Report on the

Vowell Creek Project

Golden Mining Division
N.T.S. 82K/14, 15 & 82N/3
Latitude50° 57' N, Longitude 116° 58' 30" W

for

Jasper Mining Corporation
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Calgary, Alberta
T2P 3T5

Submitted by:

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Submitted: September 30th, 2004

SUMMARY

The Vowell Creek Project consists of a diverse group of mineral claims, Crown Grants and Mineral Leases held by Mountain Star Resources Ltd., a wholly owned subsidiary of Jasper Mining Corporation. The claims cover an elongate area of approximately 5,382 ha (13,299 acres) oriented northwest-southeast and approximately 19 km in length, centred on the former Ruth-Vermont mine site. The strata underlying the claims have been correlated to the Late Proterozoic Horsethief Creek Group, deformed into a series of northeast trending folds and faults in the Purcell Anticlinorium in the hanging wall of the Purcell Thrust.

The area has a history of periodic exploration, primarily for gold and silver in quartz veins, with more recent activity directed toward base metals, particularly for sedimentary exhalative (SEDEX)-type mineralization. Results from previous work in the northern portion of the property (in the Bobbie Burns and Malachite Creek drainages) appear to document predominantly gold and/or silver mineralization in quartz veins with subordinate copper. The area of the former Ruth-Vermont mine hosts a number of vein and replacement-type deposits, on which mining activity occurred in the early 1970's. Precious and base metal mineralization has been identified on the southern portion of the claims (VMT and VAD claims).

Exploration and mining activity has documented the mineral potential of replacement-type (manto) and vein-type deposits, however, more recent identification of apparently stratabound base metals in correlatable units of a black shale dominated stratigraphic package has been interpreted as indicative of sedimentary exhalative (SEDEX) potential. In addition, the presence of local Cretaceous intrusives (i.e. the Bugaboo Batholith to the south, Battle Range Batholith to the west and Sugar Plum Stock to the southwest) and the well documented presence of mineralized veins and manto-type (replacement) deposits associated with the Ruth Limestone may indicate potential for intrusion-related (magmatic) deposits.

Since acquiring the property, the Company has completed surface and limited underground diamond drilling in, and around, the former Ruth-Vermont mine, surface drilling to test the LCP Zone, a limited transient electromagnetic and gravity geophysical survey, a partial compilation of underground mine plans and sections and a compilation of surface geochemistry immediately adjacent to the claims. Previous work on behalf of Jasper Mining Corporation has emphasized the potential for SEDEX type mineralization. While acknowledging the SEDEX potential of the area, the author strongly recommended a program emphasizing work to potentially increase reserves of vein- and replacement-type mineralization remaining at the former Ruth-Vermont mine.

The 2003 field program was comprised of completion of 21 diamond drill holes, of which nineteen were located in the Vermont Creek drainage surrounding the Ruth-Vermont mine and 2 were located between Vowell and Crystalline creeks, southwest of their confluence. A total of 721 drill core samples were taken and submitted to Acme Analytical Laboratories Inc. in Vancouver for Group 1F1 37 element ICP analysis and Group 3B analysis for gold. High grade analyses were re-submitted for Group 7AR analysis for Ag, As, Cu, Pb, Sb and Zn and Fire assay for gold.

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1.00 INTRODUCTION

The Vowell Creek Project (Fig. 1) consists of a diverse group of mineral claims, Crown Grants and Mineral Leases held by Mountain Star Resources Ltd., a wholly owned subsidiary of Jasper Mining Corporation. The claims cover an elongate area of approximately 5,382 ha (13,299 acres) oriented northwest-southeast and approximately 19 km in length, centred on the former Ruth-Vermont mine site (Fig. 2). The strata underlying the claims have been correlated to the Late Proterozoic Horsethief Creek Group (Fig. 3), deformed into a series of northeast trending folds and faults in the Purcell Anticlinorium in the hanging wall of the Purcell Thrust.

The area has a history of periodic exploration, primarily for gold and silver in quartz veins, with more recent activity directed toward base metals, particularly for sedimentary exhalative (SEDEX)-type mineralization. Results from previous work in the northern portion of the property (in the Bobbie Burns and Malachite Creek drainages) appear to document predominantly gold and/or silver mineralization in quartz veins with subordinate copper. The area of the former Ruth-Vermont mine hosts a number of vein and replacement-type deposits, on which mining activity occurred in the early 1970's. Precious and base metal mineralization has been identified on the southern portion of the claims (VMT and VAD claims - Fig. 4).

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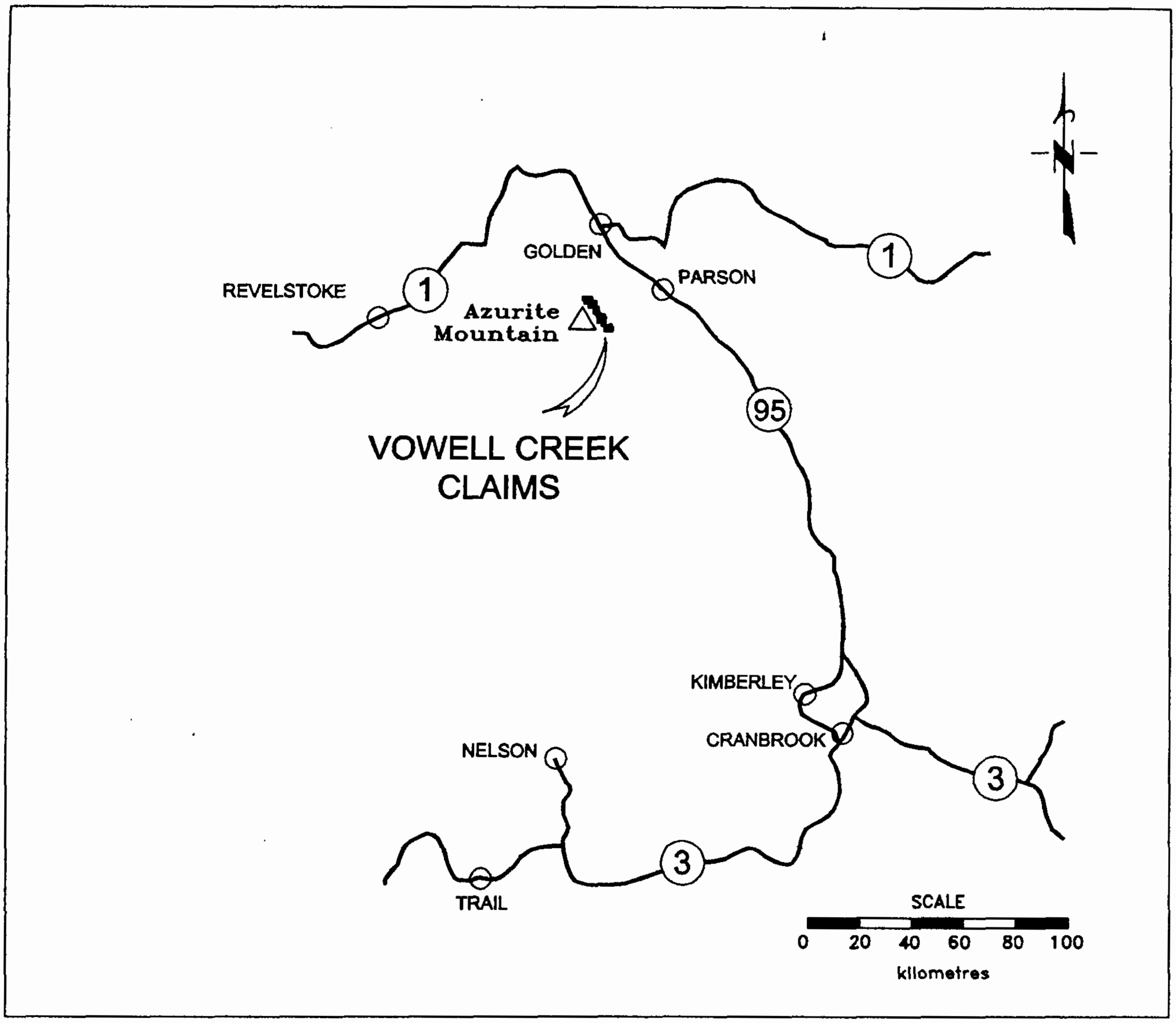
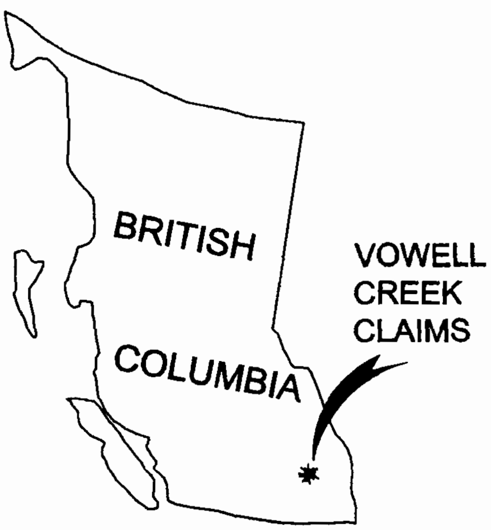
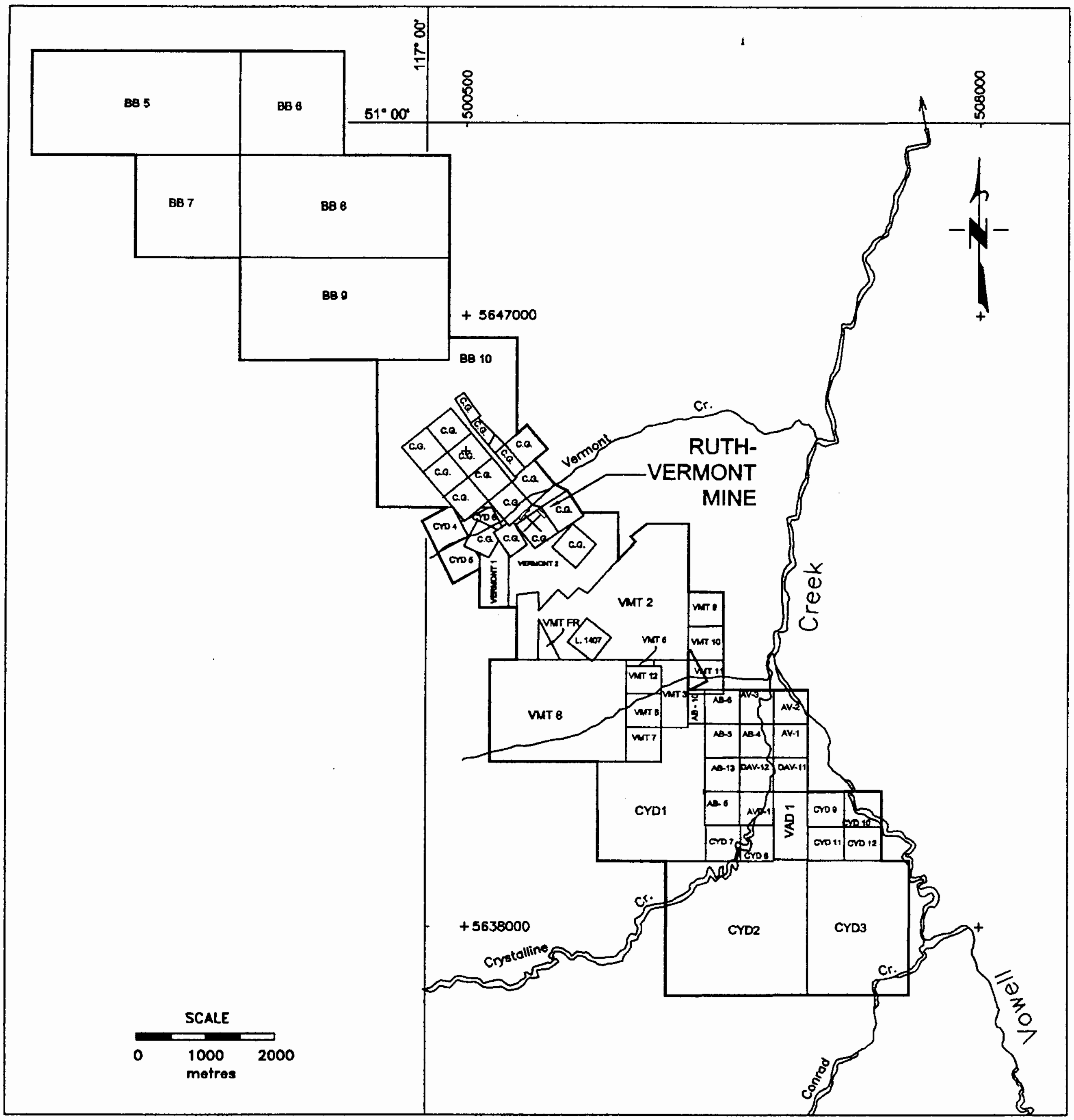




JASPER MINING CORP.	
VOWELL CREEK PROJECT	
LOCATION MAP	
N.T.S. 82 K / 15W	Figure 1



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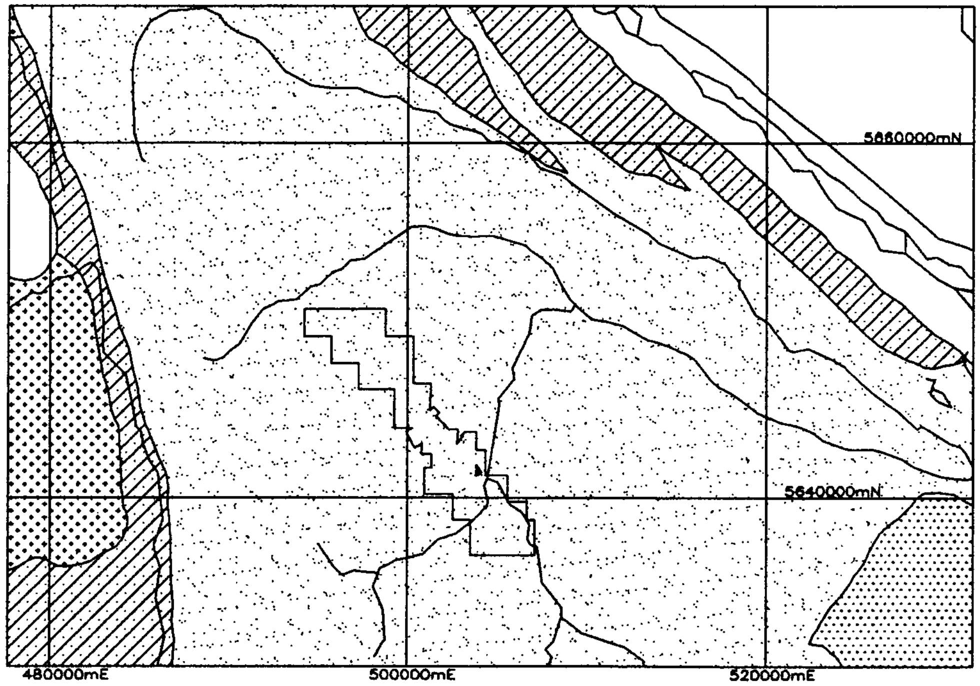
VOWELL CREEK PROJECT

CLAIM MAP

N.T.S. 82 K / 15W	Figure 2

Geology from G.S.C. Open File 481;
Original compilation scale 1:1,000,000



LEGEND

- Cretaceous Intrusives
- Lower Cambrian
  Quartzite, limestone, phillite, argillite.
- Proterozoic (Windemere)
  Sandstone, conglomerate, limestone, grit, minor volcanic rocks
- Proterozoic (Belt–Purcell)
  Quartzite, argillite, dolomite, limestone, siltstone
- Vowell Creek
  claim boundary

SCALE
0 5km 10km
kilometres

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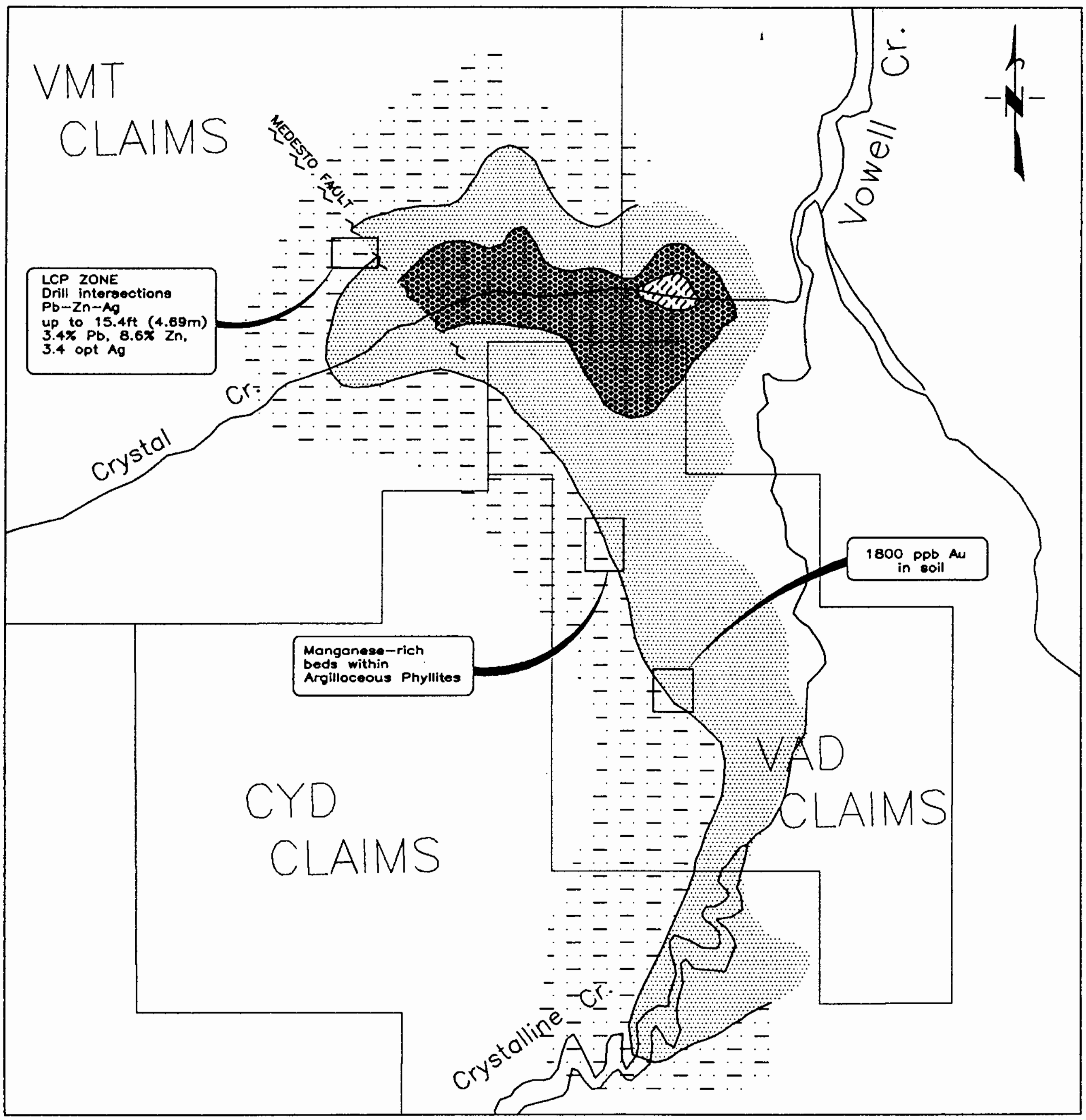
VOWELL CREEK PROJECT	
REGIONAL GEOLOGY	
N.T.S. 82 K/15W	Figure 3



LEGEND

- Unit M Turbidites
- Unit A Turbidites
- Cedar Grit
- Gneiss
- Claim Boundary
- Geologic Boundary

JASPER MINING CORP.	
VOWELL CREEK PROJECT	
GEOLOGY OF SOUTHERN VMT & VAD CLAIMS	
N.T.S. 82 K / 15W	Figure 4

between Vowell and Crystalline creeks, southwest of their confluence. A total of 721 drill core samples were taken for analysis.

All samples were sent to Acme Analytical Laboratories Ltd. in Vancouver, BC for Group 1F1 (37 element ICP) analysis and Group 3B analysis for gold. Samples returning high, to potentially ore, grade results were re-analyzed, using fire assay for gold and silver (Group 6) and ICP (Group 7AR) for other metals (As, Cu, Pb, Sb and Zn).

2.0 LOCATION AND PHYSIOGRAPHY

2.1 Location and Access

The property extends from the headwaters of Bobbie Burns, Malachite, Vermont and Crystal creeks, through Crystalline Creek to the confluence of Conrad and Vowell creeks in the northern Purcell Mountains (Figure 2). The centre of the claims is located approximately 30 km southwest of Golden, B.C. (Figure 1) and 27 km west-southwest of the town of Parson, British Columbia (Figure 1) at approximately latitude 50° 57' N, longitude 116° 58' 30" W (UTM coordinates 501500 E, 5644000 N, Zone11). The property lies on NTS mapsheets 82N/2, 3 and 82K/14, 15. Alternatively, with reference to the BC Geographic Survey 1:20,000 Terrain and Resource Information Management (TRIM) maps, the property lies on mapsheets 082K 085, 086, 095, 096, 082N 005 and 006.

The central portion of the property (the focus of this report), comprising the Ruth-Vermont and VMT Claim Groups, can be accessed by 2-wheel drive using a network of well maintained logging roads west of Vowell Creek, originating from Highway #95 at Parson. Old logging and mining roads along Vowell, Vermont and Crystal Creeks can be utilized for 4-wheel drive, All Terrain Vehicle and/or foot access to the main areas of interest on the VMT and Ruth-Vermont claim blocks.

Tembec Industries Inc. has recently rehabilitated the old mining road from the Vowell Creek Mainline into the Vermont Creek drainage in order to access timber along the lower portion of the creek. Therefore, an access road compliant with haul road standards under BC's Forest Practices Code exists and can be utilized in the near future, however, the road does not extend to the former Ruth-Vermont mine site.

The northern two thirds of the property is not currently accessible by vehicle. An unused logging road branching north off the main road system at the 40 km post, was negotiable in 1997 by standard vehicle for a distance of 8.2 km up Bobbie Burns Creek (Gidluck 1997). The boundary of the northern BB claims, however, is another 14 km upstream from this point. An old mining road, constructed in 1966 along Bobbie Burns Creek, is grown over in many places and eroded beyond use for 4 wheel drive vehicles. An ATV trail utilizing the old road bed appears to be partially maintained by hunters to a point about 1 km east of the property boundary.

Currently, the best access to the northern portion and high elevation areas of the property is by helicopter based out of the town of Golden. Accommodation and helicopter charter may also be available on a seasonal basis, from the Bobbie Burns Lodge, located on the Vowell Creek logging road at the 57 km post, adjacent to the VMT claims.

2.2 Physiography And Climate

Elevations on the property vary from approximately 1400 m (4600 ft) at the southern edge of the property adjacent to Vowell Creek to 2870 m (9400 ft) on Vermont Mountain. Much of the property, however, is situated above tree line at about 2285 m (7500 ft) in this region. Snow generally remains on a large portion of the claims, particularly north facing slopes and valleys, until mid-July and permanent snow and ice is present as ice fields on the BB-1, BB-10 and VMT-2 claims.

Vegetation in the area consists primarily of coniferous trees with undergrowth comprised largely of slide alder.

The claims are located west of the Rocky Mountain Trench and east of Rogers Pass in the Northern Purcell Mountains. As such, they are subject to heavier precipitation than areas to the south and east. Therefore, the property is available for geological exploration from May (at the lowest elevations and on south facing slopes) to late October. However, the possibility of early, heavy snowfall and freezing (at higher elevations) as early as mid-September, can be expected to result in delays during some aspects of an exploration program.

2.3 Property Ownership

The initial property was comprised of mineral claims and mining leases staked in 1989 and 1990 by MineQuest Exploration Associates Ltd. on behalf of the Spillamacheen Joint Venture. In 1995, the VMT claims were acquired by Mountain Star Resources Ltd., which had previously acquired the former Ruth-Vermont mine, with additional subsequent claims subsequently acquired by staking. The property owned by Mountain Star Resources Ltd in 1997 was "... comprised of 34 minerals dispositions made up of 218 whole or partial (fractions) claim units covering a total of approximately 3474 hectares. The land package is made up of three major claim group, the VMT group in the south, the Ruth-Vermont group in the middle and the BB group which occupies the northern two-thirds of the property" (Gidluck 1997).

On November 28, 1997, Bright Star Ventures Corporation, incorporated on November 28,1994 acquired the all of the issued and outstanding shares of Mountain Star Resources Ltd. as its "major transaction" to fulfil Junior Capital Pool requirements under Alberta Stock Exchange regulations, subsequently changing its name to Bright Star Metals Inc. on August 11, 1998. In the interim, several of the BB claims were allowed to lapse.

On May 31, 1999, Bright Star Metals Inc. entered into an option agreement with Mellenco Investments Ltd. to acquire 13 Crown granted claims immediately adjacent to the former Ruth-Vermont mine. In 2000, following a diamond drill program along the Vermont Creek valley and LCP Zone, the CYD claim group was staked by the company to cover the interpreted sub-surface projection of a favourable horizon.

On February 8, 2001, the company changed its name to Jasper Mining Corporation and now holds a contiguous block of mineral claims, Crown Grants and Reverted Crown Grants extending approximately 19 km on a northwest-southeast direction and centred approximately on the former Ruth-Vermont mine.

2.5 Claim Status

The Vowell Creek Property consists of 36, 2-post and 15, 4-post mineral claims (Fig. 5) staked in accordance with existing government claim location regulations. The mineral claims, leases and Reverted Crown Grants are held, or have been optioned by, Mountain Star Resources Ltd, a wholly owned subsidiary of Jasper Mining Corporation.

The BB Claim Group comprises the northern portion, the Ruth-Vermont and VMT Claim Groups comprise the central portion and the CYD Claim Group comprises the southern portion of the property. The property includes 13 whole or partial Reverted Crown Grants, contained in two Mineral Leases (Mineral Leases 95 and 97), and 16 Crown Grants. The property comprises a total area in excess of approximately 5,382 ha (13,299 acres).

Significant claim data are summarized on the following pages:

Registered to Gordon Dixon

Claim	Units	Number	Type	Due Date*	Area (ha)
Bryan	1	213877[2]	L. 3951	Apr. 17, 2005	16.94
Lincoln	1	213877[2]	L. 3952	Apr. 17, 2005	18.13
Lucky Jack	1	213877[2]	L. 3953	Apr. 17, 2005	15.30
Total	95				

1. Mineral Lease 95

Registered to Mountain Star Resources Ltd.

Claim	Units	Tenure Number	Type	Due Date*	Area (ha)
BB Claim Group					
BB-5	18	340409	Claim	Sept. 24, 2004	450
BB-6	9	340410	Claim	Sept. 24, 2004	225
BB-7	9	340411	Claim	Sept. 24, 2004	225
BB-8	18	340412	Claim	Sept. 24, 2004	450
BB-9	18	340413	Claim	Sept. 24, 2004	450
BB-10	20	340414	Claim	Sept. 24, 2004	500
Ruth Vermont Claim Group					
Vermont 1	3	213300	Claim	Apr. 3, 2005	75
Vermont 2	12	213301	Claim	Apr. 3, 2005	300
Cleopatra	1	213875[1]	L. 8122	Aug. 21, 2012	
Vermont	1	213875[1]	L. 8123	Aug. 21, 2012	
Sheba	1	213875[1]	L. 8124	Aug. 21, 2012	
Ruth Fr.	Fract.	213875[1]	L. 8125	Aug. 21, 2012	119.69
Ruth	1	213875[1]	L. 418	Aug. 21, 2012	
Minnie	1	213875[1]	L. 419	Aug. 21, 2012	
Charlotte	1	213875[1]	L. 405	Aug. 21, 2012	
?????	1		L. 15310		
C.M.R.M.C.	Fract.		L. 10476		
Total	21				

1. Mineral Lease 97

Claim	Units	Tenure Number	Type	Due Date*	Area (ha)
VMT Claim Group					
VMT #2	20	213576	Claim	Sept. 15, 2013	500
VMT #3	2	213577	Claim	Sept. 15, 2013	50
VMT 5	1	213770	Claim	Sept. 12, 2013	25
VMT 6	1	213769	Claim	Sept. 15, 2012	25
VMT 7	1	213768	Claim	Sept. 15, 2012	25
VMT 8	12	213766	Claim	Sept. 15, 2012	25
VMT 9	1	213771	Claim	Sept. 14, 2012	25
VMT 10	1	213772	Claim	Sept. 14, 2012	25
VMT 11	1	213773	Claim	Sept. 14, 2012	25
VMT 12	1	213767	Claim	Sept. 15, 2012	25
VMT Fr.	Fract	213774	Claim	Sept. 15, 2012	≈12
Excelsior	1	213268	Rev.	April 26, 2005	Campeau Estate
Total	42				

CYD Claim Group

CYD 1	12	381156	Claim	Sept. 29, 2012	300
CYD 2	16	381157	Claim	Sept. 30, 2012	400
CYD 3	16	381158	Claim	Oct. 1, 2012	400
CYD 4	1	381165	Claim	Oct. 2, 2012	25
CYD 5	1	381166	Claim	Oct. 2, 2012	25
CYD 6	1	381164	Claim	Oct. 2, 2013	25
CYD 7	1	381159	Claim	Sept. 30, 2012	25
CYD 8	1	380910	Claim	Sept. 29, 2012	25
CYD 9	1	381160	Claim	Sept. 28, 2012	25
CYD 10	1	381161	Claim	Sept. 28, 2013	25
CYD 11	1	381162	Claim	Sept. 28, 2013	25
CYD 12	1	381163	Claim	Sept. 28, 2013	25

Crown Grants

Crown Grants	Name	Folio Number	
L. 672	Syenite Bluff	008850	
L. 763	Black Horse	008850	
L. 764	Agnes	008850	
L. 6662	Eureka	010634	
L. 6663	Wild Horse	010634	
L. 6664	White Horse	010634	
L. 15307	Golden Bluff	019950	Approximately 100 ha
L. 15317	Agnes Fraction	019950	
L. 15318	Charlotte Fraction	019950	
L. 15445	Ruth No. 2	019950	
L. 15446	Lion	019950	
L. 15447	Unicorn	019950	
L. 15448	Mazeppa	010634	

Registered to Jim Adamson

Claim	Units	Tenure Number	Type	Due Date*	Area (ha)
AB-10	1	213748	Claim	Aug. 23, 2012	25
AB-13	1	213751	Claim	Aug. 28, 2012	25
AB-15	1	213754	Claim	Aug. 29, 2012	25
AVD-1	1	213570	Claim	Sept. 16, 2020	25
VAD-1	2	213436	Claim	July 6, 2012	50
DAV-11	1	213726	Claim	July 18, 2012	25
DAV-12	1	213727	Claim	July 18, 2012	25
AV-1	1	380835	Claim	Sept. 23, 2012	25
AV-2	1	380836	Claim	Sept. 23, 2012	25
AV-3	1	380837	Claim	Sept. 23, 2012	25

Claims registered to Sodi Berar

Claim	Units	Tenure Number	Type	Due Date*	Area (ha)
AB-4	1	365241	Claim	Aug. 2, 2012	25
AB-5	1	365242	Claim	Aug. 2, 2012	25
AB-6	1	365243	Claim	Aug. 2, 2012	25

- Upon acceptance of 2003 Assessment Work credits.

3.0 HISTORY

Regionally, the area has a history of episodic exploration, primarily for gold and silver in quartz veins, with more recent activity directed toward identification of base metal, particularly sedimentary exhalative (SEDEX)-type, mineralization. Results from previous work in the northern portion of the property (in the Bobbie Burns and Malachite Creek drainages) appear to document predominantly gold and/or silver mineralization in quartz veins with subordinate copper. The area of the former Ruth-Vermont mine hosts a number of vein-type (and associated replacement-type) deposits, on which mining activity occurred in the early 1970's. Precious and base metal mineralization has been identified on the southern portion of the claims and adjacent areas (i.e. VMT and VAD claims).

Exploration and mining activity has documented the mineral potential of replacement-type (manto) and vein-type deposits, however, more recent identification of apparently stratabound base metals in correlatable units of a black shale dominated stratigraphic package has been interpreted as indicative of SEDEX potential (Brophy and Slater 1981). In addition, the presence of local Cretaceous intrusives (i.e. the Bugaboo Batholith to the south, Battle Range Batholith to the west and Sugar Plum Stock to the southwest) and the well documented presence of mineralized veins and manto-type (replacement) deposits may indicate potential for carbonate replacement-type and/or intrusion-related gold deposits (Logan 2002a).

The history of exploration over the property has been well documented in previous Assessment Reports (Walker 2002).

4.0 GEOLOGICAL SETTING

4.1 Regional Geology

The following has been taken from Gidluck (1997):

Stratigraphy

> "The Vermont Property is underlain by a thick sequence of Hadrynian marine sedimentary rocks (Figure 3) exposed in the core of the northwest trending Purcell Anticlinorium, on the west side of the Rocky Mountain Trench. The anticline is deformed by subsequent thrust faulting and folding parallel to the structural axis (Okulitch and Woodsworth 1977, Kubli and Simony 1994).
>
> The majority of lithologies exposed on the property belong to the Horsethief Creek Group, a subdivision of the Windermere Supergroup of Hadrynian age. The Horsethief Creek Group is composed of four general divisions which are not easily separable; a lower Grit Division of turbidite sandstones and shales, a deep water Slate Division, a shallow water Carbonate Division and an Upper Clastic Division of shales, sandstone and carbonate deposited during a marine transgression (Evans 1933, Young et al 1973).
>
> Conformably underlying the Horsethief Creek are diamictic conglomerates of the Toby Formation derived from subaqueous slides and debris flows. These rocks have been mapped in the Bugaboo Creek valley 20 km to the southeast of the property (Reesor 1973).
>
> Overlying the Horsethief Creek Group in the Purcell Mountains is the Lower Cambrian Hamill Group which occurs to the northeast of the property. This Group is largely comprised of quartzites, slates, phyllites and schists and is probably in sharp, unconformable contact with the Horsethief Creek Group (Reesor 1973)".

Several Cretaceous intrusions have been identified in the general area of the Vowell Creek Property, intruding the Windermere Supergroup and cross-cutting Mesozoic age deformation fabrics, and include the Battle Range Batholith (87 - 100 M.a.), Bugaboo Batholith (94 -107 M.a.), Horsethief Creek Batholith (93 - 109 M.a.) and the undated Sugar Plum Stock. These intrusions belong to the Bayonne Magmatic Suite and are associated with an unusual metallogenic suite, including Ag, Au, Mo, Pb, Sn, W, and Zn, as well as uranium and rare earth elements (Logan 2002b).

4.2 Detail Geology

4.2.1 VMT Claim Group

The following has been taken from Fyles (1966):

"The (Atlas) claims are west of Vowell Creek between Vermont and Crystalline Creeks. The main work has been on showings at an elevation of 5,800 feet on the slope north of Crystal Creek, a small tributary of Crystalline Creek from the west. The workings are reached by a steep "Cat" road from a trailer camp at Mile 33 on the Vermont Creek logging-road. They are bulldozer strippings on a steep jack pine slope covering an area about 400 feet square which exposes showings of galena discovered by Renn in 1965. Two short diamond-drill holes were put down in the upper northwest corner of the stripped area in July, 1966.

The rocks exposed at the showings are dark-grey slates and grey to light brownish-grey micaceous quartzites. The slates are pyritic, and the quartzites contain rusty iron carbonates.

The showings consist of half a dozen scattered occurrences of gossan or galena, sphalerite, and pyrite in both the slates and the quartzites. The zones of gossan are mainly in slates, ranging from 2 to 4 feet wide, and are parallel to the cleavage. ... The sulphides are mainly in the quartzites. One showing consists of massive galena, minor pyrite, and sphalerite along a series of fractures in the quartzite that strike 120 to 125 degrees and dip steeply. They form a lens of sulphides 1 to 2 feet thick and several feet long more or less parallel to a bed of quartzite on the northeast limb of a small syncline. ... Another showing 300 feet to the southwest contains galena and minor sphalerite and pyrite disseminated in quartzite. The sulphide zone is irregular and poorly defined and is well mineralized over widths up to 5 feet. ...

The mineralized quartzites lie above the slates containing the gossans, and the rocks have the form of a shallow open syncline with an essentially horizontal axis and vertical axial plane trending 135 to 140 degrees. The folds are asymmetric and lie on the northeastern limb of an anticline. The exposures provide very slight evidence on the control of mineralization, but the mineralization appears to be associated with fractures principally in the quartzitic beds. Locally the quartzites near the fractures are replaced by the sulphides".

The following has been taken from Gidluck (1997):

> Reconnaissance style geological mapping was conducted over large land holdings in this area by Norcen and Bluesky Oil & Gas between 1979 and 1982. It was not until 1992 and 1993, however, that mapping by MineQuest established the first detailed stratigraphic sequence of lithologies (below) on the VMT claims. All these units are believed to be within the Grit Division (Table 2) of the lower Horsethief Creek Group.
>
> Stratigraphic Sequence - in descending order (Longe 1994)
>
> | | |
> |---|---|
> | Unit W | Whitebark Grit - white quartz grit with micaceous cleavage |
> | Unit M | Schists - brown weathering ankeritic and tuffaceous appearing micaceous schists interbedded with grey argillite.
- base of unit is host to sulphide occurrences. |
> | Unit A | Argillite - grey or buff weathering argillite composed of thin turbidite beds with abundant disseminated pyrite. |
> | Unit C | Cedar Grit - white quartz grit with micaceous cleavage and occasional beds of quartz pebble conglomerate |
>
> The stratigraphic thickness of the shale units, A and M, in this area appear to be approximately 300 m thick (Longe 1993).
>
> Structure
>
> These pelitic units occur on a shallow dipping, north plunging anticlinorium which is deformed locally by tight isoclinal folds and faults where bedding is near vertical. Typically there is a well developed axial plane cleavage striking 140° and dipping from 70° to 90° at these localities. A major northwest striking, northeasterly dipping fault zone, the Medesto Fault, appears to separate the LCP Zone from the other mineralized zones on the VMT claims. MineQuest has interpreted this to be a northeasterly dipping, reverse fault which may have caused considerable displacement to a single mineralized horizon (Unit M) on this part of the property.
>
> ...

4.2.2 Ruth Vermont Claim Group

The most informative description of the geology is from the former Ruth-Vermont mine itself. The following has been taken from Fyles (1966):

> "Rocks in the Vermont Creek area are grey slates; light-grey quartzites, grits, and pebble conglomerates; and minor limestones belonging to the Horsethief Creek Group of Late Precambrian age. The slates commonly carry disseminated pyrite, the quartzitic rocks contain white quartz veins and rusty iron carbonates, and the limestones are dark grey, fine-grained, and more or less micaceous and cleaved. The slates and limestones are thin bedded, and beds crossed by cleavage are apparent in almost every exposure. Minor folds are fairly common, and from a distance major folds can be seen in cliffs.
>
> In the mine area a bed of limestone 30 to 50 feet thick, here referred to as the Ruth Limestone, lies between two thick slate formations. The lower slate, which is several hundred feet thick, is underlain by a greyish-brown quartzite that forms prominent cliffs on the Charlotte claim east of the mine and on the north side of Vermont Creek. It is buff-weathering to light-grey somewhat micaceous quartzite with rounded bluish-white quartz grains up to one-eighth inch in diameter. The quartzite has an irregular fracture cleavage, and contains local stockworks of barren white quartz veins.
>
> A major asymmetric anticline trending northwest crosses Vermont Creek near the Ruth property. Reconnaissance suggests that it continues southeast and northwest of the mine for many miles and that most of the known showings of the region are near the hinge zone. On Vermont Creek the anticline plunges gently to the southeast and the axial plane dips steeply to the northeast parallel to the cleavage in the slates.
>
> ... (Two) large anticlines (are evident), the Charlotte on the northeast, the Sheba on the southwest, and between them the Ruth syncline. They are named from the old Crown-granted claims on which they are well exposed. All three folds are in the hinge zone of the major anticline just referred to and are local structures which change in form up or down the axial plane and along the axis of the anticline.
>
> The Ruth syncline as outlined by the Ruth limestone is exposed near the portals of the 6000 level and is encountered underground on the level. The synclinal axis plunges at 5 degrees toward an azimuth of 135 degrees, and the axial plane dips 75 degrees to the northeast. In the inner part of the working the axis appears to swing to the west and steepen somewhat in plunge. The limestone on the southwest limb

has a fairly uniform attitude with an average strike of 140 degrees and a dip of 30 degrees to the northeast. This southwest limb of the Ruth syncline contains the

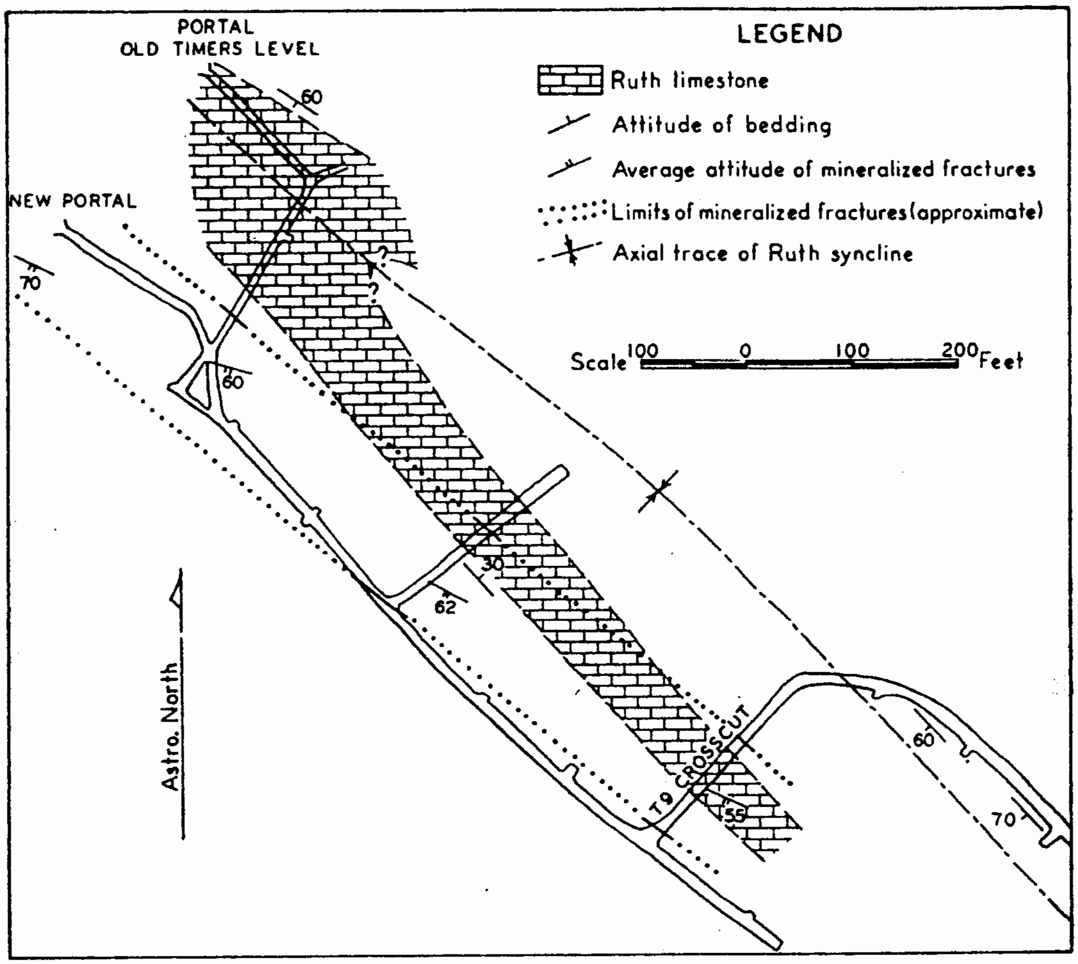


Figure 30. Columbia River Mines Ltd. Geological sketch-map of part of the 6000 level of the Ruth Vermont mine.

sulphide mineralization currently being developed.

The following has been taken from Manning (1972):

"Polymict quartz pebble conglomerates grade locally to grit and impure quartzite which in turn grade into slate or argillite and argillaceous limestone.

The conglomerates contain blue and white quartz pebbles, are sericitic, chloritic and contain scattered pyrite. Locally they are limey. Deformation of the beds has produced an elongation of the pebbles. The finer grained character of the grit and quartzite is the only discernible difference between them and the conglomerate.

Argillite beds are locally slaty, phylitic and limey and vary from 1/8 inch to several feet in thickness and are black, green and grey. Porphyroblasts of ankerite are present within all the argillite members. Syngenetic pyrite, as euhedral and elongated cubes and pyritohedrons, occurs parallel to the bedding. Minor drag folding is common.

The argillaceous limestone units are conformable to overlying and underlying slatey argillite members. They are bluish grey, aphanitic, exhibit minor drag folding, and are the most significant host rocks in the area. The main unit is 20 to 50 feet thick with individual beds varying from a fraction of an inch to several feet in thickness.

All members of the series are intercolated with readily discernible facies changes both along the strike and dip.

Structurally, the units have been folded to an anticline approximately 600 feet from crest to trough. The fold plunges gently to the southeast. To the east of this, the Ruth Anticline, lies a series of synclines and anticlines of varying amplitudes which culminate near the eastern extremity of the Charlotte crown grant, into the Charlotte Anticline which is overturned to the west. The main workings are along the limbs of a southeast plunging syncline, immediately east of the Ruth Anticline.

Three sets of quartz-calcite fissure veins occur obliquely, transversely and parallel to bedding relative to the fold structures. The oblique veins strike southeast and have an average dip of 65° to the southwest. They are well mineralized and cut at an angle of 15° to the strike of the beds. The transverse veins are poorly mineralized and are representative of fissure fillings along a series of near vertical and parallel shears. Tension gashes are generally related to such veins. The veins parallel to the bedding normally mark concordant contacts between the argillite and argillaceous limestone. Sulphide content in the veins is low. Scheelite occurs in varying amounts in the three sets of veins" (sic.).

4.2.3 Mineralization

Disclaimer: The following reserve estimate by Manning in 1979 cannot currently be considered an Ore Reserve unless an updated feasibility study demonstrates economic viability. Until that is done, it is appropriate to designate the material as an indicated mineral resource, according to the CIM Standards adopted in National instrument 43-101.

Several generations of Reserve Estimates are available pertaining to the former Ruth-Vermont mine, from as early as 1972 to the last available tabulation in 1982. The estimates appear to conform to the categories in sections 1.3 and 1.4 of the National Instrument and were apparently based upon underground drill holes and subsequent mine sections and plans developed from drill hole data and underground workings. These data were developed for planning purposes of an operating mine and are therefore **assumed** to utilize a recognized and widely accepted (at the time) methodology.

> "The following report is an update of the writer's report of April 18, 1979. ...Vein ore deposits have been increased since the 1981 operation indicated their (sic.) increased potential as an ore source.
>
> **Ore Reserves**

		Ag.	Pb.	Zn.
Replacement Ore				
Tons Diamond Drill Indicated	101,000	5.0	3.6	4.9
Probable Ore	57,000	4.9	3.5	4.9
Sub-total	158,000	4.9	3.5	4.9
Vein Deposits				
Tons Diamond Drill Indicated	44,000	9.0	6.3	6.1
Probable Ore	100,000	9.0	6.3	6.1
Sub-total	144,000	4.9	3.5	4.9
Total	302,000	6.8	4.8	5.4

> ... Exploration of the vein deposits on the 5750 level have added one new vein system to the ore potential and other parallel vein structures are indicated to the East.
>
> **Notes on Tonnage**
>
> Twenty-six thousand tons of replacement ore left in the backs and floors of the present stopes is still recoverable. The stope survey completed by Mr. J. Start on March 22nd, 1977 shows this on the diamond drill sections. This survey indicates that some 58,000 tons of ore should remain in the stoped area. A large part of this tonnage was left in the roof and floor of the old stopes and can be mined at today's metal prices.
>
> Replacement ore between sections 1650 and 1975 is estimated at 99,672 tons based on diamond drill sections after an allowance of 10% for dilution. Diamond drilling in the 1975 section is not sufficient to allow accurate ore calculations and this tonnage has been reduced to 75,000 tons until further development has been done.

> Exploration of the vein deposits is limited to a few hundred feet of drifting and a series of diamond drill holes put in from the 6,000 foot level. Since the drill holes were largely oriented to prove up the replacement ore tonnage, only a few holes shed light on continuity of the vein deposit.
>
> Four vein systems have been found in the exploration to date, namely the Blacksmith, Pinetree, North vein and South vein. They have a combined strike length of 2700 feet and two have a vertical range of from 200 feet to 500 feet within the confines of the present workings. Taken over an average five foot mining width and a specific gravity of eleven cubic feet to the ton, they have an ore potential of 429,545 tons. Since exploration to date is too limited to estimate the distribution of ore shoots within the vein a conservative estimate of one ton of ore in each three tons of ore potential has been used. Possible ore is therefore 142,512 tons, of which 44,000 tons within the Pinetree vein are diamond drill indicated, leaving possible ore as 98,512 tons. The figure of 100,000 tons has been used in calculating ore reserves.

"Production to the end of November has used up approximately 17,000 tons of reserves but development on the 5750 has indicated an additional 15,000 tons of vein ore ..." (Forman 1981a).

This last statement is considered highly significant, originating in a report written near the end of underground mining operations at the former Ruth-Vermont Mine. The mine was shut down due to financial difficulties due, in part, to damage incurred to the mine infrastructure from an avalanche. At the time underground mining operations were abruptly halted, there were almost 300,000 tonnes of reserves remaining in the mine, comprised of both vein- and replacement-type mineralization. It is highly significant with regard to the mandate of this exploration program to attempt to increase reserves at the former Ruth-Vermont mine that exploration conducted concurrently with mining in 1981 evidently delineated additional potential ore reserves at almost the same rate they were being mined.

7.0 2003 EXPLORATION PROGRAM

One of the objectives of the 2003 field program was to attempt to locate additional sub-surface mineralization with which to increase reserves previously described on the property. A total of 19 diamond drill holes were completed along either side of Vermont Creek in the immediate vicinity of the Ruth-Vermont mine (Fig. 6-26). Two additional diamond drill holes were completed between Vowell and Crystalline creeks, west of their mutual confluence.

The following table summarizes pertinent collar information for the 2004 diamond drill holes. Additional data is available in the core descriptions included in Appendix B.

Hole	Pad Number	Azimuth	Inclination	Down-hole Depth
01	1	220°	- 40°	140.64
02	1	220°	- 65°	102.41
03	1	220°	- 77	98.14
04	2	224°	- 81°	121.91
05	2	043°	- 75°	112.16
06	2	043°	- 63°	182.87
07	2	070°	- 50°	142.03
08	3	041°	- 45°	264.55
09	4	032°	- 47°	131.06
10	5	Vertical	- 90°	85.34
11	5	043°	- 46°	143.25
12	5	231°	- 49°	264.25
13	6	344°	- 85°	143.25
14	6	344°	- 45°	260.60
15	6	190°	- 54°	307.83
16	7	215°	- 35°	72.23
17	8	218°	- 45°	163.90
18	9	215°	- 45°	153.30
19	10	224°	- 45°	149.63
20	11	216°	- 60°	157.26
21	12	274°	- 60°	

Pads 1 and 2 (from which holes 1 through 7 were drilled) were located at the top of the cliff band above the underground workings of the Ruth-Vermont Mine. Pad 1 (from which Holes 1 to 3 were drilled) was located at the mouth of the Blacksmith Adit (presumably driven to evaluate the Blacksmith Vein) and Pad 2 (Holes 4 through 7) was located approximately 105 m to the west. Holes 1 to 7 were drilled from these two pads to test mineralization in the stratigraphy immediately overlying the mine workings and several did intersect the upper workings of the mine. Pad 3 was located 290 m to the northwest and was drilled to test the stratigraphy underlying the Mine Sequence along the trend of the Ruth Vein System. Pad 4 was located immediately north of Vermont Creek at a distance of 441 m from Pad 1 and was were drilled from Pad 6 to evaluate the potential of a mineralized grit package interpreted to overlie the Ruth Limestone. Rock sample RW 2003 - 001 was taken from an arsenopyrite-rich vein approximately 100 m vertically above Pad 6. Hole 16 was drilled from Pad 7, located immediately east of the portal for the underground workings of the Ruth-Vermont Mine, approximately 101 m north of Pad 1. Holes 17 to 19 were drilled along an old mine road east of the Ruth-Vermont Mine. The holes were drilled to test moderately to highly anomalous gold in soil anomalies identified during the 2002 field program, with Hole 17 located approximately 557 m northeast, Hole 18 approximately 334 m north-northeast and Hole 19 275 m north of Pad 1.

Drill core samples were split using a rock saw under the supervision of the author. Half of the resulting split core remains in the core box and the other half was packaged and shipped to Acme Analytical Laboratories Ltd. in Vancouver, B.C. The samples were prepared using Acme's R150 procedure. All samples were then subjected to aqua regia digestion on a 10 gram sample split and analyzed using Acme's Group 1F1 analytical package (ICP-Mass Spectrometer analysis). High grade rock samples were re-assayed using Acme's Group 7AR analytical package (Inductively Coupled Plasma) and Group 3B fire assay for Au and Ag.

The drill core is stored on the property south of Vermont Creek.

8.0 DISCUSSION OF RESULTS

Exploration over the previous 20 years has emphasized potential for, and evaluation of, base metal occurrences having interpreted SEDEX potential, resulting in identification and preliminary evaluation of the LCP Zone (MINFILE 082KNE011 - Crystal Creek), immediately north of Crystal Creek and south of Vermont Creek. Mineralization described is interpreted by the author to be similar to vein-type mineralization described in the former Ruth-Vermont mine, although a short interval of fault-bounded massive sulphide was identified in 2000 which may be consistent with a SEDEX origin.

There are a number of MINFILE occurrences which lie along a distinct trend oriented northwest - southeast, which include (from south to north): 082KNE031 (VAD), 082KNE011 (Crystal Creek), 082KNE009 (Ruth Vermont), 082KNE037 (Syenite Bluff), 082KNWE193 (Monitor / Southern Cross), 082KNW182 (Malachite) and 082N 010 (Diamond /No One). Farther northeast, this trend can be extended to include the Flying Dutchman (082N 006) and the Bobbie Burns (082N 008) and Crown Point (082N 009) MINFILE occurrences. These documented mineral occurrences can generally be described as being comprised of moderate to high grade gold and silver with or without associated base metals (based largely upon grab samples documented in MINFILE). Furthermore, associated mineral types described include sphalerite and galena with ubiquitous pyrite, together with arsenopyrite, chalcopyrite, boulangerite, tetrahedrite, freibergite, scheelite and stibnite. Generally, this mineral association would be consistent with a vein-dominated mineral system, with local manto-type replacement deposits potentially occurring in association with carbonate-rich sequences within the siliciclastic-dominated Proterozoic Horsethief Creek Group grit succession.

A surprising, but not altogether unexpected result of the 2002 field program was the presence of anomalous gold in soils and locally high grade gold values in rock samples. In 1996, an anomalous drill intercept grading 71 g/t (2.08 oz/ton) gold was reported from 1.71 metres of"... limey argillite with disseminated pyrite and arsenopyrite..." in DDH96-3. On the basis of a possible relationship between gold and arsenopyrite, all arsenopyrite-bearing occurrences identified during the 2002 field program were sampled, resulting in numerous moderate to high grade gold values and a very strong correlation coefficient between gold and arsenic in both rocks and soils. Although arsenopyrite-bearing occurrences were identified within, and proximal, to the Ruth Vein System (i.e. Blacksmith Adit), such mineralization appeared to be more widespread and has been interpreted as the result of a separate mineralization event (or a different phase of a protracted event).

Anomalous gold-in-soils are relatively common east (i.e. in the footwall) of the projected trend of the Ruth Vein System, associated with more resistant lithologies, typically comprised of grits. Furthermore, mineralization appears to be localized at, or near, the hinge areas of prominent structures, in particular, anticlinal closures, however, this may well be a function of exposure and cover. The anticlinal closures are exposed above surface, whereas synclinal closures occur largely in the sub-surface (i.e. in the underground workings of the Ruth Vermont mine where DDH96-3 (2.08 oz/ton over 1.71 metres)was drilled).

Therefore, the control(s) on gold mineralization are currently not constrained. Currently, data might be interpreted to indicate that gold + arsenic-rich fluids utilized pre-existing fluid conduits and pathways arising from structural flexure producing the regional anticlinorium and associated parasitic folds. Recessive lithologies within the folds allowed fluid passage but few favourable sites for development of mineralization. Resistant lithologies, including the Ruth Limestone and grit sequences, allowed for development of mineral deposits in axial planar fractures. As a result, argillite and siltstones may host high background gold and/or thin gold-bearing veinlets and veins, whereas more resistant lithologies are expected to offer potential for larger veins and pods of mineralization.

The 2004 drill core results confirmed high grade Ag, Pb, As, Zn and/or Au mineralization associated with predominantly quartz or quartz + dolomite veins. On the south side of Vermont Creek, the Ruth Vein System, comprised of the Blacksmith, Pinetree, Windlass, North and/or South veins and associated with high grade Ag + Pb + Zn vein-and replacement-type ore in the Ruth Vermont Mine, was intersected above the underground workings, but were much thinner than expected based on the literature.

On the north side of Vermont Creek, the Ruth Limestone and the Ruth Syncline, stratigraphic and structural hosts, respectively, of vein-and replacement- mineralization documented in the Ruth Vermont Mine, are interpreted to have been intersected exactly where expected, based on projections from structural data obtained in 2002. However, the prospective host limestone and/or structure intersected did not contain correlative vein and/or replacement mineralization. Preliminary interpretation is that vein mineralization is controlled and localized along a mineralized trend slightly oblique to the Ruth Syncline. This mineralized trend, documented previously in the underground workings of the Ruth-Vermont mine, is interpreted to have subsequently been truncated and offset by faulting sub-parallel to the axis of the regional anticlinorium, which is associated with anomalous geochemical results and 11 documented MINFILE occurrences over in excess of 19 km.

Samples from the resulting drill core (Appendix B) were taken in an attempt to differentiate silver-bearing base metal-rich vein and/or replacement mineralization associated with the Ruth-Vermont mine, from a proposed gold-bearing mineralized halo surrounding the mine. In addition, the possibility of more than one mineralizing event has been proposed and sampling attempted to obtain suitable data with which to evaluate this proposal. Finally, anomalous gold values were documented in soil samples on both the north and south sides of Vermont Creek, east of the projected trace of the Ruth Vermont Vein System. Therefore, numerous samples were taken in an attempt to identify the control(s) on gold. As a result of this sampling philosophy, sample sizes range from 2 cm to approximately 1 metre. The data documented in this report represents analytical results from veins at a variety of angles to the core axis, ranging from very shallow (0° to 20°) to moderately steep and **DO NOT REPRESENT TRUE THICKNESSES.**

Gold/Silver

Table 1 is a compilation of the 2002 and 2003 results for relatively high grade gold and silver. An empirical cut-off of 1 g/t (0.03) has been utilized for the purposes of previous Press Releases (dated 09/12/03 and 11/29/03), however, for the purposes of this note only samples having gold values greater than 3 g/t (0.09 oz/t) have been tabulated. A more thorough tabulation can be found in the referenced Press Releases.

In addition to the results, an interval in diamond drill hole 0315 returned a weighted average of 0.89 g/t Au over 6.63 metres (21.75 feet). It is important to note that these preliminary analytical data result from a program undertaken specifically to evaluate the Ruth Vein System. Therefore, the 2003 diamond drill holes were oriented so as to be perpendicular, or at a high angle to, the Ruth Vein System and, therefore, may not have been at an optimal angle to assess gold potential associated with a separate, and potentially distinct, gold+arsenopyrite-bearing vein system. Furthermore, holes 1-7 were drilled from two set-ups approximately 100 metres apart to test mineralization associated with the vein system immediately above the underground workings. These holes represent a relatively closely spaced set of holes. Pad 6 was located to the north, across Vermont Creek, approximately 865 m from Pad 1. Finally, the MINFILE occurrences mentioned previously are separated from one another on the kilometre scale (1 to 4

Sample Number	Interval (metres)	Au (Gold)		Ag (Silver)	
		oz/t	g/t	oz/t	g/t
RW-02-03	Rock	0.40	15.52	11.07	272.20
RW-02-04	Rock	0.18	7.08	54.15	247.40
RW-02-05	Rock	0.31	12.82	23.13	267.90
RW-02-014	Rock	0.50	19.81	11.17	243.80
RW-02-015	Rock	0.35	11.59	0.15	5.00
RW-02-016	Rock	0.13	4.50	6.41	237.60
RW-02-026	Rock	0.23	11.55	4.47	129.30
RW-02-028	Rock	0.21	7.74	15.86	270.10
RW-02-030	Rock	0.52	19.18	0.63	21.70
RW-02-032	Rock	0.39	12.58	1.71	52.50
RW-02-040	Rock	0.20	6.09	1.43	40.50
RW-02-04 1	Rock	0.35	10.73	4.39	87.90
RW-02-042	Rock	0.14	4.24	9.32	244.00
0301-66	0.15	0.29	9.94	71.25	2442.70
0302-10	0.14	0.10	3.38	1.24	42.60
0302-33	0.28	0.09	3.11	23.01	789.10
0303-86	0.10	0.16	5.59	1.48	50.70
0303-89	0.20	0.30	10.16	4.53	155.30
0303-95	0.23	0.09	3.15	12.47	427.60
0303-96	0.24	0.10	3.41	4.46	152.90
0303-107	0.24	0.12	4.06	8.24	282.40
0303-111	0.63	0.11	3.72	0.80	27.40
0305-149	0.08	0.11	3.70	1.98	67.80
0306- 172	0.04	0.23	7.94	0.02	0.57
0306- 176	0.16	0.26	8.86	15.45	529.70
0306-189	0.02	0.69	23.65	22.43	768.90
0306-195	0.16	0.09	3.09	46.32	1588.20
0306-199	0.11	0.11	3.79	16.66	571.30
0307-218	0.72	0.15	4.98	0.50	17.10
0307-220	0.30	0.12	4.00	0.76	26.00
0307-221	0.43	0.13	4.40	0.17	6.00
0307-225	0.29	0.10	3.58	1.54	52.90
0313-418	0.10	0.21	7.03	0.01	0.30
0314-488	0.06	0.52	17.97	>2.92	>100
0314-507	0.12	0.23	7.89	>2.92	>100
0314-558	0.13	0.13	4.48	6.39	219.00
0314-584	0.38	0.24	8.18	0.19	6.55
0315-620	0.77	0.13	4.34	0.58	19.75
0315-651	0.06	0.30	10.31	1.95	67.00
RW-03-001	Rock	0.14	4.73	9.29	318.40

kilometres). Therefore, it is impossible to make confident correlations between MINFILE occurrences and discuss whether they belong to the same vein, or even mineralized system, as the Ruth Vermont Vein System and associated (interpreted) mineralized halo. Work will continue on attempting to make correlations between the 1996, 2000 and 2003 drill holes within the Vermont Creek valley.

However, if the surface and drill data from to 1996 - 2003 exploration programs are taken collectively, and if one accepts the close spatial association between the regional anticlinorium, MINFILE occurrences and geochemical results (rock, silt and soil), then it is reasonable to conclude that the regional anticlinorium is the primary structural control on gold-bearing (and, more generally, base and precious metal-bearing) mineralization. The fact that relatively high grade gold-bearing MINFILE and regional geochemical data have been documented along, and beyond, a 19 kilometre trend underlying the property are considered to indicate potential to identify additional mineralization surrounding, and between, these occurrences. Therefore, one possible conclusion that can be made at this stage in the exploration program is that a large tonnage - low grade gold-bearing potential ore body becomes a valid exploration target.

For clarification, a high tonnage (or bulk tonnage) - low grade deposit is one in which a large volume of host material contains highly anomalous background levels of gold within which higher grade (to "Bonanza" grade) gold can be found, commonly in the form of veins. For the purposes of the exploration program to date, low grade gold is considered to range between 0.5 and 3 grams per metric tonne and moderate to high grade gold comprises any results above 3 gm/mt (Note: oz/ton = gm/mt / 34.2857). It is important to note that high grade gold in other programs, particularly those having "Bonanza" grades document gold results having several to many ounces per tonne, therefore, we emphasize that the use of the term "relatively high grade" has not been rigorously quantified.

Lead Zinc Silver

Table 2 comprises all the high grade lead and/or zinc analyses returned from the 2003 drill program, having values for lead and/or zinc greater than 4.00%. The data have been previously released in earlier Press Releases. A review of the data reveals a strong relationship between high grade silver values (reported in gm/mt = ppm) and lead. This is not surprising as galena (the most common lead-bearing sulphide) typically contains silver as an impurity. Another feature of the tabulated data is that there is not a strong relationship between lead (as galena) and zinc (as sphalerite), suggesting they do not have the same controls over precipitation.

Continuing work to evaluate the 2003 drill results will include a review of the gold-bearing intercepts, the nature of the mineralization within those intercepts and the host lithology. The host strata for both the vein system and the gold-bearing halo are interpreted to have had considerable addition of iron, in the form of pyrite and arsenopyrite, together with other less abundant iron-bearing sulphides. It is expected that further work to evaluate the regional anticlinorium will confirm that it is a regional structure controlling mineralization and that the MINFILE occurrences mentioned previously are all

Sample Number	From (metres)	To (metres)	Interval (metres)	Ag (ppm) Silver	Pb (%) Lead	Zn (%) Zinc
0301 - 66	46.75	46.90	0.15	2442.7	15.34	3.61
0301 - 56	65.20	65.30	0.10	2866.0	29.59	4.63
0301 - 57	78.98	79.14	0.16	107.5	1.47	10.09
0301 - 58	85.49	86.10	0.61	2013.1	24.84	16.85
0301 - 59	86.20	86.86	0.66	353.8	6.36	11.25
0301 - 65	97.63	97.80	0.17	556.8	8.19	0.21
0301 - 70	124.50	124.55	0.05	68.8	1.28	6.22
0302 - 24	70.96	71.06	0.10	152.8	2.48	4.61
0302 - 31	74.73	74.86	0.13	945.8	12.09	0.15
0302 - 32	74.86	75.15	0.29	1193.3	13.44	0.17
0302 - 33	75.15	75.43	0.28	789.1	6.44	0.06
0302 - 42	86.20	86.29	0.09	269.9	7.58	1.11
0302 - 43	92.52	92.75	0.23	581.7	17.23	0.04
0302 - 48	97.10	97.45	0.35	357.2	8.44	15.45
0302 - 49	97.45	97.84	0.39	174.1	3.19	26.05
0302 - 51	98.13	99.12	0.99	178.1	4.20	4.30
0302 - 53	99.72	100.58	0.86	154.8	2.91	10.55
0302 - 55	101.45	102.41	0.96	12.0	0.17	10.63
0303 - 95	39.39	39.62	0.23	427.6	5.08	2.99
0303 - 100	40.61	41.01	0.40	1373.2	6.28	11.25
0303 - 101	41.01	41.46	0.45	507.6	4.50	11.22
0303 - 103	41.73	42.08	0.35	739.1	11.96	1.68
0303 - 107	42.99	43.23	0.24	282.4	2.83	9.46
0303 - 108	43.23	43.42	0.19	155.0	1.60	4.44
0305 - 120	40.99	41.07	0.08	452.2	6.22	3.28
0305 - 121	42.38	42.50	0.12	499.2	18.63	0.05
0305 - 123	48.01	48.05	0.04	167.4	5.15	0.01
0305 - 160	79.97	80.03	0.06	779.4	6.73	16.74
0305 - 129	85.72	85.85	0.13	123.7	0.53	6.35
0305 - 131	85.98	86.08	0.10	828.5	29.25	1.55
0305 - 132	87.33	87.74	0.41	41.2	0.16	5.18
0305 - 133	88.77	88.86	0.09	110.8	2.92	5.00
0305 - 135	88.96	89.10	0.14	301.0	8.29	9.96
0305 - 136	89.10	89.17	0.07	206.0	5.57	7.06
0305 - 139	89.55	89.66	0.11	361.8	6.23	15.72
0305 - 144	92.20	92.28	0.08	469.1	4.44	12.44
0305 - 149	93.28	93.36	0.08	67.8	5.04	6.31
0305 - 152	95.26	95.74	0.48	2074.8	25.52	9.71
0305 - 153	95.74	95.97	0.23	420.9	5.28	1.35

Sample Number	From (metres)	To (metres)	Interval (metres)	Ag (ppm) Silver	Pb (%) Lead	Zn (%) Zinc
0305 - 155	96.32	96.80	0.48	436.7	5.36	1.75
0306 - 176	60.67	60.92	0.16	529.7	10.79	1.85
0306 - 180	67.21	67.24	0.03	2910.8	20.97	16.96
0306 - 182	69.50	69.56	0.06	93.4	0.43	11.27
0306 - 184	69.84	70.10	0.26	1945.5	28.06	15.64
0306 - 186	76.50	76.53	0.03	623.0	9.26	18.25
0306 - 187	83.78	83.79	0.01	660.8	5.46	0.12
0306 - 188	84.32	84.35	0.03	112.4	0.22	30.36
0306 - 189	84.79	84.81	0.02	768.9	14.52	17.10
0306 - 237	87.10	87.22	0.12	2556.4	22.03	18.11
0306 - 190	96.90	96.98	0.08	895.4	8.79	3.29
0306 - 191	97.50	97.53	0.03	854.7	11.96	18.20
0306 - 192	111.96	112.08	0.12	928.3	10.00	0.11
0306 - 193	112.83	113.05	0.22	566.5	5.06	2.15
0306 - 194	113.46	113.49	0.03	679.0	8.93	0.02
0306 - 195	114.52	114.68	0.16	1588.2	21.53	5.94
0306 - 196	115.32	115.40	0.08	139.0	4.15	0.04
0306 - 202	136.28	136.31	0.03	40.0	8.06	4.55
0307 - 220	56.97	57.27	0.30	26.0	4.40	0.13
0307 - 223	58.44	58.53	0.09	61.0	5.32	16.43
0307 - 225	58.83	59.12	0.29	52.9	3.67	8.29
0307 - 228	84.73	84.77	0.04	315.1	11.93	14.33
0307 - 229	87.03	87.18	0.15	1718.4	31.29	16.23
0307 - 230	94.14	94.18	0.04	1207.2	8.45	31.09
0307 - 233	110.88	111.08	0.20	1495.5	19.50	14.24
0313 - 413	34.68	34.75	0.07	56.7	1.56	3.40
0313 - 446	95.91	96.07	0.16	91.5	4.16	0.38
0314 - 447	0.52	0.91	0.39	399.8	9.99	12.82
0314 - 558	172.33	172.46	0.13	219.0	14.14	----
0319 - 704	56.30	56.37	0.07	20.0	0.91	3.90
0319 - 705	56.37	56.47	0.10	545.8	18.26	5.38
0319 - 706	56.47	56.56	0.09	270.7	7.94	13.33
0319 - 713	88.82	88.87	0.05	68.0	2.43	7.60
0319 - 714	89.39	89.44	0.05	37.0	1.89	8.47
0319 - 716	89.66	89.77	0.11	286.0	10.45	1.31
Rock 03-01				318.4	34.35	15.55

located along, and controlled by, the anticlinorium. As pyrite and arsenopyrite are commonly described in the MINFILE occurrences, together with relatively high grade gold (with silver and base metals), one possible outcome of continued exploration of the Vowell Creek property is the potential to identify and delineate a widespread gold-dominated halo surrounding the high grade silver-bearing base metal Ruth Vein System.

9.0 CONCLUSIONS

Jasper's work to date suggests the possibility of a polymetallic mineralized zone containing high grade silver-lead-arsenic-zinc and/or gold as described above. The former Ruth Vermont mine represents high-grade vein mineralization associated with individual veins of the Ruth Vein System and low to moderate grade replacement- (manto-) type mineralization hosted by the Ruth Limestone, in a zone adjacent to, and associated with, the Ruth Vein System. A separate mineralization event has been proposed to address the widespread gold and arsenic, also believed to be associated with the regional anticlinorium as the controlling host structure. Mineralization characterized by gold + arsenic appears to overlap, but is not interpreted to correlate to, the high grade silver-lead-zinc event. It may represent distal mineralization associated with the Ruth Vein System or it may represent an entirely separate mineralization event.

Ruth-Vermont System

The Ruth Vein System (comprised of at least four separate and distinct veins) has been identified and described from surface and underground workings at the Ruth-Vermont mine. Manning (1979) reported that these veins "... namely the Blacksmith, Pinetree, North vein and South vein,... have a combined strike length of 2700 feet and two have a vertical range of from 200 feet to 500 feet within the confines of the present workings. The veins are associated with several prominent local folds, specifically the Charlotte and Sheba anticlines and the Ruth Syncline, host of the mineralization of the Ruth-Vermont mine, within a broad northeast-trending, regional anticlinorium. The MINFILE occurrences mentioned earlier are localized along the trend of the anticlinorium, interpreted to strongly suggest it is the primary structure controlling vein-type mineralization. Limited structural work along the Vermont Creek drainage in the vicinity of the Ruth-Vermont Mine is interpreted to suggest there has been no offset along Vermont Creek (i.e. orthogonal to the trend of both the Ruth Vein System and the trend of the anticlinorium). However, there are a number of faults having displacement ranging from several centimetres to "significant" offset, sufficient to have displaced the Ruth Vein System north of Vermont Creek.

Manning (1972) reports that "Three sets of quartz-calcite fissure veins occur obliquely, transversely and parallel to bedding relative to the fold structures. The oblique veins strike southeast and have an average dip of 65° to the southwest. They are well mineralized and cut at an angle of 15° to the strike of the beds. The transverse veins are poorly mineralized and are representative of fissure fillings along a series of near vertical and parallel shears. Tension gashes are generally related to such veins. The veins parallel to the bedding normally mark concordant contacts between the argillite and argillaceous limestone. Sulphide content in the veins is low. ... ". Evaluation of drill core from the 2003 field program identified multiple generations of veining, comprised of quartz and/or carbonate (calcite and/or dolomite) with variable amounts of sulphide mineralization. The current working hypothesis regarding the high grade silver-bearing, base metal Ruth Vein System is that the veins cross-cut the Ruth Syncline at a shallow oblique angle and have been truncated by a fault on the west limb of the Sheba Anticline. Further work is recommended to evaluate opportunities to locate the northern offset of the Ruth Vein System.

Based on observations made in outcrop and in drill core, there are interpreted to be at least two separate and distinct phases of mineralization along Vermont Creek. One comprises the high grade silver-lead-zinc vein system identified within and immediately above the Ruth-Vermont Mine. Where the vein system intersects the Ruth Limestone, moderate grade replacement- (manto-) type mineralization was encountered and has been documented. Significant vein- and/or replacement-type mineralization was **not** identified north of Vermont Creek, despite intersecting the interpreted correlative of the Ruth Syncline, the structure that hosts both the Ruth Vein System and the Ruth Limestone.

The second interpreted phase of mineralization consists gold + arsenopyrite. Both phases appear to be spatially separate, with high grade silver - lead ± zinc as galena + sphalerite mineralization comprising the Ruth Vein System and gold + arsenic ± zinc as gold + arsenopyrite ± sphalerite vein mineralization, apparently preferentially localized in the granule conglomerate ("grit") package immediately underlying the Mine Sequence. Analysis of geochemical results from the 2002 samples was interpreted to indicate a strong correlation between arsenic and gold Walker 2003), empirically confirmed during 2003. A large number of relatively narrow, arsenopyrite-bearing to arsenopyrite-rich vein intercepts were sampled and analyzed, returning variable gold results.

Of particular interest in evaluating the gold potential of the Vermont Creek area are the relatively narrow veins which return gold values of approximately 1 gm / mt (1000 ppb) or more. These values are well in excess of regional background values, with a majority of the analytical gold results returning values in excess of 30 ppb (an empirical anomalous cut-off value) to a maximum of 23,650 ppb. These high gold values are interpreted to suggest a relatively high grade gold-enriched mineralized halo spatially associated with a regional anticlinorium which hosts the Ruth Vein System and a number of previously documented MINFILE occurrences, also having anomalous gold values.

10.0 RECOMMENDATIONS

A two phase program is proposed in which Phase I consists of compilation of all available data followed by geological fieldwork to assess the database and ground-proof interpretations. Phase II consists of diamond drilling, both underground and surface. The author strongly recommends all aspects of the Phase I program proceed to completion in order to provide a complete database for subsequent field work and drilling.

Phase I

Pre-Field

10.1 Diamond drill hole data from the Vermont Creek drainage (1996 underground, 2000 and 2003 surface programs) should be combined into a digital database from which sections and plans can be drawn (ideally integrating the underground mine plans and sections). Combining these data is expected to allow identification of stratigraphic and structural features in the immediate vicinity of the Ruth Vermont mine. Evaluating the resulting digital database, together with surface and sub-surface geochemistry may allow more confident projections and correlations of the individual elements of the Ruth-Vermont vein system, faults and other structures controlling mineralization and the possible juxtaposition of two proposed mineralization events.

10.2 The author strongly recommends that compilation of all available data for the property continue to completion. A partial geochemical compilation and a preliminary compilation of geological information was initiated in 2000. All remaining data pertaining to the property, comprised of regional and detailed geological data, geochemical analyses (rock, silt, stream and/or drill core) and drill hole and trench locations, should be compiled, evaluated and interpreted. An internally consistent compilation of regional data (geological and geochemical) would allow subsequent exploration to utilize and evaluate interpretations from previous geological mapping and allow mineralized horizons and/or structures to be identified and projected.

10.3 The most important data with which to evaluate potential ore-grade (vein- and replacement-type) mineralization and potential reserves is available as archival mine data, principally in the form of plans and cross sections for the former Ruth-Vermont mine, in the possession of Jasper Mining Corporation.

The author strongly recommends these records be digitized in their entirety, together with data from the 1996 and 2000 drill programs, and a database built from which new plans and sections can be plotted. Examination of the resulting digitized mine data, as plans and sections, with respect to surface geology and geochemistry is likely sufficient to propose a logical underground drill program. In support of this interpretation, the author notes that Forman (1982) recommended a drill program, as follows: "The present mine program should be continued until such time as exploration and development programs have a better knowledge of the ore shoots. The immediate need underground is an 1000 foot (Author's Note: 305 m) diamond drill program to definitely establish the location of the Pinetree vein on the 5750 foot level. It would also provide information on the exact location of the major fault at the 2000 section" (Forman 1982).

10.4 The 1:10,000 aerial photographs from the 2000 exploration program should be utilized to create an orthophoto. Work on an orthophoto was implemented in 2003 and should be completed. The completed orthophoto is expected to greatly assist in interpreting and understanding stratigraphic and structural relationships on the property.

10.5 A digital database comprised of drill holes and mineralized intercepts arising from work in 2000-2001 by Minequest Exploration Associates Ltd. for the LCP Zone should be developed and critically evaluated with respect to sub-surface stratigraphic and structural correlations. These data, plotted on the 1:20,000 TRIM base and/or an orthophoto, should be evaluated with regard to the presence of faults sub-parallel to the trend of the regional anticlinorium and the possibility they may represent fault offset equivalents of mineralization documented in the Ruth-Vermont mine. Sub-surface data should be evaluated with respect to surface geological and geochemical data, plotted with respect to topography and projections of underground (Recommendation 10.2) and surface data from the area of the Ruth-Vermont mine.

Field

10.6 The current database for the property, subsequent to compilation, needs to be "ground proofed" by geological mapping and sampling, initially for the region extending from the LCP Zone north-northwest to Malachite Creek.

Stratigraphic correlations proposed from the LCP area northward to Malachite Creek should be confirmed and plotted on digital 1:20,000 TRIM topographic maps and/or an orthophoto, with reference to underground data from the former Ruth-Vermont mine. The reported stratabound lead ± zinc should be plotted and subsequently followed up in the field with stratigraphic and/or structural mapping in an attempt to identify and map possible marker horizons and extend correlations. These stratabound horizons obviously represent the best opportunity in the immediate future to evaluate the SEDEX potential of the area.

This work is expected to result in an understanding of the stratigraphic and structural relationships in the area centred around the former Ruth-Vermont mine site and allow interpretation of the relationship between stratigraphy, structure and documented mineralization to determine:

1. If mineralization is predominantly stratabound or vein-type, primary or replacement,
2. The extent to which gold + arsenic (± cadmium ± copper ± gallium ± tungsten) is associated with documented silver + lead + zinc,
3. If the relatively consistent stratigraphy from Vermont Creek can be correlated north to Malachite Creek where apparently stratabound lead - zinc mineralization was previously reported, and
4. If there are preferred mineralized horizons and, if so, whether they can be mapped and projected.

10.7 Geological mapping of the steep ground immediately south of the former Ruth-Vermont mine is considered very important. The Ruth Limestone is clearly critical to replacement-type mineralization in the former Ruth-Vermont mine, both as a stratigraphic and/or structural control in localizing mineralization along the base and within the limestone itself. Mapping the Ruth limestone should allow more confident projection into the sub-surface and to project the mutual intersection of the limestone and the cross-cutting vein system as a potential vein- and replacement-type deposit. Field work to further map the Ruth Limestone may allow identification of axial planar faults and determination of offset, both critical to the economic potential of the property.

Furthermore, "A relatively unexplored replacement zone further up-dip from the Nelson Orebody may provide potential ore. To the southwest, and at much higher elevation from the Nelson Orebody, another limestone unit is known to exist. Veining has also been noted in this area.

A replacement zone of unknown dimension has been examined by the writer on the Syenite Bluff crown grant immediately north of the Ruth-Vermont property on the north side of Vermont Creek" (Forman 1982).

Future exploration to expand reserves documented at the former Ruth-Vermont mine should include testing the proposed extension of the vein system along strike, both north and south of Vermont Creek. It is interesting to note that the Pinetree and Blacksmith vein system (repeatedly described as having a 2600 foot surface trace) was projected south from the former Ruth-Vermont mine into the northern portion of the Crystal Creek drainage, which has been the locus of several phases of exploration to determine the source of a number of high grade mineralized intercepts recovered in previous drill programs on the LCP Zone.

10.8 The tentatively identified "major fault" that obliquely cuts the ore zone beyond section 2000 (Forman 1982) needs to be critically evaluated with respect to its potential effect on the ore zone (i.e. does it duplicate, and therefore thicken the ore zone, or potentially eliminate it). The other limestone unit to the southwest and at higher elevation, associated with veining, and "a replacement zone of unknown dimensions" on the Syenite Bluff crown grant (Forman 1982) may represent fault duplicates, additional veins cross-cutting the Ruth (or another) limestone or other stratigraphically and/or structurally controlled mineralization in the local anticlinorium. Furthermore, geological mapping of the Medesto and Cochrane faults in the LCP Zone should be undertaken to evaluate the possibility these faults project into Vermont Creek.

10.9 Re-evaluation of previously described mineralized occurrences is strongly recommended. These occurrences should be geologically mapped and re-sampling. Precise location of these occurrences on topographic maps and, if possible, with respect to their stratigraphic and/or structural position is key to evaluating their origin, whether primary (SEDEX) or secondary (vein- or replacement-type).

10.10 An airborne transient electromagnetic (TEM) geophysical survey should be considered, extending from the LCP Zone northward to the height of land separating Malachite Creek from Vermont Creek. The survey should be sufficiently wide to detect the presence of a SEDEX massive sulphide body and, if present, determine its margins. In addition, the survey should respond to sufficiently large, potentially economic vein- and/or replacement-type mineralization. Interpretation of the data resulting from the proposed survey is expected to benefit greatly from compilation of the Ruth-Vermont underground mine data (Recommendation 10.2) in determining the probable strike extensions of the Pine Tree, Blacksmith, North and/or South vein from the Ruth-Vermont southwest into the Crystal Creek drainage.

10.11 Structural data is required as a fundamental and integral part of all future exploration programs, including, but not limited to, bedding, foliation, fault and/or fractures measurements from outcrop, underground workings and/or diamond drill holes. The author considers the consistent lack of these data to represent a significant weakness in the documentation accompanying all previous reports. Without structural data, no meaningful projections and/or correlations can be attempted and no significant cross sections can be developed to integrate surface and underground data (whether from diamond drill holes or from underground workings). Finally, with the possible exception of deep penetrating geophysics, no meaningful sub-surface drill targets can be developed or proposed. Collection of structural data should continue as an integral component of all future programs.

10.12 All future soil, rock and drill core analyses should utilize multi-element ICP analysis with assays on high (potentially ore) grade results to facilitate identification of base and/or precious metal potential and/or pathfinder elements, together with the effects of possible alteration. In addition, the presence of possible co-products, such as cadmium, copper, gallium, gold and/or tungsten can be evaluated. Where direct base and/or precious metal results are disappointingly low, pathfinder elements (i.e. Cd for Zn) may indicate proximity to higher grade results and/or the possibility of interference or masking by other elements.

10.13 The orthophoto, once completed, can be utilized to identify and map coarse units (i.e. the resistant grit packages) for subsequent transfer onto the 1:20,000 digital TRIM maps. Field mapping, with structural measurements, are expected to help constrain the major structures in the area and may assist with stratigraphic / structural correlations.

Phase II

Phase II consists of a drill program to follow-up on the Phase I program Both underground and surface drilling is recommended for the Vowell Creek Property, with the highest priority being drilling in the Vermont Creek drainage.

10.14 In one of the last reports available from the underground mining operation, Forman (1982) stated that the "... immediate need underground is an 1000 foot (Author's Note: 305 m) diamond drill program to definitely establish the location of the Pinetree vein on the 5750 foot level. It would also provide information on the exact location of the major fault at the 2000 section". Underground access was available for the 1996 MineQuest program and appears to remain available subject to re-opening the 6000 portal (the Nelson and 5750 having been intentionally caved). Water may need to be pumped out in some areas to facilitate access and ventilation will probably be required.

The proposed underground program should attempt to further develop the identified vein system, comprised of the Pinetree, Blacksmith, North and South veins, and attempt to correlate them with mineralization identified at surface and in adits driven above the former mine workings.

10.15 Surface drilling is recommended to attempt to:

a. continue to determine the extent and grade of mineralization lying between the former underground mine workings and the surface,

b. determine the extent and nature of the mineralization (vein- and/or replacement-type) along the trend of the vein system to the south toward Crystal Creek and the LCP Zone,

c. evaluate surface scorodite staining associated with anomalous levels of arsenic and the relationship with elevated to highly anomalous gold values.

11.0 PROPOSED BUDGET

The following tentative budget is proposed, however, the actual rates have not been determined at the time of writing and will have to be confirmed by the geologist supervising the project.

