

**ASSESSMENT REPORT**

for the

**BLENDE Property**

**MIX 1 - 16 Claims**

Mayo Mining District, Central Yukon Territory  
Mapsheet 106-D-07  
Latitude 62° 24 N / Longitude 132° 42 W  
NTS 7141120 N / 515750 E

Prepared for:

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JANUARY 30 2003



**094407**

This report has been examined by  
the Geological Evaluation Unit  
under Section 53 (4) Yukon Quartz  
Mining Act and is allowed as  
representation work in the amount  
of \$ 10,524.86.

*M. B. L.*  
for Regional Manager, Exploration and  
Geological Services for Commissioner  
of Yukon Territory.

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## SUMMARY

The BLENDE property consists of 16 claims staked under the regulations of the Yukon Quartz Mining Act of 1924. The project is 70km from the all-weather highway at the mining town of Elsa which itself is 600km from tidewater at the port of Skagway, Alaska. A winter trail has been constructed to link the property to the established Wind River Trail right-of-way. The claims are administered by the Mayo Mining Recorder and are centered at Latitude 62; 24 N /Longitude 134; 42 W. The claims are owned 100% by Eagle Plains Resources Ltd.

The Blende deposit consists of lead-zinc-silver mineralization within a dolomitic carbonate host. The mineralization is contained in an anastomosing, structurally controlled vein system that has been traced on surface for more than 6km. The mineralized zone can be up to 200m wide and has a vertical extent of at least 600m.

The property has had extensive geochemical, geophysical, geological and trenching programs and a total of 94 diamond drill holes (16499.7 meters - 54130 feet) were completed between 1988 - 1994. Environmental baseline studies were conducted throughout 1990-1991.

Preliminary petrographic, polished section and metallurgical work has been completed on drill core. Academic research has been carried out by the Geological Survey of Canada, the Geological Branch of the Yukon Government, Carleton University and the University of British Columbia.

Systematic diamond drilling has been concentrated in two areas known as the West and East Zones. The West Zone is exposed at the 1800m elevation where it comprises multiple en echelon zones of mineralization with variable southward dip that have an aggregate strike of at least 800 metres from 9+700E-10+500E and are drill tested to a maximum of 300-400 metres down dip. The West Zone remains open both to the west and down dip. The West Zone is estimated to contain an in-situ geological resource of about 15.3Mt of variably oxidized galena-sphalerite-pyrite which grades at 2.14% PbS, 1.09% Pb (non-sulphide), 2.25% ZnS, 0.79% Zn (non-sulphide) and 1.97 opt Ag. The West Zone mineralization is amenable to open pit mining methods. Potential pit designs generated in-house by Billiton Metals Canada suggest that a large portion of the West Zone is accessible at a stripping ratio of about 4.5: 1.

The East Zone is exposed at the 1200-1300m elevation where it comprises one major and several minor zones of mineralization which are defined both along strike and to depth from about 12+450E to 12+900E. Additional geochemical and geophysical anomalies remain untested in rugged terrain east of the known East Zone mineralization (Far East Zone). The East Zone contains an in-situ geological resource of about 4.3Mt of relatively non-oxidized sphalerite-galena-pyrite which grades at 1.12% PbS, 0.19% Pb (non-sulphide), 2.99% ZnS, 0.06% Zn (non-sulphide) and 0.44 opt Ag. The East Zone mineralization is also amenable to open pit mining methods, at a stripping ratio of about 3:1.

Review of past data by Eagle Plains indicates that some of the higher grade mineralization already delineated on the Blende may also be amenable to smaller scale underground mining methods. There is also potential for bonanza grade Keno type silver mineralization that was intersected in a single 1991 drillhole and has never been followed up.

The total cost of the 2002 geological exploration work on the Blende property was \$11,141.39

## LOCATION, ACCESS AND GEOMORPHOLOGY (Fig.1, following page)

The claims lie 67 km northeast of the mining community of Elsa and are accessible by helicopter or a 70 km winter trail. The first 60 km of the land route follows the Wind River Trail, an established winter road that joins the government-maintained, all-weather road system at McQuesten Lake, some 20 km northeast of Elsa. Approximately 9 km of four-wheel drive roads were built in 1989 from the camp to the main areas of interest on the property and another 2 km were built in 1990 to provide access to drill sites. Total road distance from Blende to the seaport of Skagway, Alaska is about 729 km which compares favorably with other lead-zinc deposits in the Yukon and Northern B.C. such as: Faro (536 km), Logan (592 km), Hundere (706 km), Tom-Jason (777 km), Howards Pass (978 km), and Cirque (1216 km to the nearest seaport at Prince Rupert, B.C.). An under-utilized hydroelectric dam, which formerly provided power to the United Keno Hill Mines Ltd. operation at Elsa, is located near Mayo, some 110 km by road from the property.

The Blende property is centred on Mount Williams, a prominent peak in the southern Wernecke Mountains which form the divide between the Yukon River watershed to the south and MacKenzie River drainages to the north. Local elevations range from 1130 to 1875 m above sea level.

The area has undergone Pleistocene to Recent alpine glaciation and cirques are common at elevations above 1370 m. Outcrop is most abundant on steep, north facing cirque walls, along ridge tops and in actively eroding creek cuts. South-facing hillsides are normally blanketed by talus. Frost action on over steepened slopes has caused numerous landslides, the largest of which covers a 30,000 sq m area near the head of Dean Creek.

Treeline is at about 1300 m and aside from sparse grass and lichen, most of the property is unvegetated. Soil development is poor and usually consists of "C" horizon decomposed bedrock mixed with poorly developed "B" horizon material.



Eagle Plains Resources  
Blende Property

Figure 1 - Property Location

Scale 1:5,000,000  
Projection: UTM NAD83 - Zone8N

50 25 0 50 100 150 200 250 300 350

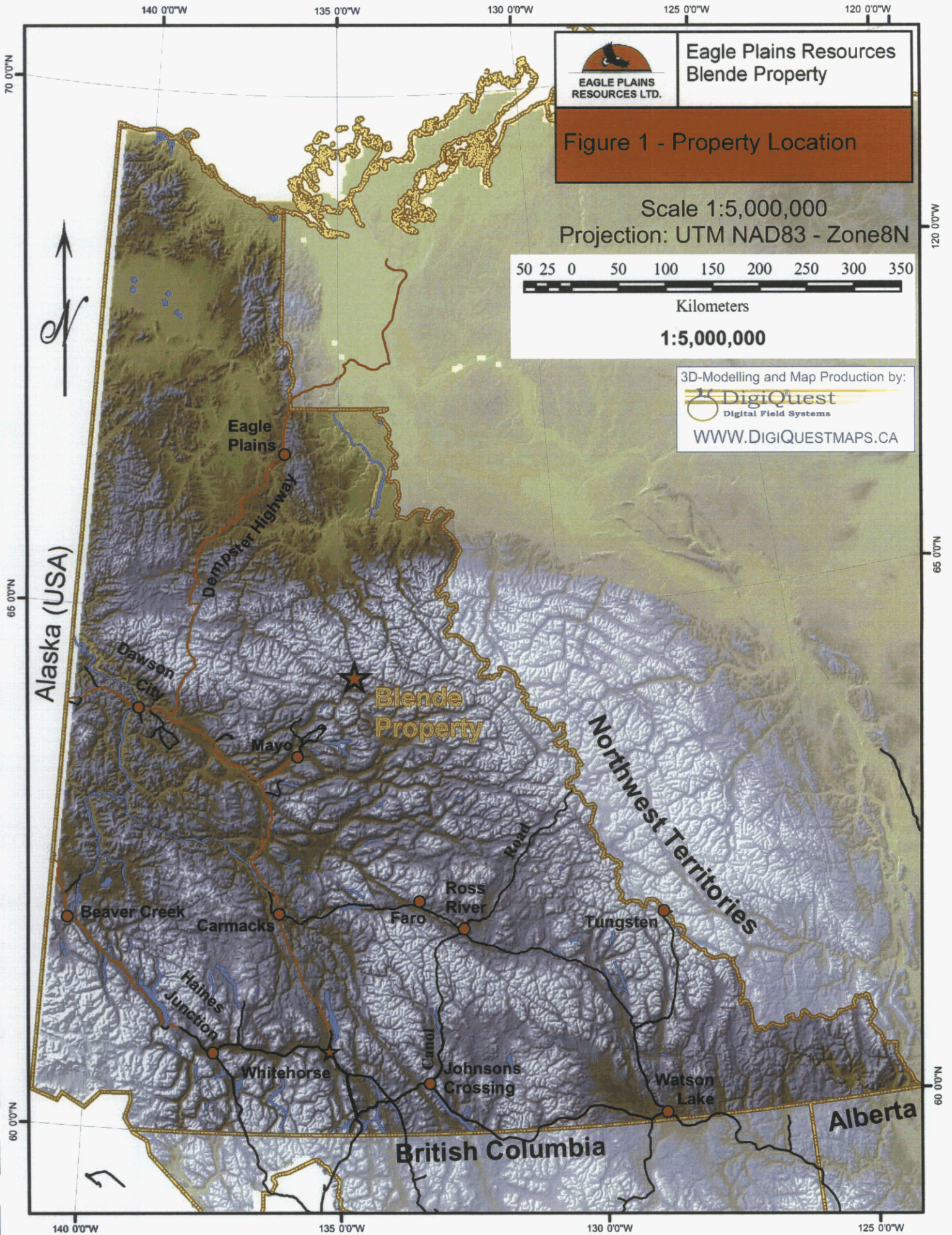
Kilometers

1:5,000,000

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**TENURE** (Fig. 2, following page)

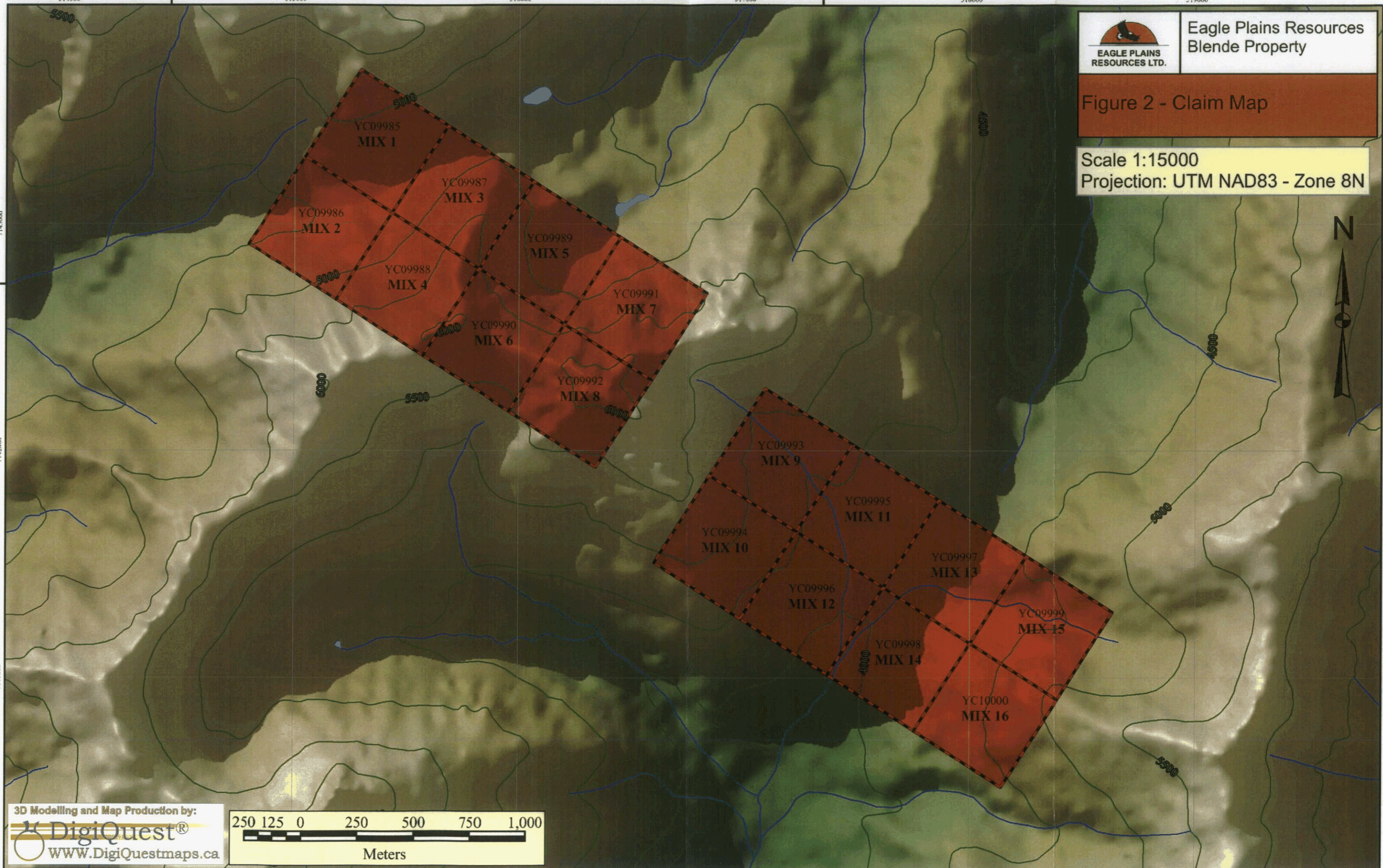
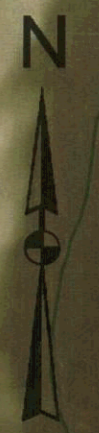
The property consists of 16 Quartz claims located on the Williams Creek map sheet within the Mayo Mining District. The claims consist of two non contiguous eight unit blocks. The claims are owned 100% by Eagle Plains Resources Ltd., with an underlying 1% NSR carried by Bernie Kreft of Whitehorse, Yukon.

<u>Claim Name</u>	<u>Tenure Number</u>	<u>Mapsheet</u>	<u>Expiry Date</u>
MIX 1-16	YC09985-10000	106D07	2007/03/28*

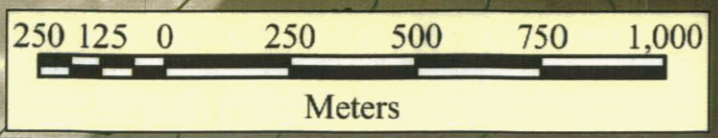
\*Includes 2003 assessment credits which have been filed but not yet accepted.

Figure 2 - Claim Map

Scale 1:15000  
Projection: UTM NAD83 - Zone 8N



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514000 134 42'0"W 515000 516000 517000 134 38'24"W 518000 519000

514000 134 42'0"W 515000 516000 517000 134 38'24"W 518000 519000

7143000  
64 24'36"N  
7142000  
7141000

7143000  
7142000  
7141000

## HISTORY AND PREVIOUS WORK

Mineralization was originally noted in this vicinity by the GSC in 1961. The property was first staked as the Will 1-60 claims by Cyprus Anvil Mining Corporation in July, 1975 after lead-zinc mineralization was discovered while following up anomalous stream sediment samples. The claims were explored later that year with reconnaissance sampling, geological mapping and prospecting (Roberts and Dean, 1975). Although Cyprus Anvil recognized the deposit had considerable grade and tonnage potential, the claims were dropped when the company's focus shifted to stratiform shale-hosted deposits.

