcanics (Thorkelson 2000). Breccia matrix is generally composed of milled and small fragments of clasts and wall rock, cemented by abundant hydrothermally precipitated minerals including: hematite, quartz, carbonate, chlorite, feldspar and mica (Thorkelson 2000; Thorkelson *et al.* 2001b).

Metasomatism associated with the Wernecke Breccia was initiated before and concluded after the main breccia forming event, and is commonly preserved as metasomatic aureoles overprinting breccia and surrounding country rock (Thorkelson *et al.* 2001b). Metasomatic effects are variable regionally, but typically result in the overprinting of clasts and matrix via the precipitation of a range of minerals including: hematite (earthy and specular), magnetite, dolomite, siderite, chlorite, titanite, brannerite and chalcopyrite (Thorkelson *et al.* 2001b).

U-Pb dating of titanite produced an age of ~ 1.6 Ga for the earliest phase of brecciation (Thorkelson *et al.* 2001b). Although this event is recognized as the dominant breccia forming event, at least two other phases of hydrothermal activity occurred at 1.38 and 1.27 Ga (Thorkelson *et al.* 2005).

Bonnet plume River intrusions *(1.71 Ga)*- The Bonnet Plume River intrusions represent the oldest intrusive rocks in the Yukon (figure 1) (Thorkelson 2000; Thorkelson *et al.* 2001b). Intrusion occurred in the form of short dikes and stocks of fine to medium-grained diorites and gabbros (with minor syenite and anorthosite) (Thorkelson *et al.* 2001a) that invaded the Wernecke Supergroup (Delaney 1981; Norris & Dyke 1997; Thorkelson 2000). This intrusive relationship allows the Bonnet Plume River Intrusions to constrain the minimum age of Wernecke Supergroup deposition and preceding Wernecke basin formation (Thorkelson *et al.* 2001a). Dating of zircon obtained from several Bonnet Plume River Intrusions samples yielded U-Pb ages of ~ 1.71 Ga, providing a lower bracket age for Wernecke Supergroup deposition of > 1.71 Ga (Thorkelson *et al.* 2001a).

The Bonnet Plume River Intrusions are predominantly found as clasts and enclaves – millimeters to hundreds of meters in length – within breccia bodies that formed during voluminous hydrothermal-phreatic activity at ca. 1.6 Ga (Thorkelson *et al.* 2001b). These events lead to the development of regional zones of fragmental rock known as the Wernecke Breccia (Laznicka & Edwards 1979; Bell 1986b; Laznicka & Gaboury 1988. Bonnet Plume River Intrusions also show an association with normal faulting that probably represents syn-magmatic extensional faulting within the Wernecke Mountains (Thorkelson *et al.* 2001a).

Slab Volcanics *(1.71 Ga?)*-The Bonnet Plume River Intrusions are often considered to have a possible co-magmatic extrusive equivalent known as the Slab Volcanics (figure 1) (e.g. Thorkelson 2000; Thorkelson *et al.* 2001a; Thorkelson *et al.* 2005). The Slab volcanics comprise of a sequence of ~ 40 mafic to intermediate thin lava flows, preserved entirely as clasts, including one 250 m thick megaclast (Thorkelson *et al.* 2001a). This megaclast is hosted within an expansive zone of Wernecke breccia; present within schist and metasediment of the Fairchild Lake Group (Thorkelson *et al.* 2005).

Regional Mineralisation

Sixty-five Wernecke breccia bodies within the Wernecke and Ogilvie Mountains have been identified to host prospective IOCG style mineralisation (Archer & Schmidt 1978; Deklerk & Traynor 2005). Mineralisation occurs both within breccia, and in the surrounding rock, as disseminations and veins that record multiple phases of mineralisation (Hunt *et al.* 2005). Common IOCG phases include: magnetite, hematite, chalcopyrite, pitchblende, brannerite, cobaltite and gold (not visible but reports in assay with copper) (Hunt *et al.* 2005).

Mineralised Wernecke breccia appears to show similarities with mineralized breccia associated with the giant Olympic Dam deposit (Thorkelson *et al.* 2005). This correlation is significant for paleogeographic reconstructions that link Australia and Laurentia during the early Proterozoic (e.g. Bell & Jefferson 1987; Dalziel 1991; Moores 1991; Thorkelson *et al.* 2001b; Betts *et al.* 2008).

