> BC Geological Survey Assessment Report 30610

DIAMOND DRILLING, TRENCHING and RECLAMATION ASSESSMENT REPORT

on the

Broken Hill – Leo Property (VISTA, VISTA A, VISTA 1-8, 10, 11, 14-19; NAVAN 0-3, 5-11, 15, 17-26; MIKE; MIK1; MIK2; MIKY; JIMM; DIAN; LEO 1, 2; LL1-8) Kamloops Mining Division

Avola Area N.T.S. 82M/14Latitude $51^{0}50$ ' N Longitude $119^{0}15$ ' W

For **POTASH NORTH RESOURCE CORPORATION** 802 – 700 West Pender Street, White Rock, B.C., V4E-1E1

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Summary

The 133 unit (approximately 3,325 hectares) Broken Hill - Leo Mineral Property is located approximately 150 kilometres north-northeast of Kamloops and is centered 6 kilometres northeast to east of the village of Avola, British Columbia on NTS map sheet 082M/14.

The property covers eight mineral showings and occurrences discovered between September 2000 and September 2004 over a strike distance of 6 kilometers. These are the Vista (15.9% Zn over 0.3m), Navan A (21.5% Zn, 3.8% Pb and 11 g/t Ag in float), Navan B, Navan C (float), Navan D (float), Pautler (10.2% Zn over 0.33 meters), Mike (7 to 20% Zn in float over a 250 meter distance) and Denis (15.5 % zinc over 20 cm), 1.68 g/t Au in subcrop) occurrences. All showings were discovered by Leo Lindinger with the exception of the Pautler and Denis showings which were discovered by Jean Pautler and Denis Delisle respectively

On October 7, 2002, Cross Gold Corporation entered into an option agreement with Mr. Lindinger to acquire a 100 percent right, title and interest in the Broken Hill-Leo property, subject to a 2% purchasable Net Smelter Return (NSR). To fulfill the terms of the agreement, Cross Gold Corporation was to make \$46,200 in cash payments and complete \$270,000 in work commitments over a 4-year period. On October 25, 2003, B2B Solutions Inc. acquired the Option from Cross Gold Corp.. On August 10, 2004, B2B Solutions Inc. changed its name to Timer Explorations Inc.. In 2008 Timer explorations Inc. changed its name to Potash North Resource Corporation. The original Option has been amended many times. On Nov 2, 2008 Potash North Resource Corporation fulfilled the terms of the amended Option and has earned the right to acquire the property.

The Broken Hill - Leo Property is underlain by highly deformed, high-grade metamorphic rocks of the Proterozoic to Paleozoic Shuswap Metamorphic Complex within the pericratonic Kootenay Terrane. Similar rocks to the east are assigned to the Proterozoic Horsethief Creek Group. The Group consists of three lithological packages; a lower amphibolite-biotite gneiss unit, a middle biotite gneiss - calc-silicate unit with minor marble and chert, and an upper mixed siliceous biotite schist and quartzite unit. The middle unit hosts most known zinc-lead-silver deposits in the region, including the nearby Ruddock Creek (discovered 1961), CK (discovered 1972) and Finn (discovered 1978) occurences. All lithologies are intruded by Devonian orthogneiss, Cretaceous and Tertiary felsic stocks, plugs, sills and dykes. Late Tertiary andesitic to mafic plugs and dykes, and lamprophyric dykes are locally common. Glacial till cover is extensive and variers from thin to large thick sheets with and glacio fluvial and lacustrine deposits in occupying most lower relief areas.

The Broken Hill - Leo Property covers a 9 kilometre strike extent of the carbonate stratigraphy on the east side of the North Thompson River valley, favourable for hosting high-grade zinc-lead-silver 'Shuswap-style' mineralization similar to the nearby Ruddock Creek, CK and Finn Deposits. To date eight showings are known. The Vista Showing is the most northwesterly known occurrence. The Pautler occurrence is 500 meters to the east, and the 4 Navan Showings are located 1.3 km southeast of the Vista Showing. The Mike float showing is located 4 kilometres south of the Navan occurrence and the Denis showing is 500 meters northeast of the Mike showing. The Denis showing also hosts gold enriched massive pyrrhotite veins. The Finn prospect lies 2 kilometers north of the property

The property has no recorded mineral exploration history prior to the September 2000 discovery of the Vista and Navan occurences. During the subsequent nine years the property has received nearly \$450,000 (including this program) of exploration expenditures comprising several surface geochemical programs, one local gravity survey, three backhoe trenching programs, and three diamond drill programs. Trench and drill testing of several of the many geochemical anomalies resulted in only one significant but non economic occurrence being partially outlined to date.

During September and October 2008 the Denis-Mike, north Pautler and north Navan targets were drill tested. Two of the trenches at the Mike float showing were extended and one trench north of the Denis float showing was excavated. All testing of the Mike-Denis area failed to locate economic bedrock zinc or gold mineralization. The drilling north of the Pautler showing intersected narrow subeconomic widths of zinc mineralization. The drill hole at the north Navan target intersected very weak mineralization similar to the soil anomaly. The immediate Mike-Denis area has been adequately tested. The source of the numerous float boulders and cobble remains undiscovered. Due to the numerous large intrusive in the area any large tonnages of high The Pautler Occurrence displays strong continuity, grade zinc mineralization is unlikely. however the widths intersected remain frustratingly small. There is some 500 meters of down dip potential remaining to be tested to the north of the 2008 Pautler drilling and similar distances north of the Vista discovery showing where soil anomalies indicate continuation of the zinc mineralized horizon. Also the recessive area east of the Denis area is deeply overburden covered and the favourable stratigraphy seen at the Navan dips under this area. The Tum Tum Creek valley area between Fowler Lake and Highway 5 remains unexplored and remains a third order target. In order to cost effectively determine if deeper significant mineralization is present in these areas ground magnetometer and gravity surveys are recommended. This initial surface program is budgeted at \$120,000 with \$60,000 at the Pautler-Vista area and \$60,000 for the east Denis area. Pending positive results of these surveys a \$380,000 diamond drilling program of the best targets would be proposed. If the gravity method is successful then testing west of the Mike area within the Shannon Creek Valley can be tried.

Introduction and Terms of Reference

This report documents the work, and discusses the results of a 2008, backhoe trenching and diamond drilling program on the Broken Hill-Leo property between September 24 and October 12, 2008. This exploration program was funded by and is completed for the successor name of Timer Explorations Inc. The conclusions made, and recommendations for future exploration expenditures in this report are those of J. E.L. (Leo) Lindinger, P.Geo.

Property Description and Location

The Broken Hill-Leo Property covers approximately 3325 hectares in east-central British Columbia, 150 kilometres north-northeast of Kamloops, B.C., within the Kamloops Mining Division (Figure 1). The centre of the property sits at 51° 50'N and 119° 15'W (NTS 082M/14) and 5744540 N and 345500 m E, UTM Grid Zone 11 (NAD 83).

The property consists of eight 20-unit modified grid and 48 2-post contiguous "legacy" mineral claims (Figure 3) totaling 133 units. Table 1 contains information on the individual claims. The claims are currently 100% owned by Leo Lindinger (FMC 115758). No legal survey has been completed on the property.

Potash North Resource Corporation (formerly Timer Explorations Inc.) holds an option to acquire a 100% right, title and interest in the property, subject to a 2% net smelter returns royalty reserved in favour of Leo Lindinger, pursuant to an October 7, 2002 Property Option Agreement between Leo Lindinger and Cross Gold Corp. On October 25, 2003, B2B Solutions Inc. (predecessor name of Timer Explorations Inc.) acquired the Option from Cross Gold Corp.. In order to maintain the Option in good standing, Timer Explorations Inc. had to (1) make scheduled cash payments to Leo Lindinger totalling \$46,200 by October 7, 2005 (completed); and (2) incur at least \$270,000 in exploration and/or development expenses on the Broken Hills–Leo Property by November 2, 2008 pursuant to a revised Option Agreement. The net smelter return royalty may be bought for \$1,500,000. With the completion of this program Potash North has fulfilled the terms of the Option.

The Broken Hill-Leo property is not subject to any known environmental liabilities. A portion of the property lies within an ecological reserve surrounding Fowler Lake. The surface rights are owned by the Crown.

The claims cover the recently discovered Vista, Navan, Mike and Denis high grade carbonate associated zinc+/-lead+/-silver occurrences (Figure 5). There are also indications of intrusion associated gold-bismuth-copper veins. There are no known mineral resources, mineral reserves or mine workings on the property.

The work program discussed in this report has been filed with the Ministry of Energy, Mines and Petroleum Resources under Statement of Work Event number 4244121.

A \$5000.00 bond with the Ministry of Energy and Mine (MX-4-369) has been created and maintained.

Claim	Record	Units	Expiry Date	Claim	Record	Units	Expiry Date				
	No.				No.						
VISTA	380752	4	October 1, 2013*	NAVAN 15	380786	1	October 1, 2013*				
VISTA 1	380753	1	October 1, 2013*	NAVAN 17	380788	1	October 1, 2013*				
VISTA 2	380754	1	October 1, 2013*	NAVAN 18	380789	1	October 1, 2013*				
VISTA 3	380755	1	October 1, 2013*	NAVAN 19	380790	1	October 1, 2013*				
VISTA 4	380756	1	October 1, 2013*	NAVAN 20	380791	1	October 1, 2013*				
VISTA 5	380757	1	October 1, 2013*	NAVAN 21	380792	1	October 1, 2013*				
VISTA 6	380758	1	October 1, 2013*	NAVAN 22	380793	1	October 1, 2013*				
VISTA 7	380759	1	October 1, 2013*	NAVAN 23	380794	1	October 1, 2013*				
VISTA 8	380760	1	October 1, 2013*	NAVAN 24	380795	1	October 1, 2013*				
VISTA 10	380762	1	October 1, 2013*	NAVAN 25	380796	1	October 1, 2013*				
VISTA 11	380763	1	October 1, 2013*	NAVAN 26	380889	1	October 1, 2013*				
VISTA 14	380766	1	October 1, 2013*	MIKE	380890	20	October 1, 2013*				
VISTA 15	380767	1	October 1, 2013*	VISTA A	380891	8	October 1, 2013*				
VISTA 16	380768	1	October 1, 2013*	MIK1	381767	1	October 1, 2013*				
VISTA 17	380769	1	October 1, 2013*	MIK2	381768	1	October 1, 2013*				
VISTA 18	380770	1	October 1, 2013*	MIKY	381777	8	October 1, 2013*				
VISTA 19	380771	1	October 1, 2013*	JIMM	381778	3	October 1, 2013*				
NAVAN 0	380772	1	October 1, 2013*	DIAN	381779	2	October 1, 2013*				
NAVAN 1	380773	1	October 1, 2013*	LEO 1	381891	20	October 1, 2013*				
NAVAN 2	380774	1	October 1, 2013*	LEO 2	381892	20	October 1, 2013*				
NAVAN 3	380775	1	October 1, 2013*	LL1	381393	1	October 1, 2013*				
NAVAN 5	380776	1	October 1, 2013*	LL2	381894	1	October 1, 2013*				
NAVAN 6	380777	1	October 1, 2013*	LL3	381895	1	October 1, 2013*				
NAVAN 7	380778	1	October 1, 2013*	LL4	381896	1	October 1, 2013*				
NAVAN 8	380779	1	October 1, 2013*	LL5	381897	1	October 1, 2013*				
NAVAN 9	380780	1	October 1, 2013*	LL6	381898	1	October 1, 2013*				
NAVAN 10	380781	1	October 1, 2013*	LL7	381899	1	October 1, 2013*				
NAVAN 11	380782	1	October 1, 2013*	LL8	381900	1	October 1, 2013*				

Table 1 - Broken Hill - Leo Property Mineral Claims

* upon acceptance for assessment credit of the work documented in this report under Statement of Work Event number 4244121.

Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Broken Hill-Leo property is located on the east side of the steep-sided North Thompson River valley, 150 km north-northeast of Kamloops, and 6 km northeast and east of the village of Avola, British Columbia (Figure 2). The region lies at the northwest end of the Shuswap Highland portion of the Interior Plateau, in an area of moderate to steep topographic relief. The North Thompson River occupies a south draining, steeply incised valley, approximately 1200 metres below the surrounding plateau. The property ranges from 580 metres elevation in the North Thompson valley to 1,750 metres on the Mike, Jimm and Dian claims east and south of Dustin Lake. The vegetation on the lower parts of the property consists of lodgepole pine, interior fir and black spruce. Balsam predominates at upper elevations, with lodgepole pine on dry, substrate deficient cliffs. These pine groves are currently being impacted by the Mountain Pine beetle infestation.

Road access to the property is via Highway 5 (Yellowhead Highway and east onto the Shannon Creek Forest Service Road, 0.5 kilometres north of Avola. The Shannon Creek FSR crosses through the property between 12.1 and 19 kilometres. The Cornice logging road originates at the 11.5 kilometres mark of the Shannon Creek FSR, and runs north onto the property near the 3 kilometre mark, accessing the areas west and north of Fowler Lake. The northeast directed now deactivated Fowler logging road originates at 17.5 kilometres on the Shannon Creek FSR and accesses the east-central side of the property eventually meeting the Cornice Logging road northeast of Fowler Lake. The south directed Dustin-Shannon spur originates at 15.5 kilometres on the Shannon Creek FSR and accesses the east side of Shannon Lake. Road access to the north part of the property is via Highway 5, 19 kilometres north of Avola, east onto the Finn Creek FSR, and south onto the Camp Creek logging road from the 10 kilometre mark.

Basic accommodation, food, and fuel are available in the village of Avola immediately southeast of the property. The village of Blue River 20 kilometres north of the property, has good accommodations, food and fuel, and is serviced by Greyhound Canada. Basic supplies can be obtained from Clearwater 70 kilometers west of the property. The City of Kamloops, located 190 road kilometres south, is the main centre of service and supply for the region. Logging is the primary resource activity in the region. Access to numerous equipment contractors are available on relatively short notice.

The CN Rail mainline in the north Thompson River valley is less than 2.5 kilometres west of the property. And passes thru Avola, Blue River and Clearwater. A medium sized high tension power line strikes through the west side of the valley. Gas and oil pipelines are located in the valley. Sufficient water and room for potential waste disposal, tailings storage, and processing pant sites and small scale hydro power all exist in the general project area.

The climate is moderately wet continental. Snowfall can exceed 4 metres at higher elevations, and rain showers are common in the summer and fall. Temperatures range from -25° C in winter to $+30^{\circ}$ C in summer. Most surface mineral exploration can be conducted between May and early November. Geophysical exploration, drilling and mining can take place year round.

Figure 1 - Property Location Map







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Figure 3 - Mineral Tenure Map

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History

The oldest known significant zinc-lead-silver massive sulphide base metal discoveries in the region include Cotton Belt (1905) to the south and Ruddock Creek (1961) to the east in the Monashee Mountains. With increased access, due to logging activity, occurrences such as the CK (1972) and Finn (1978) zinc-lead-silver massive sulphide deposits, Dimac tungsten skarn, and the Trio and Hydro molybdenum prospects were discovered. More recent discoveries include the Bizar Au-Bi-Cu veins (1998) east of Ground Hog Mountain, the Readymix Au-Bi-Cu veins (2000) about 10 km to the west, and the Broken Hill massive sulphide showings (2000).

A government regional geochemical silt survey was completed in 1972. Results indicate that drainages originating from the current Broken Hill - Leo property are moderately to weakly anomalous in zinc, lead and gold. Since 1979, various prospectors and mining companies have staked claims north, south and east of the area now covered by the Broken Hill - Leo Property.

Prior to the discovery of the Vista, Navan and Mike (Broken Hill) zinc-lead-silver massive sulphide showings in September 2000, mineral exploration on the current Broken Hill - Leo Property was limited to prospecting.

In September 2000, the newly staked Broken Hill Property was optioned to Cassidy Gold Corporation. In October 2000, Cassidy conducted limited geological mapping and soil and rock sampling over approximately 5 square kilometres in the central part of the Broken Hill Property. A total of 479 soil samples and 30 rock samples were collected under the supervision of Warner Gruenwald, P.Geo. (Gruenwald, 2000). This program produced several open-ended soil anomalies. Subsequently, additional claims were staked, including the Leo claims north of the Vista area.

In December 2000, a gravity survey was completed by Discovery Geophysics Ltd. (Kubo and Woods, 2001). In late January and early February, 2001, a 13 hole, 930 metre diamond drill program was completed by LDS Diamond Drilling Ltd. of Kamloops, B.C. The drill program targeted gravity and geochemical anomalies and down dip extensions of the Vista and Navan mineralized horizons (Lindinger and Pautler, 2001).

Cassidy terminated the Option Agreement on September 6, 2001.

On October 7, 2002, Cross Gold Corporation entered into an option agreement with Mr. Lindinger to earn a 100 percent right, title and interest in the Broken Hill - Leo property, subject to a 2% purchasable net smelter return royalty.

On November 5, 2002, B2B Solutions Inc. entered into an option to acquire a 100 percent right, title and interest in the property, subject to a 2% net smelter return royalty reserved in favour of the underlying owner.

On October 25, 2003, B2B Solutions Inc. acquired the Option from Cross Gold Corp. on the Broken Hill - Leo Property from Cross Gold Corp..

Between October 25 and November 1, 2003, a program of soil sampling, geological mapping and rock sampling was completed at a total cost of approximately \$25,000.

On August 10, 2004 B2B Solutions Inc. changed its name to Timer Explorations Inc.

In Late August and September 2004, a program of soil, moss mat and rock sampling was completed at a total cost of approximately \$20,000, prior to the September 15, amended date to fulfil the work commitment terns of the Option Agreement. Further exploration requirements under the Option Agreement were deferred till the summer of 2005.

During May and June 2005 a small diamond drilling and trenching program costing \$33,000 was completed over the Vista, Pautler and Navan areas. This program was successful in extending the Pautler horizon with intersections of 5.88% zinc over a drill width of 0.83 meters and 10.2% zinc over a drill width of 0.33 meters with a wider interval of 2.1% zinc over 1.9 meters, and discovering a mineralized horizon higher than the Vista.