Archer, Cathro & Associates (1981) Limited restaked the main area of interest as the Blende 1-15 claims in March, 1981 and that summer collected several rock samples during a brief examination to evaluate silver potential. In 1982, further rock and chip sampling was conducted along with some peripheral prospecting and an airphoto interpretation of linear structures. More systematic chip sampling and hand trenching were done during 1984 in a joint venture with Norvista Development Ltd. (Cathro and Carne, 1984).

NDU acquired the claims in 1986 and explored by prospecting and three diamond drill holes totaling 718 m in 1988. Upon receipt of favourable drill results, the property was enlarged to 66 claims, a hand trench was dug, aerial photographs were flown and ore mineralogy was studied. In 1989, NDU mobilized a ripper-equipped D-7F bulldozer and a Longyear 38 diamond drill to the property, constructed a 15 man camp, built 9 km of four-wheel drive roads, staked 56 additional claims, and conducted geological mapping, grid soil sampling and VLF-EM and magnetic surveys. This work traced the mineralization intermittently over a 6 km strike length and outlined strong soil geochemical anomalies for silver, lead and zinc over the entire 4.8 km length of the grid (Eaton and Lister, 1989).

Billiton Metals Canada Inc. optioned the property in September 1989. The 1990 work program was operated by Billiton with field management by Archer, Cathro. It consisted of additional camp construction, staking of 6 full claims and 28 fractional claims, detailed geological mapping, approximately 2 km of road construction, 3659.7 m of diamond drilling in 15 holes and water quality baseline surveys.

Additional Blende claims and 48 new Zinc claims were added in September 1990. Billiton's 1991 work included completion of the soil geochemical and geophysical coverage and drill testing of the deposit over a 3.3 km strike length, and preliminary metallurgical tests. The 1991 drilling consisted of 62 holes totaling 11525.1 m, including 15 holes in the west zone, 34 holes in the east zone and 13 holes in the central area between the east and west zones. As part of the 1991 work, a resource estimation on the Blende property was undertaken. The West Zone is estimated to contain an in-situ geological resource of about 15.3Mt of variably oxidized galena-sphalerite-pyrite grading 2.14% PbS, 1.09% Pg (non-sulphide), 2.25% ZnS, 0.79% Zn (non-sulphide) and 1.97 opt Ag, while the East Zone contains 4.3Mt of relatively non-oxidized sphalerite-galena-pyrite which grades at 1.12% PbS, 0.19% Ph (non-sulphide), 2.99% ZnS, 0.06% Zn (non-sulphide) and 0.44 opt Ag. Both zones are amenable to conventional open pit mining methods at a strip ratio of between 3.0 — 4.5:1. Billiton also undertook a detailed study of the ore mineralogy and retained Bacon, Donaldson and Associates to conduct preliminary metallurgical testwork.

In 1994 NDU drilled 7 holes totaling 596 m in an area of relatively high grade surface exposures located at the base of a cliff immediately west of the West Zone reserve block. In March 1998 NDU merged with United Keno Hill Mines Ltd. (UKHM) and the property came under the control of UKHM, which subsequently went into receivership.

The Blende and Zinc claims lapsed in March 2002 and Bernie Kreft of Whitehorse staked the MIX 1 - 16 claims on behalf of Eagle Plains Resources.

## **GEOLOGY**

### **Regional Geology** (Figure 3 following page)

The Blende area lies immediately north of a regional-scale thrust fault (Kathleen lakes Fault Zone) and is underlain by Middle to late Proterozoic, Beltian - and Windermere-equivalent marine sediments capped by Early Paleozoic Mackenzie Platform strata (Roots, 1990).

The Middle Proterozoic shelf assemblage, known as the Wernecke Supergroup, was deposited during periodic extensional events outboard from an east-west trending continental margin that lay north of the present Wernecke Mountains. Mesozoic thrust and high angle faults displaced the Wernecke Supergroup sediments northward and upward so they are now exposed in an arc extending across the central Yukon from Alaska to the Northwest Territories.

The Wernecke Supergroup has been subdivided into the Fairchild Lake, Quartet, and Gillespie lake Groups (Delaney, 1981). The Fairchild lake Group is the oldest unit and consists of about 1000 m of deep water siltstone and mudstone. It is overlain by about 3000 m of Quartet Group, stagnant basin and shallow marine, interbedded quartzite and pelitic rocks. Both groups have been deformed locally and metamorphosed to slate and phyllite. The Gillespie Lake Group overlies the older groups and consists of a 1200 m thick sequence of interbedded clastic and carbonate sedimentary rocks that progressively transform from predominantly deep water mudstone to shallow water stromatolitic dolomite.

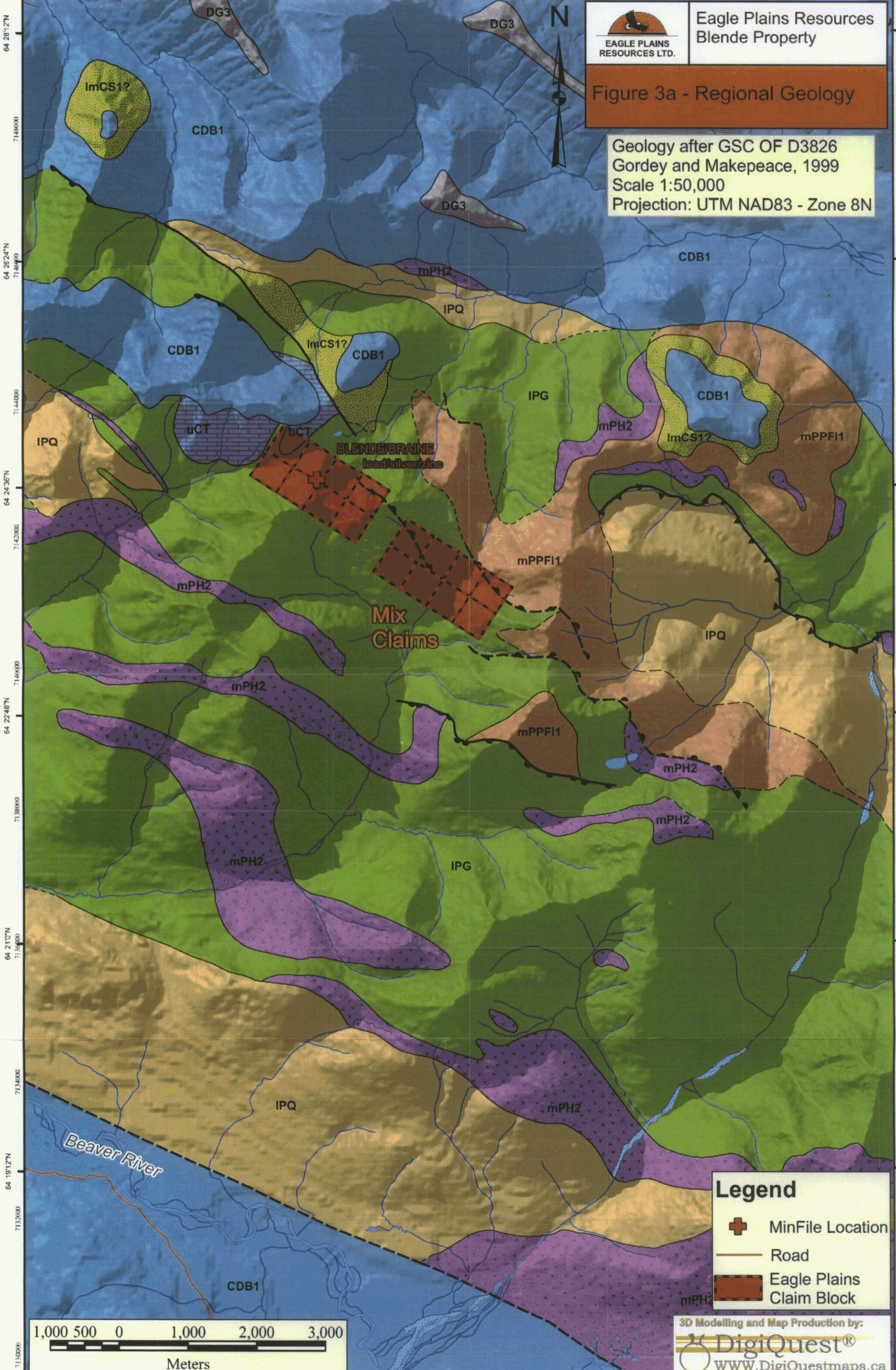
Extensional stresses following deposition of the Gillespie Lake Group created small local basins in which late Proterozoic sedimentary rocks were deposited. In the Blende area, these strata include shale, dolomite, siltstone and minor sandstone that are stratigraphically equivalent to the Pinguicula Group which Eisbacher (1981) mapped about 40 km northeast of the property.


Paleozoic limestone and dolomite unconformably overlie the Proterozoic units and cap several ridges in the area.

A 75 km long, east-west trending belt of dioritic to gabbroic sills and dykes is developed along the north side of the Kathleen Lakes Fault Zone. These intrusions are probably Late Proterozoic in age as they intrude Gillespie Lake Group and some Pinguicula Group strata but do not cut the Paleozoic platform carbonates. More than one age of intrusion may be present.

The dominant structures are broad folds and south-dipping thrust faults which strike east-west and are related to the Late Mesozoic to Early Tertiary Laramide Orogeny. The folds generally plunge gently to the east and overprint at least one phase of earlier folding that affects the Proterozoic strata. Several generations of high angle faults have been recognized, ranging from Middle Proterozoic age structures that cut only Wernecke Supergroup rocks to relatively recent structures that postdate the Laramide Orogeny thrust faults.

134 45'36"W 512000 134 42'0"W 514000 134 38'24"W 516000 134 34'48"W 518000 134 31'12"W 520000 522000 524000



 **Eagle Plains Resources  
Blende Property**

**Figure 3a - Regional Geology**

Geology after GSC OF D3826  
Gordey and Makepeace, 1999  
Scale 1:50,000  
Projection: UTM NAD83 - Zone 8N

64 28'12"N 7148000 64 26'24"N 7146000 64 24'36"N 7144000 64 22'48"N 7142000 64 21'0"N 7139000 64 19'12"N 7136000 7130000

7148000 7146000 7144000 7142000 7140000 7138000 7136000 7134000 7132000 7130000

7142000 7140000 7138000 7136000 7134000 7132000 7130000

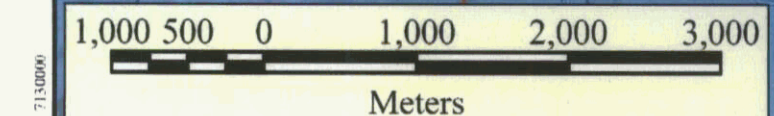
7140000 7138000 7136000 7134000 7132000 7130000

7138000 7136000 7134000 7132000 7130000

7136000 7134000 7132000 7130000


7134000 7132000 7130000

7132000 7130000



**Legend**

-  MinFile Location
-  Road
-  Eagle Plains Claim Block

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## Figure 3b - Regional Geology Legend

(after GSC OF D3826; Gordey and Makepeace, 1999)

### lower and middle Devonian

DG3

#### DG: GOSSAGE

Limestone and dolostone, light grey and dark brownish grey, fine to medium grained, mostly alternating dark and light coloured medium to thick beds.

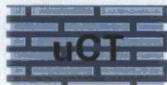
### upper Cambrian and lower Devonian

CDB1

#### CDB: BOUVETTE

Grey-and buff-weathering dolomite and limestone, medium to thick bedded; white to light grey weathering, massive dolomite; minor platy black argillaceous limestone, limestone conglomerate, and black shale; massive bluish-grey weathering dolostone.

### upper Cambrian



#### uCT: TAIGA

Striped yellow and orange weathering fine crystalline, light grey limestone; light grey weathering, thick bedded and massive dolostone; minor brown and green shale.

### lower to middle Cambrian



#### ImCS: SLATS CREEK

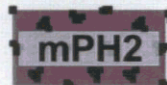
Rusty brown weathering, turbiditic, quartz sandstone with minor shale and siltstone; pale red weathering siltstone, sandstone, quartzite pebble and cobble conglomerate and limestone; maroon with green argillite with minor quartzite and limestone.

### middle Proterozoic

mPPFI1

#### mPPFI: PINGUICULA/FIFTEEN MILE (LOWER)

Basal siliclastic red laminates; thin bedded laminated and flasered limestone; laminated dolosiltite; massive white dolostone with wavy cryptalgal lamination, cross bedding, tepee structures, extensive dolomite veinlets and chert.



#### mPH: HART RIVER

Resistant dark weathering diorite and gabbro sills and dikes.

### lower Proterozoic

IPG

#### IPG: GILLESPIE LAKE

Dolostone and silty dolostone, locally stromatolitic, locally with chert nodules and sparry karst infillings, interbedded with lesser black siltstone and shale, laminated mudstone, and quartzose sandstone; local dolomite boulder conglomerate.

IPQ

#### IPQ: QUARTET

Black weathering shale, finely laminated dark grey weathering siltstone, and thin to thickly interbedded planar to cross laminated light grey weathering siltstone and fine grained sandstone; minor interbeds of orange weathering dolostone in upper part.

## Property Geology (Fig. 4 following page)

### **Stratigraphy**

Rocks on the Blende property have been tentatively subdivided into seven sedimentary units and one intrusive unit, as described below. A stratigraphic column has been included following Figure 4.

#### Quartet Group

Only the top 200 m of the Quartet Group succession is seen on the Blende property. This unit, designated Q2, is a monotonous sequence of black slate, phyllite and argillite with minor interbedded quartzite. The Q2 rocks exhibit a pervasive micaceous cleavage which fractures to create long indurated splinters in talus. Some mappers (Delaney, 1981 and Mustard et al, 1990) have reported that the upper contact of the unit grades stratigraphically into Gillespie lake Group sediments, while Roots (1990) has observed angular relationships between the two in an area 100 km west of the property. No contacts were observed in the immediate vicinity of Blende.

#### Gillespie Lake Group

The Gillespie Lake Group is subdivided into two units: a deep water clastic sequence; and, a shallow water predominately carbonate package. The lower unit (G1) is about 740 m thick and consists of repeated 1 to 5 m thick cycles containing maroon or green weathering mudstone and shale beds alternated with light orange weathering dolomitic sandstone horizons. The rocks have a striped appearance in outcrop and break to form flat, rhomb-shaped talus.

The upper unit (G2) is approximately 460 m thick and hosts the main zones of silver-lead-zinc mineralization on the Blende property. It mainly consists of thick bedded grey dolomite and dolomitic mudstone containing abundant domal and columnar stromatolite beds up to 4 m thick. Fine interbeds of sandstone, shale, mudstone and chert also occur throughout the section. Oolitic beds found in several locations near the middle of the section on the property and a thin green volcanic layer noted just above the G1-G2 contact in localities off the property may be useful marker horizons. G2 rocks generally weather buff-orange to brown and break into irregularly shaped boulders.

#### Pinguicula Group

Regionally, Roots (1990) observed that no single stratigraphic section of the Pinguicula Group is representative and did not further subdivide the unit. However, on the property, three distinct sequences were noted.