The mineralisation is commonly copper-gold and less frequently uranium and cobalt. This mineralisation occurs in four of styles: (1) disseminations in albite-quartz-pyrite-chalcopyrite veinlets/replacement veins within sedimentary clasts in the Werneckes Breccia and as rare massive sulphide clasts, (2) disseminations and blebs in breccia matrix, locally forming the entire matrix, (3) as blebs up to 5cm across or disseminations in calcite-chlorite-muscovite-pyrite-chalcopyrite-hematite ± magnetite, quartz-hematite-pyrite-chalcopyrite and calcite ± chalcopyrite veins that cross-cut breccia and the Werneckes Supergroup and (4) as blebs or disseminations in quartz-chalcopyrite ± feldspar ± muscovite ± hematite veins that are parallel to and cross-cut calcareous layers in siltstone (Hunt *et al*. 2005).

Property Mineralisation and Geochemistry

Samples collected were sent to ALS for analysis. No anomalous assays were recorded from the silt samples collected on the ASAP property in 2007. The major and trace element concentrations of all samples is shown in Appendix 1.

Discussion and Recommendations

Samples analysed have shown variable degrees of mineral enrichment throughout the area. Continued exploration is recommended on the PER prospect to further constrain the local geology and degree of alteration and mineralization. Field lithological and structural mapping combined with more detailed interrogation of available geophysical data should be used to locate zones with increased mineralization potential.

Respectfully submitted,
Cash Minerals Limited

Russell Smits, MSc.

References

ARCHER A. & SCHMIDT U. 1978. Mineralized breccias of Early Proterozoic age, Bonnet Plume River district, Yukon Territory. *Canadian Mining and Metallurgy Bulletin* **71**, 53-58.

BELL R. T. 1986b. Megabreccias in northeast Wernecke Mountains, Yukon Territory. *In: Current Research, Part A*, pp. 375-384. Geological Survey of Canada, Paper 1986-1A.

BELL R. T. & JEFFERSON C. W. 1987. A hypothesis for an Australian-Canadian connection in the late Proterozoic and the birth of the pacific Ocean.*In:* Pacific Rim Congress '87, Parkville, Australia, Australian Institute of Mining and Metallurgy, Melbourne.

BETTS P. G., GILES D. & SCHAEFER B. F. 2008. Comparing 1800-160 Ma accretionary and basin processes in Australia and Laurentia; possible geographic connections in Columbia. *Precambrian Research*, In Press.

COOK F. A., CLOWES R. M., SNYDER D. B., VAN DER VELDEN A. J., HALL K. W., ERDMER P. & EVENCHICK C. A. 2004. Precambrian crust beneath the Mesozoic northrn Canadian Cordillera discovered by Lithoprobe seismic reflection profiling. *Tectonics* **23**.

DALZIEL I. W. D. 1991. Pacific margins of Laurentia and East Antarctica-Australia as a conjugate rift pair: Evidence an implications for an Eocambrian supercontinent. *Geology* **19**, 598-601.

DEKLERK R. & TRAYNOR S. (compilers) 2005. Yukon MINFILE - A database of mineral occurrences Yukon Geological Survey CD-ROM

DELANEY G. D. 1981. The mid-Proterozoic Wernecke Supergroup, Wernecke Mountains, Yukon Territory. *In:* Campbell F. H. A. ed. *Proterozoic Basins of Canada*, p. 23p. **81-10** Geological Survey of Canada Paper.

EATON, W.D. & WOBER, H.H. 2005. Technical Report describing the Geology, Geochemistry, and Diamond Drilling at the Bond, Igor, Steel and Pterd Properties, Mayo Mining District, Yukon Territory, prepared for Cash Minerals Ltd

GABRIELSE H., MONGER J. W. H., WHEELER J. O. & YORATH C. J. 1991. Morphogenic belts, tectonic assmeblages, and terranes. *In:* Galbrielse H. & Yorath C. J. eds. *Geology of the Cordilleran Orogen in Canada*, pp. 15-28. Geological Survey of Canada, Ottawa.

GORDEY S. P. & ANDERSON R. G. 1993. Evolution of the northern Cordilleran miogeocline, Nahanni map area (105I), Yukon and Northwest Territories. *Geological Survey of Canada* **428**, 214p.

HALL K. W. & COOK F. A. 1998. Geophysical transect of the Eagle Plains foldbelt and Richardson Mountains anticlinorium, northwestern Canada. *Geological Survey of America Bulletin* **110**, 311-325.

HUNT J. A., BAKER T. & THORKELSON D. J. 2005. Regional-scale Proterozoic IOCG-mineralized breccia systems: examples from the Wernecke Mountains, Yukon, Canada. *Mineralium Deposita* **40**, 492-514.

LANE R. A. 1990. Geologic setting and petrology of the Proterozoic Ogilvie Mountains breccia of the Coal Creek inlier, southern Ogilvie Mountains, Yukon Territory. University of British Columbia, Vancouver (unpubl.).