Phase I

Description of Work	Estimated Cost
Pre-Field	
Compile Available data and append to existing database	$ 5,000
Digitize / Scan Ruth-Vermont underground plans and sections	$ 15,000
LCP Zone sub-surface data analysis	$ 3,000
Orthophoto (to complete work)	$ 11,000
Sub-Total	**$ 34,000**
Field	
Mob / De-mob	$ 2,000
Geological Mapping - 20 days	
Geologist - 20 days at $500 / day	$ 10,000
Assistant - 20 days at $250 / day	$ 5,000
4WD Truck - 20 days @ $75 / day	$ 2,200
Food / Accommodation - 40 man-days @ $100 / day	$ 4,000
2 ATV's - 40 man-days @ $75 / day	$ 3,000
Hand-held radios - 10 days x 2 @ $15 / day	$ 150
100 rock samples @ $25 / sample	$ 2,500
Helicopter (Jet Ranger) - 6 hours @ $1,000 / hr	$ 6,000
Sub-Total	**$ 34,850**
Airborne Geophysical Survey - Transient Electromagnetic	**$ 80,000**

Phase II

Underground Drilling at Ruth Vermont	
Mob / Demob drill and drillers	$ 4,000
Site Preparation	$ 20,000
Underground Supervisor - 15 days at $700 / day	$ 10,500
Geologist - 15 days at $500 / day	$ 7,500
Assistant - 15 days at $250 / day	$ 3,750
4WD Truck - 15 days at $75 / day	$ 1,125
Food / Accommodation - 30 man-days at $ 100 / day	$ 3,000
Drilling - 1000 m @ $120 / metre (underground)	$ 120,000
Supplies / Consumables - 15 days at $150 / day	$ 2,250
Rock Saw - 15 days at $30 / day	$ 450
Assays / Geochemistry - 500 samples at $25 / sample	$ 12,500
Reclamation / Reseal Portal	$ 15,000
Sub-Total	**$ 200,075**

Surface drilling - Ruth Vermont area	
Site Preparation, bulldozer and manual - $2000 / site x 8 sites	$ 16,000
Supervision - Geologist / Assistant - 40 days	$ 30,000
4WD Truck - 40 days at $75 / day	$ 3,000
Food / Accommodation - 80 man-days at $100 / day	$ 8,000
Drilling - 2,400 m @ $70 / metre	$ 168,000
Supplies / Consumables - 40 days at $150 / day	$ 4,500
Helicopter - 212 to sling drill equipment - 30 hrs @ $1,500 / hr	$ 45,000
Rock Saw - 40 days at $30 / day	$ 1,200
Assays / Geochemistry - 600 samples @ $25 / sample	$ 15,000
Reclamation	$ 12,000
Sub-Total	**$ 305,700**

Post-Field

Report	$ 15,000
Drafting	$ 10,000
Sub-Total	**$ 25,000**

Summary

Phase I		
Pre-Field		$ 34,000
Field		$ 114,850
Phase II		
Underground Drilling - 1000 metres		$ 200,075
Surface Drilling - 2400 metres		$ 305,700
Post-Field		$ 25,000
	Sub-Total	$ 654,625
Contingency (10%)		$ 65,500
		$ 628,592
	Total	**$ 720,125**

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Appendix A

Statement of Qualifications

Richard T. Walker, M.Sc., P.Geol.
656 Brookview Crescent
Cranbrook, B.C.
V1C 4R5

I, Richard T. Walker, hereby certify that:

1. I am a graduate of the University of Calgary with a Bachelor of Science in Geology in 1986 and subsequently obtained a Masters of Science in structural geology from the University of Calgary in 1989,

2. I am a Professional Geologist (P.Geol.) registered with the Association of Professional Geologists and Geoscientists of British Columbia,

3. I am the principal of Dynamic Exploration Ltd., 656 Brookview Crescent, Cranbrook, B.C. and work as a Consulting Geologist,

4. I have worked as a geologist and a consulting geologist from 1986 to the present in the provinces of British Columbia, Alberta and New Brunswick, the Northwest Territories, the state of Montana and Brazil and have been employed by the Geological Survey of Canada, the government of the Northwest Territories, and junior to senior resource companies as both a contract employee and as a consultant,

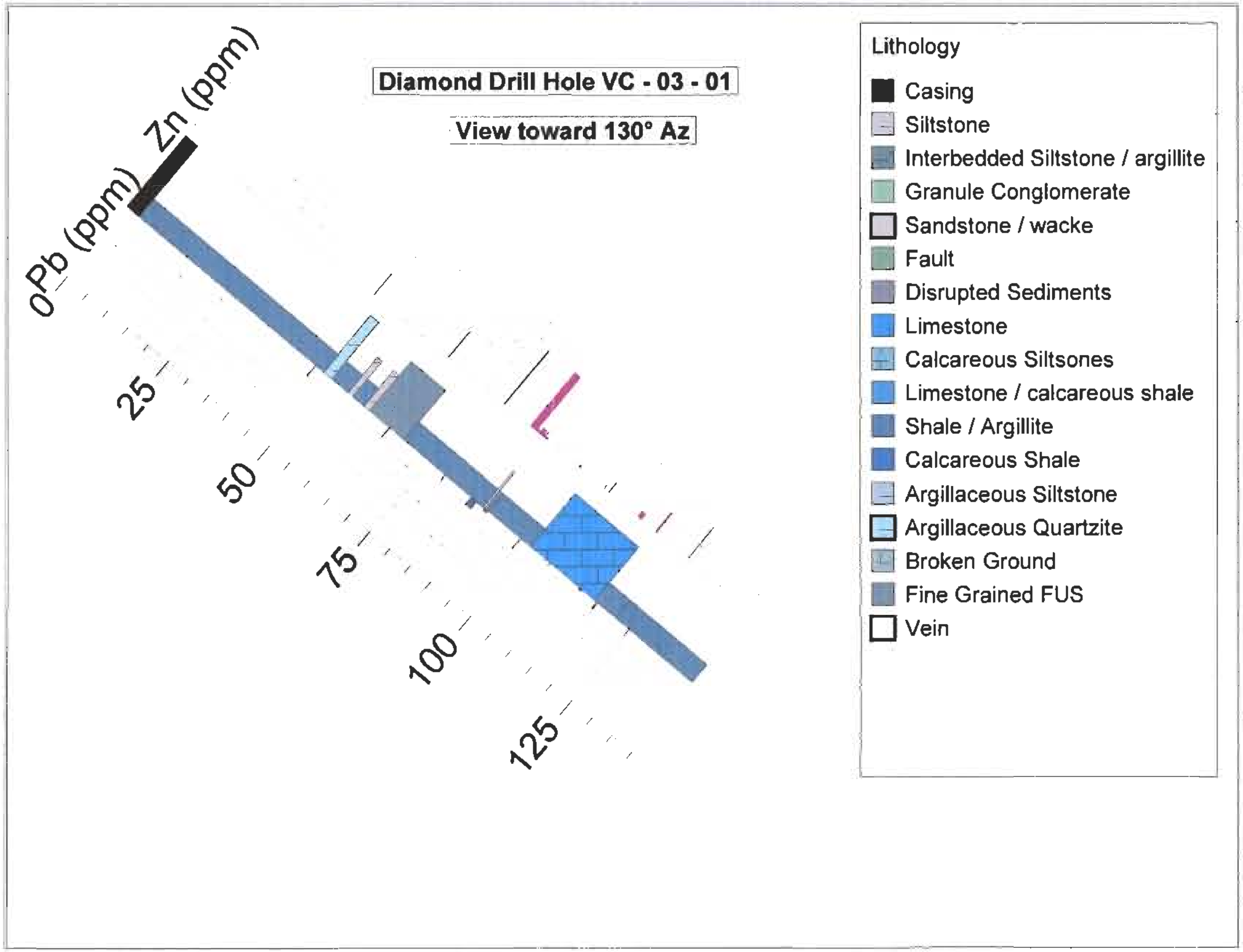
6. I am the author of this report which is based upon work completed on the property under my direct supervision between June 15 and October 6, 2003.

Dated in Cranbrook, British Columbia this 30th day of September, 2004.

Richard (Rick) T. Walker, P. Geol.

Appendix B

Drill Core Descriptions



Diamond Drill Hole VC - 03 - 01
View toward 130° Az
Pb (ppm)
Zn (ppm)
0
25
50
75
100
125
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein

DYNAMIC EXPLORATION LTD.

DRILL LOG: DIAMOND DRILL CORE

HOLE NO.	VC - 03 - 01

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:	Lot 418		
LOCATION - GRID NAME:			
EASTING:	501523	NORTHING:	5643934
SECTION:		ELEV:	1875 m
AZIM:	220°	LENGTH:	140.2
DIP:	-40°	CASING LEFT?:	No
CORE SIZE:			NQ
CORE STORAGE:	Vermont Creek		

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
4.57		37.5°	105.46		33°
DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
140.2		31.5°			

DRILLING CO:	F.B. Drilling
STARTED:	20-Jun-03
COMPLETED:	23-Jun-03
PURPOSE:	To test stratigraphy, structure and mineralization
CORE RECOVERY:	
LOGGED BY:	Paul Ransom
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	A302511, A302511r, A302511R2, A302740, A302740r, A302740R2

Drill Hole VC - 03 - 01

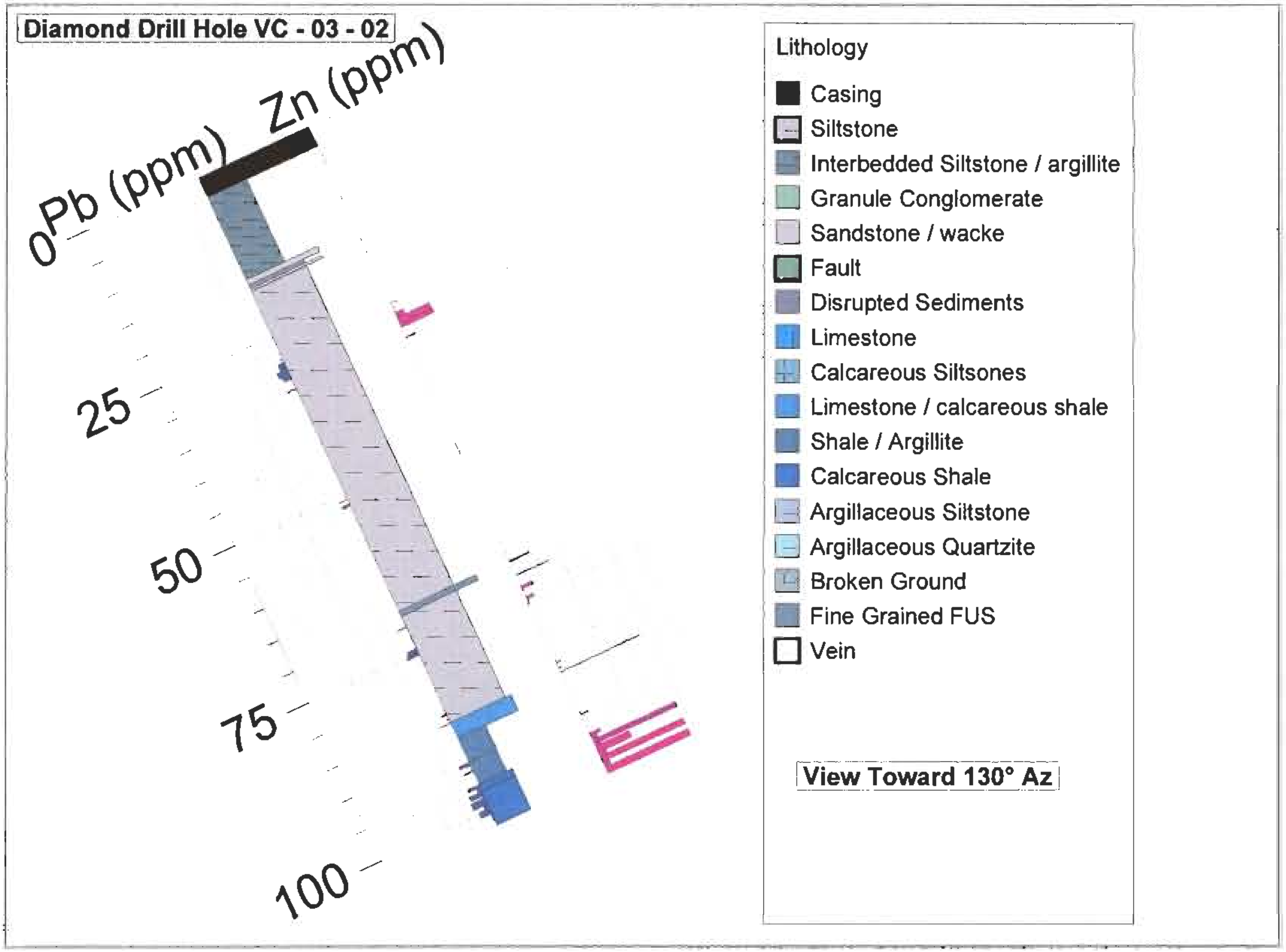
From	To	Core Angle		Description	Sample	From	To	Gold	Silver	Lead	Zinc
m	m	m	Deg		Number	m	m	gms/T	gms/T	ppm	ppm
0.00	3.05			Casing							
3.05	48.84	5.15 5.30 7.30 8.80 9.10 9.90 10.60 - 10.90 11.60 12.70 13.30 - 13.46 16.70 18.00 18.80 21.50	0° 76° 80° 20° 20° 35° 0° 45° 45° 0° 78° 75° 70° 70°	**Lithology: Shale** Medium grey thin bedded, often note internal lamination indicative of settling, interbedded with shale, dark grey laminations with fine internal laminations, probably product of hemipelagic settling. From 4.42 to 4.64 is a single quartzite bed, fine sand sized grains, light grey, speckled appearance from chipping of grains. Occasional pale grey beds of silt and fine sand are probable current deposits; pinch - swell thickness variation indication of current, however, structure complicates interpretation. Light grey (folded) possibly medium bedded siltstone 39.10 - 40.20; 40.48 - 40.62. Dolomite alteration as 1-2mm clusters of fine dolomite rhombs forming up to 20% of some sections. Occasionally this dolomite appears to be replaced by pyrite. Otherwise pyrite occasionally occurs as scattered coarse grains. **Veins:** Veins are present, some of barren quartz, with creamy mineral thought to be dolomite, but possibly scheelite as unable to obtain effervescence with HCl on powder. Occasional vein with coarse galena and sphalerite. **4.88** 5mm quartz and rusty dolomite at 14° (straight). **7.33 - 7.43** <1cm, quartz and rusty dolomite at 18° straight. **12.75 - 12.85** 7cm with crushed wallrock margins of 5cm both sides. Barren quartz, some vugs < 5mm. Probably in Fault at 75°. **13.50 - 13.57** 2 cm, quartz containing 30% coarse sphalerite and galena at 27°. **15.10 - 15.25** Irregular quartz mass with 10% dolomite. Probably folded vein. Quartz dolomite vein 10° to 30°. **17.00 - 17.07** Coarse vuggy quartz vein; some limonite probably after weathered pyrite. Irregular, average intersection with core about 45°. **19.35 - 19.42** 5 mm quartz vein at 40°. **22.13 - 22.35** 3 intersections 2, 1 and 3 cm, possibly of single folded quartz vein contains <10% dolomite. **22.64 - 22.94** A 1-3 cm wide quartz-dolomite vein at 20° has numerous 5 mm wide parallel offshoots in cleavage at 65°. **23.50 - 23.63** Small 2 to 10 mm quartz veins in cleavage cut silty interval. **36.13 - 36.27** Quartz and minor dolomite probably along healed fault (?) at approximately 80° sub-parallel to zone of steep cleavage with sub-parallel bedding. **37.50 - 37.60** 1 cm quartz vein with creamy dolomite margins, undulating with 7 cm wavelength, average 27° to core **38.50 - 38.70** 2 cm vein, some quartz, flanked by creamy dolomite (probably ferroan) that weathered to limonite. **Sulphides in Veins:** **0302-66** 46.75 - 46.90 2 cm vein of quartz + coarse galena (10%) and sphalerite (8%) at 30°. **Structure:** Folding is pronounced throughout this interval, consistent with structures expected in the core of a syncline. Some extremes: 48° to 75°+ **14.00 - 16.60** several "tight" zones. **18.40 - 18.60** 2 fold noses **18.89 - 19.30** broken up limb Fold noses: 19.50, 19.66, 20.00 **22.05 - 22.20** 2 fold noses	0302-66	46.75	46.90	9.94	2442.70	**15.34%**	**3.61%**

3.05	48.84	(Cont'd)		Core runs ± parallel to core axis from 20.10 - 21.30 This pattern of folded noses, broken up limbs and bedding parallel to core continues to end of interval.							
48.84	50.85			**<u>Lithology: Quartzite and beds of laminated shale.</u>** First quartzite from 48.84 - 49.40 may be 3 medium beds, grains are sand sized (1mm). Wispy argillaceous matter in the middle and at the bottom of 3rd bed, all seem cored at 75°. Two lower beds are more argillaceous wispy and folded, and are probably same bed.							
50.85	54.93	51.00 51.70 52.90 54.50 52.15 - 52.30	68° 70° 77° 75° 10°	**<u>Lithology: Shale</u>** Light grey and thin bedded, dark grey and laminated; siltstone, pale grey, generally laminated, however, some thin beds look like turbidites with flame structures intruding bulbous bases. Fine dolomite in 1-2mm clusters in fairly densely dispersed in some of the dark shale. **<u>Structure:</u>** **51.34 - 51.55** Folds with short limbs (2-3cm) parallel to core. **52.15 - 52.30** Similar small folds continue to end of interval, highest core angles. **54.66** Fault, 5 cm gouge, parallel to cleavage 68° (in opposite sense to bedding of 55°).							
54.93	56.12	55.90 56.12	0° 80°	**<u>Lithology: Siltstone</u>** Pale gray, axial planar wisps suggests this is a relatively thin bed sub-parallel to core. Laminations near start at 5°, 20°							
56.12	58.92	56.80 57.50 58.50	72° 80° 75°	**<u>Lithology: Shale</u>** Medium, thin bedded; with dark grey laminated shale irregularly spaced as laminations. Siltstone 10% of interval as very thin beds (1-3cm) or intervals with darker laminations.							
58.92	60.33			**<u>Lithology: Siltstone and very fine sand</u>** Sand (sub-arkosic composition), pale grey, and laminated shale interbeds, medium to dark grey. Coarser beds from base: 10 cm Bouma B + 8 cm shale; 11 cm Bouma ACD + 13 cm as 3 shale interbeds with silty bases; 6 cm Bouma B + 18 cm laminated shale interbeds; Bouma A (27cm), B (11 cm), C (12 cm replete with micro flame structures and bifurcating laminations).							
60.33	68.88	61.05 62.50 65.00 66.20 67.00 68.00	70° 75° 80° 80° 75° 74°	**<u>Lithology: Predominantly siltstone - shale couplets and graded beds</u>** Fining upward cycle. . Basal bed from 67.76 - 68.88 grades from lithic wacke with quartz grains typically 1 mm (up to 2) weakly calcareous and dark argillaceous clasts, wisps and matrix from 68.45 - 68.88 (includes large dark argillite masses that might be flame structure or large rip-up - this is a Bouma A division. Bouma B of basal bed 68.15 - 68.45, Bouma C 67.98 - 68.15 and Bouma D 67.77 - 67.98 is a massive dark grey argillite. Overlying beds are medium to thin and many have features consistent with deposition from turbidites. Dolomite is common, particularly in the darker shales, as 1-2mm clusters of very fine grains that form up to 30% of the rock. **<u>Veins:</u>** **62.33 - 62.46 - 62.65** 1) 5-12mm at 15° quartz with dolomite margins and when thin, slivers of wall rock. 2)lower, branches from above 5 mm at 5-15° in opposite sense. **62.90 - 63.20** Irregular quartz vein, vuggy to 2 cm lined with quartz crystals. Upper part has dolomite, some coarse pyrite. Broken, vein 10° to core, 2-3 cm.	0301 - 56	65.20	65.30	0.66	2866.10	**29.59%**	**4.63%**

60.33	68.88	(Cont'd)		**63.30 - 63.45** Zone with foliation intensely developed and along which small quartz veins and masses are developed approximately 70° - 90° to core axis. **65.10 - 65.20** 1-3 cm vuggy quartz vein, crystals coated with rust. **66.45 - 66.55** Quartz vein, some 5 mm vugs, large wall rock fragments up to 1 cm wide > 5cm long. **<u>Sulphides in Veins:</u>** **65.20 - 65.30** Vein of quartz, black sphalerite, galena and pyrite, all coarse. Broken but minerals aligned suggest it is 8 cm wide at 38°.							
66.88	88.48	69.00 71.00 72.00 75.00 76.50 78.00 79.50 81.00	75° 75° 80° 71° 65° 65° 63°	**<u>Lithology: Shale</u>** Medium grey commonly with silt bases that are pale grey, very-thin (<3cm) bedded and laminated (silt bases only 2-3 mm), and laminated shale laminations and very rarely very thin beds. **<u>Sulphides in Sediments:</u>** **86.86 - 87.73** Shale with notable increase of medium to coarse crystals of pyrite and at 86.97 a 1 cm band with abundant arsenopyrite needles. **87.73 - 88.48** Shale with 0.5 to 1.5 cm veins (2) cutting core at 10° and 22°. Short jogs in the veins that are mainly quartz with thin creamy dolomite margins and variable (<10% overall) orange-brown rimming black sphalerite . Central selvage of the larger vein marked by arsenopyrite grains. <10% medium pyrite in wallrocks.	0301 - 57 0301 - 58 0301 - 59 0301 - 60 0301 - 61 0301 - 62 0301 - 63	78.98 85.49 86.20 86.86 87.73 88.48 88.76	79.14 86.10 86.86 87.73 88.48 88.76 88.92	0.55 0.68 0.52 0.27 0.94 0.04 1.76	107.50 2013.10 353.80 11.90 8.70 1.61 13.70	**1.47%** **24.84%** **6.36%** 1176.85 888.26 168.99 5654.45	**10.09%** **16.85%** **11.25%** 3641 9387.8 2850.80 8931.80
		 81.00 82.50 84.00 84.50 85.50 86.10 86.90 88.00	 60° 55° 38° 40° 19° 45° 68° 65°	**<u>Veins:</u>** **69.84 - 70.11** White quartz, 10% vugs to 1 cm, creamy yellow dolomite may be present on margins, few coarse grains pyrite. At 15°, straight parallel sides, 3.5 cm wide. **71.74 - 71.88** Vein similar to previous; less dolomite, no pyrite, 4 cm wide at 30°, sides wavy. **75.65 - 75.89** 1-2 cm wide at 15°, 40% quartz, 60% dolomite along margins, scattered pyrite in the dolomite. **77.50 - 78.03** Two quartz veins about 2 cm wide, at 15° and 6°. Upper one has 30% dolomite along margins, almost no dolomite in lower vein. Both have < 5 mm vugs. **78.98 - 79.14** 2 cm vein at 23°. Creamy yellow dolomite margins form approximately 50%, sulphide 40% (coarse sphalerite, pyrite, and galena) and quartz 10%. **85.49 - 86.10** Sulphide vein with quartz. Sphalerite / galena banding at 50° is 90° to overlying beds. Coarse galena, only near the top, orange-brown to black sphalerite not as coarse. Bottom has more quartz and at 85.95 has a "root" that forms half the core at 13° (wedges out at 86.10). Estimate 15% Pb, 15% Zn. **86.20 - 86.86** Core runs along 2 en-echelon veins. The first 2 to 5 cm wide, mostly zoned sphalerite (orange-brown to dark brown with crystal cross sections up to 2 cm) with a few patches and stringers of medium grained galena. Vein margins are usually quartz to 5mm wide. Lower vein has more quartz, anastomosing short stringers of galena with some coarse sphalerite similar to above. The veins are linked by thin irregular splays. Estimate 3% Pb, 15% Zn. **<u>Sulphides in Sediments:</u>** Pyrite noted to increase from rare occurrence after 85.0							
88.48	88.92			**<u>Lithology: Siltstone</u>** In thin beds and intervals of laminated shale, bedding 59° at 88.75. Central two silty beds contain considerable arsenopyrite needles (87.76 - 87.92) and other beds are weakly pyritic.							

88.92	89.85			**Lithology: Primarily shale** Thin bedded and laminated, some beds silty. **Veins:** Quartz vein 7 cm wide, at 15° to core from 89.10 - 89.55, contains numerous small vugs <5 mm and 10% pyrite, medium to coarse. **Sulphides in Veins:** Veinlet that originates at 88.92 about 10 mm tapers to 1 mm at 89.05; contains brown to light-brown sphalerite and a network of fine galena. **Sulphides in Sediments:** Pyrite abundant in 6 cm bed near start, then diminishes. Bedding 65° at 89.80. Replacement pyrite (fairly coarse 2-3mm, up to 5mm) along thin and widely separated layers, diminishing.	0301 - 64	88.92	89.55	0.24	53.77	5293.52	2429.2
89.85	100.20	90.25 91.75 93.25 94.75 96.25 97.75 99.00 100.00	62° 66° 54° 69° 65° 75° 47° 80°	**Lithology: Shale** Light grey, thin to very thin bedded, with laminations of dark grey laminated shale. Thin intervals of siltstone at bases of several beds. **Veins:** **101.1 - 101.3** <5mm at 35° seem calcareous, barren. **Sulphides in Veins:** **97.63 - 97.80** 2-3 cm thick quartz vein with 0.5 cm thick pale yellow dolomite margins at 15-20° to core axis. Mineralization consists of pyrite and galena as medium-grained disseminations to aggregate masses (particularly pyrite). Approximately 2-3% galena in vein. **Structure:** Bedding consistent except at one fold (to 0° from 93.35 - 93.75)	0301 - 65	97.63	97.80	0.45	556.80	**8.19%**	3482.2
100.20	116.04	100.90 106.80 108.80 111.70 113.69 115.80	70° 42° 60° 55° 69° 62°	**Lithology: Limey shale, siltstone and fine sandstone** Ruth Limestone - light, medium and dark grey, medium and thin bedded, contacts sharp and flat, beds are commonly composite (eg limey siltstone/ fine-grained sandstone and limey shale most often) and each of these sub-units is homogeneous and internal contacts are sharp as well. Interbeds are typically <1cm of dark grey to black laminates, (up to 2 cm) that are not calcareous. Lime content considerably less to nil in the bottom 3 or 4 m. Matrix of the quartz grains in the fine sandstones and siltstone bases of these beds is calcite and in the first 5 m are the locus of isoclinal cleavage age (ie not slump) folds. Clearly the quartz in calcite lithotype is almost as ductile as the shale. These sand and silt bases are all <2cm thick. These are calcareous turbidites and Bouma AB beds are common (and low calcite content in basal few metres indicates events leading to formation of the calcite may have caused earlier influx of the low calcite turbidites.) Base of Ruth taken as point when weak HCl effervescence is no longer discernable and there is a change in character of bedding below. **Veins:** **102.41** 5 mm at 24°, limey at margins, barren. **109 - 112.25** Several, essentially barren, <1 cm, many 1mm, parallel and straight at 25°-50°. **114.40** 1-2 cm with 2 cm vug along bed contact of 60°.	0301 - 67 0301 - 68 0301 - 69	103.73 104.84 112.13	103.81 105.00 113.00	0.62 0.12 0.03	18.70 62.80 36.90	4775.10 6427.36 4016.44	5784.60 **1.92%** **1.02%**

100.20	116.04	(Cont'd)		**Sulphides in Veins:** **104.7** 1 cm at 33° cuts beds at 60° (beds approximately 45° folded) fine specks black sphalerite? / galena **104-90 - 105.20** 1 cm at approximately 10° merges with 3 cm zone at 105.15, <5mm vugs lined with quartz, a few medium grains galena, sphalerite and pyrite. **112.12 - 113.00** Up to 2 cm wide, 0-10° to core, contains approximately 20% medium (~5mm) brown and black sphalerite, a little galena, pyrite and minor chalcopyrite. This vein is cut by a barren quartz vein. **114.50** 0-5 mm irregular with galena and sphalerite grains. **114.60** 5-8 mm at 45° with a few grains chalcopyrite and unknown pink mineral. **Sulphides in Sediments:** **115.20** 5 cm somewhat banded along bed contact of 70°. **105.66 - 105.95** Minor replacement pyrite in patches.							
116.04	121.33	116.30 117.65 119.70 121.00	62° 67° 65° 67°	**Lithology: Shale** Medium grey with dark-grey laminated interbeds and laminations. Typically the medium grey shale is very thin bedded however 2 medium and a few thin beds also present, 1-5 mm silty bases present in about 30% of beds. Contacts are sharp and flat except for the silty beds that seem to have micro-load / transport features (always overprinted by cleavages). C.g. pyrite commonly developed in the silty bases and occasionally elsewhere. **Veins:** **118.55** 2 cm quartz with pinhole, and <5mm vugs seem lined by dolomite, on bedding contact at 70°. **120.25** 1 cm quarzt vein with dolomite margins, barren at 40°. **120.70** 3-5 mm, mostly dolomite, barren at 20°. **121.04 - 121.28** 1-2 cm, mostly dolomite, barren, approximately 20°, irregular. **Sulphides in Veins:** **116.53 - 116.83** 1 cm at 15° cuts beds ate 85° (bedding 65°). Minor As, contains ~40% medium brown to black sphalerite , minor Galena. **118.90 - 119.27** Quartz vein up to core width with contact at 15° to 24°. Margins lined with white and creamy dolomite. Large and 2x1cm partial of mass of galena showing a hopper-like growth form. A 3 mm wide veinlet with scattered galena sphalerite chalcopyrite runs parallel to core from this vein to 119.90.	0301 - 71	116.53	116.83	0.46	60.40	**1.48%**	**3.75%**
121.33	140.21	123.00 124.00 127.00 130.00 133.00 136.00 140.00	64° 64° 58° 55° 65° 62° 64°	**Lithology: Shale** medium grey with, typically, spaced dark grey hairline, sub mm laminations. Silt beds (pale gray) present but rare, reach up to 15 mm thick show many features characteristic of turbidite deposition (load features especially). **Veins:** Below are a few, predominantly dolomite dominant veins 2-5 mm wide, from high angles to core to sub-parallel. Below 137.5 not 5-10% disseminated grains of dolomite, as alteration. **Sulphides in Veins:** **124.50** - 5 cm partially banded, dolomite on one margin, concentrated along core of vein coarse black sphalerite (3-5%), galena (3-4%) and pyrite (3%).	0301 - 70	124.50	124.55	0.22	68.80	**1.28%**	**6.22%**
140.21				**End of Hole**							



Diamond Drill Hole VC - 03 - 02
Pb (ppm)
Zn (ppm)
0
25
50
75
100
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View Toward 130° Az

DYNAMIC EXPLORATION LTD.

DRILL LOG: DIAMOND DRILL CORE

HOLE NO.	VC - 03 - 02

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:		Lot 418	
LOCATION - GRID NAME:			
EASTING:	501523	NORTHING:	5643934
SECTION:		ELEV:	1875 m
AZIM:	220°	LENGTH:	102.41
DIP:	-65°	CASING LEFT?:	No
CORE SIZE:		NQ	
CORE STORAGE:		Vermont Creek	

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
11.89		54.5°	102.41		53°
DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP

DRILLING CO:	F.B. Drilling
STARTED:	23-Jun-03
COMPLETED:	24-Jun-03
PURPOSE:	To test stratigraphy, structure and mineralization
CORE RECOVERY:	
LOGGED BY:	Rick Walker
	Paul Ransom
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	A302511, A302511r, A302511R2, A302740, A302740r, A302740R2

Drill Hole VC - 03 - 02

From	To	Core Angle		Description	Sample	From	To	Gold	Silver	Lead	Zinc
m	m	m	Deg		Number	m	m	gms/T	gms/T	ppm	ppm
0.00	3.05			**Casing**							
3.05	16.12	6.00	05°	**Lithology: Argillite with interbedded sub-wacke.**	0203 - 01	10.95	11.01	0.01	1.01	121.84	355.70
		7.50	47°	Broken rock with brown, oxidized intervals to approximately 10 m. Trace pyrite, both pristine and weathered to limonite, or	0203 - 02	18.77	18.87	0.00	1.24	169.46	143.10
		16.12	40°	with limonitic coatings, to 1 cm diameter. Beds are generally thickly laminated to thin bedded, ranging between 1 mm thick to several cm. Interval comprised of dark grey to black argillite with slightly subordinate light grey intervals of coarse silt to fine sand (sub-wacke). Bedding at variable angles to core axis, from shallow to highly oblique. Coarser interval 13.27 - 13.39 m, 14.67 - 14.72 m - light grey medium (to coarse) sandstone	0203 - 03	19.81	19.83	0.29	4.99	88.86	761.80
		S1		**Veins:**							
		10.80 13.90 17.10	50° 50° 40°	Less than 1% of interval has quartz veinlets (to veins). May contain limonite (after pyrite), all less than 2 cm thick. At least two generations of veins evident. First generation are comprised of generally thin (less than 0.5 cm thick) veinlets at moderately shallow angle to core axis (approximately 10° - 15° to core axis), comprised of quartz and yellow dolomite ± pyrite (or secondary limonite). First generation may or may not be deformed (pre- to syn-deformational). Second generation cross-cuts first at moderate angle (approximately 40° to core axis) with sharp boundaries and are slightly thicker (1 - 2 cm). Predominantly quartz + highly dolomite. **18.77 - 18.87** Quartz veins with subordinate yellow-green dolomite **19.81 - 19.83** Quartz (with highly subordinate calcite) with pyrite, coarse disseminations to aggregate masses. Veins at approximately 50° to ca.							
				Structure: **9.0 - 16.12** Disrupted bedding comprised of dislocations across foliation, bedding offsets and intensely segmented, discontinuous bedded intervals. Most intense between 10.20 - 10.88, 13.90 - 14.64 **11.47 - 11.68** Fault - oxidized material with highly disrupted bedding. Gouge with no cohesion over basal 2 cm at 60° to core axis. **15.26** Truncated fold							
				Alteration: Fine-grained porphyroblasts (ankerite / siderite) in very fine-grained sediments (argillite), up to 1 mm diameter and up to 30% by volume.							
16.12	16.96			**Lithology: Fine to medium sandstone.** Calcitic between 16.20 - 16.38.							
16.96	17.55			**Lithology: Highly disrupted argillite with interbedded sub-wacke (30%)** Light grey sub-wacke interbeds. 10 % quartz veins disrupted into sub-parallelism with foliation over interval 17.10 - 17.24 (therefore, pre-deformation). **Alteration:** Lower 30 cm argillite with ankerite porphyroblasts.							

17.55	17.94			**<u>Lithology: Fine to medium grained sandstone.</u>** Calcitic between 17.60 - 17.70. Upper 4 cm appears to fine upward, possible way-up indicator (right-way-up).							
17.98	68.52	18.87 20.83 21.70 23.90 24.90 25.50 25.90 26.20 33.40 48.85 54.62 54.97 58.90 59.30 60.85 62.50 64.30 64.70 66.70 68.21	50° 67° 80° 50° 85° 78° 22° 41° 25° 80° 50° 80° 60° 45° 75° 80° 80° 85° 80° 75°	**<u>Lithology: Interbedded dark and light grey siltstone with interbedded sub-wacke</u>** Predominantly dark grey siltstone with subordinate light grey coarse silt to fine sandstone interbeds, ranges from thin laminated to thin bedded (≤ 1mm to approximately 30 cm thick), predominantly thick laminated to very thin bedded. Thin intervals of fine- to medium-grained sandstone between 54.62 - 54.97. . **Veins:** Fine (0.5 - 10 mm) quartz veins along foliation throughout interval, ranging from sporadic to network / brecciation (40.76- 41.50 m). Many undeformed, others deformed (pre- to syn-deformation) **18.05 - 18.77** 15% narrow quartz veins up to 1 cm thick with subordinate yellow-green dolomite. Many deformed by, or into, foliation. Subordinate population undeformed and parallel to, and within, foliation. **19.57 - 19.83** Deformed quartz veins at moderate angle to ca. **20.16 - 20.26** Quartz vein and lenses deformed into foliation. **22.04 - 22.28** Quartz (with subordinate dolomite) at 30° to ca. **21.92 - 21.95** Quartz and dolomite vein at approximately 45° to ca. **25.95 – 25.97** Quartz vein at 60° to ca. Fine quartz crystals and brown weathered/stained calcite (strong reaction to HCl.) Cross-cuts earlier veins (1 mm) comprised of pale yellow-green dolomite sub-parallel to ca. Pyrite rhomboidal to rectangular, up to 1.5 cm long dimension. **29.18-29.50** Thin veinlet (0.2-1cm) thick at approximately 10° to ca. Very similar to vein between 28.00 - 28.49. Lies structurally above next vein sampled (07 - 09) and probably equivalent to vein sampled in 0302-04. Bedding folded immediately below veins but veins not folded, possibly slightly attenuated. **34.61 - 37.00** 2-10% Quartz veins. Minor population (with yellow-green dolomite) at shallow angle to ca. Cross-cut by thin quartz veins parallel (majority)→ to foliation. Third population, sub-ordinate, is at high angle to foliation and generally thicker (60° to ca, 75° to foliation) predominantly quartz with subordinate dolomite. **39.46 - 39.62** Quartz and pale yellow-green dolomite injected into sediments. Upper and lower contacts irregular, gradational into sediments. Minor component of sediments incorporated as inclusions in "veins." Grades from vein through stockwork to sediments at both margins. **39.62 - 40.33** *20-60% (locally) discontinuous quartz veins and lozenges in two separate orientations.* One set along foliation and another at shallower angle to foliation. Grades to breccia at 60% quartz (and subordinate dolomite). **40.76 - 41.51** Quartz vein (with sedimentary inclusions/tear-outs) from 40-76 - 41.08. Heavily quartz injected from 41.08 - 41.51 such that sediments are discontinuous and feather into quartz intervals. Sequence then out by quartz veins. **73.15 - 73.21** m. Early quartz + dolomite veinlet (0.4 mm thick) adjacent to subsequent apparently barren quartz vein which cross-cuts vein described between 72.69 - 73.15 and 73.21 - 73.46 m. **<u>Structure:</u>** Bedding variably disrupted across / into foliations and variably deformed (i.e. micro-folds and faults) to approximately 61 m. Bedding less deformed and at higher angle to ca lower down hole. 50.86 - sinistral offsets of bedding approximately 4 cm. 17.98 Sequence H 29.08-29.60 same as interval 34.97-35.24 – same orientation – fault offset equivalents Sequence E-A-F (38.36-38.64) – two limbs of fold Sequence G 37.30 - 39.60, 38.64 - 38.93 Highly disrupted area with quartz (+ dolomite) lenses and discontinuous lozenges along, and at shallow angle to, foliation. 42.67-47.98 Clearly defined fold sequence 43.70-47.55 cored repeated folds 1 – 43.70 (40°), 46.68 (32°), 46.98 (60°)	0302 - 04 0302 - 05 0302 - 06 0302 - 07 0302 - 08 0302 - 09 0302 - 10 0302 - 11 0302 - 12 0302 - 13 0302 - 14 0302 - 15 0302 - 16 0302 - 17 0302 - 18 0302 - 19 0302 - 20 0302 - 21 0302 - 22	28.00 28.72 29.18 29.50 30.27 31.17 33.30 50.14 50.28 50.52 50.71 50.77 50.80 51.01 51.27 51.45 51.81 67.23 68.69	28.02 28.79 29.50 30.27 31.17 31.80 33.44 50.28 50.52 50.71 50.77 50.80 51.01 51.27 51.45 51.81 51.96 67.54 68.79	0.28 0.27 0.12 0.15 2.45 0.15 3.38 0.88 1.49 0.13 0.03 0.04 0.01 0.02 0.06 0.40 0.05 0.20 0.03	34.70 62.80 126.00 139.80 56.30 57.50 42.60 1.59 31.80 4.37 16.60 4.97 0.36 0.25 0.21 53.50 1.12 2.21 8.3	3134.72 4270.24 **0.99%** **1.02%** **2.25%** **1.16%** **1.58%** 131.26 74.43 26.96 **1.30%** 98.63 45.68 19.24 28.43 **1.19%** 138.94 207.49 1392.03	8754.90 2109.00 498.70 9458.50 **3.70%** **3.73%** **1.08%** 211.20 129.80 35.80 96.90 91.70 34.00 36.00 33.30 126.00 12.50 18.90 2.40%

2 – 43.86 (60°), 44.28 (25°), 44.36 (80°), 46.51 (22°)
2a – 43.92 (55°), 44.20 (20°), 44.41 (80°), 46.40 (17°)
3 – 44.03 (60°) 44.10 (15°), 44.51 (80°), 46.10 (13°), 47.38 (78°)
4 – 44.63 (80°), 45.89 (25°), 47.55 (85°)
2 – 47.23 (40o)
2a – 47.29 (80°)
24.00 -24.50 Broken ground between with iron staining and limonitic masses (after pyrite)

<u>**Sulphides in Veins:**</u>

22.96 - 23.01 4 cm thick quartz veins oriented at 62° to ca. Intergrown idioblastic quartz crystals with minor pyrite crystals (to 1 cm long dimension with 0.5 cm calcite margin) - vein growth in open fractures.

28.00-28.02 1 cm thick quartz vein with 30% sphalerite and subordinate galena at 25° to ca., flattens out to approximately 5° from 28.06 to 28.49 (also between 2-5 mm). Sulphides appear to have been boudinaged within quartz veins, partially rotated into foliation. Local void space, open space filling vein growth. Sample will probably run 0.5-0.75% Zn, 0.25% Pb.
Vein offsets bedding and earlier vein by 1 cm (dextral offset). Two generations of pyrite, one very fine grained ≤1mm diameter, cubic morphology; second is cubic, trapezoidal to rectangular and up to 0.6 cm diameter. One pyrite cube is intergrown into vein.

28.72-28.79 Quartz vein with medium to coarse grained, disseminated aggregates of galena and medium grained sphalerite. Galena and sphalerite occur in same veins but spatially distinct. Lower contact truncated by foliation at 37°. Probably equivalent of vein at 29.32, slightly offset along foliation. 1% Pb, 0.25% Zn.

29.50 - 31.80 Three samples along same vein, oriented virtually parallel to ca. Ranges from 2 cm to 5 cm thick with sulphides variably scattered along length. One margin of vein has pale yellow dolomite. Sulphides predominantly sphalerite (3-10% of veins by volume) with subordinate galena (0.25-1% of vein by volume) and pyrite (<1%). Pyrite within vein is fine-grained (≤2 mm diameter) whereas pyrite in host rock up to 1 cm long dimension. Vein margin on opposing side of dolomite has bands and/or aggregate masses of fine-grained pyrite and/or sphalerite. Analyses will probably run between 0.75%-2% Zn, 0.2-0.5% Pb over three sample length.

33.30 - 33.44 Quartz and dolomite vein 0.5 cm thick oriented at 45° to ca. Flattens to approximately 20° to 33.30 m. 15% galena by volume but due to narrow width of vein, analyses will probably be in the order of 1-2% Pb, < 0.5% Zn.

50.28 - 50.52 m Quartz vein. Quartz vein has included and partially assimilated earlier vein at base of overlying interval. Medium (to coarse) arsenopyrite as discontinuous bands and aggregated masses. Original quartz (+ dolomite) vein has open pore space (vugs) whereas later vein apparently has none. Therefore, the presence of dolomite and vugs allows the relict first vein to be traced in the second. Arsenopyrite preferentially located within, and at margin of, precursor veins. Approximately 0.5% As over interval.

50.52 - 50.71 m. Precursor vein(s) still evident but lower percentage of arsenopyrite. Argillite inclusions (tear-outs) in vein contain fine-grained disseminated arsenopyrite (similar to lower half of 0302-11). 0.1-0.25% As. Lower contact approximately 55° to ca.

50.77 - 50.80 m. 3 cm thick quartz veins with highly subordinate dolomite. 1 cm aggregated mass of pyrite with coarse arsenopyrite crystal. Sampled for continuity. Approximately 0.05% As. Upper contact at 60°.

51.45 - 51.81 m. Medium grey-coloured sub-wacke with cross-cutting quartz and carbonate vein. Carbonate is pale yellow coloured with weak reaction to HCl (siderite) and forms basal 0.5 cm margin of 1.0 - 1.5 cm thick vein. Pyrite enrichment in vein where thin argillite band (0.5 cm thick) is cross-cut by vein. Vein contains medium grained disseminated crystals and aggregates of galena, pyrite and minor chalcopyrite and arsenopyrite; preferentially hosted by quartz-rich portions ov the vein and/or upper half to 1/3 of the vein. Vein comprises 1/4 to 1/5 of interval. Pb 0.25%, As 0.1%, Cu 0.04%.

67.23 - 67.54 m. Weakly mineralized quartz vein in pyritic siltstone. Quartz vein with highly subordinate dolomite, minor calcite, joins and coalesces with earlier dolomitic vein. Vein at approximately 10° to ca. Estimate 0.2% Pb.

				<u>Sulphides in Sediments:</u> Less than 1 % cubic pyrite in both intervals, less than 0.2 cm thick. Two generations of pyrite. **50.14 - 50.28** m. Fine grained disseminated pyrite (0.2 mm diameter) and arsenopyrite in argillite over lower half of sample of sample and fine laminated argillite - sub-wacke interbeds juxtaposed over fault offset. Sense and size of displacement unknown as greater than width of core. Medium to coarse pyrite cubes to rectangles in fine laminated sequence, only fine disseminated pyrite in argillite. Interval also contains 2 cm of 1 cm thick quartz vein at base of interval, comprised of quartz and dolomite with medium grained arsenopyrite. Approximately 0.5 (to 1%) As. Base of interval in irregular contact with quartz vein at approximately 80° to ca. **50.71 - 50.77** m Interlaminated sub-wacke and argillite disrupted and dislocated by foliation. Minor fine-grained, disseminated arsenopyrite at top of interval. Sampled to provide continuity to sample sequence. Approximately 0.1% As. **50.80 - 51.01** m. Siltstone sequence with 0.5-1.0 cm thick sub-wacke band. (See photo). Pyrite present as medium to coarse crystals associated with thin quartz veinlets along foliation and in two thin deformed quartz (+ dolomite) veinlets. Minor arsenopyrite (<0.1% As) over interval. **51.01 - 51.27** m. Same as above, however, fine-grained disseminated arsenopyrite in siltstone underlying sub-wacke band 0.1-0.5% As. **51.27 - 51.45** m. Sub-wacke dominated interval overlying cross-cutting vein. Fine grained pyrite in siltstone (≤ 0.5 mm), medium grained in sub-wacke (≤ 2 mm). Trace fine-grained disseminated arsenopyrite throughout with significant increase in both pyrite and arsenopyrite at base of interval (overlying and in association with underlying mineralized vein. Approximately 0.5% As in sediments above vein (diluted to 0.1-0.2% As over interval). **51.81 - 51.96** m. Pyritic sequence underlying quartz vein between 51.45 and 51.81 m. Approximately 10-15% bimodal pyrite with medium-grained, generally idioblastic pyrite cubes and well formed crystals ≤4 mm in diameter forming the predominant population. Very fine-grained pyrite and/or arsenopyrite, highly subordinate. Estimate 0.2% As, sampled for gold in pyrite and/or arsenopyrite in association with vein.							
68.52	69.35			**<u>Lithology: Graded granule conglomerate at base to fine sandstone at top.</u>** Contains approximately 3% idioblastic pyrite to 4 mm diameter. Basal 17 cm comprised of 0.5 to 2.0 cm thick granule conglomerate laminae interlaminated with light and dark grey siltstone. Possible load casts of granule conglomerate into siltstone also apparent. Right-way-up.							
69.35	86.20	69.60	75°	**<u>Lithology: Interlaminated light and dark grey siltstone</u>** Laminae at high angle to core axis. Minor micro-folding and faulting, passed from west dipping limb, though core to east dipping limb. Calcite in beds from approximately 82.29 - 86.20. Bedding thin laminated to very thin bedded (≤2 mm to 2 cm thick). The dark laminae have paper thin internal laminae. White lenticular features at bottom of the light grey ones are probably starved ripples.	0302 - 23	68.79	68.90	0.06	9.30	920.64	**1.25%**
		70.10	80°		0302 - 24	70.96	71.06	0.15	152.80	**2.48%**	**4.61%**
		71.50	85°		0302 - 25	72.53	72.69	0.05	1.89	60.00	138.00
		72.00	85°		0302 - 26	72.69	73.15	0.74	11.70	1008.52	1.54%
		72.53	85°		0302 - 27	73.15	73.21	0.01	5.32	16.00	75.00
					0302 - 28	73.21	73.46	0.18	64.30	61.83	1019.5
		74.15	80°	**Veins:**	0302 - 29	74.15	74.33	0.31	0.90	16.57	59.30
		75.5	80°		0302 - 30	74.33	74.73	1.83	94.60	1.65%	0.89%
		76.20	85°	**83.10 - 83.32** Vein, creamy calcite, minor quartz, 2 to 3 cm wide, 15° to 24° to core.	0302 - 31	74.73	74.86	0.96	945.80	**12.09%**	1542
		79.24	80°	**85.43 - 85.50** 1.5 cm wide vein of white quartz, flanked by creamy calcite. Fine 2-3 mm vugs noted in the quartz. Vein bends almost 90°, from 20° through 90 to 85°.	0302 - 32	74.86	75.15	1.18	1193.30	**13.44%**	1845.80
		81.75	85°		0302 - 33	75.15	75.43	3.11	789.10	**6.44%**	633.20
		84.25	70°		0302 - 34	75.43	75.66	0.03	8.98	542.93	30.00
		85.40	80°	**<u>Structure:</u>**	0302 - 35	83.82	83.89	0.35	0.80	81.37	16.20
				70.10 - 71.22 Broken core with approximately 30% core loss. Lower 30 cm consists of fine grained fault gouge and fine chips. Fault zone oriented at approximately 30° to ca.	0302 - 37	84.37	84.5	0.79	2.50	98.13	22.00
					0302 - 38	84.60	84.78	0.97	12.00	629.99	570.30
				81.78 Bedding plane fault - few mm gouge at 80° to core.	0302 - 39	84.78	84.95	0.03	23.30	8800.56	4776.8

86.20 Bedding plane fault - 3 cm core loss at 88.39 may have been washed gouge from here. Only 3 mm gouge present.

0302 - 40	85.15	85.34	0.09	0.54	46.00	36.00
0302 - 41	85.55	85.75	0.07	10.00	3170.27	3234.30

Sulphides in Veins:

68.69 - 68.79 m. Four thin quartz veinlets, three of which are sub-parallel and approximately 20° to ca, cross-cut the fourth (approximately 5 o to ca.). Shallow quartz vein has subordinate dolomite and is apparently devoid of mineralization above 68.69. At 68.69 m, the second quartz vein cross-cuts the first shallow vein. The second and fourth cross-cutting vein contain coarse disseminated sphalerite (both black and honey coloured) and highly subordinate galena. Medium to coarse disseminated pyrite is present in the host sub-wacke and within the third and fourth cross-cutting veins. Sphalerite in the shallow cross cutting veins increases from 0% above 68.69 m., to 80% by volume below 68.69 m, with 10% pyrite. Due to the thin nature of the vein; however, the interval will probably assay 1-2% Zn and <0.3% Pb.

68.79 - 68.90 m. Pyrite sub-wacke structurally below vein. 10% medium-grained disseminated pyrite 1-4 mm diameter extends upward above vein to 1/2 width of vein. Sampled to test for gold in pyrite.

70.96 - 71.06 m. Mineralization immediately above fault. Upper 3 cm apparently barren quartz vein, textures (intergrown crystals) indicative of growth in open space. Mineralization consists of pyrite, galena and sphalerite (both black and honey coloured). Mineralization hosted by vein at approximately 15° to core axis, truncated by fault. Approximately 15-20% of both galena and sphalerite, vein width approximately 2.5 cm. Estimate 7-8% Zn and 7-8% Pb over interval, 10% pyrite.

72.53 - 72.69 m. Disseminated arsenopyrite in footwall of mineralized vein. Light and dark grey interbedded siltstone. Trace fine-grained disseminated arsenopyrite in siltstones. One thin band of arsenopyrite cross-cuts siltstones for 3 cm, is not apparent on opposite side of core. Estimate As 0.2%.

72.69 - 73.15 m. 2.5-3.0 cm thick quartz vein cross-cutting interbedded light and dark grey siltstones. Vein (08° to ca.) has dolomitic margins up tp 0.5 cm thick with quartz and mineralization largely contained in the core of the vein. Mineralization consists of coarse disseminated (to 1 cm diameter) to aggregate masses of predominantly sphalerite (mainly black to dark green, subordinate honey blonde), subordinate galena and pyrite. Locally there are aggregate masses of pyrite (and arsenopyrite). Estimate Zn 2-4%, Pb 0.5%.

73.21 - 73.46 m. Bottom portion of vein described in sample 0302-26. Only a portion of the vein was cored, from 1 cm at the top of the interval, to 0 cm at the bottom. Mineralized vein represents approximately 1/10 of interval. Sphalerite predominantly honey-blonde. Zn approximately 1%, Pb approximately 0.1-0.2%.

Four samples along cored extent of relatively thick mineralized vein.

74.33 - 74.73 Interval in which vein first cored, at top to full width, at base. Based on foliation, it would appear the core intersected the underlying vein first, and subsequently passed upward into the upper vein. The lower vein is very similar to that described in Samples 26 and 28, except with a higher proportion of galena and arsenopyrite at the upper contact. Zn 2-3%, Pb 1-2%, As 1%.

74.73 - 74.86 First vein above coalesces with second vein below. As the lower vein gets closer to, and coalesces with, the upper vein, the galena content significantly increases, at the expense of sphalerite. Chalcopyrite also present. Pb 6-7%, Zn ≤ 1%, Cu 0.5 - 1.5%.

74.86 - 75.15 Interval in which full core width comprised of mineralized vein. Quartz vein coalesced. Abundant medium-grained, disseminated (to locally semi-massive) mineralization, predominantly galena, with slightly subordinate chalcopyrite. Pb 4-6%, Cu 1-2%.

75.15 - 75.43 Interval over which core gradually passes out of veins. Band of fine-grained, semi-massive to massive mineralization along top of vein, broken and discontinuous across narrow quartz veinlets/micro-fractures, comprised of galena and chalcopyrite. Pb 5-7 %, Cu 2 %.

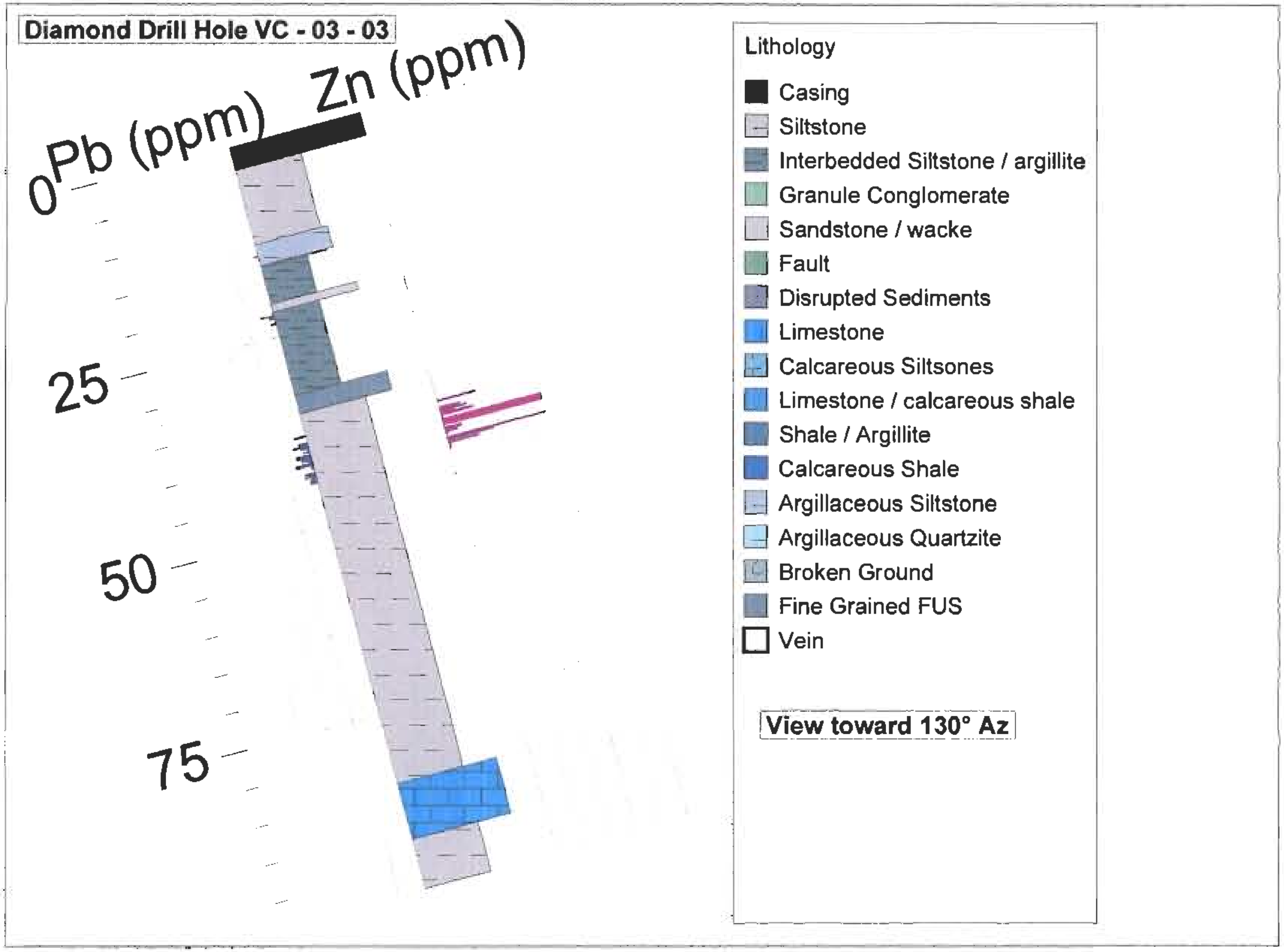
83.82 - 83.89 m. Vein, grey calcite, 8mm wide, 0-50 % by volume. Arsenopyrite as tapering mass in the core of the vein, 38° to core.

84.32 - 84.37 m. Quartz mass 3 cm by approximately 4 cm, minor creamy calcite on one side, arsenopyrite as irregular patch 1.5-2 cm wide on opposite side. This quartz mass seems to be a dilatant zone on a 1-2 mm wide veinlet.

				84.37 - 84.50 m. Quartz vein 1 cm wide at 25°-32° to core; flanked by up to 50% coarse arsenopyrite and, less commonly, creamy calcite. Adjacent and just below are 2 - 4 mm wide calcite - dolomite quartz veinlets at 20°. **84.60 - 84.78** m. Two sub-parallel veinlets of white quartz, creamy to brownish calcite contain about 35% (by volume) arsenopyrite. Both veins approximately 1 cm wide at 15° to core. **84.78 - 84.95** m. Three bedding parallel quartz veins, 2, 0.5 and 3.5 cm wide at 65°-75°. Contains various sulphide grains - isolated and very coarse (ie almost to 1 cm). Dark grey with prominent cleavage but not crumbly - galena. Irregular patches of yellow brown sphalerite + pyrite. The veins seem linked across bedding by veinlets of similar quartz and one is predominantly sphalerite. Unknown pale pink mineral, hardness about 4 and knife leaves blue mark when acid present (Tungsten?). **85.15 - 85.34** m. Vein about 1 cm wide bifurcates into 3 "tails" at 45° to core, that terminate - all over approximately 4 cm. The vein is creamy calcite, minor quartz. 1 mm Pyrite grains form a halo adjacent to the widest part of the vein and coarse arsenopyrite is present in the halo within 1-2 cm of the thick part of the vein. **<u>Sulphides in Sediments:</u>** 1 - 5 mm Pyrite grains common; some at 45° orientations to bedding deflect, immediate adjacent laminations. **74.15 - 74.33** m. Pyritic interbedded siltstones. Idioblastic pyrite, between 1 and mm in diameter, disseminated throughout interval. Locally enriched along specific horizons as multiple crystals and/or aggregate masses. Pyrite comprises 5-10% of the interval. Minor arsenopyrite. Interval sampled for gold. **75.43 - 75.66** Thick laminated to very thin bedded siltstones with coarse disseminated pyrite crystals to 0.5 cm diameter, preferentially associated with dark siltstones to silty argillites. **85.55 - 85.75** Several thin pyritic zones parallel to S0, one clearly replacing calcite. In one 5 cm thick bed 1mm grains of pyrite are abundantly disseminated.							
86.20	88.70	87.00 87.90	84° 86°	**<u>Limestone: Limestone / calcareous shale</u>** Thin (3-10 cm) to very thin (1- 3 cm) bedded, medium to light grey; interlaminae of dark grey that is extremely finely internally laminated. **<u>Sulphides in Veins:</u>** From 88.12 - 88.20 are three quartz veinlets, upper one approximately 5 mm is undulatory folded, lower two are planar and appear to be brecciated and sheared, one 5 mm galena grain present as is soft pink mineral. **<u>Sulphides in Sediments:</u>** **86.20 - 86.29** Disseminations and bands of black sphalerite. The bands are coalesced grains similar to the disseminations 1 - 2 mm diameter. Each of these 1 - 2 mm grains is rounded and appears to be made up of numerous much finer grains. Pyrite is present but is minor. This is a replacement texture. Crossing and unrelated is a 2 mm quartz-calcite veinlet. However, at 35° to this vein, at 12° to core axis is a weaker vein that prevented advance of most replacement.	0302 - 42	86.20	86.29	0.10	269.90	**7.58%**	**1.11%**
88.70	92.52	88.9 91.0	85° 85°	**<u>Lithology: Shale</u>** Non-calcareous, except first 40 cm transition from preceding interval, light, medium and dark grey. The dark grey form distinct interlaminae and are very finely laminated internally. Some medium grey is also very finely laminated internally. The light and medium grey beds are very thin or laminations (ie < 3cm). Occasional nodular looking pale siltstone beds occur above the dark grey, these are probably starved ripples and most of the scattered pyrite occurs in these beds. Visually this is a distinct interval of predominantly light grey with regularly spaced 1 - 3 cm dark bands 1 -5 mm.							

92.52	96.05			**Lithology: Shale** Non-calcareous, medium grey laminite to medium grey massive in thin and possibly medium beds. About 10% of interval is lighter grey, mostly as laminations. Start and end of folds: 93.61 - 93.64; 94.07 - 94.20; 94.20 - 95.20; 95.80 - 96.05, bedding parallels core axis in central portion of both; cleavage - parallel faults in upper interval are probably relief structures. **Sulphides in Veins:** **92.52 - 92.75** m. Five cm quartz vein, well mineralized at 30° to core. Scarce carbonate. Galena, sphalerite and pyrite as both coarse grains and fine grains in patches and as infill of fine fractures that define breccia-like texture to parts of the vein. There is a rough banding of sulphides parallel with the vein margins. A 3 to 4 mm wide mineralized quartz vein joins this vein with the next, all same generation. **92.75 - 92.99** m. Four cm quartz vein, less abundant sulphides than previous sample. Creamy calcite and possibly dolomite forms 20% of this vein. Soft, light-pink mineral previously noted also present. Vein is 35° to core, and a 1 cm offshoot swings 05° to core. **93.79 - 93.99** m. Two veins, 1 cm at 10°, 2 mm at 05° to core. The 1 cm vein has 1 - 2 mm wide creamy dolomite margins and contains several coarse sphalerite, (fewer) arsenopyrite and galena grains (5mm) and an elongated mass of chalcopyrite (3mm x 15mm). **Sulphides in Sediments:** **95.0 - 96.05** Coarse pyrite, rare sphalerite and pyrite remobilized into cleavage in paler interval.	0302 - 43 0302 - 44 0302 - 44b 0302 - 45	92.52 92.75 92.99 93.79	92.75 92.99 93.10 93.99	1.33 0.42 0.64 0.07	581.70 129.40 289.80 149.50	**17.23%** **2.92%** 5900.32 **1.62%**	404.30 848.20 **1.01%** 168.4
96.05	97.10			**Lithology: Calcareous shale** Medium and light grey, thin bedded to laminated, faint internal laminations occasionally present. **Veins:** 3 mm bedding parallel quartz vein probably a bedding parallel fault. **Structure:** Bedding close to 85° to core axis but small changes occur, plus very small folds at 96.70 and 96.93 (tight with secondary calcite). A series of 1 - 2mm tension gashes filled with dolomite at 22° to core at 96.60. **Sulphides in Sediments:** From 96.05 to 96.22 are several thin (1 - 3 mm) drusy quartz lined, open fractures at 20° to core, and patchy coarse pyrite with associated dark fine sphalerite (?). **96.72 - 96.76** Wisps with medium pyrite and associated sphalerite, some in folded dolomite bedding vein	0302 - 46 0302 - 47	96.05 96.44	96.44 97.10	0.07 0.02	70.80 26.81	**2.05%** 6764.12	**1.35%** 6721.90

97.10	102.41	99.15	75°	**Lithology: Calcareous shale**	0302 - 48	97.10	97.45	2.28	357.20	**8.44%**	**15.45%**
		100.58	68°	Moderately to well mineralized. Carbonate not continuous, probably due to presence of mineralization as well as to primary	0302 - 49	97.45	97.84	1.31	174.10	**3.19%**	**26.05%**
		101.10	70°	lithologic variation. 100.90 - 101.70 no carbonate. Bedding more uniformly thin bedded with short laminated intervals.	0302 - 50	97.84	98.13	0.09	17.90	**0.44%**	**0.68%**
					0302 - 51	98.13	99.12	0.40	178.10	**4.20%**	**4.30%**
					0302 - 52	99.12	99.72	0.24	54.98	8242	8621.6
				Sulphides in Veins:	0302 - 53	99.72	100.58	0.31	154.80	**2.91%**	**10.55%**
				97.10 - 97.45 Sulphide rich vein with quartz 28° to 50°, suspect this is folded as minor folding of S_0 is	0302 - 54	100.58	101.45	1.01	53.90	**0.29%**	**0.73%**
				also present. Offshoots of this vein below 97.45 are 2-5mm wide, parallel to the core. Coarse sphalerite, galena and pyrite.	0302 - 55	101.45	102.41	0.25	12.00	**0.17%**	**10.63%**
				Sulphides in Sediments: **97.45 - 97.84** m. Replacement sulphides, fine grained from 1 mm pyrite grains, 2 - 3mm arsenopyrite needles and framboidal sphalerite. The Sph is dull brownish with paler outer shells, and along the veinlet from the overlying interval both black and yellow brown colours outline frambroids. Estimate 8% Zn. **97.84 - 98.13** m. Calcareous shale, very thin bedded to laminated. Few medium pyrite cubes, rare sphalerite. **98.13 - 99.12** m. Replacement sulphides, pyrite dominant, and associated dolomite (some rare quartz) in irregular patchy masses that appear to post-date cleavage yet are folded and clearly later. Near base is dolomite 1 to 2 cm wide, swings from vein near 20° to core axis into bedding that is locally 72°. This vein is vuggy with openings to 1 cm in which 2mm pyritohedra are common, dolomite rhombs also line some cavities. Pyrite cubes are common in the adjacent shale. Sphalerite, generally light but some with dark cores, is common, galena rare. Estimate 1-2% Pb + Zn. **99.12 - 99.72** m. 30% replacement sulphides, about half are patchy areas of disseminated 1mm amalgamated to fine pyrite grains and half in bedding parallel quartz with minor dolomite veins. One nicely folded bedding vein has well developed cleavage and 5 mm sphalerite grains. **99.72 - 100.58** m. 30% Replacement sulphides, predominantly sphalerite. Bedding and some of the character of original sediment remains. Texture is framboidal and there is a zoning developed alongside thin fractures that cut core at 25°. Most sphalerite is brown with yellow brown rims and small grains. Early dark sphalerite is present, rimmed by lighter sphalerite and pyrite. Galena noted Estimate 20% Zn. **100.58 - 101.45** m. 40% replacement sulphides, mostly fine pyrite. Arsenopyrite needles noted over 20% of interval. Rare black sphalerite to 1 mm rimmed by finer pyrite. At 100.70 is an isoclinally folded 5mm white siltstone layer, at 55° to core, cut by fine dolomitic veinlets. A parallel siltstone (?) layer hosts coarse black sphalerite. At 101.1, a 5 cm pyritic interval is cut by 1 to 3 mm wide sparry dolomite veins that fan a few degrees around 60° in opposite sense to S_0. **101.45 - 102.41** 30% replacement sulphides. The suphides are preferentially concentrated along laminations within certain beds, disseminated throughout some of the same beds and in some cases show a preference of not being present adjacent to some hairline fractures close to parallel to core. Other such fractures cross mineralization that remains adjacent. At 101.75 is 7 cm interval of 50% sphalerite - banded, dark brown to reddish brown zones at 60° and 20° to core. Framboidal sphalerite is common. Pinch folded, quartz with minor dolomite margins, bedding vein has 2 cm vug lined with massive quartz and dolomite rhombs. Estimated 7% Zn. (Perhaps originally a siltstone bed)							
102.41				**End of Hole**							


Diamond Drill Hole VC - 03 - 03
Pb (ppm)
Zn (ppm)
0
25
50
75
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View toward 130° Az

DYNAMIC EXPLORATION LTD.

DRILL LOG: DIAMOND DRILL CORE

HOLE NO.	VC - 03 - 03

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:		Lot 418	
LOCATION - GRID NAME:			
EASTING:	501523	NORTHING:	5643934
SECTION:		ELEV:	1875 m
AZIM:	220°	LENGTH:	198.14
DIP:	-77°	CASING LEFT?:	No
CORE SIZE:			NQ
CORE STORAGE:		Vermont Creek	

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
0		72.5°	98.14		70°
DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
121.91		75°			

DRILLING CO:	F.B. Drilling
STARTED:	24-Jun-03
COMPLETED:	26-Jun-03
PURPOSE:	To test stratigraphy, structure and mineralization
CORE RECOVERY:	
LOGGED BY:	Rick Walker
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	A302511, A302511r, A302511R2, A302740, A302740r, A302740R2, A303027, A303027r, 0303027R3

Drill Hole VC - 03 - 03

From	To	Core Angle		Description	Sample	From	To	Gold	Silver	Lead	Zinc
m	m	m	Deg		Number	m	m	gms/T	gms/T	ppm	ppm
0.00	3.05			**Casing**							
3.05	12.88	9.30 12.80	15° 45°	**Lithology: Thin bedded siltstones.** Very thin beds (0.5 - 1 cm thick), dark grey argillaceous siltstone interbedded with thin bedded, light grey siltstone (1 - 5 cm thick). Very broken to 9.14 m with few segments ≥8 cm in length, gradually undergoing transition from chips to intact segments from surface to approximately 8 m. Some intervals, particularly fine-grained argillaceous siltstones, comprised of thin to thick laminations. **Veins:** Quartz veins relatively uncommon over interval, ranging from thin veinlets (≤0.1 cm) along foliations, to shallow to highly oblique, cross-cutting veins. All have sharp contacts with host sediments. Most apparently undeformed although a small proportion are folded into close folds with steeply dipping limbs and curved outer hinge surfaces and angular inner hinge surfaces. **Structure:** Foliation moderately well developed in fine-grained intervals. Bedding locally deformed, as evidenced by variable bedding orientations, micro-folds, boudinaged siltstone layers. **Sulphides in Sediments:** Pyrite variably developed as aggregates of fine-grained crystals, as fine- to very coarse-grained (1.5 cm in long dimension) disseminations and as trains of crystals along veins and/or veinlets. **Alteration:** Small (≤0.2 cm) porphyroblasts evident in fine-grained intervals.							
12.88	15.68			**Lithology: Laminated argillaceous siltstones.** Thin to thick laminated, dark grey argillaceous siltstones to silty argillites. Bedding ranges from laminations (1 mm) thick to thin beds (to 1 cm). Transition over upper 50 cm from interbedded siltstones to laminites through laminated siltstones. Thin bedded, alternating light and dark grey siltstones contain smaller scale laminations. Interval becomes more argillaceous downhole. **Structure:** **13.30 - 13.49** One highly disrupted fine lithic sandstone, folded and foliation parallel slip along multiple planes. **Sulphides in Veins:** Long interval in which mineralized dolomite + quartz vein at very shallow angle to core axis cored from 14.18 - 15.24 (see Samples 72-76 for description). Extensive quartz and dolomite + quartz veining from 15.24 - 15.68. Sediments highly disrupted with addition of significant silica, contains approximately 1% sulphides as pyrite, both fine-grained and as coarse crystals. **14.18 - 15.24** Mineralized quartz vein sub-parallel to core axis, high angle to bedding (approximately 70). Vein contact sharp, undulates through core throughout interval. Sub-divided interval into those visually mineralized and those apparently barren (71, 74, 76). Quartz vein comprised predominantly of creamy yellow dolomite or possibly siderite (based on accompanying iron-staining). Dolomite (80-90%) / quartz (10-20%) in apparently unmineralized portion of vein. Note cored only 1 margin of vein, so thickness unknown (> 3 cm). **14.35 - 14.50** Predominantly medium-grained galena, possibly fine-grained arsenopyrite with pyrite. In vein: Pb 3-5%, over core interval 1-2%	0303 - 72 0303 - 73 0303 - 74 0303 - 75 0303 - 76	14.18 14.35 14.50 14.69 15.02	14.35 14.50 14.69 15.02 15.24	0.20 1.67 0.12 1.25 0.48	1.03 64.00 1.40 7.27 1.14	13.97 6615.81 31.96 1244.13 25.64	29.20 68.70 38.80 36.00 27.40

				14.69 - 15.02 Predominantly bimodal pyrite as 1) medium- to coarse-grained crystals and crystal aggregates and 2) very fine-grained semi-massive aggregates to bands. Local very fine-grained arsenopyrite on interior margin of pyrite. As: Vein - 6%, Core Interval - 1-2%. **Sulphides in Sediments:** Local intervals of very coarse-grained (to 2 cm long dimension) pyrite crystals, associated with finer grained intervals and/or increased quartz content along foliation.							
15.68	15.90			**Lithology: Moderately disrupted laminites** Addition of silica + dolomite as veins and veinlets. Bedding (laminations) discontinuous.							
1.00	20.76			**Lithology: Interbedded argillite and argillaceous siltstone.** Relatively thick sequences (to 8 cm) of dark grey argillite with interbedded light grey laminated siltstone. **Structure:** **17.79 - 17.87** Broken interval with approximately 4 cm of broken rock recovered (possible fault). Offsets to 2 cm evident across bedding. Highly disrupted zone between 19.40 - 19.50 in which quartz + dolomite vein is discontinuous across width of core and contains highly angular argillite fragments. Core disrupted from 19.69 - 20.30, with strong preferred fabric to core at 25° to core axis. **Sulphides in Veins:** Several quartz veins evident (see Samples 77-80), with and without mineralization. Dolomite + quartz vein at 15° to core axis, 40° to host sediments, 1.0 - 1.5 cm thick. Coarse, disseminated arsenopyrite needles present within vein (0.1%) and in host argillite on either side. **16.91 - 17.64** High grade arsenopyrite-bearing quartz vein partially cored by drill, > 3 cm thick. Quartz vein folded along with host sediments. Massive aggregates of fine- to medium-grained arsenopyrite along upper contact of vein (oriented by foliation) in anticlinal fold, gradually decreases to semi-massive to aggregate masses over sampled interval. 90% arsenopyrite from 17.18 - 17.33, 80-90% from 17.33 - 17.37, 30-40% from 17.37 - 17.48. Dolomite and subordinate quartz along margin in core of fold (17.33 - 17.45). Vein comprises 15-40% of core from 17.18 - 17.48. Disseminated arsenopyrite in overlying host sediments. 78 and 80 - Disseminated fine- to medium-grained arsenopyrite in overlying sediments (0.3 - 0.7%). 77 - Apparently barren interval above mineralization. **Sulphides in Sediments:** Approximately 15-20% fine-grained disseminated pyrite in argillaceous intervals. Coarse-grained pyrite (to 1 cm in long dimension) localized along many contacts between argillite and argillaceous siltstone or siltstone.	0303 - 77 0303 - 78 0303 - 79 0303 - 80	16.91 16.99 17.18 17.48	16.99 17.18 17.48 17.64	0.19 0.97 2.44 0.15	1.60 0.60 1.70 2.10	18.47 25.59 32.90 12.19	8.40 13.30 8.90 13.3
20.76	21.81			**Lithology: Laminated fine sandstone.** Interval of coarse-grained sediments comprised of light grey fine sandstone with diffuse, wispy dark grey laminations. Sharp, planar upper contact underlying argillaceous siltstone, and basal contact with argillite. **Veins:** **21.48 - 21.51** - 2.5 cm dolomite + quartz vein at approximately 70° to core axis, located near transition from coarse-grained pyrite upward to medium-grained pyrite, contains 10-15% medium-grained pyrite aggregates to 2 cm in long dimension.	0303 - 81	21.66	21.78	0.04	2.18	48.15	377.30

				Sulphides in Sediments: Approximately 10% pyrite as medium-grained, disseminated crystals over basal 8 cm, then as less abundant but coarse-grained disseminated crystals over the next 8 cm, then decreasing to 5-7% medium-grained crystals over next 8 cm, 1-2% above to top of interval. **21.66 - 21.78** 3-5% Medium- to coarse-grained, disseminated pyrite in argillaceous quartzite at top of mineralized interval.							
21.81	32.87	25.40 30.60 30.66 34.72 36.30 38.00 39.00 40.00 41.46 42 43 44.70 45.70 47.5 48 49.7 51.6 53.2 53.80 54.80 55-58.7 59 61 64 65.6 67 68.5 70 73.3 76 78 79 81 82 84 85 87 88 91.6 92.6 94.50	40° 80° 85° 30° 70° 55° 85° 80° 40° 40° 15° 20° 20° 50° 50° 60° 20° 15° 25° 05° 0-5° 10° 10° 20° 30° 25° 35° 70° 50° 90° 80° 45° 75° 85° 35° 35° 55° 75° 75° 65° 65°	**<u>Lithology: Siltstone to Argillaceous Siltstone</u>** Laminated to thin-bedded, light grey siltstone and dark grey argillaceous siltstone to argillite. Bedding ranges from thin laminations to thin beds (to 12 cm thick). Two fining upward sequences noted between 25.03 and 25.42 and approximately 30.0 to 30.25 m. Bedding at relatively high angle to core axis throughout interval. Strongly oxidized, limonitic fractures between 31.30 and 31.50 m. **Veins:** Minor quartz veinlets, most parallel to foliation, all with sharp contacts. Four relatively thick quartz veins (see Samples 82 - 89). One 3 cm thick quartz + dolomite vein at 25.15 m at 70° to core axis and a second at 25.47 at 60° to core axis, both have large intergrown quartz crystals indicative of growth into open spaces. **Structure:** Local intervals of increased strain evident between 28.14 - 28.24, and 32.24 - 32.87 m, as dislocations of ≤4 cm, and development of a fabric with a strong preferred orientation near the base of the interval at 40° to core axis. Basal 8 cm of interval highly disrupted with strongly deformed, micro-folded and faulted, laminated bedding, relatively abundant quartz lenses and discontinuous stringers. **Sulphides in Veins:** **21.87 - 22.13** 3 cm thick quartz vein, apparently barren over upper 12 cm of interval, oriented at approximately 30° to core axis. Basal 14 cm of vein contains very coarse-grained galena and pyrite as aggregate masses (to 3 cm in long dimension). Cored 1-2 cm of vein over this interval and appears to be a different vein than that cored in the upper 12 cm. Upper 12 cm has yellowish tinge and minor iron-staining. Vein in lower 14 cm is comprised of white quartz with galena and pyrite, with margins at a shallow angle to core axis. Host rock is dark grey argillite with medium-grained disseminated pyrite and slightly coarser pyrite along laminations. Pb approximately 0.5%. **22.13 - 22.26** Mineralized upper portion of quartz vein. Quartz vein comprised of coarse intergrown quartz crystals with medium- to coarse-grained aggregate masses of arsenopyrite, galena and pyrite. Arsenopyrite localized along upper contact over 2 cm. Upper contact sharp, at approximately 50° to core axis. Vein has mottled yellow colour due to localized iron-staining, and steel to grey-blue where galena occurs. Arsenopyrite approximately 0.5 to 1% over interval; galena approximately 5-6%, pyrite approximately 1% as fine-grained aggregate masses to 4 cm in long dimension. **22.26 - 22.67** Mottled, iron-stained quartz vein, as above, with lower proportion of galena. Well-formed quartz crystals to 1.5 cm basal diameter and 2.5 cm length. Pb approximately 1%. **22.67 - 22.77** Well mineralized portion of quartz vein, as above. Lens comprised of aggregate masses of coarse-grained pyrite (to 0.4 cm diameter) and arsenopyrite to 0.4 cm in long dimension. Interior of this semi-massive band is a 0.3 - 0.5 cm thick band of iron stained carbonates with a massive aggregate of arsenopyrite. Lens comprises up to 3.5 cm of core diameter and 66% of sample interval. As approximately 15%. **23.02 - 23.21** Mineralization in basal 2.5 cm of quartz vein, as above, and underlying argillite. Approximately 15-20% pyrite over interval, both as fine- and coarse-grained aggregate masses. Coarse bladed arsenopyrite present, may also be present with fine-grained pyrite. Basal contact sharp at 60°. As approximately 2-3%.	0303 - 82 0303 - 83 0303 - 84 0303 - 85 0303 - 86 0303 - 87 0303 - 88 0303 - 89 0303 - 90	21.78 21.87 22.13 22.26 22.67 22.77 23.02 23.21 23.41	21.87 22.13 22.26 22.67 23.77 23.02 23.21 23.41 23.66	0.06 0.39 0.27 0.11 5.59 0.07 1.71 10.16 0.29	1.16 34.82 223.70 36.17 50.70 6.33 5.40 155.30 1.32	60.94 2867.97 **3.36%** 7563.24 531.22 491.16 255.39 **0.68%** 73.08	287.30 122.20 314.40 82.80 106.30 39.00 51.90 397.90 52.70

				23.21 - 23.41 Well mineralized interval comprised of sharp upper contact at 60° with white quartz vein with minor coarse bladed arsenopyrite to 1 cm in long dimension (approximately 0.5 - 1.0%) over 3.5 cm. Moderately iron-stained break at 50° underlain by 3.5 cm of strained quartz having a distinct structural fabric. Heavily iron-stained surface at 23.28 at approximately 60°. Probable fault zone has similar mineralization above and below, probably minor offset. Coarse bladed arsenopyrite above fault projects into overlying, coarse crystalline, intergrown quartz (as described in sample 84-87) from massive fine- to medium-grained sulphides, comprised of medium-grained disseminated pyrite (to 0.3 cm), a band of fine-grained pyrite 0.5 cm thick, galena and arsenopyrite. **23.21 - 23.41 (Cont'd)** As approximately 25%, galena 4-6%, pyrite approximately 30% over 21.28 to 21.35 m. Basal 6 cm comprised of white, opaque quartz vein with coarse-grained galena (approximately 1%), medium-grained bladed arsenopyrite (2-4%) and medium-grained pyrite. Arsenopyrite occurs in mono-mineralic aggregate masses, pyrite and galena intergrown. **Sulphides in Sediments:** Medium- to, locally, coarse-grained disseminated pyrite (up to 1 cm in long dimension) throughout interval, to 2%. **21.78 - 21.87** 4-6% Medium- to very coarse-grained (to 0.5 cm) disseminated pyrite crystals in dark grey argillite above quartz vein (see Sample 0303-83). **23.41 - 23.66** Argillite to argillaceous siltstone underlying quartz vein. Basal contact of quartz vein at 70°, halfway across core assumes different orientation at 20° to core axis. Two thin (0.2 - 0.5 cm) quartz veins also at shallow angle to core axis. Approximately 5% fine-grained pyrite in very thinly bedded siltstone with interbedded dark grey argillaceous siltstones. Local concentrations of fine-grained pyrite (to 0.1 cm diameter) along thin (0.1 cm) quartz veinlet. Minor medium-grained pyrite (to 0.4 cm diameter) in 0.5 cm thick quartz vein.							
32.87	35.33			**<u>Lithology: Structurally modified siltstones</u>** Fining Upward Sequence. Basal 61 cm consists of medium grey granule conglomerate layers up to 0.5 cm thick that have been desegregated across planes parallel to foliation, resulting in a series of grit slivers in laminated siltstones. Granule conglomerate layers / intervals to 2 cm thick in argillaceous siltstone relatively intact between 34.72 - 34.80 m. Basal contact of thick granule conglomerate sharp, possibly tectonically modified, at 34.72 m. From 34.12 - 34.72 lithic granule conglomerate with lithic (argilaceous) inclusions. From approximately 34.12 m upward, the grain size gradually decreases to argillaceous siltstone at 33.85 and argillite at 33.43. Possible pulses in the upper argillite sequence, from argillaceous siltstone to argillite, emphasized by zones of nested, slightly deformed quartz layers (veins) ± pyrite. **Veins:** Minor proportion of unmineralized veins, except pyrite. 1 set approximately 2-4 cm thick at high angle to bedding, spaced approximately 1 / 5 m at 80° to ocre axis. Monomineralic quartz or creamy yellow dolomite + quartz. Second set is at a shallow angle to core (10°-20° to core axis) and consists primarily of creamy white to yellow dolomite with subordinate quartz. Minor pyrite mineralization. Dolomite + quartz vein at approximately 75° to core axis, 80° to bedding. Upper contact has fault gouge, possible vein developed along fault. Fine- and medium-grained pyrite for 14 cm above and 13 cm below vein, 1 mm in diameter. **77.89 - 78.02** Milky white quartz vein with faulted lower contact at 15° to core axis. **Sulphides in Sediments:** Coarse pyrite (to 1 cm in long dimension) occurs in association or proximity to quartz-rich zones, either layer (i.e. granule conglomerate) or vein / veinlets. Approximately 5-7% fine-grained pyrite disseminated throughout granule conglomerate. Medium- to coarse-grained pyrite present throughout interval, from 1 to 7%.							

35.33	84.27			**Lithology: Interbedded light and dark grey siltstone.**

Light grey siltstone with dark grey argillaceous siltstone over entire interval. Bedding thickness ranges from thin laminations (0.2 cm) to thin beds (4 cm), with the majority between 1 - 3 cm. Upper 40 cm - bedding dislocated across foliation. Slightly calcareous over basal metre of interval.

Sulphides In Veins:

38.04-38.12 Approximately 5 % fine-grained pyrite in very thinly bedded siltstone with interbedded dark grey argillaceous siltstones. Local concentration of fine-grained pyrite (to 1.0 cm in diameter) along thin (0.1 cm) quartz veinlets. Minor medium-grained pyrite (to 0.4 cm in diameter) in 0.5 cm thick quartz veins.

38.12 - 38.35 Cored 1 margin of sphalerite + pyrite ± galena massive sulphide vein of unknown thickness. Vein at steep angle to bedding (60°) and parallel to core axis, comprised of 80% black sphalerite, 15% pyrite and 5% galena over 1 cm. Appears to be possible zonation to vein, with pyrite at contact with host rock, followed by galena, with sphalerite occurring toward the interior or core of the vein. Disseminated pyrite as in preceding interval throughout host siltstones. Lense of fine-grained pyritic aggregate in quartz vein 1 cm thick.

38.35 - 38.44 Pyrite-bearing interval similar to 38.04 - 38.12.

39.05 - 39.39 Mineralized vein at 20° to core axis, approximately 75° to bedding, cross-cuts bedding to 39.39 at which point entire core comprised of mineralized vein. Mineralization consists of semi-massive aggregate of pyrite, sphalerite, galena and arsenopyrite in quartz. Heavy iron-staining along contact between vein and host sediments. Vein approximately 30-40% pyrite, 15-20% galena, 15% sphalerite and 3% arsenopyrite. Interval will assay approximately 4-7% Pb, 2-3% Zn, 1% As.

39.39 - 39.62 Vein approximately 9 cm thick, oriented at approximately 20° to core axis. Semi-massive to massive bands of fine-grained sulphides along margins of vein for approximately 2 - 2.5 cm, comprised of pyrite, galena, sphalerite in diffuse bands parallel to contact. Core of vein comprised of intergrown, iron-stained quart crystals approximately 0.4 cm in length. Pyrite and marcasite present, marcasite highly subordinate, coarse-grained and occurs preferentially toward interior of vein. 20-30% pyrite, 3-4% arsenopyrite (?), 2-3% galena, 1-2% sphalerite.

39.62 - 39.86 Lower contact of vein, cross-cuts host siltstones at approximately 75°, 10° to core axis, and cross-cuts earlier vein at 50°. Semi-massive to massive bands of fine-grained sulphides oriented sub-parallel to vein margins, between 0.1 - 1.0 cm thick over approximately 2.0 cm. Appears to be thin band of pyrite (0.1 - 0.2 cm) at contact with host sediments, with 1.0 cm thick band of fine-grained arsenopyrite with discontinuous pyrite lenses with diffuse 0.5 - 1.0 cm thick band of pyrite, with lenses and discontinuous bands of sphalerite and galena in the core with quartz. Smaller veins (0.5 and 1.0 cm thick) coalesce into larger 2 cm thick vein at 10° to core axis and 70° to bedding contains 0.1 - 0.3 cm dolomite bands along contact with host sediments in larger vein. Arsenopyrite bands, between 0.2 - 0.4 cm thick, are located along the margins of the smaller veins and on the interior side of the dolomite bands in the larger vein. Veins: 15-20% arsenopyrite. Interval: 5-6% As, 1-2% Pb, 1% Zn

39.86 - 40.16 Two thin sphalerite-bearing quartz veins. The upper vein is 0.4 cm thick and oriented at 20°-25° to core axis, 65° to bedding. It is cross-cut by a visually barren, 3 cm thick quartz vein between 39.96 and 40.02 with approximately 2 cm of sinistral offset. The first thin vein is cored by a 0.2 cm thick discontinuous sphalerite band. The second quartz vein is located between 40.08 - 40.16, is 0.7 cm thick and is comprised of 90% sphalerite, 5-7% pyrite and 3-5% quartz. Interval approximately 1% black sphalerite.

40.16 - 40.39 Pyrite-bearing siltstone with pyritic quartz vein between 40.25 - 40.39 at approximately 30° to core axis. Host rock similar to that described in preceding intervals. Quartz vein has upper contact obscured by development of pyrite. Fine- to medium-grained pyrite developed from core of vein, through upper contact into overlying host rock, with gradation from massive to abundant disseminated pyrite upward. Vein approximately 2 cm thick. Galena along upper contact, approximately 10% galena and 40-50% pyrite. Interval: 0.5 - 1% Pb.

0303 - 91	38.04	38.12	0.06	1.77	120.94	200.30
0303 - 92	38.12	38.35	0.75	155.70	**1.89%**	**4.08%**
0303 - 93	38.35	38.44	0.17	23.85	330.08	1358.70
0303 - 94	39.05	39.39	1.21	246.20	**3.40%**	**2.14%**
0303 - 95	39.39	39.62	3.15	427.60	**5.08%**	**2.99%**
0303 - 96	39.62	39.86	3.41	152.90	**1.75%**	**1.67%**
0303 - 97	39.86	40.16	0.12	16.00	2100.44	**2.97%**
0303 - 98	40.16	40.39	0.22	118.80	**1.17%**	1161.90
0303 - 99	40.39	40.61	0.16	20.03	583.03	1581.70
0303 - 100	40.61	41.01	0.67	1373.20	**6.28%**	**11.25%**
0303 - 101	41.01	41.46	1.34	507.60	**4.50%**	**11.22%**
0303 - 102	41.46	41.73	0.21	134.80	**0.48%**	1152.00
0303 - 103	41.73	42.08	1.55	739.10	**11.96%**	**1.68%**
0303 - 104	42.08	42.34	0.28	27.30	**0.26%**	**1.18%**
0303 - 105	42.34	42.56	2.21	20.50	**0.31%**	**0.25%**
0303 - 106	42.56	42.99	0.17	3.47	480.78	166.00
0303 - 107	42.99	43.23	4.06	282.40	**2.83%**	**9.46%**
0303 - 108	43.23	43.42	1.24	155.00	**1.60%**	**4.44%**
0303 - 109	43.42	43.54	0.22	183.00	**2.58%**	872.90
0303 - 110	43.54	43.83	0.95	44.90	**0.44%**	**2.73%**
0303 - 111	43.83	44.46	3.72	27.40	**1.02%**	2572.40
0303 - 112	44.46	44.67	0.40	896.00	200.28	241.40
0303 - 113	47.73	47.94	0.54	1.90	547.19	153

40.39 - 40.61 Upper 10 cm comprised of visually barren quartz vein. Upper contact at 75° to core axis. Host siltstones pyrite-bearing as previously described. 1 cm thick pyritic quartz vein from 40.55 - 40.63 (i.e. continues into next sampled interval. Approximately 70-80% pyrite development, primarily within vein as semi-massive to massive aggregates of fine-grained pyrite, partially obscures upper and lower contacts.