Unit P1 is a 50 m thick sequence of dark siliceous siltstone and fine sandstone with thin dolomitic mudstone interbeds. The unit discontinuously overlies G2 and was probably deposited in localized basins.

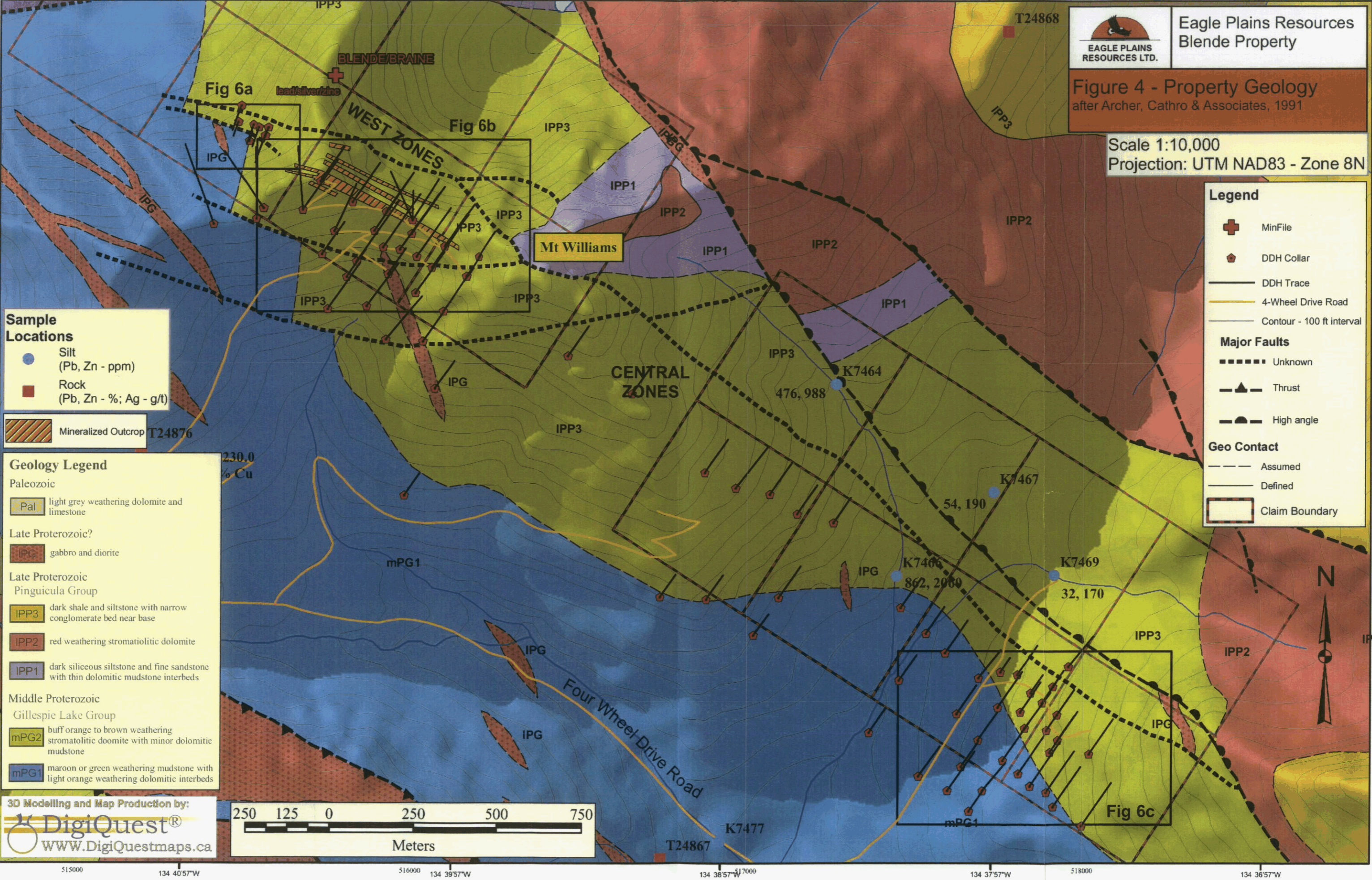
Unit P2 conformably overlies P1 or unconformably overlies G2. It is about 250 m thick and consists of red-brown weathering massive grey dolomite containing fine hair-like stromatolites with diagnostic small budding heads atop larger columns (Mustard et al, 1990).

Unit P3 is a 300 m thick section of dark grey weathering interbedded shale and siltstone. A narrow conglomerate horizon containing boulder- to pebble-sized clasts of gabbro and shale occurs near the base of the unit.

Several features of the Pinguicula Group pelitic rocks distinguish them from similar Quartet Group

Figure 4 - Property Geology  
after Archer, Cathro & Associates, 1991

Scale 1:10,000  
Projection: UTM NAD83 - Zone 8N



**Sample Locations**

- Silt (Pb, Zn - ppm)
- Rock (Pb, Zn - %; Ag - g/t)

Mineralized Outcrop

**Geology Legend**

**Paleozoic**

- Pal light grey weathering dolomite and limestone

**Late Proterozoic?**

- IPG gabbro and diorite

**Late Proterozoic Pinguicula Group**

- IPP3 dark shale and siltstone with narrow conglomerate bed near base
- IPP2 red weathering stromatiolitic dolomite
- IPP1 dark siliceous siltstone and fine sandstone with thin dolomitic mudstone interbeds

**Middle Proterozoic Gillespie Lake Group**

- mPG2 buff orange to brown weathering stromatiolitic dolomite with minor dolomitic mudstone
- mPG1 maroon or green weathering mudstone with light orange weathering dolomitic interbeds

**Legend**

- ⊕ MinFile
- ◆ DDH Collar
- DDH Trace
- 4-Wheel Drive Road
- Contour - 100 ft interval

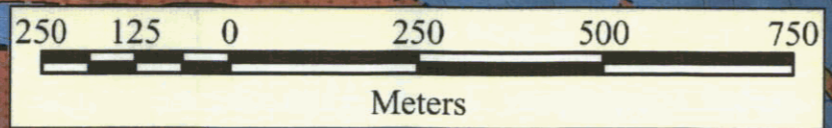
**Major Faults**

- ⋯ Unknown
- ▲— Thrust
- ▲— High angle

**Geo Contact**

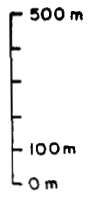
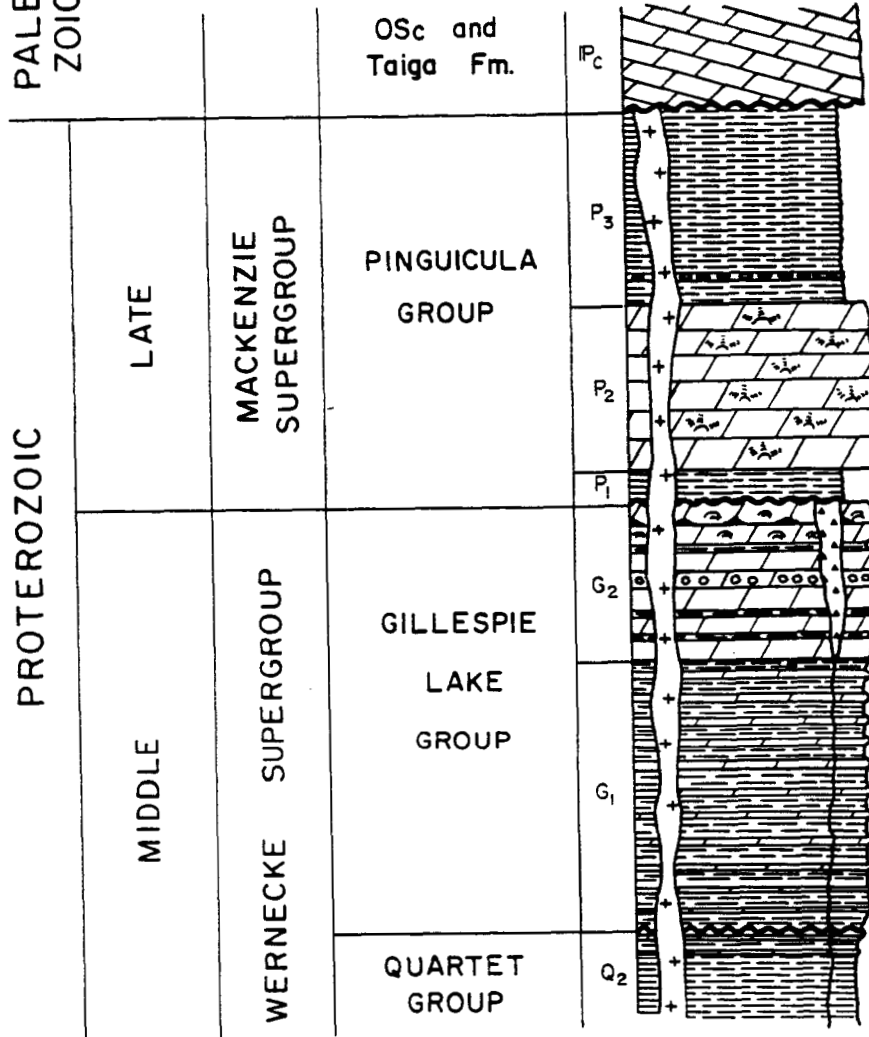
- Assumed
- Defined
- Claim Boundary

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PALEO-ZOIC

PROTEROZOIC



- unconformity
- dolomite, dolomitic sandstone and mudstone
- shale and siltstone
- domal and columnar stromatolites
- fine 'budding' stromatolites
- oolites
- conglomerate
- chert
- mineralized breccia
- diorite or gabbro

# STRATIGRAPHIC COLUMN

BLLENDE PROPERTY

strata, including greater colour variation and presence of thin carbonate interbeds in the younger group. Pinguicula Group rocks also tend to break into small chips rather than the splintery talus characteristic of the older unit (Roots, 1990).

### Paleozoic Carbonates

Approximately 150 m of light grey weathering carbonate strata (Unit Pc) unconformably cap the darker coloured Proterozoic assemblage in the Blende area. The base of the Paleozoic unit is marked in some areas by a thin bedded dolomite sequence tentatively correlated to the Cambrian Taiga Formation (Norris, 1982). These rocks are occasionally brecciated and exhibit siderite replacement along laminae and in fractures. Most of the Paleozoic sequence is comprised of relatively massive, light grey weathering, fine-grained dolomite with abundant open spaces that are occasionally filled with quartz. These rocks are believed to range from Cambrian to Devonian in age and are analogous to GSC units CDb or OSc elsewhere in the Wernecke Mountains.

### Intrusive Rocks

A suite of dense fine to medium-grained gabbros occur periodically in drill core from both the East and West Zones and have been mapped regionally by Roots et al. as dykes, sills and plugs of "hornblende diorite" intruding rocks of the Gillespie Lake Group. On the Blende property these are amphibole (hornblende?) plagioclase gabbros with no modal quartz. Thin section examination of a core sample from the West Zone shows a secondary mineralogy of about 40% carbonate, 25% chlorite, 15% plagioclase, and 10% opaque minerals (pyrrhotite, specularite, chalcopyrite). Minor amounts of orthopyroxene (5%), quartz (4%) and sericite (1%) were also noted. The plagioclase is oligoclase (Ab 90-70).

The mafic intrusions observed in drillcore drill core are variably bleached and altered to serpentine-chlorite-talc-brucite-siderite with trace amounts of leucosene. A relatively extensive body of gabbro was cut on section 10+400E and is demonstrated to be subhorizontal on section and up to about 15 metres thick. It shows relatively little deformation and is interpreted to crosscut and therefore post-date the mineralization on this section. This gabbro can readily be correlated with surface exposures which show that this body dips approximately to the east at about 30 degrees, is undeformed and can be traced in outcrop east as far as 10+600E. Both contacts of this gabbro are locally exposed and show narrow (5-10cm) sheared contacts with country rock indicating that intrusion did not entirely post-date deformation. This gabbro can be traced on drill section east to 10+600E at lower elevations confirming an easterly dip.

Other intercepts show gabbro with varying degrees of shearing deformation indicating their emplacement prior to the completion of the compressive tectonic episode. Despite relatively common shearing, siderite veining and alteration, Pb-Zn mineralization cannot definitively be shown to occur within gabbro. Although contacts are often sheared and altered, chilled margins have been preserved, and chilled and brecciated margins (locally hyaloclastitic) are common. Contact metamorphism and alteration surrounding the contact aureoles of gabbroic bodies varies in extent generally in proportion to the thickness/volume of the gabbro.

Veinlets of talc-brucite and serpentine are most common and extensive both within the gabbro and its aureole and varying degrees of bleaching (decarbonation reactions) are common and alter the typical buff-dark grey carbonates to pale shades of green and tan. The contacts of several of the gabbro intrusions appear to terminate against the major structural zones (sections 9+900E, 10+100E) suggesting that earlier intrusions may be controlled by the fault zones. This might indicate that gabbro dykes were intruded along normal faults through the extensional tectonic regime and later deformed in these same zones along the

reactivated faults. The relatively less deformed sills and laccoliths on the Blende property were probably intruded later than the dykes. This variation in degrees of deformation of gabbro may indicate the relative ages of intrusion relative to deformation and may also indicate that intrusion of relatively homogeneous magma occurred pen contemporaneously with to deformation. Pb age dating by Godwin (Lutes, 1991) from galenas clearly associated with this sill suggest an age of 0.7-0.9 Ga. This is much younger than dates for the mineralization at 1.54 Ga.

## Mineralization (Appendix III, Appendix IV)

Most silver-lead-zinc mineralization discovered to date on the Blende property occurs where a Middle Proterozoic age fault complex cuts Unit G2, the 460 m thick dolomite sequence that comprises the upper part of the Gillespie Lake Group. The fault complex is up to 350 m wide and is composed of a strong footwall break (Footwall Fault) plus several weaker structures in the hanging wall and footwall. All of the faults strike between 105 and 110°, dip to the south at about 65° and exhibit a few metres of reverse offset. The mineralization has been intermittently traced in outcrop and float over a 6000 m strike length, with the largest gap occurring where the complex is capped by the younger Pinguicula Group shales or pulled apart by cross faults. At the extreme west end, the faults cut into the underlying Unit G1 shales and appear to rapidly horsetail and pinch out. To the east they are cut off at surface by a thrust fault.

The mineralization is fracture controlled with the highest concentration occurring within 1 to 2 m wide breccia zones developed along the main faults. Fracture densities in the surrounding wallrocks gradually decrease as distance from the faults increase. Primary mineralogy consists of medium-grained galena and sphalerite with minor pyrite, traces of chalcopyrite and rare tetrahedrite in a gangue of secondary dolomite, siderite and minor quartz. Sphalerite is generally pale grey or honey coloured, which makes the zinc grade difficult to visually estimate. Aside from minor bleaching, the mineralized rocks appear to be unaltered. Unmineralized rocks in the footwall of the complex contain abundant quartz-siderite veinlets which gives them a dark brown colour and makes them resistant to weathering. Well mineralized material weathers recessively and tends to break into smaller than fist-sized fragments that are usually covered by coarser unmineralized talus. The best exposures occur on steep slopes and ridge crests near the west end of the complex. At higher elevations, much of the mineralization is partially oxidized to depths of 50 to 100 m below surface but on the glacially scoured lower slopes, fresh sulphides are common at surface.