During October 2006 a soil sampling, ground magnetometer and backhoe trenching program budgeted a \$60,000.00 was completed. This program was concentrated over the Mike-Denis area with some ground magnetometer coverage over the north Navan and Pautler areas. This program was successful in defining the soil anomalies over the Denis area, defining magnetometer anomalies over the Denis and Mike areas that were probably produced by magnetic Quaternary mafic dykes. Three long trenches in the Mike area and several test pits in the Denis showing area failed to encounter bedrock zinc mineralization. Only one Mike trench uncovered a massive sphalerite bearing boulder.

Geological Setting

Regional Geology

The northern Monashee Mountains are underlain by rocks of Kootenay Terrane portion of the Omineca Belt. The property is underlain by Shuswap Metamorphic Complex rocks a high metamorphic grade area within the pericratonic Kootenay Terrane. The Kootenay Terrane is comprised of late Proterozoic to early Paleozoic marine sediments and rare volcanic rocks, derived from the ancestral margin of North America (Wheeler 1992), and tentatively assigned to the Horsethief Creek Group (Gibson, 1991). The Complex has undergone extensive metamorphism and multiple episodes of deformation, due to collisional orogenic episodes during the Devonian, early Jurassic, mid to late Cretaceous and early to mid Tertiary (Figure 4). Coincident with these orogenic episodes, magmatic rocks intruded the rock package. Host lithologies underwent deep burial and deformation until the earliest Tertiary. Significant uplift, and erosion occurred from the mid to late Tertiary. The uplift was accompanied by north trending trans-tensional (basin and range) faulting and contemporaneous emplacement of felsic to intermediate stock and dikes, and more recent Quaternary basaltic and lamprophyric dykes.

Property Geology

The Broken Hill - Leo Property is underlain by deformed upper amphibolite metamorphic grade rocks of the Shuswap Metamorphic Complex portion. At least three phases of ductile to semi ductile deformation can be identified. The sequence is interpreted to consist of three distinct lithological packages that are usually but not universally strongly intruded by pegmatite sills and dykes (Evans, 1993).

The overall stratigraphic sequence of the property has not been mapped in any detail (Figure 5). The general lithologic trend strikes to the north to west with moderate to steep east dips, however many local variations occur. A series of parallel late stage open and upright folds plunge to the east. The general stratigraphy near the mineralized horizons in the Vista and Navan areas is somewhat better known and is described by Lindinger and Pautler (2001) as follows:

"The lowest structural package consists of amphibolite with lesser biotite gneiss and forms a thick monotonous sequence. This is overlain by a sequence dominated by biotite gneiss The third package consists of calc-silicate rocks with minor marble and chert. This package hosts the known zinc-lead-silver mineralization at the Vista, Navan and Mike Showings, on the property. The Broken Hill-Leo property covers an unexplored 9 km extent of the favourable lithology. In addition the Finn and Pica zinc-lead-silver occurrences lie 4 km and 3 km to the north-northwest of the property, respectively (Evans, 1993).

The rocks, although highly folded, have a common north to northwesterly strike with moderate easterly dips. Secondary and tertiary fold structures observed elsewhere, include late easterly trending roll folds that may reflect larger structures.

Invading the host lithologies is an augen orthogneiss of assumed Devonian Age, which has been observed along the east side of the property. The rocks have been further intruded by weakly deformed to massive leucogranites of late Cretaceous and early Tertiary ages. Accompanying and/or post dating in part, the larger intrusive bodies, are at least two generations of coarse grained leucogranite intrusions, including pegmatite. These occur as tabular to highly irregular cross cutting and concordant pods, masses, dykes and sills. Undeformed mid Tertiary (and later?) intrusions include grey 'dacitic' feldspar porphyry stocks and dykes intrude steeply dipping brittle tensional fractures. Very late melanocratic lamprophyric dykes also intrude similar structures. (Wheeler 1992, pp. 508, 514, and Lindinger, personal observations).

The carbonate horizon associated with Mike Showing mineralization appears to be shallowly dipping near the showing, gradually steepening to the northwest becoming nearly vertical at the property boundary.

The southeast striking projection of the carbonate horizon from the Navan area to the Denis showing appears to be shallowly south west dipping west of the Denis showing and east dipping to the north. North of the north striking, east dipping Navan A showing is the northwest striking southwest dipping Navan B showing. The subparallel slope and mineralized stratigraphy is probably responsible for the large zinc-lead soil anomaly in this area. These radical changes in dip may be caused by late rotational fault movement and or stoping by the large felsic plug underlying Fowler Lake to the east.

The carbonate horizon extending south of the Finn Occurrence 3 kilometers north of the Broken hill property appears to be east dipping with both north and south plunging open fold sections. This fold pattern appears to be a stage 3 event. Tight to isoclinal F1-F2 folds were observed in massive carbonate horizons 1.5 km north of the property boundary.

Soil sampling of the prospective carbonate horizons at the Mike and Denis areas indicate possible F1 fold repetition of the mineralized horizon(s) and a F3 synform between and to the north of the Mike and Denis showings.



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FIGURE 6

GEOLOGICAL LEGEND-BROKEN HILL PROJECT

to accompany Figure 5 (2008 amended)

TERTIARY

TDYKE -Grey fine to medium grainedintermediate intrusive rock. Fine to medium grainedhornblende and feldspars in a grey aphanitic groundmass. Pautler Unit 6)

CRETACEOUS AND/OREarly TERTIARY

- **PEG.** -Pegmatite sills and dykes. Leucocratic medium but usually coarse grained quartplagioclase biotite or muscovite intrusive. Often 'contaminated' with partiallyssimilated wall rocks. (Pautler Unit 5)
- **GRANO-** Leucocratic fine grained granodioritic intrusive. Pautler Unit 4)

QDIOR or TONA Leucocratic quartz diorite. Usually fine to medium grainedMay grade to pegmatite.

PROTEROZOIC to PALAEOZOIC: KOOTENAY TERRANE (Shuswap Metamorphic Complex)

DEVONIAN?

ORTHGN -Feldspar augen orthogneiss ranges from dioritic to quartz dioritic. (not seen in dridbre).

PROTEROZOIC?-HORSETHIEF CREEK GROUP?

QFGN	-Pale grey massive to laminated quartzo feldspathic gneiss with minor biotite and muscovite
BIOGN	-Metapelitic medium grained usually siliceous biotite gneiss. Rautler Unit 2)
BIOGNSIL	-Highly siliceous Biotite Gneiss (incorporated into Pautler Unit 2)
CALC-SIL	-Red-pink to green usually coarse grain~ coarsely banded garneamphibole-quartz calc silicate and skarn with remnant calcite rich pods. Pautler Unit 3)
MARB	-Leucocratic grey to white crystalline marbleOften contains and grades into wollastonite and actinolite garnet skarn and calc silicate(Pautler Unit 3-Mb)
LST	- Limestone. Varicoloured cyptocrystalline carbonate rock recrystallizes into marble (MARB) and alters to actinolite garnet skarn and calc silicate
SILCC	-Siliceous calc-silicate subUnit of CALC-SIL. Leucocratic laminated and bandedmoderately to highly siliceous rock. Over 35% fee cryptocrystalline quartz. (incorporated interautler Unit 3)
CHERT	-Cryptocrystalline laminated siliceous subunit of CALCSIL. Possibly meta-exhalite. Over 75% free quartz. (incorporated into PautlerUnit 3)
BIOHBGN	-Intermediate fine to medium gained banded metapelite? Similar to BIOGN butwith less quartz and the appearance of trace to 15% amplibole. (incorporated into PautlerUnit 1)
AMPHGN	-Melanocratic grey to greygreen fine to medium grained banded amphibole gneiss.Often biotite rich. Trace quartz. (Pautler Unit 1). Basal unit of sequence.

Deposit Types

The Shuswap Metamorphic Complex hosts several significant "syngenetic" sediment-volcanichosted zinc-lead-silver massive sulphide deposits, hosted within carbonate bearing lithologies at the transition between platformal carbonates and pelitic sediments. These occurrences include Ruddock Creek, Cottonbelt, King Fissure, Big Ledge, and CK. A "preliminary mineral resource" for Ruddock Creek, reported by Cominco and restated by Doublestar Resources in June 2000, includes 2.7 million tonnes grading approximately 8.4% Zn and 1.6% Pb. No classification is detailed but the report indicates the "calculations were not rigorous", (A. Tiver, P.Eng., personal communication.) The Ruddock Creek calculation was made prior to the requirements referred to in National Instrument 43-101 and cannot be relied upon. Clusters of zinc rich sulphide occurrences are generally aligned along north-trending large-scale folds. The mineralized horizons tend to be laterally extensive but thin. Significant thicknesses may be present near inferred vent areas and fold hinges. Structurally induced thickening can occur over short distances. The newly discovered Vista, Navan, Mike and Denis Showings are located 25 kilometres west of Ruddock Creek and 25 kilometres east of the CK occurences and are hosted in very similar rocks. Both properties are being actively explored.

Also occurring within similar lithologies are carbonatite-hosted niobium-tantalum showings and deposits like the active Mount Grace and Blue River Occurences.

Other deposit types within Shuswap Metamorphic Complex lithologies in the region are epigenetic in origin, commonly related to one or more of many intrusive events. Some of these are medium to high grade gold-bismuth-copper-arsenic veins of possible late Cretaceous to early Tertiary age (e.g. Bizar, Readymix, Denis Gold), related? copper, tungsten (Dimac), molybdenum, zinc-lead-silver and gold bearing intrusive and associated skarn and wallrock-hosted deposits. Gemstone and industrial mineral (i.e. garnet) deposits are also known to occur.

Mineralization

The following descriptions of the Vista, Navan and Mike showings are from the MINFILE database administered by the Geological Survey Branch of the Ministry of Energy and Mines with additional information from Lindinger (2002, 2004, 2005 and 2006).

MINFILE Number:	082M 280
Names:	VISTA, BROKEN HILL, VISTA A, VISTA B,
VISTA C	

The <u>Vista A showing</u> is a partially exposed band of very dark brown fine to medium grained massive sphalerite with subordinate galena, pyrrhotite, chalcopyrite and pyrite(?). The band was exposed by blasting to establish a road surface for the Cornice Logging road at about kilometre 9.3. The band is at the contact of sulphidic siliceous gneisses on the structural footwall, and an overlying 2 (plus) metre thick band of calc-silicate rocks that appear to be highly metamorphosed limestones. The showing appears to be part of a moderately (10-20 degrees) southeast plunging partially eroded antiform or northeast dipping

monocline. Rocks to the northeast change dip to moderate to steep northeast dips. Exposures to the south-west are eroded off, and covered by glacial debris, or have not been mapped.

The observed mineralization is in the form of planar to swirling bands of nearly massive sulphides up to 35 centimetres thick that grade up into bands of semimassive sulphides in a calc-silicate host. The contact with the underlying silicate rock appears very sharp. The band of Vista A type mineralization is exposed discontinuously over about 20 metres; it is assumed to be continuous although it is truncated at surface to the northwest by a northwest striking, moderately northeast dipping fault that brings a pegmatite dyke into direct contact with the mineralization. To the southeast it plunges below the logging road. Selected grab samples from bedrock exposures assayed up to 24% zinc, 4.9% lead and 72 grams per tonne silver (Lindinger, personal communication, Jan. 2001).

<u>Vista B type mineralization</u> occurs 2 to 3 meters structurally above the Vista A horizon in calc-silicate rocks. This zone is also stratiform, exposed as a 5 to 10-centimetre thick band of dark brown coarse grained massive to semi-massive sphalerite. No lead, silver or copper is reported. This band is exposed in its unweathered form for at least 5 meters about 20 meters southeast of the Vista A discovery outcrop. To the northwest it is eroded off. To the south-east it also plunges below the road. To the northeast, if continuous it would dip to the northeast as part of the stratigraphic package and remains open in that direction. Trenching in 2005 exposed the down dip extension of the Vista horizon and it pinched out 30 meters down dip to the east. Structural observations suggest that the thickened exposures in the road cut may be near s small antiform.

<u>Vista C type mineralization</u> (discovered by Warner Gruenwald, P.Geo.) are faulthosted(?) 4 to 6 centimetre thick silvery-grey medium to fine grained massive to semi-massive sphalerite and galena bands that appear to both occupy the top of and crosscut the calc-silicate horizon hosting the Vista A and B mineralization. Weathered exposures are visible over a planar 8 by 2.5 metre exposure of the top of the calc-silicate horizon above the fresh exposures of the Vista B mineral band. A sample (0.8 metres long by 8 centimetres thick) taken by Mr. Gruenwald yielded 6.6% zinc, 4.1% lead and 6.2 grams per tonne silver (Lindinger, personal communication, Jan. 2001).

The calc-silicate unit hosting the various types of zinc-rich sulphide mineralization appears to contain erratically distributed, weakly disseminated sphalerite with possibly galena. Traces of other iron and copper bearing sulphides are also present. This uncertainty is due to the generally well weathered nature of the surface exposures and lack of sample assay data.

Name UPPER VISTA

The drilling in 2006 intersected a thin mineralized horizon (that outcrops) about 30 meters stratigraphically above and 100 meters northeast of the Vista discovery

horizon. The horizon did not occur in a steeper drill hole to the northwest. This horizons relationship to the Vista and Pautler horizon is unknown but if it represents a structural repetition above the Vista Pautler horizon with a possible fold closure (and a thickening of the zinc mineralization) to the northwest.

Name PAUTLER

The Pautler Showing was discovered by Jean Pautler in February 2001 in Hole BH DDH-01-13 while following up a zinc intercept in hole BH DDH-01-03. The mineralized intersection in DDH-BH-01-03 although interrupted by a pegmatite sill graded 1.2% Zn over 1.1 metres (true width). A weighted average of the folded cherty mineralized zone in hole DDH-BH-01-13 graded 2.5% Zn over 3.9 metres (2.3 metres true width). Soil sampling in 2004 outlined lead and zinc anomalies 50 to 100 meters to the west which could represent the up dip expressions of the mineralization intersected in these holes. Hole BH-05-14 intersected 5.88% zinc over a drill width of 0.83 meters. Hole BH 05-15 intersected 10.2% zinc over a drill width of 0.33 meters with a wider interval of 2.1% zinc over 1.9 meters. Both holes are near to and bracket to the northwest and southeast hole BH01-03. The intersection in Hole 15 is 25-30 meters down dip from the intersection in Hole BH-DDH-01-13. The mineralization is hosted within or adjacent to calc-silicate rocks near the top of a 30-50 meter thick carbonate sequence. Tentatively this is geologically very similar to the Vista showing which is true would indicate that the Vista may be in a late stage down dropped block of the same stratigraphy. This remains a priority drill target.

MINFILE Number: 082M 279 Names: NAVAN, NAVAN A, NAVAN B, BROKEN HILL

The <u>Navan A showing</u> is hosted within north striking moderately east dipping open carbonate antiform or dome. The sulphides occur as several poorly exposed, partially weathered bands of dark brown fine- grained massive sulphides (sphalerite and galena) hosted by disrupted (frost heaved?) calc-silicates and impure quartzites, probably correlative with the cover sequence of the dome. The grade and style of mineralization are very similar to the Vista A type showing (082M 280); however, the highest grade exposures of Navan A are totally within calc-silicate host rocks. Massive sulphide mineralization up to 25 centimetres across and grading up to 23% zinc, 4.05% lead and 17 grams per tonne silver occur as boulders that were excavated out of subcrop exposures during road construction. Exposed hangingwall rocks include thin, impure quartzite layers with minor disseminated pyrrhotite. A second 25 centimetre thick layer of semi massive sulphides occurs less than 1 metre above the massive sulphide horizon. Still higher are disseminated medium grained sulphides in highly weathered pitted (weathered sulphides?) garnetiferous calc-silicate rock.

The <u>Navan B showing</u> is about 130 meters north of the Navan A exposure. Here, a 1.5- metre long 5 to locally 22-centimetre thick band thick of massive sphalerite occurs in northwest striking south west-dipping quartz-rich schistose rock. A

(2000) 0.3-metre thick sample which included the massive sulphide mineralization yielded 5.6% zinc, 0.6% lead and 8.4 grams per tonne silver. The host rocks are very different than those of the Navan A showing and mineralization is likely a distinct layer. More detailed examination in 2005 resulted in the discovery of 30 by 25 by 20 cm massive sphalerite boulders.

The Navan C float showing 200 meters grid north of the Navan A showing is a 30 centimetre diameter piece of siliceous calc-silicate and biotite gneiss float occurring in basal till that has on one side part of a massive sulphide layer. The remnant sulphide layer is about 12 centimetres thick. Based on glacial information the source of the boulder was to the northeast and away from the Navan A and Navan B showings.

The Navan D float showing occurs 300 metres south of the Navan A showing at approximately 7.4 kilometres on the Cornice logging road. Here clusters of fragments less than 10 centimetres in diameter of zinc-bearing semi-massive sulphides hosted by calc-silicate and chert occur in basal till and actinolite skarn and bleached marble subcrop rubble in a road cut. This is the area of the original rock sample taken by the writer in July 2000 that returned nearly 1% zinc, with anomalous copper, lead silver and tungsten values.

An open ended to the north soil anomaly immediately north (up ice) and west (down-hill) of the Navan B showing contains the highest zinc (2590 ppm) and lead (412 ppm) values in soil found to date. The intensity and shape of the soil anomaly here may reflect a surface expression of folded mineralized horizons.