LAZNICKA P. & EDWARDS R. J. 1979. Dolores Creek, Yukon - a disseminated copper mineralisation in sodic metasomatites. *Economic Geology* **74**, 1352-1370.

LAZNICKA P. & GABOURY D. 1988. Wernecke Breccias and Fe, Cu, U mineralization: Quartet Mountain-Igor area (NTS 106E). *In:* Abbot G. J. ed. *Yukon Geology*, pp. 42-50. **2** Exploration and Geological Services, Yukon, Indian and Northern Affairs Canada.

MONTGOMERY, A.T., 1995. Geological and geochemical assessment report on the Auks 1-36 claims, Leary Project, prepared for Newmont Exploration Limited.

MOORES E. M. 1991. Southwest U.S. - East Antarctic (SWEAT) connection: A hypothesis. . *Geology* **19**, 425-428.

NORRIS D. K. 1981. *Wind River*. Geological Survey of Canada, Map 1528A, 1:25000 scale.

NORRIS D. K. 1984. *Geology of the northern Yukon and northwestern District of Mackenzie* (Map 1581A edition). Geological Survey of Canada.

NORRIS D. K. 1997. *In:* Norris D. K. ed. *The Geology, Mineral and Hydrocarbon Potential of Northern Yukon Territory and Northwestern District of Mackenzie*, pp. 21-64. **422** Geological Survey of Canada Bulletin.

NORRIS D. K. & DYKE L. D. 1997. Geological Setting. *In:* Norris D. K. ed. *The Geology, Mineral and Hydrocarbon Potential of Northern Yukon Territory and Northwestern District of Mackenzie*, pp. 65-84. **Bulletin 422** Geological Survey of Canada.

THORKELSON D. J. 2000. Geology and mineral occurrences of the Slats Creek, Fairchild Lake and “Dolores Creek” areas, Wernecke Mountains (106D/16, 106C/13, 106C/14), Yukon Territory. Indian and Northern Affairs Canada, Bulletin 10, 73 p.

THORKELSON D. J., ABBOTT G. J., MORTENSEN J. K., CREASER R. A., VILLENEUVE M. E., MCNICOLL V. J. & LAYER P. W. 2005. Early and Middle Proterozoic evolution of Yukon, Canada1, 2. *Canadian Journal of Earth Sciences* **42**, 1045.

THORKELSON D. J., HUNT J. A. & BAKER T. 2003. Geology and mineral occurrences of the Quartet Lakes map area (NTS 106E/1), Wernecke and Mackenzie mountains, Yukon. *In:* Emond D. S. & Lewis L. L. eds. *Yukon Exploration and Geology 2002*, pp. 223-239. Exploration and Geoogical Services Division, Yukon Region, Indian and Northern Affairs Canada.

THORKELSON D. J., MORTENSEN J. K., DAVIDSON G. J., CREASER R. A., PEREZ W. A. & ABBOT G. J. 2001a. Early Proterozoic magmatism in Yukon, Canada: constraints on the evolution northwestern Laurentia. *Canadian Journal of Earth Sciences* **38**, 1479-1494.

THORKELSON D. J., MORTENSEN J. K., DAVIDSON G. J., CREASER R. A., PEREZ W. A. & ABBOT G. J. 2001b. Early Mesoproterozoic intrusive breccias in Yukon, Canada: the role of hydrothermal systems in reconstructions of North America and Australia. *In:* Bartley J. K. & Kah L. C. eds. *Rodinia and the Mesoproterozoic earth-ocean system*, pp. 31-55. **111** Precambrian Research.

WHEELER J. O. & MCFEELY P. 1991. *Tectonic assemblage map of th Canadian Cordillera and adjacent parts of the United States of America*. Geological Survey of Canada, Map 1712A, 1:2 000 000 scale.

Appendix 1

I, Russell Smits, exploration geologist, with a business and residential address in Vancouver, British Colombia, do hereby certify that:

Russell Smits, MSc.