40.61 - 41.01 Two massive sulphide veins at approximately 20°-25° to core axis, 60° to bedding, 2-3 cm thick, comprised predominantly of black sphalerite with subordinate galena, pyrite and quartz. Veins generally have thin, discontinuous quartz rinds (≤ 0.2 cm thick) with fine- (to medium-) grained (locally up to 0.5 cm diameter) pyrite band (≤ 0.1 cm thick) occurring on the inside of the quartz band. The remainder of the veins are comprised of intergrown coarse-grained, black sphalerite (approximately 85%) with highly subordinate galena (10-15%) and quartz (0-10%). Vein contacts with host rock are sharp. A minor proportion of the sphalerite is orange-coloured, resulting in a reverse "tiger-striped" texture. Thin pyrite veinlets or discontinuous segments cross-cut sphalerite. Massive sulphide bands cross-cut early thin quartz veinlets (≤ 0.5 cm thick) with sulphide cores (≤0.1 cm thick) comprised of fine-grained pyrite ± arsenopyrite. Host seds are pyrite-bearing siltstones.
Interval: 8-10% Zn, 3-4% Pb.

41.01 - 41.46 Two more massive sulphide (sphalerite) veins at 20° to core axis. The upper band, approximately 1.5 cm thick (41.01 - 41.16) has a thin pyritic lower layer adjacent to the contact with host sediments. The vein consists of 80-90% weakly reverse tiger-striped, coarse-grained sphalerite. A second, thin vein (0.5 cm thick) overlies this vein and is almost completely obscured by development of arsenopyrite and galena fro the upper portion of the massive sphalerite vein through the intervening sediments (≤0.3 cm). The arsenopyrite veinlet is oriented at approximately 45° to core axis and is cross-cut / assimilated by the massive sulphide vein, which undergoes transition through an increase in galena and quartz content at the expense of sphalerite.

41.01 - 41.46 (Cont'd) The lower massive sulphide (sphalerite) vein (41.26 - 41.46) is approximately 2.5 cm thick and similar to those described above, except it contains approximately 10-15% pyrite and 10% galena and the (PHOTO) base has alternating, discontinuous bands of sulphides; pyrite generally along the contact with the host sediments with mixed band os segregated sphalerite and galena, then pyrite and quartz and then coarser grained massive sphalerite. The bands are approximately 0.1 - 0.3 cm thick with a 2 cm thick massive sulphide core cross-cut by a weak network of thin (≤ 0.1 cm) pyritic veinlets. Host sediments consist of pyrite-bearing siltstones.
Interval: 3-4% Zn, 0.5 - 1% Pb, approximately 0.5% As.

41.46 - 41.73 Quartz vein at 40° to core axis, sub-parallel to bedding (41.59 - 41.73) at base of interval, approximately 6 cm thick. Vein is variably mottled due to iron-staining, Very Coarse-grained pyrite (to 1 cm long dimension) and galena (to 1 cm long dimension) each comprise approximately 1% of vein. Took picture of two medium- to coarse-grained galena crystals contained within large pyrite crystal in plane of core surface. 41.16 - 41.59 - Pyrite-bearing siltstone.

41.73 - 42.08 Two mineralized veins at approximately 10° to core axis. Upper vein, from 41.73 - 41.90, partially assimilated by quartz vein in overlying interval (contributed coarse-grained galena). Approximately 15-20% coarse-grained galena (0.5 cm diameter) in 3.0 cm thick quartz vein having sharp contacts with host sediments. Galena, with minor medium-grained pyrite, forms coarse-grained aggregate masses. Second vein, from 41.90 to 42.09, is at 10° to core axis and oriented oblique to the overlying vein, approximately 1 cm thick. Coarse-grained black sphalerite with pyrite, galena and quartz, similar to massive sulphide veins in preceding intervals. Vein: Approximately 60% black sphalerite, 20% quartz, 5-10% pyrite, 1-5% galena, ≤1% arsenopyrite. Oxidized massive sulphide veinlet between the two larger veins, ≤0.5 cm thick, comprised of 90-95% sphalerite, 0-5% pyrite, 0-3% arsenopyrite. Interval: 5-6% Pb, 3-4% Zn, 0.5-1% As

42.08 - 42.34 Arsenopyrite-bearing quartz vein ≤2 cm thick cross-cutting pyrite-bearing siltstones. Milky white quartz vein cross-cuts bedding at 30° to core axis, sub-parallel to bedding. Contains predominantly arsenopyrite along margins 3-5%, galena as medium- to coarse-grained crystals (≤1%) and both orange and black sphalerite (≤1%). Vein extends from 42.08 - 42.23.

42.34 - 42.56 Arsenopyrite-bearing veins cross-cutting both host sediments and earlier dolomite veins. Upper vein (42.34 - 42.39 m) at 45° to core axis, approximately 20° to bedding, semi-massive to massive, coarse-grained arsenopyrite in ≤1 cm thick quartz vein. 70-90% arsenopyrite. Early dolomite veins at 55° to core axis, approximately 90° to bedding, show sinistral offset of 1-3 cm, cross-cut by mineralized veins with sharp contacts, contain 0-1% pyrite. Lower vein (42.44 - 42.56 m) at 35° to core axis, sub-parallel to bedding, 3 cm thick, has semi-massive sulphides along margins, comprised predominantly of arsenopyrite 3-5%, sphalerite (1-3%), medium- (to coarse-) grained, over ≤0.5 cm. Bulk of vein comprised of milky white quartz.

42.56 - 42.99 Early dolomitic veins at 50-65° to core axis, ≤1.5 cm thick with sharp contacts. 42.83 - 42.89 - Two ≤1 cm thick quartz + dolomite veins at 45° to core axis, 30-35° to bedding, coalesce into a single vein over last 3 cm (of 8 cm core length). Quartz 40-50%, dolomite 50-60%. Minor arsenopyrite ≤1% in veins.

42.99 - 43.23 One arsenopyrite-bearing quartz vein and 3 massive sulphide veins. Upper arsenopyrite-bearing vein (42.99 - 43.05 m), ≤1.5 cm thick at 40° to core axis, contains approximately 15-45% medium-grained arsenopyrite, 6% coarse-grained galena and 5-10% fine-grained stringers of pyrite. Arsenopyrite concentration increases dramatically in proximity to underlying vein. Medium- to coarse-grained arsenopyrite + pyrite, semi-massive sulphide vein from 43.03 - 43.10 at 45° to core axis, ≤2.5 cm thick, consists of 20-40% pyrite, 30-70% arsenopyrite, 0-15% quartz. Massive arsenopyrite + sphalerite vein between 43.10 - 43.17 at 45° to core axis, ≤2.5 cm thick, comprised of tiger-striped and black, coarse-grained sphalerite (40%) and coarse-grained arsenopyrite (60%).

42.99 - 43.23 (cont'd) Third vein (43.11 - 43.30 m) at 55° at upper contact while lower contact curved from approximately 45° at 43.21 to 15° at 43.30 m. End of interval chosen where bulk of vein contained in same interval as preceding massive sulphide veins. Vein is approximately 5.5 cm thick and comprised of 40-50% reverse tiger-striped sphalerite, 20-40% pyrite and 0-40% quartz. Open space filling textures evident. Interval: 25-30% Zn, 20-25% As.

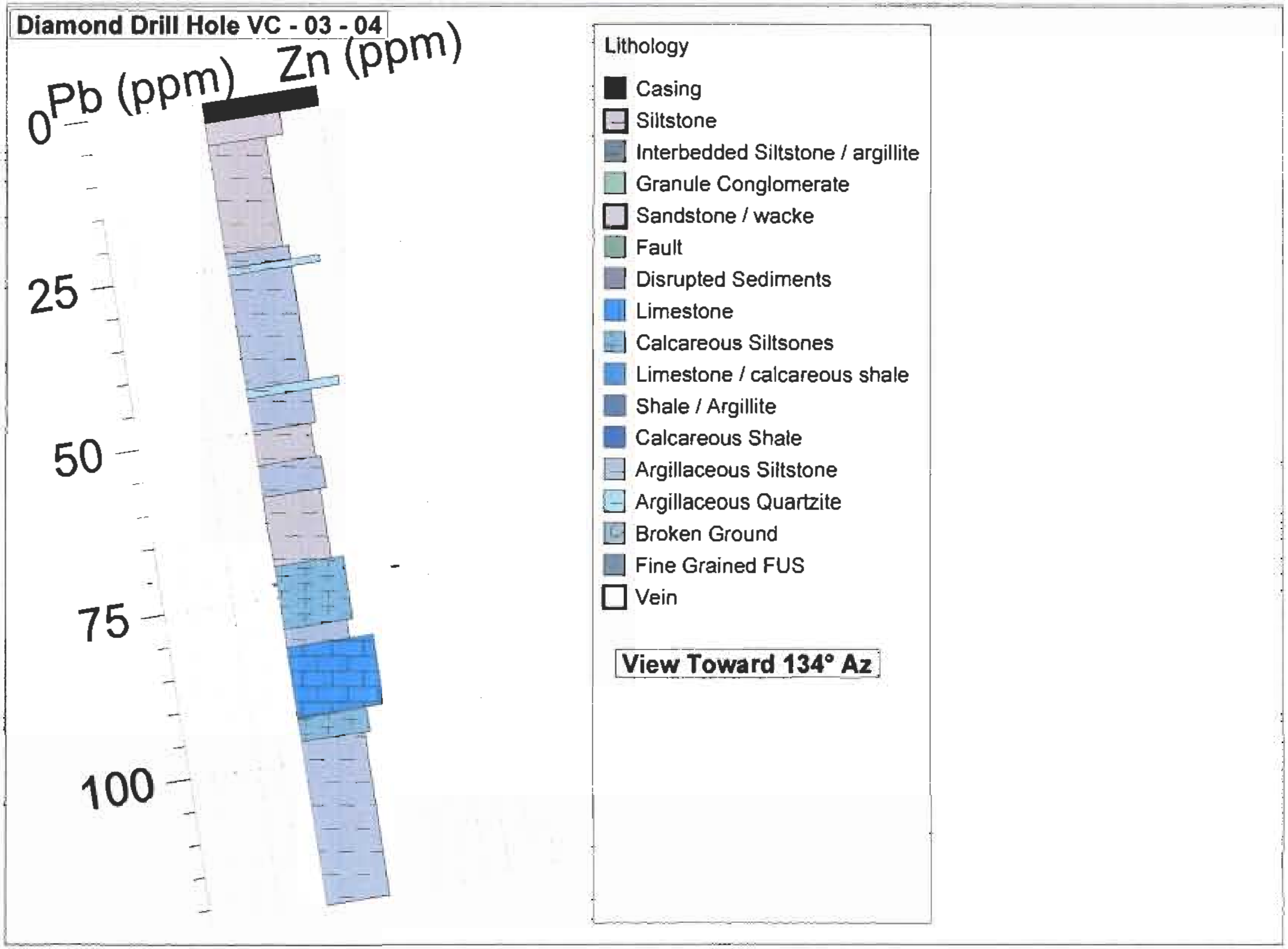
43.23 - 43.42 3 Thin quartz ± dolomite veinlets coalesce into single vein upward. Basal wedge shaped portion of vein from preceding interval. Three veinlets between 0.3 - 0.5 cm thick over 3.5 cm at approximately 40° to core axis AND bedding from 43.27 - 43.38 m. Between 43.31 and 43.38, considerable overprinting of veins with arsenopyrite, probably derived from base of vein described in previous interval, 3-90% arsenopyrite and 20% sphalerite in veins and host sediments in this interval, decreasing upward as veins diverge. Interval: 20% As, 10% Zn

43.42 - 43.54 Quartz vein at approximately 45° to core axis, ≤3.5 cm thick with 3-5% sulphides as medium- to coarse-grained pyrite and galena. Sulphides as coarse disseminated crystals in vein, ≤0.6 cm in long dimension. Vein contacts sharp.

43.54 - 43.83 Incipient stockwork veining. Multiple generations of veins in several orientations and variable degrees of mineralization evident. First generation are quartz with subordinate dolomite at approximately 50-55° to core axis, ≤0.4 cm thick with sharp margins contain ≤1% arsenopyrite. Second generation comprised of iron-stained dolomite + subordinate quartz at approximately 70° to core axis, 85° to first generation. Third generation moderately well mineralized and cross-cuts both sets of earlier veins, comprised of 50-60% quartz and 40-50% dolomite. Mineralization comprised of 10-15% medium-grained arsenopyrite. Earlier veins not significantly disrupted (in this interval) by development of foliation. Upper contact of vein sharp at approximately 25°.

43.54 - 43.83 Lower contact highly irregular, appears to have been injected along foliation resulting in a series of discontinuous lozenges comprising base. Fourth generation, comprising bulk on subsequent interval, well mineralized with very fine-grained pyrite (0-130%), arsenopyrite (5-40%), medium-grained galena (0-20%) and medium- to coarse-grained sphalerite (0-15%), all of which occur in diffuse patches or localized aggregate masses in host quartz vein. Interval: 5-10% As, 1-2% Pb, 0.5 - 1% Zn.

				43.83 - 44.46 Arsenopyrite- and pyrite-rich quartz vein at shallow angle to core axis, approximately 10° to core axis at 43.83 m, 0° from 44.20 - 44.45 m, 50° at 44.46 m. Approximately 7 cm thick, comprised of milky white quartz with heavy limonite in vugs and along contacts with host sediments. Higher proportion of medium-grained arsenopyrite with or without fine-grained along upper margin of vein as anastomosing massive bands between 0.3 - 1.0 cm thick, bands coalesce and separate along vein. Lower contact comprised of 0.4 - 0.8 cm thick disseminated to, more commonly along cored vein, massive band of fine- to medium-grained arsenopyrite. Vein: Arsenopyrite 30-40%, pyrite 5-10%. Interval: 7-10% As **44.46 - 44.67** Pyrite-bearing siltstone underlying mineralized interval. Two thin iron-stained quartz veinlets at 50° to core axis coalesce into single vein over 1 cm along core. Minor arsenopyrite from overlying interval. Arsenopyrite approximately 0.3 - 0.5%. **47.73 - 47.94** Massive band of arsenopyrite along upper contact of quartz vein at approximately 5° to core axis. 0.7 cm thick band of fine-grained arsenopyrite in 2 cm thick dolomite ± quartz vein, extends from 47.70 - 49.13 m. Approximately 15% arsenopyrite in vein in this interval, drops to≤0.5% along vein below, trace in host sediments along contact. Interval: 1-2% As **Structure:** **53.80** Strain partitioning around pyrite crystals at base of argillaceous siltstone. Pressure shadows around crystals - undeformed dolomite and quartz vein. **58.00 - 58.10** Deformation of bedding due to development of foliation, rotation - west side up. **58.70** Boudinaged light grey siltstone, partially rotated into plane of foliation **Sulphides in Sediments:** **58.00 -58.10** Pyrite crystals along quartz-rich horizons. Increased pyrite content in sediments within mineralized intervals and for up to 1 m above. Both medium- and coarse-grained pyrite present in mineralized interval but predominantly coarse-grained away from mineralization. In addition, pyrite generally localized along contacts throughout yet appears randomly disseminated in mineralized intervals in this hole. **Alteration:** Ankerite variable developed throughout core, generally comprises 20-30% by volume, randomly disseminated, appears to be more abundant in light grey siltstones, less abundant in argillaceous siltstones and argillite. Gradually increasing in abundance at approximately 75.50 and size (to 0.5 - 1mm diamater) at 79.50 and ≤3 mm at 82.50 m. **58.00 - 58.10** Speckled appearance due to ankerite porphyroblasts.							
84.27	91.60			**Lithology: Calcareous Siltstones.** Siltstones with some layers having a strong reaction to dilute HCl. In appearance, they are alternating light and dark blue-grey siltstones and argillaceous siltstones. Bedding thickness ranges from thick laminated (3 mm) to thin bedded (6 cm). Gradded bedding indicates right-way-up. Interval also contains less pyrite than siliciclastic sequences.							
91.60	98.14			**Lithology: Alternating light and dark grey siltstones.** Thickly laminated to thin bedded, light grey siltstones and thinner dark grey argillaceous siltstones **Structure:** 96.37 - 96.50 Fault gouge and chips at approximately 50° to core axis, appears to be located on common limb between overlying (open) anticline and underlying (close) syncline. **Alteration:** Coarse ankerite present over upper 3 m, gradually decreasing in size to 96.37 m.							
98.14				**End of Hole - Void space - upper workings of mine?**							



Diamond Drill Hole VC - 03 - 04
Pb (ppm)
Zn (ppm)
0
25
50
75
100
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View Toward 134° Az

DYNAMIC EXPLORATION LTD.

DRILL LOG: DIAMOND DRILL CORE

HOLE NO.	VC - 03 - 04

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:	Lot 418		
LOCATION - GRID NAME:			
EASTING:	501433	NORTHING:	5643908
SECTION:		ELEV:	1922 m
AZIM:	224°	LENGTH:	121.91
DIP:	-81°	CASING LEFT?:	No
CORE SIZE:			NQ
CORE STORAGE:	Vermont Creek		

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
3.05		78.75°			

DRILLING CO:	F.B. Drilling
STARTED:	27-Jun-03
COMPLETED:	28-Jun-03
PURPOSE:	To test stratigraphy, structure and mineralization
CORE RECOVERY:	
LOGGED BY:	Rick Walker
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	A302740, A302740r, A302740R2, A303027, A303027r, 0303027R3

Drill Hole VC - 03 - 04

From	To	Core Angle		Description	Sample	From	To	Gold	Silver	Lead	Zinc
m	m	m	Deg		Number	m	m	gms/T	gms/T	ppm	ppm
0.00	3.05			**Casing**							
3.05	6.48			**Lithology: Pyrite-bearing, argillaceous quartzite.** Medium to coarse grained quartzite (at base). Weakly defined fining upward sequence, from coarse-grained to fine-grained argillaceous quartzite. Minor lithic rip-up clasts, largest is 3.5 cm long x 0.5 cm thick. Oxidized fractures present, spaced approximately 40 to 70 cm with < 4 cm oxidized rind defined by fine grained deep red hematite spots (partially to completely weathered pyrite). Basal contact sharp, at approximately 60° to core axis, with 2 cm oxidized rind. **Veins:** Dolomite and quartz veins up to 0.4 cm thick at 40° to core axis cross-cut light grey quartz veins at approximately 20° to core axis. Minor discontinous pyrite veinlets, 0.1mm thick and up to 2 cm segments. **Structure:** Weakly defined, coarse foliation, spaced approximately 0.5 cm at 20° to core axis. **Sulphides in Sediments:** Approximately 10-15% pyrite disseminated throughout interval, ranging from 0.1 mm to 0.4 mm, average 0.2 mm. Trace arsenopyrite as coarse-grained needles to 0.5 cm in length. **3.66-3.87** Pyrite bearing argillaceous quartzite with approximately 0.1-0.2 % arsenopyrite. Sampled to test for Au.	0304 - 114	3.66	3.87	0.04	0.29	56.53	59.70
6.48	23.01	9.00 12.00 13.50 14.00 15.30 16.00 19.00 21.00 21.40 22.50 23.00	70° 60° 45° 50° 80° 75° 50° ≈10° 50° 50° 15°	**Lithology: Alternating light and dark grey siltstones.** Thickness ranges from thick laminated to thin bedded (≤4 cm). Light grey siltstones comprise 50-60% of interval and dark grey argillaceous siltstones to silty argillites comprise 40-60%. Light grey siltstones are generally thicker than interbedded argillaceous siltstones. Minor component of light grey argillaceous quartzite ripple cross-beds. Broken rock at 7.83-7.91 with abundant limonite and milky white quartz crystals. **Veins:** Two relatively thick quartz veins at 17.79-17.81 (1 cm thick) 17.88-17.92 (4 cm thick) and 18.00-18.02 (1 cm thick) and at 20.63-20.67 (2.5 cm thick at 40-45° to core axis). Subordinate dolomite (to 25%). ≤ 1% Thin quartz veinlet over interval (< 0.2 cm thick) at approximately 25° to core axis, 30° to 80° to bedding parallel to foliation). **Structure:** Beds variably disrupted by foliation, ranging from midpient development at contacts between siltstone and argillaceous interbeds, fold development through to faults and dislocation of beds across foliation parallel faults.(i.e. sinstral offset of beds up to 2 cm at 45° to core axis at 12.60 m) Incipient fault (highly disrupted but core still cohesive-no gouge) at 13.58 at 48° to core axis. Faults at 14.89 at 14.89 at approximately 30° to core axis. Anticlinal fold evident with core between 18.29 and 18.70 **Sulphides in Veins:** Heavily oxidized to pristine, pyrite vein and pyrite rich interval (60% coarse-grained pyrite over 1 cm bed) between 10.35-10.83.							

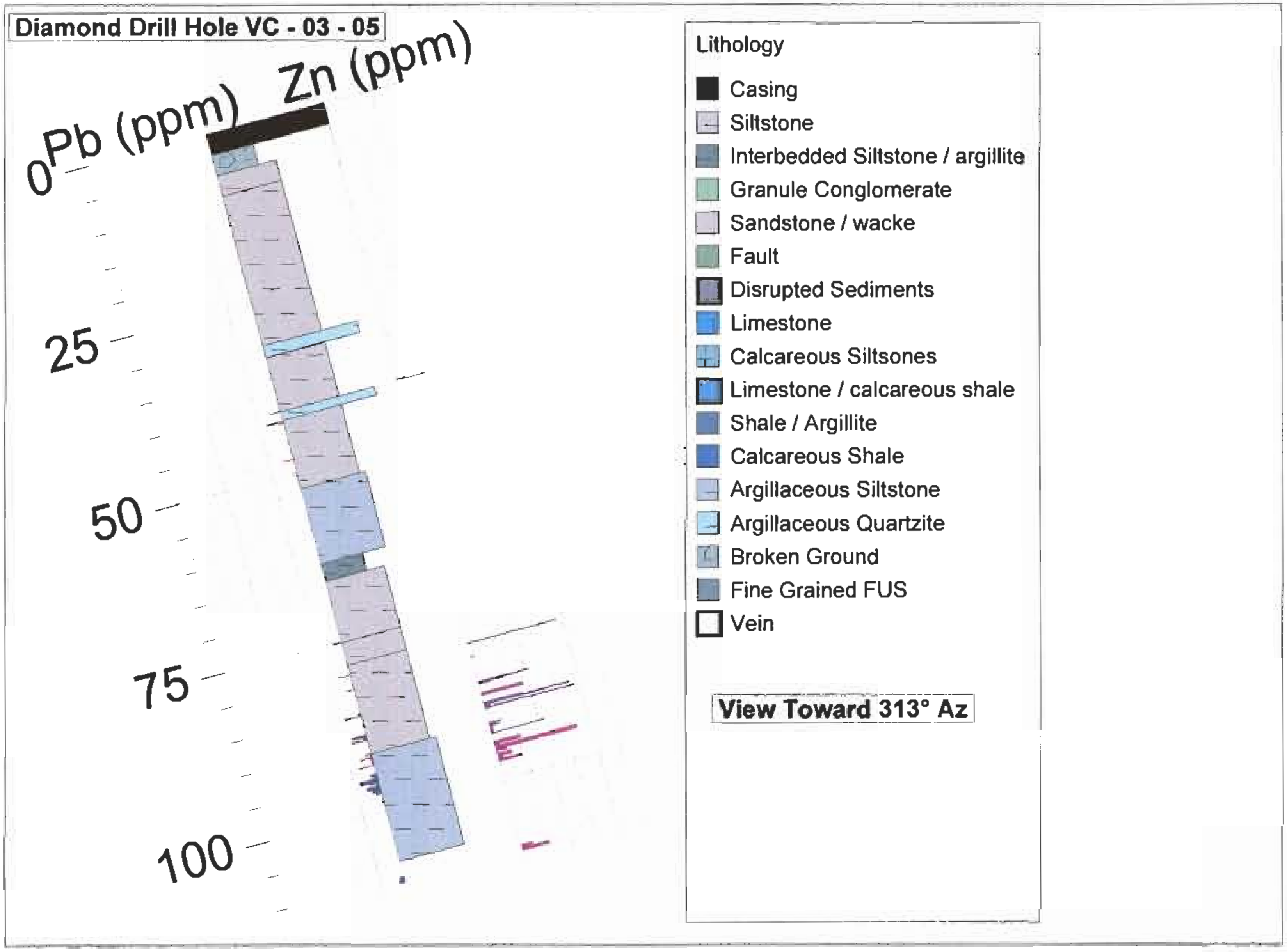
				Sulphides In Sediments: Two possible generations of pyrite. Early generation of pyrite associated with/derived from bedding at 20.67. Large pyrite crystal with quartz pressure shadows. Medium-grained disseminated pyrite in bedding. Band of fine-grained to medium-grained pyrite on margin of light grey quartz and dolomite vein. **Alteration:** Broken, heavily oxidized rock between 10.83-10.87, 10.3-10.35 with bright orange to dark brown limonite (to goethite) coating fracture surfaces.							
23.01	25.1	24.30	65°	**Lithology: Argillaceous siltstone.** Interbedded Argillaceous siltstone with argillaceous interbeds(0.2-2 cm thick). Siltstone intervals 2-40 cm thick. Lower 6 cm of interval comprised of 30 to 40 % light grey quartz (with dolomite) veins at 45° to core axis. **Veins:** Moderately abundant thin white to light grey quartz veinlets along foliation and at approximately 70° to core axis, 55° to foliation. **Structure:** Moderately well developed foliation. High angle veinlets slightly deformed (folded) by foliation. Thicker quartz and dolomite viens (0.2 - 4 cm thick) at 20-30° to core axis. Base of interval faulted. Segment truncated at upper end of interval by fault plane, placing quartz view bearing siltstone against argillite. **Alteration:** Ankerite porphyroblasts to 0.1 com present in argillite.							
25.1	25.13			**Lithology: Fault** Fault at approximately 65° to core axis, Fault chips, little gouge							
25.13	26.21	25.15	80°	**Lithology: Granule Conglomerate** Two fining upward sequences. First between 25.13-25.43 consists of diffuse lower contact in which coarse-sand to grit-sized clasts are matrix-supported in argillite. Contact at approximately 80° to core axis and modified by addition of quartz as milky white lenses and diffuse swirls of quartz. Argillaceous quartzite undergoes transition from coarse-grained at base to fine-grained at 25.20. Abrupt transition across 1 cm thick light grey to dirty white quartz + dolomite vein at approximately 80° to core axis. Lower fining upward sequence less ambiguous. Abrupt lower contact at 85° in coarse-grained argillaceous quartzite. Fines upward fo fine- to medium-grained argillaceous quartzite at 25.60. Overlain by argillite across 1-2 cm transition zone. **Veins:** Argillite contains 30 % discontinuous quartz veins and veinlets. **Structure:** Fault plane with thin layer of fault gouge at 60° to core axis at 25.16.							

				Sulphides in Sediments: Contains approximately 5-7% medium-grained disseminated pyrite.							
26.21	43.57	26.50 27.70 31.00 32.50 34.00 35.90 36.60 38.30 39.60 41.50 42.60	70° 80° 40° 60° 75° 80° 90° 75° 75° 75° 75°	**Lithology: Dark grey argillaceous siltstone** Interbedded with light grey siltstone and dark grey to black argillites, Dark grey argillaceous siltstones between 0.1mm (thin laminated) to 8 cm thick (thin bedded), light grey siltstones between 0.1-6 cm thick, argillites 0.1-10 cm thick. Many of the siltstone couplets appear to grade from argillaceous siltstone (to argillite) upward to siltstone (possibly overall coarsening upward cycle). **Veins:** Intervals of abundant quartz veining between 29.02-29.80 and 30.48-30.84m. Several different orientations (generations). Discontinous, deformed quartz veins at 25° to core axis and thin quartz veinlets(< 0.2 cm) at 15° to core axis between 30.48-30.84. Same series of veins probably present between 29.02 and 29.80 but in relative high strain zone and dissegregated along preferred fabric oriented 45° to core axis. **Structure:** Fault with 1-3 cm of dark brown gouge overlying 2-4 cm of rock fragments 0.2-1.5 cm thick between 26.34-26.42 m. **Alteration:** Coarse-grained ankerite (to 0.3 cm diameter) comprises up to 15-20 % of argillite to argillaceous siltstone intervals.							
43.57	44.91	43.60	85°	**Lithology: Granule Conglomerate** Fining upward sequence. Base modified by foliation, extends over 10 cm from contact with underlying argillite. Core comprised of coarse-grained lithic sandstone with adjacent interbedded argillaceous siltstone. Clasts at base of interval range from 0.5 cm diameter lithic clasts to grit-sized granule conglomerate in a slightly calcareous matrix. Clast size fines upward to approximately 44.01 at which point it consists of a fine- to medium-grained argillaceous quartzite with a calcareous matrix. The sequence continues to fine upward over the next 20 cm through thickly laminated argillaceous siltstone. Uppermost 20 cm comprised of massive dark grey argillaceous siltstone with minor argillite interbeds. At 44.0 m there is an oxidized fracture at approximately 35° to 40° to core axis with a 2 cm rind comprised of strongly to completely altered pyrite. **Veins:** Interval cross-cut (in the laminated argillaceous siltstone) by thin dolomite veinlets at 40° to core axis. **Sulphides in Sediments:** Pyrite over interval varies from ≤ 3% in the basal 40 cm, decreasing to ≤ 1% in the calcareous portion and overlying argillite dominated section. Pyrite crystal size varies from ≤ 0.2 cm at the base to appromately 1 cm in long dimension at the upper contact.							
44.91	49.99	45.75 47.00 47.50 48.30 49.00	80° 85° 80° 85° 75°	**Lithology: Argillaceous siltstones**. Sequence dominated by thickly laminated to predominantly thin bedded, dark grey argillaceous siltstone. Uppermost 23 cm comprised of dark grey argillaceous siltstone with subordinate light grey siltstone interbeds. Approximately 5-8 % coarse sand to grit-sized clasts contained in interval. Approximately 3-4 % coarse-grained (≤ 0.4 cm) pyrite crystals in uppermost 4 cm of interval. Bedding thickness decreases downward through the interval, from predominantly thin bedded (thickly laminated to thin bedded) to predominantly thickly laminated.	0304 - 115	48.05	48.17	0.16	0.31	25.14	50.80

				Structure: 46.40-46.45 Broken, platey rock with medium to dark brown goethite coating and completely weathered (limonite) pyrite. **Sulphides in Veins:** **48.05-48.17** Approximately 1 cm thick creamy white to pale yellow dolomitic vein with 5% arsenopyrite. Vein at 25° to core axis, 60° to bedding. Arsenopyrite fine-grained aggregates along vein. Interval: approximately 1% arsenopyrite. **Sulphides in Sediments:** Increased pyrite content between 47.68, below 1.5 cm thick creamy white to pale yellow dolomite veins at 30° to core axis and 48.38. Pyrite present as 0.5 % coarse-grained (to 0.6 cm) disseminated crystals and 2-4% fine- to medium-grained pyrite crystals disseminated along preferred horizons (i.e. argillaceous siltstones)							
49.99	55.11	50.00 51.90 52.60 52.70 54.90	80° 85° 65° 70° 90°	**Lithology: Alternating light and dark grey siltstones.** Thickly laminated to very thin bedded siltstone layers. Upper contact represents either a scour surface or a fault juxtaposition of thickly laminated siltstones against very thin bedded siltstones across a planar discontinuity at 55° to core axis. 50.46-50.69- heavily limonite coated fractures with large rock fragments at intersection of two fractures, one at approximately 10° to core axis and the second at 30° oriented at high angle to each other.							
55.11	59.94	58.00	85°	**Lithology: Alternating medium and dark grey argillaceous siltstones.** Gradual transition from approximately 54.91-55.31 m in which proportion of argillite increases down hole. Bedding ranges from thickly laminated to thin bedded, averages approximately 2-3 cm (thin bedded). Bedding appears to coarsen upward from basal argillaceous siltstone to upper siltstone. Argillaceous siltstones have a distinctive appearance in that they have small 0.2 cm diameter quartz spots with associated pressure shadows/strain gradient in argillite. Noted previously on a minor scale, relatively common in this interval. Light grey siltstone horizons also generally slightly calcareous (weak reaction to dilute Hcl) **Sulphides in Veins:** **58.32-58.82** Three veins evident in interval. First at 58.35 at 60° to core axis, 0.5 cm thick dolomite vein. Second at 58.45 at 30° to core axis, cuts 2 cm into core and assimilates a portion of another dolomite vein at 20° to core axis, then becomes parallel to core axis upward to first vein. Milky white quartz. Third vein, 0.3 cm thick at 20° to core axis at 58.67. Partial replacement by fine-grained pyrite evident in some dark grey argillaceous siltstone intervals (to 40 % pyrite) Very coarse pyrite also present (0.4 to 1.5 cm long dimension). Medium-grained needles of arsenopyrite present in the host siltstones, approximately 0.1% arsenopyrite.	0304 - 116	58.32	58.82	0.33	<0.3	30.82	12.90
59.94	70.38	60.00 61.00 62.50 64.00 65.60	80° 80° 90° 85° 80°	**Lithology: Alternating light grey and dark grey siltstones.** Thickly laminated to thin bedded (≤ 4 cm), average 1-2 cm thick. Composition of beds range from thin argillaceous tops to dark grey argillaceous siltstone intervals to minor argillaceous quartzite intervals (fine lithic sandstone) with possible ripples.							

		67.00 69.80	85° 85°	**Alteration:** Ankerite porphyroblasts gradually increase in size, from approximately 0.005 cm at 63.00 m, to 0.3 cm diameter at 70 m, then decreases from 70.0-70.35 at which point ankerite appears to be absent.							
70.38	79.93	70.40 71.80 72.70 74.10 75.00 76.00 78.10 79.90	80° 85° 85° 80° 75° 80° 85° 80°	**<u>Lithology: Alternating light and dark grey calcareous siltstones.</u>** Similar to preceding interval with variable calcite content in matrix. 70.38-71.01 Slightly calcareous, 71.77-72.66. 71.01-71.77, 72.66-74.10 Limey shale. Strong reaction to dilute HCl in matrix. Proportion of light grey siltstone increases down hole at the expense of dark grey argillaceous siltstone to minor argillite, below 75.0 m fine-grained layers comprise approximately 5-10 % while light grey siltstone comprises approximately 90-95%. Thickness of fine-grained intervals decreases to thickly laminated (minor very thin bedded (≤1cm)). Heavily iron stained, limonitic fracture sub-parallel to core axis between 74.10-74.43 **Structure:** Broken rock between 76.06-76.20 **Sulphides in Veins:** **72.92-73.26** Thin (0.3 cm) thick veinlet, cross cutting host seds at approximately 10° to core axis, 85° to bedding. Approximately 40% galena, 25% sphalerite along vein. Interval: 0.4% Pb, 0.1% Zn **Sulphides in Sediments:** Argillaceous, intervals highly pyrite. **Alteration:** Ankerite porphyloblasts present in fine-grained, non-calcareous interval, increasing in size from ≤ 0.1 cm at 75.0 to < 0.3 cm at 79.93.	0304 - 117	72.92	73.26	0.04	14.50	6428.84	**1.08%**
79.93	82.68	81.00 82.00	80° 85°	**<u>Lithology: Alternating dark and light grey argillaceous siltstone.</u>** Predominantly very thin to thin bedded dark grey argillaceous siltstone beds with interbedded light grey thinly laminated to thin bedded siltstones. Argillaceous siltstones have fine quartz spotting with associated strain gradients. **Sulphides in Sediments:** Reduced pyrite content relative to overlying interval(<1 % as predominantly medium-grained, disseminated crystals localized along bedding horizons) **Alteration:** No ankerite noted.							
82.68	93.27	83.00 84.00 85.00 87.00 88.50 90.00 91.00 92.00 93.00	78° 80° 80° 80° 80° 80° 80° 80° 90°	**<u>Lithology: Ruth Limestone</u>** Variably calcareous, limey siltstones. High calcite content in matrix to silty limestones. In appearance, looks like thin bedded, alternating light grey siltstone with dirty white to light grey interbeds. However, core surface smoother and has bluish (steel grey) colour. Bedding varies from thinly laminated to thin bedded. 90.48-94.10 Slightly calcareous 82.68-82.89, 84.10-84.44, 84.57-84.86 Calcareous 82.89-84.10, 84.44-84.57 Limey argillite to argillaceous limestone over remainder of interval. **Veins:** Relatively abundant white veins and veinlets cross-cut core at a variety of angles, range in composition from calcitic through dolomitic to quartzitic, predominantly calcitic.							

				Structure: Bedding variably deformed throughout interval, warped beds, micro-folds to micro-faults. **93.27-93.47** Broken interval, rock fragments between 1 cm - 4 cm with possible gouge on some surfaces. **Sulphides in Sediments:** Pyrite present in less calcareous to argillaceous intervals, as fine to medium-grained crystals.							
93.47	97.05	94.50 95.80 97.00	85° 85° 80°	**Lithology: Alternating medium and dark grey, variably calcareous siltstones.** Thinly laminated, (0.1 cm) to thin bedded (≤ 6 cm) dark grey argillaceous siltstones interbedded with medium grey, thickly laminated to thin bedded,(≤ 3 cm) siltstones. Slightly calcareous 93.84-94.57 Calcareous93.47-93.84, 96.58-97.05 Trace calcite (matrix) 94.57-96.58 **Sulphides in Sediments:** Approximately 2-5% pyrite as medium-grained disseminated crystals, preferentially localized along quartz-rich intervals and argillaceous intervals.							
97.05	121.91	98.00	90°	**Lithology: Thickly laminated to very thin bedded argillaceous siltstones.** Bedding thickness generally varies from 0.1cm to 1.5 cm over interval. Short fining upward intervals, from dirty white to light grey argillaceous quartzite bases to argillaceous siltstone to argillite tops at 115.20-115.26, 118.12-118.18, 118.54-118.58, 118.91-119.09, 120.81-120.86, some with probable ripple cross-beds. **Veins:** Approximately 10% veins and veinlets as creamy yellow dolomite veins, quartz and dolomite (some pyrite) veins and quartz veins. All have sharp boundaries, may or may not be deformed **Sulphides in Sediments:** Pyrite present as medium- to coarse-grained, disseminated crystals to 1cm long dimension. Pyrite and ankerite are moderately exclusionary to one another, as ankerite abundance increases, pyrite content decreases (but size increases). Fe preferentially partitioned into carbonate phase. Where present, pyrite preferentially located along bedding as previously described. **Alteration:** Ankerite porphyloblasts moderately abundant over interval ranging from 0.1cm to 0.3 cm, coarsening from the top of the interval to approximately 100.60 m.							
121.91				**End of Hole**							


Diamond Drill Hole VC - 03 - 05
Pb (ppm)
Zn (ppm)
0
25
50
75
100
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View Toward 313° Az

DYNAMIC EXPLORATION LTD.

DRILL LOG: DIAMOND DRILL CORE

HOLE NO.	VC - 03 - 05

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:		Lot 418	
LOCATION - GRID NAME:			
EASTING:	501433	NORTHING:	5643908
SECTION:		ELEV:	1922 m
AZIM:	043°	LENGTH:	112.16
DIP:	-75°	CASING LEFT?:	No
CORE SIZE:			NQ
CORE STORAGE:		Vermont Creek	

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
9.14		76°	112.16		76°

DRILLING CO:	F.B. Drilling
STARTED:	29-Jun-03
COMPLETED:	30-Jun-03
PURPOSE:	To test stratigraphy, structure and mineralization
CORE RECOVERY:	
LOGGED BY:	Rick Walker
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	A302740, A302740r, A302740R2, A303027, A303027r, 0303027R3

Drill Hole VC - 03 - 05

From	To	Core Angle		Description	Sample	From	To	Gold	Silver	Lead	Zinc
m	m	m	Deg		Number	m	m	gms/T	gms/T	ppm	ppm
0.00	3.05			Casing							
3.05	6.10			**Lithology: Badly broken rock** Bedding sub-parallel to very shallow angle to core axis. Approximately 1.5m recovery of broken rock over 3.05 m interval, includes 77 cm milky white quartz vein with siltstone inclusions to 4 cm long dimension. **Veins:** Oxidized vein within milky white quartz vein and at top of quartz vein. **Sulphides in Sediments:** Pyrite extensively to completely altered the deep red-brown limonite.							
6.10	9.14	6.40	10°	**Lithology: Alternating light and dark grey siltstone.** Approximately 1.42 m of interval missing. Remainder consists of thickly laminated to thinly bedded alternating light and dark grey siltstone. **Sulphides in Sediments:** Fracture surface at 9.14 has extensively to completely altered pyrite (to limonite) along surface. Fine-grained, disseminated pyrite in surrounding sediments altered for 60 cm down hole.							
9.14	31.34	9.20 11.00 12.00 13.00 14.00 15.30 16.00 18.00 19.40 21.00 21.80 22.80 24.00 26.00 27.00 28.00 30.00	20° 25° 25° 25° 35° 10° 10° 10° 30° 10° 30° 30° 20° 35° 40° 30° 30°	**Lithology: Alternating light and dark grey siltstone.** Thinly laminated to thinly bedded (≤ 8 cm), averaging 1-2 cm thick. Light grey (to dirty white) layers range from siltstone to highly subordinate argillaceous quartzite, some with starved ripple cross beds. Coarser argillaceous quartzite intervals may be enriched in silica, resulting in a pseudo-vein-like appearance. Medium to dark grey intervals predominantly argillaceous siltstone to silty argillite. **Veins:** **18.50-19.00** Two bedding parallel quartz veins (or silicified argillaceous quartzites) with minor pyrite (≤0.5%) cross-cut by two creamy white dolomite veins (0.5 cm thick) at 55° to core axis, 60° to bedding **23.76 and 23.95** ≤ 1.5 cm thick milky white quartz with highly subordinate creamy white dolomite (primarily along margins) oriented at 35° to core axis, 65° to bedding. **24.65 - 24.73** 6 cm thick quartz vein having intergrown quartz crystals and vug space (therefore space-filling) oriented at 45° to core axis, 70° to bedding. **25.32-25.36** 4 cm thick quartz + dolomite vein cross-cuts bedding at 55° to core axis, 60° to bedding. **27.61 - 27.65** 3 cm thick quartz vein with creamy yellow-white dolomite along contact with host sediments (≤0.5 cm thick), at 40° to core axis, 80° to bedding. **Structure:** Moderately well developed foliation in medium to dark-grey intervals passes to partially into overlying coarser intervals, resulting in feathery contacts. Fault 14.27-13.49 Comprised of broken rock fragments with fault gouge and chips at approximately 25° to core axis, sub-parallel to bedding **22.00-22.40**(?) Strongly broken rock, broken along foliation into large chips **22.55-22.65** Broken interval with minor fault gouge **22.80-22.85** Strongly broken rock chips and fragments with gouge on surfaces between 30.75-30.85 at approximately 15° to cam 70° to bedding	0305 - 117	15.00	15.13	0.24	0.81	135.38	54.20

				Sulphides in Veins: **15.00-15.13.** Lower portion of quartz vein with approximately 35% pyrite along contact and in host sediments as 90% replacement along 0.1-0.3 cm laminated, coarse-grained pyrite (≤ 0.5 cm) and aggregate masses along and within 2 cm of vein contact. **18.35** 2 cm thick quartz + dolomite vein at 50°to core axis. Contains 40-60% reddish brown goethite-limonite (after pyrite) **Sulphides in Sediments:** Pyrite ranges from <1% generally to highly subordinate intervals of ≤10% coarse-grained, idioblastic pyrite crystals to 1cm in long dimension. Increased pyrite content adjacent to some quartz veins (i.e. 24.65-24.73) where pyrite content in host sediments increases from ≤1% medium-grained, disseminated pyrite to 3-5% in zones up to 6 cm on either side of vein. **Alteration:** Ankerite content ranges from 0% very fine-grained to 40% coarse-grained (≤0.3 cm) throughout interval; 18.10 fine-grained, 19.60 coarse-grained, 21.0 fine-grained.							
31.34	33.03			<u>Lithology: Argillaceous quartzite.</u> Fines upward from coarse sand to fine sand over interval. May represent fining upward sequence truncated by fault in overlying interval at 30.90 m. **Sulphides in Sediments:** Numerous oxidized fractures with ≤1.5 cm oxidized rinds due to oxidation of fine- to medium-grained pyrite in host rock. Interval contains ≤20% pyrite as bimodal population. Approximately 5% medium- to coarse-grained, disseminated, idioblastic pyrite crystals to 0.5 cm present in middle of interval, 10-15% fine- to medium-grained pyrite aggregates in bands at contact with thin (<0.5 cm) quartz veins at top of interval.							
33.18	41.10	33.80 35.00 36.50 37.00 38.00 39.10 40.00 41.00	40° 35° 60° 70° 50° 45° 50° 40°	<u>Lithology: Alternating light and dark grey siltstones.</u> Bedding varies from thinly laminated to thin bedded (16 cm thick), averaging 1-4 cm thick. Siltstone composition varies as described previously. **Structure:** **33.10-33.20** Fragments include host siltstone and quartz vein fragments. Several surfaces heavily coated with deep orange brown limonite. **34.86-35.00** Broken interval comprised of coarse cobble size fragments. **Sulphides in Veins:** **40.84-40.99** Two thin mineralized veins, approximately 0.4 cm thick oriented at 25°to core axis. Contains spaced fine-grained aggregates of sphalerite (25%) along vein. Interval: Approximately 0.5-1% sphalerite. **40.99 - 41.07** Well mineralized quartz vein (≤ 2.5 cm) oriented at 45°to core axis. Vein contains minor, probably early, medium orange-brown sphalerite with later overgrown of black sphalerite. Black sphalerite most abundant sulphide in vein, coarsens from medium-grained between 0.1 and 0.3 cm from vein margin to coarse-grained, intergrown aggregates in core of vein. If bedding is east dipping (or west limb of syncline), then sphalerite generally localized in lower half of vein, with pyrite ± galena occurring in upper half of vein. Vein: Sphalerite 40%, pyrite 25%, galena 15%; Interval: Zn 7%, Pb 3%	0305 - 118 0305 - 119 0305 - 120	39.62 40.84 40.99	39.81 40.99 41.07	0.13 0.03 0.21	<0.3 12.07 452.20	71.72 3062.25 **6.22%**	59.70 8592.20 3.28%

				Sulphides in Sediments: Pyrite less than 2%, present mainly as coarse-grained, idioblastic crystals to 1cm diameter. **33.70-33.80** Trace arsenopyrite needles (0.2%) in sediments, approximately 0.3 cm in long dimension **39.62-39.81** Coarse-grained arsenopyrite needles in host argillaceous siltstones. Possibly associated with ≤0.5 cm thick, milky white quartz veins at 40° to core axis. Interval has fine- to medium-grained pyrite and arsenopyrite along light grey siltstone laminae. In addition, band of fine-grained pyrite parallel to contact cross-cutting vein. Interval 0.6% arsenopyrite **Alteration:** Relatively abundant, fine-grained ankerite porphyroblasts evident at 33.70, increase in size to coarse grained at 36.60 m. Size of ankerite porphyroblasts varies dependent upon host lithology. Coarse-grained in argillaceous siltstones and argillite. Quartz spotting (as described previously) also present in fine-grained intervals.							
41.10	42.34	42.00	50°	**Lithology: Argillaceous quartzite.** Light to medium grey, argillaceous quartzite (at base) to siltstone (at top). Interbedded, thickly laminated to very thin bedded argillaceous siltstone layers, having diffuse contacts with host. Sharp contact with underlying argillite, subsequently modified by development of quartz + dolomite veins at shallow angle to core axis. **Sulphides in Sediments:** Interval contains ≤ 5% pyrite, comprised of 2% coarse-grained, disseminated crystals (to 0.5 cm diameter) and ≤ 3% fine to medium-grained disseminated crystals.							
42.34	52.48	43.00 44.00 45.00 46.00 47.00 48.00 49.00 50.00 51.00 52.00	45° 45° 40° 50° 55° 55° 50° 50° 50° 60°	**Lithology: Alternating light and medium dark grey siltstones.** Varies from previous intervals described in thhere are laminated intervals, ranging from very thin to thickly laminated and short fining upward cycles. Proportion of dark grey argillaceous siltstone (and highly subordinate silty argillite) approximately 60-70% of interval. Fining upward sequences: 43.20-43.25. Series of thickly laminated to very thin beds of alternating light and dark grey siltstones in which the proportion of light grey siltstones decreases upward with a coincident increase in dark grey argillaceous siltstone. Similar interval between 46.32-46.40. Another fining upward sequence comprised of argillaceous quartzite base fining upward (either gradually or through alternating laminae as above) to argillaceous siltstone (or argillite) as at: 43.50-43.90, 44.07-44.43, 45.42-45.55, 48.29-48.47 Coarser argillaceous quartzite intervals 45-89-46.32, 52.02-52.15 Fine-grained argillaceous siltstone to silty argillite has spotted appearance due to quartz. **Sulphides in Veins:** **42.38-42.50** Mineralized quartz vein at 20° to core axis, 4 cm thick. Quartz + dolomite vein has higher proportion of dolomite along margins with quartz predominant in core of vein. Galena (10-15%) generally localized along core of vein as a branch-like band of medium-grained galena aggregates. Minor very coarse -grained, idioblastic pyrite crystals to 1 cm in long dimension. Interval 5-7% Ph. **42.67-42.76** Moderately mineralized vein at 25° to core axis, 1.5 cm thick. 4-6% fine- (to medium-) grained galena in aggregate masses with quartz + dolomite vein. **48.01-48.05** Quartz + dolomite vein at approximately 30° to core axis. Creamy yellow dolomite along margins of 1 cm thick vein, comprising 0.1-0.4 cm margins. Approximately 1-2% coarse-grained aggregates of galena, 0.1% coarse-grained chalcopyrite and 2% pyrite. Interval approximately 1 % Pb, 0.7 % Cu. **Alteration:** Ankerite porphyroblasts again evident in the core. Fine-grained at 44.10 to coarse-grained at 44.40 to fine-grained at 45.00. Fine-grained at 46.40 with sharp increase in size across sedimentary contact at 46.68 to coarse-grained to 47.09.	0305 - 121 0305 - 122 0305 - 123	42.38 42.67 48.01	42.50 42.76 48.05	0.19 0.54 0.73	499.20 237.40 167.40	**18.63%** **0.87%** **5.15%**	373.10 616.30 119.40

52.48	63.51	53.00 54.00 55.00 56.00 57.00 58.00 59.00 60.00 61.00 62.30 63.00	55° 60° 50° 50° 60° 55° 30° 40° 30° 30° 60°	**Lithology: Alternating argillaceous siltstone with interbedded argillite layers.** Interval predominantly medium to dark grey with relatively few light grey siltstone intervals. Bedding also thicker, predominantly thin bedded with very thin bedded argillite interbeds. Possible fining upward sequences 54.98-54.12, 59.12-59.62. Laminated sequences of thickly laminated light grey siltstones with thinly laminated medium to dark grey argillaceous siltstone. Frequency and thickness of argillaceous siltstone increases upward at the expense of light grey siltstone. White spotted argillaceous siltstone intervals present. **Veins:** Minor, thin quartz + dolomite veins at moderate angle to core axis, generally steep angle to bedding. Creamy white dolomite margins with milky white quartz cores, ≤ 1.0 cm, spaced approximately every 50-100 cm. **Sulphides in Sediments:** Pyrite crystals idioblastic, between 0.2 -1.0 cm in long dimension, disseminated or along preferred beds.							
63.51	66.10	64.00 65.00 66.00	55° 70° 60°	**Lithology: Very thin bedded, alternating light grey siltstones and dark grey argillaceous siltstones.** Interval characterized by thinner bedded intervals, ranging from thinly laminated to very thin bedded (≤ 3.0 cm) **Sulphides in Sediments:** Pyrite content reduced (thinner intervals usually argillaceous siltstone), ranges from 0-% fine- to coarse-grained (0.1-0.4 cm in diameter)							
66.10	75.26	67.00 68.00 69.00 70.00 71.00 72.00 73.00 74.00 75.00	75° 55° 55° 55° 50° 60° 55° 60° 50°	**Lithology: Alternating thin bedded siltstones.** As described previously. Broken rock between 68.08-68.30 cobble-sized angular fragments. **Sulphides in Veins:** **75.10-75.16** 2 cm thick vein at 45° to core axis. Coarse to very coarse-grained, intergrown quartz + creamy white dolomite. Vein approx 8% Galena, 0.5% chalcopyrite, 10% fine- to medium-grained pyrite. Mineralization post-dates growth of coarse-grained dolomite crystals. Interval 3-4% Pb, 0.1-0.2% Cu. **Sulphides in Sediments:** 0-20% pyrite porphyroblasts generally localized along preferred bedding intervals (beds with increased quartz content), ranging from scattered disseminated grains (0.2 cm diameter) to coarse-grained crystals to 0.7 cm in long dimension (appear to have been flattened parallel to bedding resulting in diamond-shaped crystal profiles) **Alteration:** Ankerite porphyroblasts range from scarce to abundan t(20-25%) and from fine- to coarse-grained (≤0.3 cm). Fine-grained - 66.60; medium-grained - 67.0; coarse-grained - 67.6; fine-grained - 68.0; medium-grained - 68.40; fine-grained - 68.90; medium-grained - 69.15; coarse-grained - 69.30; fine-grained - 70.1 (sharp reduction in size at 70.10); medium-grained - 71.15; fine-grained - 72.0; medium-grained - 73.70; fine-grained - 74.10.	0305 - 124	75.10	75.16	1.28	711.20	**2.67%**	596.6
75.26	78.62	76.00 77.00 78.00	55° 50° 60°	**Lithology: Alternating siltstones** As described previously, however, bed thickness ranges from very thin bedded (≤3 cm) light grey siltstones to thin laminated to thickly laminated (≤1.0 cm) argillaceous siltstones. **Sulphides in Sediments:** 0.5% pyrite over interval, very scarce (probably due to limited volume of local source rocks (i.e. argillite to argillaceous siltstone)							

78.62	91.73	79.00	50°	**Lithology: Alternating siltstones**	0305 - 125	81.87	81.94	0.25	17.26	1177.46	4044.50
		80.00	50°	Very thin to thin bedded (0.3-4 cm).	0305 - 126	82.12	82.18	0.14	52.30	**1.03%**	69.50
		81.00	55°	Slightly calcareous 89.90-91.40, 91.90-92.00	0305 - 127	82.18	82.33	0.02	1.29	32.39	21.30
		82.00	45°	Calcareous 85.72-85.98, 86.20-86.30, 87.33-88.00, 89.20-89.90, 91.80-91.90	0305 - 128	82.33	82.42	0.11	0.65	31.63	16.80
		83.00	50°	Thin massive sulphide veinlet at 40 ° to core axis, 90 % galena over 0.3 cm thickness.	0305 - 129	85.72	85.85	0.09	123.70	5255.36	**6.35%**
		84.00	50°		0305 - 130	85.85	85.98	0.08	21.20	2529.49	**2.86%**
		85.00	45°	**Veins:**	0305 - 131	85.98	86.08	0.27	828.50	**29.25%**	**1.55%**
		86.00	45°	Minor quartz and dolomite veins at moderately steep angle to bedding with ≤0.4 cm creamy white to pale	0305 - 132	87.33	87.74	0.05	41.20	1694.64	**5.18%**
		87.00	50°	yellow dolomite margins.	0305 - 133	88.77	88.86	0.12	110.80	**2.92%**	**5.00%**
		88.00	45°		0305 - 134	88.86	88.96	0.04	90.60	**2.57%**	**0.87%**
		89.00	30°	**Sulphides in Veins:**	0305 - 135	88.96	89.10	0.28	301.00	**8.29%**	**9.96%**
		90.00	45°		0305 - 136	89.10	89.17	0.14	206.00	**5.57%**	**7.06%**
		91.00	40°	**79.97-80.03** Massive sulphide vein at approximately 45 ° to core axis, 80 ° to bedding. Coarse-grained intergrown crystal of black to dark green and subordinate dirty orange brown sphalerite with subordinate medium-grained galena comprises core of vein. Creamy white to pale yellow dolomite margins to 0.4 cm thick. Interval: 70% Zn, 5-7% Pb.	0305 - 137	89.17	89.48	0.02	24.20	6520.23	**0.64%**
					0305 - 138	89.48	89.55	0.09	5.35	1392.82	2949.30
					0305 - 139	89.55	89.66	0.39	361.80	**6.23%**	**15.72%**
					0305 - 140	89.66	89.77	0.03	7.57	2501.60	8198.30
				81.87-81.94 Pyritic quartz + dolomite vein at approximately 50° to core axis. Approximately 1 cm thick rind of creamy pale yellow, coarse-grained dolomite along contact with host sediments. Pyrite content approximately 15-20% in vein as fine-grained aggregate masses.	0305 - 141	91.65	91.73	0.06	37.80	**0.96%**	333.70
					0305 - 160	79.97	80.03	0.28	779.40	**6.73%**	**16.74%**
				82.12 - 82.18 Quartz + dolomite vein with medium- to coarse-grained galena at approximately 30° to core axis. White dolomite crystals along contact with host sediments, up to 0.3 cm thick. Vein: 3-4% galena, 1% pyrite. Interval: 1-2% Pb.							
				85.72 - 85.85 Semi-massive sulphides within and between two veins. Upper quartz vein from 85.72 - 85.83 at 30° to core axis, ≤1.5 cm thick. Approximately 1% pyrite (possible assimilated from adjacent siltstone) and 5-7% galena as coarse-grained, intergrown, aggregate masses. Also black mineral having sub-metallic lustre and no evident cleavage (possibly tetrahedrite - tennantite). Quartz vein comprised of coarse-grained, intergrown crystals indicative of void fill. Underlying vein at 40° to core axis, 0.3 cm thick dolomite + quartz. 15-20% coarse-grained, semi-massive, branch-like black and orange-brown sphalerite and fine-grained pyrite developed between two veins. Interval: 4-5% Zn, 1-2% Pb.							
				85.98 - 86.08 6 cm thick quartz + dolomite vein at 40° to core axis, 80° to bedding. Vein has ≤1.0 cm thick rind of creamy white dolomite along contact with host sediments. Vein contains 40% galena, 10% chalcopyrite and approximately 1% sphalerite. Galena in coarse-grained aggregate masses, chalcopyrite diffuse masses of individual to a few, medium-grained aggregate masses.							
				87.33 - 87.74 Two ≤1.0 cm thick massive sulphide bands, one at top and one at base of interval. Upper vein at 25° to core axis, 80° to bedding; lower vein at 50° to core axis. Upper vein has thin quartz ± dolomite margin (≤0.2 cm thick) with yellow-orange brown to black sphalerite (medium- to coarse-grained) and medium-grained (≤0.3 cm) galena, 80-85% sphalerite, 5-10% galena. Lower vein has en echelon relationship with lowermost vein; thining, branching and terminating upward, while upper vein thickens upward. Both comprised of 70-80% black sphalerite, 5-20% dirty yellow sphalerite, 0-5% galena and 0-10% fine-grained pyrite. Veins have creamy yellow to dirty white dolomite (along contact with host sediments), ≤0.2 cm thick. Approximately 1 cm thick, unmineralized quartz vein at 70° to core axis, 60° to bedding at 87.50. Two quartz veins at 87.57 - 87.65 apparently merge in this interval. Upper vein of pair at 50° to core axis and 3 cm thick, only apparent mineralization is malachite. Lower vein of pair has irregular contacts at high angle to core axis. Approximately 5% galena and 1-2% sphalerite along upper contact. Interval: 1-3% Zn, 1-2% Pb							

89.55 - 89.66 Three massive sulphide veins. Upper vein contains 90-95% medium dirty yellow sphalerite with very thin metallic margin (≤0.05 cm) of pyrite (?) at 50° to core axis. Vein thins from 0.5 cm to 0 over width of core. Middle and basal vein separated by 1 cm on one edge of core and coalesce into single vein by middle of core. Middle vein at 40° to core axis and 1.5 cm thick, comprised of intergrown, very coarse-grained black sphalerite with rind of dirty yellow to orange-brown sphalerite. Vein approximately 90% sphalerite. Lowermost vein approximately 1.0 cm thick with 0.2 cm pyritic margins and galena-rich core (80% galena). Chalcopyrite (5-10%) scattered along vein as individual fine- to medium-grained grains. Where veins coalesce, sphalerite content decreases to 0% and fine-grained pyrite and medium-grained galena intermingled in zones ≤1 cm thick along vein margin.
Interval: 6-8% Zn, 2-3% Pb, ≤0.5% Cu

91.65 - 91.73 Coarse-grained, milky white, intergrown quartz vein with 0.5% galena. Lower contact at 55° to core axis.

Sulphides in Sediments:
Mineralization localized into slightly calcareous to calcareous, alternating siltstones, with local, limey siltstones to silty limestones.

82.18 - 82.33 Pyrite-bearing, alternating light and dark siltstones between vein at 82.12 - 82.18 and arsenopyrite-bearing interval below. Trace arsenopyrite ≤1%.

82.33 - 82.42 Arsenopyrite-bearing, alternating light and dark siltstones. Fine-grained arsenopyrite needles disseminated over interval, above (and perhaps associated with) 0.5 cm thick dolomite (+ quartz) vein at approximately 40° to core axis at 82.42 m. Approximately ≤1% arsenopyrite

85.85 - 85.98 Pyrite-bearing, alternating light and dark siltstone with 5% medium-grained pyrite
88.77 - 88.86 Two thin sphalerite bands at 45° to core axis. Bands irregular in thickness and appear to replace two light grey siltstone intervals. Bands comprised of 90-100% sphalerite (black and slightly subordinate yellow-green sphalerite) and 0-5% galena. Fine-grained pyrite also appears to have replaced select intervals.

88.86 - 88.96 Pyrite-bearing, alternating siltstone.
88.96 - 89.10 Pyritic, argillaceous sltstone. Bedded interval at 30° to core axis, 8 cm thick comprised of 80% replacement mineralization. Approximately 70-80% is fine- to medium-grained pyrite, which decreases upward to 50-60% in the middle of the interval and 20-30% at the top. Fine-grained, brown coloured mineralization is probably 20-30% sphalerite in the core of the mineralized bed, decreasing to 10% above and below the 3-4 cm core zone. Interval: 30% Zn, 5% Pb

89.10 - 89.17 Alternating light and dark grey siltstones with approximately 25-30% replacement mineralization and thin cross-cutting massive sulphide veinlet at 40° to core axis. Thin zone of replacement mineralization at base of light grey siltstone bed, approximately 0.3 cm thick and discontinuous. Another in the next light grey siltstone above, more diffuse but 2 cm thick. Cross-cutting veinlet ≤0.3 cm thick and comprised of 50-60% galena, 40-50% sphalerite.
Interval: 3-5% Zn, 1-2% Pb

89.17 - 89.48 Alternating light and dark grey siltstones with disseminated pyrite (medium- to coarse-grained, ≤1%) and single replacement interval approximately 0.3 cm thick comprised of 80% pyrite, 20% sphalerite. Interval: 0.5% Zn

89.48 - 89.55 Pyritic replacement of calcareous argillaceous siltstone. Fine-grained pyrite along base of siltstone layer as 90% semi-massive aggregate 0.4 - 1 cm thick. Pyrite grains coarsen upward while abundance decreases (to ≤40%).
89.66 - 89.77 Pyritic replacement in semi-massive band up to 0.5 cm thick along base of siltstone.

91.73	107.66	92.00	40°	<u>**Lithology: Alternating argillaceous siltstones.**</u>	0305 - 142	91.73	91.87	0.04	15.00	**0.17%**	**1.48%**
		93.00	45°	Predominantly thin bedded, medium dark grey argillaceous siltstones between 0.4 - 6 cm thick with interbedded light grey	0305 - 143	91.87	92.20	0.97	19.30	1515.40	**0.80%**
		94.00	45°	siltstones (0.2-3 cm thick) and highly subordinate silty argillites (≤4 cm thick). Proportion of both siltstones and silty argillites	0305 - 144	92.20	92.28	0.20	469.10	**4.44%**	**12.44%**
		95.00	40°	decreases down section; resulting in a dark grey colour at the middle and base of the section. Light grey siltstones scarce	0305 - 145	92.28	92.46	0.08	29.20	**0.51%**	**0.40%**
		96.00	30°	below approximately 94.00 m and silty argillite bed thickness generally thinly laminated.	0305 - 146	92.46	92.66	0.03	5.24	1165.35	1614.00
		97.00	40°		0305 - 147	92.66	93.11	0.18	13.60	**0.29%**	**0.33%**

98.00	45°	0305 - 148	93.11	93.28	0.07	0.88	272.44	2050.40
99.00	55°	0305 - 149	93.28	93.36	3.70	67.80	**5.04%**	**6.31%**
100.00	45°	0305 - 150	94.54	94.98	0.10	75.40	**1.31%**	**3.22%**
101.00	50°	0305 - 151	94.98	95.26	0.07	17.20	5501.38	5612.10
102.00	50°	0305 - 152	95.26	95.74	1.45	2074.80	**25.52%**	**9.71%**
103.00	50°	0305 - 153	95.74	95.97	0.58	420.90	**5.28%**	**1.35%**
104.00	75°	0305 - 154	95.97	96.32	0.57	15.70	**0.31%**	347.50
105.00	45°	0305 - 155	96.32	96.80	1.21	436.70	**5.36%**	**1.75%**
106.00	40°	0305 - 156	96.80	97.17	0.40	289.50	**1.98%**	**0.48%**
107.00	55°	0305 - 157	97.17	97.51	0.30	79.20	**0.87%**	**2.93%**

Sulphides in Veins:

91.73 - 91.87 Alternating light and dark grey calcareous siltstones with thin cross-cutting quartz vein at 50° to core axis. Approximately 1% medium- (to coarse-) grained pyrite disseminated over interval. Vein approximately 0.5 cm thick, comprised of dirty white to light grey quartz with 3-5% sphalerite and 1-2% galena. Interval: ≤0.5% Zn, ≤0.2% Pb.

92.28 - 92.46 Approximately 1 cm thick galena and sphalerite vein at approximately 60° to core axis, 70° to bedding. Abundance of galena and sphalerite varies along vein, from 0-60% galena and 0-20% sphalerite as medium-grained aggregate masses. Basal 8 cm comprised of approximately 20-25% fine-grained, disseminated to aggregate masses of pyrite. Interval: 1-2% Pb, 0.5% Zn

92.66 - 93.11 Two thin massive sphalerite veinlets, one with and the other without a 0.1 cm thick quartz rind, both ≤0.3 cm thick and 60-65° to core axis. One barren quartz + dolomite vein, 1 cm thick at 55° to core axis and a second quartz only vein, 1 cm thick and 80-90° to core axis. 1 cm thick quartz + dolomite vein at 45° to core axis. Last vein has 0.1-0.3 cm thick white dolomitic margins with 20-30% galena in core of vein. Interval: ≤0.5 % Zn, ≤1.0 % Pb

93.28 - 93.36 ≤1.5 cm thick massive sulphide vein at 40° to core axis, 90° to bedding. 2.5 cm dextral offset of bedding along vein. When using foliation to orient core, vein becomes very shallow dipping with beds dipping steeply to west (i.e. east limb of syncline). Vein comprised of 45-50% fine-grained, dirty yellow sphalerite and 45-50% very fine-grained galena in vein with 1-10% quartz along margins (≤0.5 cm thick). Interval: 4-5% Zn, 4-5% Pb.

94.54 - 94.98 4 veins cross-cutting alternating siltstones at 25° to 55° to core axis, 70°-80° to bedding. One vein is a thin (≤0.3 cm thick) vein and the other three are massive sulphide veins, comprised predominantly of black sphalerite with subordinate galena and pyrite. Veins: 70-90% black sphalerite, 0-30% galena, 0-20% pyrite, 0-30% quartz. Interval: 1-3% Zn, ≤1% Pb.

95.26 - 95.74 Relatively thick vein with semi-massive sphalerite and galena in quartz vein. Approximately 28 cm thick quartz vein, upper contact at 55° to core axis with 20-30% galena having weak web-like texture comprised of fine-grained galena in quartz for ≤7 cm from contact with host sediments. Only 5 cm along upper contact, then ≤8 cm of quartz with 10-15% galena. Core 6 cm of vein comprised of coarse-grained, dirty yellow sphalerite. Lower 3 cm of sphalerite zone contains intermingled galena. Minor pyrite (1-2%) in interval. Minor coarse-grained sphalerite at lower contact. Interval: 13-15% Pb, 15-20% Zn.

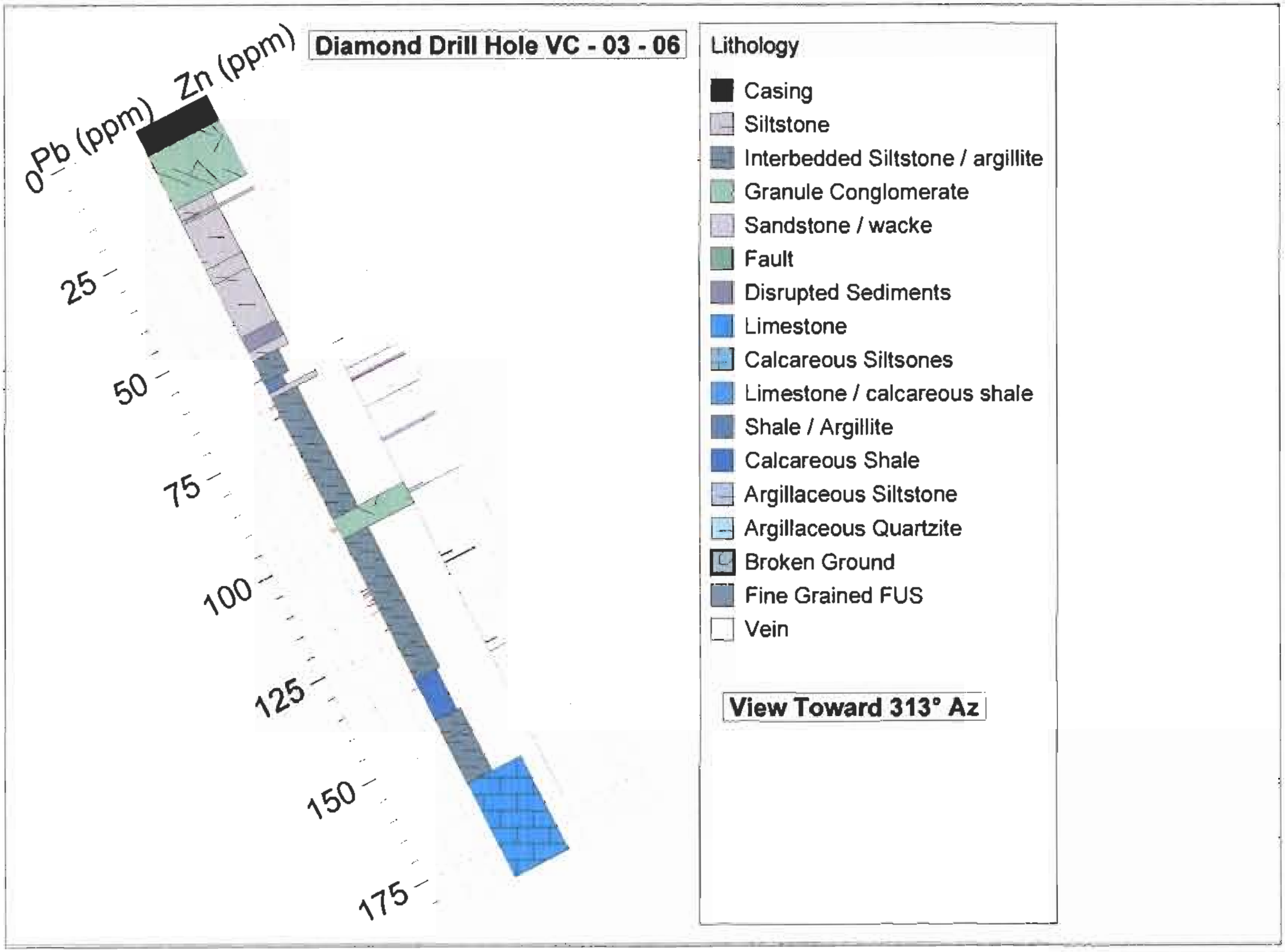
95.97 - 96.32 Approximately 9 cm thick coarse-grained, milky white quartz vein with discontinuous 0.3 cm band of arsenopyrite along base of vein (at 60° to core axis) and up to 1.5 cm thick massive arsenopyrite band at top of vein. 6 cm thick milky white quartz vein at 60° to core axis at base of interval. 1-3% arsenopyrite along upper contact, hosted by sediments. Interval: 1-2% As

96.32 - 96.80 Pyritic quartz vein, upper contact at 40°, lower contact at 60°. Patchy black sphalerite along upper contact. Massive sulphide band ≤1.5 cm thick along base. Subordinate galena intermingled with pyrite over basal 6 cm. Pyrite predominantly fine-grained in anastomosing bands and large aggregate patches. Interval: 4-6% Pb.

96.80 - 97.17 Two weakly mineralized quartz veins, 6 cm thick (upper) at 40° to core axis and 5 cm thick (lower) at 80° to core axis. Upper vein has approximately 3-5% galena and lower vein has ≤1% galena. Interval: Approximately 1-2% Pb.

97.17 - 97.51 Three sulphide-bearing veins between 40°-55° to core axis, 1.0 - 2.0 cm thick. Uppermost vein comprised of 30-35% orange-brown sphalerite, 35-40% arsenopyrite and 25-35% quartz. Sphalerite as coarse-grained aggregate patches and arsenopyrite as 0.3 - 1.0 thick band. Middle vein comprised of 30-40% coarse-grained black sphalerite along the core of the vein and 10% fine-grained, light orange-brown, with subordinate black, sphalerite as 0.2 - 0.4 cm thick band along lower contact of vein. Lowermost vein has pyrite- and galena-rich core approximately 0.4 cm thick.
Interval: 4-6% Zn, 1-2% As, 1% Pb.

				Sulphides In Sediments: Pyrite generally fine- to (just) medium-grained, comprising 21% of interval, veins scarce below mineralized interval. **91.87 - 92.20** Variable pyrite replacement in alternating calcareous to slightly calcareous siltstones. Four light grey to milky white quartz veins in centre of interval, which contain little or no pyrite. Immediately adjacent host sediments contain local semi-massive to massive, fine-grained pyrite aggregate masses to 1 cm thick. Pyrite abundance decreases away from vein. Also pyrite replacement along bedding, in diffuse bands at base of siltstone intervals. Lowermost 8 cm of interval has approximately 40% disseminated, fine- to medium-grained pyrite. **92.20 - 92.28** Alternating light and dark grey siltstones. **92.46 - 92.66** Alternating light and dark grey siltstones with approximately 1-2% medium-grained disseminated pyrite. **93.11 - 93.28** Alternating siltstones with 2-3% coarse-grained, disseminated pyrite (to 0.5 cm diameter) and small aggregate masses. **94.98 - 95.26** Alternating siltstones with 1-5% medium- to coarse-grained pyrite (to 0.5 cm long dimension) disseminated and as local aggregate masses along bedding. **95.74 - 95.97** Alternating light and dark grey siltstones with 1-7% medium- to coarse-grained pyrite. 4 cm of thin sphalerite vein from preceding interval present at top of interval. **Alteration:** Ankerite porphyroblasts variably developed, generally fine- to (locally) medium-grained.							
107.66	112.16	108.00 109.00 110.00 111.00 112.00	25° 40° 35° 40° 45°	**Lithology: Limey siltstones to silty limestone.** Strong reaction to dilute HCl over most of interval. Bedding thickness ranges from thinly laminated sequences of alternating, light grey, limey siltstones and dark grey, calcareous, argillaceous siltstones. Light grey to dirty white intervals of limestone present. **Sulphides In Veins:** **109.82 - 110.29** Two ≤2.0 cm quartz + dolomite veins at 30° (upper) and 40° (lower) to core axis. Upper vein contains very coarse-grained (≤1 cm), medium orange sphalerite with black sphalerite cores, coarse-grained (≤0.4 cm) pyrite crystals and 2-3 crystal aggregates and coarse-grained galena crystals and aggregates. Vein: sphalerite - 20-25%, galena - 5%. Lower vein has creamy white to pale yellow dolomitic margins (against host sediments) and milky white quartz core. Approximately 20-25% coarse-grained galena aggregates. Interval: 1% Zn, 1% Pb. **110.29 - 110.66** Wedge shaped zone of pyrite + sphalerite replacement mineralization in upper 8 cm of interval, associated with six thin, milky white to blue grey quartz veins. Concentrations of pyrite along margins of quartz veins within sediments where they cross preferred sedimentary interval. Approximately 50-60% pyrite, 20-30% sphalerite in both veins and host sediments. Thin (≤0.5 cm) mineralized vein at base of interval with 50-60% galena, 30-40% sphalerite and 0-15% quartz. Interval: 1-3% Zn, 1% Pb	0305 - 158 0305 - 159	109.82 110.29	110.29 110.66	0.08 0.23	23.19 68.10	6558.87 **1.92%**	**1.17%** **3.26%**
112.16				**End of Hole**							


Diamond Drill Hole VC - 03 - 06
Pb (ppm)
Zn (ppm)
0
25
50
75
100
125
150
175
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View Toward 313° Az

DYNAMIC EXPLORATION LTD.

DRILL LOG: DIAMOND DRILL CORE

HOLE NO.	VC - 03 - 06

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:	Lot 418		
LOCATION - GRID NAME:			
EASTING:	501433	NORTHING:	5643908
SECTION:		ELEV:	1922 m
AZIM:	043°	LENGTH:	182.87
DIP:	-63°	CASING LEFT?:	No
CORE SIZE:		NQ	
CORE STORAGE:	Vermont Creek		

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
6.1		57.25°	121.91		61°
DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
182.87		54°			

DRILLING CO:	F.B. Drilling
STARTED:	30-Jun-03
COMPLETED:	2-Jul-03
PURPOSE:	To test stratigraphy, structure and mineralization
CORE RECOVERY:	
LOGGED BY:	Rick Walker
	Paul Ransom
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	A303027, A303027r, 0303027R3

Drill Hole VC - 03 - 06

From	To	Core Angle		Description	Sample	From	To	Gold	Silver	Lead	Zinc
m	m	m	Deg		Number	m	m	gms/T	gms/T	ppm	ppm
0.00	6.10			**Casing**							
6.10	19.30	11.0	25°	**Lithology: Coarse sand to granule conglomerate**	0306 - 161	12.86	12.92	0.10	1.51	185.52	185.10
		12.0	10°	Predominantly fine- to medium-grained argillaceous quartzite with one interval of finer grained lithologies.	0306 - 162	12.92	12.97	0.09	0.93	61.03	123.70
		16.7	20°	11.70 - 12.49 Very thin bedded argillaceous siltstone and silty argillite at approximately 10° to core axis. Fractures from base of casing to base of interval variably oxidized, ranging from iron-stained rinds with oxidized pyrite (to limonite) up to 3 cm thick to heavily limonite coated fracture surfaces. Truncated fining upward sequence, from coarse granule conglomerate at 19.3 m upward through coarse argillaceous quartzite to silty argillite at 15.95. **Veins:** Various veins are present throughout interval representing various stages of vein development, including thin (≤ 1.0 cm thick) light grey quartz veins at 35° to core axis, having diffuse boundaries with host argillaceous quartzite; dolomite + quartz veins comprised of creamy white to pale yellow dolomite with subordinate quartz along the core of the veins at approximately 60° to core axis; thicker 2-15 cm coarse-grained, intergrown quartz veins, milky white to slightly to moderately iron-stained at 40-75° to core axis, with coarse-grained pyrite (and/or secondary limonite after pyrite) to 10%. **Structure:** Faults: 6.87 - 7.00 (35° and 45°), 7.53 - 7.62 (30° and 65°), 8.64 - 8.74, 10.76 - 10.84, 11.70 - 11.83, 12.40 - 12.49, 12.60 - 12.64, 13.56 - 13.73, 15.40 - 15.74. Broken ground: 7.90 - 8.03 Argillaceous siltstone to silty argillite at shallow angle to core axis, slivered due to drilling and/or overlying fault; 12.49 - 12.60; 13.45 - 13.56; 15.74 - 15.95; 16.81 - 16.88; 18.02 - 18.20 **Sulphides in Veins:** **12.92 - 12.97** 3.0 cm quartz vein at 65° to core axis. Appears to cross-cut earlier milky white quartz vein. Coarse-grained pyrite (to 0.5 cm diameter) in milky white quartz vein and adjacent quartz vein. **Sulphides in Sediments:** Heavily iron-stained, deep orange limonite after medium- to coarse-grained pyrite; 10.84 - 10.95, 11.05 - 11.10, 11.83 - 12.49 heavy dark blue to black coating; 18.65 - 18.72; 18.85 - 18.94 Pyritic intervals: 10.80 - 10.90, 12.92 - 13.50, 16.81 - 16.88. **12.86 - 12.92** Pyrite-bearing argillaceous quartzite. Coarse-grained (≤0.5 cm) pyrite disseminated throughout argillaceous quartzite, above vein. Pyrite approximately 8-10% **12.97 - 13.28** Pyritic siltstone (argillaceous quartzite). Approximately 30 - 60% very fine- to medium-grained pyrite disseminated over interval. Quartz vein at top of interval (13.01 - 13.03). Upper vein has heavy limonite / goethite coating.	0306 - 163	12.97	13.28	0.20	0.94	53.16	72.80
19.30	22.12	20.2	60°	**Lithology: Alternating siltstones**							
		21.0	65°	Thin laminated to very thin bedded.							
		22.0	15°	**Structure:** Beds have moderately well developed foliation. Fault 20.65 - 20.79. Broken ground: 19.30 - 19.70, 21.10 - 21.40							

22.12	22.50			**Lithology: Fault** Fault in alternating siltstones							
22.50	23.00	23.0	20°	**Lithology: Quartz Vein** Coarse-grained, intergrown quartz vein with very coarse-grained pyrite (≤ 2.0 cm in long dimension)							
23.00	34.08	24.0 25.0 26.0 27.0 28.0 29.0 30.0 31.0 32.0 33.0 34.0	15° 25° 10° 30° 50° 25° 25° 05° 25° 20° 15°	**Lithology: Alternating siltstones.** Argillaceous siltstone slightly subordinate from top of interval to approximately 27.60, comprised of very thin bedded siltstones and interbedded, thinly laminated to very thin bedded argillaceous siltstones. Below 27.60, argillaceous siltstone thicker and more abundant than siltstone. **Veins:** Minor quartz veins over interval, including Sample 167, vein described above, dolomite + quartz and quartz + dolomite veins; all at moderately high angles to bedding. **Sulphides in Veins:** **27.80 - 27.83** Approximately 1.5 cm thick milky white quartz vein with 20-25% fine-grained arsenopyrite localized at contact or on interior side of 0 - 0.3 cm thick, iron-stained dolomite layer. Vein at 65° to core axis. Interval: 2 - 4% As. **29.81 - 29.83** ≤1.5 cm thick, weakly iron-stained dolomite + quartz vein at 70° to core axis. Core comprised of light grey quartz while margins comprised of 0.4 - 1.0 cm thick creamy yellow dolomite. Arsenopyrite (8-10%) present as small (0.3 cm) to large (1.0 cm) aggregate masses of medium- to coarse-grained needles. In several areas arsenopyrite in vein, at contact, adjacent to zones of relatively extensive replacement in host siltstones. Interval: 2-4% As. **Sulphides in Sediments:** Pyrite <<1% throughout interval with the exception of local areas such as on either side of pyrite-bearing veins (22.26 - 22.32 at 50° to core axis) and some preferred bedding intervals, up to 0.7 cm in diameter, and local concentrations up to 80% of fine- to medium-grained pyrite along bedding. **27.73 - 27.80** Trace arsenopyrite in laminated to very thin bedded siltstone above vein (27.80 - 27.83). Approximately 0.2% arsenopyrite as medium-grained needles within 1.5 cm of vein. Also pyrite replacement along two thickly laminated siltstone layers. Approximately 80-85% fine-grained pyrite along ≤ 0.2 cm layers. **29.65 - 29.81** Trace arsenopyrite in siltstones above vein 29.81 - 29.83). Arsenopyrite as single needles and as multiple needles radiating from common centres, located within 3 cm of lower contact. 25% pyrite replacement of medium grey argillaceous siltstone 0.7 cm thick. Band of 60-70% pyrite over 0.3 cm along base of layer. Partial replacements, as discontinuous bands, along 3 other light grey siltstone beds. Coarse-grained, idioblastic pyrite crystals and small aggregate masses. **29.83 - 29.90** Similar to 0306 - 166. Arsenopyrite approximately 0.3%. **Alteration:** Ankerite porphyroblasts variably developed over interval, generally fine-grained in siltstone intervals and fine- to medium grained in argillaceous siltstones.	0306 - 164 0306 - 165 0306 - 166 0306 - 167 0306 - 168	27.73 27.80 29.65 29.81 29.83	27.80 27.83 29.81 29.83 29.90	0.03 1.61 0.09 1.82 0.13	1.16 1.00 0.90 488.00 1.50	17.78 30.54 18.00 17.82 18.00	43.50 32.60 12.80 26.90 13.60

34.08	37.73	35.0 36.0 37.0	30° 20° 25°	**Lithology: Thickly laminated siltstones.** Slightly subordinate, thinly to thickly laminated argillaceous siltstones interbedded with thickly laminated to very thin bedded siltstones. **Sulphides in Veins:** **36.06 - 36.09** Milky white quartz vein at 65° to core axis. Approximately 0.5 - 1.0% arsenopyrite along contact with host sediments. **Sulphides in Sediments:** Pyrite < 1% over interval, as coarse-grained to very coarse-grained (≤ 1.5 cm diameter) crystals and crystal aggregates, disseminated in bedding throughout interval and as localized concentrations along bedding (and/or localized replacements of bedding). **Alteration:** Ankerite porphyroblasts variably developed.	0306 - 169	36.06	36.09	0.51	1.00	9.31	12.00
37.73	50.69	38.0 39.0 40.0 41.0 42.0 43.0 44.0 45.0 46.0 47.0 48.0 49.0 50.0	07° 15° 05° 05° 15° 10° 07° 07° 15° 07° 15° 12° 08°	**Lithology: Alternating siltstones.** Thickly laminated to thin bedded, average: very thin bedded. Light grey siltstones include very fine sandstones with probable starved ripples. **Veins:** Approximately 3% thin dolomite (± quartz) veins (≤1 cm thick) at moderately high angle to core axis (50°-65°). **Structure:** Broad, open fold in core between 50.00 and 50.60. **Sulphides in Veins:** 0.5 cm thick mineralized vein at 50.57 m at 65° to core axis. Medium-grained (≤0.3 cm) sphalerite grains (black cores with deep orange margins) comprise approximately 5% of vein. Vein comprised of quartz + dolomite. **37.73 - 38.07** Two ≤1.5 cm thick creamy to chalky white dolomite + quartz veins at approximately 65° to core axis. Light grey quartz along core of veins with bulk of veins comprised of dolomite along the margins (0.4 - 1.0 cm thick). Dolomite weakly iron-stained. Minor arsenopyrite in the host siltstones (approximately 0.2 - 0.3%) as medium-grained needles. **Sulphides in Sediments:** Pyrite varies from very coarse-grained (≤1 cm in long dimension), disseminated crystals in bedding to multiple crystals along preferred bedding horizons. Pyrite also present as partial replacements along preferred bedding horizons adjacent to veins. **Alteration:** Ankerite only locally developed within preferred, fine-grained argillaceous siltstone.	0306 - 170	37.73	38.07	0.11	1.50	8.59	14.10

50.69	54.21	51.0 52.0 53.0	0° 40° 15°	**Lithology: Alternating siltstone** **Veins:** Light grey quartz and creamy yellow dolomite veins, ≤1 cm thick, at shallow angle to bedding (approximately 15°-20°) and deformed into folds with significant thickening in hinge areas (3-4 times). Approximately 25% vein material added to interval, from quartz + dolomite to quartz veins. **Structure:** High strain zone. Moderately to highly disrupted, with bedding sheared and dislocated along multiple planes at 35° to core axis. Broad, open fold closure between 50.0 and 51.0 m and 51.0 to 52.0 m. Tight fold closure between 53.0 and 53.2 m **Sulphides in Sediments:** 1-2% pyrite present as disseminated crystals (≤1 cm diameter) with local enrichment / replacement along discontinuous bedded horizons.							
54.21	56.44	55.1 56.0	30° 40°	**Lithology: Quartz wacke to wacke, silt and sub-wacke / argillite.** Thin bedded. Quite phyllitic to 55.0. Contacts are sharp and wavy, some have small load structures. Most beds internally laminated. From 55.30 - 55.55, silty bed folded from 90° to 0° to 90°. Interbeds of carbonaceous wacke laminite from a few mm to 1 cm are common. **Veins:** Quartz with minor dolomite and rare pyrite seems to develop veins in fold cores and along cleavage as thin layers in tight folds. **Structure:** Strain zone continues, less intense. **Sulphides in Sediments:** Coarse pyrite to 1 cm is rare and in noted in 3 main lithotypes. **56.27 - 56.32** Arsenopyrite 0.2% **Alteration:** Fine ankerite porphyroblasts aligned within phyllitic cleavage.	0306 - 171	56.27	56.32	0.40	0.21	9.08	18.60
56.44	61.85	57.0 58.0 59.0 59.6 60.0 61.0 61.9	40° 43° 40° 35° 30° 30° 20°	**Lithology: Quartz wacke, wacke silts and sub-wacke, argillite** As graded tops and sedimentation units. Main style of sedimentation continues. Medium to thin bedded. All Bouma divisions and carbonaceous wacke laminites present. The carbonaceous wacke laminite interbeds are only a few mm thick. Bed thickness and quartz content of beds decrease down section. **Veins:** In rocks adjacent to mineralized quartz vein (60.76 - 60.92) are several 1-5 mm quartz infill veinlets within cleavage. **Structure:** Less strain than preceding interval.	0306 - 172 0306 - 173 0306 - 174 0306 - 175 0306 - 176	56.32 56.36 59.07 60.57 60.76	56.36 56.44 59.14 60.76 60.92	7.90 0.47 0.30 0.08 8.86	0.57 0.32 0.52 2.60 529.70	11.59 12.05 23.22 21.23 **10.79%**	37.90 11.90 81.60 36.10 **1.85%**

				Sulphides in Veins: **56.32 - 56.36** Vein at 60° to core axis, arsenopyrite 20-25% **56.36 - 56.44** Arsenopyrite 0.4%. 2 cm thick dolomite + quartz vein, creamy white dolomitic margins ≤1 cm thick. Arsenopyrite as aggregates of medium- to very coarse-grained (to 1 cm length and 0.1 cm width) at high angle to vein margin. **59.07 - 59.14** Arsenopyrite to 0.3% in host siltstones above 0.5 cm thick dolomite + quartz vein at 55° to core axis. No mineralization evident in vein. **60.76 - 60.92** Semi-massive to massive sulphides in quartz vein, 8 cm thick at 35° to core axis. When oriented using foliation, quartz dominant over upper 3 cm of vein with discontinuous band of arsenopyrite approximately 0.2 cm thick and coarse-grained needles in immediately adjacent sediments. Approximately 10-15% arsenopyrite in upper 3 cm of vein, with 5-7% galena. Central 2 cm of vein comprised of semi-massive to massive, fine-grained arsenopyrite with distinct preferred orientation (parallel to margin of vein). Approximately 70-80% arsenopyrite. Underlying 2 cm comprised of coarse-grained aggregates of both sphalerite (15-20%) and galena (25-30%). Basal 1 cm comprises a massive band of fine-grained arsenopyrite. Thin margin (0.3 cm) of dirty white to light grey quartz. Interval: Approximately 30-35% As, 3-4% Zn and 4-6% Pb. **Sulphides in Sediments:** **60.57 - 60.76** Argillaceous siltstones, minor replacement of select thick laminae. One lamination comprised of 85% fine-grained pyrite with very thin white dolomitic margins. Another lamination partially replaced, comprising 4 cm of similar replacement. Pyrite also disseminated over interval, from fine-grained to very coarse-grained (≤ 1.5 cm in long dimension).							
61.85	64.35	62.0 62.3 63.0 64.0	30° 24° 22° 25°	**Lithology: Mixed Argillaceous Siltstone.** This may be upper part of single large sedimentation unit that includes the next interval as its base. Internal beds within this part may simply be reworked parts of a slowly accumulating sediment. Argillite, several 1-3 mm black layers, possibly carbonaceous wacke laminite and, below 63.25, three 1 cm units of quartz wacke silt, primarily parallel laminated but some wavy laminated. **Structure:** Small fault with fold at 63.25 and several 1-2 mm quartz fillings of cleavage of 20° from 63.25 - 63.50. **Sulphides in Veins:** **64.23 - 64.26** ≤2.5 cm thick arsenopyrite-bearing quartz vein. Quartz vein with 0.1 - 0.5 cm thick milky white dolomitic margin with 10-15% coarse-grained arsenopyrite needles (to 0.4 cm length) and aggregate masses. Interval: Approximately 10% arsenopyrite. **Sulphides in Sediments:** **64.15 - 64.23** Arsenopyrite-bearing sediments. Approximately ≤0.1% As. **64.26 - 64.35** Arsenopyrite-bearing sediments. Approximately ≤0.1% As.	0306 - 177 0306 - 178 0306 - 179	64.15 64.23 64.26	64.23 64.26 64.35	0.07 1.68 0.21	0.95 6.50 1.00	105.86 3616.36 113.50	95.00 1397.40 223.80
64.35	65.60	65.0	30°	**Lithology: Quartz wacke, wacke** Medium grey, basal 30 cm massive (Bouma A), then 80 cm (these are core lengths), numerous dark flat parallel laminations (Bouma B) then wavy laminated for most of remainder (Bouma C). Suspect the variations of the preceding interval are related to the slower accumulation of argillite that accompanied this turbidite. Limey interval 15-30 cm above base. Basal contact distinct but broken.							