MINFILE Number: 082M 281 Names: MIKE, BROKEN HILL, MIKE FLOAT

The Mike float showing contain cobbles and boulders of dark brown massive, semi massive and disseminated, fine to coarse grained sphalerite and pyrrhotite associated with garnetiferous calc-silicate, pyrrhotitic silicate and coarse grained pegmatitic rocks that are exposed over 250 meters in a series of pits dug for material to upgrade the Shannon Creek logging road between 15.1 and 15.35 km. The boulders and cobbles can be dug out of the bank and occur within discrete stratigraphic zones near to and overlying possibly disrupted pegmatitic bedrock. The western exposures of the boulders occur in a dense basal till that is overlain by several glaciofluvial and silty boulder till layers. The boulders appear to occur at higher levels in the till to the east indicating a source to the west and north. Northwest of the float occurrence is an area of nearly flat lying to northeast dipping calc-silicate float and bedrock extending for over 2 kilometres. The stratigraphy tow kilometres west is subvertical to steeply north dipping. To the northeast, east and south-east is deep glacial till extending to Shannon Lake. This till terminates and may mask the soil anomaly. The significance of the soil anomalies from the higher till sheets are unknown.

One sample of a massive sphalerite (~ 15 cm thick) boulder returned 19.6% zinc

and 352 ppm cadmium (Gruenwald, personal communication, 2000). The lead content of this and other samples have consistently lower lead values than the Navan (082M 279) and Vista (082M 280) prospects of the Broken Hill property, although moderate lead in soil anomalies occur here..

Names: DENIS ZINC, DENIS GOLD

The Denis Zinc showing was discovered by Denis DeLisle in September 2004 and is 500 meters northeast of the Mike showing and is in the west uphill side of a road cut in an unreclaimed skidder road. The showing is a one meter square "outcropping" exposure of a 20 cm thick north striking subvertically dipping massive sphalerite slab that is truncated to the north by intrusives, but is open to the south and at depth. Representative samples returned from 11 to 15.5% zinc with lesser lead and silver. Partially defined moderate zinc and lead soil anomalies occur down hill to the northeast. The area is characterized by very large (4-5 meter) boulders. And trenching results indicate the stratigraphy is shallowly southwest dipping. Therefore the current interpretation is that the showing may be within a large rotated boulder or may be a rotated block contained within pegmatite.

The Denis Gold was also discovered by Denis DeLisle and occurs as a west striking massive to semi massive pyrrhotite-quartz breccia vein hosted by pegmatite about 3 meters north of the Denis Zinc showing. Float samples of massive and semi massive pyrrhotite mineralized gneiss returned up to 1.28 g/t Au with associated bismuth (up to 896 ppm) and copper (up to 1160 ppm).

Backhoe trenching of this area exposed these showings as strongly frost fractured glacially or frost transported megaliths, presumably from some distance up hill to the west.

Other potential deposit types located on the property include tungsten skarn and intrusion associated gold zones. Known types of mineralization nearby include molybdenum stockwork veins and high grade intrusion associated gold veins such as the nearby Bizar, and Readymix gold occurrences, pyrrhotite hosted gold skarn mineralization, and copper bearing quartz veins and stockworks represented by the Denis gold and Mike gold showings. Carbonatite deposits prospective for Niobium and Tantalum are known to occur in the region, but not as yet on the property

2008 Exploration Progam

The 2008 program was designed to test for bedrock zinc mineralization at the Denis, Mike, North Pautler and North Navan areas by diamond drilling. A linear north trending soil anomaly north of the Denis showing was also tested by one backhoe trench. All disturbed areas including trenches, drill sites and access trails were reclaimed.

Trenching

A Hitachi 220 Backhoe (Cat 215 equivalent) owned and operated by Willie Winn Farms Ltd. was retained for trenching in the Denis and Mike areas, and reclamation efforts. One 15 metre east west striking trench located at UTM zone 11 5741890 N 345235 E was excavated down ice and across from a linear multielement (zinc, lead copper) soil anomaly north of the Denis showing and two of the 50 meter trenches at the Mike showing were extended to the east towards the Shannon FSR. Summary results are discussed in exploration results

Diamond Drilling

A Boyles 37 Drill was contracted from Target Drilling Ltd. to test for bedrock zinc mineralization at the Denis, Mike, north Pautler and north Navan areas. The north Denis area was tested by two vertical holes to test for the bedrock source of large weakly mineralized calc-silicate boulders in the area and to see if an interpreted synform connecting the Denis (south dipping and Mike (north dipping) areas existed. Two holes were drilled north of the Mike float showings for the same reason. Two holes were drilled some 80 meters north of the Pautler showing to test for the north extension of the Pautler portion of the 2 km long Vista-Navan zinc horizon. And finally one hole tested the north end of the strong multielement soil anomaly north of the Navan area and south of the Pautler area.

All core was geoteched and logged on site. Core geoteching included core washing, reassembly to determine recovery and location of core loss and quality of core handling by the drillers. Additional procedures included metric conversion, marking the core at one meter intervals and finally imaged using digital cameras. Usually 4 boxes were imaged at one time. The images are provided with a CDR accompanying this report as Appendix 4. All geotechnical data was entered into a laptop computer using appropriate programs at the end of each shift. Core logging was completed with rock type, alteration and mineralization recorded. The logged data was entered into a laptop computer using the Excel spreadsheet program on a daily basis.



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RENAISSANCE GEOSCIENCE SERVICES – J.E.L. Lindinger, P.Geo. 680 Dairy Road, Kamloops, B.C. V2B-8N5

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Sampling Method and Approach

Core samples.

Upon completion of logging of two to four boxes of core, samples if any were deemed appropriate were marked by writing a red line across the core at the beginning and end of the sample with arrows point towards the sample termination using a marker or grease pencil by the geologist. If a section of core had to be cut a certain way a red cut line was drawn on the length of the core in question. Otherwise the geotechs were instructed to cut the core so the core angles were best exposed as long as mineralization representativeness was retained.

The sample books, used had white plastic triplicate tags. Two tags had all pertinent information written on them and one had just the sample number. One information tag and the one number only tags were placed at the end of each sample next to the core.

Sample Preparation, Analyses and Security

The core designated for sampling was transported by Renaissance Geoscience Services Inc. employees Jennifer Schroeder and Adam Lyons to the secure Renaissance Geoscience facility at 680 Dairy Road, Kamloops, B.C. There the samples were cut by a 2 HP electric rock saw by employees Adam Lyons and Jennifer Schroeder. After cutting, one half of the sample was placed into a 6 mil thick 8 by 13 or 12 by 18 inch sample bag depending on sample size, with the "number only" tag inserted facing out. The sample number was also prewritten on the bag. The second half of the core was placed sequentially in its original order back in the core box. The "information on" sample tag was stapled to the box at the end of each sample. Inserted blanks and duplicates were also added at the appropriate locations by stapling the tags into the core box. The sample bags were sealed using 10 inch plastic zap straps. Every sample was placed into a white fabrene sack to a maximum weight of 60 lbs and then sealed with 2 10-13 inch zap straps. The address of the destination laboratory was either pre labelled or written on each sack which were also numbered. Written record sheets were made for all samples and sacks for tracking purposes.

Blanks comprised of washed cement sand were inserted into the sample stream after strongly mineralized samples to test for downstream contamination. This material provided an extremely cost effective and highly reproducible blank material. A WCM Minerals Ltd. PM 186 analytical standard was inserted at the end of the samples. The blanks and standard were made in advance by carefully placing 10-25 grams of material into a 2 inch by 4 inch kraft paper sealable envelope. At the appropriate sample the numbered tag was stapled to the craft envelope and placed into 8 by 13 inch sampled bags which were in turn stapled shut. The blacks and standards were then placed into the sample stream prior to departure to the lab. The blank or standard was recorded in the sample book and stapled into the core boxes at the proper location. The samples were stored on site for one night in a locked building then transported directly to Ecotech Laboratory Ltd. 10041 Dallas Drive Kamloops B.C. by employee Jennifer Schroeder. All samples were analyzed for 28-elements using a standard multi-element ICP procedure. Several samples reporting overlimits for zinc were fire assayed using procedures specific for that element.

The following list of procedures was supplied by Eco-Tech Laboratories Ltd..

Sample Preparation

Samples are catalogued and dried. Soils are prepared by sieving through an 80 mesh screen to obtain a minus 80 mesh fraction. Samples unable to produce adequate minus 80 mesh material are screened at a coarser fraction. These samples are flagged with the relevant mesh. Rock and core samples are 2 stage crushed to minus 10 mesh and a 250 gram subsample is pulverized on a ring mill pulverize to -140 mesh. The subsample is rolled, homogenized and bagged in a prenumbered bag.

Multi-Element ICP Analysis

A 0.5 gram sample is digested with 3M of a 3:1:2 (HCl:HN03:H20), which contains beryllium, which acts as an internal standard for 90 minutes in a water bath at 95°C. The sample is then diluted to 10ml with water. The sample is analyzed on a Jarrell Ash ICP unit.

Results are collated by computer and are printed along with accompanying quality control data (repeats and standards). Results are printed on a laser printer and are faxed and/or mailed to the client.

Result data is entered along with standards and repeat values and are faxed and/or mailed to the client.

Data Verification

All samples were collected under the direct supervision of independent field technicians, and transported directly to Eco-Tech Laboratories Ltd. in Kamloops, a certified analytical laboratory. Certificates of Analyses are appended in this report (Appendix 1).

The author arranged to have both the field standard and "blanks" inserted into the core sample sequence by independent employees.

Interpretation and Conclusions

Trenching

Denis area

The backhoe trench completed in the Denis area was excavated to a depth of 5 to 6 metres and failed to encounter bedrock. Over 90% of the material was intrusive in origin. Only one cobble sized calc silicate sample was recovered. It was so weakly mineralized that it was not sampled.

Mike Area

The trench extensions at the Mike showing failed to encounter bedrock or more mineralized float. After careful observation of the chaotic pattern of mineralized float material the author was forced to conclude that the source of the mineralization may originate from the south east towards Shannon Lake or from the south towards Shannon Creek. Generally the mineralized float is decreasing in size towards the northwest.

Drilling

Drill hole collars are plotted on Figures 7 and 8 below and drill logs with UTM co-ordinates are appended to this report.

Denis Area

The two holes drilled in the north Denis area failed to intersect zinc mineralization. Hole M08-01 intersected a thick interval of felsic intrusives and migmatites that was repeatedly interrupted by magnetic Quaternary basalt dykes. The upper contacts of most dykes were clay altered possibly caused by hydrothermal activity during dyke emplacement. Hole M08-02 intersected from 19 to 30.5 m a sequence of very weakly mineralized calc silicates and biotite gneiss. This metasediments were over and underlain by thick intrusives The causative source of the multielement anomaly southwest of drill hole M08-02 may be derived from the up dip projection of this calc silicate horizon. No samples were taken.

Mike Area

Two holes were drilled north of and uphill from the Mike float showing. Both holes intersected thick intervals of felsic intrusives and migmatites that enveloped several thin sequences of metasediments including calc silicates. The holes also intersected several magnetic Quaternary basalt dykes. Hole M08-04 intersected a thick basalt dyke in the down dip location of the projected mineralized horizon. The dyke was bracketed by favourable calc silicate stratigraphy which was underlain by alternating thin biotite gniess and thicker felsic intrusive and migmatites. No samples were taken from these holes.

In spite of the potential to discover the bedrock source of the zinc mineralization by tipping the drill to the south from the M08-04 drill site the decision was made to move the drill to the north Pautler area. This was due to the high probability that even if the zinc horizon was located that the chance of discovering significant amounts of zinc mineralization appeared small and that due to budget constraints the Pautler target appeared to be a better use of the remaining budget.

Denis-Mike Synopsis

Drilling derived geological observations from the Mike and Denis areas suggest the flat area containing innumerable calc-silicate boulders west of the Denis and north of the Mike showings is underlain by a large siliceous intrusive body that is in turn crosscut by widely spaced highly magnetic Quaternary mafic dykes. The previously interpreted F3 synform appears to have been totally invaded by felsic intrusives. The calc-silicate till

veneer may have originated from the north from an area south of Fowler Lake where the carbonate stratigraphy is plentiful in out and subcrop. The pattern of the soil anomalies in the Denis and Mike areas have thru trenching and drilling been found to be in areas of deep overburden cover. Tentatively the causative source of the anomalies in the Denis area is to the north towards the Navan area and/or from the east under deep overburden. The recessive area east of the Denis target remains to be tested, however it is covered by deep overburden and only a gravity or IP with ground magnetic surveys would detect significant buried mineralization. MMI soil sampling is also a possible tool to use.

North Pautler Drilling

Holes BH08-19 and 20 both intersected the down dip projection of the Pautler portion of the Vista-Navan mineralized horizon. Hole BH08-19 was collared about 100 metres and north of the previous drilling on the Shannon Road and drilled at a bearing of 205 degrees and a dip of -55 degrees. The hole intersected from 80.87 metres 15.8% zinc over 0.1 metre. A second very weakly mineralized zone was intersected at 97.5 metres and a third at 104.3 metres. Hole BH08-20 was collared 5 metres north of hole 19 and was drilled at a bearing of 115 degrees and a dip of -60 degrees. This hole intersected several small or low grade mineralized zones. At 25.35 m a massive pyrrhotite band returned 482 ppm copper. The relationship of this mineralization with the deeper zinc mineralization is unknown. Both are hosted by similar calc silicate and chert wall rocks. The hole also intersected at 98.25 m 7.0% zinc over 0.2 metres. This zone is overlain by a 0.5 metre thick very low grade interval. The low grade zinc zone hosts about 5% pyrrhotite. Core length intervals in hole 19 is near true width and for hole 20 about 60% of true width.

North Pautler Synopsis

Although both holes intersected mineralization that confirms that the Pautler portion of the Vista-Navan mineralized horizon continues at depth from the areas previously tested, the intervals intersected are thin. Hole BH08-020 which intersected the horizon due east of hole BH08-019 intersected a much broader folded interval but lower overall grade than the single highly sheared intersection in hole BH08-19. The Pautler horizon can be said to be thickening to the east in relation to hole 19. Overall, the intervals are weaker than the areas tested at the Cornice Road.

North Navan Drilling and Synopsis.

The top of drill hole BH08-021 intersected a thick sulphidic cherty migmatite that may have been a thick sulphidic exhalative chert mass. The mass returned locally highly anomalous silver, weakly anomalous lead and very weakly anomalous zinc and copper. The anomalous zinc bracketed the co-incident silver, lead and copper. The immediate up dip to the west exposures underlie the north end of the strong Navan soil anomaly and the material derived from the chert probably hosts the soil anomaly.

Reclamation

All disturbed sites and access trails have been reclaimed with a backhoe and seeded with forest range mix.

TABLE 2 - 2008 PROGRAM EXPENDITURES										
EXPENSE ITEM	DETAILS		CHARGE							
EXPLORATION										
Potash North Resolurce Corporation. Management costs		\$	1,000.00							
Renaissance Geoscience Services Inc. Project supervision	12.5 days @ \$800 per day	\$	10,000.00							
Nissan 4X4	12 days @ \$705 per day	\$	840.00							
Accomodation 12 days @ 120 per day		\$	1,440.00							
Willie Win Farms Ltd. D7 dozer	Per Invoice	\$	7,276.50							
Willie Win Farms Ltd. Hitachi 220 backhoe	Per Invoice	\$	1,811.25							
Target Drilling Ltd	Per Invoice	\$	98,200.00							
Fuel for Target drilling (50%)	Per Invoice	\$	205.44							
Mobilization	Per Invoice	\$	2,670.94							
Core shack rental		\$	200.00							
Core cutting (A Lyons, J Schroeder)		\$	400.00							
Supplies (sample bags, flagging, hip chain thread analytical sta	andards)	\$	250.00							
Analytical (Eco Tech Laboratories Ltd.) core analyses	Per Invoice	\$	418.32							
Report		\$	3,600.00							
Total 2006 field program		\$	128,312.45							
RECLAMATION										
Willie Win Farms Ltd. Backhoe reclamation	Per Invoice	\$	3,701.25							
Grass seeding (J Shroeder 1 day)		\$	290.00							
Renaissance Geoscience Services Inc. Supervision		\$	200.00							
J.L. Lindinger, P.Geo.	Report portion	\$	300.00							
Nissan 4X4	1 day @ \$250 per day	\$	250.00							
Total Reclamation		\$	4,741.25							
TOTAL FOR 2006 PROGRAM		\$	133,053.70							

Recommendations

The results of the 2008 program although disappointing helped to clarify where additional exploration expenditures are warranted. The following \$500,000 phased exploration program is recommended. Figure 5 depicts the proposed exploration areas.

Phase 1

A proposed \$60,000 surficial exploration program includes the establishment and reestablishment of an expanded grid north of the Pautler-Vista area. This grid would cover the flat area north of the Vista and Pautler outcroppings east to the hills which are intrusive and west to the cliff overlooking the North Thompson River. Work on this grid would include, geological mapping, gravity and ground magnetic surveys. Any significant positive gravity anomalies would then be drill tested in Phase 2

A proposed \$60,000 surficial exploration program includes the establishment and reestablishment of the grid east of the Denis area. This grid would cover the deeply overburden covered area east to the old Fowler logging road. The high ground east of this road is largely underlain by intrusives. Work on this grid would include float mapping, gravity and ground magnetic surveys. Any significant positive gravity anomalies would then be drill tested in Phase 2.

Phase II

Pending successful outlining of any gravity anomalies a proposed Phase II drill program budgeted at up to \$380,000 to test these anomalies would be recomended. If the drill testing of any gravity anomalies is successful then gravity testing west of the Mike area within the Shannon Creek Valley can be tried. Additional expenditures are contingent on the successful development of the targets recommended to be explored in this report.