Appendix II

Rock geochemical data from ALS for samples collected from the PER Property
All samples assayed for major and trace elements by ME-MS61, besides Au which was assayed via Ion Coupling Plasma Au-ICP21

	Ag	**Al**	**As**	**Ba**	**Be**	**Bi**	**Ca**	**Cd**	**Ce**	**Co**	**Cr**	**Cs**	**Cu**	**Fe**	**Ga**	**Ge**	**Hf**	**In**
Sample	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**Ppm**
2002	0.24	4.07	6.4	570	1.01	0.16	3.55	0.26	68.5	7.6	42	2.92	13.4	2.06	9.4	0.13	2.2	0.033
2040	0.13	5.78	7.5	740	1.53	0.19	1.56	0.26	83.2	10.6	56	5.33	17.5	3.02	13.45	0.17	3.4	0.046
2041	0.13	5.11	10	710	1.2	0.22	1.1	0.25	96.7	10.5	63	3.3	15.6	2.78	12.15	0.15	2.8	0.046
2042	0.1	4.66	8	660	1.19	0.17	1.3	0.18	88.4	8.8	52	2.77	12	2.36	11.15	0.14	2.5	0.037
2043	0.15	5.21	10.4	740	1.34	0.22	1.55	0.18	73.6	10.7	58	3.62	15.8	2.9	12.25	0.15	2.5	0.045
2044	0.14	5.07	10.4	710	1.4	0.22	1.33	0.17	72.1	10.7	59	3.69	16.2	2.81	12.45	0.15	2.6	0.045
2058	0.23	6.07	5.6	960	1.8	0.22	1.22	0.1	93.2	13.4	60	10.8	29.3	4.19	16.4	0.19	3.9	0.062
2074	0.13	4.58	8.7	670	1.08	0.19	1.2	0.31	72.6	11.1	49	3.29	16.6	2.6	10.8	0.13	2.3	0.038
2075	0.13	4.66	7.8	730	1.18	0.21	3.2	0.24	70.2	9.1	49	3.11	17.6	2.5	10.8	0.15	2.4	0.039

	K	**La**	**Li**	**Mg**	**Mn**	**Mo**	**Na**	**Nb**	**Ni**	**P**	**Pb**	**Rb**	**Re**	**S**	**Sb**	**Sc**	**Se**	**Sn**
Sample	**%**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**Ppm**
2002	1.32	31.4	19.3	1.92	647	0.54	0.57	8.8	17.1	540	16	63.6	<0.002	0.04	0.75	7.7	2	1
2040	1.75	38.7	26.9	0.87	371	0.5	0.79	19.3	22.1	800	31.8	84.6	<0.002	0.08	0.64	10.9	2	1.5
2041	1.23	44.4	22	0.68	696	0.9	0.86	11.4	21.6	750	18.2	67.6	<0.002	0.03	0.97	10.4	2	1.4
2042	1.18	40.1	19.4	0.7	551	0.67	0.89	10.7	19.2	730	13.9	62.9	<0.002	0.03	0.84	9.5	2	1.3
2043	1.27	34.1	24.6	0.89	539	0.73	0.79	10.8	25.4	770	16.2	76	<0.002	0.05	0.87	10.6	2	1.4
2044	1.27	33.7	25.4	0.76	467	0.71	0.77	11.3	25.5	730	16.5	76.2	<0.002	0.05	0.92	10.9	2	1.5
2058	1.63	48.1	32.4	0.97	659	1.07	0.66	28.3	25	990	16	91.1	<0.002	0.06	0.66	13.6	2	1.9
2074	1.36	32.6	21.8	0.67	1220	0.63	0.64	9.5	21.9	610	16.5	66.3	<0.002	0.03	0.88	9	2	1.2
2075	1.16	32.1	21.6	1.52	550	0.8	0.74	10.3	21.2	680	16.5	62.9	<0.002	0.05	1	9.2	2	1.2

	Sr	**Ta**	**Te**	**Th**	**Ti**	**Tl**	**U**	**V**	**W**	**Y**	**Zn**	**Zr**	**Au**
Sample	**ppm**	**ppm**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**
2002	105	0.59	<0.05	7.7	0.272	0.41	1.7	68	1.3	14.2	70	70.6	0.004
2040	119.5	1.12	<0.05	10.1	0.475	0.52	2.3	94	1	20	89	120	<0.001
2041	135.5	0.76	<0.05	10.3	0.377	0.48	2.3	100	1.2	18.2	80	88.4	0.009
2042	142.5	0.71	0.05	9	0.343	0.42	2.1	86	0.9	16.7	86	80.5	0.011
2043	131	0.69	<0.05	9.1	0.327	0.53	2	95	1.2	17	96	81	0.001
2044	131	0.73	0.05	9	0.339	0.52	2	98	1.3	17.6	96	84.9	0.001
2058	98.8	1.57	<0.05	10.4	0.656	0.5	2.3	118	1.2	26.8	63	142	<0.001
2074	109	0.63	<0.05	8.2	0.299	0.48	1.8	79	0.9	15.8	71	74.2	0.002
2075	132	0.67	<0.05	8.3	0.313	0.46	2.2	87	1	16.3	75	77.4	0.001