65.60	95.05	67.15	25°
		68.0	35°
		69.0	25°
		70.0	27°
		71.0	25°
		72.0	30°
		73.0	25°
		74.0	20°
		75.0	30°
		76.0	20°
		77.0	18°
		78.0	23°
		79.0	27°
		80.0	35°
		81.0	10°
		82.0	18°
		83.0	20°
		84.0	15°
		85.0	23°
		86.0	20°
		87.0	23°
		88.0	15°
		89.0	20°
		90.0	25°
		92.0	25°
		93.0	28°
		94.0	25°
		95.0	20°

Lithology: Quartz Wacke to wacke

Turbidite sequence. Bases of many beds are quartz wacke or wacke and these progress up through full and partial Bouma sequences through sub-wacke to argillite, some of the quartz wack is weakly to mildly calcareous. Some of the thicker bed bases are fine sand, remainder have silt bases. A few thick beds, several medium and numerous thin beds. Contacts are sharp, some flat, wavy and at least one quite erosive. Very thin bedded zones consist of smaller turbidites or alternating argillite and carbonaceous wacke laminite, neither more than a few mm to 1 cm thick. Carbonaceous wacke laminite as 1-2 cm interbeds occur, and as repeated 1-3 mm laminae within argilite are occasionally noted. Dark grey / black laminated intervals to 15 cm suspected as carbonaceous wacke laminite may be EPL within Bouma sequence.

Sulphides in Veins:

67.21 - 67.24 ≤2.5 cm thick quartz + dolomite vein at 55° to core axis. 0.1 - 0.3 cm dolomite rind developed on lower margin of vein with only short discontinuous segments ≤1.5 cm in length and ≤ 0.2 cm thick along upper margin. Massive sulphide core to vein approximately 2 cm thick comprised predominantly to sphalerite, orange-brown along core 1 cm rimmed by black sphalerite (approximately 0.5 cm thick) on each side. Galena dominant in outer portions of vein, intermingled with black sphalerite (upper margin) or quartz (lower margin). Vein: 50-60% Zn, 25-30% Pb.

67.76 - 67.78 ≤1.5 cm thick mineralized quartz vein at approximately 60° to core axis. Basal contact with host sediments comprised of ≤0.3 cm thick band of fine-grained, intermingled arsenopyrite + galena. Medium-grained aggregates of galena present along top of vein. Vein: 15-20% arsenopyrite, 8-10% galena.

69.50 - 69.56 Mineralized quartz vein at 40° to core axis, ≤ 1 cm thick. Quartz margins ≤ 0.3 cm thick with semi-massive sulphides along core of vein. Composition of sulphides changes along core, with fine-grained pyrite (60%) with highly subordinate galena (10-15%) along 4.5 cm of core, with a 2 cm long interval of pyrite (20-25%), galena (25-30%) and the remainder quartz with 1.5 cm of deep orange brown and black sphalerite. Interval: 10-15% Zn, 7-10% Pb.

69.84 - 70.10 Semi-massive to massive sulphides in quartz + dolomite vein at 40° to core axis, 70° to bedding. Approximately 18 cm thick with distinct bands of mineralization ≤3.5 cm thick. From top to bottom: ≤1 cm thick margin of creamy yellow dolomite + quartz along upper contact with sediments; ≤3.5 cm thick band of massive, coarse-grained sphalerite (80%), predominantly black with highly subordinate deep orange-brown, with a fine network of very fine-grained pyrite (10-15%) and medium-grained galena (8-10%); 0.5-2.0 cm bifurcated, discontinuous band of creamy white dolomite; 1.5-2.0 cm band of massive, medium- (to coarse-) grained galena (70%), sphalerite (15-20%) and pyrite (5-10%); ≤1 cm thick band of creamy white dolomite; ≤4 cm band of semi-massive, coarse-grained sphalerite (25-30%), medium-grained galena (30-40%) and fine-grained pyrite (10-15%) in quartz; ≤2.5 cm band of massive, coarse-grained, black sphalerite speckled with deep orange-brown sphalerite; ≤3 cm band of semi-massive, coarse-grained black (speckled with deep orange-brown) sphalerite (20-25%), coarse-grained galena (35-40%) and 5-10% pyrite; basal band (≤1 cm thick) of fine-grained pyrite (30-40%) and fine- to medium-grained galena (20-30%). Interval: 40% Zn, 25% Pb.

76.50 - 76.53 Vein at 65° to core axis, 90° to bedding, 2 cm thick, interaction with pressure solution cleavage, 1-1.5 cm in core comprised of galena, sphalerite , 1 margin comprised of quartz and the other of dolomite. Host sediments calcareous (secondary) on side above 76.5 m. Vein cuts pressure solution cleavage at 55° to core, 20° to vein. Halo of mm size pyrite overprints dolomite "porphyroblast" clusters that are typically ≤0.5 cm for 10 cm on either side of vein. Two smaller, barren veinlets within about 15 cm either side of vein are quartz with approximately 10% dolomite at 55° to core and 60° to vein are cut by pressure solution cleavage.

83.78 - 83.79 Quartz - dolomite veinlet with core of galena and sphalerite, clearly cuts pressure solution cleavage. Few grains of replacement pyrite nearby. 60° to core, 80° to bedding, 45° to pressure solution cleavage. Note parallel, barren quartz ± dolomite veins 3.5 cm thick at 84.12 at 62° to core axis and 2 cm thick at 84.59 at 60° to core axis.

0306 - 180	67.21	67.24	3.92	2910.80	**20.97%**	**16.96%**
0306 - 181	67.76	67.78	0.45	256.40	**3.89%**	**0.15%**
0306 - 182	69.50	69.56	0.36	93.40	**0.43%**	**11.27%**
0306 - 183	69.56	69.84	0.15	3.27	191.15	675.60
0306 - 184	69.84	70.10	1.93	1945.50	**28.06%**	**15.64%**
0306 - 185	70.10	70.28	0.65	4.50	692.99	418.70
0306 - 186	76.50	76.53	0.36	623.00	**9.26%**	**18.25%**
0306 - 187	83.78	83.79	0.73	660.80	**5.46%**	**0.12%**
0306 - 188	84.32	84.35	0.28	112.40	**0.22%**	**30.36%**
0306 - 189	84.79	84.81	23.65	768.90	**14.52%**	**17.10%**
0306 - 237	87.10	87.22	1.74	2556.40	**22.03%**	**18.11%**

				84.32 - 84.345 Sphalerite + galena, trace dolomite and quartz at 70° cuts beds where beds are approximately 80° to core axis. Cuts pressure solution cleavage at 45° (pressure solution cleavage at 17° to core axis). Sphalerite black with brown on fractures. **84.79 - 84.81** Vein mainly dark brown sphalerite and galena, minor quartz ± dolomite on margins. Vein 65° to core, 85° to bedding (where bedding is 16° to core axis). Also cuts pressure solution cleavage sharply at 30° (where pressure solution cleavage is 15° to core axis). **Sulphides in Sediments:** **69.56 - 69.84** Arsenopyrite-bearing sediments. Coarse-grained needles of arsenopyrite to 0.4 cm length. Approximately 0.1% As, minor sphalerite and galena. **70.10 - 70.28** Pyrite-bearing argillaceous siltstones. Minor coarse-grained needles of arsenopyrite, approximately 0.5% As. **Alteration:** Creamy (presumed) ankerite and quartz segregations developed in 2 bed bases (84.5 and 88.8) that have been heavily deformed. Numerous tightly micro-folded siliceous layers commonly also have ankerite. In argillaceous rocks, ankerite or dolomite is common as fine to 2 mm clusters of fine rhombs that, in some cases, are replaced by pyrite and where coarse-grained, pyrite is also common. Where intensely developed, the secondary dolomite is 50% of the rock and is present uniformly through all rock types. In places there is preferred alignment and augen shaped forms aligned in pressure solution cleavage.							
95.05	99.95	95.0 95.4 96.0 97.0 97.75	20° 30° 25° 10° 09°	**Lithology: Granule conglomerate to quartz wacke** One, possibly two, beds graded from granule conglomerate and coarse-grained quartz wacke with abundant rip-up clasts of argillite and sub-wacke. Bouma A, B, C and D divisions recognized. Three thin beds, less than 10 cm, overly the D division and appear identical, probably are part of this interval. There is a change from Bouma B to A (going up that bed) at the quartz sulphide vein (96.90 - 96.98 m) that may mark a repeat of a portion of this bed or a second turbidite, offset on the plane of the vein. Base at 28° to core axis conforms with beds below. Laminations within measured. **Sulphides in Veins:** **96.90 - 96.98** 8 cm quartz vein with 10% sulphides, comprised of galena, black sphalerite, minor pyrite and arsenopyrite. 65° to core axis, 80° to bedding, 20° to pressure solution cleavage. S_0 is 12° to core axis, pressure solution cleavage is 55° to core. Faint halo of pyrite ± 10 cm on either side of vein. In 30 cm above are four essentially barren quartz veinlets 0.5 to 2.5 cm thick at different but high angles (>60°) to core axis. **97.50 - 97.53** Vein comprised of black sphalerite, galena, <10% quartz, dolomite at 60° to core axis. Cuts S_0 at 80°, pressure solution cleavage at 12° where S_0 is at 10° to core axis, pressure solution cleavage is 52° to core axis. Faint "halo" of pyrite (few coarse grains) flanks for approximately 10 cm on either side.	0306 - 190 0306 - 191	96.90 97.50	96.98 97.53	1.17 0.55	895.40 854.70	**8.79%** **11.96%**	**3.29%** **18.20%**
99.95	127.15	100.0 101.0 102.0 103.0 104.0 105.0 106.0 107.0 108.0	30° 22° 15° 35° 32° 30° 25° 20° 20°	**Lithology: Argillite and sub-wacke.** Argillite is light grey, very thin beds and laminations, rarely thin bedded. Sub-wacke is dark grey to black carbonaceous wacke laminites 1-10 mm thick. Irregular silty wacke lenses (starved ripples etc) noted on some bases. **Veins:** **100.70 - 100.71** 1 cm thick at 62° to core axis. Quartz with dolomitic margins, contacts wavy so may be early **101.45 - 101.455** 0.5 cm thick vein at 80° to core axis. Quartz + dolomite. Contacts sharp and flat **110.15 (top)** 1cm thick at 25° to core axis. Quartz + dolomite. Contacts wavy and sharp.	0306 - 192 0306 - 193 0306 - 194 0306 - 195 0306 - 196 0306 - 197 0306 - 198 0306 - 199 0306 - 200	111.96 112.83 113.46 114.52 115.32 115.62 116.11 117.40 121.96	112.08 113.05 113.49 114.68 115.40 115.66 116.13 117.51 122.00	2.52 0.76 2.83 3.09 2.00 1.94 1.72 3.79 2.37	928.30 566.50 679.00 1588.20 139.00 88.80 1.03 571.30 95.50	**10.00%** **5.06%** **8.93%** **21.53%** **4.15%** **1.37%** 132.70 **3.71%** **1.14%**	**0.11%** **2.15%** 289.00 **5.94%** 368.70 618.90 68.40 455.20 602.30

109.0	17°
110.0	20°
111.0	18°
112.0	17°
113.0	18°
114.0	17°
115.0	20°
116.0	15°
117.0	20°
119.0	24°
119.5	06°
120.0	03°
121.8	75°
122.0	10
122.5	65°
122.85	66°
124.0	50°
125.0	58°
126.0	35°
127.0	25°

110.63 - 110.68 5 cm thick at 60° to core axis. Quartz + minor dolomite. Contacts sharp and flat

111.30 - 111.32 2 cm thick at 55° to core axis. Quartz with scattered pyrite and galena, irregular coarse dolomite. Contacts flat.

112.37 - 112.39 2 cm thick at 62° to core axis. Quartz + 30% dolomite

Structure:

122.0 10° directly below 5 cm vein. Veinlet parallel bedding (10°) and across which the beds are at much higher angle with some "gentle" folding.

Sulphides in Veins;

101.32 - 101.35 2 cm thick at 60° to core axis. Quartz with dolomite on margins, and a few grains chalcopyrite, sphalerite, galena. Contacts sharp and flat.

109.70 - 109.83 9 cm and 1 cm thick veins at 66° to core axis. Quartz with small vugs, dolomitic margins. Trace pyrite, arsenopyrite on 1 margin. Contacts wavy - possibly early vein?

110.90 - 110.91 1 cm thick at 60°. Quartz + arsenopyrite core, > 50% dolomitic margins. Contacts sharp and flat.

111.96 - 112.08 Two veinlets at 37° and 50° to core axis. 1 with branching stringers over 1-2 cm, arsenopyrite + quartz, the other solid and comprised of arsenopyrite, galena, pyrite, quartz and dolomite.

112.83 - 113.05 Four veinlets from low to high sulphide content or quartz + dolomite. 3 at 50°, one at 62° to core axis. <1, 1, 1.5 and 2+ (?) cm thick. The thickest seems to have merged with replacement sulphides on one side, all but that contact are flat and sharp. Pyrite, minor galena and sphalerite, trace arsenopyrite.

113.46 - 113.49 2.5 cm thick vein at 50° to core axis. Dolomitic margins with a quartz + sphalerite + galena + arsenopyrite core.

114.52 - 114.68 13 cm thick vein at 55° to core axis, comprised of massive pyrite + galena with minor sphalerite and quartz, with thin (3-5 mm) dolomitic margins. Contacts ± flat but break off wallrock.

115.32 - 115.40 6 cm thick vein at 45° to core axis, with undulating contacts. Cuts earlier 4 mm dolomitic veinlet. Arsenopyrite on one margin and in core of vein. Quartz in core and along one margin with dolomite. Lesser sphalerite, galena and pyrite in core.

115.62 - 115.66 3 cm vein at 65° to core axis. One contact sharp, the other contact irregular. Primarily quartz and dolomite on one margin (3-5 mm) ± 10% pyrite, galena, sphalerite and arsenopyrite.

116.11 - 116.13 1.7 cm vein at 60° to core axis. 55% dolomite (along margins), 40 % quartz (in core). Scattered arsenopyrite radial to margins with the dolomite.

117.40 - 117.51 6 cm vein at 60° to core axis. 40% quartz, 5% dolomitic margins (approximately 5 mm thick). Pyrite, arsenopyrite, galena, no sphalerite.

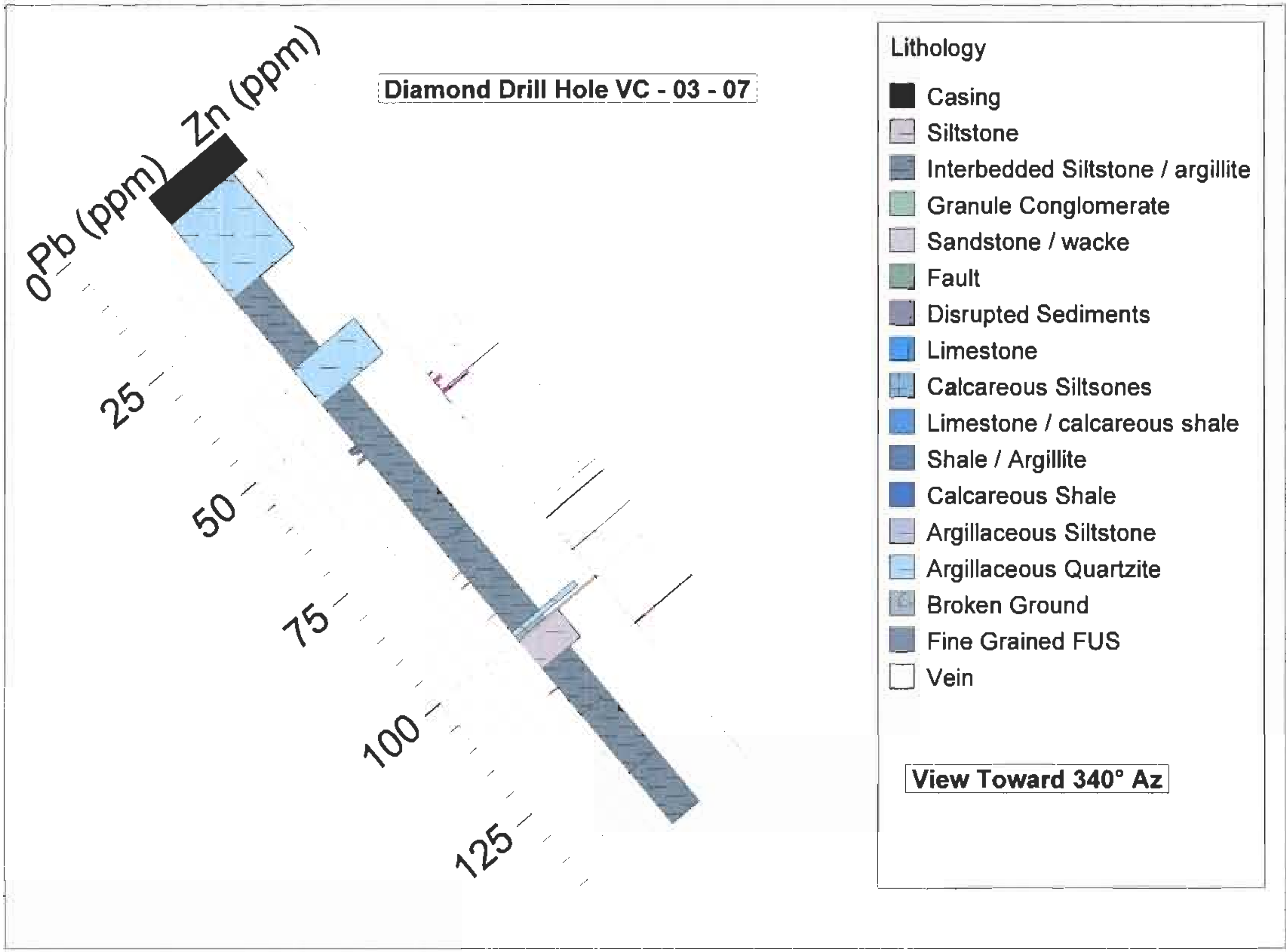
121.96 - 122.00 3.5 cm vein at 60° to core axis. 5 mm dolomitic margins (10%), 40 % quartz + pyrite + arsenopyrite and a few grains galena

Alteration:

Ankerite present in some zones (porphyroblastic clusters of fine rhombs) and it occurs in and highlights pressure solution cleavage. Pyrite occurs in the same zones and is coarsest in bed (especially silty) bed bases.

127.15	127.55	127.5	0°	**Lithology: Incohesive Fault Gouge and adjacent broken rock.** Gouge between 127.20 - 127.55 cuts core at 17°.							
127.55	134.50	128.5 130.5 131.0 132.5	10° 0° 06° 0°	**Lithology: Argillite and sub-wacke.** Argillite is light grey, sub-wacke is dark carbonaceous wacke laminite. Sub-wacke bases and carbonaceous wacke laminite show cleavage the best. **Veins:** Several quartz veins. **Sulphides in Veins:** **134.07 - 134.37** 15 cm vein + 2 adjacent (0.5 and 1.5 cm thick) veinlets with scattered pyrite and galena at 62° to core axis. **Sulphides in Sediments:** Minor pyrite.	0306 - 201	134.07	134.37	0.08	13.90	1127.66	**2.24%**
134.50	144.51	135.5 137.0 139.0 140.0 141.5 143.3 144.4	35° 65° 23° 25° 24° 35° 21°	**Lithology: Sub-wacke, Argillite.** Variably (and some very) calcareous. Light green with dark carbonaceous wacke laminite interbeds to 2 cm. **Veins:** **134.94 - 135.02** Barren quartz vein, dolomitic margins at 50° to core axis, slightly wavy **136.11** 8 mm barren quartz vein at approximately 70° to core axis, wavy, folded, cleavage is axial planar **Sulphides in Veins:** **134.65 - 134.75** Quartz vein, vuggy with coarse-grained pyrite only. Contact at 50° on one side, other side irregular. **135.10 - 135.15** Network of barren quartz veins with dolomitic margins, occasional pyrite **135.50** 8 mm veinlet, quartz with core of fine pyrite wisps, minor dolomite **136.28 - 136.31** 2.5 cm quartz vein with abundant coarse-grained, medium brown to black sphalerite and galena. **Sulphides in Sediments:** Coarse pyrite noted on silty bases.	0306 - 202	136.28	136.31	2.97	40.00	**8.06%**	**4.55%**
144.51	149.34	145.0 146.5 147.8 148.8	70° 22° 20° 70°	**Lithology: Argillite, sub-wacke.** Medium to light grey, in thin beds and laminations, alternating with dark grey carbonaceous wacke laminites, in laminations 0.5 - 2.0 cm thick, usually 0.5 cm. Very distinctive interval.							

149.34	160.00	152.8 154.0 155.4 158.5 159.5	11° 40° 25° 15° 12°	**<u>Lithology: Sub-wacke, Argillite, minor wacke.</u>** Medium grey, thin bedded and laminated. Distinctive character of bed contrast no longer evident (one short zone). **Structure:** Cleavage development is strong below 154.5 and from 156.0 - 158.0, considerable movement along cleavage and pressure solution loss of primary texture. **Sulphides in Sediments:** Minor pyrite in the very thin, pale wacke bases.							
160.00	182.87	160.5 161.7 163.0 164.6 166.1 167.6 171.3 174.9 176.4 177.8 180.0 182.5	20° 23° 21° 40° 25° 33° 35° 60° 55° 47° 66° 0°	**<u>Lithology: Ruth Limestone.</u>** Very calcareous subwacke to limestone, medium grey, medium to thin bedded, contacts sharp to distinct, flat where not folded and cleaved. Interbeds are not particularly distinct, most are limey, some that are not are darker and well laminated. **Veins:** **163.04** 5 mm calcite vein parallel to bedding **161.55** 5 mm quartz + calcite vein at 35° to core axis **162.05** Intersecting quartz calcite veinlets <1 cm thick **162.40** 3 mm sphalerite + calcite veinlet at 50° to core axis **166.22** 10 mm or less quartz (calcite) vein at 45° to core axis, jagged edges. **171.95** Parallel 3 mm quartz - calcite veinlets, tightly folded. **Structure:** Small scale tight folding is common and there are several very limey quartz-rich silt and fine sand beds that display this folding well. Highly cleaved fold axis at end of hole. **Sulphides in Veins:** **162.50 - 164.05** Five veinlets < 5 mm contain pale brown sphalerite. Also at 166.08 - sphalerite and galena in 5 mm veinlet. **161.40** 5 mm vein at 61° to core axis. Quartz (calcite) veinlet, minor specks of galena (?) or boulangerite **162.00** Seam at 58° to core axis along which up to 7 mm of medium brown sphalerite and in core, grey sulphide, sides indicate replacement **165.95** 4 mm quartz + calcite veinlet with sphalerite + galena							
182.87				**End of Hole**							



Diamond Drill Hole VC - 03 - 07
0
Pb (ppm)
Zn (ppm)
25
50
75
100
125
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View Toward 340° Az

DYNAMIC EXPLORATION LTD.

DRILL LOG: DIAMOND DRILL CORE

HOLE NO.	VC - 03 - 07

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:	Lot 418		
LOCATION - GRID NAME:			
EASTING:	501433	NORTHING:	5643908
SECTION:		ELEV:	1922 m
AZIM:	070°	LENGTH:	142.03
DIP:	-50°	CASING LEFT?:	No
CORE SIZE:		NQ	
CORE STORAGE:		Vermont Creek	

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
0		41°	142.03		43°

DRILLING CO:	F.B. Drilling
STARTED:	3-Jul-03
COMPLETED:	4-Jul-03
PURPOSE:	T test stratigraphy, structure and mineralization
CORE RECOVERY:	
LOGGED BY:	Paul Ransom
	Rick Walker
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS	A303027, A303027r, 0303027R3

Drill Hole VC - 03 - 07

From	To	Core Angle		Description	Sample	From	To	Gold	Silver	Lead	Zinc
m	m	m	Deg		Number	m	m	gms/T	gms/T	ppm	ppm
0.00	6.10			**Casing**							
6.10	22.92	15.15	50°	**Lithology: Quartz wacke**	0307 - 203	8.50	10.00	0.03	1.34	314.42	220.00
		22.80	15°	Bases of some beds comprised of granule conglomerate with grains to 2 mm (not common). Occasional short section of laminated sub-wacke/argillite, clearly contorted within rigid bounding beds. Some of the thick beds grade through wacke to sub-wacke. Bedding: 15.15 - 50° in Bouma B type laminations, or wacke/sub-wacke interbed. Suspect portions of this interval grade down hole, including last half metre. Clearly portions of core are jumbled.	0307 - 204	11.53	11.73	0.01	0.42	265.05	70.80
					0307 - 205	12.30	12.50	0.01	0.37	29.26	20.00
					0307 - 206	16.10	16.30	0.17	0.27	23.82	13.90
					0307 - 207	19.45	20.23	0.03	0.25	16.81	15.20
					0307 - 208	20.23	20.94	0.12	0.30	18.20	9.60
					0307 - 209	20.94	21.59	0.05	0.72	22.30	8.80
				Veins:	0307 - 210	21.59	22.23	0.06	0.30	10.52	15.60
				8.50 - 10.00 Quartz vein, rusty coatings on most fracture surfaces, includes 20 cm quartz wacke/ granule conglomerate.							
				11.53 - 11.73 Quartz vein, minor limonite in box works.							
				Structure:							
				22.80 - tight folding in this basal interval, probably of rip-ups.							
				Sulphides in Veins:							
				Badly broken and near surface oxidation of sulphides in many quartz veins to 19.0.							
				12.30 - 12.50 Quartz vein, minor traces pyrite, limonite.							
				16.10 - 16.30 Quartz vein, scattered fine pyrite / limonite, very small vugs.							
				19.45 - 20.23 10 cm quartz vein with limonite, 15 cm quartz vein, silicified quartz wacke and pyrite.							
				20.23 - 20.94 Quartz vein, scattered limonite in box works, vugs.							
				20.94 - 21.59 Sub-wacke/Argillite - Pyritic with 15 cm quartz vein, minor vugs. Pyrite in seam to 1 cm.							
				21.59 - 22.23 Quartz vein 20 cm and quartz wacke, both quite pyritic. Speck grey sulphide.							
22.92	39.07	23.5	00°	**Lithology: Argillite, sub-wacke (wacke)**	0307 - 211	29.13	29.38	0.03	1.56	56.15	34.8
		25.0	09°	Dark and pale grey, thin bedded and laminated, basal portions of sub-wacke (wacke) have ripples and are probably Bouma CD beds.							
		26.2	12°								
		27.50	15°								
		29.50	09°	**Veins:**							
		30.10	00°	**35.37** Quartz / dolomitevein at 62° to core axis							
		30.80	15°	**38.76** 9mm thick Quartz / Dolomite vein							
		32.00	55°								
		33.50	32°	**Sulphides in Veins:**							
		35.00	32°	**29.13 - 29.38** Quartz vein, 5% patchy limonite / pyrite.							
		38.1	17°	**35.30 - 39.70** Several veins <1cm, plus two of 2 cm, most have small amounts of fine pyrite and arsenopyrite.							
		39.0	70°								
				35.56 Dolomite vein at 59° to core axis, fine pyrite / arsenopyrite in wall rock.							
				36.17 1 cm vein at 72° to core axis and 2 cm vein at 55° 2 interact, 2 cm has large pyrite patches, marginal arsenopyrite .							
				38.32 7mm thick Quartz + Dolomite, marginal pyrite / arsenopyrite							
				38.43 9 mm thick Quartz + Dolomite vein, few grains Pyrite,							
				39.65 2.5 cm thick vein at 65° to core axis, <10% pyrite and arsenopyrite, mainly on margin.							

39.07	47.02			**Lithology: Quartz wacke** Wacke only near top of interval, pale grey, medium- to fine-grained sand. No sedimentary features. From 39.07 - 40.20 m are several thin wacke / sub-wacke / argillite beds that mark the top of this interval. Bedding in them continuous from previous interval. **Veins:** Numerous parallel quartz segregations, usually <1 cm wide. From 45.20 - 45.40 m is a larger quartz segregation, below which is a little patchy pyrite. **Structure:** Cleavage fabric dominates throughout. **Alteration:** Ankerite porphyroblasts consisting of clusters of very fine rhombs are common.							
47.02	79.00	48.75 51.0 51.35 51.50 51.75 52.1 - 54.4 54.80 55.20 55.50 57.5 58.2 - 59.4 60.50 63.00 64.00 68.50 71.00 73.80 76.00 77.50 78.20	50° 50° 00° 00° 52° 00° 10° 18° 90° 18° 00° 18° 12° 16° 16° 17° 15° 14° 32° 28°	**Lithology: Sub-wacke / argillite** Dark and medium grey, rare pale sub-wacke with irregular bases and indications of current transport, very thin bedded and laminated. Laminations of Carbonaceous Wacke Laminite fairly common. **Structure:** **73.90 - 74.25** Fault comprised of 20 cm of fractured core and 20 cm incohesive fault gauge - mostly 1 mm and crumbles, some clayey. Base at 30°, intersection with bedding is 50°. **Sulphides in Veins:** Mineralized interval - several veinlets and 2 veins mineralized with sulphides, particularly common and widespread is arsenopyrite, galena, sphalerite and pyrite. Some of the coarse pyrite is zoned. **54.18 - 54.25** 2 mm fracture at 45°, mainly arsenopyrite, some quartz, few grains of arsenopyrite adjacent to fracture **54.86 - 55.08** 3 veinlets < 1 cm, all have quartz, dolomite, arsenopyrite, one with brown / black sphalerite. Veins at 40°, 35°, 51°, facing different ways. **56.97 - 57.27** 2 Veinlets 2 cm, 3 cm, 45°, 60°, zoned pyrite to 1 cm . **57.27 - 57.70** 3 Veinlets (4,3,1 cm) 55°, 57°, 49°, all parallel, all with abundant arsenopyrite. One has minor medium brown sphalerite. Sub-wacke / argillite is pyritic, with trace acicular arsenopyrite. **58.44 - 58.53** 7 cm quartz vein at 60° with two parallel, 1 cm bands of dark brown sphalerite. Arsenopyrite near lower contact. **58.83 - 59.12** 9 cm vein, abundant disseminated pyrite and arsenopyrite and two <1 cm veinlets in sub-wacke / argillite. Both black and red-brown sphalerite, arsenopyrite and pyrite are abundant in vein, sheared appearance, dolomite / quartz are common on margins. **Sulphides in Sediments:** **54.25 - 54.86** Sub-wacke / argillite, scattered pyrite, rare isolated arsenopyrite. **55.08 - 55.25** Sub-wacke / argillite, scattered pyrite. **55.25 - 55.52** Sub-wacke / argillite, scattered pyrite, arsenopyrite, 2 quartz + dolomite veinlets < 1 cm at 55° to core axis, contain arsenopyrite. **55.52 - 56.07** Sub-wacke / argillite. A few large pyrite crystals. **56.07 - 56.79** Sub-wacke / argillite + 35% veins, mainly quartz, low dolomite, abundant arsenopyrite, including in vugs to 15 mm across. Biggest vein 15 cm at 60° to core axis. Isolated patchy black and brown sphalerite in quartz vein. Pyrite common in the sediments. **56.79 - 56.97** Sub-wacke / argillite, 5 % Pyrite.	0307 - 212 0307 - 213 0307 - 214 0307 - 215 0307 - 216 0307 - 217 0307 - 218 0307 - 219 0307 - 220 0307 - 221 0307 - 222 0307 - 223 0307 - 224 0307 - 225 0307 - 226 0307 - 227	54.18 54.25 54.86 55.08 55.25 55.52 56.07 56.79 56.97 57.27 57.70 58.44 58.53 58.83 59.12 59.79	54.25 54.86 55.08 55.25 55.52 56.07 56.29 56.97 57.27 57.70 58.44 58.53 58.83 59.12 59.79 61.00	1.08 0.13 0.48 0.08 0.46 0.02 **4.98** 0.59 4.00 4.40 1.87 2.51 1.74 3.58 0.12 0.13	1.57 0.80 1.81 0.50 0.79 1.65 17.10 0.43 26.00 6.00 1.49 61.00 4.20 52.90 1.33 0.68	154.08 18.99 973.72 20.70 13.44 9.68 **2.98%** 186.68 **4.40%** **0.86%** 159.50 **5.32%** 3366.48 **3.67%** 72.68 80.60	41.50 178.70 7299.00 252.40 35.30 61.80 **1.20%** 92.20 **0.13%** **0.37%** 974.60 **16.43%** **1.26%** **8.29%** 260.30 147.90

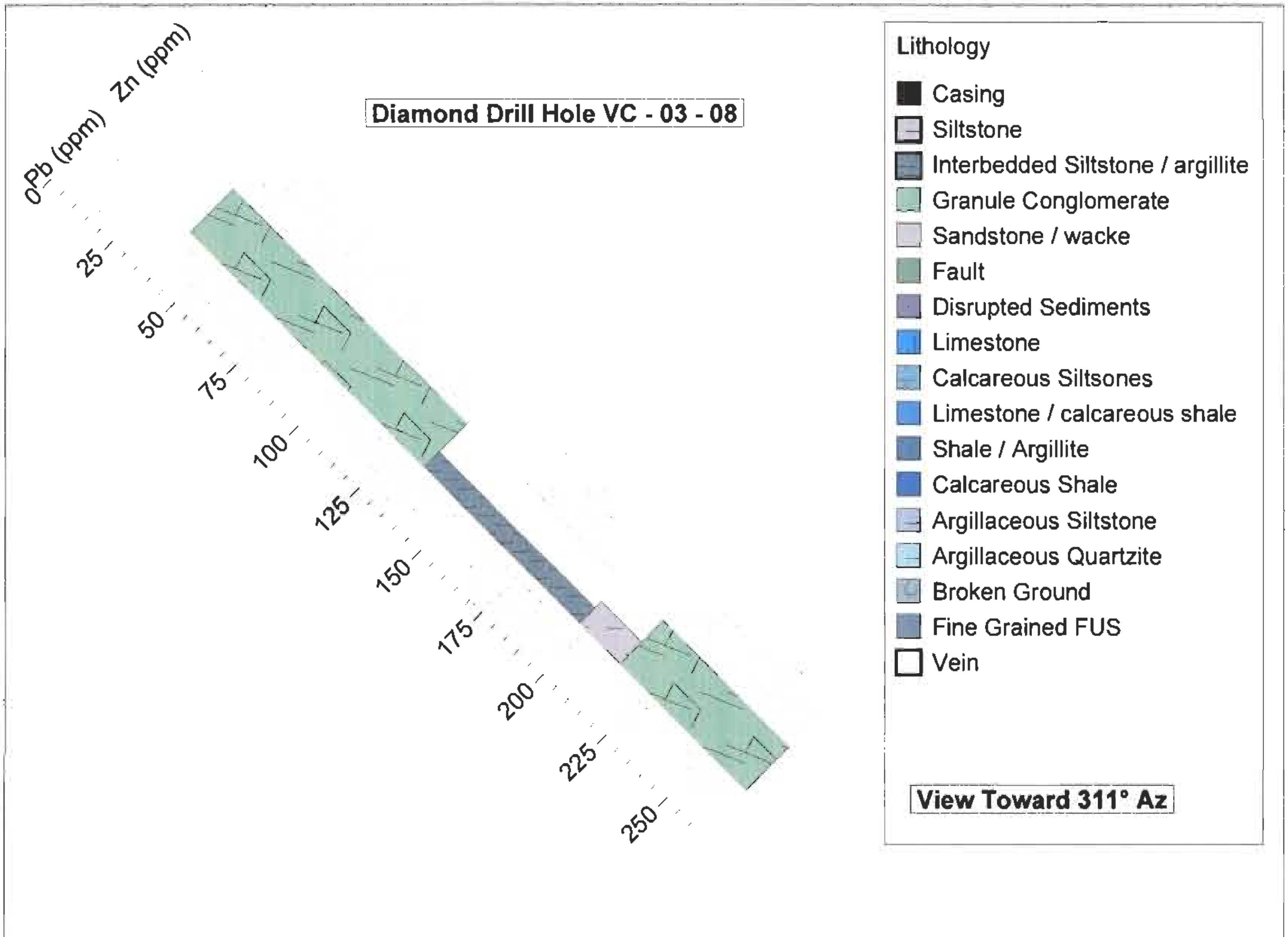
				57.70 - 58.44 Sub-wacke / argillite, + 4 Veinlets 2, 1.5, 0.5, 0.7 cm, mostly dip same way, at 38°, 50°, 55°, 66°. Two largest have abundant radial arsenopyrite between dolomite margins and quartz core. One (0.7 cm) has black and medium brown sphalerite and arsenopyrite. Scattered pyrite and rare arsenopyrite in the sub-wacke / argillite, commonly along S_0. **58.53 - 58.83** Sub-wacke / argillite with 3 mm veinlets at approximately 60°, parallel to 223. Sphalerite in one; arsenopyrite and pyrite in all. Rare arsenopyrite with disseminated pyrite in sub-wacke / argillite. **59.12 - 59.79** Sub-wacke / argillite, very few sulphides except in and near 1 cm vein of dolomite at 59.70 at 60°. In veinlet, arsenopyrite is concentrated along 2 mm wide zone in middle of vein. **59.79 - 61.00** Sub-wacke / argillite, pyrite along bedding and in a few places seems to be replacing ankerite clusters. Quartz + dolomite veins near the bottom at 60°, 67° have scattered pyrite, arsenopyrite, possibly galena. Arsenopyrite is present in some adjacent wallrock.							
79.00	98.60	84.70 85.34 - 87.50 87.50 - 88.50 91.3 - 92.1 92.30 98.30	42° 0-90° 00° 00° 50° 59°	**Lithology: Sub-wacke / argillite and wacke** Medium and light grey, thin and very thin, with rare small to medium beds, folded, contacts sharp. Carbonaceous Wacke Laminite interbeds common, usually < 0.5 cm but up to 4 cm. **Sulphides in Sediments:** **84.73 - 84.77** Black sphalerite with brown on fractures + galena, dolomite on one side, quartz on other. **87.03 - 87.10** Vein at 60°, comprised of coarse galena, black sphalerite and some brown sphalerite, pyrite and quartz. **87.10 - 87.22** 8.5 cm thick semi-massive sulphide vein at 50° to core axis. ≤3.0 cm thick, deep orange-brown sphalerite at lower contact with host sediments. Thin discontinuous galena band approximately 0.1 cm thick at 40° to core axis, cuts obliquely through sphalerite band at approximately 10°. 1 cm wide quartz and galena band also cross-cuts sphalerite band at approximately 10°, comprised of 60% fine-grained galena and 40% quartz. 1.5 cm milky white quartz band lies interior of sphalerite and galena and quartz bands. Contains minor coarse-grained galena along boundaries with sulphides and medium-grained galena and orange-brown sphalerite along core. A ≤4.0 cm band of coarse-grained black sphalerite, pyrite, and galena comprises the next zone upward. Each sulphide mineral occurs as a virtually mono-mineralic aggregate mass. Sphalerite appears to be a later phase and incorporates pyrite masses as inclusions (to 4 cm parallel to vein contact.) Galena may also be earlier than the sphalerite as some grains are included within the sphalerite masses. The upper margin is comprised of a ≤ 2 cm thick quartz and minor creamy yellow dolomite band with approximately 10-15% sulphides as medium- to coarse-grained pyrite and galena. Interval: 30-35% Zn, 20-25% Pb. **93.95 - 93.96** Small 1 cm veinlet at 54° to core axis, comprised of sphalerite, galena, chalcopyrite and pyrite in quartz + dolomite). **94.14 - 94.18** 3.5 cm black sphalerite, red-brown sphalerite, quartz, pyrite at 45° to core axis **Alteration:** Occasional ankerite patch or pyrite (disseminated along layering).	0307 - 228 0307 - 229 0307 - 237 0307 - 230	84.73 87.03 87.10 94.14	84.77 87.10 87.22 94.18	0.81 0.68 1.74 2.37	315.10 1718.40 2556.40 1207.20	**11.93%** **31.29%** **22.03%** **8.45%**	**14.33%** **16.23%** **18.11%** **31.09%**
98.60	99.60			**Lithology: Quartz Arenite.** Single bed comprised of sand sized grains difficult to size but probably < 1 mm or < 0.5 mm. **Structure:** Foliation approximately 40° throughout.							

99.60	100.30			**Lithology: Broken Zone** Broken zone with 50 cm core loss. Mostly dark, broken sub-wacke / argillite with rusty fractures.							
100.30	100.58			**Lithology: Quartz vein** Quartz vein with enclosed fragments of wall rock. Patchy coarse limonite (pyrite).							
100.58	106.85	101.1 102.0 103.1 104.0 105.1 106.0	55° 45° 67° 68° 67° 17°	**Lithology: Light grey siltstones** With interbedded, medium to dark grey silty argillite (to argillite). Generally very thin to thin bedded with intervals of very thin to thick sequences of interlaminated, light grey siltstone and dark-grey silty argillite laminae. (101.34 - 101.55, 104.04 - 104.17, 105.93 - 106.07, 106.67 - 106.75). Laminations comprise middle portion of Fining Upward Sequences, from fine- (to medium-) grained, lithic sandstone bases to argillaceous tops. FUS: 101.06 - 101.58, 101.60 - 101.81, 103.86 - 104.27). Other partial, but ambiguous, FUS may be present as well, from interlaminated siltstone and silty argillite upwards into silty argillite (and argillite). **Veins:** Approximately 2-3% veins throughout interval, comprised of: 1) milky white quartz veins with dolomitic margins up to 1.5 cm thick at high angle to core axis (60-70°) with textures indicative of growth into open spaces (intergrown quartz crystals, vugs), having sharp planar boundaries, and 2) one quartz vein to 2 cm thick with irregular, curvilinear boundaries up to 52° to core axis, and 3) very thin (≤ 0.2 cm) veinlets at moderate to high angles to core and both planar and irregular contacts. **Structure:** Laminated sequences also show evidence of moderately well developed foliation (where micas in dark grey laminae partially re-oriented into plane of foliation). **102.76 - 103.00** Fault with highly oxidized, deep brown limonite / goethite gouge at 30° to core axis between 102.95 - 103.0. Foliation moderately well developed over interval, characterized by diffuse, feathered contacts between recessive and more-resistant lithologies. **Sulphides in Sediments:** Bimodal pyrite present in silty argillite to argillaceous intervals, comprised of approximately 1% coarse-grained (to 1 cm diameter), disseminated idioblastic crystals and fine-grained, strongly oxidized pyrite crystals along preferred bedding horizons.							
106.85	117.27	107.1 108.05 108.95 110.0 111.15 112.0 113.00 116.00	60° 62° 63° 55° 65° 48° 50° 56°	**Lithology: Silty Argillites with subordinate siltstone.** Medium grey, silty argillites with subordinate light grey siltstones. Interval comprised of higher proportion of thin bedded silty argillite and argillite. Two possible Fining Upward Sequences from 116.10 to 117.27. FUS grades from slightly calcareous, fine- to medium-grained lithic sandstone (argillaceous quartzite) through laminated sequence with very thin, silty argillite laminations in fine-grained argillaceous quartzite to wacke to silty argillite and capped by very thin bedded argillite. **Veins:** Significant addition of quartz + dolomite between 113.9 - 114.15 and 115.04 -115.82 as large mass at base of medium-grained lithic sandstone in the upper interval and as thin (≤ 1.0 cm) quartz + dolomite veins, veinlets and stringers sub-parallel to foliation in lower interval.	0307 - 232 0307 - 233 0307 - 234 0307 - 235	108.66 110.88 111.28 111.78	108.73 111.08 111.43 111.88	0.21 2.14 0.17 0.42	7.44 1495.50 3.65 8.82	940.35 **19.50%** 456.95 1139.26	256.40 **14.24%** 529.90 842.00

				Structure: Whole interval has been variably tectonized due to shearing. Upper and lower contacts of coarse units irregular due to shearing. Moderately well developed foliation at 20° to core axis to 110 m and between 112 - 113.90 m. Strong development of foliation with offset of bedding across foliation planes between 110 - 112 m. Highly disrupted bedding across foliation between 115.04 - 115.82 m, with small scale isoclinal fold (2 cm wavelength, 0.75 cm width) evident at 115.82 m. **Sulphides in Veins:** **107.95 - 108** Mineralized quartz vein 3 cm thick at 41° to core axis. Appears to be comprised of two quartz and dolomite veins that have coalesced, with slivers of host sediments between. Coarse-grained pyrite (to 0.5 cm) in small aggregate masses and 1-2% coarse-grained galena. Minor chalcopyrite as two grains along margin of galena. Pyrite generally along margins of galena. One coarse galena grain contains small inclusion of pyrite (in plane of core surface). Zoned pyrite evident as coarse-grained crystals to 1 cm in long dimension along preferred horizons (predominantly silicified (?) argillaceous intervals ≤ 0.4 cm thick). **108.66 - 108.73** ≤ 2.5 cm thick milky white quartz vein at 57° to core axis. Dolomitic margins up to 0.7 cm thick along lower margin, ≤ 0.3 cm thick on upper margin. Coarse needles (to 0.3 cm length) in sediments for 2.5 cm on either side. Fine-grained pyrite localized in lower half of vein with approximately 5% in the lower dolomitic margin and 10% along the interior margin of the dolomite band with fine grained arsenopyrite. Interval: As approximately 0.2%. **110.88 - 111.08** Semi-massive sulphides in quartz vein. Mesh textured network of sulphides in approximately 18 cm thick vein at 70° to core. Lower contact broken. Dark brown to black sphalerite with highly subordinate deep orange patches and striping localized in ≤ 3.0 cm zones on interior side of ≤ 0.5 cm dolomite band with thin (≤ 0.3 cm) bands of pyrite. A ≤4.0 cm zone is present on the interior, and structurally lower part of the vein comprised of 60-70% galena, 5-10% sphalerite. The next ≤4.0 cm zone upward is comprised of 40-50% fine-grained arsenopyrite with ≤5% sphalerite + galena. Another ≤3.0 cm zone is comprised predominantly of pyrite (60-70%) and galena (≤5%) which grades into the uppermost sphalerite zone across approximately 1.5 cm in which pyrite decreases while sphalerite increases. Interval: Zn 15-20%, Pb 10-12%, As 7-10%. **111.28 - 111.43** Two thin creamy white dolomite veinlets at 38° and 52° to core axis. The upper vein is 0.3 cm thick and contains minor arsenopyrite (0.5%) and the lower one is 0.5 cm thick with very coarse arsenopyrite needles (approximately 20%) (to 1 cm length) oriented within plane of vein (not approximately perpendicular to margins as noted previously). Arsenopyrite associated with strong, but very local, iron-staining. Interval: As 1-3%, scattered arsenopyrite in host beds for approximately 4 cm either side of veins. **111.78 - 111.88** Highly oxidized, limonite coated, fractured vein approximately 0.5 cm thick at approximately 38° to core axis. Arsenopyrite noted in vein and host beds. Interval: As approximately 2%.							
117.27	130.38	118.0 119.0 120.0 121.00 122.00 123.0 124.0 125.0 126.00 127.00 128.00 129.00 130.00	63° 66° 71° 58° 87° 68° 62° 62° 66° 44° 61° 60° 70°	<u>**Lithology: Siltstones and interbedded silty argillites.**</u> Distinctive, very thin bedded, light grey siltstones and interbedded medium grey silty argillites. Bedding thickness varies from 0.1 cm (thinly laminated) to 3 cm (very thin bedded). **Veins:** Thin quartz and dolomite veinlets along foliation over upper 40 cm. Minor quartz and dolomite veining present, ranging from ≤1.5 cm thick at 55° to core axis with sharp, straight boundaries to ≤2 cm thick at approximately 15° to core axis with sharp, irregular, undulating boundaries. **Structure:** Upper contact sheared over 30 cm with coarse-grained base of overlying lithic sandstone. Laminae dislocated and offset by foliation to 117.66 m. Foliation variably developed, dependent upon proportion of fine-grained silty argillite or argillite present.							

		130.30	60°	**Sulphides In Sediments:** Pyrite << 1% over interval, present as medium-grained, idioblastic crystals (≤0.5 cm) along preferred horizons, usually where a slightly coarser lithology (i.e. fine- to medium-grained lithic sandstone or even some siltstones) are in contact with argillite or silty argillite. **Alteration:** Ankerite porphyroblasts present from 122 m (very fine - ≤ 0.05 cm) to medium (124.0 m) to very fine at 125.0 m.							
130.38	142.03	131.0 132.0 133.0 134.0 135.00 136.00 137.0 138.0 139.0 140.0 141.0 142.00	78° 84° 74° 83° 90° 73° 80° 83° 80° 83° 77° 75°	**Lithology: Alternating light grey and dark grey siltstone.** Very thin bedded. Thickness of bedding increased relative to previous interval, still ranges from thinly laminated to very thin bedded, but average thickness now approximately 1-2 cm, with significantly lower proportion of laminae. Otherwise similar to previous interval. **Sulphides In Veins:** **132.85 - 132.92** Moderately mineralized quartz vein between drill runs, appears to be approximately 2.2 cm thick at approximately 56° to core. Vein comprised of milky white quartz with ≤20% dolomite and approximately 3-4% arsenopyrite as fine-grained, ≤0.1 cm band along contact with host sediments. Arsenopyrite appears to be associated with dolomite within the vein. Approximately 1-2% medium-grained arsenopyrite within 1.5 cm of vein, hosted by adjacent sediments. **Alteration:** Ankerite porphyroblasts fine-grained at 138 m and coarsen to medium-grained from 139-140.4 m, then decrease in size. Proportion and thickness of dark grey siltstone increase gradually downhole until approximately 139 m at which point the proportion of dark grey siltstone exceeds that of light grey. Silty argillite from approximately 140.50 m to end of hole.	0307 - 236	132.85	132.92	1.10	2.00	206.07	188.70
142.00				**End of Hole**							

Note: Previously described light grey siltstone and medium to dark grey silty argillite actually light and dark siltstones.


Diamond Drill Hole VC - 03 - 08
Pb (ppm)
Zn (ppm)
0
25
50
75
100
125
150
175
200
225
250
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View Toward 311° Az

DYNAMIC EXPLORATION LTD.

DRILL LOG: DIAMOND DRILL CORE

HOLE NO.	VC - 03 - 08

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:	Lot 8123		
LOCATION - GRID NAME:			
EASTING:	501237	NORTHING:	5644084
SECTION:		ELEV:	1710 m
AZIM:	041°	LENGTH:	264.55
DIP:	-45°	CASING LEFT?:	No
CORE SIZE:		NQ	
CORE STORAGE:	Vermont Creek		

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
0		41.75°	60.96		38.5°
DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
194.15		33°	264.55		32°

DRILLING CO:	F.B. Drilling
STARTED:	4-Jul-03
COMPLETED:	10-Jul-03
PURPOSE	
CORE RECOVERY:	
LOGGED BY:	Rick Walker
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	A303027, A303027r, 0303027R3

Drill Hole VC - 03 - 08

From	To	Core Angle		Description	Sample	From	To	Gold	Silver	Lead	Zinc
m	m	m	Deg		Number	m	m	gms/T	gms/T	ppm	ppm
0.00	39.62			**Casing**							
38.92	133.84	39.91 40.45 52.63 61.36 86.53 87.69 92.90 94.20	88° 28° 70° 65° 75° 65° 15° 12°	**Lithology: Conglomerate.** Note: Casing reamed to 39.62 m. Began coring at 64.00 m. Used reamed material from 38.92 to 64.00 to determine probable lithology. Grain size varies from coarse-grained sand to pebble sized (approximately 2 cm diameter) clasts in fining-upward sequences. Each sequence varies from 10's of cm to metres thick, having a coarse-grained base and fining upward. Several Fining Upward Sequences have apparent renewed pulses of coarse-grained material within sequences. Clasts comprised predominantly of highly angular to sub-angular sedimentary clasts and quartz grains with rare argillaceous rip-up clasts in very coarse-grained bases (possible intraformational conglomerate?). **Fining Upward Sequences:** **38.92 - 39.91** - Grit to fine pebble conglomerate with large pebbles of highly angular, silty argillite in basal 30 cm. 1-3 cm pulses of coarse-grained material in uppermost portion of underlying unit. **39.91 - 42.99** - Matrix- to clast-supported fine pebble conglomerate at base grades upward to medium-grained sand. **42.99 - 49.17** - Fine- to medium-grained pebble conglomerate at base grades upward to medium-grained sand at 42.99 m. Small pulse of coarse grit to fine pebble conglomerate between 43.35 and 43.51 m. **49.17 - 52.63** - Coarse grit to very fine pebble conglomerate grades upward to medium grit at 49.17 m - renewed pulse evident in overlying unit. **52.63 - 60.78** - Clast- to matrix-supported pebble conglomerate grades upward to medium-grained lithic grit at 52.63 m. **60.78 - 61.36** - Matrix-supported pebble conglomerate grades upward to medium- to coarse-grained grit - renewed pulse evident in overlying unit. **61.36 - 63.03** - Clast-supported pebble conglomerate interval 4 cm thick (load cast in underlying interval) in transition over next 30 cm through alternating medium-grained sand and pebble conglomerate intervals to clast- to matrix-supported coarse grit to fine pebble conglomerate **63.03 - 73.60** - Matrix- to clast-supported, medium-grained pebble conglomerate at base to approximately 67.88 m at which point it begins to fine upward to a medium-grained argillaceous to lithic sandstone at 63.03 m. **73.60 - 84.38** - Matrix- (to locally, clast-) supported pebble conglomerate extends from base to 82.29 m (fining slightly with addition of slightly more matrix), then fines upward to a thick massive fine sand from approximately 77 m to top of FUS. **84.38 - 86.83** - Matrix-supported pebble conglomerate at base fines rapidly to coarse sand at 86.53 at which point there is another pulse of much coarser grained material. Sub-rounded to sub-angular coarse pebble to fine cobble conglomerate grades slowly upward to matrix-supported coarse-grained granule conglomerate with ≤20% pebble sized clasts to 84.70 m, then to a granule conglomerate at 84.38 m. **86.83 - 87.19** - Matrix-supported pebble conglomerate grades upward to coarse sand. **87.19 - 87.67** - Fine cobble conglomerate, matrix- to clast-supported, grades upward to coarse sand. Rapid transition from pebble conglomerate to coarse sand. **87.67 - 92.90** - Good, sharp basal contact between basal matrix- to clast-supported pebble conglomerate and underlying coarse sand at 15° to core axis. Thick, massive basal pebble conglomerate slowly fines upward to granule conglomerate at upper contact. **92.90 - 94.20** - Coarse-grained lithic sandstone fines upward to medium-grained lithic sandstone. Basal contact has flame structures from, and load casts into, the underlying unit. **94.20 - 94.48** - 2 thin, ≤1.5 cm coarse-grained sand intervals at top and bottom with approximately 9 cm thick band in middle, separated by 1-4 cm thick dark grey siltstone intervals with 20-25% coarse-grained sand sized clasts. Both lithologies are identical to underlying unit and probably represent pulses of coarse-grained material in the waning stages of the underlying Fining Upward Sequence.	0308 - 238	81.14	81.51	0.05	5.42	349.62	363.90

94.48 - 99.88 - Matrix-supported granule conglomerate grades slowly upward to coarse-grained lithic sandstone at 94.48, overlain by 20% coarse-grained sand in siltstone matrix.

99.88 - 120.12 - Medium- to coarse-grained pebble conglomerate, clast-supported, comprised of rounded to sub-rounded quartz clasts and sub-angular to angular siltstone rip-ups and clasts. Gradually fines upward to coarse grit at 116 m, coarse sand at 112 m, to medium-grained sand at 99.88 m. Coarse spaced foliation at 55°-60° to core axis.

120.12 - 120.53 - Short Fining Upward Sequence, or possible sand lense at base of preceding interval. Sharp basal scour against underlying fine sandstone. Medium-grained pebble conglomerate (identical to preceding interval) with sharp transition to medium-grained sand at 120.26 m at 20° to core axis, with opposite sense to base of unit at 120.12 m at 35° to core axis and 120.53 m at 30° to core axis.

120.53 - 121.46 - Grades from fine- (to medium-) grained pebble conglomerate comprised predominantly of quartz-rich clasts rounded to sub-rounded to sub-angular and sub-ordinate sub-angular to angular silty argillite to siltstone clasts, clast-supported. Grades gradually upward to fine-grained sand at 120.53 m.

121.46 - 124.82 - Basal contact at approximately 55° to core axis. Fine-grained pebble conglomerate comprised of sub-rounded, quartz-rich grains and a slightly higher proportion of sub-angular to angular, silty argillite to siltstone clasts, clast- to matrix-supported. Grades gradually upward to medium-grained granule conglomerate at 121.96 m, then sharp transition to medium- to coarse-grained sandstone to top of interval.

124.82 - 133.84 - Basal contact at 26° with underlying dark grey siltstone. Basal 30 cm of Fining Upward Sequence comprised of coarse-grained sand to fine-grained granule conglomerate with approximately 20% matrix-supported, sub-rounded to sub-angular, pebble-sized quartz-rich clasts. Proportion of coarse-grained clasts increases upward (coarsening upward) for 50 cm to matrix- to clast-supported pebble conglomerate, then fines upward to coarse-grained granule conglomerate at 131.14 m at which point there is a sharp transition to coarse-grained sand. Coarsens upward again for 60 cm to matrix-supported, coarse-grained granule conglomerate to fine-grained pebble conglomerate with 60% coarse clasts. Fines to coarse-grained sand by 130.20 and fine- to medium-grained argillaceous sandstone at top. Interval probably at moderately shallow angle to core axis as fine-grained argillaceous sandstone present between 127.34 - 127.55 m (probable warp in bedding cored by drill).

General Observations: Veins generally comprised of opaque milky white quartz with both diffuse and sharp contacts at moderately high angle to core axis (40° - 50°), ≤3.5 cm thick. Quartz with subordinate white dolomite at moderately high to high angle to bedding (60° to 70°), ≤0.5 cm thick, sharp contacts. Veins comprise 1-2% of conglomerate dominated sequences. There is a tan to white coloured coating along the coarse fracture surfaces and coating grains (does not react with dilute HCl - may be dolomite and/or siderite (Fe carbonate cement)). Pyrite not common but, when present, is very fine- to medium-grained, idioblastic crystals, locally enriched adjacent to some veins.

Veins:

Approximately 1% quartz and quartz + dolomite veins and veinlets throughout interval, between 0.1 - 1.5 cm thick at moderate to high angle to core axis. Quartz veins have diffuse contacts; quartz + dolomite veins have sharp contacts, both veins types planar contacts.

62.00 - 62.66 - 40% milky white quartz + dolomite veins with both sharp and diffuse contacts.

Structure:

Coarse spaced foliation weakly developed.

Fault at 40.76 m at 30° to core axis, immediately above 14 cm thick milky white quartz vein, apparently barren, with well developed, intergrown quartz crystals. Fault has grit-sized fragments of upper quartz vein and sickly green gouge (or infiltration of surface clays?). Incohesive fracture at 40.45 m at 65° to core axis.

Foliation 45 - 50°

Sulphides in Veins:

62.60 - 62.66 Milky white opaque quartz vein with approximately 1% medium-grained galena. Vugs and intergrown quartz crystals. Not sampled.

				81.14 - 81.51 m. Milky white, opaque, apparently barren quartz vein from 81.30 - 81.48. Coarse, intergrown quartz crystals and vugs indicate space filling vein growth. Coarse, granule conglomerate host enriched in pyrite, for 18 cm above vein and 6 cm below. Pyrite (15 - 20%) comprised of fine-to medium-grained, sub-idioblastic crystals which fine away from the vein contact. Another vein at 81.28, 81.12 and 81.13. Vein contacts diffuse over ≤0.2 cm at approximately 70° to core axis.							
133.84	196.96	135.00 136.00 137.00 138.00 139.00 140.00 141.00 142.00 143.00 144.00 145.00 146.00 147.00 149.00 150.00 151.00 152.00 153.00 154.00 155.00 156.00 157.00 158.00 159.00 160.00 161.00 162.00 163.00 164.00 165.00 166.00 167.00 169.00 170.00 171.00 172.00 173.00 174.00 175.00 to 202.00 202.00	15° 15° 05° 07° 10° 12° 06° 00° 05° 05° 10° 10° 12° 00° 00° 20° 00° 00° 00° 15° 10° 05° 00° 05° 05° 05° 05° 15° 07° 07° 04° 05° 08° 05° 04° 05° 05° 00° 0 - 5° 7.5°	**Lithology: Dark grey to black silty argillites and siltstones.** At very shallow angle to core axis, thinly laminated to very thin bedded, average 2-3 cm thick. Many small scale fining upward intervals. From approximately 176.0 - 188.0, very distinctive unit in which thin quartz-rich layers (≤0.5 cm thick) are strongly folded, boudinaged and/or offset across foliation planes. Medium- to very coarse-grained (≤1.5 cm long dimension), idioblastic pyrite crystals associated with these layers. Due to strong rheological contrast, these highly folded layers crumble within host siltstones. **Veins:** Several generations of veins present: 1) early light grey to milky white veins of variable thickness with straight to irregular boundaries, which have been variably deformed by foliation in bedding (folded and/or boudinaged), 2) earlier milky white quartz + creamy yellow dolomite, cross-cut and partially assimilated by later milky white quartz veins (≤2.0 cm thick) and 3) late light yellow-green veinlets (≤0.5 cm thick) which cross-cut and offset earlier, boudinaged milky white quartz veins, with straight to slightly irregular, sharp contacts. **171.33** - Milky white quartz vein, ≤2 cm thick, at 20° to core axis. Sharp, irregular contacts. **173.14** - 4 cm thick quartz + dolomite vein at 32° to core axis. Sharp, straight contacts. Dolomite as ≤0.5 cm undulose bands along contact with host sediments and as ≤0.5 cm thick discontinuous band along core of vein. Numerous other veinlets, comprised of ≤0.3 cm light grey quartz, light orange dolomite (?), folded, boundinaged and undeformed at shallow to high angles to bedding. **Structure:** Foliation moderately well developed at 20° to core axis, 20° to bedding, opposite sense to one another. 134.0 - 134.30 m Broken ground: Faults: 137.23 - approximately 30° to core axis, 20° to bedding (sub-parallel to core axis, ≤0.5 cm of gouge and chips 140.77 - bedding parallel at 12° to core axis, 0.5 cm of gouge 147.58 - 10° to core axis, 30° to bedding, ≤0.3 cm gouge 147.99 - 27° to core axis, multiple fault planes over 10 cm, sub-parallel to foliation, fault gouge 167.90 - 168.25 - Fault with broken ground, gouge on fracture surfaces 171.90 - 172.0 - Fault surface with 0.4 cm gouge at 15° to core axis. 175.33 at 30° - Two fault surfaces with clayey gouge separated by 1.5 cm 176.33 at 20° - 3 cm zone of slivered rock with clayey gouge on fracture surface 189.72 at 20° - 3 cm zone of broken rock with 1 cm clayey gouge and rock chips 199.43 at 25° - 0.3 cm gouge zone along quartz veinlet 202.40 at 45° - Two clayey gouge zones separated by 1 cm of host rock 212.00 at 35° - thin gouge zone 212.10 at 15° - 0.2 cm clayey gouge zone 212.25 at 25° - minor fault gouge along foliation surface Foliation - 27° to core axis, 37° to bedding at 151 m Core folded with dislocations and offsets along foliation planes from approximately 176.0 - 196.96 m.	0308 - 239	150.03	150.08	1.20	5.80	511.99	269.90

				Sulphides in Veins: **150.03 - 150.08 m.** Quartz vein, ≤2 cm thick, at 64° to core axis, 75° to bedding, comprised of intergrown quartz crystals and vugs, thin (≤0.1 cm), short (≤0.1 cm) bands of arsenopyrite in vein, ≤0.5 cm, Thick dolomitic margins. Approximately 5-7% fine-grained arsenopyrite along interior margin of lower dolomite band along contact with sediments. Very fine-grained pyrite enrichment in host sediments (3-5%) **165.03** at approximately 30° (upper contact) and 165.24 at approximately 70° (lower contact). Milky white quartz vein with chalky white dolomite in interior of vein and creamy yellow dolomite along margins (0.2 cm thick). Vein has irregular, sharp contacts with host rocks (which are slightly enriched in pyrite (to 2% for 8 cm on either side of vein). Contains 1-2% coarse-grained pyrite, to 0.4 cm. **Sulphides in Sediments:** ≤1% pyrite present as medium- to very coarse-grained (≤1.5 cm long dimension), idioblastic crystals disseminated throughout bedding and locally concentrated along preferred bedding horizons. Pyrite locally enriched on either side of some quartz + dolomite veins for ≤10 cm on either side. Also local occurrences of en echelon pyritic veinlets cross-cutting bedding. **Alteration:** Pyrite and ankerite as described previously, variably developed.							
196.96	213.44			**<u>Lithology: Light and Dark Grey Siltstones.</u>** Thickly laminated to very thin bedded, alternating light and dark grey siltstone similar to above but with thinner average bedding thickness (≤0.5 - 1.0 cm). **Veins:** Fewer veins than in previous interval. **Structure:** Bedding has weaker development of deformational features (i.e. low amplitude micro-folding, attenuated to boudinaged bedding and dislocations / offsets across foliation). **Sulphides in Veins:** **201.00 - 201.07 m.** Quartz vein, approximately 6 cm thick with irregular, but sharp, upper and lower contacts. Minor dolomite (≤5-7%) in patches along contact with host sediments (≤1 cm thick) and within the vein. Intergrown quartz crystals and vugs. Very coarse-grained, sub-idioblastic pyrite grains and/or fine-grained aggregate masses ≤1.5 cm (long dimension). **208.41 - 208.54 m.** Milky white quartz vein, approximately 9 cm thick at approximately 40° to core axis. Many small vugs present. Pale, creamy yellow dolomite along contacts (to 1 cm thick). Sediments pyrite-enriched (to 5%) for 8 cm above upper contact. **Sulphides in Sediments:** **200.74 - 201.00 m.** Sediments with bedding parallel to core axis. Pyrite enrichment along two quartz-rich intervals 0.4 cm thick with interbedded 0.5 cm thick dark grey siltstone, variably pyrite-enriched. Pyrite medium-grained and disseminated along 3 layer zone with ≤30-40% pyrite over ≤1.5 cm for 26 cm above upper contact of vein.	0308 - 240 0308 - 241 0308 - 242	200.74 201.00 208.41	201.00 201.07 208.54	0.03 0.12 0.01	1.55 1.71 1.55	128.95 144.67 377.78	117.50 89.10 58.00
213.44	264.55	245.23 245.90 246.20	10° 20° 15°	**<u>Lithology: Granule conglomerate</u>** Granule conglomerate-dominated succession. Heavily quartz veined sequence ranging from pebble conglomerate to minor siltstone. Series of Fining Upward Sequences in upper part of interval with overturned FUS at base.	0308 - 243 0308 - 244 0308 - 245 0308 - 246	229.93 230.17 231.80 233.84	230.17 230.26 231.93 234.00	0.01 0.02 0.07 0.00	0.96 1.80 0.37 0.94	49.90 80.53 37.89 106.19	46.50 48.70 23.00 46.90

0308 - 247	237.52	237.58	0.05	0.32	29.36	24.60
0308 - 248	237.58	237.69	0.00	0.45	49.36	23.30
0308 - 249	248.02	248.19	0.04	1.01	28.59	27.00

Fining Upward Sequences:

227.00 - 230.23 - Large lithic rip-up clasts of laminated siltstone over basal 50 cm, highly angular to angular, ≤25 cm in long dimension. Basal contact against thick quartz vein. Fines upward from basal, matrix-supported pebble (to cobble) conglomerate with granule conglomerate matrix to medium-grained granule conglomerate. Upper 20 cm comprised of alternating medium and dark grey, very thin bedded siltstones with quartz-rich layers (probably bedding parallel quartz veins to 0.5 cm thick)

236.29 - 240.78 - Basal medium-grained, clast-supported pebble conglomerate with 5% deep orange iron-spotting around clasts over basal 40 cm. Probable warp in bedding so no base exposed, appears to fine both upward AND downward. Fines upward to medium sand in sharp contact with thick quartz vein.

Overturned Fining Upward Seqeunces:

240.78 - 244.37 - Base not exposed due to suspected warp / fold in bedding. Grades downward from clast-supported, medium-grained pebble conglomerate to fine- to medium-grained lithic sandstone at 244.15 m, with 5 cm thick granule conglomerate layer, capped by foliated dark grey, 3 cm thick, silty argillite at 25° to core axis.

244.37 - 245.23 - Sharp basal contact at 23° to core axis with silty argillite at top of underlying interval. Unit grades from coarse-grained granule conglomerate to fine-grained pebble conglomerate upward to medium-grained to coarse-grained sand underlying 6 cm thick, thinly to thickly laminated, alternating light and dark grey siltstone at 18° to core axis.

245.23 - 249.00 - Sharp basal scour against underlying laminated siltstones. Unit grades from coarse-grained granule conglomerate at base to fine lithic (argillaceous) sandstone at 247.93 m, thickly laminated to thin bedded alternating light and dark grey siltstones to 248.60 m with dark grey to black silty argillite to argillite to 249.0 m. Upper contact at 25° to core axis.

249.00 - 251.82 - Sharp basal scour against underlying argillite. Approximately 30-40% pebble sized clasts in coarse-sand to medium-grained granule sized matrix at base. Fines slightly (lower proportion of coarse-grained clasts) to 251.52 m, sharp contact at approximately 80° to core axis into wispy, thinly laminated, medium grey siltstone to 249.0 m. Upper contact at 40° to core axis. Possible renewed pulse of coarse-grained material at 250.19 m at 15° to core axis. Medium-grained granule conglomerate in contact with overlying medium-grained sand (stratigraphically underlies granule conglomerate).

The facing direction of the remainder of the conglomerate interval (251.82 - 264.55 m) is uncertain. There are variations from granule conglomerate to pebble conglomerate with 1 thin (≤2.0 cm thick) argillaceous interval between 262.21 - 262.23 at approximately 40° to core axis but no unambiguous fining direction could be determined.

Veins:

214.07 - 214.40 Apparently barren, milky white quartz vein with diffuse contacts over 0.4 cm at high angle to host conglomerate. Vugs and coarse intergrown quartz crystals evident.

216.02 - 217.24 As above

217.62 - 218.32 As above

222.49 - 223.06 As above

223.19 - 224.12 As above

224.58 - 224.80 As above, upper contact sharp, irregular at approximately 40°, minor dolomite (≤5%) in core of vein. Lower contact at approximately 60° to core axis.

225.10 - 225.59 As above (214.07 - 214.40). Upper contact diffuse, gradational over 4 cm. Lower contact sharp at 50° to core axis.

225.87 - 225.92 As above, 3 milky white quartz veins coalesce into single vein, upper contact at 80° to core axis, lower contact at 35° to core axis.

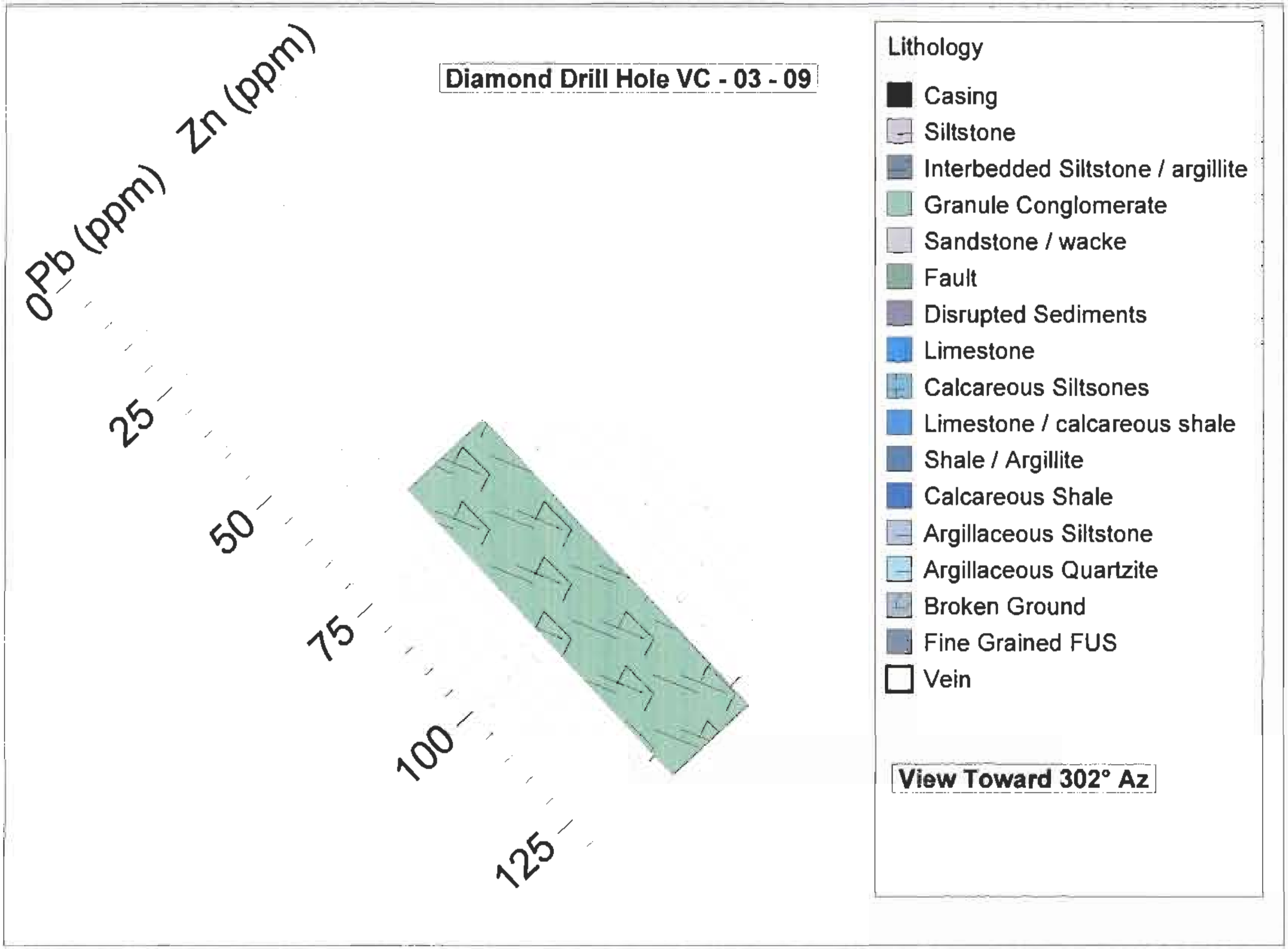
226.00 - 226.70 As above. Upper contact diffuse over approximately 3 cm at 50° to core axis. Lower contact sharp, curvilinear at approximately 50° to core axis.

239.25 - 239.78 As above. Upper contact broken, clayey fault gouge over 1 cm at 70° to core axis.

242.35 - 242.70 As above. Upper contact at approximately 70° to core axis, diffuse over 0.3 cm, irregular. Lower contact diffuse at approximately 30° to core axis.

250.97 - 251.15 Similar to preceding interval.

				Sulphides in Veins: **230.23 - 236.29** As above, however, < 1% sulphides, primarily as pyrite (to ≤2 cm diameter), as very fine- to medium-grained aggregate masses. Approximately 2% thin screens or inclusions of host argillaceous sandstone, very diffuse and quartz-rich. Minor chalcopyrite present along upper contact, associated with pyrite. **236.43** ≤1 cm thick, diffuse quartz vein with 10% deep orange-brown sphalerite and 3% galena at 75° to core axis. **237.47 - 238.52** As above. Sharp, curvilinear contact at approximately 40° (upper). 1 cm thick pyrite band at 237.55 m at 80° to core axis. Lower contact broken.. **248.02 - 248.19** As above, with highly irregular and diffuse contacts with approximately 5% pyrite. **231.80 - 231.93** m. Pyrite (5-7%) and dolomite (1-2%) portion of quartz vein. Pyrite localized along zone approximately ≤3 cm thick, oriented at approximately 60° to core axis. **233.84 - 234.00** m. Apparently barren, milky white quartz vein, coarse intergrown quartz crystals. **237.58 - 237.69** m. Apparently barren, milky white quartz vein, coarse intergrown quartz crystals. **248.02 - 248.19** m. Apparently barren, milky white quartz vein with highly irregular, diffuse contacts over 0.4 cm at high angle to host conglomerate. Vugs and coarse intergrown quartz crystals evident. Approximately 5% pyrite. **Sulphides in Sediments:** **229.93 - 230.17** m. Coarse basal sequence to Fining Upward Sequence. Approximately 5% medium- to coarse-grained, sub-idioblastic pyrite in granule conglomerate above thick vein. **230.17 - 230.26** m. Contact between pyrite-bearing base of Fining Upward Sequence and vein. Sample extends approximately 3-4 cm on either side of contact. **237.52 - 237.58** m. ≤0.6 cm band comprised of aggregate mass of medium-grained pyrite, oriented at approximately 60° to core axis.							
264.55				**End of Hole**							



Diamond Drill Hole VC - 03 - 09
0
Pb (ppm)
Zn (ppm)
25
50
75
100
125
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View Toward 302° Az

DYNAMIC EXPLORATION LTD.

HOLE NO.	VC - 03 - 09

DRILL LOG: DIAMOND DRILL CORE

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:	Lot 8123		
LOCATION - GRID NAME:			
EASTING:	501137	NORTHING:	5644223
SECTION:		ELEV:	1698 m
AZIM:	032°	LENGTH:	131.06
DIP:	-47°	CASING LEFT?:	No
CORE SIZE:			NQ
CORE STORAGE:	Vermont Creek		

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
9.14		42.25°	131.06		35.75°

DRILLING CO:	F.B. Drilling
STARTED:	10-Jul-03
COMPLETED:	14-Jul-03
PURPOSE	
CORE RECOVERY:	
LOGGED BY:	Rick Walker
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	A303027, A303027r, 0303027R3

Drill Hole VC - 03 - 09

From	To	Core Angle		Description	Sample	From	To	Gold	Silver	Lead	Zinc
m	m	m	Deg		Number	m	m	gms/T	gms/T	ppm	ppm
0.00	32.24			**Casing**							
32.24	65.11	33.53 34.00 35.00 36.00 37.00 38.00 39.00 40.00 41.00 42.00 43.00 44.00 45.00 46.00 47.00 48.00 49.00 50.00 51.00 52.00 53.00 54.00 55.00 56.00 57.00 59.00 60.00 61.00 62.00 63.00 64.00 65.11	15° 50° 80° 80° 73° 35° 37° 15° 10° 17° 20° 48° 26° 35° 60° 50° 32° 35° 20° 25° 23° 70° 30° 58° 70° 12° 80° 60° 35° 30° 70° 62°	**Lithology: Thin bedded, medium grey siltstones.** Bedding ranges from thinly laminated to thin bedded (≤20 cm). Two coarse-grained granule to fine-grained pebble conglomerate (52.15 - 52.36 and 53.90 - 55.63 m) - overturned Fining Upward Sequences. **Structure:** Interval tectonized, probable proximity to a relatively significant fault. Moderate to strong development of foliation throughout interval which overprints earlier regional foliation, probably shear related. The early, regional foliation is spaced, wispy and irregular, deformed by S_2. Some folds are related to the regional foliation while some are related to the second foliation, S_2, based on axial planar relationships. Bedding has been intensely modified by both foliations, particularly S_2, with the amount of disruption based on the angle between bedding and S_2 and the rheology of individual lithologies. Argillites and silty argillites have a very strong S_2 developed and there is little evidence of bedding or an S_1 fabric. Siltstones are dismembered, boudinaged and/or folded depending on the particular orientation to S_2. Where siltstones are adjacent to finer grained intervals, a generally modified S_1 is present. Faults: 32.55 m with abundant (≤3 cm) clayey gouge, broken ground to 33.06 m. 34.42 m at 32° to core axis, ≤1 cm clayey gouge 37.50 - 37.90 m 40.13 - 40.84 m 41.21 - 41.38 m 42.67 - 42.76 m at 25° to core axis 43.18 - 1.0 cm thick clayey gouge at 45° to core axis. Note: the above intervals may or may not be associated with broken ground and have seams of possible clayey ground but they may alternatively represent open fractures that have been infilled with fine-grained silts and clays below a significant thickness of overburden. **Veins:** **48.69 - 48.76** m - Dirty grey to milky white quartz vein with intergrown crystals and vugs. Upper contact at 75° to core axis, lower contact at 60° to core axis, approximately 6 cm thick. **49.0** m - Light grey to dirty white quartz + pale yellow dolomite vein at approximately 25° to core axis. Contacts sharp and slightly irregular. Contacts discontinuous screens of well foliated, S_2-bearing, sedimentary inclusions, rotated slightly to perpendicular to pervasive S_2 in adjacent sediments. Therefore, vein post-dates development of S_2. **50.44 - 50.52** m - Dirty white quartz vein with ≤3 cm of pale creamy yellow dolomite along upper contact and ≤0.5 cm discontinuous band along lower contact. Upper contact at 80° to core axis, lower contact at 58° to core axis. **53.75 - 53.79** m - Light grey to dirty white quartz vein, ≤3.5 cm thick at 65° to core axis. Vugs and intergrown quartz crystals. Thin veinlets as stringers from vein into host sediments undeformed by well-developed pervasive S_2 fabric. **56.15 - 56.22** m - Irregular, 1.0 - 4.0 cm thick, medium yellow-orange to orange dolomitic vein (very weak reaction to dilute HCl). Vein appears to have been broken by development of S_2 fabric, which itself appears to wrap vein and fragments, possibly coeval with development of S_2. Approximately 10-15% medium-grained, sub-idioblastic pyrite along upper margin and/or margin fragments of vein. Stringers of dolomite from vein out into sediments along S_2 planes. Sharp contacts. **58.85 m** - Mottled orange-yellow to yellow-green dolomite vein at 25° to core axis. Sharp contacts at moderate angle to S_2, apparently unaffected by S_2.	0309 - 250 0309 - 251	57.34 58.49	57.91 58.58	0.00 0.00	0.23 0.20	21.07 13.54	232.20 589.90

				60.08 - 60.18 m - Milky white quartz vein with 15% very coarse-grained, mottled yellow-orange to yellow-green dolomite crystals. Sharp, slightly irregular contacts at very shallow angle to sub-parallel to S_2 foliation. 3.5 cm thick at 25° to core axis. **57.34 - 57.91** m. Milky white quartz + medium yellow-green dolomite with light green chlorite. Upper contact at approximately 35° to core axis, cross-cut by creamy yellow dolomite veinlet ≤0.4 cm thick at 50° to core axis (approximately 80° to sample vein). Lower contact broken at approximately 65° to core axis. Earlier yellow to yellow-green dolomite vein evident in, and assimilated into, sample vein, ≤1 cm thick at 50° to core axis. Screens and/or sedimentary inclusions (tear-outs) present in core of interval, comprised of argillite with well-developed pervasive foliation. Large (≤2.0 cm) patches and diffuse bands of light green chlorite, rimmed by yellow-green dolomite in upper 25 cm of vein. Quartz content increases downward at the expense of dolomite and absence of chlorite. **58.49 - 58.58** m. Fluorite(?)-bearing quartz vein. Light to medium, translucent, medium- to coarse-grained fluorite(?) crystals in very irregular quartz veins. Vein comprised of light grey - dirty white quartz and medium yellow-orange dolomite. Lower contact sharp and irregular at approximately 20° to core axis. **Sulphides in Veins:** **43.15 - 43.22** m - Vein at 25° to core axis. Light grey to dirty white, 4.5 cm thick quartz vein, sub-parallel to S_2, margins sharp and, apparently, undeformed. ≤0.5% medium-grained disseminated pyrite. **47.82 - 47.87** m - 4 cm thick quartz vein at 52° to core axis, coarse-grained, intergrown quartz crystals and vug space in core of vein, with coarse, medium creamy yellow, bladed crystals (dolomite?) along margins as band ≤1 cm thick. Minor (≤0.5%) disseminated pyrite as medium-grained, sub-idioblastic crystals. Pyrite-enriched sediments, to 10% on either side of vein for approximately 13 cm below and 7 cm above vein. Vein contacts sharp and straight, undeformed by foliation, S_2, which is at high angle to margins. **48.54 - 48.63** m - Light grey to dirty white, translucent quartz vein with very coarse-grained mineral having pale yellow colour (very weak reaction with dilute HCl), to 2 cm in long dimension at 25° to core axis. Approximately 5-7% pyrite present as medium- to coarse-grained, sub-idioblastic crystals disseminated throughout vein and as fine-grained aggregate masses as thin (≤0.3 cm) discontinuous bands along contact. Contacts sharp and irregular at shallow to moderate angle to S_2. **52.81 - 52.96** m - Light grey to dirty white quartz veins with sharp, slightly irregular contacts at 50° to core axis, sub-parallel to S_2. Has a weak cross-cutting fabric which appears to correlate to S_1. Contains <1% sub-idioblastic, fine- to medium-grained, disseminated pyrite. Cross-cut by 0.3 cm thick, medium creamy yellow dolomitic vein at 90° to core axis.							
65.11	131.06	67.85 74.55 79.77 79.87 91.10 91.25 91.40 92.76 115.32 117.00 117.39 117.63 118.20 121.66 121.76	36° 35° 70° 20° 80° 85° 63° 70° 40° 30° 50° 20° 25° 28° 80°	<u>**Lithology: Conglomerate.**</u> Coarse-grained interval comprised of predominantly granule conglomerate, ranging from siltstone to pebble conglomerate. **Fining Upward Sequences:** **65.11 - 67.85** - Grades upward from sharp basal contact against underlying siltstone at approximately 40° to core axis. Clast supported, coarse-grained granule to fine-grained pebble conglomerate at base grades upward to fine-grained pebble conglomerate at 67.05, then fine gradually upward to a granule conglomerate at 65.16, overlain by a medium-grained, parallel laminated sand and silty argillites of the overlying sequence. **67.85 - 73.62** - 30% fine-grained pebbles, matrix-supported in a coarse-grained granule conglomerate at base. Fines gradually upward to a medium-grained sand at 72.44 (approximately 13 cm thick), then renewed pulse comprised of coarse-grained granule to fine-grained pebble conglomerate. Continues to fine upward to coarse-grained sand to fine-grained granule conglomerate at 69.79 m. Thin, ≤1.5 cm siltstone to silty argillite deformed into foliation, possible fine-grained upper layer or rip-up clast in renewed coarse-grained deposition (equivalent to those in 69.52 m). Massive coarse-grained fine pebble conglomerate between 67.95 and 69.08 overlain by thickly laminated, dark grey siltstone to silty argillite.	0309 - 252 0309 - 253	119.93 126.49	119.95 126.63	0.02 0.00	1.26 56.30	533.34 11906.00	27.00 17523.00

Faults:
73.30 - 73.37 m at approximately 40° to core axis.
73.62 m at approximately 35° to core axis
Appears to be a reversal in facing direction across the above faults

Overturned Fining Upward Sequences:
73.62 - 76.68 - Coarse-grained granule conglomerate to fine-grained pebble conglomerate fines gradually downward to coarse-grained clast- to matrix-supported conglomerate at approximately 76.61 m, relatively sharp transition to medium-grained sand with approximately 10% coarse-grained, grit-sized clasts for 14 cm, then 3 cm of medium grey coarse silt to fine sand.