TABLE 3 - RECOMMENDED PROJECT EXPENDITURES											
Charge Item	Amount	Charge	Total								
Phase 1											
Mobilization	days		\$2,200.00								
Linecutting gridwork 15 km @ \$600 /km)	35	\$600.00	\$21,000.00								
Gravity Survey	30	\$1,400.00	\$42,000.00								
Magnetic survey	35	\$150.00	\$5,250.00								
Food and accomodation 40 mandays @120.manday)	80	\$120.00	\$9,600.00								
vehicles 30 vehicle days @ \$80/day	60	\$30.00	\$1,800.00								
Geological mapping (mandays)	4	\$800.00	\$3,200.00								
Project management mandays	20	\$800.00	\$16,000.00								
Supplies			\$500.00								
Contingency @ 10%			\$ 12,000								
Report			\$ 6,000								
Total surface program			\$119,550.00								
Phase 2	metres	\$ per metre)								
Diamond drilling (metres) all inclusive (includes all	1250	\$275.00	\$343,750.00								
drilling and geological support costs)											
Contingency @10%			\$38,000.00								
Total Drilling Program			\$381,750.00								

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CERTIFICATE AND SIGNATORY PAGE

I, Joseph Eugene Leopold (Leo) Lindinger, P.Geo. of 680 Dairy Road, Kamloops, B.C. V2B-8N5 Tel. 250-579-9680 Fax 250-554-6887 Email joslind@telus.net

HEREBY DO CERTIFY THAT:

- 1. I currently own the British Columbia Mineral Claims called the "Broken Hill Property" which are now under option by Potash North Resource Corporation which is the successor company to Timer Explorations Inc..
- 2. I graduated in 1980 from the University of Waterloo, Ontario with a Bachelor of Sciences (BSc) in Honours Earth Sciences.
- 3. I am a member in good standing as a Professional Geoscientist (#19155) with the Association of Professional Engineers and Geoscientists of the Province of British Columbia since 1992.
- 4. I have worked continuously as a geoscientist since graduating in 1980.
- 5. I am responsible for presenting the exploration results in the "**Diamond Drilling**, **Trenching and Reclamation Assessment Report on the Broken Hill - Leo Property**" and dated 18Th day of February, 2009. I have participated in, directly, or in a supervisory capacity in all of the exploration programs discussed in the report between September 2000 and October 2008 with the exception of work completed by Avola Industries Ltd. in August 2002 on the Leo Claims.

Dated this 18th day of February, 2009

Signature and Stamp of J.E.L. Lindinger, P.Geo

Printed name of J.E.L. Lindinger, P.Geo.

Appendix 1 Analytical Results 26-Nov-^^ Alex Stewart Geo hical ECO TECH LABORATORY LTD. 10041 Dallas Drive KAMLOOPS, B.C. V2C 6T4

ICP CERTIFICATE OF ANALYSIS AK 2008-1775

Renaissance Geoscience 680 Dairy Road Kamloops, BC V2B 8N5

Phone: 250-573-5700 Fax : 250-573-4557

No. of samples received: 24 Sample Type: Core **Project #: Broken Hill Shipment #: 08-01** Submitted by: Jen Schroeder

Values in ppm unless otherwise reported

Et #.	Tag #	Ag Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na <u>%</u>	<u>Ni P</u>	_Pb_	Sb	Sn	Sr	<u>Ti %</u>	<u> </u>	<u>v</u>	W	<u>Y</u>	Zn		
1	905220	0.2 1.76	5	35	10	4.38	7	7	169	13	2.86	10	0.70	1340	<1	0.07	23 2050	32	<5	<20	164	0.08	<10	31	<10	5	2992		
2	905221	1.4 0.64	<5	30	10	2.46	319	46	99	31	3.78	<10	0.40	736	<1	0.03	41 3630	36	<5	<20	89	0.04	<10	10	70	<1 >	>10000		
3	905222	<0.2 0.05	<5	5	<5	0.02	<1	<1	<1	<1	0.16	<10	<0.01	12	<1	0.01	1 70	2	<5	<20	<1	<0.01	<10	2	<10	<1	52		
4	905223	<0.2 0.90	<5	35	<5	3.40	<1	18	77	42	3.40	10	0.41	450	1	0.03	33 600	34	<5	<20	102	0.03	<10	30	<10	9	284		
5	905224	<0.2 0.97	10	<5	<5	3.17	<1	3	73	4	0.60	<10	0.15	226	<1	0.03	7 1400	8	<5	<20	97	0.05	<10	10	<10	4	56		
6	905225	<0.2 1.94	<5	80	<5	1.88	2	119	107	482	>10	20	0.05	140	4	0.11	135 350	18	<5	<20	127	0.12	<10	11	<10	<1	104		
7	905226	<0.2 2.06	<5	175	5	0.31	<1	20	157	49	3.81	<10	1.35	462	1	0.08	42 330	18	<5	<20	9	0.25	<10	84	<10	9	89		
8	905227	<0.2 2.31	5	65	<5	3.39	<1	16	131	34	3.10	<10	0.95	445	7	0.12	27 930	34	<5	<20	250	0.05	<10	63	<10	4	213		
9	905228	<0.2 1.08	55	60	<5	2.65	<1	16	106	40	3.01	10	0.82	329	11	0.04	65 1060	46	<5	<20	201	0.02	<10	104	<10	6	139		
10	905229	<0.2 2.03	10	110	<5	4.53	<1	20	148	22	3.54	10	2.02	605	2	0.06	68 1960	36	<5	<20	291	0.08	<10	83	<10	6	239		
								_												_									
11	905230	<0.2 0.77	<5	30	<5	4.88	42	10	97	10	1.25	<10	0.15	431	<1	0.05	10 1080	36	<5	<20	110	0.02	<10	11	<10	<1 :	>10000		
12	905231	0.2 0.96	5	20	<5	5.39	1	5	175	5	1.55	<10	0.34	455	<1	0.03	21 940	24	10	<20	131	0.03	<10	14	<10	3	475		
13	905232	1.6 1.20	10	15	10	6.13	50	12	100	17	1.55	<10	0.16	454	<1	0.03	21 5280	494	<5	<20	75	0.08	<10	26	<10	<1 :	>10000		
14	905233	0.2 0.42	<5	30	<5	1.23	289	42	124	24	1.98	<10	0.07	214	<1	0.06	32 600	228	<5	<20	40	0.04	<10	7	60	<1 :	>10000		
15	905234	<0.2 0.05	<5	5	<5	0.02	<1	<1	<1	<1	0.13	<10	<0.01	16	<1	0.01	<1 50	<2	<5	<20	1	<0.01	<10	2	<10	<1	47		
16	005235	<0.2 0.63	-5	25	~5	1 28	-1	8	118	10	1 63	<10	0 33	101	-1	0.05	16 360	34	<5	<20	70	0.06	<10	30	~10	7	332		
17	905236	0.2 0.03	-5	5	-5	1.00	21	2	176	8	0.41	<10	0.00	96	<1	0.00	6 150	16	<5	<20	134	<0.00	<10	1	<10	2	144		
18	905230	22 0 14	<5	5	115	1.01	21	7	120	36	1 24	<10	<0.01	67	21	0.00	12 60	78	<5	<20	83	<0.01	<10	<1 <1	<10	1	27		
10	905237	17 0 27	-5	15	30	1.31	~1	15	222	76	2 /8	~10	-0.01	171	1	0.02	20 150	72	~5	<20	47	-0.01	<10	- 1	~10	2	27 11		
20	905230	03 070	~5	20	-5	2.60	21	13	74	60	2.40	<10	0.07	302	-1	0.02	25 500	28	<5	<20	ч/ 0/	0.01	<10	6	<10	2	126		
20	303233	0.5 0.70	-5	20	-5	2.09		15	74	03	2.44	10	0.25	552	~1	0.02	25 500	20	-5	~20	34	0.01	-10	0	~10	0	120		
21	905240	<0.2 0.34	5	15	<5	0.58	<1	2	100	9	0.40	<10	0.04	57	<1	0.05	4 150	16	<5	<20	23	<0.01	<10	1	<10	4	11		
22	905241	<0.2 0.48	<5	25	<5	0.22	<1	4	83	19	1.12	10	0.18	102	<1	0.08	4 330	10	<5	<20	<1	0.04	<10	10	<10	8	23		
23	905242	<0.2 0.26	5	10	<5	0.40	<1	<1	138	4	0.37	<10	0.03	68	<1	0.07	4 80	12	<5	<20	17	<0.01	<10	<1	<10	2	7		
24	905243	0.6 0.70 2	2845	30	10	5.38	4	96	9	121	3.45	10	0.16	482	27	0.08	28 1210	18	<5	<20	116	0.04	<10	29	<10	5	87		
Alex Stewa ECO TECH	rt Geoch LABC	emical ORY	LTD.					I	СР С	ERTIF	ICAT	E OF /	ANAL	YSIS	200	8- 17	75					I	Rena	issand	e Ge	oscie)nc		
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<u></u> #	Tag #	Ag	Al <u>%</u>	As_	Ba	Bi	Ca_%	Cd	Co	Cr	Cu	Fe %_	La	<u>Mg %</u>	Mn	Мо	<u>Na %</u>	Ni	P	Pb	Sb	Sn	Sr	_Ti %_	U	v	w	Y	Zn
QC DATA: Repeat:				_								_																	
1	905220	0.2	1.78	15	30	5	4.43	6	8	170	13	2.89	<10	0.69	1349	<1	0.07	25	2070	32	5	<20	162	0.08	<10	31	<10	5	2976
10	905229	<0.2	2.02	10	110	<5	4.56	<1	20	151	21	3.58	10	2.00	610	2	0.06	67	1990	38	<5	<20	286	0.08	<10	84	<10	6	245
19	905238	1.6	0.27	10	15	30	1.33	<1	15	228	76	2.51	<10	0.06	170	2	0.02	19	130	74	<5	<20	46	0.01	<10	4	<10	1	36
Resplit: 4	905223	0.2	0.99	<5	35	<5	3.68	<1	21	89	48	3.68	10	0.43	471	1	0.03	38	630	40	<5	<20	104	0.03	<10	33	<10	9	314
<i>Standard:</i> Pb129a		11.8	0.83	10	65	<5	0.50	59	6	11 1	372	1.57	<10	0.67	348	3	0.03	5	420 (6142	10	<20	31	0.04	<10	19	<10	<1 >	10000

ECO TECH LABORATORY LTD. Jutta Jealouse B.C. Certified Assayer

JJ/ap df/1773s XLS/08

CERTIFICATE OF ASSAY AK 2008-1775

Renaissa 680 Dairy Kamloops V2B 8N5	nce Geoscience Road s, BC		01-Dec-08						
No. of sam	oles received: 24								
Sample Type: Core Project #: Broken Hill									
Shipment	Shipment #: 08-01								
Submitted I	by: Jen Schroeder								
		Zn							
<u> </u>	Tag #	(%)							
2	905221	15.8							
11	905230	1.64							
13	905232	2.43							
14	905233	11.5							
<u>QC DATA:</u> Repeat:									
2	905221	16.0							
14	905233	11.2							
Standard:									
Pb129		2.01							

JJ/nw XLS/08

ECO TECH LABORATORY LTD. Jutta Jealouse B.C. Certified Assayer Appendix 2 Diamond Drill Logs

POTASH N	ORTH RESC	URCE CORPO	RATION	DDH M08-01	BROKEN HILL PROJECT, AVOLA, B.C.				
UTM	NOR-	EASTING	ELEV	BEARING/DIP					
ZONE	THING								
11	5741900	346100	1630	0/-90	TAK	RGET			
Metres	Metres	STRUCTURE			TESTING MAGNETOMETER AND	SOIL GEOCHEMICAL ANOMALIES			
					BETWEEN MIKE AN	D DENIS SHOWINGS			
FROM	ТО	FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION			
0.00	7.00		CASG	CASING NO RECOVERY					
7.00	50.40		QDIOR	HETEROGENEOUS PLAGIOCLASE		Very rare trace pyrrhotite			
				QUARTZ +/- GARNET +/- BIOTITE					
				PORPHYRITIC TO MEGACRYSTIC					
				INTRUSIVE AND MIGMATITE.					
				Overall composition probably mafic					
				poor quartz diorite. Extremely					
				variable grain size.					
				Planar contact 35 deg. to c.a.					
50.40	50.90	Intrusive	TDYKE	QUATERNARY BASALT DYKE	Propylitic				
		contacts 55		Very dark green-grey Quaternary					
		deg. To C.A.		Anaheim volcanic. Small zeolite filled					
				amygdules in chilled contacts. Lower					
				contact has at least two small					
				injections into wallrock ~55 deg. to					
				C.A.					
				planar contact 30 deg. to C.A.					
50.90	54.80		QDIOR	HETEROGENEOUS PLAGIOCLASE		Very rare trace pyrrhotite			
				QUARTZ +/- GARNET +/- BIOTITE					
				PORPHYRITIC TO MEGACRYSTIC					
				INTRUSIVE AND MIGMATITE.					
				Overall composition probably mafic					
				poor quartz diorite. Extremely					
				variable grain size.					
				Planar contact 25 deg. to c.a.					
54.80	55.35		TDYKE	QUATERNARY BASALT DYKE Late	Propylitic				
				very dark green-grey Anaheim					
				volcanic. Small zeolite filled					
				amygdules in chilled contacts.					
				Planar contact 25 deg. to c.a.					

FROM	ТО	FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION
55.35	67.60		QDIOR	HETEROGENEOUS PLAGIOCLASE QUARTZ +/- GARNET +/- BIOTITE PORPHYRITIC TO MEGACRYSTIC INTRUSIVE AND MIGMATITE. Overall composition probably mafic poor quartz diorite. Extremely variable grain size.		
				Planar intrusive contact 80- deg. To C.A.		
67.60	69.30	55+/-15	ORTHGN	MEDIUM GRAINED QUARTZ DIORITIC ORTHOGNEISS Well foliated. "Devonian orthogneiss?		
69.30	69.50		QDIOR	HETEROGENEOUS PLAGIOCLASE QUARTZ +/- GARNET +/- BIOTITE PORPHYRITIC TO MEGACRYSTIC INTRUSIVE AND MIGMATITE. Overall composition probably mafic poor quartz diorite. Extremely variable grain size.	Weak pervasive clay alteration	
				Clay altered rock destructive contact		
69.50	70.80		GRANO	FINE TO MEDIUM GRAINED BIOTITE GRANODIORITE. Weakly foliated.		
				Irregular assimilation intrusive contact ~30 deg. to C.A.		
70.80	80.20		QDIOR	HETEROGENEOUS PLAGIOCLASE QUARTZ +/- GARNET +/- BIOTITE PORPHYRITIC TO MEGACRYSTIC INTRUSIVE AND MIGMATITE. Overall composition probably mafic poor quartz diorite. Extremely variable grain size.	Weak pervasive clay alteration	
				Intensely clay altered and bleached contact. Lost core		

FROM	ТО	FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION
80.20	81.30		TDYKE	QUATERNARY BASALT DYKE Late very dark green-grey Anaheim volcanic. Small zeolite filled amygdules in chilled contacts. Lower contact has at least two small injections into wallrock ~55 deg. to C A	Very strong clay alteration and late brittle calcite veining.	
				Intensely clay altered and bleached contact. Lost core		
81.30	81.90		QDIOR	HETEROGENEOUS PLAGIOCLASE QUARTZ +/- GARNET +/- BIOTITE PORPHYRITIC TO MEGACRYSTIC INTRUSIVE AND MIGMATITE. Overall composition probably mafic poor quartz diorite. Extremely variable grain size.	Weak pervasive clay alteration	
				Clay altered contact 12 deg. to C.A.		
81.90	82.10		TDYKE	QUATERNARY BASALT DYKE Late very dark green-grey Anaheim volcanic. Small zeolite filled amygdules in chilled contacts. Lower contact has at least two small injections into wallrock ~55 deg. to C.A	Very strong clay alteration and late brittle calcite veining.	
				Clay altered contact 20 deg. to C.a.		
82.10	84.00		QDIOR	HETEROGENEOUS PLAGIOCLASE QUARTZ +/- GARNET +/- BIOTITE PORPHYRITIC TO MEGACRYSTIC INTRUSIVE AND MIGMATITE. Overall composition probably mafic poor quartz diorite. Extremely variable grain size.	Moderate pervasive clay alteration. Partially sausseritized plagioclase	
				Clay altered contact lost core.		