Samples from breccia zones typically assay between 8 and 20% Pb+Zn while the surrounding fractured wallrocks normally grade between 1 and 5% Pb+Zn. On average, mineralized rocks contain about 17 g/t Ag for each 1% lead with the ratio for individual samples typically ranging between 7 and 30 g/t Ag per 1% lead. Preliminary metallurgical tests suggest that the silver will report with the lead concentrate. There appears to be some metal zoning in the deposit with increasing copper values and silver-to-lead ratios toward the base of Unit G2; however, this trend is based on only a few exposures and has not been tested by drilling. Minor metal analysis indicates there are no significant concentrations of detrimental elements and that cadmium and germanium are possible smelter credits. Gold contents are negligible (less than 0.03 gpt).

A sample of galena from Blende was submitted to the University of British Columbia for lead isotope analysis and returned a model age of 1.4 bya (Godwin et al, 1988).

Twelve zones of mineralization have been discovered within or adjacent to the fault complex and have been chronologically numbered in the order that they were first discovered by Cyprus Anvil or Archer, Cathro workers. They have been grouped into four packages: the West Zones, which were the target of the 1988, 1990, 1991 and 1994 drilling, lie west of the Pinguicula Group shale cap; the Central Zones lie between the cap and a large landslide on Dean Creek; the East Zones cover a 600 by 200 m area east of the landslide; and, the Far East Zones are located 2 km farther east and are separated from the other zones by a prominent ridge again capped by younger rocks.

## West Zones (Fig. 6a, 6b, 6d Appendix IV)

Surface mapping has recognized six zones (1,2,5,6,7 and 9) which collectively comprise the West Zones within an area that is approximately 900 m long and ranges from 50 to 350 m in width.

Even though this is the best exposed and most intensely explored part of the property, the dimensions, average grade and continuity of zones were difficult to determine from surface work because most mineralized exposures are on cliffs and the rest of the area is covered with a thick layer of talus. All of the 1990 drilling was directed toward a 600 m section covering the central and eastern parts of these zones. The following paragraphs describe results of surface exploration and briefly summarize drill results.

The widest, most consistent exposures of mineralization on the property occur in Zone 5 adjacent to the Footwall Fault. In 1984 systematic chip sampling of outcrops and hand trenches was conducted over a 750 m strike length along the zone (through a vertical range of 200 m) and averaged 2.2% Pb, 3.1% Zn and 44.8 g/t Ag across 27.5 m. The real width of the zone is somewhat greater than the sampled width because talus obscured part of the mineralization at several sites. In most exposures, galena and sphalerite are the main sulphide minerals but, at the west end where the zone cuts a diorite dyke, chalcopyrite is common. A 1989 chip sample from the chalcopyrite-rich area (which has not been drill tested) returned 3.0% Cu, 8.7% Pb, 1.9% Zn and 1038.8 g/t Ag over 2.8 m.

No systematic surface sampling has been done on the other zones because of the lack of exposure. However, rock specimens and isolated chip samples returned encouraging results with numerous values exceeding 10% Pb+Zn.

Soil geochemical surveys returned strongly anomalous values for lead, zinc and silver for the length of the zones. Copper response gradually increased from near background over the eastern part of the zones to strongly anomalous at the western end.

In 1988 three holes were drilled in a fan from a single site (Fig. 6b) with the intention of testing Zone 5. Surprisingly, the best intersections were obtained near the drill collars from mineralized zones that are obscured at surface by talus and Unit PI shale cap rocks. Intersections are tentatively correlated to Zones 6, 7 and 9. The best assays came from Hole 88-2 which cut obliquely across the mineralized zones and averaged 5.2% Pb, 2.8% Zn and 108.9 g/t Ag over 81.7 m, including 19.8 m that graded 12.3% Pb, 4.4% Zn and 284.8 g/t Ag.

The 1990 and 1991 drilling was done on a series of section lines to the east and west of the 1988 holes. This work confirmed that the mineralization continues to depth and along strike and showed that it occurs in three main bands. The band closest to the Footwall Fault corresponds to Zone 5; the middle one, which is the weakest of the three, appears to be the downdip extension of Zones 1 and 6; and the band farthest into the hanging wall, which is the widest and best mineralized in most sections, projects to Zones 7 and 9 at surface. Zone 2, which is even farther into the hanging wall, was only tested by a few holes and was weakly mineralized.

The West Zone is estimated to contain an in-situ geological resource of about 15.3Mt of variably oxidized galena-sphalerite-pyrite which grades at 2.14% PbS, 1.09% Pg (non-sulphide), 2.25% ZnS, 0.79% Zn (non-sulphide) and 1.97 opt Ag (Lutes 1991). The West Zone mineralization is amenable to open pit mining methods. Potential pit designs generated in-house by Billiton Metals Canada suggest that a large portion of the West Zone is accessible at a stripping ratio of about 4.5: 1.

In 1994 Archer Cathro completed seven diamond drillholes that tested a previously undrilled area of relatively high grade mineralization located directly west of the West Zone Reserve block. The drilling successfully extended the West Zone mineralization for approximately 150 meters along strike and returned some significantly higher silver and copper values in comparison to other parts of the deposit.

### Central Zones

The Central Zones (Zones 3, 4, 8 and 10) occur intermittently over an 800 m strike length on a long talus slope between the top of Mount Williams and Dean Creek. Exposure is poor and mineralization is confined to a few float trains and scattered outcrops.

Zones 3, 4 and 8 are a series of subparallel sphalerite-galena veins up to 1 m wide. One of the veins in Zone 4 was sampled in 1989 and returned 1.1% Pb, 14.8% Zn, 19.2 g/t Ag and 0.02% Cu over 0.6 m. Zone 10 lies about 900 m northeast of the fault complex and consists of a 20 by 10 m area containing numerous, 1 to 3 cm in diameter, malachite- and limonite-stained vein fragments, a composite sample of which assayed 1457 g/t Ag with only 0.1% Pb, 0.2% Zn.

Geochemical surveys returned strong zinc and moderate lead and silver response in an 800 m long by 400 m wide anomaly. The most intense values are aligned in two subparallel bands forming the core of the anomaly.

1991 drilling by Billiton returned only scattered intercepts of weak mineralization through the Central Zone area.

### East Zones (Fig. 6c Appendix IV)

The East Zones include Zone 11 on the east side of Dean Creek and an unnamed copper occurrence located approximately 800 m to the north.

Zone 11 is approximately 600 m long and 200 m wide and consists of hydrozincite-stained, sphalerite- and galena-bearing rock fragments mixed with ferricrete boulders and soil on a gentle, lightly vegetated slope. There are no outcrops in the main part of the zone and bulldozer trenching did not reach bedrock due to frost in the soil. Mineralized boulders up to 2 m in diameter were exposed in the trenches. Selected float specimens returned up to 36.1% Pb, 11.6% Zn and 438.8 g/t Ag, while chip samples across two 1.5 m wide mineralized shear zones exposed on a steep slope at the eastern edge of the zone assayed up to 0.06% Pb, 7.9% Zn and 6.9 g/t Ag. Soil sampling over this zone returned consistently strong zinc and moderate to strong lead and silver values.

The copper occurrence was discovered in 1990 and is comprised of sparse chalcopyrite, malachite and azurite in 10 cm to 1 m wide quartz veins cutting Unit P2 dolomite. Well mineralized specimens (greater than 1.0% Cu) returned low precious metal values (less than 34 g/t Ag and 0.07 g/t Au). No lead or zinc mineralization was seen.

The East Zone mineralization was tested by 34 diamond drillholes as part of the 1991 Billiton program. Billiton calculated an in-situ geological resource of about 4.3Mt of relatively non-oxidized sphalerite-galena-pyrite which grades at 1.12% PbS, 0.19% Ph (non-sulphide), 2.99% ZnS, 0.06% Zn (non-sulphide) and 0.44 opt Ag (Lutes 1991). The East Zone mineralization is also amenable to open pit mining methods, at a stripping ratio of about 3:1

### Far East Zones

The Far East Zones consist of scattered hydrozincite-stained boulders in two 25 m wide float trains that are 100 m apart and are collectively referred to as Zone 12. The float trains occur within a broad talus fan at the head of a cirque. The boulders range from 5 to 30 cm in diameter. Specimens typically contain abundant galena and sphalerite in fractures and assayed up to 8.7% Pb, 17.6% Zn, and 31.5 g/t Ag. This area was not covered by grid soil geochemistry but stream sediment samples collected downstream from it returned the highest lead and zinc values obtained anywhere on the property.

## **Structure and Mineralization**

Property scale mapping by Archer Cathro and Billiton suggests that the G1-G2 units as well as the unconformably overlying P1-P3 units form a broad anticline which plunges easterly at generally 35-45 degrees. A single pressure solution, or fracture cleavage is variably developed through the area, generally dips steeply to the southwest and appears to be axial planar to folding. Extensive faults are mapped through the area. Many of these are thrust or strike slip faults which have regional extent and are of uncertain age. They juxtapose differing rock types which are difficult to accurately distinguish on a local scale. Drilling on the property has been exclusively within the G1 and G2 units.

Shear zones are narrow zones of severe deformation across which there has been significant zone parallel displacement. They are typically planar on the large scale, although localized variations in strike are characteristic and they commonly possess a length to width ratio greater than 5:1 (Bursnall, 1989). Ductile shear zones show a continuously changing deformation state between boundaries, brittle shear zones (faults) exhibit separation across discrete discontinuities, and those shear zones which are intermediate in character are referred to as brittle-ductile shears and typically show a complex interplay between ductile and brittle elements. Most vein-hosted deposits fall into the latter shear zone type.

Mineralization on the Blende Property comprises a simple assemblage of pyrite, sphalerite and galena with local rare grains of chalcopyrite and tetrahedrite which are hosted by siderite- or dolomite-quartz veins and veinlets. These tend to follow a steep southwest (grid south) dipping pressure solution or strain slip cleavage which is variably developed in lithologies of both the Gillespie Lake Group and the unconformably overlying rocks. Concentrations of mineralized veins and veinlets are focused within shear zones which generally dip steeply to the southwest and verge to the northeast and, at least in the West Zone, are interpreted to be partially controlled by an earlier generation of high angle listric normal faults. Locally, shear zone boundaries dip at shallower angles than the steeply dipping mineralized S-fabric suggesting that bounding shear planes (C-fabric) are only locally developed but can effectively control shear zone boundaries and mineralization. Ductile shear is generally pervasive through the East Zone which is about 500 metres lower in elevation than the West Zone. This deeper elevation may account for the increased ductile strain observed in the East Zone.

In the West Zone the earliest structures observed in drill core are dewatering structures and tensional fractures with occasional horst and graben structure with fracture fillings of siderite-quartz carrying local minor grains of galena. Several periods of extension and veining are often indicated by microfaulting of earlier veins and crosscutting vein relationships.

Dewatering structures are common in laminated to thinly bedded dololomite-dolosiltites and appear to be transgressive into a pressure solution cleavage which is axial planar to hand scale buckle folds. These structures are largely indicative of a compressive tectonic regime whereas dewatering structures are more probably related to compaction and diagenesis. This pressure solution cleavage is locally transitional into a heterogeneous strain slip cleavage which is commonly deformed within shear zones of variable scale. Cleavage dips are generally consistent at about 70 degrees to the southwest. Mapping in the West Zone shows locally developed low angle shear planes developed in the dark muddy tops of dololomite beds. This structure dips generally 30-40 degrees to the southwest and is rarely mappable but can be identified in drill core. The implicit angle between these S and C fabrics is 30-40 degrees. C is assumed to be parallel to the plane of shear and the walls of the shear zone and S indicates the plane of flattening. The angle between cleavage and shear zone boundaries is clearly illustrated by section 10+400E which shows an angle of -40 degrees between cleavage measurements in drill core and the 1% Pb+Zn envelope which outlines the mineralization. This angle appears to decrease to the west through 10+300E and 10+200E (-30 degrees) to

10+100E where the mineralized shears appear to be wholly controlled by steeply dipping structures. An indication of strain rate is given by the angle between Sand C fabrics. Initially, the angle between C and S fabrics is about 45 degrees. However, with progressive deformation, the S fabric intensifies, stretches and rotates towards parallelism with the C plane. At very large strains, the C and S planes may be parallel and determination of the shear sense becomes problematic. Generally, the structures observed and measured in the West Zone reflect a low strain rate with much brittle fracturing and poorly developed shear planes. Pervasive and locally intense ductile shear in the East Zone indicates a higher strain rate. This area is at a crustal level that is -500 metres deeper than the West Zone mineralization and overlies a shallow southwest dipping thrust fault which may have channeled fluids into these structures.

A set of joints is erratically developed along the crest of Mt. Williams in the West Zone. These appear to be subvertical a-c joints which trend generally to the northeast and have subvertical dips.

Mineralization is introduced along, and spatially controlled by pressure solution cleavage and strain slip cleavage. Higher grades are directly related to the concentration and width of sulphide infillings. Veins of massive sulphide return the highest grades (generally >10% Pb+Zn) but are usually less than one metre in width. Clasts in these sulphide-rich vein breccias are generally angular and lithologically identical to the country rock at the vein margins. This suggests stoping of these fragments with little or no transport along the vein structure. Multiple brecciation and mineralization is common.

High grade sulphide-rich vein breccias are usually surrounded by peripheral shear hosted veins and veinlets which return lower grade mineralization. stockwork mineralization mainly occurs in rocks with brittle deformation generally near surface between sections 10+200-10+400. A variety of crosscutting relationships for the veinlets can be observed in drill core.

## ENVIRONMENTAL

As part of the work carried out by Archer Cathro and Billiton Metals, some environmental baseline studies were undertaken. Water quality surveys were initiated in 1990 and hydrometric monitoring in was done in 1991. The data consistently shows that there are no water quality anomalies in the surface waters draining the Blende property and heavy metal concentrations continue to be low or non-detectable. This is directly related to the carbonate rock which hosts all mineralization on the Blende property and effectively buffers the pH of streams draining the area. Low metal contents occur even in streams which drain the most heavily oxidized areas of Mt. Williams. The potential for any appreciable acid drainage from mine waste waters or stockpiled ores is therefore considered to be minimal. Mill tailings would be easily treated and stored in ponds, and would have relatively low associated decommissioning costs.

## 2002 WORK PROGRAM

Eagle Plains Resources 2002 work program consisted of a one day property examination by Tim Termuende, P. Geo. The purpose was to assess property infrastructure including road access, core storage, drillsite locations, camp equipment and materials. Mobilization to the property was by a Trans North Helicopters Bell 206 based in Whitehorse, Yukon. In 2002 Eagle Plains also undertook acquired all available data from past work programs on the Blende property including programs by Archer Cathro and Billiton Metals Canada. A data compilation using a Geographic Information System was begun in 2002, and was used in part to form the conclusions for this report.