76.78 - 79.77 - Sharp basal boundary at 30° to core axis of matrix- to clast-supported granule conglomerate with approximately 10% fine-grained pebble clasts and large silty argillite rip-up clast (or fold). Massive to fault at 77.64 - 77.78 m. Fine- to medium-grained pebble conglomerate fines slowly downward to coarse-grained granule conglomerate at 79.70 m, medium- to coarse-grained sandstone to 79.76 m with approximately 1.5 cm cap of silty argillite to argillite.

79.77 - 79.87 - Argillite cap to preceding interval defines fold in core in which right-way-up tops face inward, therefore, syncline. Open fold.

79.87 - 85.06 - Sharp basal contact at 50° to core axis. Coarsens upward from granule conglomerate with approximately 20% fine-grained pebble sized clasts to matrix-supported pebble conglomerate in granule sized matrix over 6 cm. Fines upward to granule conglomerate at 80.06 m, coarse sand to 87.94 m, then uppermost argillite.

85.06 - 91.10 - Sharp basal contact at approximately 75° with underlying argillite. Approximately 60% fine- to medium-sized pebbles, matrix-supported in fine-grained granule sized matrix, fines slowly upward to 20% matrix-supported, fine-grained pebbles suspended in granule conglomerate at 86.38. Renewed pulse, influx of 90% fine- to medium-grained pebbles in medium-grained granule matrix. Fines upward slowly to 85.28 m to coarse-grained sand with several 0.5 - 1.0 cm thick layers. Overlain by 0.5 - 3.0 cm thick argillite.

91.10 - 92.76 - Interval of interbedded dark and light grey siltstones and silty argillite. Thinly laminated to thin bedded (to ≤5 cm thick).

92.76 - 93.21 - Fine-grained pebble conglomerate. Clast-supported, fine-grained pebble conglomerate with 70% pebble-sized clasts in a coarse-grained granule-sized matrix. Massive unit, no bedding evident. Fines slightly upward. Sharp basal contact with underlying argillite at approximately 50° to core axis.

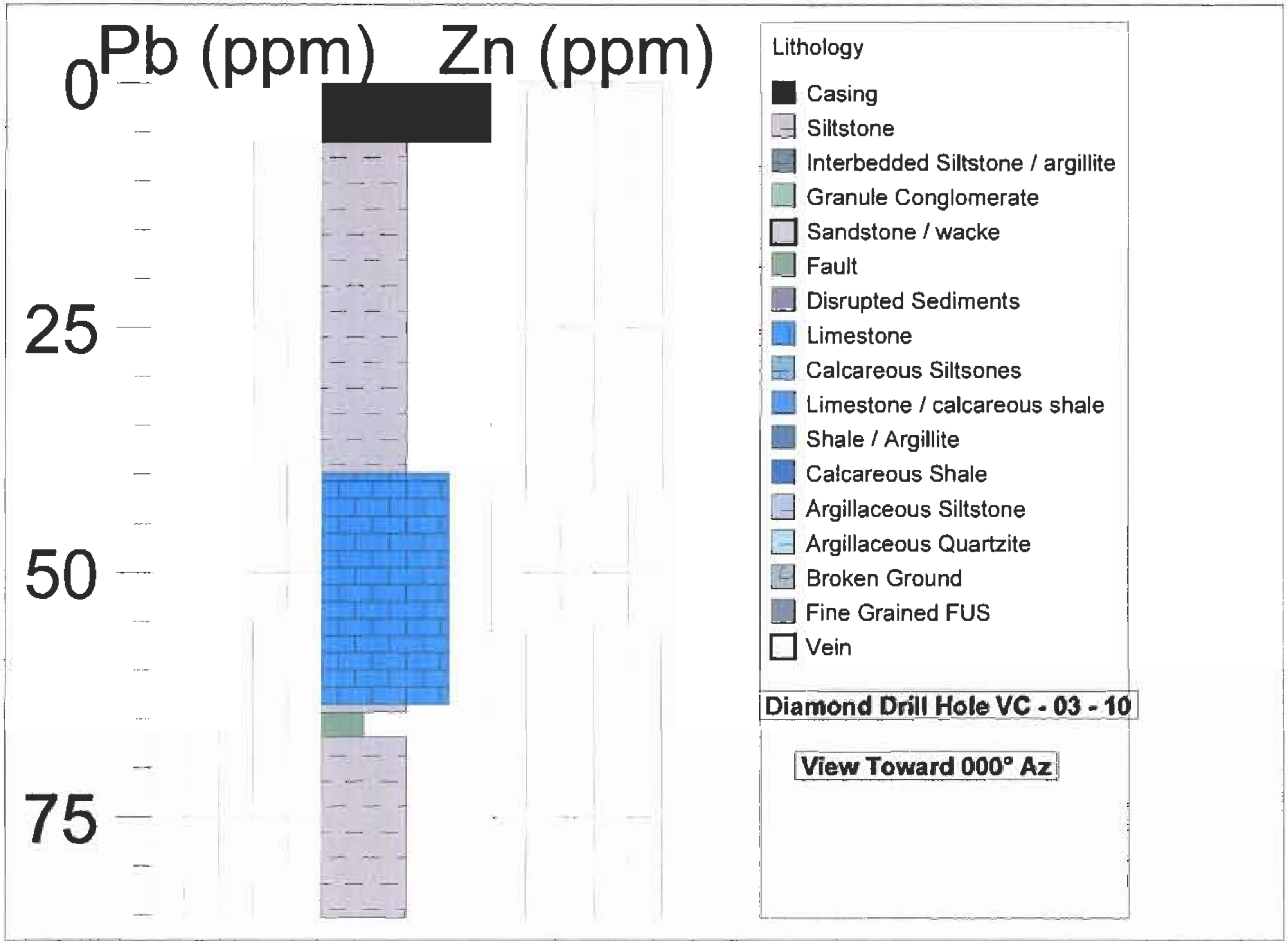
93.21 - 100.37 - Pebble conglomerate. Influx of coarse material representing new pulse overlying medium-grained granule conglomerate of previous interval. Basal contact at approximately 35° to core axis. Unit comprised of massive base of 40-50% rounded, fine pebbles suspended in medium- to coarse-grained, granule-sized matrix, to approximately 96.0 m. Fines slightly upward through slight reduction in proportion of pebbles in a coarse-grained granule sized matrix. Capped by 10 cm of black argillite.

100.37 - 102.45 - Pebble conglomerate. Basal contact of fine pebble conglomerate (70 - 80% clasts) in a medium-grained granule matrix overlying medium- to coarse-grained granule conglomerate with < 10% fine-grained, pebble-sized clasts at approximately 20° to core axis. Interval massive for approximately 1 m, then fines gradually upward to medium- to coarse-grained granule conglomerate at 100.37 m.

102.45 - 106.10 - Granule conglomerate. Approximately 20% matrix-supported, angular to sub-rounded, pebble-sized clasts suspended in a medium-grained granule conglomerate matrix in contact with 30% coarse-granule conglomerate to very fine pebble sized clasts in a coarse-grained sand to fine-grained granule sized matrix at approximately 15°-20° to core axis. Proportion of coarse-grained material increases upward for approximately 1 m to 80% fine pebble sized clasts, then decreases slowly upward to approximately 102.60 m. Upper 6 cm comprised of <10% coarse-grained granule sized clasts in a medium-grained granule sized matrix. Slightly calcareous (deep blue tinge to core) between 103.98 - 103.97 and 104.49 - 104.80 m.

106.10 - 108.50 - Granule conglomerate. Approximately 15% coarse-grained granule sized clasts with one ≤8 cm silty argillite rip-up clast in a medium-grained granule sized matrix. Proportion of coarse-grained clasts decreases upward, but size increases to fine pebble sized clasts between 107.26 - 107.70 m, then fines upward again. Upper 50 cm comprised of 20% medium- to coarse-grained granule sized clasts in a coarse-grained sand to fine-grained granule matrix.

				108.50 - 111.40 - Fine pebble conglomerate with sharp basal scour with underlying silty argillites. Angular disconformity at 15° to core axis between base of conglomerate and laminations in silty argillite. Basal contact of conglomerate at 55° to core axis. Basal portion of unit comprised of 70-80% fine pebble sized clasts suspended in medium- to coarse-grained granule sized matrix, fines slowly upward through decrease in both proportion and size of coarse clasts to ≤10% coarse-grained granule to fine-grained pebble sized clasts suspended in a fine- to medium-grained granule sized matrix. Upper 1 m of interval has relative pyrite enrichment (to ≤5%) of fine- to medium-grained, disseminated, sub-idioblastic crystals. **111.40 - 112.61** - Fine pebble conglomerate, similar to base of overlying interval. 111.95 - 112.40 m - 10% highly angular, cobble-sized argillaceous rip-up clasts to at least 9 cm in size. 111.40 - 111.95 - laminated to very thin bedded siltstone to argillaceous siltstone. Bedding deformed and discontinuous, may be fine-grained interval compressed between two thick grit sequences, or may be large rip-up clast. Basal contact at 75° to core axis. **112.61 - 113.87** - Pebble conglomerate. Similar to preceding interval. 113.10 - 113.50 - Approximately 5% highly angular silty argillite rip-up clasts ≤4 cm in long dimension. Upper 18 cm comprised of laminated silty argillite. **113.87 - 116.63** - Fine pebble conglomerate at base (80 - 90% fine pebble sized clasts suspended in medium- to coarse-grained granule sized matrix, fines rapidly upward to granule conglomerate at approximately 116.0 m and coarse-grained sandstone by 115.25 m, laminated to very thin bedded, alternating dark with subordinate light grey siltstones to approximately 114.50 m and silty argillite to argillite to the top of the interval. **116.63 - 117.78** - Approximately 8 cm base of fine-grained granule conglomerate at 15° to core axis, overlain by fine-grained pebble conglomerate to 117.39 m, fine-grained granule conglomerate to 117.0 m. Probably a folded basal sequence of conglomerate correlative to the base of the overlying sequence. **117.78 - 131.06** - Thick, homogeneous sequence of monotonous, coarse-grained sandstone to fine-grained granule conglomerate. Basal (approximately) 1.5 m comprised of coarse-grained granule to fine-grained pebble conglomerate, grades upward into monotonous sandstone sequence, probably at shallow angle to bedding. Fold between 121.66 and 121.76 m. Facing direction faces toward core of fold, therefore, syncline. ≤3 cm thick, thickly laminated to very thin bedded, alternating light and dark grey siltstone, probable top of unit, overlain by coarse-grained granule to fine-grained pebble conglomerate. **Veins:** Approximately 1-3%, predominantly quartz veins over conglomerate dominated interval, ranging from translucent grey to milky white, having diffuse (over 0.2 - 0.3 cm) to sharp contacts, ≤1 cm thick and at moderately high angles to core axis. Three thicker, milky white quartz ± highly subordinate dolomite veins, at moderately high angles to core axis between 77.10 and 82.29 m, apparently barren and ≤8 cm thick. **Sulphides in Veins:** **119.93 - 119.95** m. 0.5 cm thick at 70° to core axis, comprised of 40% medium-grained aggregates of chalcopyrite and 30% deep reddish-brown, coarse-grained sphalerite, 1% galena. **Sulphides in Sediments:** **126.49 - 126.63** m. Medium- to coarse-grained sand, homogeneous, massive with local pyrite enrichment (to 5%). Sampled for Au.							
131.06				**End of Hole**							



Pb (ppm)
Zn (ppm)
0
25
50
75
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
Diamond Drill Hole VC - 03 - 10
View Toward 000° Az

DYNAMIC EXPLORATION LTD.

HOLE NO.	VC - 03 - 10

DRILL LOG: DIAMOND DRILL CORE

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:	Lot 6662		
LOCATION - GRID NAME:			
EASTING:	500920	NORTHING:	5644475
SECTION:		ELEV:	1886 m
AZIM:		LENGTH:	85.34
DIP:	-90°	CASING LEFT?:	No
CORE SIZE:		NQ	
CORE STORAGE:		Vermont Creek	

SURVEY

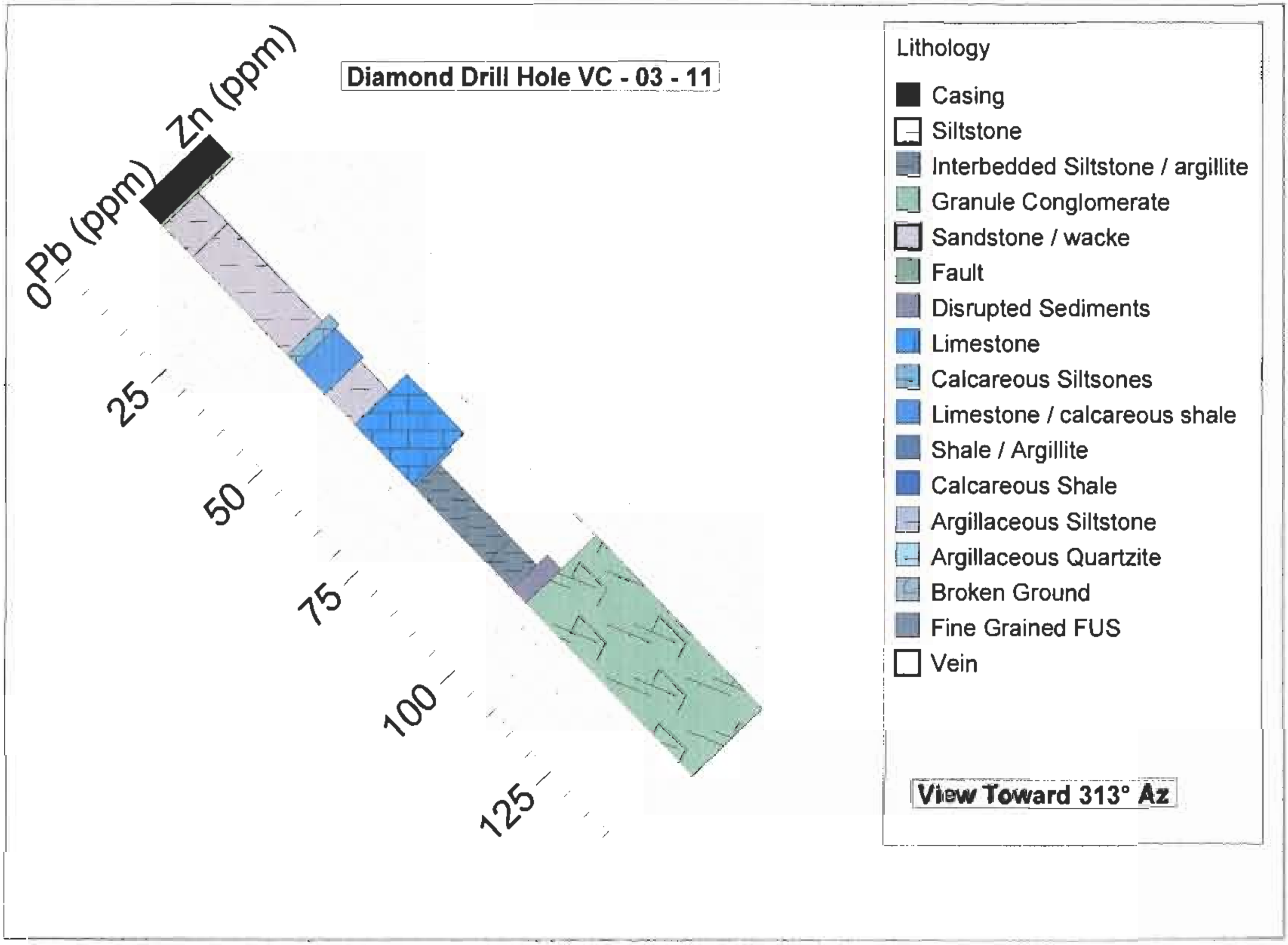
DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
85.34		90°			

DRILLING CO:	F.B. Drilling
STARTED:	15-Jul-03
COMPLETED:	16-Jul-03
PURPOSE	
CORE RECOVERY:	
LOGGED BY:	Rick Walker
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	A303027, A303027r, 0303027R3

Drill Hole VC - 03 - 10

From	To	Core Angle		Description	Sample	From	To	Gold	Silver	Lead	Zinc
m	m	m	Deg		Number	m	m	gms/T	gms/T	ppm	ppm
0.00	6.10			**Casing**							
61.00	39.94	6.00	87°	**Lithology: Alternating siltstones**.	0310 - 254	12.00	12.19	0.00	0.27	43.53	117.20
		7.00	88°	Alternating light and medium to dark grey siltstones, thickly laminated to very thin bedded, average between	0310 - 255	34.70	35.15	0.00	0.40	48.47	48.50
		8.00	55°	0.5 - 1.0 cm over top of interval, increasing in thickness downhole to 1-2 cm. Several slightly calcareous to calcareous							
		9.00	70°	zones between 18.46 and 23.90 m.							
		10.00	82°								
		11.00	82°	**Veins:**							
		12.00	74°	**20.93 - 20.95** - ≤2.5 cm thick, milky white quartz vein at approximately 75° to core axis, sharp contacts.							
		13.00	70°	**29.93 - 29.97** - Banded 4 cm thick quartz + dolomite vein at approximately 80° to core axis, sharp contacts.							
		14.00	70°	**37.08 - 37.18** - 9.5 cm thick milky white quartz vein with large vugs (to 2 cm long dimension) and large							
		15.00	79°	intergrown quartz crystals.							
		16.00	74°	Minor thin quartz, quartz + dolomite and dolomite veinlets, variably deformed to undeformed, at moderate to							
		17.00	78°	high angles to core axis.							
		18.00	80°								
		19.00	67°	**Structure:**							
		20.00	77°	Foliation at shallow angle to parallel to core axis. Foliation moderately well developed as pressure solution							
		21.00	85°	cleavage in silty argillite, particularly adjacent to siliceous horizons (probably due to development of local							
		22.00	90°	pressure gradient).							
		23.00	85°								
		24.00	80°	**Sulphides in Sediments:**							
		25.00	86°	Pyrite varies from 1 to 15%, as medium- to coarse-grained, sub-idioblastic crystals disseminated							
		26.00	86°	through rock or locally concentrated along more siliceous layers. Alternatively, present as abundant							
		27.00	85°	sub-idioblastic to xenoblastic, medium-grained crystals disseminated through much of the interval.							
		28.00	85°	**12.00 - 12.19** m. Alternating, very thin bedded siltstones with approximately 20% medium-grained,							
		29.00	83°	sub-idioblastic to xenoblastic pyrite crystals disseminated throughout interval. Sampled for Au.							
		30.00	80°	**34.70 - 35.15** m. Local zone of pyrite enrichment along preferred bedding planes and along siliceous							
		31.00	75°	tension gashes. Pyrite ranges from fine- to coarse-grained (to 0.5 cm diameter), localized along							
		32.00	60°	siliceous zones (bedding and veins). Veins discontinuous, en echelon and spaced approximately							
		33.00	20°	1-4 cm. Sampled for Au.							
		34.00	25°								
		35.00	60°	**Alteration:**							
		37.00	60°	Variable development of ankerite, controls on development unknown.							
		38.00	64°								
39.94	63.48	40.00	75°	**Lithology: Ruth Limestone.**	0310 - 256	55.11	55.24	0.02	0.46	80.61	30.60
		41.00	83°	Majority of interval has strong reaction to dilute HCl. Bluish tinge to interval and smooth cored surface. Interval very thin to	0310 - 257	55.79	56.03	0.04	1.77	350.36	46.30
		42.00	74°	thin bedded (0.5 - 15 cm, average 6-10 cm). Interval comprised of alternating medium blue-grey and light grey to dirty							
		43.00	75°	white limestones.							
		44.00	86°								
		45.00	80°	**Veins:**							
		46.00	64°	**52.72 - 53.37** - Irregular, milky white calcite vein at very shallow angle to core axis (0° - 5°). Sharp contacts,							
		47.00	50°	highly irregular to relatively straight. Cross-cuts earlier veins and veinlets ≤3.5 cm thick.							
		48.00	84°								
		49.00	30°	**Structure:**							
		50.00	58°	**49.0 - 56.1** Interval moderately deformed with discontinuous and folded bedding. Disharmonious folds							
		54.00	66°	evident in which similar, isoclinal folds undergo transition (over 10 cm) to box folds.							
		56.80	45°								

		59.00 60.00 61.00 62.00 63.00	50° 35° 40° 55° 60°	**Sulphides In Veins:** **47.53** - Mineralized milky white quartz vein, 1.5 cm thick at 75° to core axis. 3-5% reddish-orange sphalerite, 2-3% galena and 1-3% chalcopyrite. Sphalerite appears to be zoned, from reddish-orange cores to sickly yellow-green rims with black specks throughout. Chalcopyrite appears to be associated preferentially with galena, occurring as separate small aggregate masses and at, or along, the margin of galena grains. Vein has sharp contacts. **55.79 - 56.03** m. Approximately 3.0 cm thick milky white calcite vein at approximately 20° to core axis. Sharp contacts with host limestone. Pyrite present as very fine-grained aggregates, localized within vein over lower half of cored interval (35-40%) and along contacts over upper half (10-20%). **Sulphides In Sediments:** **55.11 - 55.24** m. Silty argillite to argillaceous interval in limestone, thinly laminated to very thin bedded (≤1 cm). Approximately 4% pyrite, locally enriched along calcareous laminations, fine- to coarse-grained (to 0.4 cm diameter) sub-idioblastic crystals.							
63.48	64.30	64.00	58°	**<u>Lithology: Alternating siltstones.</u>** Medium to dark grey siltstones and silty argillites. Slightly calcareous. Marked difference between the Ruth Limestone and the underlying siltstone sequence. Bedding thinly laminated to very thin bedded. Moderately well developed foliation at very shallow angle to core axis.							
64.30	66.84			**<u>Lithology: Fault Zone</u>** Incohesive core, recovery of short segments, silvers and rounded pebbles to grit. Fine clayey gouge.							
66.84	85.34	68.00 69.00 70.00 71.00 72.00 74.00 77.00 78.00 79.00 80.00 81.00 82.00 83.00 84.00 85.00	15° 65° 40° 22° 23° 60° 35° 40° 35° 40° 20° 38° 30° 25° 25°	**<u>Lithology: Argillaceous siltstone.</u>** Thinly to thickly laminated, locally very thin bedded, medium to dark grey silty argillite to argillaceous siltstone.							
85.34				**End of Hole**							



Diamond Drill Hole VC - 03 - 11
0
Pb (ppm)
Zn (ppm)
25
50
75
100
125
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View Toward 313° Az

DYNAMIC EXPLORATION LTD.

DRILL LOG: DIAMOND DRILL CORE

HOLE NO.	VC - 03 - 11

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:	Lot 6662		
LOCATION - GRID NAME:			
EASTING:	500920	NORTHING:	5644475
SECTION:		ELEV:	1886 m
AZIM:	043°	LENGTH:	143.25
DIP:	-46°	CASING LEFT?:	No
CORE SIZE:		NQ	
CORE STORAGE:	Vermont Creek		

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
0		41°	112.77		37.5°

DRILLING CO:	F.B. Drilling
STARTED:	16-Jul-03
COMPLETED:	17-Jul-03
PURPOSE	
CORE RECOVERY:	
LOGGED BY:	Rick Walker
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	A303493

Drill Hole VC - 03 - 1[illegible]

From	To	Core Angle		Description	Sample	From	To	Gold	Silver	Lead	Zinc
m	m	m	Deg		Number	m	m	gms/T	gms/T	ppm	ppm
0.00	5.49			**Casing**							
5.49	6.14			**Lithology: Granule conglomerate** Fining Upward Sequence. Pebble conglomerate at base, fining upward to medium- to coarse-grained sandstone							
6.14	13.80	7.00 8.00 9.00 10.00 11.00 12.00 13.00	20° 18° 25° 31° 24° 35° 31°	**Lithology: Alternating Siltstone.** Interval predominantly light coloured siltstone, thinly laminated to very thin bedded; to 3 cm, average 0.5 - 1.0 cm; with medium to dark grey, thinly laminated interbedded siltstone laminae. **Veins:** **10.90 - 11.03** - Approximately 4.5 cm thick, light grey to dirty white quartz vein at 26° to core axis. Approximately 1 cm of tan coloured, clayey gouge (or surface derived clay) on both margins. Relatively abundant vugs. **Structure:** Foliation moderately well developed on either side of thin siliceous intervals (possibly starved ripples of fine sand), almost perpendicular to bedding and at high angle to core axis. **Faults:** 6.50 - 6.55, 7.40 - 7.77 - Two faults, both with clayey gouge and 14' missing over interval. Therefore, fault thickness and location of 2nd fault uncertain. **Sulphides in Sediments:** Medium to coarse-grained pyrite also preferentially associated with more siliceous intervals, locally ro 20% pyrite over ≤1.5 cm.							
13.80	38.24	12.00 13.00 14.00 15.00 16.00 17.00 18.00 19.00 20.00 21.00 22.00 23.00 24.00 25.00 26.00 27.00 28.00 29.00	35° 31° 30° 24° 30° 23° 25° 32° 50° 24° 29° 24° 35° 28° 34° 32° 36° 54°	**Lithology: Alternating Siltstones.** Predominantly dark grey, thinly laminated to very thin bedded (to 6 cm thick, average 1-3 cm) with subordinate light to medium grey, thinly laminated to very thinly bedded (≤4 cm thick, average 2 cm). Otherwise similar to preceding interval. **17.20 - 17.80 m** - Approximately 2 cm thick light grey to dirty white quartz vein at approximately 15° to core axis. Deformed into low amplitude (approximately 1 - 2 cm), low wavelength (approximately 1.5 - 3.0 cm) similar folds, limbs locally attenuated and broken. Contains 1-3% fine- to subordinate medium-grained pyrite oriented in stringers approximately perpendicular to vein margins. Contacts sharp. **Structure:** **Faults:** **28.40 - 29.27** m - Crush zone at approximately 5°-10° to core axis, approximately 1.0- 3.0 cm thick with siltstone chips oriented approximately perpendicular to bounding contacts. **37.70 - 38.24** m - Moderately high strain zone. Bedding variably offset along foliation planes. Silica added as veinlets and/or silica-enriched layers parallel to foliation. Approximately 25-30% silica added.							

38.24	40.73	30.00 31.00 32.00 33.00	50° 50° 52° 61°	**<u>Lithology: Alternating Siltstones.</u>** Similar to preceding interval except increasingly calcareous proximal to underlying limestone.							
40.73	47.88	34.00 35.00 36.00 37.00 38.00 39.00 40.00 41.00	54↑ 61° 63° 50° 50° 71° 70° 77°	**<u>Lithology: Limey siltstones to silty limestones.</u>** Thick laminated to thin bedded (to 20 cm; average 4-7 cm thick). Less pronounced bluish tinge to interval than Ruth Limestone (Unit P Limestone?). **Sulphides in Sediments:** Pyrite as in previous intervals, however, tends to have calcite filled pressure shadows.							
47.99	55.71	42.00 43.00 44.00 45.00 46.00 48.40	81° 84° 87° 77° 90° 75°	**<u>Lithology: Siltstones.</u>** Predominantly light grey siltstones, thickly laminated to very thin bedded, alternating with very thickly laminated, medium to dark grey siltstones and silty argillites. Predominantly thickly laminated to very thin bedded (≤1.5 cm) from 47.99 - 51.30 m. Slightly calcareous from 53.30 m to end of interval.							
55.71	70.54	49.00 50.00 51.00 52.00 53.00 54.00 55.00 56.00 57.00 58.00 59.00 60.00 61.00 62.00 65.00 66.00 70.00	74° 87° 74° 70° 70° 80° 80° 66° 56° 63° 64° 60° 57° 68° 40° 53° 35°	**<u>Lithology: Limestone dominated succession.</u>** Thickly laminated to very thin bedded (to 6 cm; average 1-3 cm). Locally graphitic, particularly around veins and in argillaceous intervals. Minor pyritic intervals as in previous intervals. Limestone to limey shale — calcareous 55.71 - 58.64 — 65.57 - 65.80 59.67 - 60.72 — 66.02 - 66.15 61.86 - 63.55 68.08 - 68.70 70.20 - 70.54 — Remainder slightly calcareous to non-calcareous **Veins:** **56.11 - 56.28** m Quartz + calcite vein , broken, irregular, sharp contacts. Very coarse intergrown quartz + calcite crystals into large vug. **61.95 - 67.40** m. Approximately 10-20% quartz ± calcite and calcite ± quartz veining. Veins of multiple generations at variety of orientations to core axis. Second generation comprised of thin calcite veinlets sub-parallel to the foliation, between 0.1 - 0.3 cm thick. First generation appear to be silica-enriched with pyrite over intervals up to 1.5 cm thick. Margins irregular, modified by pressure shadows around pyrite crystals and foliation. Foliation well developed immediately adjacent to quartz-pyrite intervals. Probably silicified bedding horizons. Later veins (uncertain relationships regarding timing): 1. Calcite ± quartz ± dolomite veins - highly irregular, sharp contacts. Small inclusions of host rocks and wedge-shaped apophyses of vein material into sediments, terminating over ≤4 cm. 2. Quartz ± calcite ± dolomite veins - similar to above, quartz dominant. Both types of veins have medium- to coarse-grained, intergrown quartz crystals ± vugs (open cavities). May contain minor pyrite (≤2%) as fine- to medium-grained, disseminated, idioblastic crystals. **Structure:** **62.78** - Core of parasitic anticlinal fold in core. Broad, open fold with moderately steep eastern (upper limb) and moderately shallow western (lower) limb. Bedding moderately disrupted from 62.60 to end of interval, bedding dislocated and deformed along foliation. Offsets ≤2 cm common, bedding showing evidence of warps and folds over diameter of core. **65.57 - 65.80** - Highly angular breccia comprised of silty argillite fish aligned in continuous bands to discontinuous fish along foliation with approximately 40% interbanded to interstitial calcite. Locally enriched pyrite (≤4%) comprised of medium- to coarse-grained, idioblastic crystals (to 0.5 cm diameter) with pressure shadows parallel to foliations.	0311 - 258 0311 - 259 0311 - 260 0311 - 261 0311 - 262	64.16 66.30 66.52 66.80 67.10	64.25 66.52 66.80 67.10 67.33	0.00 0.43 0.15 0.01 0.01	0.507 0.713 0.905 0.482 0.348	18.96 102.97 66.81 23.56 25.75	83.1 22.3 35.9 30.4 55.6

66.02 - 66.15 - Coarse breccia. Highly angular sedimentary fragments (≤2.0 cm) in approximately 25% interstitial calcitic matrix.

66.62 - 67.10 - Medium- to coarse-grained sedimentary breccia with approximately 60-65% interstitial calcitic matrix. Sedimentary breccia clasts highly angular (≤2 cm in long dimension) with a moderately well defined preferred orientation sub-parallel to foliation. Upper 20 cm includes breccia clasts of quartz + calcite vein with rind of silty argillite wrapping vein clasts. Upper portion of interval relatively pyrite enriched (to 10%), comprised of medium- to coarse-grained, sub-idioblastic to idioblastic pyrite associated with silty argillite along deformed preferred horizons. Fine- to medium-grained, sub-idioblastic pyrite crystals disseminated throughout breccia, comprising approximately 5% by volume.

Sulphides in Veins:

60.06 m - Approximately 2 cm thick milky white calcite vein at 70° to core axis. Approximately 15-20% red-brown sphalerite, 10-15% galena and 10-15% pyrite.

66.30 - 66.52 m. Broken quartz + calcite ± dolomite vein. Lower contact sharp but irregular with incipient breccia along boundary with host sediments (over approximately 1.0 cm). Inclusions of sedimentary clasts and apophyses of vein material comprise lower contact. Approximately 3-5% fine- to medium-grained pyrite in vein as fine-grained aggregate masses (0.2 x 0.4 cm) and as disseminated medium- to coarse-grained, sub-idioblastic crystals, preferentially associated with sedimentary inclusions. Thin band of very fine-grained pyrite approximately 0.5 cm above lower contact and band of fine-grained to very coarse-grained (1.0 cm long dimension) pyrite between 0 and 2 cm of contact with vein (pyritic band inclined at approximately 20° to vein contact in host sediments). Sampled for gold.

Sulphides In Sediments:

64.16 - 64.25 m. Carbonaceous (graphitic) argillite to silty argillite with boudinaged veins. Interval contains two calcite ± quartz veins, both attenuated to boudinaged. Upper vein approximately 1.0 cm thick at approximately 60° to core axis. Second vein approximately 3.0 cm thick and boundinaged. Both comprised of a high proportion of calcite with subordinate quartz. Veins have a fine tiger striped appearance comprised of light grey to dirty white calcite ± quartz and medium, mottled grey, fine-grained dolomite, calcite and possible very fine-grained sulphides (possibly arsenopyrite) in thin, irregular columns to bands oriented at a high angle to vein margins. Sampled to test for sulphides (arsenopyrite) and gold. Deformed foliation planes around vein and boudinaged vein graphitic. Interval locally doubled due to compressional offset across foliation.

66.52 - 66.80 m. Interval containing coarse-grained (to 0.5 cm long dimension), sub-idioblastic pyrite crystals. Interval comprised of pyrite-enriched upper portion of breccia interval (see description for this interval) and overlying sediments. Pyrite appears to be localized along preferred horizons. Sampled for gold.

66.80 - 67.10 m. Lower portion of breccia interval (as previously described). Sampled for gold.

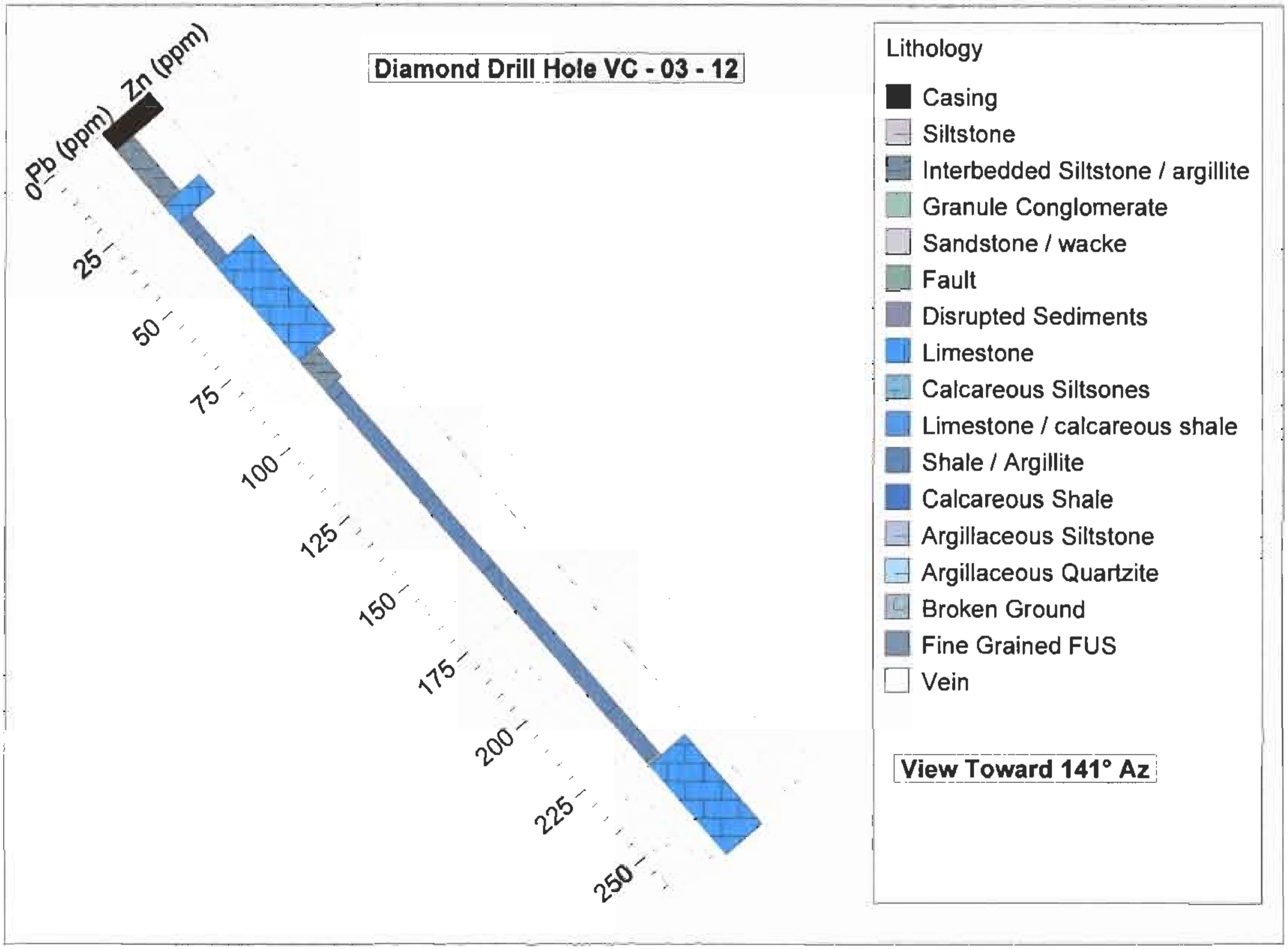
67.10 - 67.33 m. Deformed incipient breccia to micro-breccia underlying previously described breccia interval. No single bedded horizon is evident in interval, which has a disrupted texture but no predominant preferred horizon. Two irregular quartz ± calcite + dolomite veins present, one in middle of interval (≤1.0 cm thick) and the other at the base (approximately 1.5 cm thick), both of which appear to have been boudinaged. Both have sharp contacts with host sediments. Lower vein has minor dolomite along margins in zone extending to ≤0.4 cm from contact with host sediments. Veins contain ≤1 % fine- to medium-grained, sub-idioblastic to idioblastic pyrite. Very coarse-grained (to 1.5 cm long dimension) sub-idioblastic pyrite crystals. Sampled for gold.

70.54	71.31			**<u>Lithology: Calcareous siltstone to shaley limestone.</u>** Thinly laminated (to very thinly bedded) argillaceous interval with high proportion of calcite in matrix. **Structure:** Strong development of foliation with increasing deformation / offset of bedding toward base of interval. Lower 15 cm micro-breccia, similar to 65.57 - 65.80 m. Pressure shadows around pyrite, therefore pyrite crystals present before deformation resulting in foliation. **Sulphides in Sediments:** Pyrite content increases toward base of interval (≤1% to 3%) as does the size of idioblastic crystals (medium-grained to coarse-grained).							
71.31	90.00	72.00 73.00 74.00 75.00 76.00 77.00 78.00 80.00 81.00 82.00 83.00 84.00 85.00 86.00 87.00 88.00 89.00	67° 20° 63° 50° 52° 47° 52° 53° 47° 47° 43° 43° 56° 47° 44° 49° 50°	**<u>Lithology: laminated siltstone to silty argillite.</u>** Predominantly medium to dark grey. Bedding ranges from thinly laminated to very thin bedded (0.1 cm to ≤1.5 cm, average 0.2 - 0.4 cm). Highly subordinate light grey, silicified pyritic horizons to 0.5 cm thick comprise approximately 5% or less of interval. Pyrite along these horizons varies from bands of fine-grained pyrite to very coarse-grained, idioblastic crystals (≤1.0 cm diameter). Pyrite comprises between 40%-90% of such intervals. **Veins:** **77.60 - 77.90** m - Approximately 1.5 cm thick dolomite + quartz vein at 17° to core axis. Offset at 77.74 m by approximately 2.5 cm, having dextral sense (east side down) when oriented with foliation. Sharp contacts with host sediments. Silicified pyrite horizons can be traced through vein whereas bedding truncated and offset, therefore, probably bedding parallel veins rather than bedding. **Structure:** **72.26 - 73.10** m. Parasitic fold pair, with anticlinal closure at 72.34 m and synclinal closure at 72.73 m. Both fold closures broad and open, with limb at high angle to foliation and hinge areas showing offset across foliation. Limb at shallow angle to foliation attenuated (similar shear) with little evidence of deformation. Relatively homogeneous relationship between bedding and foliation over interval, with bedding generally at shallow angle to moderately well developed foliation with little evidence of offset / deformation. **Sulphides in Veins:** **71.37 - 71.44** m. Coarse-grained calcite with highly subordinate quartz + dolomite vein. Upper contact at 67° to core axis, lower at 55°. Very coarse-grained, intergrown calcite crystals with interstitial quartz (approximately 10%) and dolomite (30%). Approximately 6 cm thick vein with sharp contacts. 0.5% fine-grained pyrite crystals along lower contact. Sampled for gold. **Sulphides in Sediments:** **78.33 - 78.56** m. Approximately 7 - 10% coarse- to very coarse-grained (≤1.0 cm long dimension), sub-idioblastic to idioblastic pyrite, with accompanying pressure shadows, disseminated along preferred bedding horizons. Approximately 30-35% fine-grained, sub-idioblastic to xenoblastic ankerite porphyroblasts. Sampled for gold. **78.56 - 78.72** m. Four separate silicified, pyritic intervals between 0.2 and 1.0 cm thick, parallel to bedding. Each horizon comprised of locally enriched pyrite to 90%, comprised of fine- to medium-grained, sub-idioblastic to idioblastic pyrite crystals. Horizons show evidence of pinch and swell attenuation to incipient boudinage (thin horizons). Sampled to test possible bedding parallel veins for gold. **Alteration:** Variable development of ankerite, from 0% to 40%, fine- to medium-grained porphyroblasts.	0311 - 268 0311 - 269 0311 - 270	71.37 78.33 78.56	71.44 78.56 78.72	0.00 0.01 0.01	0.184 0.102 0.279	33.6 33.73 94.56	70.9 33.6 60.2

90.00	96.56	90.00 91.00 92.00 93.00 94.00 95.00 96.00	57° 54° 48° 48° 44° 48° 58°	**Lithology: Very thinly bedding siltstones to silty argillites.** Broadly similar to previous interval except: gradual transition to slightly thicker beds (0.1 - 3.0 cm; average 1.0 cm thick), overall lighter colour, lower proportion of pyrite and ankerite porphyroblasts. Sediments slightly coarser so medium grey rather than medium- to dark grey and weakly to moderately well developed foliation. Gradual transition from approximately 85 m to 90 m. Top of interval chosen at first light coloured siltstone bed. **Veins:** **94.97 - 95.10** m. Approximately 6.5 cm thick quartz + dolomite vein at approximately 30° to core axis. Contacts sharp and irregular with approximately 20-30% silty argillite inclusions over basal 4.0 cm of vein. No apparent sulphides. **Sulphides in Sediments:** Pyrite porphyroblasts rare below 87.0 m. Pyrite content increases slightly (from <<1% to approximately 1-3%) from 93.0 m to base of interval. Basal two metres comprised of possible sub-idioblastic (to xenoblastic), coarse-grained ankerite and highly subordinate pyrite. However, "ankerite" appears to have sub-resinous to resinous lustre and may include possible sphalerite. Interval moderately sheared at 94.48 m and strongly sheared at 96.56 m, at which point core begins to lose its cohesion in underlying fault zone. **Alteration:** Size of ankerite porphyroblasts begins to increase, from fine-grained (≤0.1 cm) to ≤0.4 cm. **94.48 - 94.97** m. Xenoblastic to sub-idioblastic ankerite porphyroblasts to 0.3 cm comprise approximately 25-30% by volume. Minor coarse-grained, sub-idioblastic pyrite porphyroblasts. Sampled to assess ankerite as possible sphalerite and to test for gold adjacent to fault (shear-hosted gold) **95.10 - 95.43** m. Similar to above. **95.43 - 96.00 m.** Similar to above. Moderately strong development of shear fabric at approximately 35° to core axis, 20° to bedding. **96.00 - 96.56** m. Similar to above. Strong development of shear fabric at approximately 38° to core axis, 40° to bedding.	0311 - 263 0311 - 264 0311 - 265 0311 - 266 0311 - 267	94.48 94.97 95.10 95.43 96.00	94.97 95.10 95.43 96.00 96.56	0.00 0.00 0.01 0.01 0.00	0.076 0.216 0.038 0.058 0.024	12.78 49.23 5.48 9.83 2.87	92.8 101.9 97.6 75.7 93.1
96.56	99.70			**Lithology: Strongly sheared zone.** It appears that lithological unit above becomes increasingly sheared downward, with associated loss of cohesion in core. Interval has strongly developed preferred orientation. Upper boundary at faulted quartz and dolomite vein, oriented at 23° to core axis, with 3.0 cm thick zone of fault gouge with cataclastic fragments to 1.0 cm (long dimension) comprised of host sediments and overlying quartz vein. Several intervals of fault gouge present with 41 cm of interval missing (probably fault gouge washed away between approximately 98.0 m and 99.25 m) **Sulphides in Sediments:** **99.34 - 99.68** m. Pyritic sheared silty argillite. Interval of relative pyrite enrichment (to approximately 15%) and ankerite (to 10%) in moderately to strongly sheared, silty argillites between two ≥3.0 cm thick quartz veins. Pyrite sub-idioblastic to idioblastic and medium- to coarse-grained (0.1 to 1.0 cm diameter). Strongly sheared against bounding veins with strain gradient diminishing to middle of interval (to weakly sheared). Sampled for gold / sphalerite.	0311 - 271	99.34	99.68	0.05	1.226	31.57	12
99.70	100.12			**Lithology: Fault Zone** Fragments of angular quartz + dolomite and dolomite clasts due to cataclasis in fault zone. Large fragments of quartz + dolomite and dolomite fragments from 0.5 to >6 cm (long dimension) suspended in fault gouge (sheared silty argillites). Fault gouge incohesive with no preferred orientation.							

				Veins: Approximately 4 cm thick light grey to dirty white quartz vein at 18° to core axis at base of interval. Upper contact sharp against recessive, incohesive fault gouge. Basal contact sharp against coarse sand to fine granule conglomerate.							
100.12	143.25	100.39 101.00 104.40 111.00 112.68 114.98 115.51 119.13 119.56 122.17	52° 52° 52° 58° 60° 57° 45° 43° 60° 38°	<u>**Lithology: Conglomerate**</u> Ranging from coarse sand to medium-grained pebble conglomerate. **Fining Upward Sequences:** **100.39 - 100.79** m - Medium-grained sand to 20 cm alternating, interbedded, very thin bedded sand to argillite cap. **100.79 - 110.95** m - 18 cm, predominantly argillite cap, coarse sand to fine granule conglomerate at base. **110.95 - 112.68** m - Medium-grained granule conglomerate base fines upward to 6 cm argillite cap. **112.68 - 114.98** m - Coarse-grained granule to fine pebble conglomerate base fines upward to 8 cm argillite cap. **114.98 - 115.51** m - Coarse-grained sand to fine-grained granule conglomerate at base fines upward to medium- to coarse-grained sand at top. **115.51 - 115.59** m - 2.5 cm thick medium-grained granule conglomerate overlain by 5.5 cm thick silty argillite. **115.59 - 116.28** m - Coarse-grained granule conglomerate to fine-grained pebble conglomerate at base fines to coarse-grained sand at 115.76 m, overlain by 4 cm of alternating medium and dark siltstone, then 13 cm of silty argillite to argillite. **116.28 - 116.89** m - Coarse-grained granule conglomerate at base fines upward to medium-grained granule conglomerate at top. **116.89 - 119.18** m - Coarse-grained granule to fine-grained pebble conglomerate at base fines upward to medium- to coarse-grained sand at 116.95 m, capped by 6 cm of argillite. **119.18 - 119.56** m - Coarse-grained granule conglomerate at base fines upward to coarse-grained sand to fine-grained granule conglomerate at top. **119.56 - 120.45** m - Coarse-grained granule conglomerate at base fines upward to medium-grained sand at top with 0.3 cm thick argillite layer. **120.45 - 121.00** m - Coarse-grained granule to fine-grained pebble conglomerate at base fines upward to coarse-grained sand at top **121.00 - 121.43** m - Coarse-grained granule to fine-grained pebble conglomerate at base fines upward to coarse-grained sand at top **121.43 - 122.17** m - Coarse-grained granule conglomerate to fine-grained pebble conglomerate at base, fines upward to coarse-grained sand to fine-grained granule conglomerate at top. **122.17 - 122.57** m - Fine- to medium-grained granule conglomerate at base fines upward to fine- to medium-grained sand at top. **122.57 - 124.17** m - Medium- (to coarse-) grained granule conglomerate at base fines upward to fine- to medium-grained sand at top. **124.17 - 127.45** m - Coarse-grained granule to fine-grained pebble conglomerate at base fines upward to fine- to medium-grained sand at top. **127.45 - 129.74** m - Coarse-grained granule conglomerate at base fines upward to medium-grained sand at top. **129.74 - 131.16** m - Coarse-grained granule (to fine-grained pebble) conglomerate at base fines upward to medium- to coarse-grained sand at 129.85 m, overlain by 11 cm of alternating light and dark grey laminated siltstone. **131.16 - 131.74** m - 3 cm thick interval of coarse-grained granule conglomerate at base, overlain by coarse-grained sand to fine-grained granule conglomerate, fines upward to medium- to coarse-grained sand at 131.20 m. Upper interval broken, appears to be medium-grained sand. **131.74 - 139.11** m - Coarse-grained sand to fine–grained pebble conglomerate at base, fines upward to alternating fine-grained sand and siltstone at 131.95 m. Interval capped by 13 cm of silty argillite with 30% ankerite porphyroblasts, above quartz vein. **139.11 - 143.25** m - Coarse-grained granule (to fine-grained pebble) size clasts in medium- to coarse-grained sandy matrix.	0311 - 272	131.74	131.88	0	0.073	7.22	131.7

				Veins: **104.86** m - 2 cm thick quartz vein at 38° to core axis, intergrown quartz crystals and vug space **105.15** m - 2.5 cm thick quartz vein at 27° to core axis, intergrown quartz crystals and vug space **105.30** m - 2 cm thick quartz vein at 67° to core axis, as above **107.88** m - 6.5 cm thick quartz vein at 30° to core axis, as above **108.00** m - Approximately 1.0 cm thick quartz vein at 20° to core axis, as above **109.25** m - 2 cm thick quartz vein at 33° to core axis, as above **109.42** m - 3.5 cm thick quartz vein at 48° to core axis, as above **109.87** m - 1.5 cm thick quartz vein at 22° to core axis, as above, 0.3 cm dolomite band along each vein margin. **110.60** m - Approximately 7 cm thick quartz vein at 28° to core axis, intergrown quartz crystals and vug space **118.68 - 118.74** m - Approximately 5 cm thick quartz vein at 55° to core axis, as above. **131.06** m - 5.5 cm thick quartz vein at 34° to core axis. **Structure:** **Faults:** **126.59 - 126.77** m - Incohesive Fault. Conglomerate fragments in fault breccia, predominantly fine-grained pebble conglomerate clasts with minor gouge. **128.32 - 128.62** m - Fault with broken ground. **139.11** m - Fault plane at 30° to core axis, gouge on surface **142.48 - 142.53** m - Incohesive fault **141.95 - 142.15** m - Fault plane with gouge, ≤1.0 cm thick at approximately 13° to core axis. **Sulphides in Sediments:** **131.74 - 131.88** m. Silty argillite with 30% probable xenoblastic ankerite (might be honey yellow sphalerite)							
143.25				**End of Hole**							



Diamond Drill Hole VC - 03 - 12
0
Pb (ppm)
Zn (ppm)
25
50
75
100
125
150
175
200
225
250
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View Toward 141° Az

DYNAMIC EXPLORATION LTD.

DRILL LOG: DIAMOND DRILL CORE

HOLE NO.	VC - 03 - 12

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:	Lot 6662		
LOCATION - GRID NAME:			
EASTING:	500920	NORTHING:	5644475
SECTION:		ELEV:	1886 m
AZIM:	231°	LENGTH:	264.25
DIP:	-49°	CASING LEFT?:	No
CORE SIZE:	NQ		
CORE STORAGE:	Vermont Creek		

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
0		40.5°	121.91		40.25°

DRILLING CO:	F.B. Drilling
STARTED:	18-Jul-03
COMPLETED:	23-Jul-03
PURPOSE	
CORE RECOVERY:	
LOGGED BY:	Rick Walker
	Paul Ransom
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	A303493,
	A303783,
	A303921,
	A303921r,
	A3004019,
	A304019r

Drill Hole VC - 03 - 12

From	To	Core Angle		Description	Sample	From	To	Gold	Silver	Lead	Zinc
m	m	m	Deg		Number	m	m	gms/T	gms/T	ppm	ppm
0.00	6.10			**Casing**							
6.10	26.28	6.10	55°	**Lithology: Alternating siltstones.**	0312 - 273	10.27	10.38	0.02	0.67	34.1	67.9
		7.00	55°	Alternating medium grey siltstones to argillaceous siltstones and dark grey argillaceous siltstones to silty argillites, thickly	0312 - 274	10.38	10.65	0.02	0.17	12.09	81.6
		8.00	49°	laminated to very thin bedded (to 4.0 cm, average 1-2 cm). Siltstones lighten from base to top (possible graded bedding).	0312 - 275	10.65	11.10	0.03	1.462	22.45	50.8
		9.00	47°		0312 - 276	11.10	11.16	0.00	0.246	6.48	21.8
		10.00	47°		0312 - 277	11.16	11.45	0.02	1.863	20.1	39.9
		11.00	39°	**Veins:**	0312 - 278	12.34	12.54	0.04	1.887	21.91	39.3
		12.00	38°	Three <3 mm quartz veinlets above 10.5 m intersect bedding at low angle and are much more highly deformed	0312 - 279	12.54	12.72	0.01	0.231	34.98	6
		13.00	25°	along pressure solution cleavage than adjacent bedding.	0312 - 280	12.72	13.02	0.02	0.709	16.97	41
		14.00	48°	**11.79 - 11.83** m - Barren quartz vein at approximately 90°							
		15.00	44°	**14.83 - 14.91** m - Barren quartz vein at approximately 90°							
		16.00	65°	**16.35** m - 1 cm dolomite vein with few medium-grained pyrite grains and wallrock fragments							
		17.00	05°	**16.70 - 16.73** m - 1.4 to 4 cm thick quartz vein (widens on a step), contains a scant few medium-grained							
		18.00	05°	pyrite crystals							
		19.00	05°	**19.83 - 19.98** m - Quartz vein, minor cm sized vug lined with partial quartz crystals, light patchy limonite							
		20.00	52°	developed adjacent to wallrock fragments and some boxwork limonite after pyrite in a vug.							
		21.00	43°	**12.54 - 12.72** m. Quartz vein, small vugs with quartz crystals to 5 mm, some vugs filled with limonite and							
		22.00	52°	dolomite. No primary sulphides. Contacts near 90° to core axis.							
		23.00	66°								
		24.00	49°	**Structure:**							
		25.00	48°	Foliation weakly to locally well developed, at high angle to perpendicular to bedding. Local aggregate							
		26.00	64°	masses of coarse-grained pyrite crystals commonly have quartz ± calcite pressure shadows along							
				foliation.							
				15.0 - 15.60 m - Fold, from 40° to 0°.							
				15.84 m - Fold continues to bend into broken core above fault.							
				15.90 m - Bedding starts at 65° below fault, bends							
				17.00 - 19.00 m - Bedding is parallel to core, below this bedding is about 40°-50°							
				Faults:							
				14.74 m - Brown, probable surface mud worked into place, noted on some vein contacts and on fractures at (80°).							
				15.40 m - Probable mud at 60° and along bedding (at 10°)							
				15.70 - 15.80 m - Muddy coating on broken core.							
				15.84 - 15.90 m - Incohesive Fault gouge, intact, parallel to bedding.							
				22.54 - 22.63 m - Muddy coating on broken core.							
				23.02 - 23.29 m - Muddy coating on broken core.							
				23.66 - 23.92 m - Muddy coating on broken core.							
				24.76 - 25.02 m - Broken core - no muddy coating							
				Sulphides in Veins:							
				11.10 - 11.16 m. 6 cm quartz + calcite vein with both contacts broken but apparently at high angle to core axis (approximately 80°). Coarse intergrown quartz crystals and open space (vugs). Calcite reacts moderately strongly with dilute HCl (iron carbonate - Fe-bearing calcite).							
				Sulphides in Sediments:							
				Pyrite variably developed, ranging from <<1% to 10% locally, disseminated to local concentrations along preferred horizons and from fine-grained to very coarse-grained (≤1.5 cm in long dimension), generally idioblastic cubic to rectangular profiles							
				10.27 - 10.38 m. Approximately 5-7% fine- to coarse-grained (≤1.0 cm), idioblastic rectangular and cubic pyrite, with highly subordinate aggregate masses, localized along preferred bedding horizons. Sampled to assess gold.							

				10.38 - 10.65 m. Approximately 1% predominantly fine-grained pyrite (minor medium- to coarse-grained), localized along preferred bedding horizons. Sampled for gold. **10.65 - 11.10** m. Approximately 10-15% fine- to coarse-grained pyrite. Probable bimodal population, with 3-5% fine- to medium-grained, idioblastic pyrite disseminated throughout interval and 10-12% medium- to coarse-grained, idioblastic pyrite localized along preferred bedding horizons. Increased pyrite content spatially associated with quartz vein (0312 - 276). Sampled to assess gold. **11.16 - 11.45** m. Interval of enriched pyrite content similar to 10.65 - 11.10 m. **12.34 - 12.54** m. Thin bedded and laminated sub-wacke / argillite in contact with quartz vein at 12.54. Fine-grained pyrite disseminated in the 5 cm adjacent to the vein, drops off rapidly. 1-2 mm pyrite present along dark laminations at about 10 cm from vein, and coarse-grained pyrite is developed along clastic base of thin bed 20 cm from vein. **12.72 - 13.02** m. Sub-wacke / argillite. Fine pyrite present in the 5 mm adjacent to the vein except for the 15 mm zone of black laminations (35° to core axis). Medium-grained pyrite (1-2 mm) is present throughout the next adjacent 10 mm bed. Medium- and coarse-grained pyrite present only along clastic layers beyond this.							
26.28	32.83	27.00 28.00 29.00 30.00 31.00 32.00	66° 55° 43° 58° 56° 67°	**Lithology: Unit P Limestone.** Wacke, sub-wacke and argillite in which wacke is generally variably calcareous, thin bedded with 2 medium beds, dark grey Carbonaceous Wacke Laminite commonly present between most beds. **Sulphides in Veins:** **29.46 - 29.50** m - Quartz vein, few seams parallel to margins at approximately 70°, few grains of sphalerite, pyrite, patchy pink mineral **Alteration:** **30.40 - 32.40** m - Abundant ankerite porphyroblasts show alignment with pressure solution cleavage							
32.83	39.35	33.00 34.00 35.00 36.00 37.00 38.00 39.00	62° 75° 42° 58° 72° 70° 67°	**Lithology: Argillite.** Light grey, with 5% distinctive dark grey laminations of Carbonaceous Laminite - probably not wacke). Some of the argillite beds have sub-wacke / wacke bases that are pale grey, likely consist of micro-starved ripples. **Structure:** **Fractures:** **33.53** m - Fracture at approximately 30° to core axis with steps, surface (?) mud coated **33.86** m - Fracture at approximately 30° to core axis with steps, surface (?) mud coated **34.33** m - Fracture at approximately 30° to core axis with steps, surface (?) mud coated **35.74** m - Fracture at approximately 50° to core axis, surface (?) mud coated **36.15, 36.20** m - Fracture at approximately 50° to core axis, surface (?) mud coated **38.90 - 39.25** m - Fracture at approximately 12° to core axis, pale limonite coatings **Sulphides in Sediments:** Coarse-grained pyrite is present in a few of the siltier bases.							
39.35	48.15	40.00 41.00 42.00 43.00 44.00 45.00 46.00 47.00 48.00	66° 83° 83° 74° 64° 83° 61° 46° 73°	**Lithology: Sub-wacke to argillite.** Medium grey (some light) and dark grey, thin and very thin bedded, the dark is probably Carbonaceous Laminite as faint laminations are present within many of these beds. Pale grey silty bases form a minor component to some beds, however, is very distinctive because of the presence of coarse-grained pyrite and visibility of pressure solution cleavage. **Veins:** **43.30** m - 15 mm greyish quartz vein at 75° to core axis, with a few parallel seams oblique to margins, pink along 2 cm of one contact. Porphyroblasts throughout, some of which are probably ankerite (white, cluster habit), however, creamy grains are unknown and white round features may be reduction spots.	0312 - 281 0312 - 282 0312 - 283	39.62 39.92 47.36	39.92 40.02 47.48	0.06 0.09 0.01	0.752 0.579 0.046	297.48 188.85 11.18	52.9 117.9 120.8

				Sulphides in Sediments: **39.62 - 39.92** m. Pale grey, predominantly clastic zone, highly strained in contrast to adjacent laminated and very thin bedded shales. Medium- to coarse-grained pyrite bounded by pressure solution cleavage seams and seems offset along the seams as well. **39.92 - 40.02** m. Shale with 2 thin clastic layers, one with only pyrite and the other pyrite and near black earthy sphalerite fringed by discontinuous, very thin orange-brown sphalerite (?), further flanked by discontinuous pyrite. **47.36 - 47.48** m. Highly strained, dark grey sediment. Pyrite is offset throughout on multiple hairline, white fractures that appear siliceous. Creamy mineral noted, possibly sphalerite but probably strained ankerite, white ankerite porplyroblasts common in less strained parts of sample.								
48.15	83.40	49.00 50.00 51.00 52.00 53.00 62.00 63.00 64.00 65.00 67.00 68.00 70.10 71.00 74.00 75.00 76.30 77.20 79.30 80.90 82.00 83.00	65° 72° 42° 24° 67° 53° 20° 37° 18° 10° 15° 48° 50° 35° 70° 0° 0° 70° 20° 75° 65°	**Lithology: Ruth Limestone.** Medium grey limestone, medium bedded with distinctive white calcareous siltstone / sandstone 0.5 - 3.0 cm thick. Dark grey to black Carbonaceous Laminite from not - to calcareous layers are probably interbeds. Weakly and non-calcareous beds (usually darker laminites) occur below 75.0 m. **Veins:** Several veinlets noted; (1) most are calcite, white, have irregular margins (probably because of folding, pressure solution cleavage, etc) and a vague planar structure that generally lines up with pressure solution cleavage, that is slightly darker and is likely pressure solution cleavage in the vein and commonly have paper thin seams of stylolite-like dark residuum. These veins are designated CaET. (2) Thinner calcite veins with flat, parallel margins are designated CaLT. (3) Quartz veins (some have minor calcite) have irregular margins similar to CaET, however, internal structure related to pressure solution cleavage not definitive, designated QET (4) Flat, planar, parallel sided quartz veins designated QLT **50.50** m - Ca.L.T. - 5 mm cuts series of mm size veinlets. **58.10, 58.26** m - Ca.E.T., 1.5 cm, 1.0 cm **59.95** m - Ca.E.T., 2 cm, residual carbonaceous material at point on one margin fans into cleavage **60.37** m - Ca.E.T., 2.5 cm, very thin dark residuum on margins (aka stylolite), slightly grey 1-2 mm straight tension veinlets developed on one side. **60.46** m - Q.L.T., 8 mm **60.57** m - Ca.E.T., 1-2 cm **60.74** m - Ca.E.T., 2 cm **61.80** m - Ca.E.T., 1 cm terminates at a bed contact **62.69** m - Q.E.T, 2 cm **62.73** m - Ca.E.T., 0.5 cm **62.93** m - 2 adjacent ET, one calcite, one quartz **63.45** m - Series of < mm to 1 cm Ca.L.T. over 10 cm **65.34** m - Ca.E.T., 3 cm **66.10** m - Ca.L.T., 1 cm offset on a stylolite and appears cut by Ca.E.T.! However, residuum on margins of Q.E.T. is discontinuous along margins where these veinlets meet. Believe the Q.E.T. did not separate when the Ca.L.T. formed. **66.27** m - Ca.E.T., 1-3 cm **66.95** m - Ca.E.T., 3-4 cm **68.16** m - Q.E.T., 2-6 cm **68.71** m - Ca.E.T., 2-6 cm, very stylolitic margins **68.79** m - Q.E.T., 5 cm **69.76** m - Ca.E.T., 1.5 cm terminates **70.20** m - Ca.E.T., 0.5 - 3.0 cm **70.32 - 70.43** m - Ca.E.T. **71.30** m - Ca.E.T., with what appears to be later piercement-like fingers crossing cleavage. **Structure:** The medium beds of limestone are generally featureless, however, complex folding is revealed by the deformed clastic layers and laminites.								

				Pressure solution cleavage is best developed in the clastic and laminated units. **48.15 - 51.00** m - bedding at approximately 70°-80° to core axis **51.00** m - intense pressure solution cleavage segment, pale silty layers starts **54.00 - 62.40** m - Intensely deformed **53.50 - 54.50** m - Numerous isoclines of 2 cm sandy bed **55.40 - 55.80** m - Numerous isoclines of 2 cm sandy bed **55.80 - 61.30** m - Tight isoclines of all beds **61.30 - 62.10** m - Beds appear thick but probably drilling isoclines **62.10 - 63.95** m - probably drilling parallel on a limestone bed. **63.95 - 65.00** m - short zone where bedding is 70°-80° to core axis **65.00** m -drilling down bedding occasionally across a short fold limb.							
83.40	94.40	84.00 85.00 86.00 87.00 89.00 92.00	75° 65° 60° 65° 55° 60°	**Lithology: Sub-wacke, argillite (Quartz wacke) (Wacke).** Medium and dark grey. The very thin bases of Quartz Wacke are pale grey, characterized by coarse-grained pyrite and thickened considerably by pressure solution cleavage. Five medium beds are wacke, appear massive except for persistent foliation. Sample 86.22 - 86.40 selected for sawing and selection of thin sections and follow up ICP on remnants. **Structure:** **91.05** - short limb parallel to core **91.30** - cross small fold **92.00** - detached (repeated?) Limbs at 60° **92.00 - 93.00** - mostly parallel to core axis **93.4 - 93.6** - Parallel to core axis **93.6 - 94.5** - Parallel to core axis, few minor closures **Sulphides in Veins:** **90.76 - 90.86** m. Quartz vein, one margin crumbly gouge, vugs to 2 cm with quartz crystals, rare coarse pyrite **Sulphides in Sediments:** Several of the Quartz Wacke beds with pyrite also have a pale yellow mineral associated with black specks that, in some cases, appear as cores to the yellow material and in other cases are isolated nearby. **88.39 - 88.71** m. Sampled to cover 2 silty beds running parallel to the core axis, one contains scattered coarse (5 mm to 1 cm) pyrite, the other more pyritic, generally 1 mm in size. **90.50 - 90.76** m. Very thin bedded, has 2 layers with scattered coarse pyrite to >1 cm and silty layers with 1 mm pyrite. **90.86 - 90.95** m. Very thin bedded, noted with fine pyrite adjacent to quartz vein **90.95 - 91.06** m. Beds swing to 0°. Some coarse-grained pyrite and 2 mm bed with abundant 1 mm pyrite. **91.06 - 91.44** m. Very thin bedded and laminated, 2 folds, scattered coarse pyrite cubes / deformed cubes	0312 - 284 0312 - 285 0312 - 286 0312 - 287 0312 - 288 0312 - 289	88.39 90.50 90.76 90.86 90.95 91.06	88.71 90.76 90.86 90.95 91.06 91.44	0.03 0.01 0.01 0.02 0.02 0.01	0.183 0.69 0.074 0.385 0.664 0.376	15.92 16.92 6.11 21.35 18.57 14.73	16.6 40.3 13.7 22.3 20.6 58.1
94.40	97.80			**Lithology: Argillite.** Dark and light grey, dark seems to be predominant, very thin bedded to laminated **Structure:** **94.5 - 97.5** - detached fold limbs							

97.80	135.97	118.00 119.00 120.00 122.00 123.00 124.00 125.00 125.60 126.00 129.00 131.10	25° 26° 27° 85° 72° 70° 65° 56° 90° 75° 25°	**Lithology: Argillite.** Medium grey, characterized by distinctive, spaced, fine black laminations throughout. Occasional wacke to quartz wacke layers with sand sized quartz and containing coarse-grained pyrite, that are mostly quite thin but reach up to 5 cm thick. Yellow mineral with associated black specks noted at 117.40 m. Interval is quite folded with drilling often parallel to bedding, fine (pressure solution) cleavage throughout is accompanied by aligned ankerite(?) (often as clusters of minute rhombs(?)). **Veins:** **120.87 - 120.91** m. White quartz vein with discontinuous creamy dolomite on margins. **124.60 - 124.75** m. Quartz vein, top margin at 55° to core axis, bottom at 35°. Approximately 20% very coarse-grained ferroan dolomite, turning orange, no preferred location **126.04 - 126.76** m. Interval with folded quartz veins up to 10 cm wide, most have ferroan dolomite up to 20%. Medium grey shale has fine black laminations **127.05 - 128.01** m. Interval is 50% vein quartz, has about 10% ferroan dolomite. Margins of the veins are irregular, probably folded. **128.74 - 129.18** m. Four 1-4 cm quartz with 0-30% iron dolomite veins, all different orientations, folded. Minor 1 mm pyrite in shale. **132.25 - 132.69** m. Five quartz veinlets 0.5 - 3 cm with irregular margins → ET. Four have flat parallel margins. Fabric, where seen crossing one quartz vein, fractures 90° in the vein. Dolomite and one coarse pyrite crystal present in uppermost vein. Dolomite not present or in trace amounts in other veins. **133.15 - 134.11** m. 35% quartz veins from 3 - 15 cm thick, irregular margins on most, so are ET. Most veins have a high angle to core, one is predominantly dolomite and it is cut by veinlets of quartz that contain <5 mm pyrite. Some of the veins appear folded. At 133.90 veining is wispy, sub-parallel to cleavage and contains minor pyrite, dolomite. **Structure:** Pressure shadows of quartz noted around several 2 x 8 mm rectangular bodies that contain several grains of chloritoid (?), all aligned perpendicular to bedding in one bed (103.40 m). **97.5 - 106.0** - largely parallel to core axis, some oblique, occasional short interval to 45° **106.0 - 110.0** - 70-90° to core axis, variable **110.0 - 116.8** - Oblique, alrgely close to parallel to core axis **121.0** - drill down "bed" of detached isoclines of single bed (20 cm) **126.0 - 128.0** - small folds, up to 0° to core axis **128.0** onwards - Strong porphyroblast / augen development, pyrite occasionally involved. Augen cores are generally dark grey, possibly chloritoid, and tails are very fine, pale grey, possibly quartz. This obscures but does not obliterate bedding Sigmoidal cleavage residue trails indicate rotation. Where most intense, approaching 135.97 m, some tails consist of quartz + sericite. **Sulphides in Veins:** **103.84 - 103.99** m. Quartz vein with vug across core, quartz crystals to 1 cm across. Coarse pyrite, generally to 8 mm if isolated, amalgamates to 2 x 3 cm patch. **Sulphides in Sediments:** Pressure shadows common around coarse-grained pyrite (both idioblastic and irregular remnants of grains). **103.63 - 103.84** m. Well foliated, bedding obscured, disseminated 1 mm pyrite throughout **103.99 - 104.22** m. Well foliated, laminated shale with 1 mm pyrite disseminated throughout, somewhat less than 103.63 - 103.84. Minor isolated coarse pyrite at limit. **120.73 - 120.87** m. Well foliated shale, bedding barely visible. Scattered 1 mm pyrite. **120.91 - 121.01** m. Bedding in this and next interval is sub-parallel to core axis but in separated, discontinuous isoclines. Minor 1 mm pyrite in chains / streaks to 2 cm and weakly scattered.	0312 - 290 0312 - 291 0312 - 292 0312 - 293 0312 - 294 0312 - 295 0312 - 296 0312 - 297 0312 - 298 0312 - 299 0312 - 300 0312 - 301 0312 - 302 0312 - 303	103.63 103.84 103.99 120.73 120.87 120.91 121.01 121.24 124.60 126.04 127.05 128.74 132.25 133.15	103.84 103.99 104.22 120.87 120.91 121.01 121.24 121.43 124.75 126.76 128.01 129.18 132.69 134.11	0.02 0.80 0.01 0.01 0.00 0.03 0.00 0.00 0.00 0.00 0.00 0.01 0.01 0.01	0.118 1.42 0.175 0.074 0.047 0.073 0.075 0.177 0.039 0.066 0.046 0.454 0.191 0.154	6.31 51.18 4.46 4.19 2.75 7.98 2.59 6.12 1.63 2.1 1.48 4.79 3.2 4.05	13.2 45.4 39.2 23.2 23.3 11.4 44.8 39.2 82.7 53.1 44.9 26.1 123.4 53.1

121.01 - 121.24 m. Medium grey shale, massive to faint laminations, abundant ankerite, rare pyrite as elongate crystals with idioblastic margins and somewhat round looking masses, long axes parallel to foliation.

121.24 - 121.43 m. Shale, dark grey, abundant creamy ankerite aligned parallel to foliation, some extend 1-2 cm in foliation and as intersecting fractures 1 mm wide. Pyrite on contact as complete or partial cubes and some light yellow in silt adjacent to pyrite may be very fine-grained, dispersed dolomite or iron stain. One irregular pyrite mass approximately 1 cm.

Alteration:
Ankerite(?) gradually develops an augen-like shape with depth through this interval and becomes very pronounced. In conjunction with the ankerite(?), chloritoid (?) starts to appear at 118.40 m, developing preferentially in certain intervals below that and dominating much of the rock fabric (though original lithotype and bedding remain visible).

135.97	161.10	142.00	0°
		144.00	70°
		145.00	90°
		149.20	70°
		150.00	25°
		157.00	30°
		158.10	25°
		158.70	50°
		160.00	50°

Lithology: Chloritoid Argillite.
Primary lithotype probably same as previous interval with perhaps fewer black laminations. Several of the black laminations adjacent to white, probably silty layers. Pyrite is somewhat rounded augen-like masses, same size as the chloritoid is common. Several irregular quartz veins, some with minor dolomite sampled in conjunction with associated pyrite. 136.40 - 136.55 m - sample to cut for thin section.

Veins:
135.97 - 136.40 m. Quartz veins with irregular margins, folded, with only minor dolomite, constitute approximately 20% of interval, and similar but with some coarse-grained dolomite / ferroan dolomite constitute 10% of interval. In shale, abundant augen, some probably chloritoid.

138.00 - 138.24 m. Quartz veins 20%, irregular margins except where parallel to cleavage. One cluster 5 x 15 mm contains ferroan dolomite. One coarse pyrite noted.

140.20 - 140.33 m. Early quartz vein with wall rock fragments and minor patchy dolomite.
140.57 - 140.65 m. Quartz vein, parallel sided with small scale irregularities, elongate openings controlled by fractures in which 1-2 mm quartz crystals occur. Small coarse pyrite, some aligned with finer pyrite in layers alongside margin.

141.07 - 141.86 m. White vein quartz, portion of creamy dolomite mass to about 10 cm wide near base. Contact irregular, therefore, EQ. Very minor pyrite as rare mm grains and irregular wisps.

146.91 - 147.00 m. Quartz vein, 6 cm true thickness at 43°, contacts sawtooth scale, irregular. Vuggy 1 cm wide to 3 cm long, 5 mm across quartz crystals.

148.98 - 149.10 m. Quartz vein with 30% creamy dolomite, rare grain of dark green chlorite, rare 2 mm pyrite
152.30 - 153.04 m. Irregular quartz vein comprises 60% of interval with phyllite comprising the remaining 40%. Irregular pyrite masses, rare cubes only in phyllite.

153.04 - 153.95 m. Irregular quartz vein, top 40 cm is half phyllite as fold of vein. Top margin has orange beige ferroan dolomite and minor pyrite, bottom has an irregular 1 cm wide zone of creamy dolomite. Almost no pyrite in this sample.

153.95 - 154.55 m. Vein, creamy yellow dolomite, breccia texture, insoluble material on margins of fragments. Rare wall rock fragments, pyritohedra to 8 mm sporadic in patches.
154.55 - 155.09 m. Similar to preceding interval. Both have <5 mm wide vugs with dolomite, pyrite crystals
155.23 - 155.44 m. Quartz veins, broken, vug comprises 50% of core with cm scale quartz crystals, tight vein 3 cm wide has scattered pyritohedra on margins.

Structure:
Tails of the augen align with S2 and long axes of augen mark S1.
150.28 - 150.48 m - Crumbles, minor gouge, 50° to core axis. Core loss of 18 cm allocated at 152.39 m
156.07 - 156.35 m - ±1 cm. Narrow zone at 10°, breaking, associated quartz and dolomite
156.58 m - <1 cm fracture with gouge at 33° to core axis

Sulphides in Sediments:
138.24 - 138.48 m. Dark grey, well foliated shale, augen probably chloritoid with quartzose tails, pyrite common 1-2 mm, often in the augen or partially with crystal form usually evident.

0312 - 304	135.97	136.40	0.01	0.147	4.4	33.8
0312 - 305	138.00	138.24	0.05	0.328	1.24	15.3
0312 - 306	138.24	138.48	0.02	0.173	3.12	26.9
0312 - 307	138.48	138.69	0.05	0.738	13.3	37.1
0312 - 308	139.93	140.20	0.00	0.05	3.19	28.4
0312 - 309	140.20	140.33	0.00	0.03	2.51	12.6
0312 - 310	140.33	140.57	0.02	0.16	3.67	12.1
0312 - 311	140.57	140.65	0.06	0.117	4.96	6.5
0312 - 312	140.65	140.88	0.03	0.361	9.44	14.5
0312 - 313	140.88	141.07	0.02	0.212	17.98	17.6
0312 - 314	141.07	141.86	0.02	0.064	5.85	6.4
0312 - 315	141.86	142.61	0.02	0.244	15.21	43.8
0312 - 316	146.59	146.91	0.01	0.563	5.24	91.2
0312 - 317	146.91	147.00	0.03	2.173	2.03	36.9
0312 - 318	147.00	147.24	0.02	1.225	4.27	65.5
0312 - 319	147.24	147.68	0.00	0.222	3.73	96.2
0312 - 320	148.98	149.10	0.00	0.057	1.03	121.1
0312 - 321	150.48	150.88	0.02	0.364	4.31	36.5
0312 - 322	150.88	151.14	0.01	0.09	2.03	19.1
0312 - 323	151.14	151.56	0.06	0.156	3.03	27.8
0312 - 324	151.92	152.30	0.00	0.118	3.72	39.2
0312 - 325	152.30	153.04	0.01	0.114	2.95	14.7
0312 - 326	153.04	153.95	0.00	0.137	3.70	14.9
0312 - 327	153.95	154.55	0.20	1.687	13.33	64
0312 - 328	154.55	155.09	0.15	1.753	5.63	160
0312 - 329	155.09	155.23	0.02	0.177	1.49	5.2
0312 - 330	155.23	155.44	0.03	4.176	30.41	23.5
0312 - 331	155.44	155.85	0.03	0.184	3.94	9.6
0312 - 332	158.33	158.37	0.01	0.616	7.57	38.7
0312 - 333	158.37	159.05	0.01	3.879	21.78	50.6
0312 - 334	159.05	159.60	0.11	16.023	8.42	110
0312 - 335	159.60	159.80	0.01	3.599	2.93	16.7

138.48 - 138.69 m. Light grey shale, abundant probable chloritoid augen, dark pressure solution cleavage seams. Pyrite more abundant than preceding interval, and some have rounded outlines, most have a portion of the crystal form visible.

139.93 - 140.20 m. Abundant possible chloritoid augen in well foliated rock, discontinuous quartz veins and dolomite vein remnants. Minor pyrite in both veins and country rock.

140.33 - 140.57 m. Bedding from 90° to 0°, strong axial planar foliation in which abundant chloritoid(?) augen and numerous pyrite augen are aligned. Only rarely does pyrite have any crystal outline.

140.65 - 140.88 m. Well foliated with chloritoid (?) and pyrite augen, cut by 2 small quartz (dolomite) veinlets. Some pyrite from fractures cut by the foliation.

140.88 - 141.07 m. Foliated, less chloritoid, anastomosing and remnants of wisps and hairline fractures of dolomite and/or quartz with fine muscovite, vein and vein remnant 2-4 cm wide of creamy dolomite (quartz). Small irregular pyrite patches, 3-8 mm pyrite crystals in the dolomite veins, discontinuous streak of pyrite along contact at 141.07.

141.86 - 142.61 m. Chloritoid - ankerite augen phyllite, faint bedding at approximately 0°, S_1 at 35° and S_2 at 61° to core axis. Many augen have associated pyrite as part of the augen, rarely there are clusters up to 5 mm.

0312 - 316 146.59 - 146.91 m. Folded, laminated argillite, irregular quartz pods / lenses sub-parallel to cleavage. Pyrite separate from quartz on edge or projection from a quartz lense. Scattered idioblastic grains to 5 mm, some associated with chloritoid augen.

147.00 - 147.24 m. Argillite, some augen, mainly chloritoid not nearly as abundant as above 144. Minor pyrite associated with augen. Quartz vein, some lenses to 1 cm, folded, trace associated pyrite.

147.24 - 147.68 m. Argillite, quartz veinlets developed parallel to cleavage, cut perpendicular flat planar quartz vein at 52°. Minor pyrite usually adjacent to quartz vein or in isolated siliceous patches.

150.48 - 150.88 m. Phyllite with abundant coarse chloritoid, minor coarse-grained pyrite cubes to 5 mm, some 1 mm cubes in irregular clusters. Detached quartz veinlet with pyrite developed between segments.

150.88 - 151.14 m. Phyllite with 50% feathery quartz veining, flanked and cut by minor dolomite. Small irregular masses of pyrite (to 5 mm) and a discontinuous veinlet of pyrite adjacent or away from the quartz.

151.14 - 151.56 m. Phyllite with two 1 cm veins. One is quartz + dolomite, one quartz with trace pyrite, both irregular, meet and diverge at a point, clearly are folded. Other veinlet segments. Scattered pyrite, some idioblastic, some rounded, often in or associated with augen.
Faint pink speck - tungsten?

151.92 - 152.30 m. Phyllite, about 30% feathery quartz and irregular quartz veins. Core loss at 152.39 of 18 cm allocated to possible fault ending at 150.48.

155.09 - 155.23 m. Phyllite, healed breccia, 5% dolomite with trace pyrite.

155.44 - 155.85 m. 7 cm core loss at 158.49 assigned here, could be between previous vuggy interval and this. Phyllite, breccia texture, matrix filled with dolomite and pyritohedra to 5 mm, forms 30% to nil over interval. Trace sphalerite suspected on some pyrite margins.

157.33 - 158.37 m. Phyllite, abundant augen of chloritoid to 2 mm, porphyroblasts of ankerite <1 mm, ankerite often has chloritoid in core and is in wings of some larger augen. Also quartz - sericite in some of the pressure shadows. Two cleavages - S_1 65°, S_2 - 30°. Pyrite scattered amongst augen and a few coarser grains along remnant bedding.

158.37 - 159.05 m. Phyllite, abundant chloritoid, minor dolomite veinlets. Only rare pyrite.

159.05 - 159.60 m. Dolomitic breccia, mosaic texture, sutured contacts with grey insoluble material, pyritohedra throughout approximately 10%.

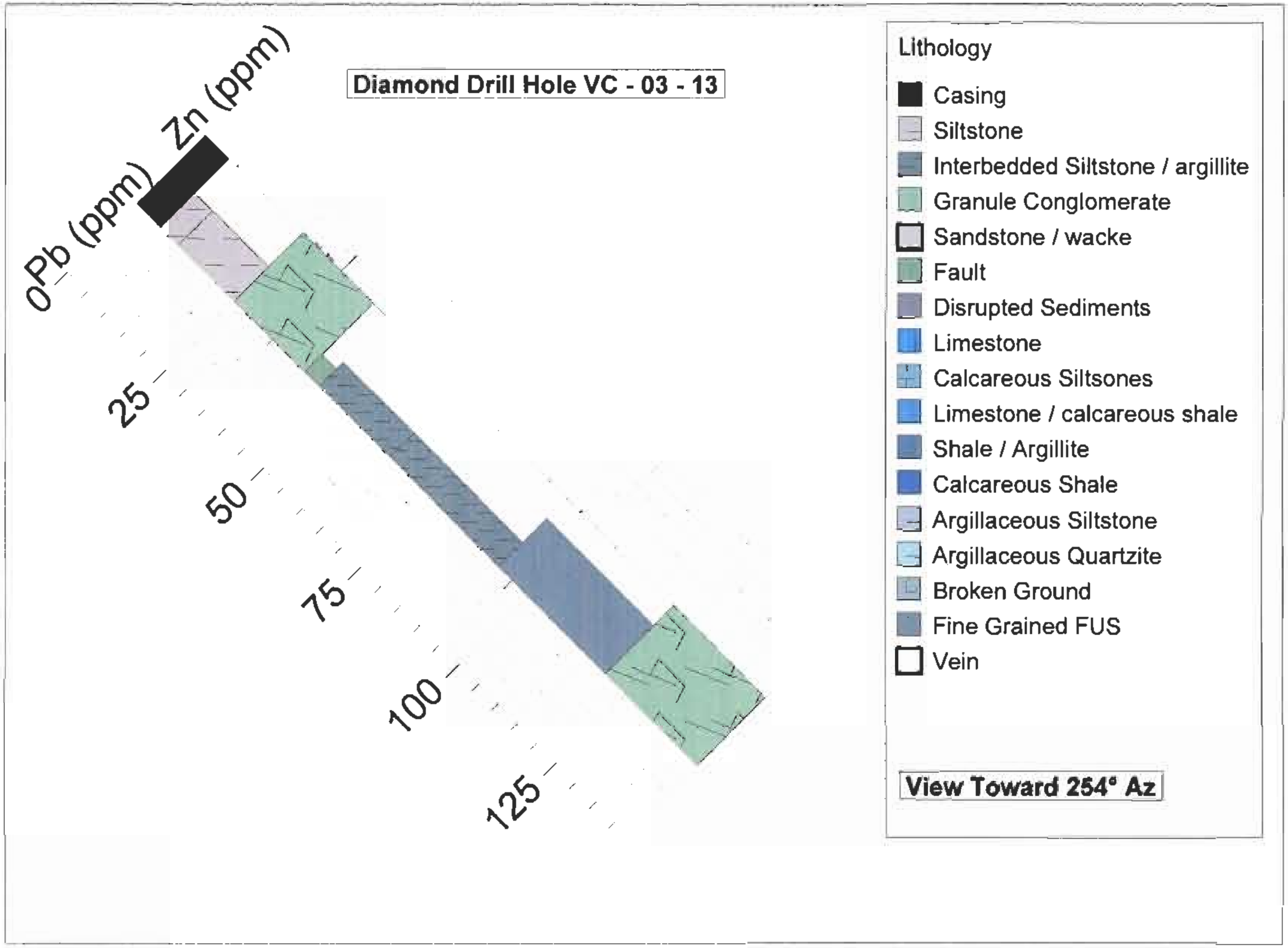
159.60 - 159.80 m. Phyllite with pyrite cubes to 8 mm, generally aligned on bedding

Alteration:
Interval dominated by intense chloritoid(?) augen development. Note that pressure shadows around chloritoid porphyroblasts often have adjacent small zone of ankerite then the quartz-sericite tails.