FROM	ТО	FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION
84.00	86.20	Intrusive contacts 25 deg. To C.A.	TDYKE	QUATERNARY BASALT DYKE Late very dark green-grey Anaheim volcanic. Small zeolite filled amygdules in chilled contacts.	Very strong clay alteration and late brittle calcite veining at top contact. Decreasing down hole	
				Curviplanar intrusive contact - 25 deg. to C.A.		
86.20	87.70		QDIOR	HETEROGENEOUS PLAGIOCLASE QUARTZ +/- GARNET +/- BIOTITE PORPHYRITIC TO MEGACRYSTIC INTRUSIVE AND MIGMATITE. Overall composition probably mafic poor quartz diorite. Extremely variable grain size.	Moderate pervasive clay alteration. Partially sausseritized plagioclase	
				Arcuate intrusive contact		
87.70	88.25		TDYKE	QUATERNARY BASALT DYKE Late very dark green-grey Anaheim volcanic. Small zeolite filled amygdules in chilled contacts.	Very strong clay alteration and late brittle calcite veining at top contact. Decreasing down hole	
88.25	90.53		QDIOR	Arcuate intrusive contact HETEROGENEOUS PLAGIOCLASE QUARTZ +/- GARNET +/- BIOTITE PORPHYRITIC TO MEGACRYSTIC INTRUSIVE AND MIGMATITE Very high calcium contact and partially migmatized gneissic textures. Possibly largely assimilated carbonate	Moderate pervasive clay alteration. Partially sausseritized plagioclase	
90.53				EOH		



M 08-1 BXI THE REPORT OF THE PARTY OF THE 100 a service and a service of the servi The second fill and M 08-1 BX 21 131 CONTRACTOR OF The second of the SA DON 1.407 1 14-29 No al march of the 1 A. 10 A State A STATE & LOTAL 19.2 M 08-1 8X 5 192 W. The state 265 25:95 29.95 -1 Br # 26.57 45 1.53 31 M 08-1 BK 5 BI 1045 367 1 08-1 BX 6 36.2

2511 36.7 H OF N # 6 382 THE LE 100000 41.76 419 108 00 FBX7 419 A CONTRACTOR OF A CONTRACTOR O 02.0 216.2 10 - A-36-1 143 CONT B D 8144 down the line A CONTRACTOR 2.4 1.50 Car 478 M-08-1-8x 08 TAR. STAT 47:8 The states Contraction of the The second second second second ANTRE STATES 1 S. A. NU IN FAILSHALL Citica Alton C. 2000 (b) Cal 53.8 M-08-1-849 .53.8 59.8 1.0 M-08-1-54.10 -59.8 States and 104 1.16 1341 1 - Population 80 65.5 576 -M-08-8×10 0" 65.5 1 68.2

States and the and the second sec AND/E CA de States and States No the second Sandy States in 655 516 1-08-84 10 g= 05 10.03 - 35 5 The s 66/1 528 1.84 71.4 153 1.00 NT-08-BX 12 7/ 4 HUDES. 123 刻し Server DE POST L'ALLER 76.9 268 M-08-813 an ind 82.5 - 200 M-08-0% 14 82.5 140 84.43 16 2 188 100.56 -1 N-08 BX 15 88.2 white Statements 1.2 181

POTASH N	ORTH RESO	URCE CORPO	RATION	DDH M08-02	BROKEN HILL PR	OJECT, AVOLA, B.C.
UTM	NOR-	EASTING	ELEV	BEARING/DIP		
ZONE	THING					
11	5741824	346200	1610	0/-90	TAJ	RGET
Meters	Meters	STRUCTURE			TESTING BETWEEN MIK	KE AND DENIS SHOWINGS
FROM	ТО	FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION
0.00	9.14		CASG	CASING NO RECOVERY		
9.14	19.00		QDIOR	MEGACRYSTIC PLAGIOCLASE	Moderately weathered.	
				QUARTZ +/- GARNET +/- BIOTITE		
				PORPHYRITIC MIGMATITE.		
				Very gradational contact. 80 deg. To		
				C.A.		
19.00	20.70		CALC-SIL	MIXED ACTINOLITE,		Trace to locally 4% very fine
				WOLLASTONITE GARNET AND		grained to coarse disseminated
				SILICEOUS CALCSILICATE WITH		pyrrhotite and pyrite associated
				MARBLE ZONES. Highly variable but		with cherty laminations.
				generally crudely banded texture due		
				to skarnification recrystallization and		
				segregation of actinolite, garnet,		
				quartz and carbonate. Relict pale		
				ivory marble is finer grained.		
				Curviplanar contact. 50 deg. to C.A.		
20.70	27.70		BIOGN	MEDIUM GRAINED BIOTITE	Weakly to uncommonly strongly	Trace very fine iron sulphides
				GNEISS Well foliated to locally	altered and bleached biotite	associated with biotite and
				cherty matrix gneiss. Hosts small	destructive alteration.	disseminated in siliceous zones.
				cherty and green actinolite calc	Montmorillanite in most strongly	
				silicate bands and small pegmatite-	altered zone (swelling clay)	
				migmatite injection zones. Calc		
				silicate probably infolded members of		
				over and underlying units.		

FROM	ТО	FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION
27.20	30.50		CALC SIL	MIXED ACTINOLITE, WOLLASTONITE GARNET AND SILICEOUS CALCSILICATE WITH MARBLE ZONES. Highly variable but generally crudely banded texture due to skarnification recrystallization and segregation of actinolite, garnet, quartz and carbonate. Relict pale ivory marble is finer grained.		Trace to locally 4% very fine grained to coarse disseminated pyrrhotite and pyrite associated with cherty laminations.
				Indistinct gradational contact		
30.50	63.10		QDIOR	HETEROGENEOUS PLAGIOCLASE QUARTZ +/- GARNET +/- BIOTITE PORPHYRITIC TO MEGACRYSTIC INTRUSIVE AND MIGMATITE. Overall composition probably mafic poor quartz diorite. Extremely variable grain size. Local fine to medium grained biotite granodiorite zones that have been intruded my migmatite.	Weakly to uncommonly strongly altered and bleached biotite destructive alteration. Montmorillanite in most strongly altered zone (swelling clay) especially of plagioclase.	Very rare trace pyrrhotite
63.10				EOH		





AND AND A PARTY OF E Ture M 08-2 BX1 and the second WE ARE TO 11.1.1 M-08-2-8x 2 M.08.2.8X3 21.5 27.1 5 HOB.Z. 8×4 137. 酸煎 84 05810 S. A.S.K. 22 32. M 108 2 6x 5 32.9 the gently 59583 东州市 星 TO CE 1.22 2. 38.6 3 300 M D8-2 BX 6 38.6 the state of the

POTASH NO	ORTH RESO	URCE CORP	ORATION	DDH M08-03	BROKEN HILL PRO	DJECT, AVOLA, B.C.
UTM	NOR-	EASTING	ELEV	BEARING/DIP		
ZONE	THING					
11	5741394	346044	1620	-90	TAR	RGET
Metres	Metres	ANGLE			TESTING BETWEEN MIKE S	SHOWING AND HOLE M08-02
FROM	ТО	FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION
0.00	9.14		CASG	CASING NO RECOVERY		
9.14	17.50		QDIOR	HETEROGENEOUS PLAGIOCLASE	Mild oxidation to 17.5 m.	Very rare trace pyrrhotite
				QUARTZ +/- GARNET +/- BIOTITE		
				PORPHYRITIC TO MEGACRYSTIC		
				INTRUSIVE AND MIGMATITE.		
				Overall composition probably mafic		
				poor quartz diorite Extremely		
				variable grain size		
				vanabio grain oizo.		
				Planar contact. 25 deg to c.a.		
17 50	18 10		GRANO	FINE TO MEDIUM GRAINED	Clay alteration towards bottom	
11.00	10110			BIOTITE GRANODIORITE Weakly	contact	
				foliated		
				Intensely clay altered and bleached		
				contact Lost core		
18 10	22 10		TDYKE			
10110			1 D III E	very dark green-grey Anaheim		
				volcanic Small zeolite filled		
				amyodules in chilled contacts		
				Planar contact 20 deg to c a		
22.10	64 40			HETEROGENEOUS DI AGIOCI ASE	Locally clay altered and oxidized	Very rare trace pyrrbotite
22.10	04.40		QDIOR		Locally clay altered and oxidized.	very fale frace pyrholite
				INTRUSIVE AND MIGNATTE.		
				Overall composition probably matic		
				poor quartz diorite. Extremely		
				variable grain size. Zones of		
				numerous large garnets and less		
				weakly assimilated carbonate rocks.		

FROM	ТО	FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION
				Planar contact 80 deg to c.a.		
64.40	65.20		CALC-SIL	LEUCOCRATIC SILICEOUS-		
				CALCAREOUS MIGMATITE. Very		
				pale green Faint relict fabric.		
				Planar contact 80 deg to c.a.		
65.20	65.80	SCRT	CHERT	GREY CHERT Grey finely laminated		[
1				to massive microcrystalline chert.		
				Planar contact 80 deg to c.a.		
65.80	68.20		QDIOR	HETEROGENEOUS PLAGIOCLASE	Locally clay altered and oxidized.	Very rare trace pyrrhotite
1				QUARTZ +/- GARNET +/- BIOTITE		
				PORPHYRITIC TO MEGACRYSTIC		
1				INTRUSIVE AND MIGMATITE.		
				Overall composition probably mafic		
				poor quartz diorite. Extremely		
1				variable grain size. Zones of		
1				numerous large garnets and less		
1				weakly assimilated carbonate rocks.		
 				Ragged subplanar contact. 50 deg. to		
4				C.A.		

FROM	ТО	FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION
68.20	72.90		TDYKE	QUATERNARY BASALT DYKE Late		
				very dark green-grey Anaheim		
				volcanic. Small zeolite filled		
				amygdules in chilled contacts.		
				Ragged subplanar contact. 20 deg. to		
				C.A.		
72.90	75.50		CALC-SIL	MIXED ACTINOLITE,		Trace very fine grained
				WOLLASTONITE GARNET AND		disseminated pyrrhotite and pyrite
				SILICEOUS CALCSILICATE WITH		associated with cherty
				MARBLE ZONES. Highly variable but		laminations.
				generally crudely banded texture due		
				to skarnification recrystallization and		
				segregation of actinolite, garnet,		
				quartz and carbonate. Relict pale		
				ivory marble is finer grained.		
				Arcuate contact 60 deg to C.a.		
75.50	75.90		TDYKE	QUATERNARY BASALT DYKE Late		
				very dark green-grey Anaheim		
				volcanic. Small zeolite filled		
				amygdules in chilled contacts.		
				Subplanar contact 20 deg. To C.A.		
75.90	76.10		CALC-SIL	MIXED ACTINOLITE,		Trace very fine grained
				WOLLASTONITE GARNET AND		disseminated pyrrhotite and pyrite
				SILICEOUS CALCSILICATE WITH		associated with cherty
				MARBLE ZONES. Highly variable but		laminations.
				generally crudely banded texture due		
				to skarnification recrystallization and		
				segregation of actinolite, garnet,		
				quartz and carbonate. Relict pale		
				ivory marble is finer grained.		
				Curviplanar contact 75 deg to C.A.		
76.10	84.43		QDIOR	MEGACRYSTIC PLAGIOCLASE	Pervasive weak to locally	
				QUARTZ +/- GARNET +/- BIOTITE	moderate saussseritization.	
				PORPHYRITIC MIGMATITE.		
84.43				EOH		



10 STATE AS A SHORE TH 38.3 M BX 6 36 3831 - And Friday and 88 In the A A TAK ANTE ANT Theorem THE PARTY M 08-3 BX 7 747 C. R. S. Seller 44.8 N . Chant STATISTICS CONTRACTOR A REAL MARTIN 1000 M 08-3 BX 8 998 41 and the 15.14 The second second second second 50.90 Sec. 10% No. W THE YEAR and a 2481 4 6 55.6 10 M 08-5 BX 9 100 1.763 a forestant of 61.5 M.08. 3"BK10 615 Ass Ca Total of the Total 111 66.14 676 M-08-3-8X11 67.6 an address to the

A CONTRACTOR OF E TRANSF No. Marcardan CONTRACTOR OF CONTRACTOR Property and a second 80.05 61.5 M-08 3"BX10 615 11 Harles & Wos R. LANS TEL CAR Brits to 122 676 M 08 3 BX11 67.6 Sec. 1 69.19 72.24 A DESCRIPTION All Party of the P MOB.3.8x12 72.9 10-7519 Sec. 1 in the files Children of the second 26 M.08.3.88 13 78.6 84.3 M08-03 BX 14 84.30 84:43

POTASH N	ORTH RESO	URCE CORPO	RATION	DDH M08-04	BROKEN HILL PRO	OJECT, AVOLA, B.C.
UTM	NOR-	EASTING	ELEV	BEARING/DIP		· · ·
ZONE	THING					
11	5741303	345065	1600	0/-90	TAK	RGET
Metres	Metres	STRUCTURE			TESTING BETWEEN MIKE SHOW	ING AND HOLE M08-03 FOR DOWN
					DIP MINER	ALIZATION.
FROM	то	FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION
0.00	9.14		CASG	CASING NO RECOVERY		
9.14	20.20		QDIOR	HETEROGENEOUS PLAGIOCLASE QUARTZ +/- GARNET +/- BIOTITE PORPHYRITIC TO MEGACRYSTIC INTRUSIVE AND MIGMATITE. Overall composition probably mafic poor quartz diorite. Extremely variable grain size.	Mild oxidation to 17.5 m.	Very rare trace pyrrhotite
						12.8 Two cm semi massive pyrrhotite zone. associated with remnant chert and calc silicate zone. POSSIBLE SULPHIDE ZONE.
						19.6 1 mm thick pyrrhotite stringers ~80 deg to C.A,
				Gradational contact		
20.20	20.50	85	CALC-SIL	MIXED ACTINOLITE, WOLLASTONITE GARNET AND SILICEOUS CALCSILICATE WITH MARBLE ZONES. Highly variable but generally crudely banded texture due to skarnification recrystallization and segregation of actinolite, garnet, quartz and carbonate. Relict pale ivory marble is finer grained.		Trace very fine grained disseminated pyrrhotite and pyrite associated with cherty laminations.
				Gradational contact		
20.50	21.10		BIOGN	COARSE GRAINED MUSCOVITE- BIOTITE GNEISS. Muscovite derived from biotite.	Bleached biotite altered to muscovite	
				Clay altered planar intrusive contact 30 deg to C.A.		

FROM	ТО	FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION
21.10	37.80		TDYKE	QUATERNARY BASALT DYKE Late very dark green-grey Anaheim volcanic. Small zeolite filled amygdules in chilled contacts. Several fabric destructive clay altered zones. Dyke occurs in target depth.		
				Planar contact 35 deg. To C.A.		
37.80	42.40		QDIOR	HETEROGENEOUS PLAGIOCLASE QUARTZ +/- GARNET +/- BIOTITE PORPHYRITIC TO MEGACRYSTIC INTRUSIVE AND MIGMATITE. Overall composition probably mafic poor quartz diorite. Extremely variable grain size.		Trace minute disseminated pyrite in remnant cherty laminations in migmatite. ~80 deg to c.a.
				Gradational contact 80 deg to C.a.		
42.40	42.70		CALC-SIL	MIXED ACTINOLITE, WOLLASTONITE GARNET AND SILICEOUS CALCSILICATE WITH MARBLE ZONES. Highly variable but generally crudely banded texture due to skarnification recrystallization and segregation of actinolite, garnet, quartz and carbonate. Relict pale ivory marble is finer grained.		Trace very fine grained disseminated pyrrhotite and pyrite associated with cherty laminations.
				Gradational contact 80 deg. To C.A.		
42.70	43.50		BIOGN	MEDIUM GRAINED BIOTITE GNEISS Well foliated to locally cherty matrix gneiss. Hosts small cherty and green actinolite calc silicate bands and small pegmatite- migmatite injection zones.		Trace very fine iron sulphides associated with biotite and disseminated in siliceous zones.
43.50	43.90		QDIOR	LEUCOCRATIC QUARTZ- FELDSPAR +/- BIOTITE MIGMATITE. Biotite 85 deg. To C.A.		
				Gradational contact		

FROM	ТО	FR. C.A. CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION
43.90	44.20	BIOGN	MEDIUM GRAINED BIOTITE GNEISS Well foliated to locally cherty matrix gneiss. Hosts small cherty and green actinolite calc silicate bands and small pegmatite- migmatite injection zones.		Trace very fine iron sulphides associated with biotite and disseminated in siliceous zones.
			Gradational contact		
44.20	44.90	CALC-SIL	MIXED ACTINOLITE, WOLLASTONITE GARNET AND SILICEOUS CALCSILICATE WITH MARBLE ZONES. Highly variable but generally crudely banded texture due to skarnification recrystallization and segregation of actinolite, garnet, quartz and carbonate. Relict pale ivory marble is finer grained.		Trace very fine grained disseminated pyrrhotite and pyrite associated with cherty laminations.
			Gradational contact 55 deg. To C.A.		
44.90	47.80	QDIOR	HETEROGENEOUS PLAGIOCLASE QUARTZ +/- GARNET +/- BIOTITE PORPHYRITIC TO MEGACRYSTIC INTRUSIVE AND MIGMATITE. Overall composition probably mafic poor quartz diorite. Extremely variable grain size. Several calc- silicate and medium grained biotite gneiss zones in less migmatized areas.		
47.80	48.30	BIOGN	MEDIUM GRAINED BIOTITE GNEISS Well foliated to locally cherty matrix gneiss. Hosts small cherty and green actinolite calc silicate bands and small pegmatite- migmatite injection zones.	Strongly clay altered associated with small mafic dyke at 47.9 m.	Trace very fine iron sulphides associated with biotite and disseminated in siliceous zones. Calcite sulphide slip ~40 deg to C.A. at 48.1 m.
48.30	49.30	CALC-SIL	LEUCOCRATIC SILICEOUS- CALCAREOUS MIGMATITE. Very pale green Faint relict fabric.		

FROM	ТО	FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION
49.30	49.60		TDYKE	QUATERNARY BASALT DYKE Late	Very strongly clay altered	
				very dark green-grey Anaheim		
				volcanic. Small zeolite filled		
				amygdules in chilled contacts. Lower		
				contact has at least two small		
				injections into wallrock ~30 deg to		
				C.A		
				Contact. ~70 deg to can		
49.60	54.60		QDIOR	HETEROGENEOUS PLAGIOCLASE		
				QUARTZ +/- GARNET +/- BIOTITE		
				PORPHYRITIC TO MEGACRYSTIC		
				INTRUSIVE AND MIGMATITE.		
				Overall composition probably matic		
				poor quartz diorite. Extremely		
				variable grain size. Several calc-		
				silicate and medium grained biotite		
				gneiss zones in less migmatized		
				areas.		
				Clay altered contact. Lost core.		
54.60	56.70		BIOGN	MEDIUM GRAINED BIOTITE		Trace very fine iron sulphides
				GNEISS Well foliated to locally		associated with biotite and
				cherty matrix gneiss. Hosts small		disseminated in siliceous zones.
				cherty and green actinolite calc		
				silicate bands and small pegmatite-		
				migmatite injection zones.		
56.70	57.00		QDIOR	MEGACRYSTIC PLAGIOCLASE	Pervasive weak to locally	
				QUARTZ BIOTITE PORPHYRITIC	moderate sausseritization.	
				MIGMATITE.		