**2002 PROGRAM RESULTS (Appendix V, Plates 1 — 4)**

The one day reconnaissance to the Blende property focused on evaluating property infrastructure. The core is securely stored. A number of drill pads are constructed and unused in the area of the 1991 drilling. The winter road appears to be in relatively good condition.

## CONCLUSIONS AND RECOMMENDATIONS

The Blende deposit consists of silver-lead-zinc mineralization within a dolomitic carbonate host. The mineralization is contained in an anastomosing, structurally controlled vein system which has been traced on surface for more than 6km. The mineralized zone can be up to 200m wide and occurs where a Middle Proterozoic age fault complex cuts a 460 meter thick dolomite sequence of the Gillespie Group. Work by Archer Cathro and Billiton Metals Canada Limited has delineated a reserve of 19.4 million tonnes grading 55.9 g/t silver and 5.85 % lead-zinc, located in the two zones. On surface, the deposit is outlined by an open-ended 6.0 km-long soil anomaly which contains values up to 10 000 ppm Zn. Most geophysical methods including IP, VLF and Max-Min EM work exceptionally well due to the inert nature of the host dolomite. Diamond drilling carried out in 1991 by Billiton Metals Canada Ltd. delineated two separate zones (East Zone and West Zone), and established that the deposit is non-acid generating and could be mined by open pit methods, with a stripping ratio of 2.1:1. The deposit consists of a near-surface steeply dipping tabular body which is conveniently located on a ridge crest. Preliminary metallurgical studies indicated no significant concentrations of deleterious elements.

Although the deposits were modeled using open pit methods, it may also be feasible to mine higher grade sections of the orebody using smaller scale underground methods. Numerous high-grade intersections have been reported by past operators, including hole 88-02 which assayed 282 g/t (8.22 oz/t) silver, 12.2% lead, and 4.4% zinc over 19.8m from a depth of 70.7 to 90.5m. Hole 88-03 returned 8.5m grading 550.1 g/t (16.04 oz/t) silver, 15.3% lead and 4.6 % zinc from 118.0 to 126.5m, and hole 90-15 intersected 9.5m grading 351.2 g/t (10.24 oz/t) silver, 14.11% lead, and 6.59% zinc from 60.1 to 69.6m. Hole 94-81 contained 14.9 m of mineralization which assayed 228.4 g/t (6.66 oz/t) silver, 9.71% lead, 5.48% zinc, and 0.78% copper from 9.2m to 24.1m, while hole 94-84 intersected 8.5m which returned 136.1g/t (3.97 oz/t) silver, 6.74% lead, 3.65% zinc, and 2.43% copper from 45.5-54.0m. Block modeling by Billiton in 1991 indicates very good continuity between mineralized sections.

Diamond drillhole B91-60 intersected bonanza grade silver mineralization (Fig. 6e Appendix IV). The zone consisted of a series of tetrahedrite-quartz veins with accessory sphalerite, galena and chalcopyrite. The interval returned a value of 501.25 g/t (14.62 oz/t) Ag over 7.89 meters from 261.41 — 269.30 meters. Within this interval was a 1.89 meter sample that returned 1532.6 g/t (44.70 oz/t) Ag. The host for the mineralization was a more silt rich to shale carbonate unit located beneath the structural break of the lower zone dislocation. It is believed that this mineralization may represent another higher grade ore type located beneath the zone already delineated by Billiton.

The Blende property should continue to be explored for high grade silver mineralization. The initial focus should be on evaluating the continuity of the high grade zone intersected in B91-60. Holes B91-43 should be lengthened to about 450meters total depth. If favorable mineralization is intersected other holes in the immediate area (B90-18, B91- 45) should also be lengthened. Additional drilling should focus on confirming continuity and establishing tonnage potential downdip and northwest of the 1994 drilling. All of the digital data from the 1991 Billiton study is currently compiled into a robust database and should be reinterpreted using an underground mining model focused on exploiting the higher grade silver intersections. The Far East zone area should also be thoroughly prospected and mapped. Finally drainages in the area surrounding the Blende should be covered with silt geochemical sampling to determine the presence of anomalous silver values.

A proposed budget for this work follows:

Diamond Drilling: 2000 meters @ \$100.00/meter .....	\$200,000.00
Personnel.....	\$25,000.00
Helicopter Support .....	\$30,000.00
Mob/Demob.....	\$5,000.00
Analytical.....	\$10,000.00
Meals/Grocery .....	\$6,000.00
Truck/Equipment Rentals .....	\$5,000.00
Fuel (Diesel, Gasoline, Propane) .....	\$4,000.00
Supplies.....	\$4,000.00
Miscellaneous.....	\$6,000.00
Report/Reproduction: includes computer modelling.....	<u>\$5,000.00</u>

Sub-Total : \$300,000.00

10% Contingency : \$30,000.00

TOTAL: \$330,000.00

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Appendix I

Statement of Qualifications

## CERTIFICATE OF QUALIFICATION

I, Charles C. Downie of 122 13<sup>th</sup> Ave. S. in the city of Cranbrook in the Province of British Columbia hereby certify that:

- 1) I am a Professional Geoscientist registered with the Association of Professional Engineers and Geoscientists of British Columbia (#20137).
- 2) I am a graduate of the University of Alberta (1988) with a B.Sc. degree and have practiced my profession as a geologist continuously since graduation.
- 3) This report is supported by data collected by Eagle Plains employees during fieldwork as well as information gathered through research.
- 4) I hold 125,000 shares of Eagle Plains Resources; I Hold an option to purchase a further 250,000 Common Shares of Eagle Plains at \$0.10 per share.

Dated this 28th day of February, 2003 in Cranbrook, British Columbia.

Charles C. Downie, P.Geo.

### Certificate of Qualification

I, Chris Gallagher of 1-622 Somerset St. West in the city of Ottawa in the Province of Ontario hereby certify that:

- 1) I am a graduate of Carleton University (1999) with an M. Sc. Degree and have practiced my profession as a geologist and GIS analyst continuously since graduation.
- 2) Interpretations in this report are supported by data collected during fieldwork as well as information gathered through research.

Dated this 1<sup>st</sup> day of February, 2003 in Ottawa, Canada.

A handwritten signature in black ink, appearing to read 'Chris Gallagher', followed by a long horizontal line extending to the right.

Chris Gallagher, M. Sc.

Appendix II  
Statement of Expenditures

## STATEMENT OF EXPENDITURES

The following expenses were incurred on the MIX Claims, Watson Lake Mining Division, for the purpose of mineral exploration between the dates of May 01 2002 and January 30 2003.

## PERSONNEL

T. Termuende, P. Geo: 5 days x \$450/day ..... \$2250.00

## OTHER

Consultants Gallagher and Associates incl. field map preparation, digital data - 3d data sets:.	\$1385.82
Bernie Kreft and Associates : geological, truck rental .....	\$401.25
Meals/Accommodation/Groceries: .....	\$321.32
Project Management (Toklat Resources):.....	\$351.33
Fuel: .....	\$242.52
Airfare: .....	\$296.53
Helicopter Charter(Trans North): .....	\$1206.79
Drafting/Repro.....	\$865.83
Filing Fees .....	\$320.00
Report/Reproduction.....	<u>\$3500.00</u>
	TOTAL: \$11,141.39

Total Expenditures for 2002 Exploration Program: \$11,141.39

Appendix III

Table 1  
Significant Drill Intersections

YUKON ENERGY, MINES  
& RESOURCES LIBRARY  
P.O. Box 2703  
Whitehorse, Yukon Y1A 2C6

TABLE 1:  
SIGNIFICANT DRILL INTERSECTIONS BLENDE PROPERTY

Hole	Interval (m)	Width (m)	Pb (%)	Zn (%)	Ag (g/t)
88-1	4.30 - 28.99	24.69	3.5	3.3	46.6
	including: 27.4 - 29.0	1.6	17.1	13.7	211.5
	83.48 - 85.89	2.41	7.9	6.4	190.3
	129.20 - 132.31	3.11	4.7	2.2	42.2
88-2	8.81 - 90.50	81.69	5.2	2.8	108.9
	including: 8.81 - 10.4	1.59	21.2	6.4	370.3
	72.24 — 78.33	6.09	17.8	5.2	499.6
	207.90 - 209.70	1.80	3.4	3.6	93.6
88-3	3.69 - 135.88	132.19	3.7	1.8	88.8
	including: 117.96 — 119.48	1.52	25.8	9.67	1724.6
	119.48 — 121.01	1.53	31.9	9.02	627.4
	227.72 - 230.70	2.98	2.4	2.8	27.4
90-4	53.64 - 77.72	24.08	5.1	3.1	47.7
	95.74 - 119.45	23.71	2.8	1.4	60.0
	129.08 - 135.09	6.01	7.9	2.6	165.6
	218.88 - 224.79	5.91	5.9	2.2	28.1
90-5	58.55 - 88.91	30.36	3.2	3.3	51.4
	114.00 - 126.95	12.95	0.6	3.1	7.9
90-6	68.73 - 92.99	24.26	7.6	2.4	108.0
	252.37 - 257.01	4.64	1.1	3.2	15.8
90-7	217.99 - 241.98	23.99	2.7	1.5	76.8
	including: 233.0 — 236.0	3.0	5.47	1.12	248.6
90-8	49.01 - 60.02 (hole caved and was abandoned at 119 m)	11.01	1.6	1.6	20.2
90-9	15.00 - 26.91	11.91	7.1	8.2	118.6
	45.99 - 58.00	12.01	1.8	0.9	24.7
	67.36 - 84.92	17.56	5.6	2.2	71.7
90-10	29.99 - 37.89	7.90	4.2	7.8	165.6
	90.50 - 94.34	3.84	2.0	5.7	31.9
	155.66 - 176.84	21.18	3.9	1.5	28.8
90-11	16.95 - 52.73	35.78	2.0	3.7	32.2
	151.15 - 158.80	7.65	4.8	5.4	133.7

Hole	Interval (m)	Width (m)	Pb (%)	Zn (%)	Ag (g/t)
90-12	112.99 - 115.98	2.99	0.5	4.4	10.6
	242.99 - 267.98	24.99	1.8	3.0	37.4
90-13	132.01 - 141.00	8.99	0.5	4.3	14.7
	250.79 - 252.89	2.10	0.8	4.0	8.2
90-14	100.00 - 110.92	10.92	0.2	3.0	9.9
	212.90 - 215.10	2.20	6.0	2.6	46.6
	230.92 - 235.21	4.29	1.6	4.9	11.3
90-15 including:	35.0 - 104.85	69.85	5.1	2.3	131.0
	35.0 - 41.0	6.0	14.8	6.1	395.6
	60.08 — 69.55	9.47	14.11	6.6	395.9
	103.36 — 104.85	1.49	12.2	7.11	432.0
	201.75 - 216.99	15.24	3.2	4.4	33.6
	240.43 - 257.01	16.58	1.7	1.4	22.6
90-16	7.16 - 16.00	8.84	1.6	0.8	18.2
	31.00 - 43.01	12.01	2.8	1.7	31.9
	65.99 - 104.70	38.71	3.0	0.9	23.3
90-17	75.90 - 84.31	8.41	10.1	3.2	66.9
	204.40 - 206.59	2.19	3.7	2.2	19.9
90-18	26.00 - 32.00	6.0	2.1	0.8	34.6
	91.35 - 133.01	41.66	1.5	1.5	21.6
91-19	73.5 - 93.35	19.85	5.0	4.31	52.8
91-25	41.80 - 74.80	33.0	2.03	2.33	18.5
	68.80 - 71.80	3.0	2.03	4.40	57.6
91-30	3.66 - 24.66	21.0	1.91	0.91	17.8
	30.66 - 33.66	3.0	2.84	0.38	75.1
91-32	7.32 - 17.42	10.1	1.95	2.39	20.2
91-33	372.92 - 384.92	12.0	0.22	1.12	109.0
91-38	4.40 - 10.40	6.0	2.39	8.22	38.1
91-39	32.0 - 38.0	6.0	3.49	5.01	36.3
	53.0 - 86.0	33.0	2.23	2.24	19.2

Hole	Interval (m)	Width (m)	Pb (%)	Zn (%)	Ag (g/t)
91-40	9.8 - 15.8	6.0	3.82	1.43	41.1
	173.2 - 176.2	3.0	1.59	0.63	17.1
	194.1 - 197.1	3.0	1.78	3.87	28.8
91-41	57.0 - 72.0	15.0	4.89	3.39	63.8
91-43	80.0 - 92.0	12.0	2.08	0.29	25.7
	101.0 - 104.0	3.0	2.20	0.14	50.7
	122.71 - 145.50	22.79	4.03	0.46	86.7
91-45	52.40 - 146.0	93.6	2.15	1.42	50.7
91-47	66.75 - 76.5	9.75	1.92	1.50	19.5
	108.25 - 120.25	12.0	1.58	0.53	24.3
	131.06 - 136.85	5.79	1.68	0.40	26.0
	145.56 - 189.0	43.44	1.95	6.80	51.4
	180.9 - 189.0	8.1	3.07	12.0	102.2
91-51	148.4 - 170.1	21.7	1.27	1.35	49.4
	176.1 - 191.1	15.0	1.64	1.85	37.0
91-54	8.15 - 19.8	11.65	1.94	0.58	33.3
	181.05 - 184.05	3.0	2.49	0.31	98.1
	191.4 - 193.25	1.85	2.64	0.30	43.5
	204.9 - 212.52	7.62	2.33	1.65	22.6
91-55	54.5 - 56.0	1.5	1.18	1.85	23.7
91-57	227.65 - 233.65	6.0	2.01	1.86	39.8
91-60	110.0 - 120.0	10.0	2.44	1.06	36.0
	125.58 - 127.58	2.0	2.4	3.26	77.1
	138.77 - 148.0	9.23	2.97	4.05	241.4
	261.41 - 269.3	7.89	0.44	0.08	501.3
	including: 261.41 - 263.3	1.89	1.28	0.21	1532.6
91-65	3.05 - 6.4	3.35	3.29	1.63	26.7
91-68	13.2 - 14.71	1.51	10.6	4.5	101.8
	25.25 - 81.3	56.05	2.41	3.02	23.7
	36.5 - 41.5	5.0	12.68	7.19	128.2
91-75	105.0 - 124.15	19.15	4.01	5.06	45.3

Hole	Interval (m)	Width (m)	Pb (%)	Zn (%)	Ag (g/t)
91-78	103.6 - 104.6	1.0	4.13	0.29	22.6
	112.85 - 113.85	1.0	2.9	0.2	17.8
91-79	145.9 - 148.3	2.4	2.48	0.91	17.8
94-81	9.24 — 24.1	14.86	9.71	5.48	228.4
94-82	7.05 - 16.17	9.12	4.43	2.18	59.0
94-83	67.98 - 74.08	6.10	3.21	2.23	38.2
94-84	45.5 - 54.0	8.5	6.74	3.65	136.1
94-85	59.17 - 62.22	3.05	0.47	7.23	25.7
94-86	28.75 - 35.2	6.45	0.31	9.14	7.5
94-87	stopped short of target horizon				