161.10	161.25			**Lithology: Argillite.** Argillite with several feathery siliceous zones developed parallel to S_2 that contain unknown orange mineral. Sampled for thin section and analysis.							
161.25	213.20	162.00	49°	**Lithology: Argillite.**	0312 - 336	164.15	164.47	0.01	0.151	6	54.5
		163.00	64°	Light grey with spaced black laminations. Chloritoid and ankerite common throughout, however, not nearly as abundant	0312 - 337	164.47	165.09	0.01	0.175	2.67	39.1
		165.20	90°	as above. Portions of interval may be dark grey, very thin bedded with light laminations, however, the massive grey	0312 - 338	172.82	173.00	0.00	0.129	5.59	66.2
		166.00	00°	argillite with black laminations keeps re-appearing. Much of this and previous interval must be tectonic repetitions of	0312 - 339	173.00	173.44	0.01	1.185	7.98	13.2
		167.00	30°	same zone. Second cleavage noted in previous interval re-appears where augen growth increases below 204 m,	0312 - 340	173.44	174.24	0.01	0.121	6.24	145.8
		168.00	30°	however, drops off rapidly, to primarily ankerite rhombs / clusters below 210 m.	0312 - 341	175.34	175.57	0.07	0.12	6.38	37.8
		169.00	23°		0312 - 342	178.26	178.45	0.00	0.116	23.13	70.8
		170.20	30°	**Veins:**	0312 - 343	178.45	178.78	0.00	0.038	8.65	135.7
		171.00	27°	**164.15 - 164.47** m. Irregular dolomite veins (broken apart) plus one 3 cm quartz vein at 62° that has minor	0312 - 344	178.78	178.94	0.01	0.164	11.06	5.3
		172.00	75°	dolomite scattered on margins.	0312 - 345	178.94	179.51	0.00	0.072	9.15	114.5
		175.00	25°	**173.00 - 173.44** m. Massive white quartz vein, contacts 60° and 54°. Rare creamy dolomite, unknown	0312 - 346	179.51	179.82	0.00	0.125	41.43	111.3
		176.00	45°	yellowish mineral (possibly another carbonate??), small number of pyrite cubes.	0312 - 347	179.82	180.32	0.00	0.065	15.52	86.8
		178.00	58°	**175.34 - 175.57** m. Quartz vein, folded, 2-8 cm wide, a few offshoot veinlets. Contains 15% ferroan	0312 - 348	180.32	180.76	0.00	0.09	22.22	92.7
		179.00	40°	dolomite and minor amount of tremolite.	0312 - 349	187.30	187.46	0.00	0.011	1.87	82.3
		181.00	25°	**178.78 - 178.94** m. Quartz vein, white, massive, contacts at 50° and 45°, sharp, lower contact has selvedges	0312 - 350	187.46	187.80	0.01	0.065	7.71	131.8
		182.00	36°	of wall rock parallel to contact. Trace pyrite, trace dolomite.	0312 - 351	187.80	188.03	0.00	0.12	14.78	100.9
		183.00	35°	**187.30 - 187.46** m. Quartz vein with 5% coarse-grained, light orange brown, probable siderite in middle and	0312 - 352	188.03	188.27	0.00	0.052	7.81	140.8
		185.00	70°	on one margin. Minor chlorite on lower margin.	0312 - 353	188.27	188.77	0.00	0.115	21.47	93.1
		186.00	70°	**187.80 - 188.03** m. Irregular and discontinuous quartz veining, minor dolomite. Trace of unknown orange	0312 - 354	188.77	189.00	0.00	0.071	12.75	90.9
		187.00	76°	mineral.	0312 - 355	189.00	189.24	0.00	0.051	10.64	131.6
		188.00	64°	**188.77 - 189.00** m. 70% quartz veins, about 10% is dolomite.	0312 - 356	189.24	189.68	0.00	0.191	26.93	91.1
		189.00	55°	**189.00 - 189.24** m. 90% quartz veining, more like breccia infill, 15% coarse patches of chlorite. A few wisps	0312 - 357	200.90	201.24	0.00	0.254	52.62	192.2
		190.00	45°	and irregular patches of unknown orange mineral (siderite?)	0312 - 358	201.24	201.38	0.00	0.018	0.59	17.7
		191.00	46°	**201.24 - 201.38** m. Quartz vein, massive, top contact sharp and flat at 52°, lower contact is wavy over	0312 - 359	201.38	201.77	0.02	0.107	9.3	85.9
		192.00	50°	average of 54°.	0312 - 360	201.77	202.08	0.00	0.262	33.82	114.8
		193.00	55°	**202.50 - 202.75** m. Quartz vein full width at 36°, lower contact possibly offset on minor fracture. Contains	0312 - 361	202.08	202.50	0.00	0.083	1.59	69.6
		194.00	42°	5% dolomite, trace pyrite.	0312 - 362	202.50	202.75	0.00	0.024	1.07	38.3
		195.00	56°	**203.72 - 203.91** m. Quartz vein, contacts at 46° and 35° to core axis, irregular, tension gashes to 1 cm from	0312 - 363	202.75	202.96	0.00	0.098	3.16	89.9
		196.00	36°	lower contact. Ferroan dolomite locally in quartz vein adjacent to lower contact and with quartz in stringers	0312 - 364	202.96	203.46	0.00	0.115	4.5	115.4
		197.00	32°	below.	0312 - 365	203.46	203.72	0.00	0.078	3.03	74.6
		198.00	34°	**204.38 - 204.83** m. Quartz 80%, 2 irregular veins, <5% dolomite and ferroan dolomite, generally near some	0312 - 366	203.72	203.91	0.00	0.043	3.26	32
		199.00	32°	vein margins, rarely in thin fractures in the quartz vein.	0312 - 367	203.91	204.38	0.00	0.076	1.24	89.3
		203.00	40°	**208.85 - 209.18** m. Vein quartz, massive to feathering into the phyllite, comprises 50% of interval, remainder	0312 - 368	204.38	204.83	0.00	0.029	4.1	30.1
		204.15	18°	phyllite. Note: one early ferroan dolomite 5 mm veinlet cut by quartz.	0312 - 369	204.83	205.02	0.18	0.222	14.59	95
		205.00	62°	**209.51 - 209.74** m. Quartz vein with 20% angular wallrock fragments. Very minor grains of creamy dolomite.	0312 - 370	205.93	206.17	0.00	0.144	11.57	103.2
		206.20	42°	Coarse-grained pyritohedra in one zone 3 cm wide and along lower margin. Few grains of fine-grained pyrite	0312 - 371	207.58	207.64	0.01	0.472	26.46	82.3
		208.50	71°	in wallrock fragments.	0312 - 372	208.85	209.18	0.01	0.155	12.65	79.4
		210.20	20°	**210.74 - 211.00** m. Quartz vein, margins at approximately 40° to core axis, irregular, with 15% wallrock seams	0312 - 373	209.18	209.51	0.00	0.129	7.31	100.4
		212.00	50°	to 3 cm wide. Patchy dolomite, rare pyrite.	0312 - 374	209.51	209.74	0.13	0.223	17.82	214.2
		213.00	68°		0312 - 375	209.75	209.89	0.01	0.15	6.54	53
				Structure:	0312 - 376	209.89	210.74	0.00	0.102	6.31	131.6
				178.08 - 178.15 m - foliation crumbles, minor gouge at approximately 75° to core axis	0312 - 377	210.74	211.00	0.00	0.049	5.38	64.3
				181.30 m - Gouge on slip parallel to foliation at 74° to core axis							
				181.53 m - 1 cm minor gouge, weak → crumbles at 75° to core axis							
				196.42 - 196.50 m - Weak zone, minor gouge adjacent quartz vein, 65° to core axis							
				Samples:							
				164.47 - 165.09 m. Phyllite, abundant augen of chloritoid + ankerite, 10% quartz veins typically 2 cm wide							
				from near planar to irregular to segments. Trace pyrite, generally occurs in the augen.							
				172.82 - 173.00 m. Phyllite, 10% feathery quartz (no pyrite).							

				173.44 - 174.24 m. Phyllite, 10% feathery quartz as discontinuous stringers mainly parallel to cleavage. Small patch of pale green chlorite noted. **178.26 - 178.45** m. Brecciated silicic layer 4 cm (probably primary sedimentary layer) and several 2 cm thick white quartz vein segments. **178.45 - 178.78** m. Argillite, grey with black laminations, very minor, very thin veinlets of feathery quartz. **178.94 - 179.51** m. Argillite, medium grey, few black laminations, rare quartz veinlets **179.51 - 179.82** m. Argillite, 30% quartz primarily as discontinuous veinlets, 4 cm vein at start has vein parallel and perpendicular fractures filled with unknown orange mineral **179.82 - 180.32** m. Argillite, 40% quartz as discontinuous veinlets and breccia infill **180.32 - 180.76** m. Argillite, 15% <5 mm quartz veinlets parallel to cleavage and thicker zones of breccia infilled by quartz **187.46 - 187.80** m. Argillite, 5% quartz veinlets, veinlet segments, most have coarse-grained chlorite, one veinlet has scattered pyrite along both margins. **188.03 - 188.27** m. Argillite **188.27 - 188.77** m. Argillite with 20% quartz, irregular in outline, probably deformed veins. Very little dolomite (or ferroan dolomite) usually at margins of veins or in offshoot stringers. **189.24 - 189.68** m. Argillite, quartz vein on 5-10 mm side of core, parallel stringers at 189.55 come from 5 cm quartz (ferroan dolomite, siderite?) vein. **200.90 - 201.24** m. Argillite with 10% quartz or quartz dolomite vein segments all <1 cm wide. Ferroan dolomite in one vein at 201.17 at 45° to core axis. **201.38 - 201.77** m. Argillite **201.77 - 202.08** m. Argillite, 40% quartz, dolomite in very irregular wisps / veinlets **202.08 - 202.50** m. Argillite, 10% quartz, mainly in tension gash veinlets - these seem folded slightly **202.75 - 202.96** m. Argillite with 30% quartz, as irregular vein masses. Quartz contains 20% chlorite, mainly as 0.5 to 1.0 cm patches (light green). Trace dolomite. **202.96 - 203.46** m. Argillite with 30% quartz as 2 irregular veins and a zone of anastomosing and irregular stringers. Fine-grained, dark, creamy dolomite as infill of fractures in argillite as well as in a large patch in a 10 cm thick quartz vein. Very pale green, possible chlorite between the dolomite and quartz. **203.46 - 203.72** m. Argillite with well developed S_2 overprinting S_1. **203.91 - 204.38** m. Argillite, <5% quartz in minor veinlets. **204.83 - 205.02** m. Phyllite, discontinuous veinlets < 5 mm of quartz or of ankerite, both types folded. **205.93 - 206.17** m. Phyllite, 30% quartz in discontinuous to irregular vein masses 15 cm thick. Fine dolomite, some rimmed by ferroan dolomite scattered through the quartz. **207.58 - 207.64** m. Dolomitic mosaic breccia vein @ 47° to core axis. Sutured contacts marked by dark insoluble material. Coarse-grained pyrite scattered along contacts. **209.18 - 209.51** m. Phyllite, ankerite porphyroblasts, some possibly with chloritoid. Wisps of quartz in 3 cleavage layers, few hairline tension fractures lined with quartz at 51° to core axis. Scattered fine-grained pyrite. **209.75 - 209.89** m. Phyllite, strong pressure solution cleavage banding, scattered 1-2 mm pyrite as cubes and clusters of finer grains. **209.89 - 210.74** m. Phyllite, wispy quartz segregations, and straight parallel sided veinlets 1-2 mm wide of quartz and dolomite (possibly ferroan dolomite) at 50° - 60° to core axis. Only a few coarse cubes of pyrite at one point (210.05).							
213.20	230.40	214.00	36°	**Lithology: Argillite.**	0312 - 378	213.37	213.59	0.01	0.18	15.9	123.8
		215.00	65°	Dark grey, well laminated, usually with sub-mm white layers that at times are up to 2 mm wide.	0312 - 379	214.08	214.27	0.01	0.114	11.62	200.4
		216.00	40°		0312 - 380	214.27	214.55	0.00	0.146	19.89	111.2
		218.00	50°	**Veins:**	0312 - 381	214.55	215.19	0.00	0.248	17.74	98.7
		219.00	68°	**214.27 - 214.55** m. Quartz vein, margins at 50° and 35° to core axis, 1 wallrock seam central, several wispy	0312 - 382	224.63	224.72	0.00	0.303	13.74	111.2
		220.00	58°	fragments. 10% ferroan dolomite (dull yellow to greenish yellow).							
		221.00	41°	**224.63 - 224.72** m. Quartz vein, margins at 48° and 52° to core axis, upper contact is wavy, lower contact is							
		222.00	40°	flat, < 10% wallrock, 5-10% pale dolomite							
		223.00	49°								

		224.00 225.00 226.5 227.00 228.00 229.00 230.00	48° 90° 37° 30° 50° 90° 50°	**Samples:** **213.37 - 213.59** m. Zone of parallel quartz veinlets (or single bifurcating vein), 20% wallrock wisps. Few grains of white to yellow dolomite. **214.08 - 214.27** m. Phyllite with tension fills of quartz and ferroan dolomite, rare pyrite. **214.55 - 215.19** m. Phyllite, 10% quartz in 2 irregular veins with up to 20% dolomite (and greenish yellow ferroan dolomite?). Several lenses 0.5 to 1 cm wide, 1-3 cm long of quartz dolomite parallel to cleavage.							
230.40	231.63			**Lithology: Fault.** **Structure:** Major Fault - In first 25 cm foliation changes from a core angle of 65° through 90° to 52° in opposite sense, which is assumed to parallel the plane of the fault. Additional measurements through the splitting apart interval to 231.45 m are 54° (foliation 40° in same sense); 55° (foliation 40°). **218.90** m - <10 cm 70°, "foliation crumbles", minor gouge on lower surface, parallel to cleavage **219.77** m - Crush (mm) on cleavage (at 75° to core axis) surface at intersection with 2mm veinlet / slip surface at 22° to core axis **223.90** m - <10 cm broken with 2 <1 cm gouge zones parallel to cleavage at 65° **230.52 - 231.08** m. Fault zone, foliated phyllite with up to 1 cm clusters of coarse-grained, intergrown, idioblastic pyrite . Foliation at 75° to core axis. Gouge at 230.67, approximately 1 cm on surface at 50° to core axis. **231.28 - 231.38** m - crush zone / gouge incohesive but only slightly breaking apart **231.38 - 231.63** m - calcitic "mylonite", well foliated at 68°, 70°	0312 - 383	230.52	231.08	0.03	0.311	15.8	20.1
231.63	264.25	232.00 233.00 234.00 235.00 236.00 237.00 238.00 255.00 256.00 256.80 259.00 260.00 261.00 262.00 263.00	70° 50° 50° 70° 50° 55° 55° 50° 61° 31° 28° 55° 18° 50° 42°	**Lithology: Limestone.** Probably Ruth Limestone in fold repeat. Limestone is medium bedded, often with silty / fine sandy beds (calcareous), 1-3 mm thick as what are probably turbidite bases. Darker sub-units are probably carbonaceous interbedded sediments. Entire interval is folded, clearly isoclinally in some locations, detached fold limb segments are common. Pyrite is present, but rare. Sudden change at 258.00 m, where lengthy non-calcareous carbonaceous intervals are interbedded with limestone to end of hole. Galena and sphalerite and some chalcopyrite as discontinuous blebs up to 1 cm long, forming 30% by volume of 6 mm wide veinlet at 252.15 - 252.25 at 30 to core axis (tension veinlet). **Structure:** **262.54** - 1 cm crush, swelling gouge parallel to foliation at 65°, mm dolomitic veinlets sub-parallel **239.00 - 254.00** m - Bedding characterized by isoclinal folds and / or detached limbs							
264.25				**End of Hole**							



Diamond Drill Hole VC - 03 - 13
Pb (ppm)
Zn (ppm)
0
25
50
75
100
125
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View Toward 254° Az

DYNAMIC EXPLORATION LTD.

DRILL LOG: DIAMOND DRILL CORE

HOLE NO.	VC - 03 - 13

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:	Lot 15307		
LOCATION - GRID NAME:			
EASTING:	501190	NORTHING:	5644787
SECTION:		ELEV:	1908 m
AZIM:	344°	LENGTH:	143.25
DIP:	-85°	CASING LEFT?:	No
CORE SIZE:		NQ	
CORE STORAGE:	Vermont Creek		

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
143.25		84°			

DRILLING CO:	F.B. Drilling
STARTED:	25-Jul-03
COMPLETED:	26-Jul-03
PURPOSE	
CORE RECOVERY:	
LOGGED BY:	Rick Walker
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	A303921, A303921r, A304019, A304019r

Drill Hole VC - 03 - 13

From	To	Core Angle		Description	Sample	From	To	Gold	Silver	Lead	Zinc
m	m	m	Deg		Number	m	m	gms/T	gms/T	ppm	ppm
0.00	6.10			**Casing**							
6.10	10.65	8.0 9.0 10.0	34° 23° 26°	**Lithology: Alternating light and dark grey siltstones with subordinate calcareous siltstones.** Minor thinly laminated to very thinly bedded (to 3 cm thick; average 1 cm), light to medium grey, alternating siltstones with subordinate calcareous to highly subordinate limey siltstones and minor silty argillites. Limey shales have a medium earthy brown colour and, therefore, can be easily distinguished from the siltstones. The uppermost core is largely broken, down to 7.92 m, with moderately to heavily weathered pyrite and some heavily iron-stained and/or limonite-coated fractures. Right-way-up facing direction based upon probable graded bedding. **Veins:** Minor veining present (see Sample 0313-444), as milky white quartz and quartz + dolomite veins at shallow to moderate angles to bedding, contacts sharp, ≤1.0 cm thick with rare mineralization. A total of six thin veins in interval, with one having minor galena (sampled) and a second with a single medium-grained arsenopyrite crystal. Foliation moderately well developed over interval, well developed in silty argillite intervals, at shallow angle to bedding in downhole direction (i.e. acute angle between S_0 and S_1 facing sub-parallel to core axis. 0313 - 444 7.92 - 8.23 m. Silty argillites. Mineralized vein, ≤1.2 cm thick, cross-cuts host sediments at 5°-10°, undulates gently and thins down-hole to 0.2 cm. Vein heavily oxidized to 90% deep orange-brown limonite with 0.1-0.2 cm thick dolomite margins at thicker up-hole intercept. Two large aggregate masses of galena, one at top of interval 2.0 cm x 0.9 cm thick and a second at 8.11 m (0.5 cm square). Additional, much smaller galena crystals/masses evident along vein. Interval: 0.3-0.5% Pb **Sulphides in Sediments:** Pyrite-bearing to pyritic intervals are iron-spotted due to weathering of pyrite to limonite. Very coarse-grained pyrite (minor proportion of pyrite population) to 2.0 cm, lightly to moderately weathered (altered along edges to limonite), idioblastic and rectangular. Below 7.92 m, pyrite generally unweathered, except within calcareous to limey siltstones where they are moderately weathered. Approximately 1-2% fine- to medium-grained pyrite, highly subordinate very coarse-grained crystals to 1.5 cm (long dimension), sub-idioblastic to idioblastic with cubic morphology and generally localized along preferred horizons. **Alteration:** Probable ankerite porphyroblasts, where developed, emphasize foliation through development of pressure shadows oriented parallel to sub-parallel to foliation. Ankerite porphyroblasts fine-grained, present in, and immediately adjacent to, fine-grained intervals (i.e. fine-grained tops of siltstones).	0313 - 444	7.92	8.23	0.03	8.438	3845.35	3367.6
10.65	24.90	11.0 12.0 13.0 14.0 15.0 16.0 17.00	27° 40° 38° 24° 24° 44° 75°	**Lithology: Alternating light and dark grey siltstones.** Similar to preceding interval but non-calcareous. Bedding thicker below 15.92 m, average 1-2 cm. Increased proportion of light-coloured siltstone. Sharp basal scours and gradational transition upward to dark grey siltstone to silty argillite indicates right-way-up facing. Between 16.70 - 20.00 m, numerous moderately to heavily iron-stained (deep orange to medium brown) fractures oriented at shallow angle to core axis (approximately 5°-25°), no apparent offset of bedding across fractures.	0313 - 384 0313 - 385	15.63 24.76	15.92 24.90	0.01 0.01	0.342 1.413	46.74 5.07	117.6 45.5

18.00	64°
19.00	53°
20.00	38°
21.00	44°
22.00	47°
24.0	38°

Veins:

Veins comprise approximately 5% of interval, comprised of thin (≤1.0 cm thick), dirty white to light grey quartz veins, some of which contain subordinate creamy yellow dolomite (to 10%), at shallow angle to bedding (sub-parallel to foliation). Mineralization absent or comprised of minor fine-grained pyrite. Two thicker quartz veins between 13.75 - 14.40 m, ≤4.0 cm thick, milky white, intergrown quartz crystals with vugs and pale orange-yellow dolomite along margins (lower vein) or dirty white to light grey with inclusions of host siltstones (upper vein). Both veins have sharp contacts, sub-parallel to bedding (upper vein) at a moderate angle. Approximately 5-10% dirty white to light grey quartz present between 15.05 and 15.92 m as highly irregular quartz "vein" to 15.63 m and as coarse angular, irregularly shaped lozenges between 15.63 and 15.92 m.

15.05 - 15.63 "Vein" has vein-like character at 15.05 m, with subordinate adjacent fish and veinlets which pinch and swell over several cm. Downhole the vein becomes less pronounced and progressively undergoes transition into a quartz-rich zone comprised of discontinuous quartz segments, fish and short, thin stringers in host silty argillite. Represents detachment zone in which gently warped bedding above has been separated from isoclinally folded bedding below within silty argillite which has undergone plastic deformation.

Two dirty white to light grey quartz veins at 19.10 m (≤1.0 cm thick at 23° to core axis; sharp, irregular contacts; 5% creamy yellow dolomite) and 19.24 m (≤3.0 cm thick; undulating gently through core at approximately 10° - 15° to core axis; approximately 10% creamy yellow to pale orange dolomite; sharp, irregular contacts).

20.97 m - Dirty white to light grey with approximately 20-25% creamy yellow dolomite, ≤2.5 cm thick at 65° to core axis with 0.5 cm of 80-85% heavily oxidized, dark orange-brown limonite (after pyrite) along upper contact.

21.33 m - ≤3.0 cm thick; dirty white to light grey quartz vein with 10-15% dolomite; sharp, but irregular margins at approximately 30-35° to core axis.

Veining intensifies between **22.95 - 24.00** m and **24.70 - 24.90** m, comprised of dirty white to light grey quartz ± light orange, fine-grained dolomite with sharp, irregular contacts at shallow to moderate angles to core axis. Many vein contacts broken but appear to be oriented sub-parallel to core axis, and cross-cut bedding at moderate to high angles. Veins tend to thin or wedge out up-hole and thicken and coalesce downhole. Contact between siltstones and underlying conglomerate obscured by vein (Sample 0313-386).

24.76 - 24.90 m. Approximately 1.5 cm quartz + white dolomite vein along one margin at approximately 5° to core axis. Cross-cuts host siltstones at approximately 30° to core axis. Siltstones have drag-folds developed against vein contact over 1 cm. Sediments on either side of vein do not appear to match, therefore, probable offset across vein. Drag-fold appears to have west side up offset when oriented with respect to foliation. Approximately 5-10% creamy pale yellow dolomite along margins of vein, up to 0.75 cm thick. No visible mineralization. Sharp, irregular contacts.

Structure:

Foliation moderately well developed with acute angle between bedding and foliation oriented sub-parallel to core axis.

Sulphides in Veins:

15.63 - 15.92 m. Very coarse-grained, sub-idioblastic to idioblastic pyrite along preferred horizons. Pyrite (to 1.5 cm in long dimension) extends through multiple layers of thin laminated (to very thin bedded) alternating silty argillite, comprises approximately 15% of interval. Lower 2.5 cm comprised of medium- to coarse-grained pyrite. Abundance decreases rapidly downhole.

Sulphides in Sediments:

Approximately 2-3% pyrite as medium- to, predominantly, coarse-grained, idioblastic to sub-idioblastic cubic crystals, commonly localized along preferred horizons, rarely as small crystal aggregates. Many crystals have been rotated so long dimension sub-parallel to foliation (therefore, growth of some pyrite porphyroblasts preceded deformation).

Alteration:

Foliation emphasized by development of fine-grained ankerite with elongated pressure shadows, progressively more abundant downhole.

24.90	42.90	30.90	46°

Lithology: Conglomerate.

Interval comprised predominantly of coarse-grained sand to coarse-grained granule conglomerate. Fining upward sequences, partially obscured by veining and/or broken intervals, as follows:

36.14 - 42.30 m - Matrix-supported fine-pebble conglomerate (60-70% fine-grained pebbles in 30-40% granule sized matrix). Pebbles rounded to sub-rounded and quartz-rich, ranging from translucent grey to opaque light grey, white to light blue, minor lithic component comprised of sub-angular to angular fine-grained sediment (siltstone to argillite - possible intraformational conglomerate?), fines gradually upward to medium-grained granule conglomerate at 36.21 m, fine-grained sand to 36.17 m. Overlain by approximately 90 cm of black argillite. May be fine-grained E layer of Bouma Sequence, or may be argillaceous rip-up clasts at base of next sequence. Juxtaposition of argillite with sharp contact with underlying fine-grained sand, coupled with coarse-grained sand above argillite, suggests it may be cap to sequence. However, interval from 35.63 - 35.92 m contains approximately 20-25% highly angular, argillaceous rip-up clasts at least 4.0 cm in long dimension in coarse-grained sand so it may be a large rip-up clast.

Veins:

24.90 - 25.01 m. Approximately 11 cm thick quartz vein at approximately 65° to core axis. Occurs at contact between siltstone and underlying granule conglomerate. Coarse-grained milky white quartz with patches and en echelon veinlets of pale orange dolomite at approximately 37° to core axis, up to 0.2 cm thick, at 60° to vein contact. Contains minor (<0.3%) black metallic minerals (0.1 cm diameter), does not appear to be galena (tetrahedrite?). Dolomitic patches contain 2-3% coarse arsenopyrite needles (to 0.5 cm length). Patches and discontinuous segments of pale orange dolomite along contact with host sediments (up to 1.0 cm thick). Contact sharp and irregular.

27.30 - 27.49 m. Milky white quartz vein, upper contact at 17° to core axis, lower contact broken. Approximately 8.5 cm thick with diffuse (over 0.1 - 0.2 cm), irregular contacts. Approximately 3% dolomite (pale creamy yellow).

31.14 - 31.53 m. Quartz vein sub-parallel to core axis. Approximately 1.5 - 2.5 cm thick quartz + dolomite vein sub-parallel to core axis with approximately 10-15% creamy yellow dolomite as fine to medium-grained crystals along margin, local small aggregates. Extends above upper contact into preceding interval as two 6-10 cm long en echelon veins 0.5 cm thick. No apparent mineralization. Host rock is foliated coarse granule to fine pebble conglomerate. At base, second wedge shaped quartz vein tapers out upward over 15 cm.

37.44 - 37.76 m. Quartz vein. Dirty white to light grey quartz vein at 18° to core axis (upper contact; lower contact broken). Diffuse upper contact over 0.1 cm, relatively straight to slightly irregular.

38.24 - 38.39 m. Quartz vein. Approximately 5 cm thick at 26° to core axis, dirty white to light grey, intergrown quartz crystals. No apparent mineralization. Sharp, relatively straight to slightly irregular contacts.

40.00 - 40.65 m. Quartz vein. Milky white, intergrown quartz crystals comprising quartz vein in broken interval. Largest segments to 10 cm in length. Fracture surfaces have weak, patchy iron-staining to localized moderately heavily iron-stained patches to locally heavily iron-stained.

42.30 - 42.42 m. Two quartz veins separated by approximately 2.5 cm of sediments. Upper vein broken into pebble sized fragments; lower vein ≤4.0 cm thick at 25° to core axis. Veins comprised of dirty white to light grey, intergrown quartz crystals with approximately 5-7% creamy pale yellow - orange dolomite. No apparent mineralization.

0313 - 386	24.90	25.01	0.01	0.112	7.68	30.2
0313 - 387	25.01	25.27	0.08	0.425	16.41	33.3
0313 - 388	25.27	25.68	0.02	0.199	10.47	2155.1
0313 - 389	25.68	25.99	0.00	0.466	183.89	542.9
0313 - 390	25.99	26.61	0.01	0.076	5.7	35.2
0313 - 391	26.61	27.30	0.01	0.108	6.37	28.2
0313 - 392	27.30	27.49	0.00	0.025	2.67	12.1
0313 - 393	27.49	27.80	0.01	0.118	5.11	115
0313 - 394	27.80	28.48	0.02	2.341	1144.28	3057.9
0313 - 395	28.48	28.90	0.01	0.885	234.5	1197.5
0313 - 396	28.90	29.19	0.04	4.93	1868.5	4931.5
0313 - 397	29.19	29.59	0.01	0.453	29.69	238
0313 - 398	29.59	29.78	0.01	0.992	313.04	198.3
0313 - 399	29.78	30.07	0.05	0.293	72.74	417.4
0313 - 400	30.07	30.48	0.3	0.32	58.1	49.6
0313 - 401	30.48	30.76	0.06	0.28	40.89	440.1
0313 - 402	30.76	31.14	0.08	0.482	98.83	4875.8
0313 - 403	31.14	31.53	0.02	0.131	17.24	153.5
0313 - 404	31.53	32.38	0.01	0.252	22.13	3252
0313 - 405	32.38	32.74	0.08	0.238	52.4	456.8
0313 - 406	32.74	33.07	0.06	0.134	10.18	63.6
0313 - 407	33.07	33.20	0.02	0.058	7.07	220.6
0313 - 408	33.20	33.53	0.13	0.277	26.99	350.1
0313 - 409	33.53	33.76	0.09	0.085	4.28	20.3
0313 - 410	33.76	33.94	1.06	0.237	9.55	16.1
0313 - 411	33.94	34.46	0.06	0.196	9.97	60.5
0313 - 412	34.46	34.68	0.28	0.519	109.48	248.2
0313 - 413	34.68	34.75	0.17	56.7	**1.56%**	**3.4%**
0313 - 414	34.75	35.38	0.06	0.298	63.01	259.4
0313 - 415	35.38	35.68	0.11	0.356	74.51	211.1
0313 - 416	35.68	36.17	0.03	0.487	95.83	1670.9
0313 - 417	36.17	36.41	0.06	0.179	39.21	336.3
0313 - 418	36.41	36.51	7.03	0.303	21.09	216.6
0313 - 419	36.51	36.98	0.05	0.071	5.79	49.5
0313 - 420	36.98	37.44	0.01	0.175	7.26	80.8
0313 - 421	37.44	37.76	0.00	1.211	2.18	13.3
0313 - 422	37.76	37.94	0.01	0.087	10.81	232.1
0313 - 423	37.94	38.24	0.06	0.198	6.88	53.1
0313 - 424	38.24	38.39	0.00	0.041	3.63	30.8
0313 - 425	38.39	39.16	0.01	0.171	7.3	41.2
0313 - 426	39.16	39.41	0.14	0.527	138.23	2141.8

Faults:

29.59 - 29.78 m. Broken, faulted interval in granule conglomerate. Gouge largely washed away.

Sulphides in Veins:

27.80 - 28.48 m. Quartz veins in granule conglomerate. Approximately 20% of interval comprised of deformed (attenuated to incipient boudinaged) quartz veins. Veins range from 0.3 - 1.0 cm thick at approximately 18° to core axis. One 0.75 cm thick quartz vein at top of interval contains 7% coarse-grained galena in local aggregate masses, hosted by milky white quartz vein having diffuse, irregular contacts and 2% pale creamy white to yellow dolomite, 1% coarse-grained sphalerite (colliform textured with black margin and medium dirty orange core, zoned with alternating orange and black layers at 27.92 m. Another quartz vein at approximately 28.40 contains approximately 7% medium-grained, orange coloured sphalerite in aggregate masses to 2.0 cm length and 2-3% galena as spatially distinct, medium-grained aggregate masses. Arsenopyrite noted in 4-6 cm zone above lowermost sphalerite- and galena-bearing quartz vein. Interval: 0.5-0.75% Zn, 0.25% Pb, As

30.48 - 30.76 m. Pale orange quartz vein. Upper contact at 50° to core axis, lower contact swallow tailed upward into vein, continues as anastamosing line of pyrite for 9 cm into vein. Approximately 1% pyrite disseminated through vein as medium- to minor coarse-grained, sub-idioblastic dodecahedra. Vein appears to consist of coarse-grained, intergrown quartz crystals with minor interstitial dolomite. Approximately 1/3 down from top of interval is a band of milky white quartz cored by pyrite-filled vugs, locally comprising approximately 3% idioblastic pyrite.

31.53 - 32.38 m. Milky white to pale orange (weakly iron stained) quartz vein. Upper contact broken, but appears that veins in preceding interval are short apophyses into host rock. Lower contact at 31° to core axis. Several screens or inclusions of host sediments in upper 40 cm of vein, to 0.75 cm thick. Vein comprised of very coarse-grained, intergrown quartz crystals. Minor aggregates of fine-grained sphalerite (to 2 cm length x 0.3 cm width) and galena (small aggregates to dusty blue-black areas). Interval: 0.05% Zn, 0.025% Pb

33.07 - 33.20 m. Quartz vein. Upper contact at 45° to core axis, basal contact at 38°. Contacts sharp, irregular. Upper contact gradational over 4 cm with thin stacked veins and increased silica content in host sediments. Basal contact diffuse over 0.1 cm and irregular. Vein comprised of milky white, intergrown quartz crystals. Very coarse-grained, sub-idioblastic pyrite cubes (to 0.5 cm) penetrate across lower vein margin from host sediments, appear to be zoned, with sub-idioblastic cubic core defined by darker margin, then over grown with later pyrite.

36.41 - 36.51 m. Quartz + arsenopyrite vein in granule conglomerate. Approximately 1.5 cm thick, dirty white to light grey quartz vein with approximately 5-7% creamy yellow to pale orange dolomite. Semi-massive, discontinuous arsenopyrite band between 0.1-0.4 cm thick along core of vein, extending from core of vein to upper contact of vein, as fine- to medium-grained, intergrown needles. Arsenopyrite comprises 25-30% of vein. Coarse-grained arsenopyrite needles, to 0.8 cm in long dimension, disseminated in surrounding sediments. Interval: 3-5% As

39.16 - 39.41 m. Quartz veins in fine pebble conglomerate. Four quartz veins in interval, of two probable generations. Three, at 39.21, 39.22 and 39.31 m at approximately 35° to core axis and ≤1.5 cm thick, are probably early veins, comprised of light grey to dirty white, intergrown quartz with minor vug space. The fourth, between 39.16 and 39.20, is up to 3.0 cm thick at 58° to core axis and comprised of lightly iron-stained, milky white quartz. Two small aggregate masses of fine- to medium-grained, dark orange sphalerite with black speckled appearance, to 1.0 cm in length x 0.3 cm thick, are located along lower contact of lower vein. Host conglomerate contains approximately 1% medium-grained, sub-idioblastic pyrite and unidentified pale yellow-green mineral located along margin of vein at 39.23 (lower margin) and interstitially in pebble conglomerate to upper contact of vein at 39.31, comprising approximately 1% of 3.5 cm interval between the two veins. Interval: 0.1-0.2% Zn

0313 - 427	39.41	39.91	0.05	0.083	5.89	26.1
0313 - 428	39.91	40.00	0.96	0.103	14.1	76.9
0313 - 429	40.00	40.65	0.08	0.12	10.9	84
0313 - 430	40.65	41.18	0.03	0.132	14.36	43.1
0313 - 431	41.18	41.29	0.74	8.686	2146.93	2153.9
0313 - 432	41.29	41.42	0.04	4.639	1364.72	991.1
0313 - 433	41.42	41.78	0.01	0.431	47.33	104.2
0313 - 434	41.78	42.30	0.06	0.128	22.08	1478
0313 - 435	42.30	42.42	0.04	0.672	88.91	62.1
0313 - 436	42.42	42.59	0.55	0.206	17.1	79.1
0313 - 437	42.59	42.90	0.01	0.173	5.17	66.3

39.91 - 40.00 m. Quartz vein. Badly broken interval with largest fragments ≤4 cm in long dimension. Appears to consist of one or more lightly iron-stained, milky white, intergrown quartz veins ≤2.5 cm thick. Margins of vein comprised of variable amounts of fine- to medium-grained arsenopyrite needles oriented at high angles to vein margins. Arsenopyrite comprises between 0 and 5% of vein as aggregate bands of intergrown needles between 0.1 and 0.3 cm thick. Approximately 1% disseminated pyrite. Interval: 1-2% As

41.29 - 41.42 m. Quartz vein. Upper contact at 34° to core axis, lower contact broken. Vein comprised of lightly iron-stained, light grey to dirty white, coarse intergrown quartz crystals with 15-20% creamy white to pale yellow dolomite patches with thin, hairlike arsenopyrite-rich fractures. Arsenopyrite-bearing dolomite lies within medium grey shaded quartz + subordinate dolomite zone which I suspect is comprised of abundant fine-grained arsenopyrite inclusions. Interval: 3-5% As

Sulphides In Sediments:

Entire interval sampled due to minor, but ubiquitous presence of fine- to medium-grained arsenopyrite, moderate abundance of quartz veining and numerous occurrences of mineralized bands and veins, comprised of arsenopyrite, sphalerite and/or galena (see Sample Descriptions).

25.01 - 25.27 m. Pyrite-bearing granule conglomerate. Light grey granule conglomerate contains approximately 10% fine- to coarse-grained, sub-idioblastic to idioblastic pyrite (0.1 to 0.4 cm diameter). Pyrite enriched below contact with siltstone (short interval below vein - Note: little or no pyrite enrichment in siltstone above vein, therefore, fluid flow blocked by vein). Pyrite also enriched along thin, diffuse quartz vein. Approximately 12-15% pyrite in upper half of sample, decreasing to approximately 3-5% in lower half. Trace to minor amounts of coarse-grained arsenopyrite (to 0.3 cm in length) and blebs of sphalerite. Coarse-grained arsenopyrite comprises << 0.05% in interval but possibly moderately abundant fine-grained arsenopyrite in matrix.

25.68 - 25.99 m. Quartz veins in granule conglomerate. Two quartz veins (5 cm - upper; ≤4.5 cm - lower) at 17° to core axis. Both veins comprised of milky white, intergrown, coarse-grained quartz crystals in pyrite-bearing granule conglomerate (similar to above). Contacts moderately sharp (diffuse over 0.1 cm?) and irregular. Three thin dolomite veinlets (≤0.15 cm thick) present in 1-3 cm granule conglomerate between quartz veins. One veinlet contains 20-30% fine- to medium-grained, medium orange (with speckled black inclusions) sphalerite as aggregate band over 3.0 cm of exposed length of veinlet. Quartz veins probably merge within 10 cm down-hole along length of vein as lower vein at slightly shallower angle to core axis.

25.27 - 25.68 m. Pyrite-bearing granule conglomerate. Approximately 2-3% fine- to coarse-grained pyrite (0.1 - 0.5 cm) disseminated throughout granule conglomerate. Possible fine-grained arsenopyrite (or edges of pyrite cubes). Thin (0.5 cm) quartz veinlet at approximately 30° to core axis (warped vein) with approximately 15% medium orange sphalerite in fine- to medium-grained aggregate masses (to 2.0 cm long dimension). Interval: 0.2% Zn, As (?)

25.99 - 26.61 m. Conglomerate. Grades from matrix-supported, fine pebble to coarse-grained granule conglomerate over interval. One quartz vein at centre of interval (26.33 cm) at 18° to core axis, variable thickness (0.5 to 1.5 cm over width of core) comprised of light grey to milky white quartz with 5% dolomitic margins. Yellow-orange amorphous mineral in interstices of conglomerate (limonite / goethite?). Fine-grained pyrite comprises <1% of interval.

26.61 - 27.30 m. Conglomerate. Approximately 1-2% fine-grained pyrite over interval. Approximately 3 cm thick vein at approximately 20° to core axis at approximately 27.03 m. Diffuse contacts with host conglomerate. Approximately 3-4% creamy yellow to chalky white dolomite along upper contact of vein.

27.49 - 27.80 m. Pyrite-bearing granule conglomerate. Approximately 2% fine- to medium-grained, disseminated, sub-idioblastic to idioblastic pyrite (both cubic and dodecahedral morphology). Possible arsenopyrite.

28.48 - 28.90 m. Pyrite-bearing, medium-grained granule conglomerate. Approximately 3-5% sub-idioblastic pyrite (as cubes and dodecahedra). Minor coarse-grained arsenopyrite (to 0.3 cm in length).

28.90 - 29.19 m. Approximately 4 cm thick mineralized quartz vein at approximately 28° to core axis. Vein comprises approximately half of sample interval by volume. Appears to consist of two quartz veins (≤0.5 cm - upper; 2.5-3.0 cm - lower) separated by two thin, discontinuous screens (or inclusions) of granule conglomerate between 0.2 - 0.5 cm thick. Approximately 15% sphalerite, comprised of aggregate mass of fine- to medium-grained crystals as semi-continuous band and train of crystals over 3 cm along upper contact of vein, which is replaced by similar band of fine-grained galena. The two minerals occur in the same vein but are spatially distinct with one replaced by the other across a transitional zone, possibly significant in consideration of larger structural features. Contacts sharp and slightly irregular. Host conglomerate similar to previous interval.

29.19 - 29.59 m. Pyrite-bearing granule conglomerate. Similar to 28.48 - 28.90 m with 1-2% sub-idioblastic pyrite.

29.78 - 30.07 m. Pyrite-bearing granule conglomerate. Approximately 2-3% sub-idioblastic pyrite similar to 28.48 - 28.90 m, predominantly medium- to coarse-grained. Thin, light grey vein, 0.3 cm thick, at approximately 65° to core axis, same colour as host grit with relatively sharp contacts in centre of interval. Contains 2% medium orange sphalerite as single, fine-grained crystals and one small aggregate mass. Interval: <0.1% Zn.

30.07 - 30.48 m. Pyrite-bearing granule conglomerate. Similar to 28.48 - 28.90 m. Approximately 3-5% medium- (to coarse-) grained, sub-idioblastic to idioblastic pyrite (to 0.4 cm diameter). Approximately 1-2% in upper half of interval and 5-7% in lower half of interval. Approximately 1.5 cm quartz vien at top of sample interval comprised of milky white quartz at approximately 24° to core axis. Interval also has approximately 1% light to medium orange dolomite in veinlets (with 40% quartz) and in foliation parallel stringers + "fish", with quartz

30.76 - 31.14 m. Pyrite-bearing granule conglomerate. Approximately 7-10% pyrite over interval, ranging from 20% very coarse-grained pyrite (to 1 cm) for 5 cm underlying vein to 3-5% medium- to coarse-grained pyrite (to 0.4 cm) over remainder of interval. Pyrite as idioblastic, minor sub-idioblastic, dodecahedra over upper half of interval with sub-equal proportion of cubic + dodecahedral crystals over lower half. Pyrite appears to have medium-grained core (to 0.2 cm) of cubic pyrite with dark margins, overgrown by dodecahedral pyrite. Thin quartz vein, ≤0.5 cm, approximately 5 cm below lower contact of vein in previous interval at approximately 33° to core axis. Vein contains approximately 30% medium-grained, medium-orange sphalerite as semicontinuous, massive sulphide band 5 cm long. Another patch of medium honey-yellow to orange sphalerite in an aggregate mass 1.5 cm long in quartz + dolomite vein. Interval: 0.5% Zn

32.28 - 32.74 m. Quartz flooded conglomerate. Base of vein comprised of mottled, intermingled quartz vein material and host sediments. Contacts sharp to diffuse, highly irregular, comprised of possible breccia and/or multiple screens and/or inclusions of sediments over interval. Some fractures moderately iron-stained. Approximately 5-7% creamy yellow dolomite. Lower contact at approximately 25° to core axis. Approximately 3-5% medium-to coarse-grained, sub-idioblastic, cubic pyrite over basal 8 cm.

32.74 - 33.07 m. Pyrite-bearing granule conglomerate. Approximately 0.5-1% sub-idioblastic to idioblastic, cubic pyrite, with fine- to medium-grained pyrite disseminated over interval and coarse-grained pyrite (to 0.3 cm) in basal 8 cm. Trace fine- to medium-grained arsenopyrite throughout interval. Very fine-grained metallic appearing grains in rock (pyrite crystal faces and/or silver-white arsenopyrite?). Increased silica content over basal 4 cm as thin (< 0.75 cm) quartz ± dolomite veins with sharp irregular contacts stacked above vein (next interval).

33.20 - 33.53 m. Pyrite-bearing granule conglomerate. Approximately 3-5% pyrite as fine- to coarse-grained, sub-idioblastic to idioblastic cubes, with subordinate dodecahedral crystals. Coarse-grained pyrite (to 0.4 cm) zoned as previously described. Minor fine- to medium-grained arsenopyrite crystals noted in interval. Sampled to assess As +/or Au below vein.

33.53 - 33.76 m. Pyrite-bearing granule conglomerate. Similar to previous interval with approximately 5% fine- to coarse-grained pyrite (to 0.5 cm diameter), as idioblastic to sub-idioblastic cubes and dodecahedra. Minor fine-grained arsenopyrite needles noted over interval, possibly increasing toward base. Sample selected to assess As +/or Au above arsenopyrite-enriched zone (next sample).

33.76 - 33.94 m. Arsenopyrite-enriched granule conglomerate. Approximately 10-15% fine- to coarse-grained arsenopyrite over 4 cm in middle of interval, as aggregate masses and abundant disseminated crystals. Abundance decreases rapidly on either side to ends of interval. Approximately 1-3% medium- to coarse-grained pyrite, primarily in association with zone of arsenopyrite. Arsenopyrite + pyrite intergrown in several instances, with arsenopyrite along margin of pyrite and/or penetrating up to 1.0 cm into margin of pyrite. Several instances in which arsenopyrite may be contained as inclusions in outer pyrite rind, but can't be certain with hand lens. Interval: Approximately 10% As

33.94 - 34.46 m. Pyrite-bearing coarse granule conglomerate. Approximately 7-10% sub-idioblastic to idioblastic, dodecahedral to subordinate cubic, predominantly medium-grained (fine- to coarse-grained) pyrite disseminated throughout interval. Slight increase in proportion of pyrite toward base of interval. Minor fine- to medium-grained arsenopyrite noted over interval.

34.46 - 34.68 m. Pyrite-bearing coarse granule conglomerate. Approximately 10% medium- to coarse-grained (to 0.5 cm), sub-idioblastic to idioblastic pyrite cubes and dodecahedra. Interval contains two thin quartz + dolomite veins (to 1.5 cm thick) at 42° (upper) and 07° (lower) to core axis. Upper vein contains 0.4 x 2.0 cm loose aggregate mass of medium- to coarse-grained arsenopyrite needles (approximately 2% of vein). Lower vein is cross-cut by 0.1-0.15 cm band of fine-grained arsenopyrite at 27° to core axis. Approximately 1-2% coarse-grained arsenopyrite needles disseminated throughout interval. Interval: 2-3% As

34.68 - 34.75 m. Veins in pyrite-bearing granule conglomerate. Two quartz veins, upper ≤2.0 cm thick at 40° to core axis; lower ≤1.0 cm thick at 27° to core axis, both comprised of milky white, intergrown quartz crystals ± vug space. Contacts sharp to diffuse (over 0.1cm). Approximately 1 cm thick zone of 60-70% fine- to medium-grained, medium to dark orange sphalerite with 5-7% fine-grained galena and 3-5% fine- to medium-grained pyrite at approximately 75° to core axis and approximately 30° to upper quartz vein. Minor galena + pyrite within sphalerite band with most of galena + pyrite located along upper contact of sphalerite band, highly subordinate proportion along lower contact. Approximately 1% medium-grained arsenopyrite disseminated through interval. Host rock is coarse-grained granule conglomerate with 5-7% coarse-grained (to 1.0 cm), idioblastic, dodecahedral pyrite crystals. Interval: 5-6% Zn, 1-2% Pb, ≤0.5% As

34.75 - 35.38 m. Pyrite-bearing, matrix-supported, fine pebble conglomerate. Approximately 5-7% medium- to coarse-grained (to 0.5 cm), idioblastic to sub-idioblastic, dodecahedral and cubic pyrite disseminated throughout interval. Apparent zonation as described previously over fine- to medium grained cores. Minor medium-grained arsenopyrite disseminated throughout interval. Possible enrichment toward base of interval to 0.5-1% arsenopyrite. Interval: 0.1-0.5% As

35.38 - 35.68 m. Pyritic, coarse-grained granule to fine pebble conglomerate. Approximately 10-15% of interval comprised of two generations of quartz veining. First generation comprised of dirty white to light grey quartz to 1.0 cm thick which undulates through interval at approximately 10° to core axis. Second generation cross-cuts and off-sets first vein (≤1.5 cm at approximately 53° to core axis) by approximately 3 cm. Upper 15 cm of interval comprised of approximately 30% quartz veins. Host rock comprised of 10-15% medium- to coarse-grained, idioblastic to sub-idioblastic, dodecahedral to cubic pyrite (to 0.5 cm diameter). Proportion of pyrite decreases downward through interval, from 20-25% with veins to 2-4% at base of interval. Minor medium- to coarse-grained arsenopyrite (to 0.4 cm length) disseminated throughout interval.

35.68 - 36.17 m. Pyrite-bearing granule conglomerate. Approximately 15-20% highly angular, black, silty argillite to argillite rip-up clasts at probable base of granule conglomerate interval. Approximately 2-3% predominantly medium-grained, sub-idioblastic (to idioblastic), cubic (highly subordinate dodecahedral) pyrite. Proportion of pyrite decreases from 3-5% at top of interval to 1-2% at base.

36.17 - 36.41 m. Pyrite-bearing, coarse-grained granule conglomerate. Approximately 5-7% pyrite over upper 8 cm of interval, decreasing to ≤1% over remainder. Pyrite present as fine- to coarse-grained (to 0.6 cm), sub-idioblastic, dodecahedral to cubic pyrite at top of interval to fine-grained, idioblastic cubic pyrite at base.

36.51 - 36.98 m. Granule conglomerate. ≤1% sub-idioblastic, medium-grained, dodecahedral to cubic pyrite. Minor coarse-grained, disseminated arsenopyrite needles at top of interval.

36.98 - 37.44 m. Coarse-grained granule conglomerate, matrix-supported in granule conglomerate with <1% medium-grained, disseminated pyrite crystals. Two thin, dirty white to light grey quartz veins, ≤0.5 cm (upper) and ≤2.0 cm (lower) veins, with or without creamy white to pale yellow dolomite (≤5%), at 25° to core axis. No apparent mineralization.

37.76 - 37.94 m. Coarse-grained granule to fine-grained pebble conglomerate. Interval largely broken with fragments less than 8 cm in long dimension. Fracture surfaces weakly to moderately iron-stained. <<1% fine- to medium-grained pyrite.

37.94 - 38.24 m. Matrix-supported fine pebble conglomerate. Broken interval with fragments up to 15 cm in length. Limonite spotted (after pyrite) with weakly to moderately iron-stained fracture surfaces. Approximately 1-2% pyrite (as unweathered pyrite crystals to heavily to completely weathered limonite spots).

38.39 - 39.16 m. Matrix-supported, fine pebble conglomerate. Largely intact interval with moderately iron-stained fractures, irregular due to coarse-grained nature of host rock, at approximately 10° to core axis. <1% fine- to medium-grained, idioblastic, cubic pyrite crystals over interval.

39.41 - 39.91 m. Matrix-supported, fine pebble conglomerate. Approximately 1% fine- to medium-grained, sub-idioblastic, cubic pyrite. Minor arsenopyrite.

40.65 - 41.18 m. Matrix-supported, fine-pebble conglomerate. ≤1% fine- to medium-grained, sub-idioblastic, cubic pyrite.

41.18 - 41.29 m. Arsenopyrite-bearing, fine pebble conglomerate. Lightly iron-stained, milky white quartz vein at 41.23 m at approximately 31° to core axis, approximately 1.0 cm thick. Interval badly broken parallel to coarse foliation, to which vein is sub-parallel. Arsenopyrite present along lower contact of vein as irregular band approximately 0.1 to 0.4 cm thick of intergrown, fine-grained needles. Approximately 7-10% sub-idioblastic pyrite between vein and underlying vein at 41.29 (see next interval) in weakly iron-stained pebble conglomerate. Mineralization over 3 cm above base of interval, at contact with underlying vein, comprised of 15-20% sub-idioblastic pyrite and 5-6% fine-grained galena. Interval: 1-2% As, 0.5-1% Pb

41.42 - 41.78 m. Fine-pebble conglomerate. << 1% sub-idioblastic, medium-grained pyrite disseminated throughout interval.

41.78 - 42.30 m. Fine-pebble conglomerate. Approximately 1% sub-idioblastic, fine- to medium-grained pyrite crystals. Thin, 0.5 cm thick, dirty white to light grey quartz vein at 42.10 m at 45° to core axis, has discontinuous band 0.1-0.3 cm thick of fine-grained sphalerite along lower contact. Minor fine- to medium-grained arsenopyrite disseminated throughout interval. Interval: 0.2-0.3% Zn

42.42 - 42.59 m. Pyrite-bearing granule conglomerate. Approximately 10-15% fine- to medium-grained, sub-idioblastic to idioblastic, dodecahedral to cubic pyrite crystals on either side of composite vein. Vein is ≤3.0 cm thick at 41° to core axis. Upper and lower margins comprised of ≤0.5 cm thick, milky white quartz layers. Interior of vein comprised of 50-60% dirty white to light grey quartz and 40-50% creamy yellow dolomite in aggregate masses and/or fractured coarse crystals. Core of vein has dusting of dark grey material which might be fine-grained arsenopyrite, similar to 41.29 - 41.42 m. Interval: Suspect approximately 3% As

42.59 - 42.90 m. Granule conglomerate with increased shear gradient down-hole to incipient failure. Approximately 1% sub-idioblastic to idioblastic, fine-grained cubic pyrite.

42.90	46.60			**Lithology: Fault Zone.** Fault gouge, ranging from clayey gouge to grit-sized, highly angular fragments. Several shattered, relatively intact segments present within fault zone. Transition between overlying conglomerate and underlying silty argillite evident in core; conglomerate from 42.90 - 44.67 m, intermingled conglomerate and silty argillite from 44.67 - 45.07 m, silty argillite from 45.07 - 46.60 m. **Structure:** Shear foliation in conglomerate at 42.90 at 40° to core axis; in silty argillite at 46.60 m at approximately 15° to core axis. **Faults:** **42.90 - 43.40** m. Faulted granule conglomerate, comprised of incohesive fault gouge, ranging from clayey gouge to highly angular, fine pebble-sized fragments. Two faulted quartz veins in interval. **43.40 - 43.74** m. Quartz veins in granule conglomerate. Two relatively intact quartz veins in interval. Upper quartz vein sheared and shattered but remains intact. Upper contact (probably shear modified) at 19° to core axis, approximately 3.0 cm thick, upper and lower contacts sheared. Lower quartz vein at 15° to core axis , ≤5 cm thick, dirty white to light grey. Minor medium-grained, sub-idioblastic arsenopyrite. **43.74 - 44.01** m. Pebble conglomerate. Intact segment between vein and fault below, approximately 0.5-1% sub-idioblastic, fine- to medium-grained pyrite. Minor arsenopyrite as medium-grained needles (to 0.3 cm length). **44.01 - 44.53** m. Faulted conglomerate. Medium yellow to local dark orange gouge and/or spotting, possibly due to secondary limonite / goethite (after pyrite) and / or scorodite (after arsenopyrite). Shattered / sheared quartz vein material may also be present. **44.53 - 45.07** m. Mixed, intermingled, faulted conglomerate and silty argillite. **45.07 - 46.13** m. Faulted silty argillite. Note: interval from 39.62 - 42.67 short 14" (35.5 cm), probably in the interval from 39.91 - 40.65 (samples 428 + 429) and 41.18 - 41.42 (samples 431 + 432). Interval from 42.67 - 45.72 short 7" (18 cm) probably due to significant interval of faulting. Similarly, interval from 45.72 - 48.76 is short 18" (46 cm) probably due to the faulting between 45.72 - 46.60.	0313 - 438 0313 - 439 0313 - 440 0313 - 441 0313 - 442 0313 - 443	42.90 43.40 43.74 44.01 44.53 45.07	43.40 43.74 44.01 44.53 45.07 46.13	0.21 0.02 0.34 0.10 0.01 0.09	0.081 0.038 0.087 0.08 1.03 1.894	6.68 2.02 4.98 4.23 11.32 13.15	236.2 22.5 40 97.2 247.5 307
46.60	64.70	46.8 48.0 49.0 50.0 51.00 52.00 53.0 54.0 55.0 56.0 57.0 58.0 59.0 60.0 62.0 63.75 64.0	18° 74° 71° 38° 33° 30° 29° 27° 42° 32° 34° 32° 50° 51° 48° 23° 31°	**Lithology: Medium to dark grey argillaceous siltstones to silty argillites, subordinate siltstones.** Massive to bedded, with bedding ranging between thinly laminated to thin bedded. Bedding moderately difficult to identify due to minor hue changes between beds (medium to dark grey). Laminations somewhat easier to discern as they consist of light or dark grey intervals. **Veins:** **46.82 - 47.39** m - Approximately 50% quartz veining as multiple veins between 0.5 - 3.0 cm thick with thin screens and/or inclusions of host sediments. Some veins taper out uphole over 8 cm, average 13-20° to core axis. Veins have sharp, irregular margins. Veins tend to bifurcate uphole, coalesce downhole. Light grey to dirty white quartz veins with 5-10% creamy pale yellow dolomite. Cross-cut at 46.90 m and 47.15 m by two ≤0.5 cm bone white to pale creamy yellow dolomite veins at approximately 40° to core axis, 60° to quartz veins. **47.69** m - ≤1.0 cm light grey to dirty white quartz vein at approximately 35° to core axis. Sharp, irregular contacts. **47.88** m - ≤1.5 cm quartz vein, as above, at approximately 45° to core axis. Sub-parallel to S_1, pinch and swell (incipient boudinage) textures. **48.19** m - ≤2.0 cm, pale yellow dolomite vein at 37° to core axis, approximately 80° to foliation, sharp, slightly irregular to straight contacts **49.75** m - Approximately 2.0 cm thick, dirty white to light grey quartz and creamy yellow dolomite (to 10%) vein. Sharp, irregular contacts at approximately 30-35° to core axis, sub-parallel to S_0 and S_1.	0313 - 445	48.64	48.76	0.21	1.179	22.05	100.6

50.20 - 50.26 m - Five thin (≤0.4 cm) veins. Early dirty white to light grey quartz vein and dirty white quartz and creamy yellow dolomite veins cross-cut and partially assimilated by creamy yellow dolomite ± quartz veins. Veins have sharp, irregular contacts and cross-cuts foliation. Variable orientation - high angle to core axis.

50.50 m - ≤0.5 cm thick, dirty white to light grey quartz vein with light orange dolomite along margins (approximately 25-30%). Sharp, irregular contacts at slight angle to S_0.

53.35 m - Pale creamy yellow dolomite vein, ≤1.2 cm thick, at approximately 20-25° to core axis. Sharp, irregular contacts comprised of short straight segments with sharp angular corners as vein changes direction.

53.66 m - ≤1.5 cm dirty white to light grey quartz + pale yellow dolomite vein (5-10%) sub-parallel to foliation at approximately 20° to core axis. Vein thins and thickens with sharp, slightly irregular contacts.

57.24 - 57.52 m - Three thicker veins cross-cutting thinner veins. Two thin, dirty white to light grey quartz + dolomite veins (≤0.4 cm thick) at approximately 20-30° to core axis. One is cross-cut by a creamy white and yellow dolomite and white quartz vein ≤1.5 cm thick. Creamy yellow dolomite occurs on the upper margin and creamy white dolomite in the core and along the lower margin. Vein has sharp, irregular contacts with abrupt changes in thickness due to bifurcation into apophyses within sediments (or veinlets coalescing into veins). Another ≤3.0 cm thick white quartz vein with 20% creamy white dolomite margins (to 0.5 cm) along each margin. Margins sharp and straight.

58.94 - 59.09 m - Semi-translucent white quartz vein with dolomite stringers sub-parallel to foliation spaced 0.4 - 2.0 cm in vein. Contacts at approximately 50° (upper) and 40° (lower), sharp and irregular, with short quartz ± dolomite stringers into host sediments. Lower contact comprised of ≤2.0 cm of partially assimilated siltstone.

59.38 - 62.92 m - Approximately 20% quartz, dolomite and quartz + dolomite veins and veinlets. Early veins appear to be dirty white to light grey veins ≤0.5 cm thick at shallow to moderate angles to core axis. Margins sharp and straight to irregular. Where foliation strongly developed and at high angle to vein, vein may be folded and broken. May or may not be associated with pyrite. Most of the veins in this interval are milky white quartz with highly subordinate creamy yellow to light orange dolomite, at moderate to high angles to core axis and having highly irregular margins.

Structure:

Foliation moderately to well developed at very shallow to shallow angle to core axis. Foliation refracts from shallow inclination to core axis in recessive units to steeper in more resistant units. In several areas, the foliation refracts from one facing though perpendicular to core axis to the other facing. Foliation emphasized by development of ankerite porphyroblasts and pyrite, with associated pressure shadows elongated parallel to foliation, particularly in upper 2.80 m of interval.

Crenulation cleavage variably developed, absent or cryptic in coarser grained sediments, well developed in argillite to silty argillite, oriented at 14° to core axis, 15° to long axis of S_0 on broken face.

Faults:

48.90 - 49.55 m - Broken ground with one interval of incohesive sheared silty argillite (50.15 0 50.20 m) and broken rock with fault gouge between 50.43 and 50.54 m.

55.00 m - Fault plane with minor gouge on surface at 40° to core axis.

Sulphides in Sediments:

Extremely coarse-grained, cubic pyrite between 48.64 - 48.76 m, 1.5 cm on each side. Pyrite varies between <<1% to 15% over 4 cm, average 0.5-1.0% over interval, generally medium- to very coarse -grained, sub-idioblastic to idioblastic cubic crystals.

48.64-48.76 m. Very coarse, sub-idioblastic to idioblastic, cubic pyrite in well foliated silty argillite with ankerite porphyroblasts and prominent pressure shadows elongated parallel to foliation.

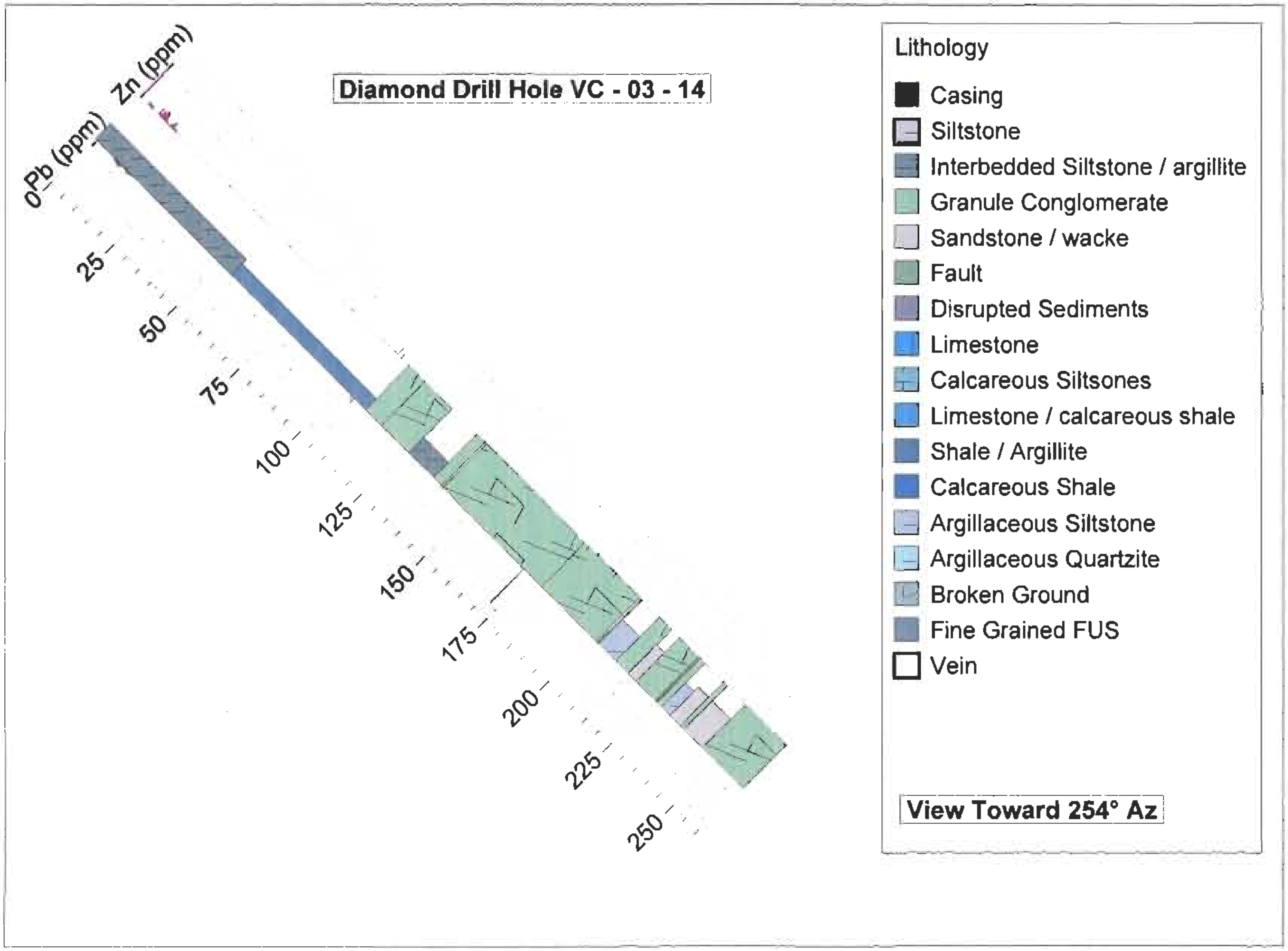
64.70	92.55	65.0 66.0 67.0 68.0 69.0 70.0 71.00 72.00 73.0 74.0 75.0 76.0 77.0 79.0 80.0 81.0 82.0 83.0 84.0 85.0 86.0 87.5 89.0 90.0	26° 27° 28° 33° 38° 37° 39° 39° 39° 43° 40° 37° 46° 44° 46° 48° 43° 46° 45° 40° 28° 00° 20° 00°	**Lithology: Medium to dark grey siltstones to argillaceous siltstones.** Prominent thinly to thickly laminated intervals. Overall, the interval is medium grey with sequences of interlaminated laminae up to 10 cm thick. In addition, there are several coarse siltstone to fine sandstone intervals up to 25 cm thick which fine upwards, therefore, right-way-up sequence. Laminae vary in size from paper thin to thickly laminated with interbeds between laminated sequences of medium to dark grey, argillaceous siltstone to silty argillite. **Veins:** **66.17** m - ≤2.0 cm dirty white quartz vein at approximately 15° to core axis. Approximately 15-20% white dolomite crystals along margins. Vein appears to have been thickened and duplicated by compression across foliation planes. Approximately 8 cm of vein has been juxtaposed underneath vein by movement along foliation plane, with another ≤5 cm juxtaposed below that, resulting in a 3-fold increase of vein thickness. Sharp, slightly undulating contacts. **66.55** m - ≤2.0 cm thick, light grey quartz vein with 10-15% white dolomite along margins, at approximately 20° to core axis. Straight contacts. **73.81 - 73.85** m - Milky white, coarse-grained, intergrown quartz crystals with vug space at 77° to core axis, approximately 4.5 cm thick with sharp, straight contacts. **77.66** m - Approximately 3.0 cm thick milky white quartz vein with intergrown quartz crystals at approximately 75° to core axis, relatively straight, sharp contacts. **77.96 - 78.01** m - Two light grey quartz veins, ≤0.5 cm thick at approximately 60° to core axis, coalesce into single vein ≤1.0 cm thick. Variable (hourglass shaped) white quartz vein at approximately 70° to core axis, ≤3.0 cm thick at widest point. Veins truncated by foliation plane. **87.50** m - Approximately 2.0 cm thick white quartz vein at 20° to core axis, straight to gently undulose contacts, sharp. **88.61 - 88.78** m - Milky white quartz vein with 5-10% creamy yellow dolomite. Vein thickens dramatically uphole at 88.78 m, from ≤1.0 cm dirty white quartz vein to ≥3.0 cm (core contains only 1 vein margin). **Structure:** Foliation moderately well developed with less abundant ankerite porphyroblasts and less prominent pressure shadows. Foliation generally at shallow angle to bedding and core axis, with bedding generally at higher angle to core axis. **Faults:** **75.28** m - Fault plane with gouge, partially healed with dirty white quartz, ≤0.5 cm thick at 37° to core axis. **86.55 - 87.78** m - Faulted zone between 86.55 - 86.84 m at approximately 10° to core axis, partially healed by quartz. Thick milky white quartz vein between 86.84 and 87.05 m with broken contacts, appears to be oriented at high angle to core axis. Incohesive fault gouge between 87.57 - 87.71 m at approximately 25° to core axis. **92.37 - 92.55** m - Faulted base of interval comprised of fault gouge between fractured fault fragments at approximately 37° to core axis. **Sulphides in Sediments:** Pyrite <<1% over interval as fine- to medium-grained, idioblastic cubic crystals.							

92.55	119.83	93.0 94.0 95.0 96.0 97.0 98.0 99.0 100.0 101.0 102.0 103.0 104.00 106.00 107.0 108.0 109.0 110.0 111.0 112.0 113.0 114.0 115.0 116.0 117.0 118.0 119.00	55° 45° 38° 43° 35° 45° 51° 47° 40° 47° 54° 56° 61° 45° 67° 75° 70° 65° 58° 78° 60° 55° 31° 55° 60° 45°	**Lithology: Transitional Fining Upward Sequence.** Interval fines upward on two scales. First order Fining Upward Sequence (FUS) comprised of decrease in proportion of coarse-grained sediments (i.e. coarse-grained argillaceous sandstone to very fine-grained argillaceous granule conglomerate) upward. Interval between coarse-grained intervals increases and average thickness decreases upward. Highly subordinate argillaceous sandstone to granule conglomerate above approximately 103.63 m, replaced by light grey siltstone. Second order FUS comprised of well developed, highly repetitive FUS throughout interval, from coarse-grained, massive base with sharp basal scour, upward to finer grained sediments, through planar bedded, thinly to thickly laminated, alternating light and medium to dark grey siltstones to a dark grey to black silty argillite to argillite cap. Base of units characterized by sharp basal scour of coarse-grained unit into underlying argillite to silty argillite. Some intervals have structurally enhanced flame structures (enhanced by development of foliation) and probable load casts. Second order FUS vary between 10 cm and 100 cm thick and comprise virtually the entire interval. **Veins:** **99.10** m - Approximately 2.0 cm thick creamy yellow dolomite vein with subordinate quartz at approximately 43° to core axis. Vein has upper dolomite dominant and lower quartz dominant halves with small, highly angular inclusions of silty argillite underlying vein. **104.27 - 104.53** m - Milky white quartz vein with approximately 5% dolomite. Only half of vein cored, with upper and lower contacts at approximately 25° to core axis to middle of core then 0° to core axis. Contacts sharp and curvilinear. **110.15 - 110.43** m - Dirty white to light grey quartz vein(s). Contacts sharp and highly irregular, with wedge-shaped apophyses, stringers and flame-like quartz veins into host sediments. Upper contact at 40°, lower at 15° to core axis. **109.50 - 112.30** m - Approximately 5 - 10% veins, predominantly quartz veins at shallow to moderate angles to core axis. Sharp contacts, some with short stringers. One thin creamy yellow dolomite veinlet at high angle to core axis (approximately 75°), sharp undulating to angular contacts, cross-cuts quartz veins. **Structure:** Foliation poorly to moderately developed in the finer grained sediments at moderately steep angle to core axis and generally at shallow angle to S_0. **Faults:** **94.61** m - Thin fault zone with fault gouge at 40° to core axis. **105.40 - 105.95** m - Broken interval with fault gouge on many broken surfaces. **107.35 - 107.40** m - Broken interval with fault gouge on many broken surfaces. Lower contact at 32° to core axis. **108.56 - 108.56** m - Thin fault zone with gouge at approximately 30° to core axis. **111.47** m - Thin gouge zone at approximately 35° to core axis. **Sulphides in Veins:** **95.91 - 96.07** m. Yellow-green iron-carbonate (powder reacts weakly with dilute HCl) + quartz vein ≤4.5 cm thick at approximately 35° to core axis, steeply dipping to west (when aligned with respect to foliation) on east limb of anticline. Vein has banded appearance, with coarse, intergrown, creamy yellow dolomite at lower contact and extending in an irregular manner to within 1.5 cm of upper contact. The dolomite is wedged-shaped along length of core, tapering downward and replaced by dirty white to light grey quartz. The dolomite appears to have cross-cut earlier bands of mineralization and may represent a later phase of vein growth. Disseminated and small aggregates of arsenopyrite are present along the contact of the vein with host sediments, above the dolomite in the quartz and in quartz patches within the dolomite wedge. Dark orange sphalerite and galena is present in a discontinuous band above the dolomite and within the quartz, up to 0.5 cm thick. A ≤0.4 cm pyrite and arsenopyrite	0313 - 446	95.91	96.07	1.58	91.5	**4.16%**	**0.38%**

				band extends along the upper portion of the vein, approximately 0.5 cm from the upper contact and cutting upward toward the contact in an up-hole direction. The pyrite band consists of fine- to medium-grained pyrite in two bands separated by approximately 0.1 cm of dirty white quartz (possibly with arsenopyrite) with ≤0.1cm of fine-grained arsenopyrite along the interior contact of the band. The upper contact of the vein consists of 0-0.5 cm of black speckled dolomite with internal, very fine-grained banding. Sharp, slightly irregular contacts. Interval:1-2% Pb, 1% Zn, 1-3% As							
119.83	143.25	120.0 121.73 123.0 124.52 126.0	42° 45° 42° 27° 32°	**Lithology: Coarse grained sandstone to fine-grained granule conglomerate.** As above, very well defined Fining Upward Sequences, ranging from massive, coarse-grained sandstone to matrix-supported (20% angular to rounded clasts), fine-grained granule conglomerate upward through alternating light and dak grey siltstones to medium to dark grey silty argillite to argillite caps. FUS have sharp basal scours with local structurally modified flame structures and load casts and range between 15 cm to 1 m or more in thickness. **Veins:** **120.30 - 134.10** m - Approximately 5% quartz veining, comprised predominantly of thin (≤1.0 cm thick) dirty white to light grey quartz veins sub-parallel, or at moderately shallow angle, to core axis. Veins show pinch and swell (incipient boudinage) texture due to development of shallow, cross-cutting, coarse foliation. Milky white quartz veins also present at shallow and high angles to core axis, ≤1.0 cm thick, with sharp, straight contacts. **127.38 - 128.74** m - Interval dominated by one (or more) milky white quartz veins with broken contacts at apparently shallow angle to core axis. **Structure:** Foliation weakly to moderately well developed in fine-grained sediments to sandstone-dominated intervals. **Faults:** **134.10 - 138.73** m - Fault dominated interval in coarse-grained sandstone to granule conglomerate. Incohesive fault gouge. Approximately 49" lost between 137.15 and 138.73 m. Interval largely broken between 138.73 and 141.40 m. **Sulphides in Sediments:** Pyrite rare. **Alteration:** Ankerite porphyroblasts present in fine-grained tops of FUS.							
143.25				**End of Hole**							

Note: The two FUS identified in this hole, from 92.55 m to the end of the hole, were better defined and finer grained than noted in any of the previous holes.The coarsest interval was comprised of 20% fine-grained pebble clasts in a coarse-grained sand matrix. The remainder of the FUS cycles were comprised of medium- to coarse-grained sand to fine-grained granule conglomerate at the base of the First Order FUS and siltstone at the top. The FUS also commonly had an interlaminated sequence between the massive, coarse-grained base and the silty argillite to argillaceous top to each cycle.

Conclusion: This is a sequence we have not seen previously as we tested the mine stratigraphy. Therefore, it would seem to be a sequence located stratigraphically above the mine stratigraphy. Need to compare it to the top of holes 10-12 to see if it can be matched to the sequence above Unit P and Ruth Limestone. The other possibility, or at least another one, is that it lies to the east of Paul's Thrust Fault and/or the proposed detachment surface and/or a steeply dipping normal fault, and it thus not directly associated with the mine stratigraphy.



Diamond Drill Hole VC - 03 - 14
Zn (ppm)
Pb (ppm)
0
25
50
75
100
125
150
175
200
225
250
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View Toward 254° Az

DYNAMIC EXPLORATION LTD.

DRILL LOG: DIAMOND DRILL CORE

HOLE NO.	VC - 03 - 14

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:		Lot 15307	
LOCATION - GRID NAME:			
EASTING:	501190	NORTHING:	5644787
SECTION:		ELEV:	1908 m
AZIM:	344°	LENGTH:	260.6
DIP:	-45°	CASING LEFT?:	No
CORE SIZE:		NQ	
CORE STORAGE:		Vermont Creek	

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
0		41.75°	263.64		39.5°

DRILLING CO:	F.B. Drilling
STARTED:	27-Jul-03
COMPLETED:	22-Aug-03
PURPOSE	
CORE RECOVERY:	
LOGGED BY:	Rick Walker
	Paul Ransom
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	A304019,
	A304019r,
	A304551,
	A304551R,
	A304993,
	A304993r,
	A304993R2,
	A305377,
	A305377r

Drill Hole VC - 03 - 14

From	To	Core Angle		Description	Sample	From	To	Gold	Silver	Lead	Zinc
m	m	m	Deg		Number	m	m	gms/T	gms/T	ppm	ppm
0.00	3.05			**Casing - reamed to 3.05 m. Cored from surface.**							
0.00	54.58	6.00	10°	**Lithology: Alternating medium to dark grey siltstones and argillaceous siltstones.**	0314 - 447	0.52	0.91	0.23	399.8	**9.99%**	**12.82%**
		7.00	07°	At shallow angle to core axis. Hole drilled at shallow angle to bedding and so little change in bedding with depth. Bedding	0314 - 448	3.51	5.39	0.01	4.504	604.65	5849.7
		11.00	09°	varies between thickly laminated to very thin bedded (0.4 - 6 cm, average 2-3 cm). Limey shale to shaley limestone between	0314 - 449	7.72	8.01	0.04	25	**0.61%**	**1.83%**
		12.00	09°	0 and approximately 4.0 m.	0314 - 450	8.01	8.53	0.02	4.495	2279.6	5854.9
		15.00	06°		0314 - 451	8.53	9.40	0.07	42	**0.74%**	**1.45%**
		16.80	00°	**Structure:**	0314 - 452	9.40	10.02	0.02	40	**1.09%**	**2.06%**
		18.00	00°	Foliation moderately well-developed thorughout interval as penetrative cleavage at shallow to moderate	0314 - 453	10.02	10.37	0.01	20	**0.87**	**1.55%**
		20.00	00°	angle to bedding. S_2 / S_1 relations suggest hole was drilled on east limb of steeply dipping anticline,	0314 - 454	10.37	10.81	0.03	5.864	2191.19	8151.7
		23.00	00°	therefore, hole passed down section downhole.	0314 - 455	10.81	11.58	0.05	11	1227.22	**0.29%**
		25.00	00°	Interval between 0 and 11.40 m highly variable, ranging from intact segments up to 50 cm in length to	0314 - 456	11.58	12.01	0.03	9.626	1148.13	1054.4
		27.00	00°	shattered fragments in fault zone ≤0.1 cm in diameter, from relatively unweathered to intensely weathered	0314 - 457	12.01	12.50	0.07	17.168	4026.5	2633.5
		29.00	07°	with dark orange-brown limonite after moderately to completely weathered pyrite.	0314 - 458	12.50	13.01	0.03	21.598	6977.74	8564
		32.00	05°		0314 - 459	13.01	13.48	0.02	21.123	8257.6	14938.7
				Faults:	0314 - 460	13.48	13.90	0.03	10.805	5054.46	4823.8
				1.0 m at approximately 43° to core axis in limestone to limey siltstone, medium grey-green clayey gouge.	0314 - 461	13.90	14.53	0.01	8.319	4411.71	3959
				1.33 m at approximately 30° to core axis in limestone to limey siltstone, dark green fault gouge	0314 - 462	14.53	14.92	0.01	4.787	1306.51	1956.6
				Approximately **3.52 - 5.13** m - Intensely shattered rock with 46 cm of interval missing, presumably fault	0314 - 463	15.90	16.36	0.00	2.316	113.55	145
				gouge lost while drilling	0314 - 464	36.22	36.44	0.04	0.185	33.55	141.7
				6.45 - 6.90 m - Approximately 2 cm thick zone of shattered, limonite-rich siltstone. Interval broken parallel to	0314 - 465	36.44	36.76	0.03	0.343	48.59	127.9
				foliation at approximately 15° to core axis, along zone parallel to bedding at 06°. $S_2 \angle S_1$ approximately 25°.	0314 - 466	36.76	36.99	0.02	0.198	25.51	123.9
				8.03 - 9.40 m - Intensely oxidized zone comprised of fault gouge and angular fragments ≤10 cm thick.	0314 - 467	45.70	45.94	0.01	0.148	37.29	86.6
				Fault planes, with gouge, at approximately 17° and 09° to core axis, up to 2 cm thick.	0314 - 468	45.94	46.23	0.01	0.046	15.48	47
				10.37 - 10.91 m - Shattered zone with abundant angular rock chips, fragments ≤13 cm, incohesive.	0314 - 469	46.23	46.48	0.01	0.077	17.22	36.6
				14.70 - Slip plane parallel to bedding with quartz healed gouge, ≤0.2 cm, at 06° to core axis.	0314 - 470	48.64	48.88	0.00	0.069	16.17	315.9
				42.60 - 43.47 m - Broken, weakly to moderately iron-stained fracture surfaces, large fragments 0.5 - 15 cm, no gouge evident.	0314 - 471	48.88	49.16	0.01	0.062	12.08	38.5
				Sulphides in Veins:							
				22.55 ≤0.7 cm thick dirty white to light grey quartz + dolomite vein at 55° to core axis. Contacts sharp and straight to slightly irregular. Approximately 15-20% highly angular inclusions of host silty argillite. Single medium sized crystal or aggregate of black (speckled with honey yellow) sphalerite.							
				Sulphides in Sediments:							
				Pyrite variably developed depending on host lithology, from <<1% fine-grained, idioblastic cubic crystals to 10-15% coarse- to very coarse-grained (≤2.0 cm long dimension), sub-idioblastic to idioblastic, cubic to rectangular pyrite crystals. Pyrite localized along preferred horizons, locally with quartz-rich pressure shadows. Sediments commonly slightly calcareous to calcareous (≤25-30% interstitial matrix calcite) to approximately 58.0 m. Thin pyritic bedding parallel veinlets and/or pyrite-enriched laminae noted between 36.0 - 48.0 m. Laminae have pyritic cores and quartz-rich margins, ≤0.2-0.3 cm thick, and laterally undergo transition to sub-idioblastic, cubic crystals aligned (with long dimension) sub-parallel to foliation.							
				29.81 ≤1.0 cm dirty white to light grey quartz vein. Pinches and swells, locally high altenuated (to 0.1cm thick) at approximately 40-45° to core axis. Contains medium-grained galena crystals (approximately 3-5% and black, ragged mineral phase of sub-metallic to resinous luster (tetrahedrite?), approximately 2-3%							

0.52 - 0.91 m. Heavily oxidized, calcareous siltstone with iron-spotting comprised of completely weathered pyrite. Similar to oxidized limestone over adit, therefore, sampled to assess possible metal content.

3.51 - 5.39 m. Shattered zone of alternating siltstone. Approximately 5-7% limonite spotting after moderately to completely weathered, medium- to coarse-grained, cubic pyrite. Mn staining present on some fracture surfaces. Sample to assess potential of Mn scavenging for Au. Note 18" missing from interval.

7.72 - 8.01 m. Heavily oxidized, brown coloured, very thin bedded siltstones (weakly evident where not obscured by iron-staining). Sampled to assess galena content immediately above next interval.

8.01 - 8.53 m. Heavily oxidized and iron-stained interval with approximately 1% galena. Interval comprised of highly angular chips and fragments (to 3 cm long dimension) and gouge with heavy, medium- to dark-orange, iron-stained fracture surfaces. Aggregates and / or crystals of galena to 0.5 cm diameter present.

8.53 - 9.40 m. Broken, faulted interval below galena-bearing interval. Incohesive fault gouge up to 3.0 cm thick at approximately 9°-17° to core axis, parallel to bedding. Due to shallow inclination of bedding with respect to core axis, galena-bearing interval should continue into this interval, although not noted.

9.40 - 10.02 m. Relatively intact, heavily iron-stained siltstone to fine sandstone. Heavily oxidized, medium- to dark-orange limonite vugs or cavities. Thin calcite ± quartz veinlets to veins (≤1.5 cm thick) with galena ± sphalerite.

10.02 - 10.37 m. Relatively intact interval of limey siltstone to silty limestone. Heavily iron-stained at upper contact adjacent to overlying interval / bedded layer.

10.37 - 10.81 m. Broken, shattered zone comprised of iron-stained, alternating siltstone, which obscures detail. Approximately 2-3% moderately to completely altered, coarse-grained, cubic pyrite.

10.81 - 11.58 m. Alternating siltstones and argillaceous siltstone. Interval lies between overlying, bedding parallel fault (preceding interval) and underlying galena bearing interval.
Interval: Minor galena - 0.1 - 0.2% Pb.

11.58 - 12.01 m. Argillaceous siltstone with well developed, penetrative foliation. Relatively abundant ankerite porphyroblasts to 0.1 cm diameter with pressure shadows aligned parallel to foliation. Approximately 7-10% coarse- to very coarse-grained (to 0.8 cm diameter), xenoblastic to sub-idioblastic, cubic pyrite. Minor galena present in thin dolomite + quartz vein and associated with pyrite in quartz-rich pressure shadow. Interval: 0.2-0.3% Pb.

12.01 - 12.50 m. Very thin bedded, slightly to non-calcareous siltstone at shallow angle to core axis. Approximately 2-3% medium- to coarse-grained, sub-idioblastic to idioblastic, cubic pyrite. Minor galena present in quartz-rich pressure shadows around pyrite and along bedding parallel quartz vein or medium-grained sand layer. Approximately one third of interval comprised of slightly calcareous coarse siltstone to fine-grained sandstone interval at base of previously described stratigraphy. Contains approximately 5% fine- to medium-grained disseminated galena.
Interval: approximately 1% Pb

12.50 - 13.01 m. Galena-bearing siltstone to fine-grained sandstone unit shallows and is sub-parallel to core axis, ≥3.5 cm thick (lower contact not cored in this interval). Minor galena present in thin (≤0.3 cm) medium-grained sandstone interval (approximately 3-5%) from previous interval and galena-bearing siltstone. Interval: 0.3-0.5% Pb

13.01 - 13.48 m. Alternating siltstones. Interval contains full thickness of two mineralized horizons. Upper coarser-grained siltstone to fine sandstone has thickened to ≤0.5 cm, comprised of dirty white to light grey quartz (possible bedding parallel vein?), with approximately 2-5% galena and 5-10% sphalerite(?) over upper 16 cm. Thickens from 0.2 cm at 13.01 to approximately 0.4 cm from 13.03 to 13.15, then tapers out down-hole. Slightly undulose against underlying planar siltstone. Galena is fine- to medium-grained and disseminated along layer. Sphalerite (?) is fine-grained, varying from dark brown-black to reddish-brown, as single grains or small aggregate masses. Galena-bearing siltstone ≤3.5 cm thick with fine- (to medium-) grained galena disseminated throughout interval. Wet surface reveals reddish-brown grains which may be sphalerite.
Interval: 1-2% Pb, approximately 1% Zn (?)