PO	TASH NOR	TH RESOURCE (CORPOR	TION	DDH BH08-19				BROKEN HILL PROJECT, AVOLA, B.C.												
UTM	NOR-	EASTING	ELEV	BEARING/								-			-						
ZONE	THING			DIP																	
11	5745440	344780	1433	205/-55		TARGET						Analy	tical R	esults and	l Assays						
Metres	Metres	STRUCTURE	ANGLE		TESTING NOR	TH EXTENSION OF PAUTLER OCCU	RRENCE	SAL	MPLE DA	TA	Zn	Pb	Ag	Mn	Cd	Cu					
FROM	то		FR. C.A	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION	SAMP#	FROM	то	%	%	ppm	ppm	ppm	ppm					
0.00	7.00			CASG	CASING NO RECOVERY																
7.00	7.20		05	RUB												_					
7.20	11.50	gneissocity	85	BIOGNSIL	MEDIUM GRAINED BIOTTE	Commonly bleached blotite															
					GNEISS, well foliated to locally cherty	destructive bleached zones.															
					zones222 Grades gradually but																
					irregularly into siliceous calc-silicate																
					aneiss																
					Gradational contact 80 deg to C.A.																
11.50	13.60			CALC-SIL	ACTINOLITE, WOLLASTONITE		Up to 5% pyrrhotite in thin chert														
					GARNET AND SILICEOUS		zones.														
					CALCSILICATE ZONES. Highly																
					variable but generally crudely banded																
					texture due to skarnification																
					recrystallization and segregation of																
					actinolite, garnet, quartz and																
					carbonate.											_					
12.60	15.00			CRANO	Planar crosscutting contact	Leadly blooched with histite	Trace errotically discominated														
13.00	15.00			GRANO		Locally bleached with blottle	nurrhetite														
						allered to muscovite.	pyrmoute.														
																-					
15.00	17.90	gneissocity	85	CALC-SIL	MIXED FINE GRAINED BIOTITE	Bleached with biotite destructive										-					
		0,			GNEISS AND ACTINOLITE	alteration.															
					DOMINANT CALC-SILICATE. Well																
					developed gneissic fabric																
					Gradational contact 85 deg. To C.A.																
17.90	24.40		85	BIOGN		Commonly bleached biotite															
17.50	24.40		00	BIOON	GNEISS Well foliated with tight	destructive bleached zones															
					ptygmatic folds occasional evident.																
					Local guartz zones if indeterminate																
					origin.																
					20.6-21.0 Coarse grained biotite	20.6-24.4 Very strongly	Thin semi continuous lamellae of														
					gneiss zone.	bleached. Biotite altered to pale	pyrite-pyrrhotite parallel to fabric														
						chlorite??	and in cross cutting quartz-calcite	•													
							veins ands zones.														
					Gradational migmatized contact											+					
24.40	26.00			QDIOR	HETEROGENEOUS PLAGIOCI ASE	Top of unit strongly clay altered	Very rare trace pyrrhotite	-								+					
20	20.00			QDION	QUARTZ +/- GARNET +/- BIOTITE	and bleached.															
					PORPHYRITIC TO MEGACRYSTIC																
					TO MEDIUM GRAINED BIOTITE																
					GRANODIORITE INTRUSIVE AND					1											
					MIGMATITE. Overall composition					1											
					probably mafic poor quartz diorite.					1											
					Extremely variable grain size.					1											
1	1		1	1			1	1	1	1	1					1					

Metres	Metres	STRUCTURE	ANGLE		TESTING NOR	TESTING NORTH EXTENSION OF PAUTLER OCCURRENCE		SAI	SAMPLE DATA		Zn l		Ag	Mn	Cd	Cu
FROM	то		FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION	SAMP#	FROM	то	%	%	ppm	ppm	ppm	ppm
					Contact zone of thinner migmatite-											
					pegmatite.											
26.00	32.70	gneissocity	85	BIOGN	COARSE TO MEDIUM GRAINED	Weakly to uncommonly strongly	Trace very fine iron sulphides									
					BIOTITE AND MUSCOVITE GNEISS	altered and bleached biotite	associated with biotite and									
					Well foliated to locally finer grained	destructive alteration.	disseminated in siliceous zones.									
					siliceous matrix biotite gneiss. The	Montmorillanite in most strongly										
					more siliceous the finer grained.	altered zone (swelling clay)										
					Coarse subunits >50% biotite. Hosts											
					small cherty and green actinolite calc											
					silicate bands and small pegmatite-											
					migmatite injection zones.											
					·											
					Planar contact 85 deg. To C.A.	Very strongly clay altered.										
32.70	44.50	gneissocity		BIOGN	FINE GRAINED TO MEDIUM	Commonly bleached biotite										
					GRAINED BIOTITE GNEISS Dark	destructive bleached zones to										
					and light grey fine grained gneiss	pale green fine grained gneiss.										
					Occasional siliceous or cherty bands.	Locally intensely soft clay altered										
						at 35.6 m. Alteration										
						accompanied by whiter quartz										
						veining.										
			85		Gradational contact	Very strongly clay altered.										
44.50	58.90		85+/-5	BIOGN	COARSE TO MEDIUM GRAINED	Weakly to commonly strongly	Trace very fine grained iron									
					BIOTITE AND MUSCOVITE GNEISS	altered and bleached biotite	sulphides associated with biotite									
					Well foliated to locally finer grained	destructive alteration.	and disseminated in siliceous									
					siliceous matrix biotite gneiss. The	Montmorillanite in most strongly	zones.									
					more siliceous the finer grained.	altered zone (swelling clay)										
					Coarse subunits >50% biotite. Hosts											
					small cherty and green actinolite calc											
					silicate bands and small pegmatite-											
					migmatite injection zones. Occasional											
					ptygmatic folding seen.											
		 	<u> </u>			44 5 47 Van/ atrang bloophing										
						44.5-47 Very strong bleaching										
						50 1-50 5 Migmatite-permatite										
						zone with 10-40 cm bleaching										
						wallrock selvages										
			+			52.3-52.5 Leucocratic										
						garnetiferous migmatite zone										
						with 10 cm bleaching wallrock										
						selvages.										
						57.8-58.1 Migmatite-pegmatite										
						zone.										
		<u> </u>			Very gradational contact											
58.90	62.70			GRANO	COARSE TO MEDIUM GRAINED									-		
					BIOTITE GRANODIORITE? TO											
					PEGMATITIC TEXTURED ROCK.											
					Locally weakly gneissic fabric at											
					shallow core angles. Numerous											
					strongly bleached and variable											
		ļ			assimilated biotite wallrock zones											
		I		1	Curviplanar contact, 75 deg to C.A.											

Metres	Metres	STRUCTURE	ANGLE		TESTING NOR	RTH EXTENSION OF PAUTLER OCCU	RRENCE	SAI	MPLE DA	ТА	Zn	Pb	Ag	Mn	Cd	Cu
FROM	то		FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION	SAMP#	FROM	то	%	%	ppm	ppm	ppm	ppm
62.70	64.10		85	BIOGN	COARSE TO MEDIUM GRAINED	Weakly to strongly altered and	Trace very fine grained iron			i						
					BIOTITE GNEISS Well foliated to	bleached biotite destructive	sulphides associated with biotite									
					locally finer grained siliceous matrix	alteration. Montmorillanite in	and disseminated in siliceous									
					biotite gneiss. The more siliceous the	most strongly altered zone	zones.									
					finer grained. Coarse subunits >50%	(swelling clav)										
					biotite. Hosts small cherty and green											
					actinolite calc silicate bands and small											
					pegmatite-migmatite injection zones.											
					Occasional ptygmatic folding seen.											
					Planar contact 85 deg. To C.A.											
64.10	76.60			GRANO	COARSE TO MEDIUM GRAINED											
					BIOTITE GRANODIORITE? TO											
					PEGMATITIC TEXTURED ROCK											
					Local gneissic fabric at shallow core											
					angles. Numerous strongly bleached											
					and variable assimilated biotite											
					wallrock zones.											
					64.5-70.3 Strongly garnetiferous with											
					wollastonite zones suggesting											
					assimilated marble and/or calc-											
					silicate.											
					76.4 -76.6 Massive to laminated											
					cherty zone with strong trace											
					pyrrhotite.											
76.60	78.35		85	BIOGNSIL	FINE GRAINED TO MEDIUM	Commonly bleached biotite										
					GRAINED BIOTITE GNEISS Dark	destructive bleached zones to										
					and light grey fine grained gneiss. Unit	pale green fine grained gneiss.										
					is distinctly harder and more siliceous	Locally intensely soft clay altered										
					than coarser gneisses. Occasional	Alteration accompanied by whiter										
					siliceous or cherty bands.	quartz veining.										
					Planar contact 85 deg. to C.A.						<u> </u>	\vdash				
78.35	79.70		80	CALC-SIL	LEUCOCRATIC SILICEOUS CALC-	Bleached at contacts										
					SILICATE Laminated and mottled											
					quartz-actinolite-wollastonite calc											
					silicate. Occasionally migmatitic.	-						\square				
79.70	80.30		80	BIOGNSIL	FINE GRAINED TO MEDIUM	Commonly bleached biotite					ı					
					GRAINED BIOTITE GNEISS Dark	destructive bleached zones to					ı					
					and light grey fine grained gneiss. Uni	pale green fine grained gneiss.					ı					
					is distinctly harder and more siliceous	Locally intensely soft clay altered					ı					
					than coarser gneiss. Occasional	Alteration accompanied by whiter					ı					
					siliceous or cherty bands.	quartz veining.					ı					
	1			1							1 I					

Metres	Metres	STRUCTURE	ANGLE		TESTING NORTH EXTENSION OF PAUTLER OCCURRE		RRENCE	CE SAMPLE DA		E DATA Zn		Pb	Ag	Mn	Cd	Cu
FROM	то		FR. C.A.	. CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION	SAMP#	FROM	то	%	%	ppm	ppm	ppm	ppm
80.30	81.20			CALC-SIL	MIXED ACTINOLITE, WOLLASTONITE GARNET AND MINOR SILICEOUS CALCSILICATE AND CHERT ZONES. Highly variable but generally crudely banded texture due to skarnification recrystallization and segregation of actinolite, garnet, quartz and carbonate. Relict pale ivory marble is finer grained.	,	up to 5% pyrrhotite in thin chert zones. Up to 3% brassy pyrite stringers in white quartz zones.	905220	80.81	80.86	0.3	tr	0.2	1340	7	13
						Finely laminated chert with massive sulphide	80.87-80.94 brown massive sphalerite zone. Highly sheared. ~80 deg to C.A. PAUTLER ZONE horizon.	905221	80.86	80.96	15.8	tr	1.4	736	319	31
					81.0-81.2 Massive actinolite calc- silicate zone.			905222	BLANK		tr	tr	<0.2	12	<1	<1
81.20	82.30			BIOGNSIL	FINE GRAINED TO MEDIUM GRAINED BIOTITE GNEISS Dark and light grey fine grained gneiss. Unit is distinctly harder and more siliceous than coarser gneiss. Occasional siliceous or cherty bands.	Commonly bleached biotite destructive bleached zones to t pale green fine grained gneiss. Locally intensely soft clay altered Alteration accompanied by whiter quartz veining.		905223	80.96	82	0	tr	<0.2	450	<1	42
		ļ			Gradational contact 65 deg to C.A.							L		ا ا	<u> </u>	
82.30	83.70			CALC-SIL	LEUCOCRATIC LAMINATED SILICEOUS CALC-SILICATE Laminated and mottled quartz- actinolite-wollastonite calc silicate. Occasionally migmatite.	Very strongly bleached and clay altered.										
83.00	86.50		65+/-15) BIOGNSIL	FINE GRAINED TO MEDIUM GRAINED BIOTITE GNEISS Dark and light grey fine grained gneiss. Unit is distinctly harder and more siliceous than coarser gneiss. Occasional siliceous or cherty bands ad calc- silicate zones curviplanar contact 80 deg to c.a.	Commonly bleached biotite destructive bleached zones to tpale green fine grained gneiss. Locally intensely soft clay altered Alteration accompanied by whiter quartz veining.										
86.50	88.60			GRANO	COARSE TO MEDIUM GRAINED BIOTITE GRANODIORITE? TO PEGMATITIC TEXTURED ROCK Local gneissic fabric at shallow core angles. Numerous strongly bleached and variable assimilated biotite wallrock zones. Gradational contact 80 days to C A											
88.60	89.20		80	CALC-SIL	MIXED FINE GRAINED SILICEOUS BIOTITE GNEISS AND LEUCOCRATIC CALC-SILICATE MIGMATITE. 5 TO 20 cm zone of various rock types.											

Metres	Metres	STRUCTURE	ANGLE		TESTING NOR	TH EXTENSION OF PAUTLER OCCU	RRENCE	SAMPLE DATA		SAMPLE DATA		TA	Zn	Pb	Ag	Mn	Cd	Cu
FROM	то		FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION	SAMP#	FROM	то	%	%	ppm	ppm	ppm	ppm		
89.20	92.80			ORTHO	MEDIUM GRAINED BIOTITE	Pale green cast indicates												
					ORTHOGNEISS Possible quartz	possible sericite alteration of								I				
					diorite protolith.	feldspathic groundmass.								I				
					Gradational contact													
92.80	96.90		75	CALC-SIL	LEUCOCRATIC LAMINATED	Very strongly bleached and												
					SILICEOUS CALC-SILICATE	locally intensely clay altered.								I				
					Laminated and mottled quartz-									I				
					actinolite-wollastonite calc silicate.									I				
					Occasionally migmatite.									I				
					Gradational contact													
96.90	97.50	bimodal	90	ORTHO	MEDIUM GRAINED BIOTITE	Pale green cast indicates												
		gneissocity 90			ORTHOGNEISS Possible quartz	possible sericite alteration of								I				
		and 65 deg to			diorite protolith.	feldspathic groundmass.								I				
		c.a.												I				
97.50	103.70			CHERT	QUARTZ ZONE Massive white	Sequence is strongly bleached	102.0 Trace sphalerite in chert											
					"chert" with minor calc-silicate and	and possibly silicified calc-silicate	zones. 102.5 possible							I				
					white actinolite speckled marble	protolith.	microcrystalline magnetite as							I				
					zones. Lower 2 meters is bleached		arcuate masses.							I				
					siliceous fine grained biotite gneiss.									I				
					Gradational contact 60 deg to C.A,									I				
103.70	104.00			CALC-SIL	ACTINOLITE CALC-SILICATE													
104.00	104.30		45	BIOGNSIL	FINE GRAINED TO MEDIUM	Commonly bleached biotite								I				
					GRAINED BIOTITE GNEISS Dark	destructive bleached zones to								I				
					and light grey fine grained gneiss. Unit	pale green fine grained gneiss.								I				
					is distinctly harder and more siliceous	Locally intensely soft clay altered.								I				
					than coarser gneisses. Occasional	Alteration accompanied by whiter								I				
					siliceous or cherty bands ad calc-	quartz veining.								I				
					silicate zones									ļ				
					Bleached contact									L				
104.30	105.10		50+/-25	CHERT	QUARTZ ZONE Massive white	Sequence is strongly bleached	Possible microcrystalline							I				
					"chert" with minor calc-silicate and	and possibly silicified calc-silicate	magnetite as arcuate masses.							I				
					white actinolite speckled marble	protolith.								I				
					zones. Lower 2 meters is bleached									I				
					siliceous fine grained biotite gneiss.									I				
			/		Very gradational contact									└───		_		
105.10	107.00		60+/-20	BIOGNSIL	MEDIUM GRAINED BIOTITE	Weakly to strongly altered and	Trace very fine iron sulphides							I				
					GNEISS Well foliated to locally finer	bleached biotite destructive	associated with biotite and							I				
					grained siliceous matrix biotite	alteration. Montmorillanite in	disseminated in siliceous zones.							I				
					gneisses. Hosts small cherty and	most strongly altered zone								I				
					brown garnet calc silicate and small	(swelling clay)								I				
					pegmatite-migmatite injection zones.									I				
					occasional ptygmatic folding seen.									I				
407.00	407.00			041.0.0"	MINED ACTINOLITE CARNET AND								<u> </u>	<u> </u>				
107.00	107.30			CALC-SIL	MIXED ACTINULITE, GARNET AND		I race erratically occurring							I				
					SILICEOUS CALCSILICATE AND		pyrmotite in thin chert zones.							I				
					CHERI ZONES. Highly variable but									I				
					generally crudely banded texture due									I				
					to skarnification recrystallization and									I				
					segregation of actinolite, garnet,									I				
					yuanz and carbonate. Relict pale									I				
					ivory marble is liner grained.									I				
					Curviplanar contact 45 dog. To C A											+		
107 30	108 50			MARR	MASSIVE WHITE MARRIE											\vdash		
101.00	100.00	1				1	1		1	i i			1		i i	1		

Metres	Metres	STRUCTURE	ANGLE		TESTING NORTH EXTENSION OF PAUTLER OCCURRENCE		SAI	TA	Zn	Pb	Ag	Mn	Cd	Cu		
FROM	то		FR. C.A.	. CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION	SAMP#	FROM	то	%	%	ppm	ppm	ppm	ppm
108 50	110.80			CALC-SIL	MIXED WOLLASTONITE		Trace erratically occurring									
					ACTINOLITE GARNET SILICEOUS		pyrrhotite in thin chert zones									
							pyrnoute in thin chert zones.									
					LAMINATED GRET LIMESTONE,											
					AND WHITE MARBLE ZONES.											
					Highly variable but generally crudely											
					banded texture due to skarnification											
					recrystallization and segregation of											
					actinolite, garnet, quartz and											
					carbonate. Relict pale ivory marble is											
					finer grained.											
					Gradational contact											
110.80	113 50		1				Trace to 1% late iron sulphides in									
110.00	113.30			UALC-SIL			fractures and undulating not									
					CALC-SILICATE MIGMATTE WITH											
					MINOR FINE GRAINED SILICEOUS		textures tracture zones.									
					BIOTTE GNEISS.											
	0.00				Gradational contact											
113.50	115,7		60+/-10	BIOGN	FINE GRAINED SALT AND PEPPER											
					FELDSPATHIC BIOTITE GNEISS.											
					Gneissic fabric very weak.											
					Gradational contact											
115.70	116.90			CALC-SIL	LEUCOCRATIC SILICEOUS AND		Trace to 1% late iron sulphides in									
					CALC-SILICATE MIGMATITE WITH		fractures and undulating net									
					MINOR REMNANT FINE GRAINED		textures fracture zones									
					Gradational contact											
116.00	118.80		60+/-10	BIOGN												
110.50	110.00		00+/-10	BIOGIN												
					FELDSPATHIC BIOTTLE GNEISS.											
					Gneissic fabric very weak.											
L	L															
L	L				Gradational contact											
118.80	119.60			BIOGNSIL	LEUCOCRATIC SILICEOUS AND		Trace to 1% late iron sulphides in									
					CALC-SILICATE MIGMATITE WITH		fractures and undulating net									
					MINOR FINE GRAINED SILICEOUS		textures fracture zones.									
					BIOTITE GNEISS.											
119.60	120.50		55+/-20	BIOGN	FINE GRAINED SALT AND PEPPER											
					FELDSPATHIC BIOTITE GNEISS.											
					Gneissic fabric verv weak.											
					Gradational contact											
120.50	121 01		60	BIOGNSI	LEUCOCRATIC SILICEOUS WITH		Trace to 1% late iron sulphides in									
0.00					MINOR REMNANT FINE GRAINED		fractures and undulating net									
					SILICEOUS BIOTITE GNEISS		textures fracture zones									
101.04							IEALUIES IIdULUIE ZUIIES.									
121.01	1	1	1	1	IEIND OF HULE	1	1	1	1	1	1		1			