## Colour Figures

Figure 5a : Mine Grid

Figure 5b : Soil Geochemistry - Pb

Figure 5c : Soil Geochemistry - Zn

Figure 6a : Diamond Drill Results 1994

Figure 6b : Diamond Drill Results West Zone Pb + Zn

Figure 6c : Diamond Drill Results East Zone Pb + Zn

Figure 6d : Diamond Drill Results West Zone Ag

Figure 6e : Section 10 + 200m E



Eagle Plains Resources  
Blende Property

Figure 5a - Mine Grid Layout

Scale 1:15000

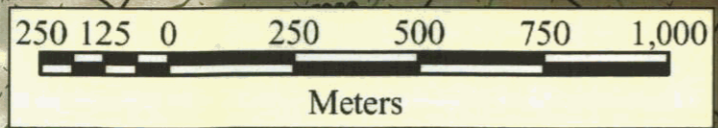
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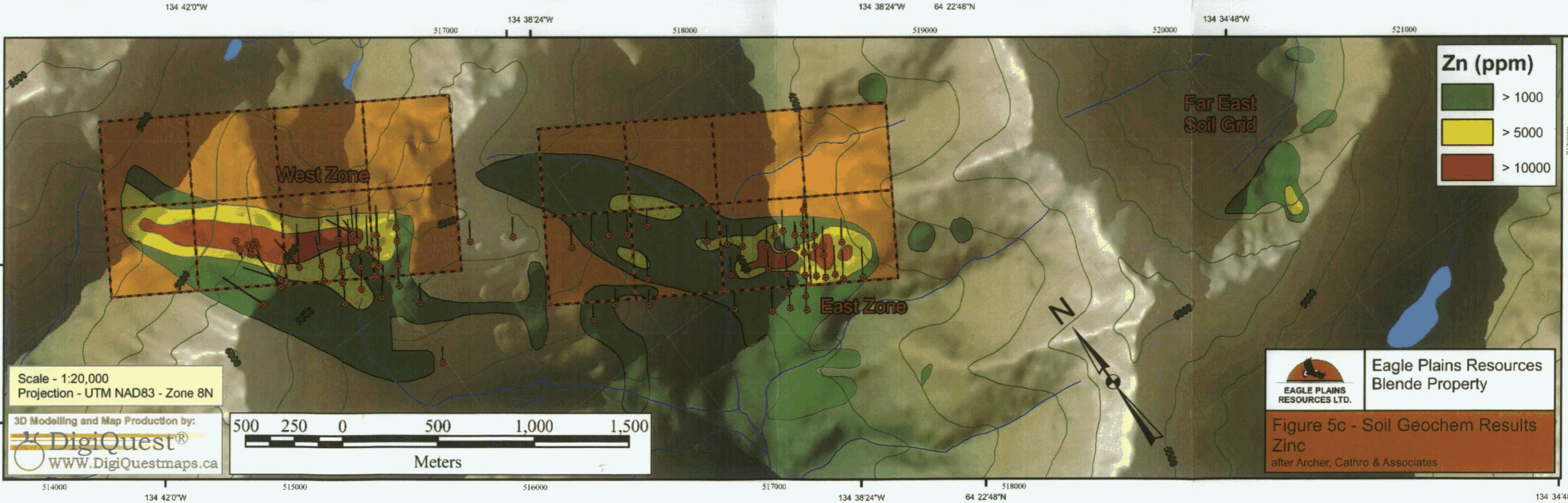
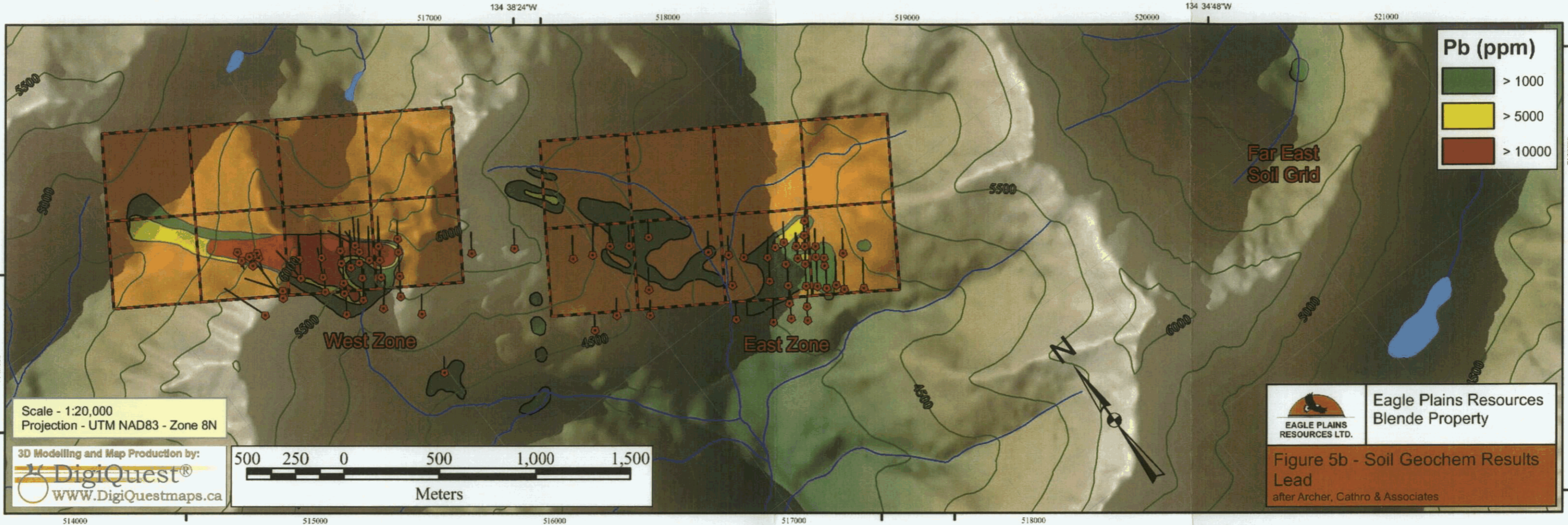
**Legend**

- DDH Collar
- Section Trace



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 DigiQuest®  
 WWW.DigiQuestmaps.ca





515400

515500

515600



Eagle Plains Resources  
Blende Property

Figure 6a - Drill Hole Results  
1994 Drill Zone

Scale 1:1,000  
Projection: UTM NAD83 - Zone 8N

**Legend**

- DDH Collar
- DDH Trace
- 4-Wheel Drive Road
- Contour - 100 ft interval

**Major Faults**

- Unknown
- Thrust
- High angle

**Geo Contact**

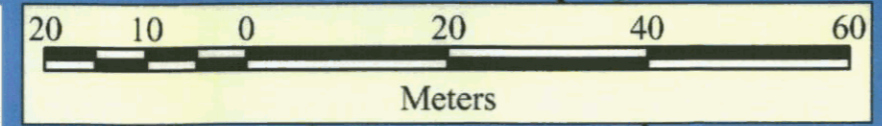
- Assumed
- Defined
- Claim Boundary

Mineralized Outcrop

**Geology Legend**

- Paleozoic**
- Pal light grey weathering dolomite and limestone
- Late Proterozoic?**
- IPG gabbro and diorite
- Late Proterozoic Pinguicula Group**
- IPP3 dark shale and siltstone with narrow conglomerate bed near base
  - IPP2 red weathering stromatiolitic dolomite
  - IPP1 dark siliceous siltstone and fine sandstone with thin dolomitic mudstone interbeds
- Middle Proterozoic Gillespie Lake Group**
- mPG2 buff orange to brown weathering stromatiolitic dolomite with minor dolomitic mudstone
  - mPG1 maroon or green weathering mudstone with light orange weathering dolomitic interbeds

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**DigiQuest**  
WWW.DigiQuestmaps.ca



**DDH Number** B91-67

Zn (%)	Pb (%)
3.51 - 3.92	3.51 - 3.95
3.93 - 4.43	3.96 - 4.58
4.44 - 5.13	4.59 - 5.31
5.14 - 6.35	5.32 - 6.74
6.36 - 9.14	6.75 - 9.84

**Drill Results - Pb and Zn**  
(after Archer, Cathro and Associates, 1995)



7142700

7142600

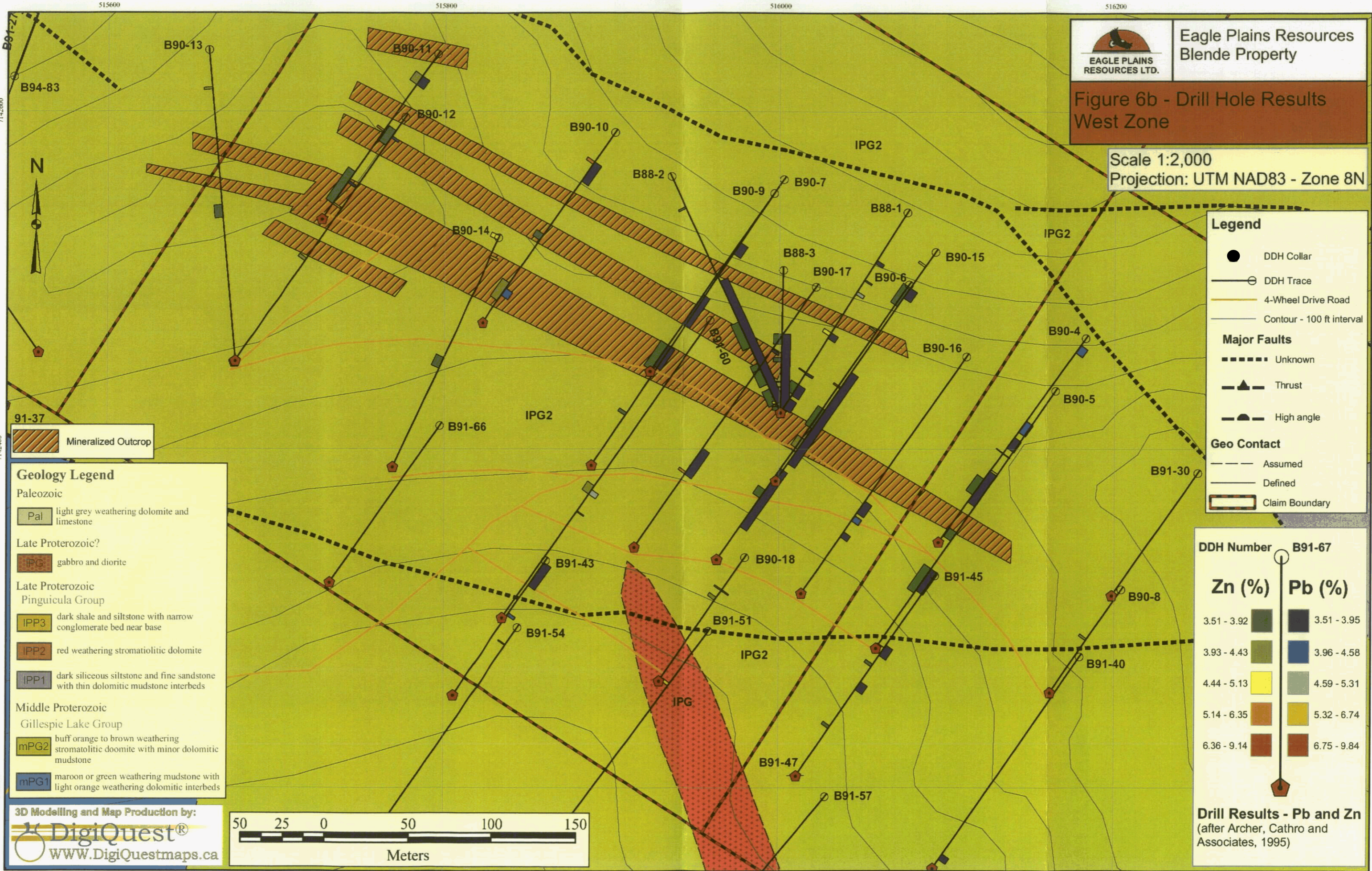
515400

515500

515600

Figure 6b - Drill Hole Results  
West Zone

Scale 1:2,000  
Projection: UTM NAD83 - Zone 8N



91-37  
Mineralized Outcrop

**Geology Legend**

**Paleozoic**

Pal light grey weathering dolomite and limestone

**Late Proterozoic?**

IPG gabbro and diorite

**Late Proterozoic Pinguicula Group**

IPP3 dark shale and siltstone with narrow conglomerate bed near base

IPP2 red weathering stromatolitic dolomite

IPP1 dark siliceous siltstone and fine sandstone with thin dolomitic mudstone interbeds

**Middle Proterozoic Gillespie Lake Group**

mPG2 buff orange to brown weathering stromatolitic dolomite with minor dolomitic mudstone

mPG1 maroon or green weathering mudstone with light orange weathering dolomitic interbeds

**Legend**

- DDH Collar
- DDH Trace
- 4-Wheel Drive Road
- Contour - 100 ft interval

**Major Faults**

- Unknown
- ▲— Thrust
- ▲— High angle

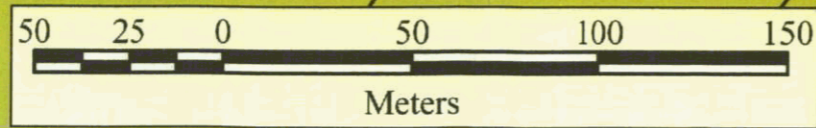
**Geo Contact**

- Assumed
- Defined
- Claim Boundary

**DDH Number B91-67**

Zn (%)	Pb (%)
3.51 - 3.92	3.51 - 3.95
3.93 - 4.43	3.96 - 4.58
4.44 - 5.13	4.59 - 5.31
5.14 - 6.35	5.32 - 6.74
6.36 - 9.14	6.75 - 9.84