				13.48 - 13.90 m. Alternating siltstones. Galena-bearing siltstone passing upward through core, which has cored below upper contact. Therefore, galena bearing siltstone tapers out (thins) down hole. Internal: 0.2-0.6% Pb, Zn? **13.90 - 14.53** m Alternating siltstones Another galena-bearing unit at base of core at 13.90, slowly passes upward into core down-hole. Dirty white to light grey, coarse siltstone to fine siltstone, ≤0.3 cm, thick with minor galena disseminated along its length. Interval: 0.1-0.2% Pb **14.53 - 14.92** m. Alternating siltstones. Thin galena-bearing, coarse siltstone to fine sandstone interval passes downward toward base of core at base of interval. Interval: approximately 0.1% Pb **15.90 - 16.36** m. Pyritic, alternating siltstones. Three horizons host medium- to coarse-grained, sub-idioblastic to idioblastic, cubic pyrite, oriented with long dimension parallel to foliation. Pyrite appears to be localized along the coarse-grained bases of siltstone layers. Quartz-rich pressure shadows associated with pyrite. Approximately 15-20% pyrite over interval. Sampled to evaluate gold content in probable diagenetic pyrite. **36.22 - 36.44** m. Silty argillite. Approximately 2-3% sub-idioblastic, medium-grained, cubic pyrite localized on either side of coarse siltstone to fine-grained sandstone unit ≤0.6 cm thick. Approximately 0.4 cm thick unit above interval undergoes transition to 0.2-0.3 cm thick pyrite band comprised of approximately 0.1 cm thick pyrite core with dirty white to light grey, quartz-rich margins. Sampled for Au. **36.44 - 36.76** m. Pyrite band from preceding interval continues into, and through, this interval. Upper pyrite-bearing band passed through top of core at base of preceding interval. Sampled for Au. **36.76 - 36.99** m. Pyrite band continues along centre of core, parallel to core axis. Sampled for Au. **45.70 - 45.94** m Approximately 1-2% disseminated, fine- to medium-grained, sub-idioblastic to idioblastic, cubic pyrite in siltstone and argillaceous siltstone at shallow angle to core axis. Pyrite veinlet, between 0.2 and 0.3 cm thick cross-cuts bedding at shallow angle, 0.05 to 0.1 cm thick, light grey quartz-rich margins. **45.94 - 46.23** m. Well foliated siltstone with approximately 1-2% fine- to medium-grained, idioblastic, cubic pyrite. **46.23 - 46.48** m. Three thin pyritic layers (veinlets?) parallel to bedding. Two bands along margins of siltstone with minor, shallow undulations in bedding. Third located in middle of argillaceous siltstone to silty argillite, with angular to rounded, open folds with 0.7 cm amplitude (peak to trough) and 1-1.5 cm wavelength, deformed around axial planar foliation. Very thin, light grey margin developed discontinuously along contact of lowermost unit. **48.64 - 48.88** m. Approximately 2-3% medium- (to coarse-) grained, idioblastic, cubic pyrite disseminated through interval, localized along preferred, coarser-grained (siltstone) layers. One thin ≤0.3 cm pyrite interval parallel to bedding with 0.1 cm thick light grey, quartz-rich margins. **48.88 - 49.16** m. Approximately 1-2% fine- to medium-grained, idioblastic, cubic pyrite localized along preferred, coarser grained (siltstone) horizons.							
54 58	108.75	55.00	12°	**Lithology: Sub-wacke / argillite and some wacke.**	0314 - 472	60.50	61.15	0.00	0.096	10.69	124.3
		56.00	11°	Thin bedded and laminated, medium grey to black. Most of the dark to black units are sub-wacke, Carbonaceous Laminite,	0314 - 473	64.93	65.23	0.00	0.104	7.55	66
		57.00	26°	however some dark argillite present. Wacke can be either dark grey and homogenous or light grey with darker current	0314 - 474	69.03	69.34	0.01	0.1	14.1	47.5
		58.00	07°	laminations. Interval is characterized by numerous very thin (1-2 mm) pale siltite units broken up by cleavage that is spaced	0314 - 475	71.63	71.82	0.01	0.083	14.48	41.8
		59.00	04°	(sub mm often) in contrast to adjacent penetrative cleavage in argillite / sub-wacke. From approximately 90-93 m and 94.5 -	0314 - 476	79.47	79.79	0.01	0.079	17.27	63.2
		60.00	12°	94.65 m, drilling mostly parallel to bedding are thin units of granule conglomerate interlaminated with phyllite and well	0314 - 477	85.91	86.29	0.03	0.095	22.43	127.4
		61.00	10°	cleaved.	0314 - 478	97.05	98.93	0.00	0.156	5.67	100.4
		62.00	07°		0314 - 479	100.50	100.80	0.01	0.846	22.06	98.7
		63.00	06°	**Veins:**	0314 - 480	101.00	101.10	0.01	0.475	37.59	118.8
		64.00	07°	**100.50 - 100.80** m. Badly broken zone that includes approximately 50% quartz fragments, some clearly caved	0314 - 481	102.45	102.58	0.02	2.43	12.95	82.8
		65.00	10°	material. Slickensides noted on some fragments. Dolomite crystals adjacent to the slickensides suggest	0314 - 482	102.58	102.89	0.06	0.144	9.44	22.7
		66.00	08°	openings formed on the fault plane.	0314 - 483	102.89	103.00	0.41	0.363	41.68	33.2

67.00	07°
68.00	21°
69.00	11°
70.00	10°
71.00	00°
72.00	15°
73.00	15°
74.00	15°
75.00	16°
76.00	10°
77.00	13°
78.00	12°
79.00	09°
80.00	05°
81.00	23°
82.00	10°
83.00	15°
84.00	13°
85.00	20°
86.00	17°
87.00	26°
88.00	35°
89.00	35°
90.00	64°
91.00	05°
92.00	10°
93.00	21°
94.00	11°
95.00	19°
96.00	22°
97.00	15°
98.00	0°
99.00	22°
100.00	35°
101.00	10°
102.00	10°
103.00	00°
104.00	00°
105.00	15°
106.00	17°
107.00	18°
108.00	40°

101.00 - 101.10 m. Caved vein quartz - probably from 100.50 - 100.80 m.

102.45 - 102.58 m. Vein quartz fragments between two pieces of core that fit together! Some overcoring noted but no definite cave. This appears to be at a run-end and is probably spilled core from 100.50 - 100.80 m.

104.04 - 104.10 m. Quartz vein, margins at 80° and 75° to core axis. Light brown siderite or ferroan dolomite. Stringy galena up to 10% with associated and lesser pyrite.

Structure:

From 54 m spaced en echelon fractures developed along and highlight an S_2 crenulation. Cleavage seems to persist to 103 m.

Faults:

74.5 m - Fault slip parallel to S_2, minor pyrite, slickensides, dolomite fill

Sulphides in Sediments:

It is along and adjacent to argillite / sub-wacke beds that coarse grains of pyrite typically 1 cm, and up to 2 cm rarely, occur. Several samples of more pyrite-rich of these zones taken for analysis.

60.50 - 61.15 - 60.60 m. Pod of quartz 3 x 10 cm on one side of core. In vicinity are several pinch and swell quartz veins developed parallel to cleavage and appearing to originate in a thin silty bed (3-5 mm). Coarse pyrite developed along the silty bed and in some of the adjacent shale. Trace sphalerite noted. Bedding is about 10° to core axis.

64.93 - 65.23 m. Shale, very thin bedded, dark carbonaceous laminite and medium massive argillite. Numerous coarse-grained pyrite crystals developed along bedding contact. Quartz pressure shadows along cleavage around pyrite.

69.03 - 69.34 m. Very thin bedded, large pyrite to approximately 1 cm aligned along carbonaceous laminite beds, quartz pressure shadows common.

71.63 - 71.82 m. Thin bed of argillite with very thin layer (silty?) along which 2 cm wide zone of pyrite to 1 cm is abundant, some have quartz pressure shadows.

79.47 - 79.79 m. Light silty thin bed with grey laminations and zone of carbonaceous laminite with a few silty laminations. Pyrite to 5 mm in former with abundant angular quartz remnants (perhaps pressure shadows of pyrite not visible) and pyrite to 8 mm in the carbonaceous laminite.

85.91 - 86.29 m. Argillite, thin bedded, with tightly folded and, in places, attenuated fine-grained quartz sandstone layer that, with included argillite laminations and wisps, is up to 2 cm wide. Coarse-grained pyrite to 1 cm along a carbonaceous laminite layer in the argillite and in the sandstone. Quartz rims and pressure shadows common around the pyrite.

97.05 - 98.93 m. Argillite, carbonaceous laminite and bulbous siltstone layers that are commonly disaggregated, all very phyllitic. Cut by a series of quartz veins 1-10 cm thick at 10° to 30° to core axis (in same sense). The veins are undulating and clearly folded and cut by the prominent cleavage along which fine dolomite is scattered, forming up to 10% of the veins. Sulphides are scarce - only a few grains of pyrite present.

102.58 - 102.89 m. Argillite and quartz wacke. Very thin bedded, bases of quartz wacke are load structures, bedding parallel to core axis. Dolomite veinlet 5-15 mm at 102.95 cuts then parallels bedding in the spec.

102.89 - 103.00 m. Same as preceding interval with scattered and disseminated replacement pyrite.

103.00 - 103.11 m. Same as preceding interval with 1.5 - 2.0 cm thick quartz vein at 45° to core axis, containing galena streaks and fine hairline networks. Contacts are irregular.

103.11 - 103.26 m. Argillite, carbonaceous laminite interlaminated with disseminated replacement pyrite plus 2 partially bedding parallel quartz veinlets with scattered pyrite on margins diminishing down-hole

103.26 - 103.88 m. Laminated and very thin bedded quartz wacke, carbonaceous laminite and argillite, cut by one quartz vein having variable width (1 - 5 cm?). Pyrite rare

103.88 - 104.04 m. Carbonaceous laminite and argillite laminated with replacement pyrite to 2 mm. Cut by folded, barren veinlet perpendicular to bedding, veinlet is primarily dolomite and may have vuggy zones.

0314 - 484	103.00	103.11	0.66	22	**1.13%**	**0.39%**
0314 - 485	103.11	103.26	0.29	1.72	680.58	3341
0314 - 486	103.26	103.88	0.03	1.925	43.02	74.6
0314 - 487	103.88	104.04	1.39	40.119	13830.51	168.2
0314 - 488	104.04	104.10	20.13	99.99	18688.9	21463.2
0314 - 489	104.10	104.17	0.15	0.809	582.38	61.5
0314 - 490	105.49	105.71	0.06	0.838	513.07	10267.1
0314 - 491	108.21	108.78	0.02	0.708	58.34	61.7

				104.10 - 104.17 m Argillite and sub-wacke, medium to light grey, laminated with scattered replacement pyrite. **105.49 - 105.71** m. Argillite - sub-wacke, laminated at approximately 15° to core axis, cut by 3 cm quartz siderite (ferroan dolomite?) vein at 20° to core axis and a series of 2 - 10 mm veinlets over 5 cm, some of which are sphalerite. **108.21 - 108.78** m. Argillite - subwacke, laminated. 40° - 90° to core axis, more close to 90°. Several quartz + dolomite veinlets, 2 - 15 mm thick, with occasional minor pyrite grains <5 mm diameter. **Alteration:** Ankerite (?) common throughout.							
108.75	115.20			**Lithology: Quartz coarse sand / granule conglomerate** Abundant quartz veining (?) and / or segregation (?) that seems developed parallel to cleavage. **Veins:** **109.19 - 109.82** m. Quartz vein, seems to parallel foliation at start, at 40° to core axis. Pyrite as 5 mm crystals to 5 x 15 mm blebs, usually associated with fragments of phyllite or patch of dolomite. **109.82 - 110.40** m. Same quartz vein as preceding interval, starts at a seam at 30°, less pyrite than 109.19 - 109.82 m. **110.85 - 111.61** m. Quartz veins or lenses 90% with wisps of granule conglomerate. First 30 cm quartz lens is vuggy (quartz crystals only) with minor pyrite and trace galena (wisps) and arsenopyrite (single grains). Some arsenopyrite mixed with patchy pyrite. Sphalerite patch present. Pyrite grains are pyritohedra in form. **114.64 - 114.82** m. Quartz vein, white and pure, except for dolomite near margins. **Sulphides in Sediments:** **108.78 - 109.19** m. Quartz sand to granule conglomerate, sericitic with rare quartz segregations. Minor grains of pyrite to 5 mm, rare needle of arsenopyrite noted (0.5 x 2 mm). **110.40 - 110.85** m. Quartz granule conglomerate (10%) and vein quartz. Minor pyrite in the granule conglomerate. **111.61 - 112.40** m. Quartz granule conglomerate with minor quartz segregations. Rare pyrite. Grey reflections probably surfaces from which quartz grains have been plucked, possibly adjacent to graphite. **112.40 - 112.77** m. Similar to111.61 - 112.40 m. **113.64 - 114.21** m. Quartz granule conglomerate, minor quartz segregations or veinlets. A few grains of pyrite to 5 mm irregularly distributed. A few needles of arsenopyrite and several specks of graphite, likely detached from black rip-up clast. **114.21 - 114.64** m Argillite, sub-wacke, dark grey to black with minor grey laminations, cut by irregular quartz - dolomite veins. Minor coarse pyrite in the veins. **114.82 - 115.20** m. Quartz granule conglomerate bed in contact with black to dark grey argillite, laminated. Matrix of the granule conglomerate may be dolomite as it is pale brown. Contact at 10° to core axis. Scattered pyrite, occasional dark speck probably graphite surface where grains have been plucked.	0314 - 492	108.78	109.19	0.06	0.309	81.82	36.6
					0314 - 493	109.19	109.82	0.07	0.103	43.47	21.7
					0314 - 494	109.82	110.40	0.00	0.044	8.04	6
					0314 - 495	110.40	110.85	0.02	0.577	206.72	218.9
					0314 - 496	110.85	111.61	0.10	2.59	910.28	406.2
					0314 - 497	111.61	112.40	0.01	0.196	51.36	50.5
					0314 - 498	112.40	112.77	0.00	0.497	7.22	13
					0314 - 499	113.64	114.21	0.01	0.19	5.08	14.2
					0314 - 500	114.21	114.64	0.21	0.519	5.56	19.2
					0314 - 501	114.64	114.82	0.03	1.847	12.84	37.7
					0314 - 502	114.82	115.20	0.01	0.798	7.13	24.2
				Note: 115.20 m is initial end of hole that subsequently was deepened.							
115.20	126.15	115.25 119.50 126.20	27° 27° 41°	**Lithology: Granule to fine-grained pebble conglomerate.** Blue quartz is common. Light brownish grains occasionally present, probably feldspathic. Micaceous (so composition is quartz wacke).							

				Veins: Several white quartz veins to 10 cm, barren. **Sulphides in Sediments:** Rare pyrite.							
126.15	136.20	126.35 126.50 127.00 127.50 128.00 128.20 129.00 130.00 131.00 132.00 132.80 133.50 134.00 135.00 136.00	00° 19° 25° 00° 21° 07° 07° 00° 00° 00° 17° 25° 29° 20° 33°	**Lithology: Sub-wacke / argillite.** Dark grey dominant with medium grey, all laminated, plus wacke as thin to very thin beds, typically with irregular load casted bases. Bouma C cross laminations common.							
136.20	139.40			**Lithology: Granule conglomerate.** Pale grey, micaceous. Three dark argillite bands 5, 7 and 12 cm wide are interpreted rip-ups. **Veins:** White quartz veins, one irregular sampled and several grey quartz segregations. **136.73 - 137.08** m. Quartz vein, barren, trace dolomite, one contact parallel to cleavage at 31° to core axis; other in opposite sense, cuts cleavage at 73°. **Sulphides in Veins:** **139.33 - 139.45** m. 5 cm vein included has coarse arsenopyrite patches, scattered 2 mm pyrite and small vugs with quartz and dolomite. **Sulphides in Sediments:** **Note:** In interval following sample 502 searched for arsenopyrite and what there is is very rare, very fine and generally questionable. Below this sampling is primarily of granule conglomerate with scattered arsenopyrite. Generally the arsenopyrite is widely scattered and rare, however, some clustering in quartz vein or lens. Deviations from the general description will only be mentioned. Several small, barren-looking quartz veins between 117 and 125 m not sampled. Their contacts are flat across core but have 1-5 mm irregularities. **138.67 - 138.91** m. Coarse sand / granule conglomerate, sericitic, foliation at 50° to core axis. 1 cm quartz veinlet parallel to foliation. **138.91 - 139.06** m. As 138.67 - 138.91 m, pyrite to 5 mm. Two quartz veinlets approximately 1 cm thick, one at 70° to core axis, ends in a fold has fine arsenopyrite along and outside of margins. **139.06 - 139.33** m. Coarse sand, scattered idioblastic pyrite.	0314 - 503 0314 - 504 0314 - 505 0314 - 506 0314 - 507	136.73 138.67 138.91 139.06 139.33	137.08 138.91 139.06 139.33 139.45	0.01 0.05 0.13 0.02 4.85	0.045 0.08 0.071 0.063 99.99	8.11 19.89 16.18 12.65 6758.59	33.3 17.9 11.8 19.9 2650.1
133.40	140.10	139.80	70°	**Lithology: Fault Zone.** Granule conglomerate crushed zone (not including vein in first 10 cm) ; narrow, somewhat gougey and incohesive zones cutting through the granule conglomerate. Overall appearance is lighter than surrounding rock and even hard sections appear affected.	0314 - 508 0314 - 509 0314 - 510	139.45 139.97 140.00	139.97 140.00 140.19	0.05 1.39 0.88	1.193 99.99 1.208	73.37 17193.5 264.01	81.1 280.4 139.2

				Structure: **Faults:** **139.45 - 139.97** m. Crush zone - gouge, incohesive, faulting probably parallel to cleavage at 34° to core axis. 20 cm short included in this interval. **139.97 - 140.00** m. 3 cm quartz vein at 40° to core axis with 7 mm galena + pyrite along centre. **140.00 - 140.19** m. Coarse sand - granule conglomerate, pyrite to 3 mm.							
140 10	179 53	142.90	50°	**Lithology: Granule conglomerate to fine-grained pebble conglomerate.**	0314 - 511	142.65	142.91				
		148 21	45°	From 148.00 - 148.21 m is a pebble conglomerate with clasts to 8 x 15 mm. Several of the clasts are black (graphitic?)	0314 - 512	142 91	143 13	0 06	1 932	237 50	19 10
				Argillite. From 174 97 - 175.55, 176.46 - 177 10 and 177.66 - 178 00 are coarse, pure quartz wacke sand, still micaceous, no	0314 - 513	143 13	143 31	0.04	0 108	9.86	5 60
				compelling bedding planes.	0314 - 514	143.312	143.45	0.04	0.336	31.76	8.30
					0314 - 515	145.50	145.76	0.02	0.082	7.11	8.3
				Veins:	0314 - 516	145.76	145.86	0.79	0.289	38.51	5.5
				147.70 - 147.85 m. Irregular quartz mass in contact with 147.62 - 147.70 m and granule conglomerate.	0314 - 517	145.86	146.31	0.04	0.068	7.76	7.5
				156.80 - 157.48 m. Quartz vein, barren, rare wisps / patches of brecciated dolomite. Upper contact parallel	0314 - 518	146.31	146.46	0.10	0.705	23.54	7.80
				to foliation at 60° to core axis.	0314 - 519	146 46	146.75	0.01	0.098	10.80	11.70
				157.48 - 157.87 m Quartz vein continues but with considerable wisps of brecciated (?) dolomite and	0314 - 520	146 75	146.95	0.14	0.127	14.57	7.60
				sediment. Lower contact at 56°, somewhat gougy as are some parallel layers.	0314 - 521	146.95	147.62	0.03	0.048	6.61	9.70
					0314 - 522	147.62	147.70	0.01	0.039	9.64	31.4
				Sulphides in Veins:	0314 - 523	147.70	147.85	0.01	0.336	8.4	21.2
				145.76 - 145.86 m. 3 cm thick quartz vein at 55° - 60° to core axis, one side 1 cm, abundant arsenopyrite	0314 - 524	147.85	148.21	0.01	0.451	5.04	22
				and pyrite, other side has small vugs with crystals of quartz and arsenopyrite.	0314 - 525	148.21	148.45	0.01	4.45	8.19	34.8
					0314 - 526	148.45	148.87	0.04	0.111	5.45	12
				Sulphides in Sediments:	0314 - 527	148.87	149.40	0.00	0.201	6.95	21.8
				Arsenopyrite is scattered throughout this interval, however it is rare. Sections with arsenopyrite	0314 - 528	149.40	149.78	0.03	0.141	7.76	17
				were all sampled.	0314 - 529	149 78	150.14	0.03	0.133	6.49	18.3
				142.65 - 142.91 m. Granule conglomerate.	0314 - 530	150 14	150.31	0.08	0.141	5.85	9.4
				142.91 - 143.13 m. Wacke, dark grey, sand, 4 cm thick quartz vein at 50° to core axis (approximately	0314 - 531	150.31	150.52	1.47	0.409	36.56	24.7
				90° to bedding). Top bedding contact at 47°, lower contact at 57° to core axis.	0314 - 532	150.52	150.62	0.05	0.068	4.66	13.7
				143.13 - 143.31 m. Granule conglomerate, dark grey (probably wacke matrix)	0314 - 533	152.08	152.37	0.05	0.064	4.94	9.5
				143.31 - 143.45 m Fine pebble to granule conglomerate. Fine brown grains throughout. Bedding	0314 - 534	152.37	152.76	0.07	0.04	3.97	6.1
				at 34° to core axis.	0314 - 535	152.76	153.32	0.09	0.035	4.66	5.6
				145.50 - 145.76 m. Fine pebble conglomerate	0314 - 536	153.32	153.44	0.13	0.037	4.37	6.7
				145.86 - 146.31 m. Granule conglomerate, rare quartz vein wisps < 5 mm.	0314 - 537	153.44	153.70	0.02	0.063	6.48	8
				146.31 - 146.46 m. Granule conglomerate, 4 approximately 1 cm thick quartz veins. Notably more	0314 - 538	153.70	154.56	0.01	0.044	4.79	9.7
				arsenopyrite and pyrite than adjacent sample.	0314 - 539	154.56	154.99	0.49	0.151	16.68	10
				146.46 - 146.75 m. Granule conglomerate, 2 minor quartz veins, 5 mm at 42° and 30° to core axis.	0314 - 540	154.99	155.88	0.08	0.063	4.78	11.5
				146.75 - 146.95 m. Granule conglomerate, 1 cm quartz vein, one folded 1 cm quartz vein , two 5 mm	0314 - 541	155.88	156.34	0.10	0 112	6.88	7.3
				quartz veinlets. Pyrite to 5 mm, arsenopyrite seems a bit higher.	0314 - 542	156.34	156 80	0.13	0.202	5.46	10.8
				146.95 - 147.62 m. Granule conglomerate, 4 minor quartz veins, slippage along one at 47° to core axis.	0314 - 543	156.80	157.48	0.00	0.034	4.22	5
				147.62 - 147.70 m. High strain zone, still see stretched granules so not mylonite (cohesive), foliation	0314 - 544	157.48	157.87	0.01	0.324	6.14	14.7
				at 55° to core axis.	0314 - 545	157.87	158.28	0 01	0.793	4.63	67.6
				147.85 - 148.21 m. Granule conglomerate to 148 m, pebble conglomerate (pebbles to 7 x 20 mm) to	0314 - 546	158.28	158.51	0.12	0.318	3.5	7.7
				148.21 m. No arsenopyrite spotted. Sampled for continuity.	0314 - 547	158.51	159.18	0.01	0.209	10.37	12
				148.21 - 148.45 m. Wacke, brownish (alteration??) especially at start, sand. No arsenopyrite noted,	0314 - 548	159.18	159.77	0.00	0.108	5.76	13.9
				sampled for continuity and to assess the alteration.	0314 - 549	163.60	164.25	0.04	0.108	7.1	11.8
				148.45 - 148.87 m. Wacke, light grey. Pyrite increases toward 148.74 m. Upper contact at 40° to	0314 - 550	164.25	164.46	0.08	0.074	10.36	9.4
				core axis.	0314 - 551	164.46	164.73	0.01	0.059	6.57	26.5
				148.87 - 149.40 m. Granule conglomerate , several foliation parallel quartz seams to 4 mm, one earlier	0314 - 552	164.73	164.93	0.06	0.031	4.12	8.3
				1 cm thick quartz vein folded. Low pyrite, arsenopyrite??	0314 - 553	164.93	165.05	0.04	0.054	6.66	10
				149.40 - 149.78 m. Granule conglomerate, scattered pyrite.	0314 - 554	165.05	165.31	0.01	0.059	4.35	8

149.78 - 150.14 m. Wacke, coarse sand, grey, irregular solution layers.

150.14 - 150.31 m. Granule conglomerate.

150.31 - 150.52 m. Granule conglomerate, including 2 cm thick quartz vein at 60° to core axis with abundant arsenopyrite.

150.52 - 150.62 m. Granule conglomerate. No arsenopyrite noted for 1.5 m after this interval.

152.08 - 152.37 m. Granule conglomerate.

152.37 - 152.76 m. Granule conglomerate, 3 spaced quartz veins 1 - 2.5 cm parallel to foliation at 55° to 75°. Dark band 15 mm wide at 25° to core axis of unknown fine brownish mineral - may be a dusting of sphalerite?? (have seen this several times).

152.76 - 153.32 m. Granule conglomerate to fine pebble conglomerate, a few ghosty quartz segregations, one 3 cm barren quartz vein at 53° to core axis.

153.32 - 153.44 m. Granule conglomerate with 25 mm quartz vein with 2 mm dolomitic margins and flanked by pyrite to 5 mm. No arsenopyrite.

153.44 - 153.70 m. Granule conglomerate.

153.70 - 154.56 m. Granule conglomerate. Arsenopyrite sparser than 153.44 - 153.70 m. One 15 mm quartz vein at 56° to core axis has small vugs lined with dolomite (barren).

154.56 - 154.99 m. Granule conglomerate with approximately 8 cm quartz vein at either end - both barren but contain pyrite in association with included sediment. Abundant coarse pyrite to 6 mm between.

154.99 - 155.88 m. Granule conglomerate, occasional minor veinlet, predominantly quartz, one with dolomite.

155.88 - 156.34 m. Granule conglomerate + 50% vein quartz, mainly in one 14 cm interval. Coarse pyrite from start to large vein at 156.08 m. Scattered ferroan dolomite in large vein.

156.34 - 156.80 m. Granule conglomerate with 30% quartz in segregations (folded vein??) throughout. Some seems to cut a 1 cm straight! dolomite / quartz veinlet at 55° to core axis.

157.87 - 158.28 m. Dark, impure granule conglomerate (wacke) and barren quartz vein interleaved, 2 of each.

158.28 - 158.51 m. Dark, impure granule conglomerate (wacke)

158.51 - 159.18 m. Fine pebble conglomerate, upper 20 cm as 158.28 - 158.51 m. No arsenopyrite noted. 4 cm thick white quartz vein near 90° to core axis, 1 cm grey quartz vein folded, both in top 15 cm.

159.18 - 159.77 m. Seems to be a transitional bed, ranging from granule conglomerate wacke at top to fine pebble conglomerate at base. Arsenopyrite present but seems much lower than general.

163.60 - 164.25 m. Fine pebble conglomerate, a few criss-crossing, grey quartz fractures. One 1cm thick vuggy quartz vein.

164.25 - 164.46 m. Fine pebble conglomerate with 25 mm quartz vein at 67° to core axis, seems flanked by halo of arsenopyrite 2-3 cm each side.

164.46 - 164.73 m. Fine pebble conglomerate, no arsenopyrite seen.

164.73 - 164.93 m. Fine pebble conglomerate, 1.5 cm shear zone at 60° to core axis, approximately parallel to the foliation.

164.93 - 165.05 m. Fine pebble conglomerate, network of grey to milky quartz stringers, seems to have a little internal and adjacent pyrite.

165.05 - 165.31 m. Granule conglomerate. Arsenopyrite content dropping off.

171.15 - 171.67 m. Granule conglomerate, 2 cm quartz vein at 60° to core axis with streak of pyrite, minor arsenopyrite sub-parallel to contact, 5 cm quartz vein segments barren. Dark layer 5 mm of unknown brownish mineral.

171.67 - 172.00 m. Granule conglomerate, slightly coarser than 171.15 - 171.67 m.

172.00 - 172.33 m. Granule conglomerate, more foliated looking and lighter, obscures the grains. Discontinuous quartz fractures approximately parallel to core axis (broken) noted with arsenopyrite.

172.33 - 172.46 m. Granule conglomerate with 1 grey, 7 mm quartz vein, white 2 cm quartz vein barren on margin of which is 1 cm of galena + pyrite with a few quartz grains.

172.46 - 173.13 m Granule conglomerate, light grey.

0314 - 555	171.15	171.67	0.22	5.234	3849.53	12.5
0314 - 556	171.67	172.00	0.02	0.101	12.22	10
0314 - 557	172.00	172.33	0.02	0.16	25.83	20.8
0314 - 558	172.33	172.46	4.48	219	**14.14%**	36.7
0314 - 559	172.46	173.13	0.04	0.154	38.16	23.2
0314 - 560	173.13	173.35	0.39	0.774	537.14	143.2
0314 - 561	173.35	173.66	0.04	0.066	15.94	7.9
0314 - 562	173.66	173.90	0.18	0.141	57.04	9.4
0314 - 563	173.90	174.07	0.08	0.107	15.19	9.7
0314 - 564	174.07	174.57	0.21	0.127	51.75	7.7
0314 - 565	174.57	174.97	0.06	0.061	8	5.8
0314 - 566	174.97	175.48	0.04	0.044	13.92	12.3
0314 - 567	175.48	176.17	0.08	0.104	16.1	12.4

				173.13 - 173.35 m. Granule conglomerate, light grey, sphalerite noted, cluster of arsenopyrite needles adjacent to 1 cm grey quartz vein at 65° to core axis, also flanked by pyrite to 4 mm.							
				173.35 - 173.66 m. Granule conglomerate. Arsenopyrite present, content seems lower.							
				173.66 - 173.90 m. Granule conglomerate with several grey quartz segregation layers approximately parallel to the foliation at 65° to core axis, one contains dolomite. One at acute angle contains numerous arsenopyrite needles and is flanked by dark zone of fine brownish mineral.							
				173.90 - 174.07 m. Granule conglomerate, centre 1 cm strain zone at 30° to core axis.							
				174.07 - 174.57 m. Granule conglomerate, slightly coarser. Four grey quartz segregations.							
				174.57 - 174.97 m. Fine pebble conglomerate, light grey. Some semi open discontinuous zones at approximately 10° to core axis.							
				174.97 - 175.48 m. Granule conglomerate, pale grey, cut by several grey quartz segregations and a quartz / dolomite veinlet, all approximately 5 mm thick and a 3 cm thick white quartz vein at 80° to core axis at base. Arsenopyrite content seems lower.							
				175.48 - 176.17 m. Granule conglomerate grading to fine pebble conglomerate. Arsenopyrite still low. None noted below. Zone of fine brownish mineral about 5 mm wide at 32° to core axis, just below start.							
179 53	260.60			**Hole re-entered to deepen for a third time**							
179 53	201.40			**Lithology: Granule to fine-grained pebble conglomerate.**	0314 - 567	181.00	181.20	0.02	0.041	6.65	22.5
				Light grey, micaceous. Blue-grey quartz segregations are common throughout and in places are close spaced and	0314 - 568	181 20	181.35	0.41	0.961	333	1235
				sometimes amalgamated. There is no consistent orientation.	0314 - 569	181.35	181.61	0.02	0.416	51.46	16.1
					0314 - 570	183.93	184.15	0.03	0.033	3.63	19.5
				Veins:	0314 - 571	184.15	184.49	0.25	0.193	41.5	5008.7
				Numerous white, generally barren-looking quartz veins	0314 - 572	184.49	184.75	0.02	0.091	24.23	2045.9
				192.99 - 193.46 m. Milky white quartz vein. Upper contact at 37° to core axis; lower contact complex at	0314 - 573	184.75	185.07	0.00	0.517	18.21	56
				approximately 45°. Vein comprised of coarse-grained, intergrown, milky white quartz with wispy, creamy	No Sample	574					
				white dolomite stringers. Lower contact comprised of 4 thin veins (≤0.5-2.0 cm) off-set relative to one another	0314 - 575	185.07	185.44	0.03	0.057	7.75	17
				at 45° to core axis, with argillaceous quartzite screens between veins	0314 - 576	185.44	185.68	0.00	0.187	5.2	13.5
					0314 - 577	185.68	185.84	0.00	0.687	228.33	354.2
				Structure:	0314 - 578	185.84	186.53	0.01	1.066	363.32	604.7
				Preferential alignment of sericite in pervasive foliation	0314 - 579	189.88	190.40	0.09	0.411	284.96	1306.7
					0314 - 580	190.40	190.69	0.20	0.374	99.1	3842.1
				Faults:	0314 - 581	190.69	190.94	0.00	0.023	5.06	345.2
				191.50 - 192.57 m - Within quartz vein is an 8 cm black shale that is deformed, perhaps locus of fault along	0314 - 582	190.94	191.41	0.02	0.042	5.53	245.2
				which the quartz vein developed.	0314 - 583	191.41	191.75	0.06	0.404	134.48	2234.2
				199.60 - 199.70 m - Broken zone developed between gouge / crush layers at 39° to core axis.	0314 - 584	191.75	192 13	8.82	6.553	101.95	1042.5
				200.48 m - Within quartz vein, foliation parallel slips at 48°.	0314 - 585	192.13	192.58	0.01	0.027	2.89	25.6
				200.98 - 201.00 m - Gouge at 39° and 49° to core axis.	0314 - 586	192.58	192.99	0.07	0.205	4.26	11
					0314 - 587	192.99	193.46	0.00	0.679	4.66	8.2
				Sulphides in Veins:	0314 - 588	193.46	193 66	0.02	0.397	3 39	10.6
				Portion of vein at 191.50 - 192.10 m has 10% pyrite as pyritohedra, plus arsenopyrite and sphalerite in	0314 - 589	195.84	196.28	0.02	1.768	3.54	18.7
				trace amounts.	0314 - 590	196.28	196.44	0.01	0.282	2.51	19.7
				181.20 - 181.35 m. Mineralized quartz vein, approximately 13 cm thick. Upper contact at 40° to core axis;	0314 - 591	196 44	196.60	0.00	0.443	3	34.3
				lower contact at 65°, comprised of mottled light grey to dirty white, coarse-grained, intergrown quartz	0314 - 592	200.00	200.40	0.00	0.06	1.9	7.6
				crystals, minor open vug space. Thin band of medium orange sphalerite, speckled with black,	0314 - 593	200.40	201.00	0.00	0.079	3.06	7.8
				approximately 2.5 cm by 0.2 cm wide along core of vein. Upper 4 cm of vein comprised of 50-60%	0314 - 594	201.00	201.28	0.01	0.186	2.83	9.9
				idioblastic quartz crystals (well developed basal section evident) with 20-30% interstitial flesh pink to pink scheelite (?) and 5-10% fine-grained xenoblastic to sub-idioblastic aggregate masses and sub-idioblastic to idioblastic, medium-grained cubic pyrite. Note: upper contact of vein sheared against host conglomerate with development of clayey gouge.							

184.75 - 185.07 m. Quartz vein. Upper contact sharp at approximately 50° to core axis. Milky white quartz vein at top of interval has increasing number of argillaceous (to sericitic) inclusions and / or screens toward base of interval. Lower contact diffuse, from 184.90 m to base, not clear if quartz vein with sedimentary inclusions / screens or granule conglomerate with multiple thin (≤2.0 cm thick) quartz veins at 37° to core axis. Approximately 2-3% fine-grained, sub-idioblastic pyrite in basal 4 cm of interval.

185.68 - 185.84 m. Light grey to milky white quartz vein with highly irregular contacts at approximately 25° to core axis, diffuse contacts over 0.1-0.2 cm. Contains minor xenoblastic inclusions of yellow sphalerite (to 0.2 cm long dimension) and speckles of galena. Approximately 2.0 cm offset across quartz vein oriented at 65° to core axis.

190.69 - 190.94 m. Coarse-grained, intergrown milky white quartz vein with irregular diffuse (over 0.1-0.2 cm) upper and lower contacts. Upper contact at approximately 75° to core axis; lower at approximately 86°. Thin 0.1 x 3.0 cm band of medium orange-brown sphalerite and xenoblastic aggregate mass (0.3 x 0.5 cm) of sphalerite in upper centre portion of vein. Minor argillaceous quartzite inclusions contain fine-grained, idioblastic, dodecahedral pyrite crystals.

191.75 - 192.13 m. Pyrite quartz vein. Milky white quartz vein with ≤5.5 cm of black argillite at the base of interval. Upper contact at 55° to core axis; lower contact highly irregular, partially obscured by overprinted pyrite. Vein contains 5-10% creamy yellow dolomite in interior of core. Approximately 2.2 cm of dirty white to light grey, coarse-grained, intergrown dolomite along interior side of upper contact. Remainder of vein consists of coarse-grained, intergrown quartz. Approximately 15-20% medium- to coarse-grained aggregate masses of sub-idioblastic pyrite infilling vug space over upper 6 cm of vein, trace galena and fine-grained arsenopyrite. Approximately 20% medium- to coarse-grained aggregate masses of sub-idioblastic pyrite along basal contact over 10 cm into vein (over 1.0 cm and along distinct linear trends into vein (fractures?, composite veins?, growth boundaries?)). Approximately 1-3% arsenopyrite as single fine- to medium-grained, disseminated needles, as small partial fan-shaped rosettes and as fine-grained aggregate masses along the interior of the pyrite bands

192.13 - 192.58 m. Milky white quartz vein, comprised of coarse, intergrown quartz. Lower 12 cm comprised of either tear-outs and/or inclusions of argillaceous quartzite in vein or multiple thin (≤4 cm thick) milky white quartz veins along base of overlying thicker vein. Sedimentary intervals between 0.1-1.5 cm thick with 0-15% sub-idioblastic, fine- to medium-grained pyrite.

200.00 - 200.40 m. Approximately 70% milky white quartz veins in coarse-grained sand to fine-grained granule conglomerate. Veins have diffuse contacts over approximately 0.3-0.4 cm, at 55° to core axis, relatively straight to undulose. Yellow dusting in conglomerate may represent 0.25-0.5% sphalerite.

200.40 - 201.00 m. Approximately 30% milky white quartz veins in medium-grained granule conglomerate. <<1% idioblastic, fine-grained, cubic pyrite. Quartz veins similar to previous interval.

Sulphides in Sediments:

Scant disseminated sphalerite and less frequently arsenopyrite in adjacent granule conglomerate.

181.00 - 181.20 m. Matrix-supported fine pebble conglomerate in a granule conglomerate matrix. Approximately 2-3% (fine- to) medium-grained, sub-idioblastic to idioblastic, cubic pyrite. Minor coarse-grained (0.2-0.4 cm in length) arsenopyrite needles.

181.35 - 181.61 m. Matrix-supported, fine pebble conglomerate with <1% sub-idioblastic to xenoblastic, medium-grained, cubic pyrite.

183.93 - 184.15 m. Matrix- to clast-supported, coarse granule to fine pebble conglomerate with approximately 3-5% fine- to medium-grained, sub-idioblastic cubic (?) pyrite. Approximately 0.5-1% coarse-grained arsenopyrite needles.

184.15 - 184.49 m. Sheared conglomerate (as above) with three dirty white quartz veins ≤0.4 cm thick at 45° to core axis, steepens to 75°. Approximately 1-2% fine- to medium-grained, sub-idioblastic to idioblastic, cubic pyrite. Below sheared zone is a 5 cm thick dirty white to light grey quartz vein with upper contact broken and lower contact at approximately 45° to core axis, irregular and diffuse. Contact obscured by diffuse character, colour similar to host rocks and local development of fine-grained, aggregate masses of arsenopyrite. Vein comprised of intergrown quartz crystals and vug space, contains approximately 15-20% fine-grained arsenopyrite needles and aggregate masses. Approximately 15 cm above vein and 7 cm below is deep yellow-orange disseminated mineral, no clear crystal form and occupying interstitial spaces between coarse-grained granules and fine pebbles, probably sphalerite (2%). Medium- to coarse-grained arsenopyrite needles (<1%) in host conglomerate on either side of quartz vein. Interval: 5-7% As, 1-2% Zn

184.49 - 184.75 m. Coarse-grained granule conglomerate with 1-2% fine-grained, sub-idioblastic to idioblastic, cubic pyrite. Very fine-grained "dusting" of creamy yellow mineral, possibly interstitial dolomite comprises 3-5% (very fine-grained but abundant). Thin dirty white to light grey quartz vein (≤0.7 cm) with diffuse contacts, at approximately 45° to core axis, contains minor arsenopyrite.

185.07 - 185.44 m. Granule conglomerate with 20-30% matrix-supported, coarse granule to fine pebble sized clasts. Approximately 2-3% fine- to medium-grained, sub-idioblastic cubic (to possible dodecahedral) pyrite. Trace fine-grained arsenopyrite.

185.44 - 185.68 m. Matrix-supported, coarse granule to fine pebble conglomerate. Approximately 5 cm bulbous lobe of quartz vein extends through half of core with inclusion of host sediments. Minor fine-grained, sub-idioblastic, cubic pyrite

185.84 - 186.53 m. Matrix-supported, coarse granule to fine pebble conglomerate. Approximately 1% sub-idioblastic pyrite over interval with one local concentration of 1-2% sub-idioblastic to idioblastic, dodecahedral pyrite associated with thin quartz + dolomite vein (≤0.5 cm thick) at 70° to core axis. Another thin quartz vein 3 cm above, ≤0.5 cm thick at 60° to core axis, contains approximately 5% fine-grained, xenoblastic yellow-orange sphalerite (?). Minor interstitial sphalerite (deep yellow-orange colour) in conglomerate. Thin (≤0.3 cm) quartz + dolomite vein at approximately 70° to core axis with approximately 5% deep yellow-orange sphalerite approximately 12 cm from base of interval. Approximately 5 cm above base of interval is a ≤1.5 cm band of medium orange sphalerite, speckled with fine black inclusions, possibly localized along a quartz + dolomite vein oriented at approximately 70-75° to core axis. Margins diffuse and obscured by sphalerite overgrowths into host conglomerate.

189.88 - 190.40 m. Matrix-supported, granule conglomerate with approximately 1% sub-idioblastic to idioblastic, cubic pyrite. Minor medium- to coarse-grained needles of arsenopyrite disseminated throughout interval. At approximately 190.25 is a thin (≤0.7 cm) thick quartz vein oriented at 40° to core axis with 30-40% colliform, banded medium- to dark-orange and black sphalerite and 3-5% galena as medium- to coarse-grained aggregates and as individual xenoblastic crystals. Approximately 5-7% arsenopyrite as small aggregate masses of fine-grained needles within vein, along margin of both vein and sphalerite. Approximately 1% arsenopyrite as individual disseminated needles for approximately 3 cm on either side of vein. The basal 8 cm of interval consists of 3-5% sub-idioblastic to idioblastic, fine- to medium-grained, dodecahedral and cubic pyrite with 1-3% fine- to medium-grained arsenopyrite needles.

190.40 - 190.69 m. Matrix-supported granule to fine pebble conglomerate with two milky white quartz veins. Upper vein (at 190.50 m) has slightly irregular to straight contacts at approximately 60° to core axis, with variable thickness (1.5-3.0 cm), milky white, intergrown quartz crystals. Creamy yellow dolomite (5-10%) developed along margins with 5-7% deep orange sphalerite with black speckles and 1% fine-grained galena along upper margin. Lower vein approximately 4.0 cm thick (190.56) at approximately 67° to core axis, relatively straight upper contact, undulose lower contact. Creamy pale to medium yellow, coarse-grained dolomite in lower half of vein, remainder intergrown milky white quartz. Approximately 0.2-1.0 cm thick zone of pyrite enrichment along upper contact of vein, comprised of aggregate masses of fine-grained pyrite, xenoblastic in sediments to idioblastic in vein with fine-grained arsenopyrite. Vein appears to cross-cut or disrupt earlier dirty white to light grey quartz vein. Milky white vein is itself deformed and folded, resulting in a break which allowed mineralization to cross through vein to lower contact. Host sediments contain 1-3% fine- to medium-grained, sub-idioblastic to idioblastic, cubic and minor dodecahedral pyrite above upper vein. Approximately 1-3% fine-grained, xenoblastic, medium dirty yellow sphalerite and <1% fine-grained, idioblastic, cubic pyrite below lower vein.

190.94 - 191.41 m. Matrix-supported granule to fine-pebble conglomerate. Approximately 3-5% fine- to medium-grained, sub-idioblastic to idioblastic, cubic and dodecahedral pyrite. (Note: fine-grained pyrite is cubic, medium-grained is dodecahedral). Interval contains single light grey, fine-grained quartz vein at approximately 75° to core axis (slightly deformed). Interval cross-cut by subsequent medium creamy yellow dolomite veins, varying between 0.1 and 0.3 cm thick at 45° and 70° to core axis (opposing sense to earlier quartz vein). Minor medium- to coarse-grained arsenopyrite noted as disseminated needles above quartz vein at 191.21 m.

191.41 - 191.75 m. Matrix-supported fine pebble to coarse granule conglomerate with two milky white quartz veins. Upper vein, at 30° to core axis, approximately 4 cm thick with sharp, irregular contacts. Vein has discontinuous 0.1-0.3 cm thick band of fine- to medium-grained, sub-idioblastic, cubic pyrite. Vein cross-cut by subsequent 0.1-1.3 cm thick pale yellow to flesh pink coloured dolomite within earlier milky white quartz vein. Contact between quartz and dolomite vein has thin 0.0-0.2 cm thick band of fine-grained pyrite and arsenopyrite. Lower vein, at 35° to core axis (upper contact), 55° to core axis (lower contact) resulting in variable thickness (1.5-4.5 cm thick). Approximately 3-5% fine- to medium-grained, sub-idioblastic pyrite for ≤10 cm on either side of lower vein, together with 2-3% xenoblastic, medium yellow sphalerite. Single 0.1 x 3.0 cm stringer of medium orange sphalerite 1.0-1.5 cm above upper contact of lower vein. Minor medium-grained needles of arsenopyrite disseminated through interval.

192.58 - 192.99 m. Matrix-supported, coarse granule conglomerate to fine pebble conglomerate. Approximately 1% fine- to medium-grained, sub-idioblastic to idioblastic, dodecahedral pyrite. Minor medium- to coarse-grained arsenopyrite needles disseminated throughout interval. Basal 15 cm comprised of 60% quartz veins 0.5-4 cm thick at 60° to core axis.

193.46 - 193.66 m. Medium-grained, granule conglomerate with approximately 1% medium- to coarse-grained, sub-idioblastic, dodecahedral pyrite. Lower third of interval comprised of one milky white quartz vein with silty argillite inclusions or three milky white quartz veins with thin silty argillite screens. Approximately 10-15% creamy yellow dolomite associated with veins.

195.84 - 196.28 m. Medium- to coarse-grained, granule conglomerate with approximately 40% dirty white to light grey quartz veins, from 0.5-6.0 cm thick at approximately 65-75° to core axis over upper half of interval. Quartz veins appear to belong to two different generations: dirty white to light grey, fine-grained quartz veins and milky white, coarser grained quartz veins. The veins have slightly irregular, diffuse contacts (over 0.1-0.2 cm). The host lithology consists of granule conglomerate with 3-5% fine- to medium-grained, sub-idioblastic, cubic pyrite and 1% arsenopyrite as medium- to coarse-grained, disseminated needles.

196.28 - 196.44 m. Coarse-sand to fine granule conglomerate with approximately 1% fine- to medium-grained, idioblastic, cubic pyrite. Minor disseminated arsenopyrite.

				196.44 - 196.60 m. Matrix-supported, coarse-granules (10%) in coarse-grained sand to fine-grained granule conglomerate with 0.5-1% fine-grained, idioblastic, cubic pyrite. Lower 2-3 cm discoloured (dark grey-green), above undulose fault plane with slickensides on calcitic coating, possibly fine-grained sulphides. **201.00 - 201.28** m. Matrix-supported, medium- to coarse-grained granules in fine- to medium-grained, salt and pepper granule sized matrix. Creamy white, interstitial dolomite present as possible cement(?). <1% fine-grained, idioblastic, cubic pyrite. Approximately 1.5 cm thick, discoloured band at top of interval, dark grey in colour, possibly due to fine-grained sulphides, capped by 0.1-0.2 cm thick, medium orange coloured sphalerite band.							
201.40	202.10			**Lithology: Fault Zone.** **Structure:** **Faults:** **201.40 - 201.83** m - Incohesive zone of rock fragments and gouge, granule conglomerate to 201.83 m. Base is shale at 41° to core axis. **201.83 - 202.10** m - Fault slippage in shale and granule conglomerate layers that at 202.00 m passes into cohesive high strain zone that passes into granule conglomerate below.							
202.10	202.48			**Lithology: Granule conglomerate.**							
202.48	209.37			**Lithology: Sub-wacke / argillite.** Dark grey, laminated with occasional light grey layer and wacke, light grey, medium to thin bedded, Bouma C-type cross laminations. **Veins:** Very minor quartz lenses with brecciated dolomite and trace pyrite 5 cm from base. **Structure:** Phyllitic, in places with two distinct crenulations. **Faults:** Low angle slips common, eg. 14° to core axis, with a few mm gouge. From 203.30 - 203.60 m are two intersecting low angle gouges from 2 mm to approximately 5 mm.							
209.37	214.28			**Lithology: Granule to fine-grained pebble conglomerate.** Granule and, from 213.95 - 214.28 m, fine-grained pebble conglomerate (bed base).	0314 - 595	209.38	209.96	0.02	1.083	7.34	13.3
					0314 - 596	210.82	211.12	0.01	0.058	2.74	8.7
				Veins:	0314 - 597	211.12	211.78	0.03	0.54	2.8	9.3
				213.78 - 213.97 m. Milky white quartz vein. Upper contact irregular, bowl-shaped in profile, lower contact at 63° to core axis. 19 cm thick.	0314 - 598	211.78	212.28	0.02	0.564	2.57	9.7
					0314 - 599	213.48	213.78	0.51	0.03	4.05	6
					0314 - 600	213.78	213.97	0.01	0.017	3.78	5
				Sulphides in Veins: **211.12 - 211.78** m. Approximately 15-20% dirty white to milky white quartz veins 1.0-2.0 cm thick at 65° to core axis. Thinner veins in lower half of interval have sub-idioblastic to xenoblastic, fine-grained pyrite along margins. Minor fine- to medium-grained, acicular arsenopyrite needles disseminated throughout interval.							

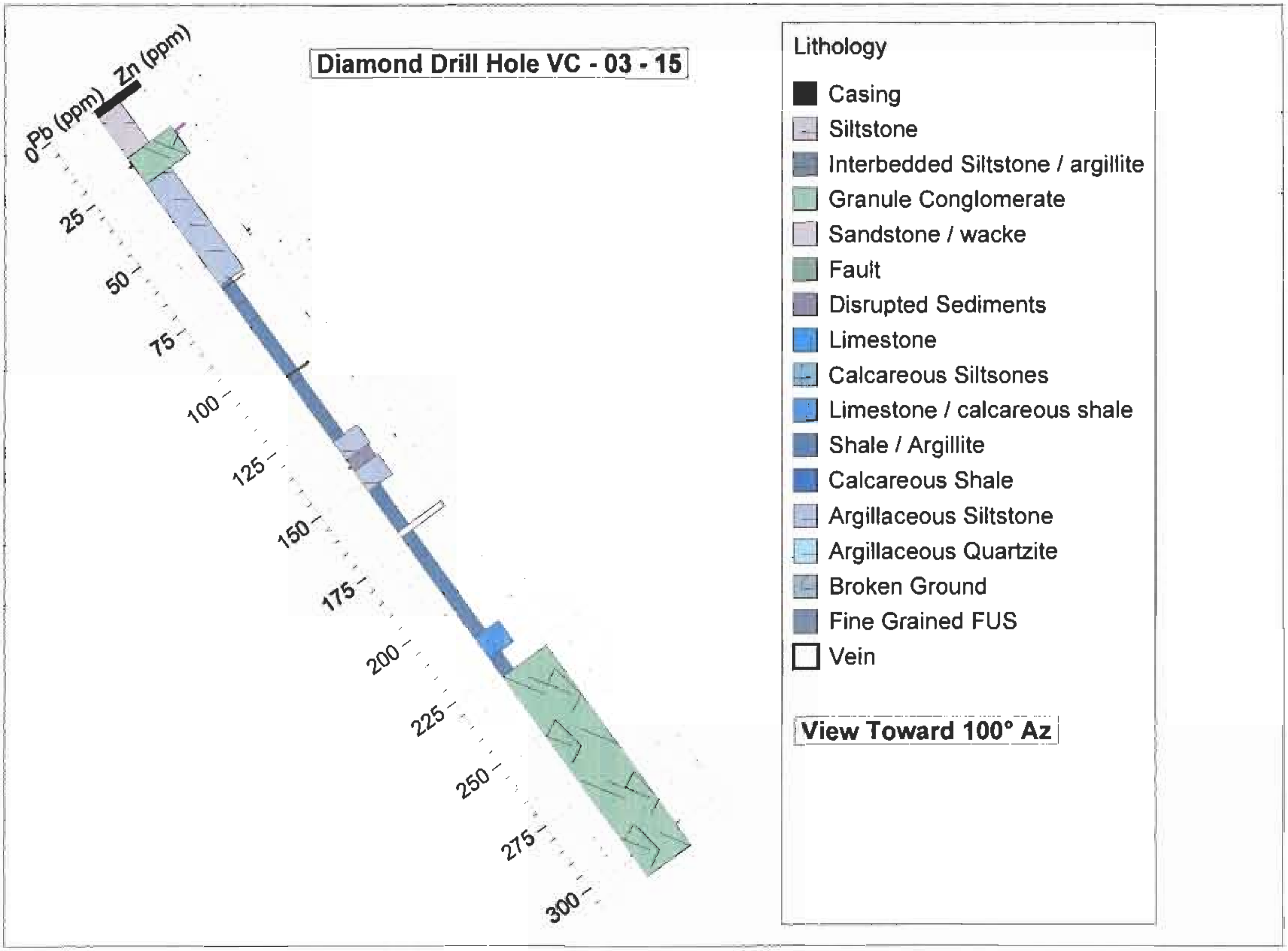
244.25	260.60			**Lithology: Fine-grained pebble conglomerate.** Light grey. From 246.75 to 258 m is predominantly granule conglomerate, often with scattered fine-grained pebbles. All fairly light grey. **Structure:** From 250.80 - 252.00 and 256.80 - 257.50 m colour is darker and texture dominated by more intense foliation. **Sulphides in Sediments:** Zone of "sheared" appearance of fine-grained brownish mineral over 4 cm at 245.70 m (sphalerite?). **245.64 - 245.73** m. Dark tinged interval within this interval which appears to be otherwise similar to overlying and underlying sediments. Suspect discolouration may be due to presence of very fine-grained sphalerite. **247.55 - 247.62** m - thin "seam" of the very fine, light brown mineral that might be sphalerite - it is **259.69 - 260.09** m. Matrix-supported, coarse-grained granule conglomerate in coarse sand sized matrix. Three light grey quartz veins present (0.4-1.0 cm thick) with approximately 5-10% xenoblastic, fine-grained, medium yellow-orange sphalerite + 3-5% galena. Specks of interstitial, xenoblastic, fine-grained, medium-yellow to pale orange sphalerite throughout interval in host sediments. Several grains of orange sphalerite and associated galena on margins and flanking scattered grey quartz segregation layers parallel to foliation. **Alteration:** Within a slightly greenish altered looking zone from 248.90 - 250.30 m are numerous angular, creamy off-white grains from specks to 5 mm that are dolomite (crushed several to observe effervescence in dilute HCl). This is a matrix infill of carbonate.	0314 - 615 0314 - 616	245.64 259.69	245.73 260.09	0.00 0.02	1.187 0.108	433.96 10.58	756.4 31.9
260.09				**End of Hole**							

				211.78 - 212.28 m. Approximately 60% milky white and dirty white to light grey quartz + dolomite veins in medium-grained granule conglomerate. Veins have sharp to diffuse (over 0.2 cm), undulose to relatively straight contacts. Host sediments have approximately 1-2% fine-to medium-grained, idioblastic, cubic pyrite. **Sulphides in Sediments:** Several grains of arsenopyrite at 213.50 m. **209.38 - 209.96** m. Fine- to medium-grained, salt and pepper, light grey sandstone with approximately 3-5% fine-grained, sub-idioblastic to idioblastic, cubic pyrite disseminated throughout interval. Fine- to medium-grained, acicular arsenopyrite needles noted disseminated in core. May be considerable amount of very fine-grained arsenopyrite. **210.82 - 211.12** m. Light grey, fine- to medium-grained sandstone with <<1% fine-grained, idioblastic, cubic pyrite. Fine-grained arsenopyrite noted disseminated in core. Again, may be a considerable amount of very fine-grained arsenopyrite in interval. **213.48 - 213.78** m. Pyrite-bearing granule conglomerate. Approximately 5-7% fine- to medium-grained, sub-idioblastic to idioblastic, cubic pyrite disseminated through interval, probably associated with underlying quartz vein (see next interval) as only minor pyrite above. Approximately 0.5-1.0% medium-grained arsenopyrite needles in interval, disseminated as well.							
214.28	217.57			**Lithology: Quartz wacke, coarse-grained quartz sandstone.**							
217.57	225.20			**Lithology: Granule to fine-grained pebble conglomerate.** Granule conglomerate that at 219.00 passes into fine-grained pebble conglomerate. **Sulphides in Veins:** **217.77 - 218.05** m. Milky white quartz vein with irregular contacts. Probable composite vein with coarse-grained, milky white core comprised of intergrown, coarse-grained quartz crystals. Contact with host coarse-grained sandstone to fine-grained granule conglomerate gradational through sediments having ≤90% dirty white to creamy yellow dolomite with 1-2% medium- to coarse-grained, sub-idioblastic, cubic pyrite. **219.36 - 219.90** m. Two milky white quartz veins. Upper vein approximately 9.5 cm thick, upper contact at 52° to core axis, lower contact at approximately 54° to core axis at 219.48 m, contacts diffuse and irregular with minor wispy and stringers of dolomite along lower contact and into host coarse-grained granule conglomerate. Lower vein has highly irregular, sharp upper contact between 219.55 and 219.64 m. Minor arsenopyrite along upper contact. Host sediments between veins seem slightly darker than equivalent lithology above vein, possibly enriched in fine-grained sulphides (arsenopyrite?). Lower contact irregular over 6.0 cm, sharp. Lower vein has cross-cut and partially assimilated creamy yellow dolomite vein(s) ≤0.5 cm thick at approximately 75° to core axis. **Sulphides in Sediments:** **218.05 - 218.31** m. Matrix-supported granule conglomerate. Approximately 2-3% sub-idioblastic (to xenoblastic), fine-grained, cubic pyrite above ≤3.0 cm quartz vein at 218.20 m. Medium- to coarse-grained, idioblastic, cubic pyrite below vein. Minor pyrite below interval.	0314 - 601	217.77	218.05	0.01	0.334	7	19.6
					0314 - 602	218.05	218.31	0.06	0.862	4.99	12.2
					0314 - 603	219.36	219.90	0.01	0.582	2.88	15.3
					0314 - 604	220.20	220.50	0.04	0.391	3.89	12.9
					0314 - 605	220.50	220.97	0.01	0.055	3.94	10.3
					0314 - 606	220.97	221.41	0.07	0.113	5.53	15.1

				220.20 - 220.50 m. Matrix-supported, granule conglomerate with quartz veining. Approximately 20-25% milky white quartz veins over interval, ranging from ≤0.5 cm thick to 8 cm thick, with approximately 10% coarse-grained, creamy white to yellow dolomite along margins, contacts slightly irregular to straight, sharp to diffuse over 0.1-0.2 cm at 60° to core axis. Matrix has 1-2% medium-grained, sub-idioblastic, cubic pyrite. Adjacent to contacts of upper vein is 3-5% fine- to medium-grained, sub-idioblastic, cubic to dodecahedral pyrite as single disseminated grains and as a zone or band of fine-grained pyrite. Minor arsenopyrite adjacent to / associated with pyrite grains above upper contacts. **220.50 - 220.97** m. Matrix-supported, granule conglomerate to fine pebble conglomerate between quartz veins. <<1% fine-grained, sub-idioblastic to idioblastic, cubic pyrite with minor fine- to medium-grained arsenopyrite needles (to 0.2 cm length). Upper 15 cm of interval has fine-grained "dusting" of medium yellow mineral, may be sphalerite. **220.97 - 221.41** m. Matrix-supported, coarse granule to fine pebble conglomerate with quartz veining. Approximately 20% of interval comprised of 6 dirty grey to milky white quartz veins from 0.6-4.0 cm thick, minor dolomite, with sharp to diffuse (over ≤0.2 cm) margins, at 30° to core axis. Sub-idioblastic to idioblastic, fine- to medium-grained, cubic pyrite in host sediments, with coarse-grained, sub-idioblastic, sub-idioblastic, cubic pyrite at, and adjacent to, vein contacts. Lower 10 cm of interval has zone of coarse-grained pyrite (to 0.7 cm diameter) for 4 cm above ≤3.0 cm thick vein at lower contact. Pyrite as small aggregate masses of multiple crystals forming discontinuous bands. Host rock has darker colour, probably due to sulphide enrichment above vein, in which fine-grained arsenopyrite needles noted.							
225.20	225.48			**Lithology: Black sub-wacke, grey wacke.** **Veins:** Wispy layering with white to grey quartz veining interleaved. **Sulphides in Veins:** **225.13 - 225.50** m. Milky white quartz vein and medium yellow green dolomite vein in structurally modified, interbedded argillite to granule conglomerate. Complex zone of veining with upper vein of coarse-grained, milky white quartz as a wedge-shaped vein up to 4 cm thick, tapers to 0 cm over half core width. Upper "contact" of vein interval at 30° to core axis. Approximately 7.5 cm of intermingled, creamy white dolomite and grey quartz with 7-10% medium- to coarse-grained, sub-idioblastic pyrite and fine-grained "tear-outs" of argillite to silty argillite. Underlying this zone is approximately 3.5 cm of medium yellow-green, very coarse (to 2.0 cm in length), xenoblastic dolomite crystals (intergrown), with 1-2% medium-grained, sub-idioblastic pyrite, minor medium- to coarse-grained (to 0.3 cm) arsenopyrite needles and inclusions (and/or "tear-outs") of fine-grained sediments. Vein at 45° to core axis. The remainder of the interval consists of pyritic, interbedded (to intermingled) argillite, silty argillite, fine- to medium-grained sandstone above coarse granule conglomerate (probably fine-grained cap to fining upward sequence into which a higher strain gradient was partitioned). Approximately 15-20% fine- to very coarse-grained pyrite (to 1.3 cm long dimension) present as single disseminated crystals, small aggregate masses, linear masses of crystals sub-parallel to lithological contacts and/or foliation and as **Sulphides in Sediments:** Central zone of yellow, coarse-grained siderite that contains traces arsenopyrite.	0314 - 607	225.13	225.50	0.48	0.412	6.82	28.9
225.48	225.76			**Lithology: Granule conglomerate.** **Sulphides in Sediments:** Pyritohedra common in bottom half, 2 grains arsenopyrite noted.	0314 - 608	225.50	225.79	0.06	0.299	5.44	14.4

				225.50 - 225.79 m. Pyrite-bearing, matrix-supported granule to fine-pebble conglomerate. Approximately 3-5% fine- to medium-grained, sub-idioblastic, cubic to dodecahedral pyrite. Minor arsenopyrite present.							
225.76	226.00			**Lithology: Shale.** Rotated core and shale continues to 226.30 m on bottom half. **Veins:** Foliation parallel quartz lenses forming vein have minor dolomite. **Structure:** Highly foliated shale. Foliation overprinted by wavy folds and a crenulation cleavage. **Sulphides in Sediments:** Pyrite common. Two grains arsenopyrite. **225.79 - 226.00** m. Interlaminated, fine-grained cap to Fining Upward Sequence. Interval consists of thinly laminated argillite and silty argillite with 3-5% fine- to coarse-grained, sub-idioblastic to xenoblastic, cubic to dodecahedral pyrite predominantly as short foliation and/or bedding parallel linear, aggregate masses comprised of multiple crystals. Two, wedge-shaped, dirty white to creamy yellow dolomite veins, the upper is 3 cm thick and extends approximately 5 cm into the core at 38° to core axis, the second is ≤0.5 cm and extends approximately 1 cm. Minor arsenopyrite noted. **Alteration:** Ankerite layers probably remnants of porphyroblasts.	0314 - 609	225.79	226.00	0.11	0.441	7.98	26
226.00	227.85			**Lithology: Granule conglomerate.** Granule conglomerate with irregular lenses of fine-grained pebble conglomerate. Wispy shale remnants at 226.75 - 226.85 m. Base is sharp and planar flat at 57° that coarse pyrite overprint equally above and below. **Veins:** 4 cm quartz vein parallel foliation. **Structure:** Foliation is in opposite sense to bedding at 46° to core axis.							
227.85	231.22			**Lithology: Sub-wacke / argillite.** Dark grey / black to medium grey. Both dark and light laminations on light and dark backgrounds, some thin beds. One medium-bedded wacke, about 25 cm thick - Bouma CD. Two very thin bedded wacke (Bouma C). Bed laminations near top seem disrupted (load effect of deposition of overlying bed?). Zones of several decameters of perfectly parallel laminations at 33° and 75° to core axis. Base is sharp at 70° to core axis. **Structure:** Deformed, brecciated, crenulated introduction of quartz lenses with dolomitic breccia from 230.30 to 231.22 m, mostly cohesive except near 5 mm gouge at 230.30 m at 46° ± parallel to foliation.							

231.22	235.36			**Lithology: Wacke, quartz wacke.** Coarse-grained sand size grains. **Veins:** Zone is cut by several foliation parallel or low angle to foliation white quartz veins (common) in which brecciated and individual grains of dolomite are typical along margins. **234.48 - 234.77** m. Approximately 70-80% milky white quartz veins with approximately 10-15% creamy white to yellow dolomite developed discontinuously along margins. Individual veins vary between 1.5-3.0 cm thick with sharp, slightly irregular contacts at approximately 40° to core axis. **235.11 - 235.55** m. Interval of 60-70% milky white quartz veins, at approximately 60° to core axis, 1.0-5.0 cm thick, mottled due to inclusions of host sediments, sharp contacts slightly irregular. **Sulphides in Veins:** **231.76 - 232.25** m. Milky white quartz vein in fine- to medium-grained granule conglomerate. Interval contains 4 quartz-rich zones comprising 75-80% of interval, with each zone consisting of a single quartz vein with or without inclusions and /or screens of host sediments or multiple veins with thin screens of host sediments separating veins. Interval comprised largely of single, ≤33 cm thick milky white quartz vein, consisting of coarse, intergrown quartz with vugs. Small idioblastic quartz crystals line vugs. Upper 3.0 cm quartz vein contains approximately 30% dolomite. Remainder of veins contain approximately 5-10% creamy white dolomite. Milky white vein appears to have formed subsequent to quartz + dolomite. One 3.0 cm vein at base of interval comprised of light grey quartz + 30% creamy white dolomite along which a later milky white quartz vein has been injected. Light grey quartz + dolomite veins tend to have dolomite developed approximately perpendicular to vein margins. Host granule conglomerate contains approximately 3-5% fine-grained, idioblastic, cubic pyrite. **233.00 - 233.47** m. Another zone of multiple vein development comprising approximately 60% of interval with two different vein types (generations?) present. One type consists of light grey to milky white quartz veins having sharp, straight to slightly irregular contacts. Second type comprised of quartz and / or pale yellow-green dolomite veins with sharp contacts, characterized by angular contacts when vein changes orientation and segmented into discontinuous lenses / lozenges. Central quartz and / or dolomite vein mass contains minor pyrite and stringers of very fine-grained sulphides. **Sulphides in Sediments:** **234.77 - 235.11** m. Medium-grained sandstone to medium-grained granule conglomerate with approximately 1% pyrite. One milky white quartz + creamy yellow dolomite vein toward base of interval (235.05 m) at 40° to core axis. **Alteration:** Zone is altered, probably due to high fluid flow, as mica colouration is green to yellow-green.	0314 - 610 0314 - 611 0314 - 612 0314 - 613 0314 - 614	231.76 233.00 234.48 234.77 235.11	232.25 233.47 234.77 235.11 235.55	0.00 0.00 0.00 0.00 0.00	0.074 0.026 0.03 0.012 0.04	3.71 4.66 2.49 2.29 2.91	15.1 49.4 19.3 11.4 11.4
235.36	236.75			**Lithology: Granule conglomerate.** Grey green (wet - normal colour).							
236.75	244.25			**Lithology: Quartz wacke.** Coarse-grained sand sized grains, grey to, below 239.50 m, slightly greenish to yellow green. **Veins:** Massive, few sub-cm quartz segregations							



Diamond Drill Hole VC - 03 - 15
0
Pb (ppm)
Zn (ppm)
25
50
75
100
125
150
175
200
225
250
275
300
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View Toward 100° Az

DYNAMIC EXPLORATION LTD.

DRILL LOG: DIAMOND DRILL CORE

HOLE NO.	VC - 03 - 15

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:	Lot 15307		
LOCATION - GRID NAME:			
EASTING:	501190	NORTHING:	5644787
SECTION:		ELEV:	1908 m
AZIM:	190°	LENGTH:	300.08
DIP:	-54°	CASING LEFT?:	No
CORE SIZE:		NQ	
CORE STORAGE:	Vermont Creek		

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
0		50.75°	155.44		42.25°
DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
307.83		41°			

DRILLING CO:	F.B. Drilling
STARTED:	11-Aug-03
COMPLETED:	18-Aug-03
PURPOSE	
CORE RECOVERY:	
LOGGED BY:	Rick Walker
	Paul Ransom
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	A304019,
	A304019r,
	A304551,
	A304551R,
	A304993,
	A304993r,
	A304993R2,
	A305377,
	A305377r

Drill Hole VC - 03 - 15

From	To	Core Angle		Description	Sample	From	To	Gold	Silver	Lead	Zinc
m	m	m	Deg		Number	m	m	gms/T	gms/T	ppm	ppm
0.00	2.72			**Casing - reamed to 9.14 m.**							
2.72	18.88	9.0 13.0 15.0 16.0 17.2 18.0	25° 57° 40° 40° 53° 64°	**Lithology: Alternating siltstone.** Bedding ranges from thick laminated to very thin bedded (≤4 cm; average 0.5 - 1.0 cm). Sediments vary from argillaceous siltstone to very thin beds of dirty white to light grey argillaceous quartzite (argillaceous fine- to medium-grained sandstone). Graded beds indicate right-way-up sequence (i.e. facing top of hole). **Veins:** Minor quartz veining, ranging between 0.4 - 4.0 cm thick; sharp, slightly irregular contacts. Larger vein has sedimentary inclusions and/or thin screens and approximately 15-20% creamy yellow dolomite. **Structure:** Upper 9.0 m shattered into small chips and flakes to short segments up to 7 cm in length. A total of 96" (244 cm) missing from upper 9.14 m which, taken with the high proportion of chips and flakes, may indicate missing material is fault gouge. Sediments variably disrupted by foliation, which has locally offset bedding, resulting in foliation bounded lenses and ragged, irregular bedding contacts. Offsets have sinistral, or west side down, sense of motion of up to 3 cm. Majority of bedding to base of interval shows evidence of disruption due to foliation. **Faults:** **16.92 - 17.14** m - Incohesive fault gouge comprised of silt sized gouge to small chips, moderately to heavily iron-stained. Lower contact at approximately 10° to core axis. Note: due to the orientation of the hole, S_0 and S_1 are at oblique angles to one another. **Sulphides in Sediments:** All surfaces in upper 9.14 m covered with medium yellow to orange coating, probably goethite to limonite. Intact segments show iron-spotting, varying from very fine- to fine-grained limonite after pyrite.							
18.88	29.44			**Lithology: Granule conglomerate.** Interval comprised predominantly of shattered granule conglomerate with subordinate matrix-supported, fine-grained pebble conglomerate. Between approximately 26.90 - 27.43 m is largely intact core comprised of intermingled granule conglomerate and silty argillite to argillite. Contacts are largely broken but, where present, appear to be structurally enhanced bedding contacts. May represent fine-grained tear-out / inclusions in basal portion of coarse-grained Fining Upward Sequence, or may represent juxtaposition by faulting. Basal contact sharp, at approximately 65° to core axis, against underlying silty argillite to argillite. **Structure:** The interval is short 80" (203 cm) between 18.29 and 30.48 m, probably representing loss of fine-grained fault gouge) **Sulphides in Veins:** **20.17 - 20.88** and **21.33 - 22.10** m is largely intact and contains a mineralized quartz vein essentially parallel to the core axis (slightly undulose). The vein contains approximately 20-40% sulphides, including coarse-grained pyrite, sphalerite, medium- to coarse-grained arsenopyrite and fine- to medium-grained galena, as single crystals and as small aggregate masses. The quartz vein is characterized by open vug space with intergrown, well-formed, idioblastic quartz crystals. The vein contact is slightly diffuse (over ≤0.2 cm) and is broadly undulose. The interval from 22.10 - 24.38 m is broken but appears to contain segments of mineralized quartz vein. Immediately below 24.38 m are larger pieces of apparently unmineralized quartz vein.	0315 - 617	18.88	20.27	0.18	0.735	9.56	588.2
					0315 - 618	20.27	20.88	0.42	4.935	4730.5	33416.1
					0315 - 619	20.88	21.33	0.25	0.144	44.79	1948.6
					0315 - 620	21.33	22.10	4.34	19.749	14030.7	6248.9
					0315 - 621	22.10	24.38	0.95	0.255	162.33	739.3
					0315 - 622	24.38	25.19	0.01	0.156	105.19	1060.6
					0315 - 623	25.19	26.90	0.03	0.093	8.58	1164.5
					0315 - 624	26.90	27.76	0.06	0.17	13.93	841.4
					0315 - 625	27.76	28.59	0.03	0.041	4.88	291
					0315 - 626	28.59	29.44	0.01	0.480	11.37	571.9

20.27 - 20.80 m. Light blue-grey granule conglomerate with mineralized quartz vein ≤3.0 cm thick sub-parallel to core axis. Granule conglomerate contains iron-spotting from fine- (to medium-) grained pyrite Quartz vein varies between 1.5-3.0 cm over upper 20 cm of interval and contains approximately 20-30% coarse-grained (to 2.0 cm long dimension) sphalerite crystals with long axis perpendicular to vein margins. Vein comprised of quartz with open vug space having well-formed, idioblastic quartz crystals. Quartz vein contains large masses of medium to deep orange limonite (to 1.5 cm diameter), probably secondary weathering product of coarse-grained pyrite. Host conglomerate consists of matrix-supported, fine-grained pebble conglomerate (30-40% sub-rounded to sub-angular, fine pebble sized clasts) in a medium- to coarse-grained granule conglomerate matrix. Local zones of medium- to coarse-grained, idioblastic dodecahedral pyrite. A short 5 cm segment of granule conglomerate contains a ≤0.5 cm band of very fine-grained arsenopyrite at approximately 30° to core axis.

21.33 - 22.10 m. Relatively intact interval comprised of light to medium grey granule conglomerate with an approximately 3.0 cm thick mineralized quartz vein sub-parallel to core axis. Quartz vein strengthened interval and did not fracture as badly as preceding intervals. Granule conglomerate on either side less cohesive and locally shattered, with iron-spotting due to moderately to heavily weathered pyrite. Arsenopyrite present in quartz vein and within granule conglomerate on either side, comprised of coarse needles in quartz vein and fine needles in host conglomerate. Vein also contains fine- to medium- grained pyrite and blue-black sulphide with xenoblastic morphology (possibly tetrahedrite - tennantite?) and minor sphalerite.

Sulphides in Sediments:
Intact segments have fine- to medium-grained pyrite while shattered segments have moderately to heavily iron-stained and/or limonite coated surfaces. Large masses of limonite / goethite probably represent completely weathered, coarse- to very coarse-grained pyrite.

18.88 - 20.27 m. Shattered mix of silty argillite, granule conglomerate and vein quartz. Interval moderately to heavily iron-stained with 1.5 x 1.5 x 0.4 cm masses of deep orange limonite (after pyrite). Intact pieces of conglomerate (up to 6 cm in long dimension) contains apparently unweathered, sub-idioblastic, fine-grained pyrite; moderately to heavily weathered pyrite along fractured ends. Quartz vein (± carbonate?) appears to be ≤2.0 cm thick with open vugs having well-formed idioblastic, medium-grained (to 0.5 cm length) quartz crystals. Note: interval from 18.29 - 21.33 short 23" (58 cm), allocated 29 cm each to sample interval 617 and 619. 618 relatively intact.

20.88 - 21.33 m. Shattered zone of granule conglomerate. Similar to 18.88 - 20.27 m, but with little or no silty argillite.

22.10 - 24.38 m. Similar to 20.88 - 21.33 m. Mineralized fragment evident in shattered rock. Segments of granule conglomerate to 10 cm in length, half core width and quartz vein (to 3.0 cm thick) present. Fault gouge over basal 7 cm. (Note: 33" (84 cm) missing from this interval).

24.38 - 25.19 m. Similar to above, comprised predominantly of iron-spotted granule conglomerate. (Note: 24" (61 cm) missing from interval 24.38 - 27.43 m, probably from this sample interval and 25.19 - 26.90 m). This interval comprised predominantly of pebble to coarse cobble sized fragments (4.0 cm to 10.0 cm) with subordinate granule size chips and flakes. All fragments angular to highly angular.

25.19 - 26.90 m. Shattered interval of iron-spotted granule conglomerate. Locally moderately to heavily iron-stained with patches and coatings of limonite.

26.90 - 27.76 m. Structurally mixed interval comprised of dirty white to light grey granule conglomerate and silty argillite to argillite. Interval moderately broken so contact relations difficult to identify. One series of fragments over upper 20 cm of interval suggests lithologies juxtaposed, or at least modified, by foliation. Fine- to medium-grained, sub-idioblastic to idioblastic, cubic and dodecahedral pyrite locally present, as well as moderately to completely weathered pyrite (as limonite). ≤2.5 cm dirty white quartz vein evident in fragments over lower 30 cm, with pyrite as only apparent mineralization (as pyrite + limonite).

27.76 - 28.59 m. Light grey to dirty white granule conglomerate with 2-3% fine- (to medium) grained, sub-idioblastic, cubic pyrite. Minor coarse-grained arsenopyrite noted (to 0.5 cm long dimension). Approximately 1.0 cm thick dirty white quartz vein over lower 15 cm of interval at approximately 15° to core axis. Heavy iron-staining and limonite along contacts, half in this interval, half in next.

28.59 - 29.44 m. Similar to above.

29.44	70.30	31.2	62°	**Lithology: Silty argillite to argillaceous siltstone.**	0315 - 627	59.23	59.53	0.02	1.456	398.97	1049.1
		32.0	48°	Thin laminated to thin bedded, silty argillite to argillaceous siltstone, subordinate light and medium dark grey siltstone.	0315 - 628	59.53	59.74	0.07	0.555	159.67	78.3
		33.0	60°	Gradation from very thin bedded, coarse-grained bases through thick to thin laminated laminae with decreasing	0315 - 629	59.74	59.95	0.33	20.17	3744.49	547.7
		33.9	65°	proportion of coarse-grained siltstone and increasing silty argillite defines short Fining Upward Sequences.	0315 - 630	59.95	60.14	0.18	0.614	246.22	48.1
		35.1	22.5°		0315 - 631	60.14	60.50	0.01	1.142	24.16	57
		36.0	17°	Right-way-up: 32.63 to 40.37 m, 44.47 m, 45.83 m, 56.52 m	0315 - 632	60.50	61.27	1.00	5.250	2239.34	8161.2
		37.0	06°	Overturned: 40.91 m, 54.56 m, 55.57 m, 57.70 m, 59.28 m	0315 - 633	61.27	61.40	0.33	1.580	62.78	474.2
		38.0	00°		0315 - 634	62.23	62.29	0.06	5.291	71.31	73.1
		39.2	08°	**Veins:**	0315 - 635	62.29	62.34	2.64	81.249	14836.1	11950.8
		40.0	13°	Approximately 20-30% quartz ± dolomite veining between 30.40 and 35.40 m. Veins have sharp, straight to	0315 - 636	62.34	62.46	0.03	3.058	161.39	79.2
		41.0	40°	highly irregular contacts and vary from single veins to stacked or sheeted multiples. Minor proportion have							
		42.0	15°	stockwork appearance, with either abundant inclusions or closely spaced multiples. Approximately 5-10%							
		43.0	30°	dirty white to creamy yellow dolomite along margin of some veins. Quartz varies from dirty white to light grey							
		44.0	33°	and milky white, probably representing multiple generations of veining. Thin veinlets comprised of creamy							
		45.0	38°	yellow-orange dolomite, sub-parallel to core axis, join some veins. Veins range from 0.4-15 cm thick, sub-							
		46.0	20°	parallel to 80° to core axis.							
		47.0	20°	**36.70 - 43.80** m - Approximately 10-15% quartz and dolomite veins at moderate angles to core axis, cross-cut							
		48.0	28°	both bedding and foliation at moderate to steep angles. Minor proportion of thin quartz veinlets parallel to							
		49.0	30°	foliation. Veins range between 0.3-4.0 cm thick, straight to slightly irregular to undulose, sharp contacts.							
		50.0	36°	**44.70 - 47.80** m - Approximately 15-20% short segments of thin quartz veins (0.1 - 0.5 cm thick), oriented							
		51.0	35°	sub-parallel to core axis, truncated and offset by foliation. Interval has incipient to weak stockwork texture,							
		52.0	25°	thin veinlets parallel to sub-parallel to foliation show little or no deformation and/or offset. Veins at high angle to							
		53.0	12°	foliation have offsets up to several cm.							
		54.0	24°								
		55.0	30°	**Structure:**							
		56.0	13°	Broad, open folds identified in core at 40.42 m (warp) and 41.62 m, both synclines, possibly faulted or close							
		57.0	17°	fold closure at 40.90 m (anticline). Broad, open syncline at 53.24 m. Tight synclinal closure at 56.52 m,							
		58.0	13°	probably drag fold or small scale parasitic fold against quartz vein at 56.55 m.							
		59.0	15°	From 46.0 onward, the bedding and foliation planes are at an oblique angle to one another (i.e. they are not							
		60.0	33°	in the same plane)							
		61.0	34°	**Faults:**							
		62.0	28°	**29.84 - 30.09** m - Upper contact at approximately 25° to core axis. Thick interval of clayey gouge.							
		63.0	20°	**34.70 - 35.02** m - Thin fault zone with light to medium orange clayey gouge at 40° to core axis at top of							
		64.0	13°	interval. 1 cm thick band of medium olive green, fine-grained gouge at approximately 50° to core axis at							
		65.0	07°	35.02 m.							
				38.80 - 39.16 m - Broken interval with small chips and flakes at 55° to core axis. (Note: 8" short at 39.62 m marker)							
				47.40 - 47.60 m - Broken interval with partial loss of cohesion and fault gouge.							
				53.90 - 54.30 m - Fine-grained sediments have sheared appearance with accompanying loss of cohesion.							
				62.70 - 70.30 m - Sediments variably sheared with accompanying partial to complete loss of cohesion between 66.30 - 66.44 m, 67.17 - 69.49 m (Note: 55" missing in interval between 66.44 - 69.49 m)							
				Sulphides in Sediments:							
				59.23 - 59.53 m. Pyrite-bearing siltstones to argillaceous siltstones. Sharp increase in pyrite content at 59.23 m, from ≤1% (fine- to) medium-grained (to 0.4 cm diameter), sub-idioblastic to idioblastic, cubic pyrite to 3-5% medium- to coarse-grained (to 0.6 cm diameter), sub-idioblastic to idioblastic cubic (and possibly dodecahedral) pyrite above mineralized vein. Pyrite preferentially developed in coarse-grained light grey siltstones. One thin quartz + dolomite vein at approximately 40° to core axis, varies between 0.2 and 1.0 cm thick, pinch and swell texture.							
				59.53 - 59.74 m. Same lithology as previous interval but with 5-7% fine-grained, idioblastic cubic pyrite in 6 cm above vein. Pyrite abundance increases while size decreases from top of interval to base. Sharp increase approximately 6 cm above base of interval, top of mineralized vein. Pyrite preferentially located in coarse-grained, light grey siltstone.							

				59.74 - 59.95 m. Mineralized quartz vein, between 0.5 - 2.0 cm thick, at 12° to core axis. Approximately 10-15% fine- to highly subordinate, medium-grained, sub-idioblastic to idioblastic cubic and dodecahedral pyrite in host sediments, preferentially located in coarse-grained, light grey siltstones. Quartz vein contains minor deep orange sphalerite and galena along contacts with host sediments, contains approximately 10-15% fine- (to minor coarse-) grained pyrite crystals and small aggregate masses. Suspect very fine-grained silver coloured aggregate masses to be arsenopyrite. 3 cm offset (west-side down) of quartz veins along foliation. **59.95 - 60.14** m. 2-3% fine- to medium-grained, sub-idioblastic to idioblastic, cubic and dodecahedral pyrite as disseminated crystals and small aggregate masses, localized along preferred bedding horizons and thin quartz veinlets (at 47° to core axis). **60.14 - 60.50** m. Laminated to very thin bedded, light and medium dark grey siltstones, with <1% pyrite as fine-grained, idioblastic, cubic, disseminated crystals and as single pyritic veinlet (0.05 cm thick). **60.50 - 61.27** m. Mineralized quartz vein at very shallow angle to core axis (parallel to sub-parallel), only 1 margin cored over bulk of interval. Both margins cored at 60.96 m, 1.5 cm thick, but elsewhere at least 2.0 cm thick. Contains 15-20% coarse to very coarse-grained pyrite (to 1.5 cm long dimension), black sphalerite (5%, to 1.0 cm diameter) and 2-3% galena. Pyrite also present with pyritic aggregate masses and very fine-grained arsenopyrite as discontinuous bands along contact with host sediments. Fine- to medium-grained, creamy yellow-orange dolomite also present along contact (dolomite and sulphides appear mutually exclusive along contact). Approximately 2-5% fine -grained pyrite present in host sediments, localized along light grey siltstone layers. Minor fine- to medium-grained arsenopyrite also present in host sediments. Vein contacts sharp and irregular to undulose against host sediments. **61.27 - 61.40** m. Approximately 3-5% fine- to medium-grained pyrite in host sediments below vein. Pyrite generally increases in size away from the vein, from 0.1-0.2 cm at top of interval to 0.4 cm at base (with fine-grained, idioblastic cubic pyrite as well). **62.23 - 62.29** m. Approximately 10-15% very fine- to fine-grained, idioblastic, cubic pyrite in siltstones below vein. Minor arsenopyrite noted / suspected as well. **62.29 - 62.34** m. Up to 1.3 cm mineralized quartz vein at 35° to core axis. Vein contains very fine- to medium-grained sulphides (arsenopyrite and pyrite), which tend to be localized as thin, discontinuous bands parallel to the vein axis. Medium-grained crystals of galena, pyrite and sphalerite appear to be disseminated. Thin band (0.1 cm) of very fine-grained arsenopyrite along upper contact. Minor creamy yellow dolomite. Approximately 20-25% galena, 3-5% sphalerite and 10-15% arsenopyrite in vein. Approximately 10-15% very fine-grained pyrite ± arsenopyrite in adjacent host sediments. **62.34 - 62.46** m. Pyrite-bearing siltstones. Approximately 5-10% fine-grained pyrite in upper 2 cm, with zone of medium- to coarse-grained, idioblastic, cubic pyrite over next 2-3 cm. ≤1% pyrite over remainder of interval.							
70.30	71.55			**Lithology: Argillite.** Dark grey.							
71.55	71.85			**Lithology: Possible fault.** Core more or less complete but flaky to crumbly if scratched. Flakes parallel to cleavage.							
71.85	78.80	73.0 74.0 75.0 76.0 77.0 78.0	2.5° 00° 05° 10° 07° 15°	**Lithology: Argillite.** Medium grey with pale grey laminations and rare, pale grey sub-wacke, very thin bedding.							

78.80	85.35	79.0 80.0 81.0 82.0 83.0 84.0 85.0	14° 09° 12° 20° 27° 25° 30°	**Lithology: Argillite.** Dark grey with slightly darker laminations irregularly spaced throughout.							
85.35	106.68	86.0 87.0 88.0 89.0 90.0 91.0 92.0 93.0 94.0 95.0 96.0 97.0 98.0 99.0 100.0 101.0 102.0 103.0 104.0 105.0 106.0	30° 27° 26° 22° 22° 25° 21° 30° 30° 14° 14° 23° 21° 32° 24° 23° 20° 31° 15° 28° 17°	**Lithology: Argillite.** Medium grey, continuously laminated with dark grey, closely spaced laminations and, particularly from 85.35 - 90.40 m, distinctive pale grey laminations and starved ripples of sub-wacke / wacke. Below 90.40 m only pale sub-wacke / wacke is in rare thin beds that appear to have taken up the bulk of strain in that they are composed of micro-lithons bounded by dark irregular bifurcating wisps. **Veins:** **103.00 - 106.65** m abundance of quartz veins developed above fault. Bright orange iron stain developed preferentially on iron dolomite that outlines larger grains and other fine-grained clusters and veinlets. **103.48 - 103.77** m. Quartz vein, rare pyrite as 1-5 mm grains in a cluster, orange stain along fractures and in small patches, possibly ferroan dolomite; dull brownish stained patches possibly dolomite. **105.34 - 105.57** m. Quartz vein with 20% wall rock fragments. Fine wispy orange stain. **106.36 - 106.68** m. Quartz vein in contact with hanging wall of fault, contains 10% wall rock fragments. Orange stain suggestive of ferroan dolomite on cross-cutting zones to 5 mm wide and wisps. One area of orange stain appears to be infill adjacent to coarse quartz. **Sulphides in Sediments:** Very minor pyrite present in some of the veins, chalcopyrite noted with pyrite at 106.65 m. **92.49 - 92.79** m. Country rock with ankerite (not noted in country rock) increasing to abundant toward 92.79 m, scattered coarse pyrite. A few sub mm white quartz veinlets plus one pinch and swell (early) quartz + dolomite veinlet (2-3 mm) and a straight parallel sided 6 mm late quartz - dolomite veinlet at 40° to core axis. **92.79 - 92.98** m. Quartz vein with minor 1-4 mm pyrite and rare dolomitic vein. Margins 33° and 55° to core axis, with branches near perpendicular to the lower 55° margin. **92.98 - 93.19** m. Primarily country rock cut by intersecting veinlets at 57° and 62° to core axis. **93.19 - 93.85** m. Country rock, no veinlets, one 1 x 2 cm pyrite mass rimmed by 1 mm white quartz rind. Core marked sphalerite? Possibly orange brown oxidation on porphyroblasts? **93.85 - 94.30** m. Country rock with 20% quartz as folded and discontinuous quartz veins. Dull orange mineral present in the quartz vein - probably a surface iron stain. **94.30 - 94.94** m. Country Rock **94.94 - 95.44** m. Country Rock with 30% quartz veins. The veins are primarily elongate, parallel sided, at approximately 40-45° to core axis, however, the veins taper, some appear folded, appendages indicate tension gash sets. Wispy orange material appears to scrape off - just a surface iron stain. **95.44 - 95.70** m. Country Rock with scattered ankerite plus one layer along which scattered coarse-grained pyrite developed. **95.70 - 95.95** m. Country Rock with quartz filled fractures near start along with 2, 1 cm wide (but discontinuous) quartz veins at approximately 50°. Dull orange material noted in some of the quartz, some has appearance of being a distinct mineral, some seems to be stain.	0315 - 637 0315 - 638 0315 - 639 0315 - 640 0315 - 641 0315 - 642 0315 - 643 0315 - 644 0315 - 645 0315 - 646 0315 - 647 0315 - 648	92.49 92.79 92.98 93.19 93.85 94.30 94.94 95.44 95.70 103.48 105.34 106.36	92.79 92.98 93.19 93.85 94.30 94.94 95.44 95.70 95.95 103.77 105.57 106.68	0.03 0.15 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.07 0.00 0.01	2.858 0.692 0.178 0.095 0.093 0.040 0.085 0.13 0.041 0.262 0.33 0.052	5.82 6.57 4.69 5.47 8.75 2.04 4.31 13.58 3.50 3.92 59.94 5.76	20.1 20.3 41.1 54.7 97.6 101 180.7 133.7 86.4 12.8 80.3 42.1
106.68	106.85			**Lithology: Fault gouge.** Incohesive clay with rock fragments to 5 mm.							