2.1 BH03-14 1 Contract of Article - \blacklozenge HIMPORT ALCOLOGICAL AND A STATES 12.4 商 -ANT State State BHOR - BRES 101 - AND THE R. 73.41 Wat Mar 18 8×4 240 A DESCRIPTION OF TAXABLE PARTY. 5 Nichiel COTICE ROUTED IN ADDR as BM 08-19 PX 65 29.8 100 35.6 13 Hot 19 38 0 35.6 PY X

A COLOR CONTRACTOR OF THE OWNER, MICH. . 14 182 BUO mentry. 125 275 8 1995 E Por 1. 46.5 08-ABXE 31.5 2 ALL AND STRAND 10 Phillip Control 84 e e li interest 52.3 A 05/9 6× 9 52.3 Sin 六 581 WHERE AND AND 100 100 1000 3084412 -11 - Call And States 6 . 1

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a share THE PARTY NEW YORK AND A ATTOM A MADRAMADA -SH. 08 19 8× 17 05 2 69.7 TYPES OF a way THE R. O. LEWIS CO. 100000 S.BITT E.C.Y. The Art Martin The second second second second 11-08-5-6X12 673 1 NOT and the state 1 2 25 L LACE COL The second states of 6818-012 18 24 In Maria 10 811.08 19 BX 13 15.2 75.29 WATES NOT ADD A 78.53 80.9 BH OB-5 BXEA 809 10.00 BH 98-19 8x 15 86.3 and the second 97.4A A MARKEN ALS 1000 AND AND 92.2.1 The states

92.7 - BALCOS-191 100 16 and the second states of the 120 AHON-IN DA IN and the 10.17 15 102.72 102,7 1027 HH 05-14 64 13 7 and a -5 4 3 H 08 . 5. 84 19 AND PRICE DAMAGE ADDRESS. ADDRESS. 114-6 BA9-08:5-8× 20 /4 **Kusme** 119.90 BH:08 5-6X 217 119.9 100 12101 1 3 1 2 C 1 3 C 1 3 100

POTASI	I NORTH	RESOURCE COP	RPORATION	I		DDH BH08-20			BROKE	N HILL I	PROJE	ECT, AVC	DLA B.	c.	
UTM	NOR-	EASTING	ELEV	BEARING/											
ZONE	THING			DIP											
11	6E+06	344780	1433	115/-60		TARGET					Ana	lytical Res	ults and	l Assa	ys
Meters	Meters	STRUCTURE	ANGLE		TESTING NORTH EXTENSION OF I	PAUTLER OCCURRENCE DOWN DIP	OF HOLE BH08-19	SAI	MPLE DA'	TA	Zn	Pb Ag	Mn	Bi	Cu
FROM	то		FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION	SAMP#	FROM	то	%	ppm ppn	n ppm	ppm	ppm
0.00	6.14			CASG	CASING NO RECOVERY										
6.14	6.30				RUBBLE										
6.30	6.90			BIOGN	LEUCOCRATIC SILICEOUS MIGMATITE WITH										
					MINOR FINE GRAINED SILICEOUS BIOTITE										
					GNEISS. Biotite gneiss is protolith.										L
					Oxidized and lost core at contact.										L
6.90	7.60	Strong	50+/-15	BIOGN	COARSE TO MEDIUM GRAINED BIOTITE AND	Weak biotite destructive	None noted								
		ptygmatic			MUSCOVITE GNEISS Well foliated biotite	alteration.									
		folding lots of			gneiss. Coarse subunits >50% biotite. Hosts										
		fine buckling.			small pegmatite-migmatite injection zones.										
														<u> </u>	
7.00	44.46		45	DIOON	Curviplanar contact - 45 deg to C.A								_	_	⊢
7.60	11.10	gneissocity	45	BIOGN	Vell foliated to locally cherty matrix gneiss.										
					ell foliated to locally cherty matrix gneiss. destructive bleached zones.										
					Small white quartz and migmatite zones.										
					Planar contact 60 dag. To C A									<u> </u>	<u> </u>
11 10	12 20	planar	451/10	RIOCN		Weekly to upcommonly strongly									
11.10	13.30	aneissocity	434/-10	DIOGIN	MUSCOVITE GNEISS Well foliated to locally	altered and bleached biotite									
		grieissocity			finer grained siliceous matrix biotite graiss. The	destructive alteration									
					more siliceous the finer grained. Coarse subunits	destructive alteration.									
					>50% biotite Hosts small cherty and green										
					actinolite calc silicate bands and small negretite-										
					migmatite injection zones										
					g										
					Planar contact 50 deg. To C.A.										
13.30	14.10			BIOGNSIL	LEUCOCRATIC SILICEOUS BIOTITE		Brassy pyrite in late clay altered								
					ORTHOGNIESS AND MIGMATITE. Very faint		fractures								
					relict biotite gneiss with biotite altered to										
					muscovite. Sequence begins as orthogneiss and										
					grades to migmatite.										
L					Slightly curviplanar contact 50 deg. To C.A.				L					<u> </u>	<u> </u>
14.10	15.30		45	BIOGN	COARSE TO MEDIUM GRAINED BIOTITE AND	Weakly to uncommonly strongly									
					MUSCOVITE GNEISS Well foliated to locally	altered and bleached biotite									
					finer grained siliceous matrix biotite gneiss. The	destructive alteration.									
					more siliceous the finer grained. Coarse subunits										
					>50% biotite. Hosts small cherty and green										
					actinolite calc silicate bands and small pegmatite-										
					migmatite injection zones.										
					Planar contact 50 deg. To C A				 					<u> </u>	
15.30	16.10			PEG	LEUCOCRATIC SILICEOUS MEGACRYSTIC			1	1					\vdash	
					MIGMATITE. Very "pegmatitic" looking										
					Planar contact 35 deg. To C.A.									1	

Meters	Meters	STRUCTURE	ANGLE		TESTING NORTH EXTENSION OF I	PAUTLER OCCURRENCE DOWN DIP	OF HOLE BH08-19	SAM	IPLE DA	TA	Zn	Pb	Ag	Mn	Bi	Cu
FROM	то		FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION	SAMP#	FROM	то	%	ppm	ppm	ppm	ppm	ppm
15.10	17.40		45	BIOGN	COARSE TO MEDIUM GRAINED BIOTITE AND MUSCOVITE GNEISS Well foliated to locally finer grained siliceous matrix biotite gneiss. The	Weakly to uncommonly strongly altered and bleached biotite destructive alteration.										
					solve solution the finer grained. Coarse subunits											
					actinolite calc silicate bands and small negmatite-											
					migmatite injection zones. Gradually decreasing											
					grain size down hole.											
					g											
					Gradational contact 45 deg. To C.A.											
17.40	23.50			BIOGN	FINE TO MEDIUM GRAINED BIOTITE GNEISS,	Occasional bleached biotite										
					Well foliated to locally cherty matrix gneiss.	destructive bleached zones.										
					Small white quartz and migmatite zones.											
					Lost core at contact. ~5 cm ground.								L	L		
23.20	23.50			PEG	LEUCOCRATIC COARSE GRAINED			905224	24.35	25.35	56	8	<0.2	226	<5	4
00.50	05.00		45.145		PEGMATITIC TEXTURED MIGMATITE.		05.45.05.55 M	005005	05.05	05.75	101	10		4.40	-	400
23.50	25.80		45+/-15	CALC-SIL	ACTINOLITE, WOLLASTONITE GARNET AND		25.45-25.55 Massive to semi-	905225	25.35	25.75	104	18	<0.2	140	<5	482
					SILICEOUS CALC-SILICATE AND MARBLE		massive pyrmotite in chert and									
					banded texture due to exemplication		Zono may be continuous but in									
					banded texture due to skarnincation,		Zone may be continuous but is									
					arnet quartz and carbonate		tension fracturing into which									
					gamet, qualiz and carbonate.		sulphides have migrated									
					Gradational contact 45 deg. To C A		Suprides have migrated.	905226	25 75	26 75	89	18	<0.2	462	5	49
25.80	28.00			BIOGN	FINE TO MEDIUM TO LOCALLY COARSE	Commonly bleached biotite		CCCLLC	20110	20.10	00				Ū	
20.00	20.00			5.001	GRAINED BIOTITE GNEISS. Well foliated to	destructive bleached zones.										
					locally cherty matrix gneiss. Small white guartz											
					and migmatite zones.											
					Gradational contact 45 deg. To C.A.											
28.00	34.10			BIOGN	COARSE TO MEDIUM GRAINED BIOTITE AND	Weakly to uncommonly strongly										
					MUSCOVITE GNEISS Well foliated to locally	altered and bleached biotite										
					finer grained siliceous matrix biotite gneiss. The	destructive alteration.										
					more siliceous the finer grained. Coarse subunits											
					>50% biotite. Hosts small cherty and green											
					actinolite calc silicate bands and small pegmatite-											
					migmatite injection zones.											
					Assimilation contact 50 dog. To C A								<u> </u>	<u> </u>	<u> </u>	
34.10	34.60			PEG	LEUCOCRATIC COARSE GRAINED								<u> </u>	<u> </u>	<u> </u>	+-1
04.10	04.00			1 20	PEGMATITIC TEXTURED MIGMATITE											
34.60	35.20			BIOGN	COARSE TO MEDIUM GRAINED BIOTITE	Weakly to uncommonly strongly										
					GNEISS Well foliated to locally finer grained	altered and bleached biotite										
					siliceous matrix biotite gneiss. The more	destructive alteration.										
					siliceous the finer grained. Coarse subunits											
					>50% biotite. Hosts small cherty and green											
					actinolite calc silicate bands and small pegmatite-											
					migmatite injection zones.											
					Planar gradational contact 45 deg. to c.a.											
35.20	35.70			BIOGN	MEDIUM GRAINED BIOTITE GNEISS, Well	Commonly bleached biotite										
					foliated to locally cherty matrix gneiss. Small	destructive bleached zones.										
					white quartz and migmatite zones.								—	<u> </u>	—	+
				1	Planar gradational contact 45 deg. to c.a.			1		1		1	1	1	1	1

Meters	Meters	STRUCTURE	ANGLE		TESTING NORTH EXTENSION OF PAUTLER OCCURRENCE DOWN DIP OF HOLE BH08-19			SAN	APLE DAT	ſA	Zn	Pb	Ag	Mn	Bi	Cu
FROM	то	l l	FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION	SAMP#	FROM	то	%	ppm	ppm	ppm	ppm	ppm
35.70	36.30	gneissocity	45	CALC-SIL	MIXED FINE GRAINED BIOTITE GNEISS AND ACTINOLITE DOMINANT CALC-SILICATE. Well developed gneissic fabric	Bleached with biotite destructive alteration.	Pyrrhotite stringers in central portions of calc-silicate zones. Smaller version of overlying CC zone.									
					Gradational contact. 85 deg. To C.A.											
					Planar gradational contact 45 deg to c.a.						—		Ļ'			
36.30	37.80			BIOGN	COARSE TO MEDIUM GRAINED BIOTITE GNEISS Well foliated to locally finer grained siliceous matrix biotite gneiss. The more siliceous the finer grained. Coarse subunits >50% biotite. Hosts small cherty and green actinolite calc silicate bands and small pegmatite- micmatite injection zones	Weakly to uncommonly strongly altered and bleached biotite destructive alteration.										
					Gradational migmatized contact									-+		
37.80	40.70		45+/-15	QDIOR	HETEROGENEOUS PLAGIOCLASE QUARTZ +/ GARNET+/- BIOTITE PORPHYRITIC TO MEGACRYSTIC TO MEDIUM GRAINED BIOTITE GRANODIORITE INTRUSIVE AND MIGMATITE. Overall composition probably mafic poor quartz diorite. Extremely variable grain size.	Top of unit strongly clay altered and bleached.	Very rare trace pyrrhotite									
		ļ!			Contact zone of thinner migmatite-pegmatite.								<u> </u>			
40.70	54.60	Gneissocity. Many fold axes of various degrees of tightness. Upper and lower zones appear repeated.	45	BIOGN	MUSCOVITE GNEISON GRAINED BIOTTLE AND MUSCOVITE GNEISS Well foliated to locally finer grained siliceous matrix biotite gneiss. The more siliceous the finer grained. Coarse subunits >50% biotite. Hosts small cherty and green actinolite calc silicate bands and small pegmatite- migmatite injection zones.	Weakly to uncommonly strongly altered and bleached biotite destructive alteration. Montmorillanite in most strongly altered zone (swelling clay)	associated with biotite and disseminated in siliceous zones.									
		· · · · · · · · · · · · · · · · · · ·			Planar contact 85 deg. To C.A.	Very strongly clay altered.				-						
54.60	59.70	gneissocity	45	BIOGN	FINE GRAINED TO MEDIUM TO LOCAL COARSE GRAINED BIOTITE GNEISS Dark and light grey fine grained gneiss Occasional siliceous or cherty bands.	Commonly bleached biotite destructive bleached zones to pale green fine grained gneiss. Locally intensely soft clay altered zones where intruded by white quartz veining.										
			45		Gradational contact	Very strongly clay altered.					I		L			
59.70	65.60		85+/-5	BIOGN	COARSE TO MEDIUM GRAINED BIOTITE AND MUSCOVITE GNEISS Well foliated to locally finer grained siliceous matrix biotite gneiss. The more siliceous the finer grained. Coarse subunits >50% biotite. Hosts small cherty and green actinolite calc silicate bands and small pegmatite- migmatite injection zones. Ptygmatic folding common. This sequence distinctly more siliceous that previous coarse unit.	Weakly to commonly strongly altered and bleached biotite destructive alteration. Montmorillanite in most strongly altered zone (swelling clay)	Trace very fine iron sulphides associated with biotite and disseminated in siliceous zones.									
05.00	05.00	ļ!		550	Very gradational contact				┝──┤			+	⊢ '			
65.60	65.90			PEG	PEGMATITIC TEXTURED MIGMATITE. Garnets and muscovite common.						<u> </u>		 			
					@45 deg. To C.A						L					

Meters	Meters	STRUCTURE	ANGLE		TESTING NORTH EXTENSION OF	ENSION OF PAUTLER OCCURRENCE DOWN DIP OF HOLE BH08-19		SAM	PLE DA	ТА	Zn	Pb	Ag	Mn	Bi	Cu
FROM	то		FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION	SAMP#	FROM	то	%	ppm	ppm	ppm	ppm	ppm
65.90	69.60		50	BIOGN	FINE GRAINED TO MEDIUM TO LOCALLY	Commonly bleached biotite										
					COARSE GRAINED BIOTITE GNEISS Dark	destructive bleached zones to					1					
					and light grey fine grained gneiss Occasional	pale green fine grained gneiss.					1					
					siliceous or cherty bands. Numerous small	Locally intensely soft clay altered	1				1					
					migmatitic zones.	zones where intruded by white					1					
						quartz veining.										
					Gradational contact											
69.60	71.80		45	BIOGN	COARSE TO MEDIUM GRAINED BIOTITE	Weakly to strongly altered and	Trace very fine iron sulphides				1					
					GNEISS Well foliated to locally finer grained	bleached biotite destructive	associated with biotite and				1					
					siliceous matrix biotite gneiss. The more	alteration. Montmorillanite in	disseminated in siliceous zones.				1					
					siliceous the finer grained. Coarse subunits	most strongly altered zone					1					
					>50% biotite. Hosts small cherty zones.	(swelling clay)					1					
					Occasional ptygmatic folding seen.						 					
					Planar contact 85 deg. To C.A.						 					
71.80	74.60		45	PEG	LEUCOCRATIC COARSE GRAINED	Strong alteration with garnet and					1					
					PEGMATTIC TEXTURED MIGMATTE.	muscovite.					1					
					Garnets and muscovite common. Numerous fine						1					
					grained bleached blotite gneiss zones.						<u> </u>					
					Gradational bleached contact with fine grained						1					
74.00	04.00		45	DIOCNI	DIDITITE GREISS.						<u> </u>	<u> </u>				-
74.60	84.30		45	BIOGN	CUARSE TO MEDIUM GRAINED BIOTTLE						1					
					GNEISS Weil Iollated to locally lifter grained						1					
					The more siliceous the finer grained. Coarse						1					
					subunite >50% biotite. Occasional ptyamatic						1					
					folding seen						1					
					Ground altered core at contact							I				
84 30	90.75			PEG							<u> </u>	<u> </u>				
04.00	50.75			120	PEGMATITIC TEXTURED MIGMATITE						1					
					Garnets and muscovite common. Numerous fine						1					
					grained bleached biotite gneiss and grange						1					
					migmatized calc-silicate zones.						1					
					Ground altered core at contact							-				
90.75	94.40		50	BIOGN	FINE GRAINED TO MEDIUM GRAINED	Commonly bleached biotite			-							
					BIOTITE GNEISS Dark and light grey fine	destructive bleached zones to					1					
					grained gneiss. Unit is distinctly harder and more	pale green fine grained gneiss.					1					
					siliceous than coarser gneiss. Occasional	Locally intensely soft clay altered					1					
					siliceous or cherty bands.	zones where intruded by white					1					
						quartz veining.					1					
					planar contact 55 deg. to C.A.											
94.40	95.00		50	CALC-SIL	MIXED ACTINOLITE, WOLLASTONITE	Bleached at contacts		905227	94.6	95.6	0.021	34	<0.2	445	<5	34
					GARNET AND MINOR SILICEOUS						1					
					CALCSILICATE AND CHERT ZONES. Highly						1					
					variable but generally crudely banded texture due						1					
					to skarnification recrystallization and segregation						1					
					of actinolite, garnet, quartz and carbonate. Relict						1					
					pale ivory marble is finer grained.						1					
								005000	05.0		0.04 :	10	0.0	000	-	40
05.00	07.40		50	DIOON		Commonly blooch and biatite		905228	95.6	96	0.014	46	<0.2	329	<5	40
95.00	97.10		50	BIOGN		Commonly bleached blotite		905229	96	97.8	0.024	36	<0.2	605	<5	22
					BIOTTE GNEISS Dark and light grey fine	destructive bleached zones to				'		'				
					gramed gnelss. Unit is distinctly harder and more	pale green fine grained gheiss.					1	1 1				
					siliceous man coarser gneiss. Occasional	Locally Intensely soft clay altered					1	1 1				
					siliceous of cherty banus.	as at 55.6 accompanied by					1	1 1				
					Broken core at contact ~60 deg. To C A	winter quartz venning.	+	905230	97.8	97.9	1.64	36	<0.2	131	~5	10
		1	1	1		1	1		01.0		+		· ~ · ·	1 701	~~	1 10