**Drill Results - Pb and Zn**  
(after Archer, Cathro and Associates, 1995)

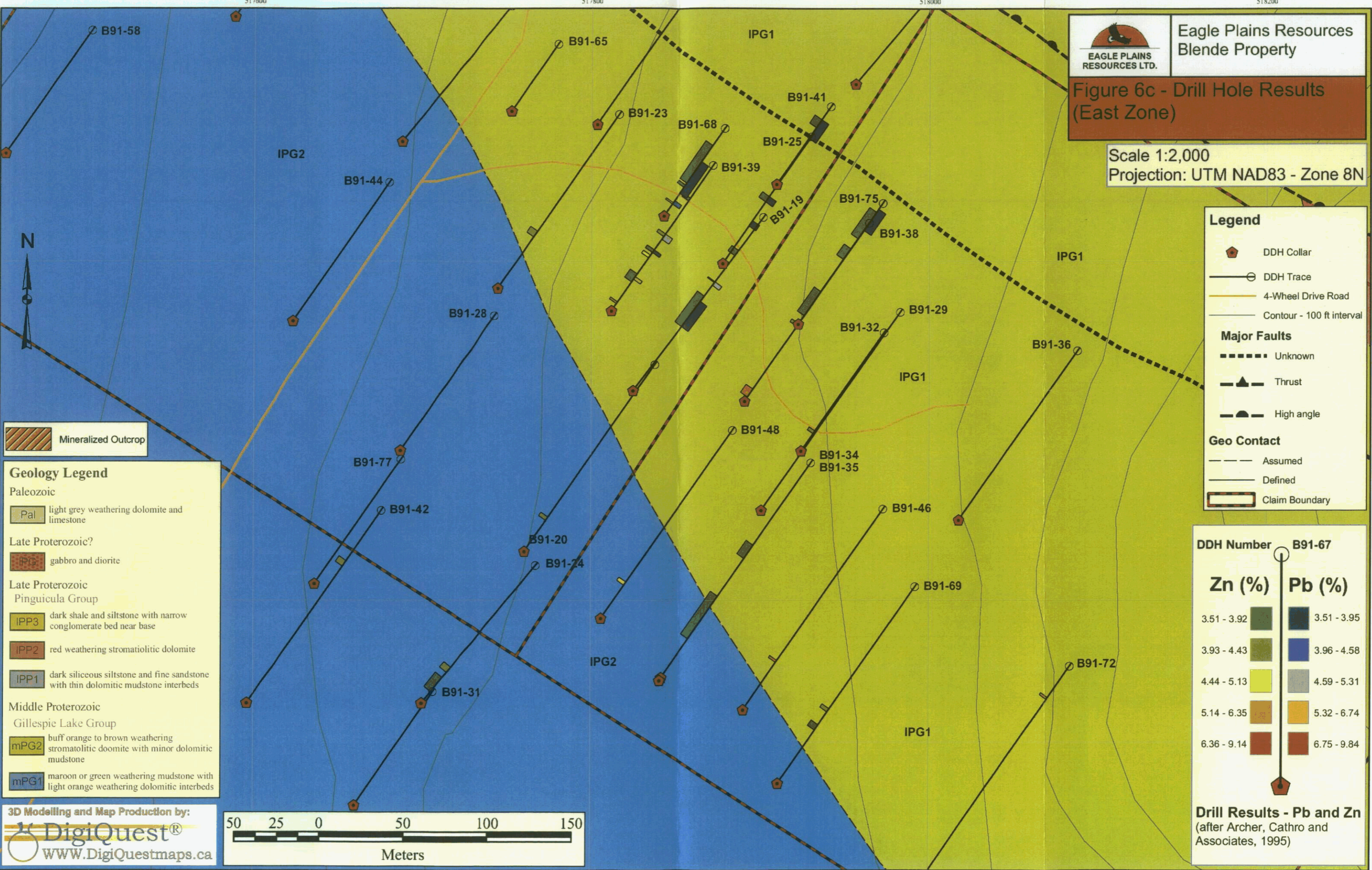




Eagle Plains Resources  
Blende Property

### Figure 6c - Drill Hole Results (East Zone)

Scale 1:2,000  
Projection: UTM NAD83 - Zone 8N



**Legend**

- DDH Collar
- DDH Trace
- 4-Wheel Drive Road
- Contour - 100 ft interval

**Major Faults**

- Unknown
- Thrust
- High angle

**Geo Contact**

- Assumed
- Defined
- Claim Boundary

Mineralized Outcrop

#### Geology Legend

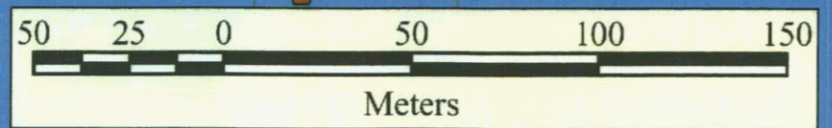
- Paleozoic**
- Pal light grey weathering dolomite and limestone
- Late Proterozoic?**
- IPG gabbro and diorite
- Late Proterozoic**
- Pinguicula Group**
- IPP3 dark shale and siltstone with narrow conglomerate bed near base
  - IPP2 red weathering stromatolitic dolomite
  - IPP1 dark siliceous siltstone and fine sandstone with thin dolomitic mudstone interbeds
- Middle Proterozoic**
- Gillespie Lake Group**
- mPG2 buff orange to brown weathering stromatolitic dolomite with minor dolomitic mudstone
  - mPG1 maroon or green weathering mudstone with light orange weathering dolomitic interbeds

**DDH Number** B91-67

Zn (%)	Pb (%)
3.51 - 3.92	3.51 - 3.95
3.93 - 4.43	3.96 - 4.58
4.44 - 5.13	4.59 - 5.31
5.14 - 6.35	5.32 - 6.74
6.36 - 9.14	6.75 - 9.84

**Drill Results - Pb and Zn**  
(after Archer, Cathro and Associates, 1995)

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WWW.DigiQuestmaps.ca



517600 517800 518000 518200

7141000

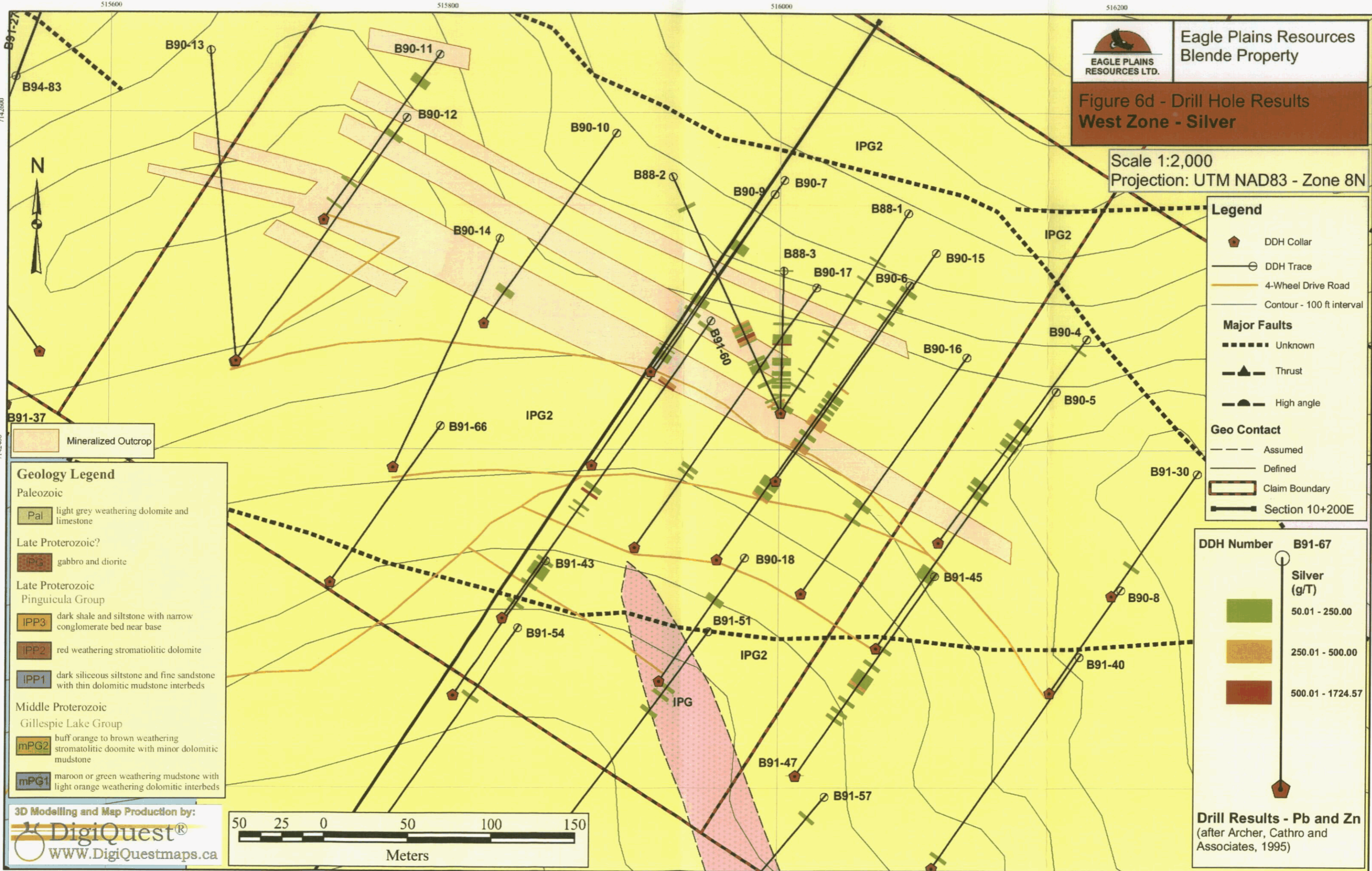
7140800

7141000

7140800

Figure 6d - Drill Hole Results  
West Zone - Silver

Scale 1:2,000  
Projection: UTM NAD83 - Zone 8N



**Legend**

- DDH Collar
- DDH Trace
- 4-Wheel Drive Road
- Contour - 100 ft interval

**Major Faults**

- Unknown
- Thrust
- High angle

**Geo Contact**

- Assumed
- Defined
- Claim Boundary
- Section 10+200E

**Geology Legend**

Paleozoic

- Pal light grey weathering dolomite and limestone

Late Proterozoic?

- IPG gabbro and diorite

Late Proterozoic Pinguicula Group

- IPP3 dark shale and siltstone with narrow conglomerate bed near base
- IPP2 red weathering stromatolitic dolomite
- IPP1 dark siliceous siltstone and fine sandstone with thin dolomitic mudstone interbeds

Middle Proterozoic Gillespie Lake Group

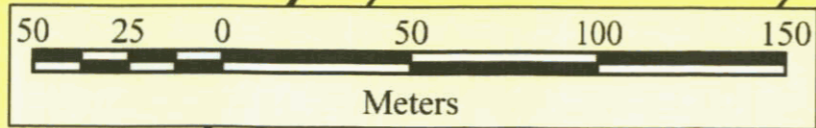
- mPG2 buff orange to brown weathering stromatolitic dolomite with minor dolomitic mudstone
- mPG1 maroon or green weathering mudstone with light orange weathering dolomitic interbeds

**DDH Number B91-67**

**Silver (g/T)**

- 50.01 - 250.00
- 250.01 - 500.00
- 500.01 - 1724.57

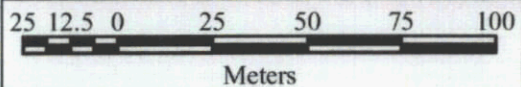
**Drill Results - Pb and Zn**  
(after Archer, Cathro and Associates, 1995)