Meters	Meters	STRUCTURE	ANGLE		TESTING NORTH EXTENSION OF I	PAUTLER OCCURRENCE DOWN DIP	OF HOLE BH08-19	SAN	IPLE DA	TA	Zn	Pb	Ag	Mn	Bi	Cu
FROM	то		FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION	SAMP#	FROM	то	%	ppm	ppm	ppm	ppm	ppm
97.10	99.30			CALC-SIL	MIXED CHERT, ACTINOLITE, WOLLASTONITE GARNET AND SILICEOUS CALCSILICATE ZONES. Highly variable but generally crudely banded texture due to skarnification constructing and construction of actingite		Up to 5% pyrrhotite in thin chert zones. Up to 3% brassy pyrite stringers in white quartz zones.	905231	97.9	98.25	0.048	24	0.2	455	<5	5
					garnet, quartz and carbonate. Relict pale ivory marble is finer grained.						I					
						Finely laminated chert with	97.8 2 to5 mm thick brown	905232	98.25	98.35	2.43	494	1.6	454	10	17
						massive sulphide	massive sphalerite zone at				1		1			
							laminated quartz and orange				1		1			
							CC. 45 deg to C.A.	005222	09.25	09.45	116	220	0.2	214	-5	24
							massive continuous and two	905255	90.33	90.45	11.0	220	0.2	214	<0	24
							hairline discontinuous				1		1			
							massive sphalerite laminations				1		1			
							and bands. 45-55 deg to C.A. PAUTLER ZONE HORIZON									
					40 cm migmatized lower contact.			905234	BLANK		<.01	<2	<0.2	16	<5	<1
99.30	101.50			BIOGN	FINE GRAINED TO MEDIUM GRAINED	Commonly bleached biotite		905235	98.45	99.45	0.033	34	<0.2	194	<5	10
					BIOTITE GNEISS Dark and light grey fine	destructive bleached zones to					1		1			
					grained gneiss. Unit is distinctly harder and more	pale green fine grained gneiss.					1		1			
					siliceous than coarser gneiss. Occasional	Locally Intensely soft clay altered					1		1			
					sinceous of cherty and calc sincate bands.	whiter quartz veining					I		1			
					100.5-100.8 two distinctive green coarse biotite	Biotite partially altered to										
					zones (seen at CK near mineral zone) ~75 deg to	muscovite and chlorite?					1		1			
					C.A. separated by migmatite and bounded by						1		1			
					Fine grwined Biotite Gneiss.					<u> </u>	<u> </u>	<u> </u>	├ ───	<u>ا</u> ا		
101 50	102.80			BIOGN	Gradational contact 65 deg to C.A.	Locally strongly bleached and						\vdash	<u> </u>			
101.50	102.00			BIOGIN	GNEISS Well foliated to locally finer grained	clay altered.					l				1	
					The more siliceous the finer grained Coarse						I		1 1			
					subunits >50% biotite. Occasional ptygmatic						I		1 1			
					folding seen.						I					
					Clay altered contact						I		L			
102.80	107.90			CALC-SIL	HETEROGENEOUS QUARTZ CALCSILICATE	Very strongly bleached and clay					1		1			
					aneiss zones. Quartz zones may be primary	around core					I		1			
107.90	113.20			BIOGNSIL	FINE GRAINED SILICEOUS BIOTITE GNEISS	Commonly bleached biotite						-		ł		
					Light grey very fine grained gneiss. Unit is	destructive bleached zones to					1		1			
					distinctly harder and more siliceous than coarser	pale green fine grained gneiss.					1		1			
					gneiss. Occasional siliceous or cherty and calc	Locally intensely soft clay altered					1		1			
					silicate bands.	as at 35.6 accompanied by					1		1			
					Intensely clay altered sheared ~70 deg. To C A	whiter quartz veining.										
					siliceous migmatized contact.						I					
113.2	134.00		35+50/-20	SILCC	LEUCOCRATIC SILICEOUS CALC-SILICATE											
					AND WHITE MASSIVE MARBLE Laminated and						I		1			
					mottled quartz-actinolite-wollastonite calc silicate.						I	'				
					Occasionally migmatite. Several large white						I		1			
					quartz zones.		125.5 Modium groipod			──┤		<u> </u>				
							molybdenite in actinolite "skarn"				I		1			
											I					

Meters	Meters	STRUCTURE	ANGLE		TESTING NORTH EXTENSION OF F	PAUTLER OCCURRENCE DOWN DIP	OF HOLE BH08-19	SAN	MPLE DA'	ГА	Zn	Pb	Ag	Mn	Bi	Cu
FROM	то		FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION	SAMP#	FROM	то	%	ppm	ppm	ppm	ppm	i ppm
					Curviplanar contact - 35 deg to C.A											
134.00	136.25		35	BIOGN	COARSE TO MEDIUM GRAINED BIOTITE											
					GNEISS Well foliated to locally finer grained											
					siliceous matrix ribbon banded biotite gneiss.											
					The more siliceous the finer grained. Coarse											
					subunits >50% biotite. Occasional ptygmatic											
					folding seen.											
136.25					END OF HOLE											



ALL STORE S ADD DOOLT and the second s - CONTROL and the second 10000 10000 and the second 5H 68-20 8x 2 auffind a V ffit, so is all that is a little of the second and the second of the secon 100000 1 In the second of Carlos Parto and the mark 1 177 BH 06-20 BX 3 17.7 1.4.20 100 ad. 5H:08-2* 6XH 23.5 2 40.14 House a 1 A Contraction of the second California Provi HOBZOBXS 121 616 SF 7 8 , 119 24,4 12.2.16 11-11 5H-08-20-6×6 35.2 -Children of the state

100 1000 54**8** 4 R.E and the second AND PROVED 1 08-20-83 Sector Action of the sector of the 6 1 10 and the second se Contraction in All All S. LANSON and. Sto ME Lind SH-08-20-8x7 シーにな 14 10 14 14 19 19 19 ENGRAPHIC STATE OF 46 4 APT 100 15-20-2× B AND THE PARTY OF T Jun M SCAME PERSON STREET 2 ALC: NOT 1000 82 an a de al se concerte de la se a la la se a la de se a entration for the state time 520 O'BY Q - 4 4 01 HU 10000 1 4 1 6 1 9 A 69 57.7 0 10.516 2.160 a station of the second CARDER A BARDER I THE MEAN TO POPULATE STREET

Ford. BH-08-22-6X 1/ 63.4 AND STREET State Street 10 1.3 1125 - and he BH 08 20.88 12 A REAL PROPERTY OF THE PROPERTY AND NAME. 104717-101 -20 A CONTRACTOR 748 BH 08-20 8×13 ante: 10 7524 ~~~ 661 ----8 1000 - 16 CO100100 80.6 BH 08.20 BK 14 80.6 VII. 122010 4.00 Well Company 10.0 Contract over a contract of the second second 163.23 Sector States 86 81 08-20 BY 15 77 CORPORATE AND The state of the s 91.8 NOR OF THE PARTY OF THE

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COM MAN PARAM -1911 108.00 × 19 108.0 1.1 AST MANY TOTAL STANCE The particular -21. 000 m.m.s 1 100 CONTRACTOR OF Cart -LIND PROPERTY ACTO 11.50 STE OF 0.0 RANDO BH-C8-20 BX 21 1187 RAN ene 1000 124.4 5H 08-20 3X 22 64 08-20 BX 23 130-1-1.00 BH 08-20 Bx 25 1361 The second 15-11-10 and the second second

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РОТ	POTASH NORTH RESOURCE CORPORATION					DDH BH08-21			BROKE	N HILL	PROJ	ECT,	AVOL	.A, B.	С.	-
UTM	NOR-	EASTING	ELEV	BEARING/												
ZONE	THING			DIP				ļ								
11	5744920	345100	1433	225/60		TARGET					A	nalytic	al Resu	ilts and	Assay	/ S
Metres	Metres	STRUCTURE	ANGLE		TESTING	NORTH END OF NAVAN SOIL ANO	MALY	SAI	MPLE DA	TA	Zn	Pb	Ag	Mn	Cd	Cu
FROM	то		FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION	SAMP#	FROM	то	%	%	ppm	ppm	ppm	ppm
0.00	6.10			CASG	CASING NO RECOVERY											
6.10	6.50			RUB	RUBBLE											
6.50	15.60			PEG	HETEROGENEOUS QUARTZ +/-		as described below									
					PLAGIOCLASE MIGMATITE. Highly											
					silicified. Probably calc-silicate											
					protolith.											
					6.5-9.8 Much lost core. Oxidized										$ \longrightarrow $	
					9.8-11.2 Oxidized core.		Unoxidized rock hosts 0.5% finely disseminated pyrrhotite.	,								
					11.2-13 Quartz zone with net textured			905236	11	12	144	16	0.2	96	<1	8
					sulphide stockwork											
					13-14 Definite relict calc-silicate		2% pyrrhotite and pyrite in net	905237	12	14	27	78	2.2	67	<1	36
					14.0.15.6 Quartz zona Aalabaya	Soft pariaitia alay agama	2% pyrrbetite and 1% later pyrite	005220	14	16	11	70	17	171	-1	76
					14.0-15.6 Qualiz zone. As above	Sont sending day seams	3% pyrnolite and 1% later pyrite.	905236	14	10	41	12	1.7	171	<1	70
					with stronger mineralization and clay	common. Possible remnant										
					seems.	Internally alow altered and										
						bloachad										
					Lost core at contact	bleached										
15.60	17 40		55	BIOGN	MEDIUM GRAINED BIOTITE	intensely clay altered 80% core		905239	16	17 37	126	28	0.3	392	<1	69
10.00	17.10		00	DIGON	GNEISS	loss		000200	10	11.01	120	20	0.0	002		00
					lost core at contact											
17.40	18.00		70	BIOGNSIL	SILICEOUS-SILICIFIED BIOTITE	highly oxidized with 50% core		905240	17.37	19.5	11	16	< 0.2	57	<1	9
					GNEISS.	loss.										-
18.00	22.50			CHERT	BROWN CHERT AND CALC	often bleached to brown and	~1-5% finely disseminated	905241	19.5	22.5	23	10	<0.2	102	<1	19
					SILICATE Occasional relict fine	white laminated rock at various	pyrrhotite and pyrite.									
					laminations largely destroyed by	core angles (primary??)										
					recrystallization.											
					lost core at contact											
22.50	26.00			PEG	LEUCOCRATIC PLAGIOCLASE		Trace minute disseminated pyrite	905242	22.5	23.5	7	12	<0.2	68	<1	4
					QUARTZ +/- GARNET		in remnant cherty laminations in									
					MEGACRYSTIC INTRUSIVE AND		migmatite. ~80 deg to c.a.									
					MIGMATITE. Occasional rare											
					muscovite.											
					ground core at contact			905243	STD PM186		87	18	0.6	482	4	121
26.00	32.00	relict	75	CHERT	BROWN CHERT Occasional relict	often bleached to pale green rock	~1-5% finely disseminated									
		curviplanar	-		fine laminations largely destroyed by		pyrrhotite and pyrite.									
		laminations			recrystallization.											
32.00	36.00			CHERT	WHITE AND PALE GREEN							ĺ				
					LEUCOCRATIC PLAGIOCLASE											
					QUARTZ MIGMATITE. Protolith is											
					chert remnant laminations											
					planar contact 75 deg to C.a.]		ı T	

Metres	Metres	STRUCTURE	ANGLE		TESTING NORTH END OF NAVAN SOIL ANOMALY		SAM	IPLE DAT	ί Α	Zn	Pb	Ag	Mn	Cd	Cu	
FROM	то		FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION	SAMP#	FROM	то	%	%	ppm	ppm	ppm	ppm
36.00	40.10		85	BIOGN	MEDIUM GRAINED BIOTITE GNEISS Well foliated to locally cherty matrix gneiss. Hosts small fabric parallel pegmatite-migmatite injection zones.		Trace very fine iron sulphides associated with biotite and disseminated in siliceous zones.									
					crosscutting curviplanar contact 75 deg to C.a.											
40.10	41.65			PEG	LEUCOCRATIC PLAGIOCLASE QUARTZ +/- GARNET MEGACRYSTIC INTRUSIVE AND MIGMATITE. Occasional rare muscovite.											
41.65	42.90		85	BIOGN	MEDIUM GRAINED BIOTITE GNEISS Well foliated to locally cherty matrix gneiss. Hosts small fabric parallel pegmatite-migmatite injection zones.											
42.90	43.90			PEG	LEUCOCRATIC PLAGIOCLASE QUARTZ +/- GARNET MEGACRYSTIC INTRUSIVE AND MIGMATITE. Occasional rare muscovite.											
43.90	46.20		85	BIOHBGN	MEDIUM GRAINED BIOTITE AMPHIBOLITE GNEISS Well foliated to locally cherty matrix gneiss. Hosts small fabric parallel pegmatite- migmatite injection zones.											
					cross cutting clay altered intrusive contact											
46.20	46.70		45	ORTHO	COARSE GRANODIORITE ORTHOGNIESS. 5% medium grained biotite in quartz-feldspathic groundmass.											
					cross cutting clay altered intrusive contact											
46.70	47.20		85	BIOHBGN	MEDIUM GRAINED BIOTITE AMPHIBOLITE GNEISS Well foliated to locally cherty matrix gneiss. Hosts small fabric parallel pegmatite- migmatite injection zones.											
47.20	57.15			PEG	LEUCOCRATIC PLAGIOCLASE QUARTZ +/- GARNET MEGACRYSTIC INTRUSIVE AND MIGMATITE. Occasional rare muscovite.											

Metres	Metres	STRUCTURE ANGLE		TESTING	NORTH END OF NAVAN SOIL ANO!	MALY	SAM	APLE DA'	ГА	Zn	Pb	Ag	Mn	Cd	Cu
FROM	то	FR. C.A.	CODE	GEOLOGICAL DESCRIPTION	ALTERATION AND VEINING	MINERALIZATION	SAMP#	FROM	то	%	%	ppm	ppm	ppm	ppm
57.15	58.20	85	BIOHBGN	MEDIUM GRAINED BIOTITE AMPHIBOLITE GNEISS Well foliated to locally cherty matrix gneiss. Hosts small fabric parallel pegmatite- migmatite injection zones. Grading to green calc-silicate gneiss at contact.											
58.20	60.40	75	BIOGNSIL	LEUCOCRATIC MIGMATITE. Silicified protolith. Relict siliceous biotite gneiss and calc-silicate gneiss textures common. Possibly migmatized siliceous gneiss											
60.40	60.70	80	AMPHGN	MEDIUM GRAINED AMPHIBOLITE GNEISS Well foliated to locally cherty matrix gneiss.											
60.70	61.80	70	BIOHBGN	LEUCOCRATIC MIGMATITE WITH AMPHIBOLITE GNEISS. Silicified protolith. Relict siliceous biotite gneiss and calc-silicate gneiss textures common. Possibly migmatized siliceous gneiss											
				61.7-61.8 Sulphidic chert zone		5% net textured pyrrhotite in									
61.80	66.30		PEG	LEUCOCRATIC PLAGIOCLASE QUARTZ +/- GARNET MEGACRYSTIC INTRUSIVE AND MIGMATITE. Occasional rare muscovite.											
66.30	76.10		AMPHGN	MEDIUM GRAINED AMPHIBOLITE GNEISS Well foliated to locally cherty matrix gneiss. Hosts a few pegmatite style migmatite zones.											
67.10	68.60		BIOGN	Gradational contact MEDIUM GRAINED BIOTITE GNEISS Well foliated to locally cherty matrix gneiss. Hosts small cherty and pegmatite-migmatite injection zones.											
				Gradational contact							L				
68.60	69.19		PEG	LEUCOCRATIC PLAGIOCLASE QUARTZ +/- GARNET MEGACRYSTIC INTRUSIVE AND MIGMATITE. Occasional rare muscovite.											
69.19		1		EOH							r I				







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