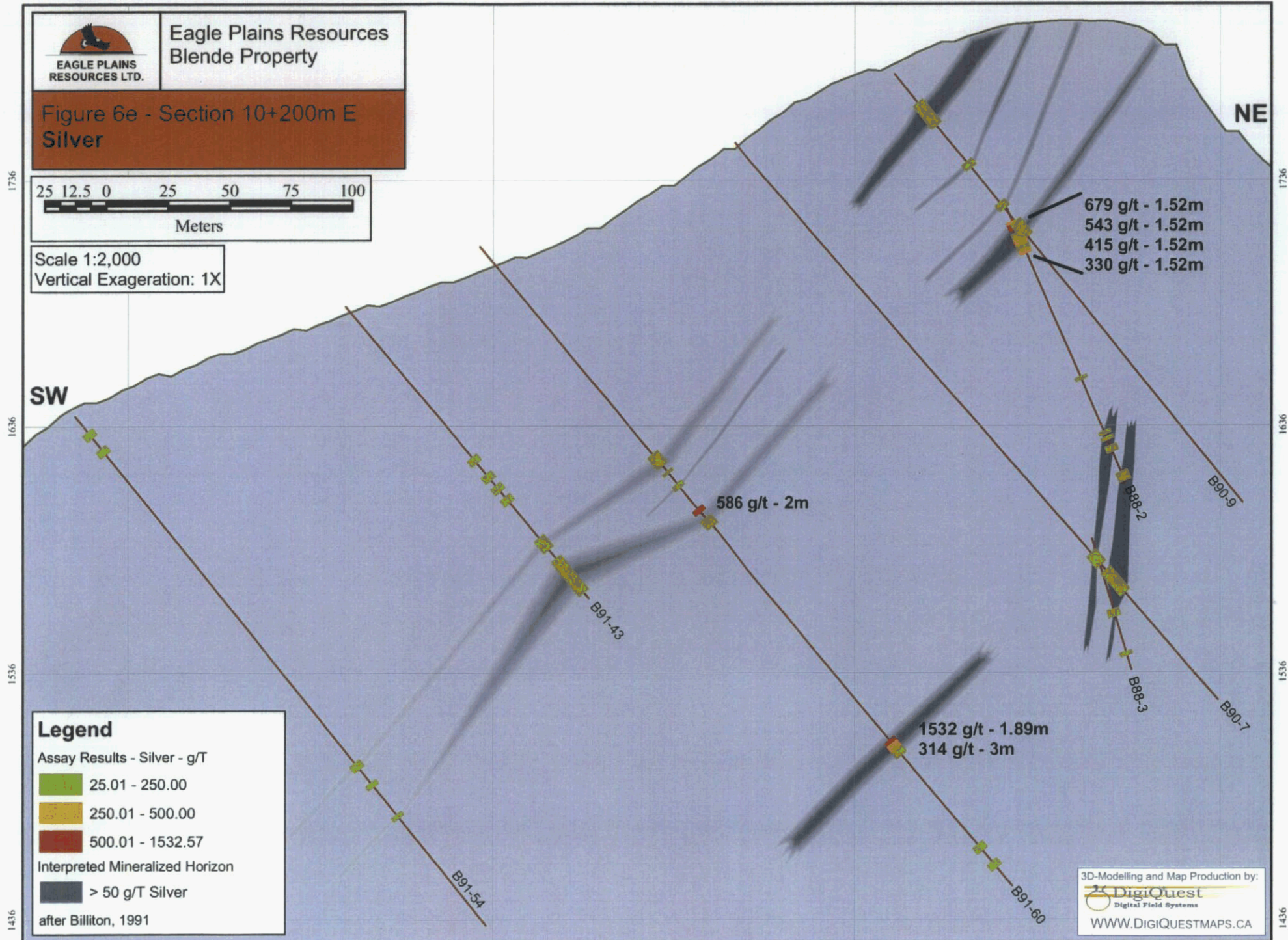


Eagle Plains Resources  
Blende Property

Figure 6e - Section 10+200m E  
Silver



Scale 1:2,000  
Vertical Exaggeration: 1X



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Appendix V

Colour Plates



PLATE 1 Blende Camp and West Zone Drill Roads



PLATE 2 West Zone Drill Roads and Drillsites



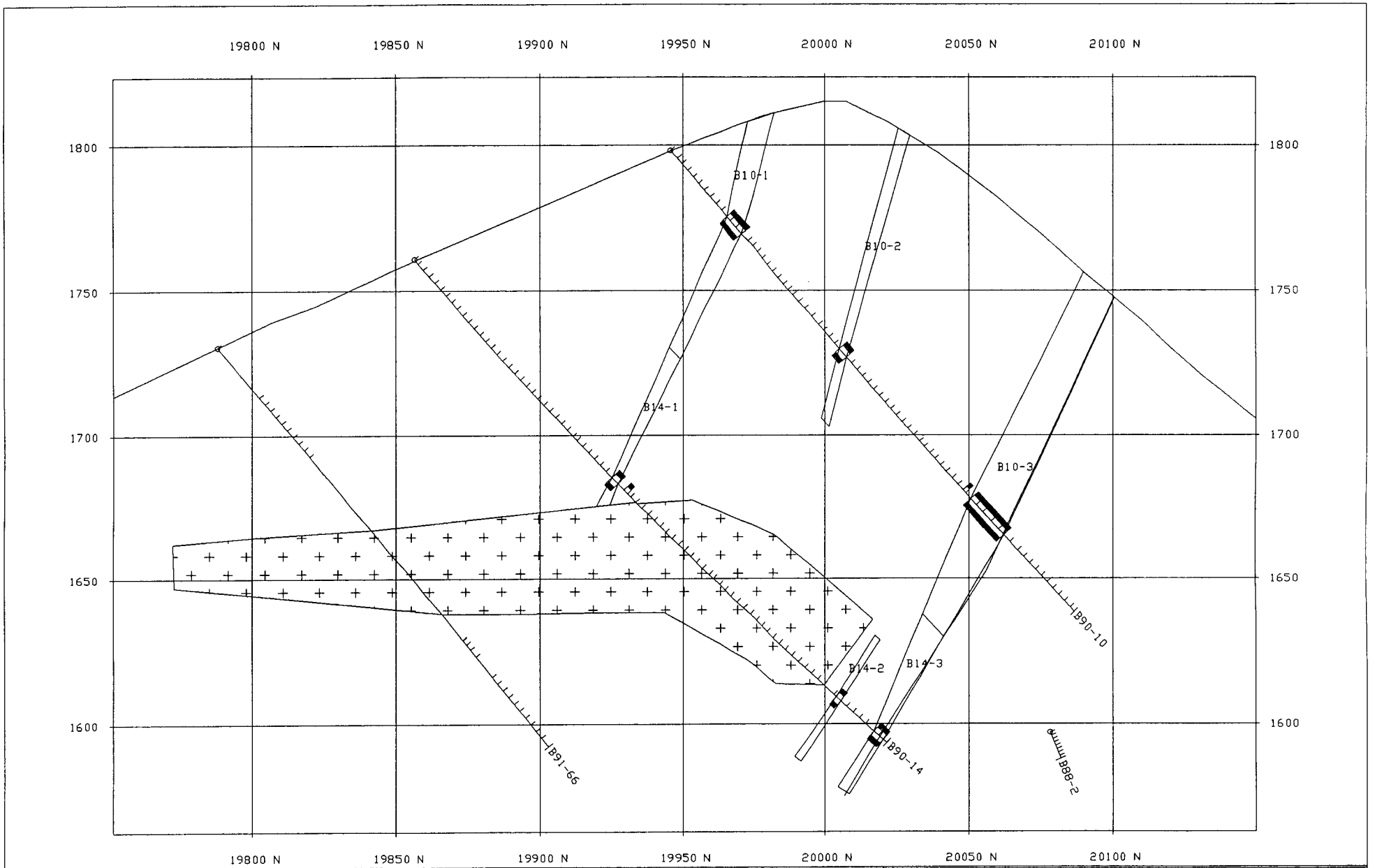
PLATE 3 East Zone Drill Roads and Drillsites



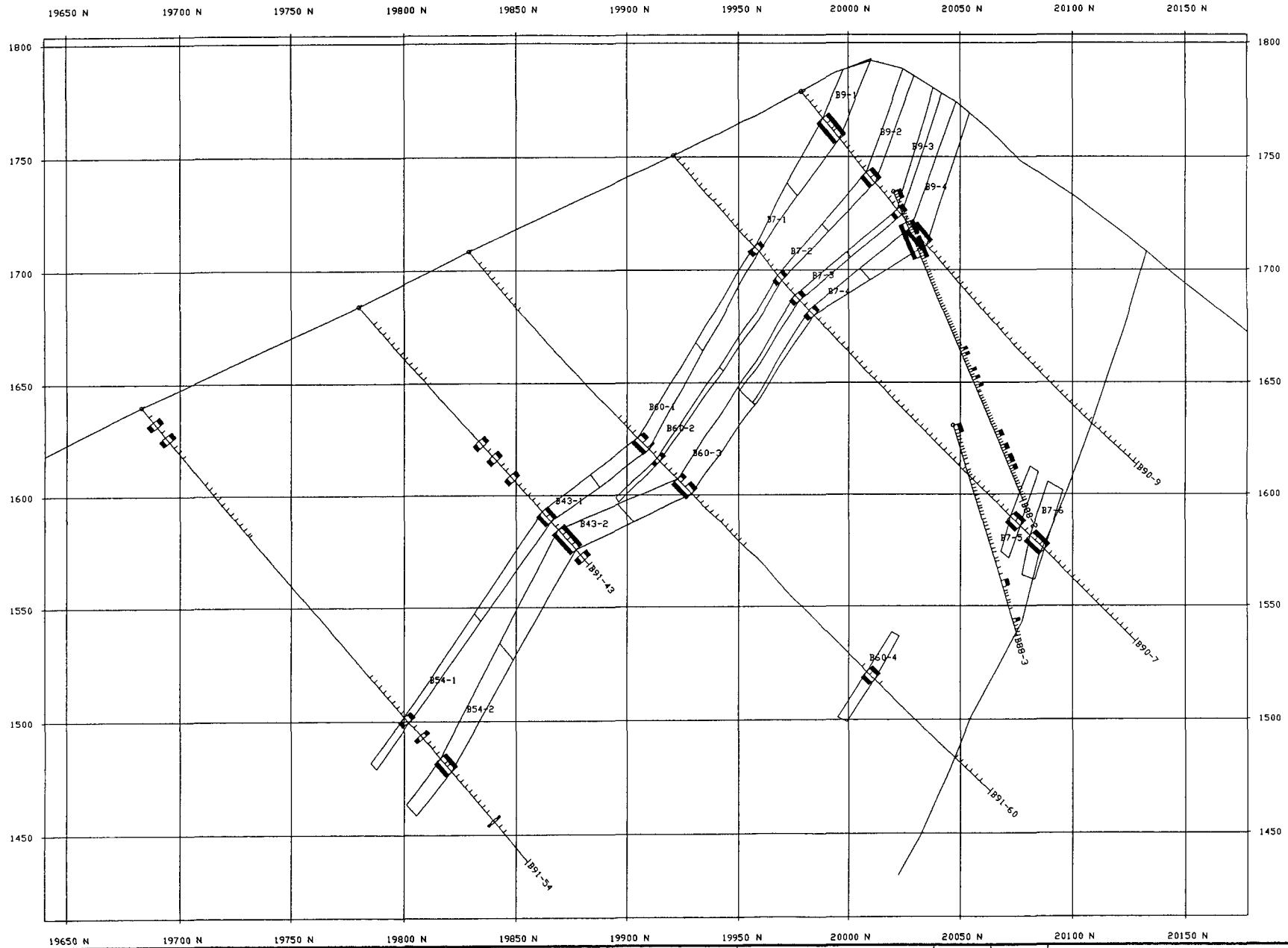
PLATE 4 Diamond Drill Core Storage

Appendix VI

Billiton Metals Sections

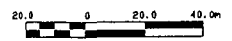


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DRAWN BY	DATE												
G. Lutes	Nov. 14, 1991												
REVISED BY	DATE												
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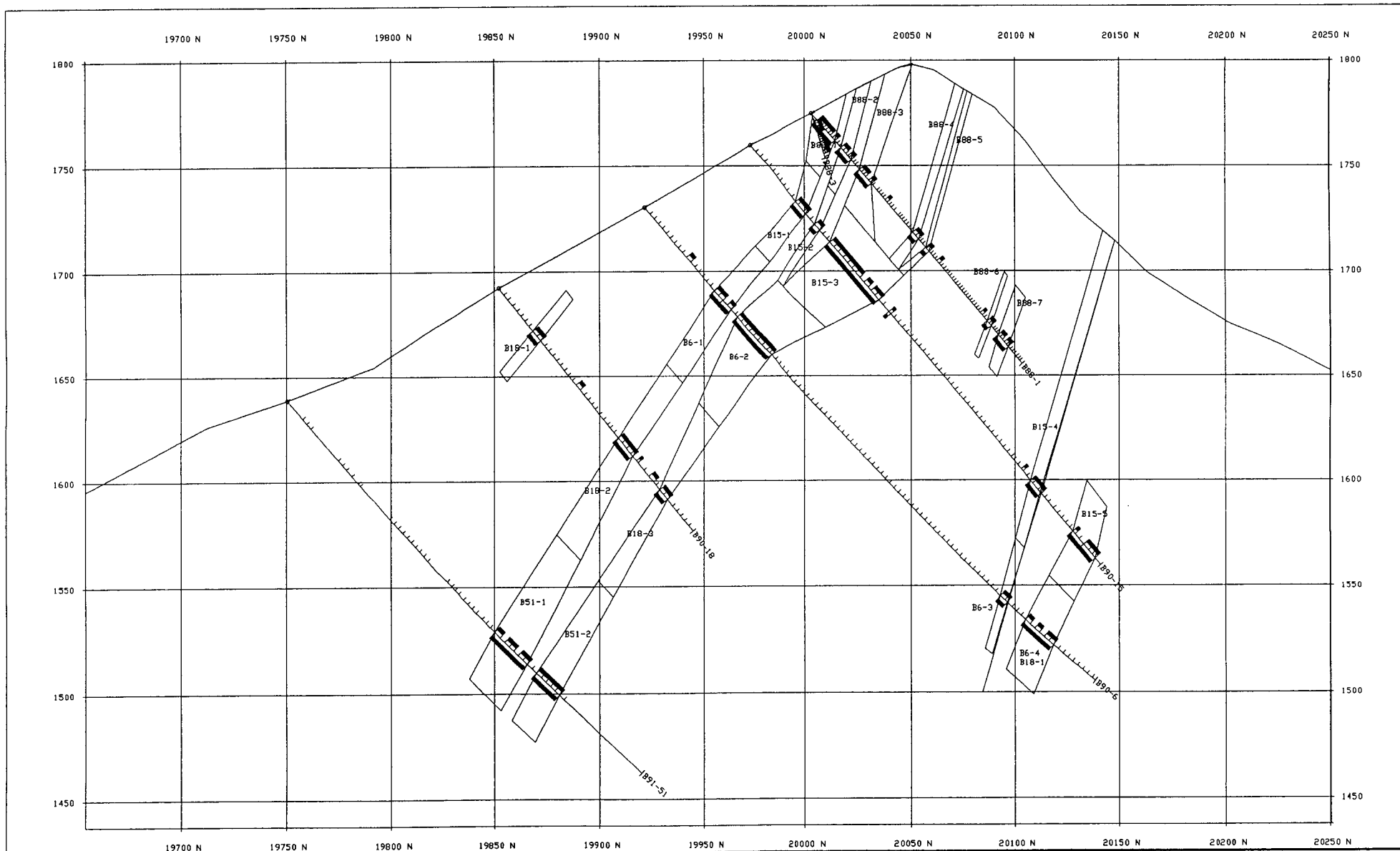


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REVISED BY	DATE
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Billiton Metals Canada  
 Blende Project  
 Section SC10200E  
 COMPOSITES >#25/TONNE, NET ZND

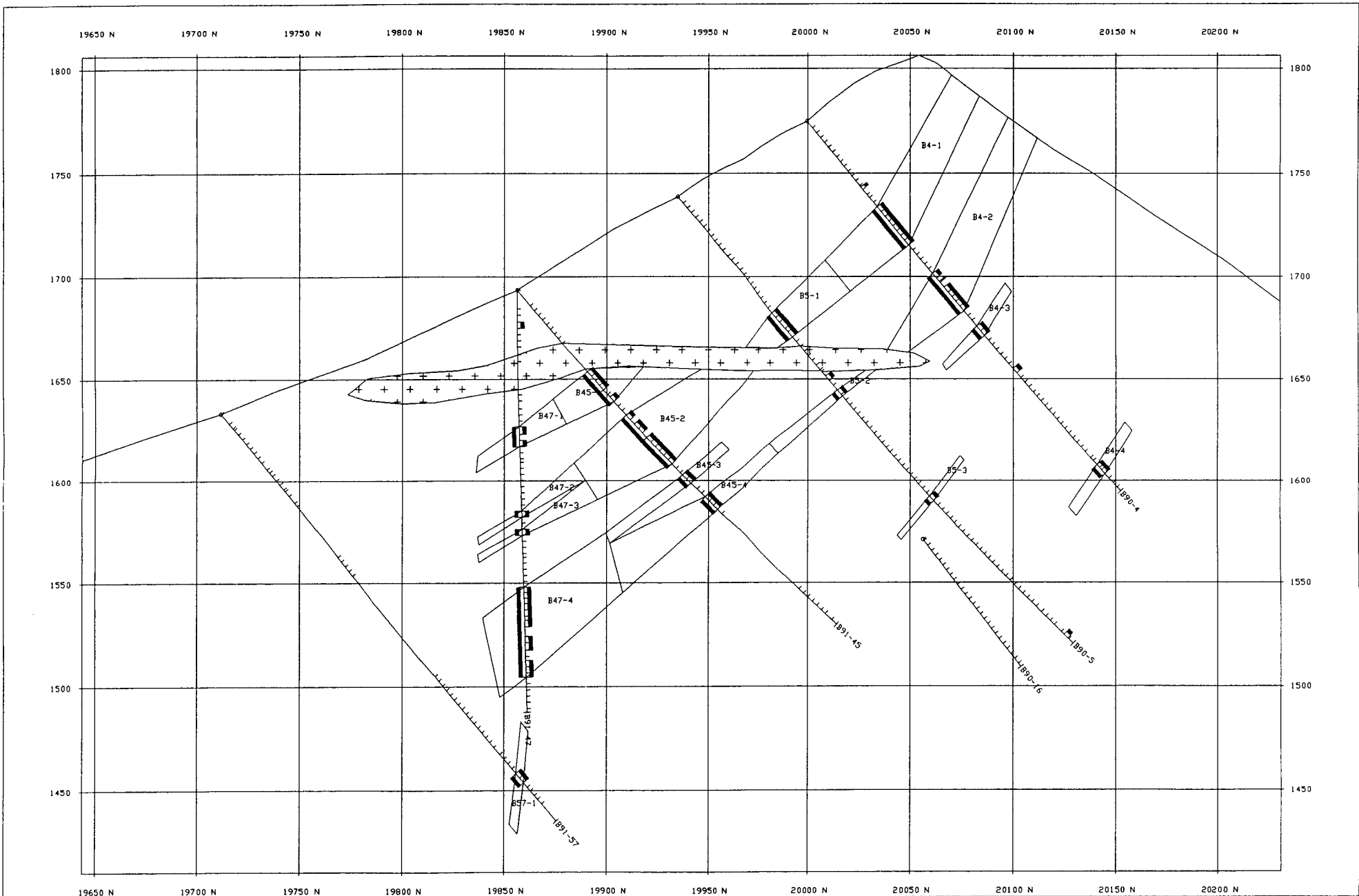


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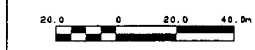
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REVISED BY	DATE									
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DWG	SC10300E.DWG									

BILL METALS CANADA



DRAWN BY	DATE
G. Lutes	Nov. 14, 1991
REVISED BY	DATE

Billiton Metals Canada  
Blende Project



SCALE 1:1000  
DWG SC10400E.DWG

Section SC10400E  
composites >#25/tonne, net ZnO