106.85	107.02			**Lithology: Argillite.** **Structure:** Incohesive highly cleaved / sheared argillite. Although disintegrating, some material up to 2 cm of continuous partial core is present.							
107.02	107.24			**Lithology: Argillite.** **Structure:** Highly cleaved, disintegrating laminated argillite.							
107.24	107.60			**Lithology: Argillite.** Incohesive, some laminations noted, easily broken into fine < 5 mm crumbles.							
107.60	110.00			**Lithology: Argillite.** Dark grey, laminated with medium-grained argillite laminations. **Veins:** **108.86 - 109.46** - 90% quartz as vein material. **Structure:** Highly strained, portions broken.							
110.00	124.72	110.0 111.0 112.0 113.0 114.0 115.0 116.0 117.0 118.0 119.0 120.0 121.0 122.0 123.0 124.0	30° 30° 00° 10° 10° 23° 17° 14° 00° 13° 18° 23° 50° 58° 16°	**Lithology: Argillite.** Medium and dark medium grey and rare light grey sub-wacke. Laminated and very thin bedded, rare thin beds. Individual beds commonly internally thinly laminated. Pale beds commonly appear ripple laminated. **Veins:** **119.46 - 119.52** m. Vein at 56°-45° with patches of amalgamated 1-2 mm pyrite grains, surrounded by orange stain (ferroan dolomite?). Vein is about 25% quartz. **119.30 - 119.46** m. Argillite with 6-10 mm quartz veinlets with orange stained (ferroan dolomite?) margins. **Structure:** Breaking on cleavage, common below 117.5 m, intense below 123.70 m. **Sulphides in Sediments:** **119.52 - 119.77** m. Argillite cut by 2 quartz / ferroan dolomite veinlets at approximately 20° to core axis. Sub-mm grains of replacement pyrite throughout.	0315 - 650 0315 - 651 0315 - 652	119.30 119.46 119.52	119.46 119.52 119.77	0.03 10.31 0.15	0.34 67 0.642	7.93 3192.53 21.06	40.1 288 22.1
124.72	125.50			**Lithology: Fault.** Core largely in one piece but incohesive. Except for 10 cm of gouge, original sedimentary rock is probably continuous. The gouge is rock flour and fragments to approximately 3 mm. At very base in footwall, cleavage parting at 38° to core axis.							

125.50	130.50	126.8 127.0 127.4 128.0 129.0 130.0	23° 00° 15° 22° 30° 25°	**<u>Lithology: Argillite.</u>** Dark medium grey, laminated to very thin bedded, rare lighter coloured sub-wacke. **Sulphides in Sediments:** Becomes increasingly pyritic. **Alteration:** Ankerite porphyroblasts throughout and in places are continuously developed along laminations.							
130.50	133.20	131.0 132.0 133.0	23° 58° 75°	**<u>Lithology: Argillite.</u>** Dark grey, laminated with occasional pure white silty (often pyritic) layers. A number of lighter brownish to yellowish stained sub-wacke to wacke beds noted, often as thin, internally laminated beds.							
133.20	140.55	134.0 135.0 136.0 137.0 138.0 139.0 140.0	52° 55° 68° 65° 63° 65° 64°	**<u>Lithology: Sub-wacke and argillite.</u>** Sub-wacke yellow-brown, thin and very thin beds, faint internal (possible current structures) noted; argillite is dark grey, typically as laminations 1 cm or so thick and massive , however, internal fine white laminations do occur. The sub-wacke is most abundant 134-135±, forming 60% of that interval. It decreases downhole and only 3 very thin beds are present below 138.50 m. **Structure:** Bedding attenuated and close to parallel to S1 below 139.60 m. **Sulphides in Sediments:** Coarse-grained pyrite appears below 135.0 m, developed in zones parallel to bedding with an alignment related to cleavage.							
140.55	145.00			**<u>Lithology: Argillite.</u>** Mixed light / dark intervals probably were quartz wacke dominant and dark carbonaceous zones remnants of argillite. **Veins:** **141.22 - 141.42** m and **142.73 - 143.73** m. quartz veins **Structure:** Highly strained and contorted. Generally a carbonaceous mylonite with quartz veins. **Sulphides in Veins:** **141.22 - 141.42** m. Quartz vein, 10% dolomite, a few grains pyrite. Very small vugs lined with quartz and dolomite. **142.73 - 143.26** m. Quartz vein (part), <10% lithic fragments, scattered pyrite usually as sub mm grains, some clusters to 5 mm. Lesser scattered galena and sphalerite. Arsenopyrite noted. Some vugs with quartz. **143.26 - 143.73** m. Continuation of quartz vein. Vugs with quartz crystals, one galena crystal. Scattered pyrite and lesser galena and sphalerite. **Sulphides in Sediments:** Coarse-grained pyrite common throughout.	0315 - 653 0315 - 654 0315 - 655	141.22 142.73 143.26	141.42 143.26 143.73	0.00 0.09 0.31	0.435 37 16.667	15.54 **1.24%** 6888.21	76.2 1782.2 1246.5

145.00	153.00	148.0 149.0 150.0 151.0 152.0	66° 75° 85° 70° 61°	**Lithology: Argillite / sub-wacke.** Medium grey with dark grey to black laminations and very thin beds. Contact to next interval taken near middle of strain interval. **Veins:** **146.35 - 146.45** m - Quartz vein at 45° to core axis, parallel to both S_0 and S_1, with 10% creamy dolomite, rare coarse-grained pyrite, 1 cm vuggy area with sphalerite grains and crystals. **Structure:** Narrow high strain zones with thin lenses of quartz at 146.00 m (10 cm), 147.40 m (10 cm), and 148.90 m (approximately 10 cm). Increasing strain below 153.30 m gradually obscures bedding. **Sulphides in Sediments:** Coarse-grained pyrite present, coarse but less abundant than below 135.00 m.							
153.00	169.13	155.0 156.0 157.0 158.0 159.0 160.0 161.0 162.0 163.0 164.0 165.0 166.0 167.0	40° 42° 45° 65° 62° 54° 60° 62° 40° 55° 55° 51° 49°	**Lithology: Argillite.** Dark medium grey, thinly laminated, characterized with two ± 2 m long intervals with distinct light grey, very thin and rarely thin beds of argillite or sub-wacke, often with a few fine black internal laminations only a few of which might represent current laminations.							
169.13	171.32			**Lithology: Quartz Vein.** Single massive white quartz vein, rare pyrite. **Sulphides in Veins:** **169.13 - 169.98** m. White quartz vein, near massive. Pyrite, dolomite and fine linear vugs present. Upper contact irregular at approximately 5° to core axis. (Includes 5 cm of short) **169.98 - 170.55** m. White quartz vein, near massive continues. Rare pyrite, usually in small clusters of 1 -5 mm grains. (Includes 5 cm of short) **170.55 - 171.32** m. Quartz vein continues, rare pyrite scattered along a single fracture and as a few grains elsewhere. Contact at 70° to core axis.	0315 - 656 0315 - 657 0315 - 658	169.13 169.98 170.55	169.98 170.55 171.32	0.01 0.02 0.01	0.028 0.273 0.055	1.24 13.8 2.25	4.8 4.1 1.4

171.32	211.79	171.5 173.0 174.0 175.0 176.2 177.0 178.0 178.2 179.55 180.0 180.2 182.0 184.0 188.0 189.0 192.0 193.0 194.0 195.0 195.9 197.0 198.0 199.0 200.0 202.0 204.0 205.0 206.0 209.0 210.0 211.0	75° 42° 40° 72° 87° 68° 75° 73° 00° 30° 00° 70° 68° 69° 42° 14° 54° 35° 38° 21° 70° 70° 75° 68° 47° 50° 46° 70° 20° 00° 26°	**Lithology: Argillite.** Dark medium grey, laminated throughout with lighter medium grey argillite layers. Rare interval to 40 cm with several pale, very thin beds. Tapering tips of quartz-filled tension openings between 172.30 - 172.60 m, contain dolomite and minor coarse-grained pyrite. **Veins:** **173.30** m - 2 cm, straight sided, quartz dolomite veinlet at 45° to core axis. Veins parallel to S_1: 173.80 m (1 cm), 174.37 m (5 cm), 174.52 m (3 cm), 175.30 m (5 cm), 177.66 m (2 cm), 177.73 m (6 cm), 178.10 m (1 cm? if in S1), 182.00 (2 cm parallel to S0), 184.30 m (3cm). **202.15** m - 5 cm, irregular margins, curving as if folded, split. **205.54** m - 5 cm, irregular, wavy margins, white, 5% dolomite (creamy) **205.70** m - 5 cm, irregular, wavy margins, white, 5 % dolomite (creamy) **206.62** m - 1 cm, serrated margins, 10% yellowish dolomite **Structure:** Well developed phyllitic appearance and strong S_2 below approximately 195 m. Commonly bedding surface is crenulated suggesting a bedding parallel S_1 is present. Strain is more intense in this interval and core commonly splits parallel to S_0 (and probable S_1), but not parallel to S_2. **Faults:** **171.53 - 171.65** m - Crumbles and gouge over 10 cm, fractures aligned parallel to S0 at 75° and 40° to core axis. **175.80 - 176.00** m - First 12 cm clay gouge with fine sand sized rock chips then intact core; incohesive, crumbles, parallel to S0 at 72° to core axis **180.15** m - 1 cm parallel to S_0 at ±56° to core axis (slippage on fold limb) **184.90** m - 1 cm, possibly parallel to S_0 at 64° to core axis. Also a 2 mm parallel gouge at 184.97 m **Sulphides in Veins:** **171.98 - 172.23** m. Two quartz veins (5 and 15 cm core length). 5 cm contacts at approximately 66° to core axis. 15 cm contacts irregular. The 15 cm vein is 40% dolomite. A few grains of pyrite noted, most in host rock selvedge between veins. **206.67 - 207.15** m. 1, 10 and 30 cm quartz veins; 1 and 10 cm veins have >30% yellowish dolomite; 30 cm vein has <5% dolomite. All contain wisps of shale and are separated by shale zones, quite irregular. Margins serrated to wavy. Few grains of pyrite. **207.15 - 207.65** m. Mostly shale that wraps around a large lense of quartz up to 15 cm wide. Rare pyrite. **207.65 - 208.09** m. 70% quartz, possibly folded part of same lense as in previous interval. Wavy to serrated margins, shale selvedges within and attached to walls. Yellowish dolomite present, coarse-grained pyrite noted.	0315 - 659 0315 - 660 0315 - 661 0315 - 662	171.98 206.67 207.15 207.65	172.23 207.15 207.65 208.09	0.01 0.03 0.20 0.06	0.074 0.047 0.2 0.105	4.52 4.89 54.26 26.92	35.5 30 109.2 187
211.79	220.10	212.0 214.0 215.0 216.0 218.0 219.0 220.0	38° 39° 20° 20° 58° 58° 55°	**Lithology: Limey siltstone to limestone.** Thick laminated to thin bedded. Limey siltstone medium to charcoal grey in colour, ranges from very thin bedded to thin bedded (to 15 cm), generally massive with rare thin laminated intervals. Limestone beds light to medium grey in colour, appear to fine upward over 0.5 - 2.0 cm. **Structure:** Beds offset and locally duplicated along / across foliation. Bedding also planar to folded around small scale parasitic folds, ranging from isoclinal to close. **Faults:** **214.27** m - Bedding parallel fault zone with 0.5 cm thick gouge at 20-25° to core axis. Lower contact broken between 218.54 - 220.00 m with fault with gouge 218.62 - 218.76 m, 219.14 - 219.17 m, 219.55 - 219.95 m							

				Sulphides in Sediments: Pyrite present as minor fine- to medium-grained, idioblastic cubes disseminated throughout interval. Local, small aggregates of sub-idioblastic pyrite (to 2 cm diameter) in calcite + quartz lenses and / or bedding parallel veins. Pyrite ≤ 1% over interval, locally up to 10% over 3-4 cm.							
220.10	227.45	221.0 222.0 223.0 224.0 225.0	40° 58° 57° 35° 43°	**<u>Lithology: Silty argillite to argillite, minor siltstone.</u>** Thick laminated to very thin bedded. Bedding ranges from 0.2 to 6 cm thick, comprised predominantly of interbedded medium to charcoal grey silty argillite, with subordinate light grey siltstone interbeds. **Veins:** **220.43** m - ≤2.5 cm thick quartz + dolomite vein at 55° to core axis. Approximately 5% pale to medium creamy yellow dolomite along lower contact with host sediments and ≤1.5 cm into vein. Boundaries sharp and slightly irregular to undulose. **220.61** m - 1.5 to 3.5 cm thick quartz + dolomite vein at approximately 35° to core axis. Approximately 10% white to creamy yellow dolomite along lower contact and along contacts of sedimentary inclusions. Contacts sharp and irregular to undulose. **221.08 - 221.15** m - Two thin, ≤2.0 cm thick quartz + dolomite veins at approximately 20-25° to core axis. Approximately 10-15% white to creamy yellow, fine- (to minor coarse-) grained dolomite along vein margins and associated with contacts of sedimentary inclusions within vein. Vein contacts sharp and slightly to moderately irregular. **221.33** m - Approximately 3 cm thick quartz + dolomite vein at approximately 40° to core axis. Predominantly coarse-grained, creamy yellow dolomite rhombs, many at contact with host sediments, projecting at high angle into vein. Vein contacts sharp and straight to slightly irregular. **223.71** m - Composite vein approximately 2.0 cm thick at approximately 25° to core axis. Early light grey to dirty white dolomite + opaque quartz vein appears to have been cross-cut by sub-parallel quartz (translucent grey) + dolomite vein. Early vein has thin stacked series of stringers into host sediments, and sharply terminating segments (to 0.5 cm thick) sub-parallel to bedding. Contacts for both veins sharp and irregular. **225.90 - 227.20** m - Approximately 20-25% veining, comprised of two types: 1) Dirty white to light grey dolomite + opaque white to grey quartz and 2) Dirty white to milky white quartz veins, both oriented sub-parallel to bedding at approximately 10-20° to core axis. Veins range between 0.5 - 8.0 cm thick with sharp, slightly to moderately irregular margins. **Structure:** Foliation moderately well developed in upper portion of interval, dependent upon host lithology. Refracts through coarser intervals (steepens up - shallow angle to core axis), flattens in finer-grained intervals (steeper angle to core axis), locally penetrative in fine-grained intervals. Increasingly well developed and penetrative toward base of interval. **Faults:** **220.18** m - 55° to core axis, very friable core, sub-parallel to S0 **220.35** m - 40° to core axis, 0.5 cm gouge zone **226.32** m - 56° to core axis, 0.5 cm gouge zone, sub-parallel to S0 **Sulphides in Sediments:** Pyrite approximately 1-2% over interval, comprised predominantly of medium- to coarse-grained, sub-idioblastic to idioblastic pyrite cubes to 1 cm in long dimension. **Alteration:** Ankerite, with accompanying pressure shadows, increasingly abundant and well developed with depth through interval, coincident with increasingly well developed foliation. Fine to medium-grained ankerite, ranging from 0 to 30% dependent upon host lithology. Locally well developed and abundant, with quartz pressure shadows and tails elongated parallel to foliation.							

227.45	307.83	227.5	18°	**Lithology: Conglomerate.**	0315 - 663	233.93	234.41	0.00	0.215	96.3	59.7
		229.5	20°	Varies from granule to fine pebble conglomerate, with fine-grained tops ranging from fine sand to argillite. Several fining	0315 - 664	234.41	234.70	0.01	0.109	32.42	19.1
		230.0	35°	upward sequences indicate right-way-up, from short (6-25 cm thick) sequences from fine- to medium-grained sand to	0315 - 665	234.70	235.19	0.02	0.071	25.31	52.7
		232.0	50°	argillite (243.36 - 245.83 m) to thicker sequences, fining from coarse-grained granule to pebble conglomerate to medium-	0315 - 666	257.23	257.74	0.17	0.066	7.56	38.5
		238.0	32°	sandstone (argillaceous quartzite) to argillite (i.e. 241-242 m, 245.83 - 247.29 m, 261 - 262 m, 262 - 266.29 m, 266.29 -	0315 - 667	252.16	252.57	0.00	0.066	8.46	19.4
		241.0	44°	267.30 m). Interval from 257.0 - 266.0 m contains approximately 10-15% angular to rounded, bone white feldspar clasts.	0315 - 668	252.57	252.80	0.00	0.058	6.22	12.8
		242.0	25°	Conglomerate contains highly variable proportion of interstitial, light to medium orange mineral, ranging from 0-30% in	0315 - 669	254.72	255.00	0.00	0.056	9.52	13.8
		244.0	42°	matrix. Coarse-grained in coarse-grained bases of Fining Upward Sequences, fine-grained in upper portions, identical to	0315 - 670	279.93	280.40	0.04	0.038	4.42	29.2
		245.0	30°	mineral along margins of veins, probably ferroan dolomite.	0315 - 671	280.40	280.84	0.00	0.070	4.78	35.6
		247.4	45°		0315 - 672	287.02	287.91	0.00	0.108	24.7	7.0
		269.6	37°	**Fining Upward Sequences:**	0315 - 673	298.92	299.35	0.01	19.000	**0.59%**	**1.15%**
		281.53	30°	268.25 - 269.37 m, 271.10 - 273.96 m, 281.47 - 282.42 m, 282.42 - 283.82 m, 294.79 - 296.53 m, 296.53 -	0315 - 674	303.06	303.56	0.01	0.07	4.47	11.7
		302.9	49°	297.11 m, 302.11 - 302.67 m	0315 - 675	303.56	304.11	0.03	0.402	5.06	26
				Fining Upward Sequences (FUS) define right-way-up interval, grading upward from granule to fine pebble conglomerate at base to medium sandstone to argillite at top. Some probable FUS obscured by vein development.	0315 - 676	304.11	304.39	0.00	0.055	7.1	26.8
				Veins: **230.50 - 233.00** m - Milky white quartz veins comprise approximately 15% of interval, ranging from ≤3.0 cm at shallow angle to core axis (0°-10°) to approximately 8 cm thick at 20° to core axis. Veins contain 0-10% white to creamy yellow dolomite. Margins sharp to slightly diffuse, irregular to undulose. One vein may be composite, cross-cutting earlier dolomite + opaque white quartz vein. **233.00 - 239.90** m - Approximately 50-60% milky white quartz veining with ≤3% (locally 20% over 1 - 15 cm) white to creamy yellow dolomite, appears to be associated with earlier veins, sedimentary inclusions and/or screens and vein contacts. Minor sub-idioblastic, medium- to coarse-grained pyrite (to 0.5 cm) associated with sedimentary screens and/or inclusions. Veins at shallow angle or sub-parallel to bedding. Sharp, moderately irregular contacts. Early veins comprised of fine-grained, dirty grey opaque quartz + white dolomite assimilated into milky white quartz veins, which consist of medium- (to coarse-) grained, translucent grey quartz with minor open space (vugs). **240.50 - 243.84** m - Approximately 15-20% quartz veining as fine-grained, dirty white to light grey quartz veins and slightly thicker milky white quartz + dolomite veins. Dirty white veins have sharp to slightly diffuse contacts, slightly irregular to undulose and appear to be gently folded. Milky white veins appear to be undeformed, although hosted by deformed sediments. Individual quartz (to 1+ cm) and dolomite (to 1 cm long dimension) crystals are coarser grained than dirty white veins. Dolomite pale yellow-green to creamy yellow and associated with contacts with host sediments, sedimentary inclusions and/or screens and possible early fine-grained dolomite + opaque quartz veins. Veins range from parallel to sub-parallel to S_0 to parallel to sub-parallel to S_1. **246.00 - 247.29** m - Milky white quartz + dolomite vein at shallow angle to sub-parallel to core axis, thins downhole from >3.0 cm to approximately 1.0 cm. Very coarse-grained, intergrown quartz crystals with minor open space with idioblastic quartz crystals. Approximately 5% creamy yellow dolomite (deep yellow when partially oxidized), predominantly along or within 1.5 cm of vein margin. Contact sharp and slightly irregular to undulose. Moderately abrupt upper and lower terminations to vein against (lower) or within (upper) intervals characterized by higher proportion of fine-grained sediments. **247.89 - 255.58** m - 80-85% Milky white quartz. Minor creamy white to yellow to yellow-green dolomite associated with margins of thinner veins at top of interval. Yellow-green dolomite may represent earlier vein included within and/or partially assimilated by milky white quartz vein. Milky white vein contains minor sedimentary inclusions / screens along vein margin. Veins comprised predominantly of thick intervals (i.e. 249.90 - 255.50 m) of very coarse-grained intergrown quartz with minor open space (vugs) with medium-grained, idioblastic quartz crystals.							

255.58 - 263.51 m - Light grey to milky white quartz veins cross-cutting core at moderate angle (sub-parallel to S_0 and/or S_1) to core axis. Veins contain 5-15% bright, medium orange ferroan dolomite (slight oxidation of surface), primarily along contact with host sediments. Thinner veins (≤2.0 cm) have sharp to diffuse (over 0.1 - 0.2 cm), slightly irregular contacts and consist of fine-grained quartz. Thicker veins (2-30+ cm) comprised of coarse- to very coarse-grained, intergrown quartz crystals with minor open space (vugs). Dolomite associated with contacts with host sediments, sedimentary screens and/or inclusions and within host sediments. Contacts sharp and slightly irregular.

264.51 - 264.61 m - Milky white quartz vein with approximately 15% fine- to coarse-grained dolomite (fine-grained along contact with host sediments; coarse-grained in core of vein), oriented at approximately 45° to core axis. Contacts sharp, straight (upper) to highly irregular (lower).

269.80 - 269.90 m - Milky white quartz vein which appears folded but probably has been emplaced as such. (Note: FUS consistent on either side of vein which, therefore, oppose possible folding and vein itself demonstrates no evidence of folding). Milky white quartz vein with approximately 5-10% bright orange ferroan dolomite along contacts (oriented at high angle to contact). Sharp, slightly irregular contacts.

276.29 - 277.15 m - Predominantly milky white quartz vein with minor sedimentary inclusions in centre of interval and at margins. Minor white to creamy yellow dolomite at margins with host sediments. Approximately 30-40% creamy yellow, fine- to medium-grained dolomite associated with sedimentary inclusions at centre of interval. Moderately irregular, sharp to slightly diffuse (over 0.1 cm) contacts.

277.25 - 277.67 m - Probable composite vein comprised of early, mottled creamy yellow grey dolomite + quartz vein, subsequently injected with dirty white to light grey vein. Interval comprised of lenses to small lozenges of each vein type intermixed by, and elongated along, a well developed foliation. Dolomite in early vein fine- to medium-grained, with discrete crystals bounded by fine-grained, medium to dark grey material. Later dolomite medium creamy yellow-orange, comprised of medium-grained aggregate masses. Abundant (40-50%) inclusions and/or sedimentary screens in veins. Contacts sharp, irregular.

278.74 - 284.23 m - Interval comprised of 25-30% quartz ± dolomite veining. Minor, early dolomite + quartz veins cross-cut by more abundant milky white quartz + dolomite veins. Early veins predominantly creamy yellow dolomite with minor grey quartz. Sharp, slightly irregular contacts at shallow angle to parallel to core axis. Later quartz veins milky white with highly subordinate creamy yellow-orange dolomite, oriented at shallow angle to core axis; sharp, irregular contacts. Minor local medium green chlorite in both vein and host sediments.

287.02 - 295.64 m - Approximately 30-40% milky white quartz veins with minor to rare dolomite. Vein contacts generally at moderate angle to core axis and diffuse over 0.1 - 0.3 cm, locally difficult to distinguish from host fine-grained pebble conglomerate. Elsewhere on same vein, contacts sharp and slightly irregular where bounded by fine-grained sediments.

303.56 - 304.11 m - Approximately 10-15% translucent grey to milky white quartz veining with 3-60% creamy yellow-orange dolomite along margins and within vein. Vein very irregular, injected along and cross-cutting foliation, 1-4.0 cm thick with variable thickness along veins. Vein at upper contact has light to medium lime green zones, possible sericite adjacent to sediments.

305.44 m - Lower end of vein at 15° to core axis, approximately 1.5 cm thick. Approximately 10-15% creamy yellow to medium orange dolomite, largely as fine- to coarse-grained crystals along contacts with host sediments, some as crystals along string extending from margin into core of vein, oriented at high angle to contact.

306.75 m - Approximately 3.0 cm thick milky white quartz vein with approximately 5% fine-grained, medium orange dolomite along vein margins. Vein at 20° to core axis.

307.40 - 307.71 m - Approximately 25-30% translucent grey to milky white quartz veins at high angle to core axis. Approximately 5-40% medium orange ferroan dolomite, primarily along contacts with host sediments. One vein (40% dolomite) has dolomite distributed throughout vein. Host sediments contain approximately 40% interstitial dolomite.

233.93 - 234.41 m. Milky white quartz vein with medium blue-grey inclusions of phyllitic argillite. Approximately 15% phyllitic inclusions as 0.1-3.0 cm zone of inclusions, interconnected by thin, irregular band. Patchy mottling suggests additional inclusions.

234.41 - 234.70 m. Interval largely free of inclusions in milky white quartz vein. Minor dolomite (2-3%) and inclusions (2-4%) in vein. Also open space (vugs) present with medium-grained idioblastic quartz crystals.

234.70 - 235.19 m. Approximately 20-25% medium grey-green sedimentary inclusions in milky white quartz vein. Approximately 10-15% light orange, ferroan dolomite in interval.

252.16 - 252.57 m. Milky white quartz vein with approximately 1% bright orange, fine-grained ferroan dolomite. Lower contact at approximately 40° to core axis.

254.72 - 255.00 m. Granule conglomerate with approximately 20% argillaceous material along / defining foliation. Two milky white quartz veins present in interval. Upper vein at top of interval, ≤1.5 cm thick at 45° to core axis. Lower vein approximately 6 cm thick at 50° to core axis, with thin apophyse sub-parallel to core axis, extending down-hole for 10 cm then steepens sharply to margin of core. Veins contain 5-15% medium orange ferroan dolomite within 1.0 cm of margin of vein. Host argillaceous granule conglomerate contains approximately 2-3% medium orange ferroan dolomite.

279.93 - 280.40 m. Dirty white to light grey quartz + dolomite vein at shallow angle to core axis. Only 1 margin cored, >2 cm thick. Patches of creamy yellow dolomite with very fine-grained, dark grey material, may represent partially assimilated, earlier vein. Dolomite is fine- to medium-grained, pale to creamy yellow. Vein margin sharp, slightly irregular, with ≤0.4 cm thick zone of argillaceous material bounding vein, concentrated from host matrix-supported pebble conglomerate. Vein either swells dramatically to approximately 4.0 cm or is cross-cut by dirty white vein with fine pore space and 10-15% fine, creamy yellow dolomite.

280.40 - 280.84 m. Approximately 60% milky white quartz veining in well-foliated argillite, foliation deformed around quartz veins. Vein margins defined by abundant inclusions into quartz vein and/or numerous quartz stringers separated by sedimentary screens. Thin quartz veinlet segments and fish along foliation. Light to medium green chloritic inclusions within quartz. Approximately 5-15% creamy yellow dolomite. Contacts sharp, highly irregular.

287.02 - 287.91 m. Milky white quartz veins in granule conglomerate. Approximately 10 cm segment of host granule conglomerate at centre of interval separates two veins. Veins have weak mottled texture due to thin wispy sedimentary inclusions.

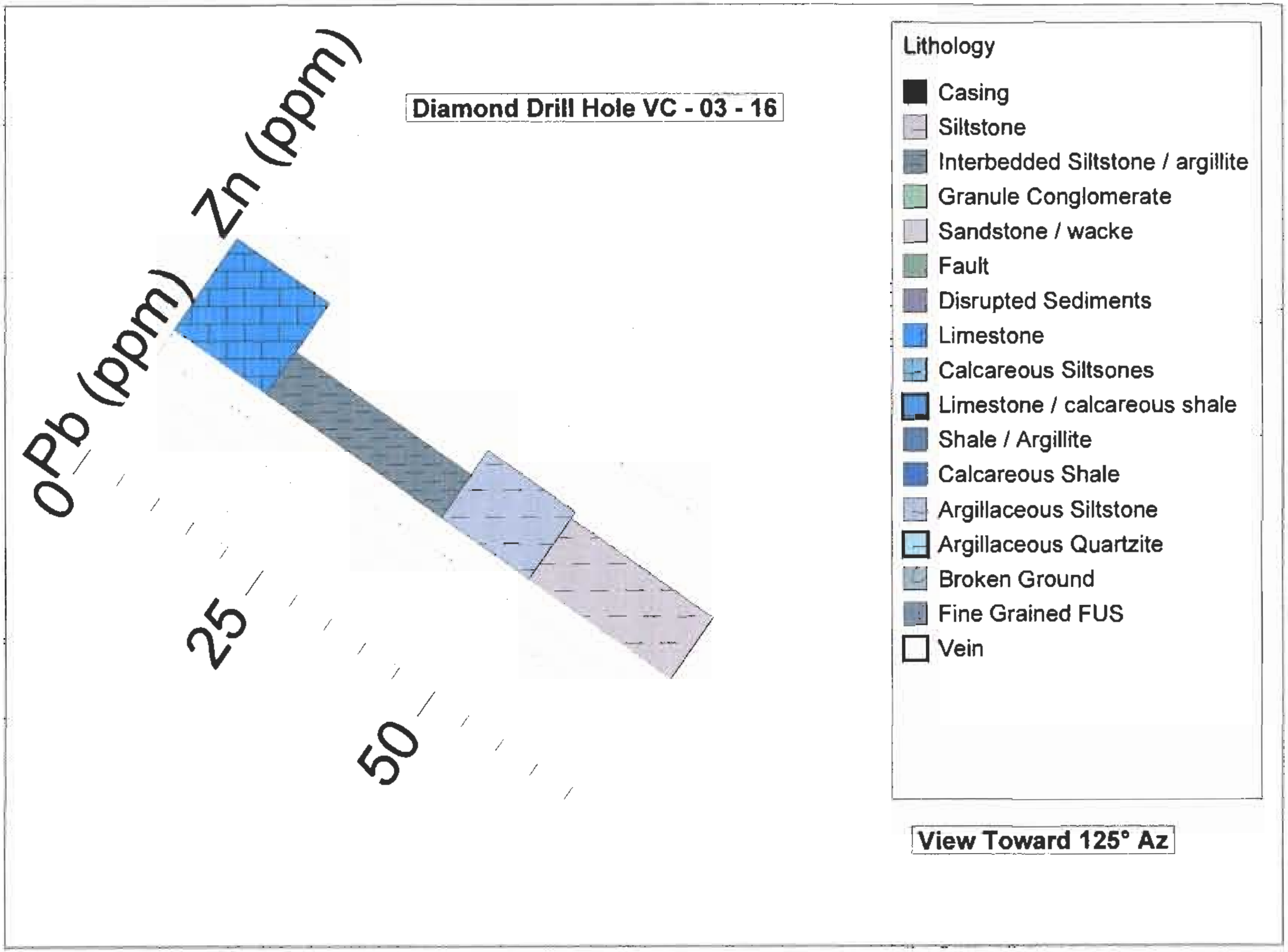
Structure:
Foliation poorly developed through most of the coarse-grained conglomerate succession, moderately well developed in fine-grained tops and locally well developed in thin, silty argillite, however, probably highly variable due to refraction through different lithologies so not measured.

Sulphides in Veins:
297.20 - 300.08 m - Approximately 5-10% veining as thin quartz ± dolomite at moderate angle to core axis. Veins vary between 0.5 - 4.0 cm thick, predominantly light grey to milky white quartz ± creamy yellow to medium orange ferroan dolomite, typically along the vein margins and as stringers or strings of dolomite crystals extending across vein at high angle to vein margin, imparting a ladder-like appearance. Three small veins, first 2 cm thick at 298.94 m at 54° to core axis; second ≤1.5 cm thick at 299.10 m at 73° to core axis and third ≤0.5 cm thick at 299.32 m at 57° to core axis; all contain mineralization. Vein at 298.94 m contains approximately 20% medium orange sphalerite as aggregate masses and 3-5% galena, fine-grained creamy yellow to light orange dolomite (10-15%). Vein at 299.10 m contains 10-15% galena and 10-12% medium orange sphalerite within the vein and in the adjacent granule conglomerate (over a zone of 4.0 cm, including the vein). Vein at 299.32 m similar to previous vein in that mineralization extends beyond the veinlet intosurrounding granule conglomerate over zone approximately ≤2 cm thick.

300.44 - 301.52 m - Approximately 60% quartz veining, as milky white veins at high angle to core axis. Open pore space with idioblastic quartz crystals minor but present. Margins sharp where bounded by silty argillite to argillite, diffuse over 0.1-0.5 cm where bounded by granule conglomerate. Approximately 10-15% creamy yellow dolomite as sharply bounded, mottled masses within vein (assimilated dolomite + quartz vein) and along contacts with host sediments (extending up to 3 cm into vein). Dolomite present in host conglomerate, up to 25 cm from veins. Not certain if sediments contributed dolomite to veins or veins injected dolomite into sediments. Fine- to medium-grained, sub-idioblastic, cubic pyrite present for 8 cm above and below vein-bearing interval (5-7%).

257.23 - 257.74 m. Approximately 20-25% medium grey sedimentary inclusions in milky white quartz vein. Approximately 15% creamy yellow to orange dolomite and 2-3% sub-idioblastic to idioblastic, medium-grained, cubic pyrite.

				252.57 - 252.80 m. Coarse granule to fine pebble conglomerate underlying milky white quartz vein from 252.16 - 252.57 m. Three thin, dirty white to light grey quartz veins at 9° to 19° to core axis present in the interval. Approximately 30% medium orange, medium-grained ferroan dolomite over 1.5 cm underlying vein. Approximately 7-10% interstitial ferroan dolomite in conglomerate. Three, thin quartz veins also contain ferroan dolomite. Approximately 1% fine- to medium-grained, sub-idioblastic pyrite. **298.92 - 299.35** m. Interval containing three mineralized veins. See description for interval 297.20 - 300.08 m **303.06 - 303.56** m. Interval with approximately 3-5% sub-idioblastic, medium-grained, cubic pyrite, 20-25% medium yellow-orange, interstitial ferroan dolomite in matrix-supported, fine pebble conglomerate. **303.56 - 304.11** m. Quartz vein interval as previously described. Host lithology is argillaceous siltstone, medium to charcoal grey with approximately 10-15% sub-idioblastic, medium-grained, cubic pyrite, 15-20% xenomorphic to sub-idioblastic, fine- to medium-grained ankerite porphyroblasts with pressure shadows. 4 cm argillaceous interval near top of sample contains medium-grained chloritoid porphyroblasts with pressure shadows. **304.11 - 304.39** m. Medium-grained granule conglomerate underlying vein interval. Approximately 30-40% interstitial, pale to creamy yellow dolomite. **Sulphides in Sediments:** Minor medium- to (local) coarse-grained, sub-idioblastic to idioblastic, cubic and dodecahedral pyrite disseminated throughout conglomerate. **Alteration:** Minor ankerite ± chloritoid in thin argillitic to silty argillite dominated intervals. **227.20 - 246.00** m - Medium to coarse-grained (to 0.4 cm), medium to dark grey-green porphyroblasts, probable chloritoid with quartzose pressure shadows elongated sub-parallel to parallel to foliation in fine-grained intervals. **239.90 - 240.50** m - Silty argillite to 240.10 m, underlain by well foliated argillite. Short ferroan dolomite vein segments parallel to foliation, with minor proportion at moderate angle to S_1. Pressure shadows around porphyroblasts comprised of ferroan dolomite + quartz. Porphyroblasts consist of medium-grained ankerite in coarser silty argillite and medium- to coarse-grained chloritoid with subordinate ankerite in argillite. Interval also contains coarse-to very coarse-grained (1.0 cm diameter), sub-idioblastic to idioblastic, cubic pyrite.							
307.83				**End of Hole**							



Diamond Drill Hole VC - 03 - 16
Zn (ppm)
0Pb (ppm)
25
50
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View Toward 125° Az

DYNAMIC EXPLORATION LTD.

DRILL LOG: DIAMOND DRILL CORE

HOLE NO.	VC - 03 - 16

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:	Lot 418		
LOCATION - GRID NAME:			
EASTING:	501424	NORTHING:	5644038
SECTION:		ELEV:	1790 m
AZIM:	215°	LENGTH:	72.23
DIP:	-35°	CASING LEFT?:	No
CORE SIZE:			NQ
CORE STORAGE:		Vermont Creek	

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
0		33°			

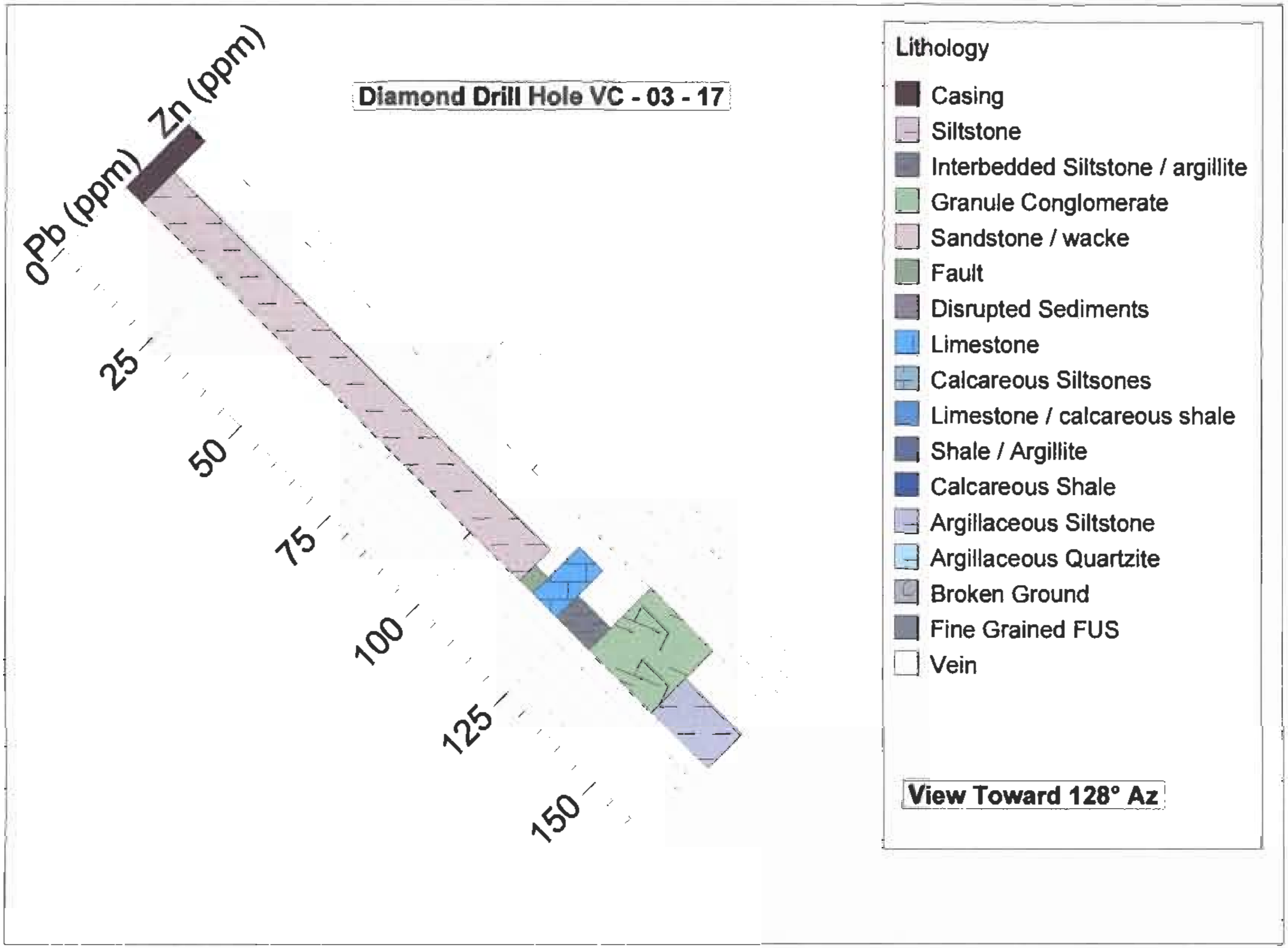
DRILLING CO:	F.B. Drilling
STARTED:	24-Aug-03
COMPLETED:	25-Aug-03
PURPOSE	
CORE RECOVERY:	
LOGGED BY:	Rick Walker
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	

Drill Hole VC - 03 - 16

From	To	Core Angle		Description	Sample	From	To	Gold	Silver	Lead	Zinc
m	m	m	Deg		Number	m	m	gms/T	gms/T	ppm	ppm
0.00	13.36	3.0 5.0 6.0 7.0 8.0 9.4 10.0 11.0 12.0	7.5° 15° 35° 50° 45° 55° 60° 37° 55°	**Lithology: Shaley siltstone to silty limestone.** Ruth Limestone. Fining downward beds noted between surface and 6.84 m. Uncertain regarding facing direction. Characteristic Ruth Limestone with dirty white to light grey, typically graded, very thin bedded layers of micritic sandstone (fine- to medium-grained clastic limestone) in predominantly medium grey limey siltstone to silty limestone. Bedding typically moderately to strongly deformed into tight to close (locally isoclinal) folds, have short wavelength and amplitude. **11.33 - 11.40** m - Interval comprised of predominantly medium grey limey siltstone to argillaceous siltstone with subordinate dirty white to light grey, very thin bedded, graded, fine- to medium-grained micritic limestone (equivalent to sandstone in texture). Beds range from thinly laminated (rare) to thin bedded. Silty intervals typically massive. **Veins:** Minor veining, commonly thin ($\leq$0.1 cm) veinlets parallel to foliation, rare cross-cutting. **12.26 - 12.77** m - Two (approximately 15 cm thick), milky white quartz veins comprised of coarse, intergrown quartz crystals with large open pore spaces filled with coarse, idioblastic quartz crystals. Between the quartz veins at the centre of the interval is fine- to medium-grained salt and pepper sandstone with coarse stockwork veining. Sediments may represent inclusions and/or screens within single quartz vein or thin sedimentary interval separating two veins. Upper vein and contacts broken but appears to be fault gouge (chips and fragments) and at lower contact fault chips / gouge at 55° to core axis. Contacts with sediments at centre of interval have sharp, straight contacts. 15 cm immediately underlying vein heavily oxidized and/or iron-stained, no reaction to dilute HCl. Lowermost 2.3 cm of oxidized zone reacts with dilute HCl, carbonates probably dissolved due to weathering of pyrite. **Structure:** Anticlinal parasitic fold at 9.16 m (Fining upward bed fines outward from closure), with more fining downward beds to 10.22 m. Core broken between 10.40 - 10.55 m, 11.28 - 11.33 m and 12.15 - 12.26 m. Foliation moderately (to locally well) developed, at moderate to high angle to bedding, inclined at an angle to bedding (i.e. not coincident in core). **Sulphides in Sediments:** Pyrite varies from 0-90% within individual bedded horizons, ranging from fine- to coarse-grained (0.4 cm in long dimension), xenoblastic to idioblastic, cubic crystals. Coarse-grained crystals generally idioblastic, slightly to moderately elongated to rectangular (to locally rod-shaped crystal profile). May or may not have calcitic pressure shadows, particularly where foliation well developed.							
13.36	38.94	14.0 15.0 16.0 17.0 18.0	54° 70° 49° 52° 50°	**Lithology: Laminated siltstones to silty argillites.** Bedding ranges from thin laminae to very thin bedded, medium to dark grey. Lithology predominantly medium grey siltstone to argillaceous siltstone laminae to thin beds with dark to charcoal grey, predominantly thin laminae. Minor light grey, very thin bedded, coarse-grained siltstone to fine-grained sandstone beds.							

		19.0 20.2 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 30.0 31.0 32.0 33.0 34.0 35.0 36.0 37.0 38.0	67° 49° 45° 65° 60° 63° 32° 48° 40° 48° 45° 50° 47° 35° 53° 70° 55° 38° 48° 57°	**Veins:** **25.33 - 25.40** m - Approximately 3.5+ cm thick, upper contact at 70° to core axis. Lower contact complex, with two downward tapering fingers of quartz into host rock. Vein heavily oxidized at upper contact, with medium to large, irregularly shaped masses of deep orange-brown limonite over upper 3.0 cm, with extent of oxidation diminishing downward into the vein. Vein includes approximately 15-20% creamy yellow to orange ferroan dolomite (also partially to extensively altered to limonite) and diffuse patches and sharp-bounded chloritic inclusions. Vein with tapering fingers extends approximately 11 cm below lower contact of vein. Approximately 1-2% thin quartz ± dolomite to dolomite ± quartz veinlets to thin veins over interval. Veins range from dirty white to light grey quartz + dolomite veins at high angle to bedding to medium orange ferroan dolomite ± quartz veins at moderate angle to core axis. **Structure:** Penetrative foliation moderately well developed. Broken ground: 14.63 - 15.48 m with intervals of fault gouge at 50° to 65°; 18.34 - 18.44 m; 19.87 - 20.15 m - oxidized fractures at shallow angle to sub-parallel to core axis, locally heavily iron-stained and coarse-grained, completely weathered pyrite (to limonite). **Sulphides in Sediments:** Minor medium- to coarse-grained, sub-idioblastic to idioblastic, cubic pyrite disseminated throughout interval (<<1%). Slightly more abundant and/or enriched in coarse siltstone intervals (5-7%), fine- (to medium-) grained, sub-idioblastic to idioblastic, cubic pyrite, and as medium- to coarse-grained, sub-idioblastic, cubic pyrite along preferred horizons, particularly in upper third of interval.							
38.94	51.60	40.0 41.0 42.0 43.0 45.0 46.0 47.0 48.0 50.0 51.0	53° 56° 53° 63° 66° 66° 60° 60° 61° 66°	**<u>Lithology: Siltstone.</u>** Transitional zone from laminated interval above to very thin bedded interval below. Bedding varies from thinly laminated to very thin bedded. Transition defined as increasing proportion of light grey siltstone (both in terms of number and thickness of individual beds) at the expense of thin, dark grey laminae. **Veins:** **48.73 - 49.61** m - Oxidized vein, probably quartz + ferroan dolomite. Relict surfaces, vein contact(?), at shallow angle to parallel to core axis with moderately abundant coating of medium to deep orange limonite. **Structure:** Bedding locally deformed, from gentle warps to tight folds, having both curvilinear and angular closures. Foliation moderately well developed, locally well developed in finer grained intervals and sequences. **Faults:** **47.85 - 48.08** m - Broken along medium orange limonite coated fractures into coarse fragments							
51.60	72.23	52.0 53.0 54.0 55.0 56.0 57.0 58.0 59.0 60.0 61.0 62.0 63.0 64.0	63° 65° 68° 64° 56° 66° 57° 66° 70° 57° 65° 73° 57°	**<u>Lithology: Alternating light and dark grey siltstones.</u>** Range from thin laminated to thin bedded (paper thin laminae to ripple bedded siltstone to fine-grained sandstone beds 35 cm thick; average 2-4 cm). Numerous fining upward beds indicate right-way-up succession, beds have planar upper and lower contacts with little evidence of deformation (i.e. folds). Lower portion of interval contains highly subordinate, coarse-grained siltstone to fine-grained sandstone intervals between 4-30 cm thick, not noted higher in the hole. **Veins:** **56.50 - 57.00** m - Thin dolomite + quartz vein cross-cuts core at shallow angle to core axis to 56.80 m then reverses direction and cross-cuts at shallow angle to 57.00 m. Sharp, straight contacts. Approximately 1 cm thick with fine-grained yellow-green dolomite margins and dirty white quartz core. **61.25** m - Approximately 3.0 cm thick dirty white quartz vein at 56° to core axis. Contacts sharp and straight. Approximately 5% fine-grained, sub-idioblastic to idioblastic cubic pyrite.							

		65.0 66.0 67.0 68.0 69.0 70.0 71.0 72.0	72° 82° 69° 70° 67° 65° 65° 68°	**66.70 - 66.83** m - 13 cm thick milky white quartz vein with numerous open pore spaces (vugs) with fine- to coarse-grained, idioblastic quartz. Also bladed crystals - look like idioblastic calcite blades but do not react to dilute HCl - pseudomorphs?, surrounded by creamy yellow dolomite (comprises approximately 10-12% of vein. Upper and lower contacts broken, at approximately 55° to core axis. **Structure:** Foliation poorly to moderately well developed, locally modifying bedding (i.e. minor folds, slight offset along foliation). **Faults:** **59.80 - 59.84** m - Rock moderately friable, probable locus of shearing with minor gouge but no through-going shear / slide plane evident. **64.17 - 64.34** m - Coarse angular chips and plates of host lithology with minor possible gouge on surfaces but no clear shear / slide / fault plane **Sulphides in Sediments:** Minor pyrite (≤1%) over interval, as disseminated fine- to medium-grained, idioblastic, cubic crystals. Local enrichment proximal to veins, from fine- to coarse-grained, sub-idioblastic to idioblastic, cubic crystals.							
72.23				**End of Hole**							



Diamond Drill Hole VC - 03 - 17
Pb (ppm)
Zn (ppm)
0
25
50
75
100
125
150
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View Toward 128° Az

DYNAMIC EXPLORATION LTD.

HOLE NO.	VC - 03 - 17

DRILL LOG: DIAMOND DRILL CORE

CLAIM BLOCK CODE:			
NTS: 82 K15		TRIM Map:	
CLAIM NAME:	Lot 15318		
LOCATION - GRID NAME:			
EASTING:	501824	NORTHING:	5644437
SECTION:		ELEV:	1719 m
AZIM:	218°	LENGTH:	163.9
DIP:	-45°	CASING LEFT?:	No
CORE SIZE:			NQ
CORE STORAGE:	Vermont Creek		

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
0		40.25°	136.54		36°
DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
163.97		33°			

DRILLING CO:	F.B. Drilling
STARTED:	25-Aug-03
COMPLETED:	27-Aug-03
PURPOSE	
CORE RECOVERY:	
LOGGED BY:	Rick Walker
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	A305377,
	A305377r

Drill Hole VC - 03 - 17

From	To	Core Angle		Description	Sample	From	To	Gold	Silver	Lead	Zinc
m	m	m	Deg		Number	m	m	gms/T	gms/T	ppm	ppm
0.00	4.60			Casing							
4.60	110.93	5.0	33°	**Lithology: Siltstones.**	0317 - 677	15.32	16.00	0.00	0.062	24.83	106.7
		6.0	26°	Interval dominated by alternating light and dark grey, thinly laminated to very thin bedded siltstones (ranging from	0317 - 678	16.00	16.68	0.01	0.034	15.63	95.8
		7.0	25°	approximately 0.1 to 6.0 cm ; average 0.5 - 2.0 cm). Planar tops and bases to bedding with only minor deformation	0317 - 679	16.68	17.51	0.00	0.064	25.88	92.9
		8.0	23°	evident (i.e gradual variations in the angle between bedding and the core axis). Average bedding thickness increases	0317 - 680	32.89	33.57	0.00	0.176	23.91	105.1
		9.0	25°	down-hole with massive silty argillite intervals ≤6 cm and wacke to quartz wacke intervals up to 20 cm.	0317 - 681	33.57	34.23	0.00	0.078	9.13	97.9
		10.0	12°		0317 - 682	34.23	34.57	0.00	0.171	19.26	105.3
		11.0	03°	**37.5 - 71.0** m - Minor quartz-rich wackes to approximately 20 cm thick interbedded with thinly laminated to very thin	0317 - 683	46.68	47.13	0.00	0.198	55.1	101
		12.0	13°	bedded, predominantly argillaceous siltstone to siltstone. Bedding ranges between 0.1 cm - 20 cm+ (average 1-4 cm) so	0317 - 684	50.35	50.91	0.01	0.226	36.38	88.5
		13.0	20°	interval comprised of slightly thicker beds and proportion of medium to dark grey argillaceous siltstones increased relative	0317 - 685	50.91	51.45	0.00	0.162	29.05	93.6
		14.0	26°	to upper portion of interval.	0317 - 686	90.00	91.13	0.00	0.079	15.21	126.1
		15.0	23°	**71.0 - 105.0** m - Little or no quartz wacke and thicker, massive beds from approximately 71 - 105 m. Alternating	0317 - 687	97.15	97.27	0.06	28	**1.96%**	**1.1%**
		16.0	21°	medium to dark grey siltstone to argillaceous siltstone, very thin bedded, average 0.5 - 1.0 cm thick at high angle	0317 - 688	97.27	97.42	0.00	0.598	25.23	35.9
		17.0	24°	to core axis.	0317 - 689	97.42	98.23	0.00	0.194	104.35	108.3
		18.0	21°		0317 - 690	98.23	98.30	0.00	0.213	62.64	99.8
		19.0	21°	**Veins:**	0317 - 691	98.30	98.74	0.00	0.059	17.9	73.1
		20.0	25°	Less than 1% veining as thin veinlets parallel to foliation and thin veins (dolomite and quartz + dolomite) at							
		21.0	17°	moderate to high angle to bedding. Contacts sharp, straight to slightly irregular.							
		22.0	27°	**35.39** m - Approximately 1 cm thick, iron-stained dolomite + quartz vein at approximately 80° to core axis.							
		23.0	20°	Contacts sharp, straight							
		24.0	21°	**36.10 - 36.84** m - Ptygmatic folds in 2 dirty white to light grey quartz veins between 0.5 - 0.2 cm thick. Folds							
		25.0	33°	close to tight and similar, having variable axial planes (may be due to refraction of foliation). Veins have							
		26.0	15°	sharp, curvilinear boundaries. Contain ≤30% pale to medium yellow dolomite. Veins cross-cut by two thin							
		27.0	31°	dolomite + quartz veins. Dolomite medium creamy yellow to orange and preferentially located along the							
		28.0	35°	margins of 0.1 - 0.3 cm thick veins sub-parallel to core axis. Contacts sharp, straight.							
		29.0	26°	**37.5 - 71.0** m - Approximately 1%, dirty white to light grey quartz with subordinate dolomite veining throughout							
		30.0	18°	interval from approximately 37.5 - 71 m. Veins at moderate to high angle to core axis, with slightly irregular to							
		31.0	18°	ragged (structurally modified (i.e. offset) by foliation), sharp contacts. Veins range from 0.5 - 2.0 cm thick.							
		32.0	28°	**71.45 - 72.70** m - Thin, creamy orange ferroan dolomite ± quartz veinlets ≤1.0 cm thick at shallow angle to							
		33.0	23°	parallel to core axis, comprises 1-3% of interval.							
		34.0	22°	**73.46** m - 5 cm thick quartz + creamy orange dolomite vein at 50-55° to core axis. Dolomite predominantly along							
		35.0	28°	contact with host sediments, subordinate proportion within interior of vein. Contacts broken but appear sharp,							
		36.0	25°	slightly irregular.							
		37.0	23°	**99.10 - 99.79** m - Thin dolomite veinlets (0.1 - 0.3 cm thick) at approximately 55° to core axis, spaced							
		39.0	12°	0.5 - 2.5 cm apart, comprising ≤5% of interval.							
		40.0	15°	**101.45** m - Approximately 1.5 cm thick, creamy yellow-orange ferroan dolomite + quartz vein. Contacts sharp							
		41.0	20°	and irregular. Dolomite comprised of intergrown medium-grained crystals. Veins at approximately 35° to core							
		42.0	73°	axis.							
		44.0	05°	**106.15 - 109.80** m - Approximately 3-5% creamy white to yellow dolomite ± quartz veins and veinlets at							
		45.0	10°	shallow to moderate angle to core axis. Contacts sharp and straight to slightly irregular. Thin veinlets within							
		46.0	20°	and parallel to foliation and veinlets and veins at shallow to moderate angle to core axis, moderate to steep							
		47.0	10°	angle to bedding.							
		48.0	25°								
		49.0	12°	**Structure:**							
		50.0	00°	Penetrative foliation moderately well developed throughout, locally well developed in fine-grained intervals							
		51.0	00°	and poorly developed in coarse-grained intervals.							

52.0	2.5
53.0	10°
54.0	08°
55.0	05°
56.0	00°
57.0	10°
58.0	08°
59.0	20°
61.0	21°
62.0	33°
63.0	40°
64.0	47°
65.0	57°
66.0	70°
67.0	57°
68.0	76°
69.0	75°
70.0	72°
71.0	63°
72.0	76°
73.0	74°
74.0	77°
75.0	78°
76.0	53°
77.0	67°
78.0	60°
79.0	57°
80.0	77°
81.0	73°
82.0	67°
83.0	77°
84.0	72°
85.0	73°
86.0	78°
87.0	84°
88.0	87°
89.0	83°
90.0	84°
91.0	75°
92.0	74°
93.0	75°
94.0	27°
95.0	78°
96.0	80°
97.0	82°
98.0	80°
99.0	90°
100.0	88°
101.0	83°
102.0	66°
103.0	80°
104.0	82°

Penetrative foliation better developed in lower portion of interval (37.5 - 71 m), resulting in feathery appearance to probable planar contacts. Bedding angle to core axis varies, indicating broad, open folds to gentle warps in bedding. Foliation locally displaces and offsets bedding. Faulted fold at 76.30 m.

Faults:

12.45 - 12.60 m - Two bands of fault gouge at 50° to core axis (0.5 cm thick - upper and 1 cm thick - lower), in interval in which siltstone is moderately cohesive. Overlain by broken interval to 12.11 m.

24.13 - 24.30 m - Broken interval comprised of 1-3 cm discs broken along foliation. Discs have lost cohesion and are slightly to moderately friable. Two foliation planes covered with fine fault gouge / chips at approximately 50° to core axis.

42.34 m - Approximately 3.0 cm thick zone of sheared rock, moderate loss of cohesion at approximately 50° to core axis, approximately 40° to S_0 and opposite sense

59.88 - 60.07 m - Interval of broken rock, no evidence of shearing or gouge.

65.09 m - Approximately 1.5 cm thick band of fine-grained gouge and chips at 33° to core axis. Band has approximately 15-20% dirty white to grey quartz veining within fault zone pre- to syn-offset.

67.52 - 67.61 m - Three 1.0 - 1.5 cm thick bands of shearing subsequently healed by quartz, oriented at 60°, 55° and 38° to core axis, top to bottom of interval.

71.12 - 71.25 m - Interval of platey discs with minor, fine-grained gouge evident along fractures.

75.90 - 76.04 m - Sheared sediments with offset across foliation. Rock locally incohesive over 3-4 cm with zone of gouge / chips at 76.10 m sub-parallel to both S_0 and S_1.

80.95 m - Approximately 1 cm thick dolomite + quartz vein at 90° to core axis with fault gouge / chips underlying vein over ≤1.0 cm.

81.33 - 81.63 m - Sheared zone comprised of weakly to moderately cohesive rock, fault gouge / chip at 10° to core axis. Broken ground to 81.80 m.

82.37 m - Glide plane coated with fine gouge at 85° to core axis, broken ground to 82.45 m.

97.10 m - Fault plane with gouge at approximately 35° to core axis.

98.90 m - Fault plane with gouge at approximately 27° to core axis.

100.17 - 100.27 m - Interval with variable loss of cohesion. Rock disrupted and annealed between 100.22 - 100.25 m.

104.16 - 104.40 m - Broken ground with two fault planes with associated gouge between 104.16 - 104.22 m at 32° to core axis and 104.36 - 104.40 m. Interval between 104.22 - 104.36 m consists of breccia fragments between 0.1 - 2.5 cm diameter annealed / healed with creamy medium yellow to pale orange dolomite.

Sulphides in Sediments:

Pyrite up to 1%, disseminated throughout interval as medium- to coarse-grained, sub-idioblastic to idioblastic, cubic crystals and as local concentrations along preferred bedding horizons of fine- to medium-grained, sub-idioblastic to idioblastic, cubic crystals and small aggregate masses. Pyrite crystals generally rotated so long axis (i.e. diagonals) parallel to foliation.

71.0 - 105.0 m - Pyrite more abundant, 1-3% over interval as fine- to medium-grained, xenoblastic to idioblastic, cubic crystals. Local concentrations along preferred bedding horizons, to 30% over ≤1.0 cm, of fine- to medium-grained, sub-idioblastic to idioblastic, cubic pyrite. Also local, very fine- to fine-grained pyritic rods 0.05 cm thick and 0.1 cm long.

15.32 - 16.00 m. Very thin bedded, minor thick laminated, alternating medium to dark grey siltstones. Approximately 2-3% fine-to coarse-grained, sub-idioblastic to idioblastic pyrite. Minor xenoblastic pyrite, localized along preferred horizons.

16.00 - 16.68 m. Similar to 15.32 - 16.00 m, less coarse-grained pyrite.

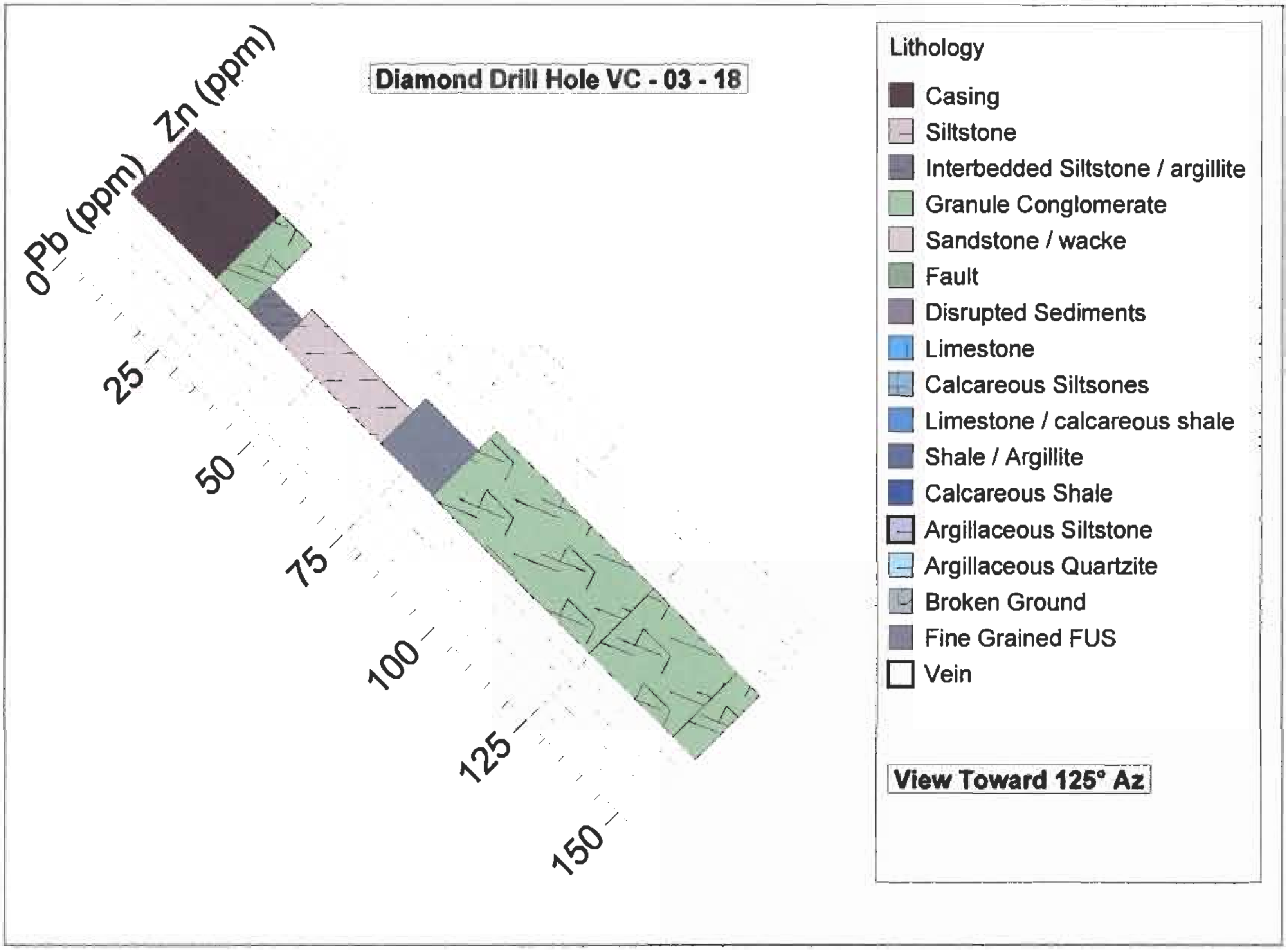
16.68 - 17.51 m. Similar to 15.32 - 16.00 m. Increased medium- to coarse-grained, predominantly idioblastic, cubic pyrite.

32.89 - 33.57 m. Very thin-bedded (1.5 - 8 cm), interbedded siltstone with subordinate, dark grey silty argillite and medium yellow-brown quartz wacke. Moderately abundant, fine-grained ankerite porphyroblasts disseminated throughout intervals comprised of finer sediments. Approximately 1% fine-grained, sub-idioblastic pyrite.

		105.0 106.0 107.0 108.0 109.0 110.0	80° 87° 50° 00° 73° 66°	**33.57 - 34.23** m. Very thin bedded (1-8 cm), medium grey siltstones with subordinate, interbedded, dark grey, thin laminated to very thin bedded (≤1.5 cm) argillaceous siltstone and highly subordinate, medium yellow-brown quartz wacke. Moderately abundant (≤10%) fine-grained ankerite porphyroblasts. Approximately 1% very fine- to fine-grained, locally medium-grained, idioblastic pyrite. **34.23 - 34.57** m. Similar to 33.57 - 34.23 m. Approximately 4.0 cm thick quartz wacke dominated interval. **46.68 - 47.13** m. Approximately 1-2% sub-idioblastic to idioblastic, fine- to predominantly medium-grained, cubic pyrite within approximately 6 cm thick silty argillite bed. Well developed foliation. Approximately 20% fine white speckling throughout bed, possibly quartz along / within foliation and / or porphyroblasts. **50.35 - 50.91** m. Approximately 2 cm thick silty argillite parallel to bedding with 5-7% medium-grained, predominantly idioblastic, cubic pyrite. Some pyrite crystals have dolomitic inclusions / cores. **50.91 - 51.45** m. Bed, described above, folded with hinge at approximate top of interval. Sample interval contains bed in lower half of fold. Similar to above. (Note: "Copper Coat" from drill on core surface) **90.00 - 91.13** m. Interval of alternating, thick laminated to very thin bedded (0.2-4.0 cm) siltstones at high angle to core axis, cross-cut by thin dolomite ± quartz veinlets at 58° to core axis, opposite sense to bedding, sub-parallel to foliation, spaced 0.1-1.0 cm apart. Top of interval has bounding, irregular vein at approximately 10° to core axis at high angle to veinlets. Pyrite ranges from cubic to elongated rods, fine- to medium-grained, approximately 2-3%. **97.15 - 97.27** m. Medium grey, very thin bedded siltstone with thin (≤0.5 cm thick), weakly iron-stained bands. Thin galena + sphalerite stringer veinlet at approximately 20° to core axis. Stringer obscured by quartz + dolomite mass, then evident as three, thin (0.1-0.2 cm thick) sub-parallel stringers, cross-cut white quartz veins. Medium orange-brown sphalerite present where galena stringers intersect / cross-cut quartz veins. Base of interval comprised of ≤2 cm thick quartz and creamy yellow dolomite vein at 90° to core axis. Lower contact faulted, with ≤0.5 cm of gouge. **97.27 - 97.42** m. Very thin bedded, light and medium grey siltstone (each comprising half of interval) with 0.5% fine-grained, idioblastic, cubic pyrite. Cross-cut by paper thin quartz veinlets at moderate angle to core axis. **97.42 - 98.23** m. Very thin bedded, alternating light and medium grey siltstones, cross-cut by approximately 2% dirty white quartz veins and veinlets at various angles to core axis. Thin bands and lenses of pyrite-bearing quartz wacke. Pyrite ≤0.5-1% over interval, as fine- to medium-grained, sub-idioblastic to idioblastic, cubic crystals. **98.23 - 98.30** m. Thin interval of light grey siltstone with upward tapering quartz ± dolomite veinlets. Small lenses of quartz wacke with approximately 30-35% yellow-orange to orange-brown dolomite + 5-10% pyrite. **98.30 - 98.74** m. Alternating light and medium grey siltstones with several fining upward intervals, cross-cut by medium orange dolomite veinlets (≤0.1-0.2 cm thick) comprising approximately 2-3% of interval. Local pyrite enrichment along preferred horizons, consisting of medium-grained, sub-idioblastic crystals. **Alteration:** Very fine-grained porphyroblasts evident at approximately 32 m in silty argillite, probable ankerite, which coarsens down-hole, comprising approximately 15-20% of a given interval.							
110.93	114.60			**<u>Lithology: Fault Zone.</u>** Variably sheared, ranging from annealed breccia to thick intervals of clayey fault / chips.							

				Structure: **Faults:** **110.93 - 112.16** m - Fault gouge / chips with suspended, milled clasts to pebble size. Incohesive **112.16 - 114.00** m - Moderately cohesive interval with short intact intervals of annealed (calcite) breccia and sheared intervals with gouge (≤0.5 cm) **114.00 - 114.60** m - Annealed (calcite) breccia with two sheared failure zones at approximately 25° to core axis.							
114.60	121.22	115.0 116.0 117.0 118.0 119.0 121.0	75° 63° 90° 77.5° 82° 55°	<u>**Lithology: Limestone.**</u> Interval has characteristic appearance of silty limestone to limey siltstone, blue-grey colour with thin (0.5 - 1.5 cm thick), dirty white, coarse intervals. **Veins:** **114.60 - 119.87** m - Approximately 10% (locally from 0-60% over 30 cm intervals) calcite ± dolomite (bone white to pale creamy yellow) veinlets to veins at numerous orientations. Veins interpreted to comprise variably developed stockwork style texture within, and adjacent to, fault zones in host rocks. Adjacent to faults, veins commonly have annealed texture with marked changes in width over several cm and ranging from paper thin veinlets to irregularly shaped lenses. Contacts sharp with host lithology, slightly to highly irregular. **Structure:** Bedding shows evidence of local intense deformation, multiple, small-scale folds, offsets along foliation. Limestone contained, and intermingled, within fault zone at top (i.e. faulted contact). **Faults:** **119.87 - 120.70** m - Interval of fault chips to milled pebble sized clasts. 119.87 - 120.36 m with graphitic coatings on surfaces / matrix and from 120.58 - 120.77 m. **Sulphides in Sediments:** **115.72 - 116.53** m. Approximately 5-7% pyrite throughout interval as: 1) ≤0.5% fine-grained, sub-idioblastic, cubic crystals, 2) local concentrations along preferred horizons (to 15% over ≤0.5 cm) and 3) as very fine-grained rods and/or strings of pyrite in limey siltstone intervals. **0317 - 693** 119.27 - 119.53 m. Similar to 115.72 - 116.53 m.	0317 - 692 0317 - 693	115.72 119.27	116.53 119.53	0.00 0.00	0.102 0.18	23.2 20.35	31.6 61.3
121.22	130.42	122.0 123.0 124.0 125.0 126.0 127.0 128.0 129.0	72° 87° 80° 90° 83° 78° 75° 83°	<u>**Lithology: Alternating light and medium grey siltstone and argillaceous siltstones.**</u> Very thin bedded, 0.4 - 3.0 cm thick. Siltier and darker than interval above limestone unit. **Veins:** Minor dolomite and dolomite + quartz veining, as thin veinlets to minor veins ≤1.5 cm thick at shallow to moderate angle to core axis. **Structure:** Moderately well developed, penetrative foliation sub-parallel to bedding. Deformation evident in 4 m above base of interval as offsets along foliation and small-scale parasitic folds, tight to isoclinal. **Faults:** **123.10** m - Fault plane with ≤0.3 cm gouge at approximately 5-10° to core axis. **125.10 - 125.30** m - Sheared interval with very well developed, shear related foliation, loss of cohesion along foliation planes. **126.34** m - Approximately 2.0 cm thick fault zone comprised of gouge at approximately 80° to core axis. **130.09 - 130.42** m - Interval sheared with local loss of cohesion and development of fault gouge / chips. Interval also locus of slight increase in creamy yellow orange ferroan dolomite veining.							

				Sulphides in Sediments: Pyrite 2-3% as fine- to medium-grained, sub-idioblastic, cubic crystals, localized along preferred horizons.							
130.42	148.04	136.66 148.04 149.0 150.0 151.0 152.0 154.0 155.0 156.0 160.0 161.0 162.0 163.0	35° 83° 78° 90° 72° 85° 86° 76° 75° 76° 75° 83° 76°	<u>**Lithology: Granule to pebble conglomerate.**</u> Local Fining Upward Sequence at 133.00 - 135.58 m, 135.58 - 136.68 m, 136.68 - 138.16 m, 142.63 - 145.02 m and 145.02 - 146.75 m. Variable amounts of medium orange, interstitial ferroan dolomite, from 1-20%. **Veins:** **131.05** m - Approximately 1.5 cm thick quartz vein at 25° to core axis. Slightly diffuse contacts over 0.1 cm. Approximately 2-3% fine-grained, medium orange ferroan dolomite. **132.04** m - Approximately 2.0 cm thick quartz vein at 30° to core axis. Slightly diffuse contacts over 0.1-0.2 cm. Approximately 3-5% medium-grained, xenoblastic, medium orange ferroan dolomite. **134.19** m - Approximately 0.75 cm quartz vein at 25° to core axis. As above. **134.90** m - Approximately 2.0 cm quartz vein at 33° to core axis. As above. Approximately 1-2% creamy yellow to orange dolomite. **136.30** m - Approximately 3.0 cm quartz vein at moderate angle to core axis, broken contacts. Granule conglomerate above vein sheared, friable over 10 cm. **140.96** m - Approximately 2.0 cm quartz vein at 33° to core axis. Approximately 7-10% creamy pale to medium orange ferroan dolomite. **146.17 - 146.39** m - Dirty white to light grey quartz vein at 20° to core axis, approximately 6.0 cm thick. Fractures spaced 0.5 - 1.0 cm at approximately 10° to core axis, at high angle to orientation of vein contacts (angle between fractures and contacts approximately 40°). Approximately 5% creamy, medium-grained orange ferroan dolomite. **146.75 - 148.04** m - Approximately 5% quartz veining in 6 veins between 0.5 - 2.0 cm thick, between 27° - 68° to core axis, up to 95° to one another. Dirty white to light grey quartz veins with approximately 10% medium-grained, orange ferroan dolomite. **Sulphides in Sediments:** Approximately 1-3% fine-grained (minor local medium-grained), sub-idioblastic pyrite.							
148.04	163.90			<u>**Lithology: Silty argillite to argillaceous siltstone.**</u> Minor medium orange-brown argillaceous quartzite (fine sandstone intervals). Very thin bedded, average 0.3 - 1.0 cm thick. Short FUS indicate right-way-up. **Veins:** Approximately 1-2% quartz, dolomite and dolomite ± quartz veinlets over interval at shallow to very steep angle to core axis, 0.1 - 0.5 cm thick, sharp, straight contacts. **152.37** m - Top of approximately 10 cm thick, milky white quartz + medium orange ferroan dolomite vein. Contacts broken. Quartz intergrown with minor, small vugs (open pore space). Dolomite crystals sub-idioblastic to idioblastic, medium- to coarse-grained. **Structure:** Well developed penetrative foliation resulting in 0.1 - 4.0 cm segmented discs throughout much of interval. Minor parasitic folding between 150.40 - 151.40 m. **Sulphides in Sediments:** Minor pyrite as fine- to minor coarse-grained, sub-idioblastic to idioblastic (minor xenoblastic) crystals.							
163.90				**End of Hole**							



Diamond Drill Hole VC - 03 - 18
Pb (ppm)
Zn (ppm)
0
25
50
75
100
125
150
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View Toward 125° Az

DYNAMIC EXPLORATION LTD.

HOLE NO.	VC - 03 - 18

DRILL LOG: DIAMOND DRILL CORE

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:	Lot 15318		
LOCATION - GRID NAME:			
EASTING:	501636	NORTHING:	5644285
SECTION:		ELEV:	1720 m
AZIM:	215°	LENGTH:	153.3
DIP:	-45°	CASING LEFT?:	No
CORE SIZE:		NQ	
CORE STORAGE:		Vermont Creek	

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
153.31		40.5°			

DRILLING CO:	F.B. Drilling
STARTED:	28-Aug-03
COMPLETED:	13-Sep-03
PURPOSE	
CORE RECOVERY:	
LOGGED BY:	Rick Walker
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	A305377,
	A305377r

Drill Hole VC - 03 - 18

From m	To m	Core Angle m	Deg	Description	Sample Number	From m	To m	Gold gms/T	Silver gms/T	Lead ppm	Zinc ppm
0.00	23.03			Casing							
23.03	31.51	23.55	28°	**Lithology: Granule conglomerate.** Subordinate siltstone to black argillite. Multiple Fining Downward Sequences from 30 cm to 2 m thick, grading from granule conglomerate (with ≤30% coarse-grained granule to fine-grained pebble, matrix-supported clasts) at base to 4 (common) to 30 (rare) cm intervals of thinly laminated, medium grey siltstone to black argillite tops. Upper and lower contacts generally planar. Colour of granule conglomerate changes from top to bottom of unit, from light to medium grey through blue-grey to light grey to dirty white at base (stratigraphic top), probably due to decreasing argillite / silt content.	0318 - 694	23.03	23.73	0.00	0.039	13.61	66.6
		26.90	33°		0318 - 695	23.73	24.13	0.00	0.039	12.63	77.2
		31.00	39°		0318 - 696	25.50	26.40	0.00	0.052	20.12	47.1
					0318 - 697	26.40	26.94	0.00	0.041	10.42	18.7
					0318 - 698	26.94	28.24	0.00	0.034	8.71	30.3
					0318 - 699	28.24	29.39	0.00	0.041	11.17	22.6
					0318 - 700	29.39	29.96	0.00	0.051	8.13	42.5
				23.03 - 23.73 m. Partial Fining Downward Sequence, from casing to stratigraphic top of graded interval. 23.51 - 23.73 m. Fine-grained top of sequence, comprised predominantly of thin to thick laminated silty argillites to minor, very thin bedded (0.5 cm thick) argillaceous quartzite. Very fine-grained material throughout coarse-grained base may be metallic sulphides or reflections from idioblastic crystal faces.	0318 - 701	29.96	30.78	0.00	0.055	10.33	26.3
					0318 - 702	30.78	31.07	0.00	0.061	3.13	83.2
					0318 - 703	31.07	31.51	0.00	0.093	10.09	41.4
				23.73 - 24.13 m. Two partial Fining Downward Sequences, one from base of broken interval at 23.73 to 23.86 (top of 3.0 cm thick, interlaminated, light and medium grey siltstones) and from 23.86 - base of fault at 24.13 m. Interval medium grey in colour due to relatively high proportion of fine-grained argillaceous material in granule conglomerate. Fine-grained ankerite developed as disseminated porphyroblasts over interval, more abundant in fine-grained interval. As with previous interval, very fine-grained metallics throughout interval and/or reflections from idioblastic crystal faces.							
				25.50 - 26.40 m. Coarse-grained base to Fining Downward Sequence, extending from base of fault zone at 25.50 m. Lower 20 cm of interval contains edge of fault zone along margins of core, and adjacent oxidized zone approximately 20 cm or less in which interstitial dolomite ± pyrite has been oxidized to limonite. Approximately 15-20% interstitial medium orange ferroan dolomite over interval. Slight increase in proportion of argillaceous material at 26.10 m resulting in change from light grey-orange to light medium blue-grey.							
				26.40 - 26.94 m. Transitional zone from coarse-grained base of Fining Downward Sequence to argillaceous top. From 26.79 to 26.94 m comprised of interlaminated light grey siltstone and medium grey argillaceous siltstone to silty argillite, culminating in 2.0-3.0 cm of paper thin, alternating laminae of medium grey silty argillite and dark grey argillite.							
				26.94 - 28.24 m. Coarse, basal portion of Fining Downward Sequence. Minor (approximately 0.5%) idioblastic, fine-grained, cubic pyrite. Basal 20 cm contains coarse granule to fine pebble sized, matrix-supported clasts with approximately 40% fine-grained, medium orange ferroan dolomite. Proportion of interstitial dolomite markedly less than previous interval (approximately 10-15%). Note description of veins at 27.78 m. Possible fine-grained metallics (sulphides) as described in previous interval. Note: 1 acicular needle of fine- to medium-grained arsenopyrite noted.							
				28.24 - 29.39 m. Top of Fining Downward Sequence unit. Base of interval comprised of granule conglomerate with approximately 10% matrix-supported coarse granule to fine pebble sized clasts. Similar to previous interval. Fines upward (stratigraphically) to medium-grained granule conglomerate overlain by approximately 45 cm dark grey to black silty argillite to argillite with 25-30% light grey siltstone lenses (disrupted along foliation). Approximately 1-2% fine-grained, idioblastic, cubic pyrite having square to rectangular profiles. Abundant possible very fine-grained metallics (sulphides). Note: vein at 29.04 m.							

29.39 - 29.96 m. Complete Fining Downward Sequence from coarse granule conglomerate at base to medium sand with approximately 10-15% coarse, matrix-supported granule sized clasts at top, overlain by approximately 4.0 cm of interlaminated paper thin, light grey siltstone laminae and thin laminated to very thin bedded, black argillite. Approximately 1% fine-grained, idioblastic, cubic pyrite. Approximately 20-25% rounded to elliptical, granule sized ferroan dolomite clasts and interstitial dolomite. Four thin quartz + dolomite veinlets (≤0.3 cm thick) at moderate to high angle to core axis, diffuse contacts dirty white to light grey, 5-40% creamy yellow-orange, fine- to medium-grained dolomite. One thin creamy yellow dolomite veinlet (0.2 cm thick) at high angle to core axis. One thicker (≤2.5 cm thick) dirty white to light grey, sugary quartz vein with approximately 10% creamy orange dolomite. Possible very fine-grained metallics similar to previous interval.

29.96 - 30.78 m. Coarse-grained base to Fining Downward Sequence. Note: vein at 30.00 m, fault at 30.27 m. Interval grades stratigraphically upward from medium- to coarse-grained granule conglomerate with approximately 20-25% creamy yellow-orange dolomite to fine- to medium-grained sand with interbedded, very thin bedded sandy siltstone to siltstone. Minor fine-grained, idioblastic, cubic pyrite. Possible very fine-grained metallics similar to previous interval.

30.78 - 31.07 m. Fine-grained top to Fining Downward Sequence, comprised of interlaminated dark grey and subordinate light grey siltstone, fining upward to silty argillite to argillaceous siltstone. Laminae range from paper thin to thickly laminated, to very thin bedded at base of interval.

31.07 - 31.51 m. Two thin (17 - 24 cm thick) Fining Downward units, fining stratigraphically upward from coarse granule conglomerate to medium- to coarse-grained sandstone, overlain by approximately 2 cm of silty argillite with paper thin laminae of light grey siltstone (lower unit) and highly angular to wispy silty argillite tear-ups / inclusions at top of lower Fining Downward Sequence. Approximately 1% fine- to medium-grained, sub-idioblastic to idioblastic, cubic pyrite in upper (stratigraphically lower) unit.

Veins:

27.78 m - Approximately 10 cm thick series of stacked light grey to dirty white, fine-grained quartz + creamy orange ferroan dolomite veins and lenses. Contacts diffuse over ≤0.5 cm between quartz and dolomite in vein and quartz and interstitial dolomite in host granule conglomerate. One vein 5.5 cm, separated by approximately 1.0 cm of host rock from 2.0 cm vein. One or two lenses along margin of core.

28.34 - 29.80 m - Approximately 1-3% dirty white to light grey, fine-grained (sugary) quartz + 5-10% creamy orange ferroan dolomite in veins between 0.2-2.0 cm thick at moderate angle to core axis.

30.00 m - Approximately 7.0 cm of fine-grained (sugary), dirty white to light grey quartz + approximately 5-10% creamy yellow-orange ferroan dolomite veins at approximately 65° to core axis. Upper vein approximately 4.5 cm thick, separated by approximately 1.0 cm of argillaceous quartzite from lower vein ≤2.5 cm thick. Contacts sharp and irregular with ≤0.1-0.3 cm band of argillaceous material adjacent to vein.

Structure:

Faults:

23.60 - 23.73 m - Interval of broken ground comprised of 2.0 - 4.0 cm (long dimension) angular fragments with gouge on many surfaces. Some surfaces iron-stained and coated with medium orange limonite.

24.14 - 25.50 m - Fault Zone at 12° to core axis, comprised of fine clayey to silty fault gouge with rounded, milled, coarse-grained granule to fine-grained pebble sized clasts of host granule conglomerate.

27.78 m - Thin, iron-stained shear zone at approximately 75° to core axis.

29.04 - 29.20 m - Friable granule conglomerate with weathered fractures at 35° to core axis.

30.27 m - Approximately 4.0 - 4.5 cm thick oxidized zone with fault zone at core at approximately 63° with clayey fault gouge, chips and milled, rounded pebbles ≤1.0 cm thick

Sulphides In Sediments:

Minor pyrite (<<0.05%) throughout interval as fine- (to medium-) grained, sub-idioblastic to idioblastic, cubic crystals. Very fine-grained metallics (and/or quartz crystals faces) evident in the coarse-grained granule conglomerate bases, very minor acicular arsenopyrite noted.

31.51	40.28	32.00 33.00 34.00 35.00 36.00 37.00 38.00 39.00 40.00	30° 37° 40° 45° 42° 45° 41° 47° 40°	<u>**Lithology: Silty Argillite.**</u> Thin FDS intervals. Interval comprised of numerous 1-30 cm thick FDS units, thicker at top of interval (stratigraphic base) and thinning downward. Interval comprised of medium grey silty argillite with slightly subordinate, light grey to weak orange-brown (iron-stained?), interlaminated to interbedded, paper thin laminae to very thin bedded siltstone as discrete FDS units. **Veins:** **34.41** m - Approximately 1.5 cm creamy yellow dolomite and 15-20% dirty white to light grey quartz veins at approximately 50° to core axis. Vein contacts sharp, irregular. **Structure:** **Faults:** **32.22** m - Thin fault zone ≤0.5 cm thick with fault gouge / chips at 45° to core axis. **34.74 - 34.78** m - Two thin fault zones (0.3 and 1.0 cm thick) at approximately 48° to core axis with partial loss of cohesion in core between faults (top and bottom of interval) **36.98 - 37.95** m - Core broken into 0.3 - 10 cm segments and discs with fracture or fault at approximately 10° to core axis. **37.25 - 37.48** m - Numerous very thin, discontinuous veinlet segments **48.80, 48.70** and **49.06** m - Parasitic fold closures, close to isoclinal. **Sulphides in Sediments:** Minor medium-grained, sub-idioblastic, cubic pyrite disseminated over interval, typically associated with light grey siltstone (coarse intervals) and locally enriched to 3-5% over 3 cm over rare preferred horizons. **Alteration:** Fine- to medium-grained ankerite porphyroblasts from approximately 32.00 - 34.20 m, weakly developed to base of interval.							
40.28	67.98	41.00 42.00 43.00 45.00 46.00 47.00 48.00 49.00 50.00 51.00 52.00 53.00 55.00 56.00 57.00 58.00 59.00 60.00 61.00 61.80 64.00 65.00	41° 40° 50° 47° 45° 53° 40° 32° 41° 34° 35° 09° 61° 07° 37° 30° 33° 28° 58° 75° 61° 70°	<u>**Lithology: Siltstone.**</u> Predominantly medium grey siltstone with subordinate light grey paper thin laminae to very thin bedded siltstone and highly subordinate light grey to light orange-brown (weakly iron-stained) fine-grained sandstone intervals. Short, probable FDS (≤2 cm thick) indicate overturned succession with minor reversals across parasitic folds. **Veins:** **43.84** m - Approximately 1.0 cm thick ferroan dolomite + quartz vein at 34° to core axis. Sharp, slightly irregular contact with host sediments. Quartz localized along core, comprises approximately 20% of vein. High angle to bedding. **60.50** m - Approximately 1.5 cm thick dolomite ± quartz vein at approximately 20° to core axis, along margin of core. Contains several angular inclusions of host sediments so "margin" of vein may simply be inclusion and therefore > 1.5cm thick. Cored exposure approximately 90-95% creamy yellow ferroan dolomite. High angle to bedding and sub-parallel to fault contact, possible locus of shear strain. **61.40** m - Approximately 1.0 cm quartz + dolomite vein at 16° to core axis. Creamy yellow ferroan dolomite along margins with 40-85% sugar, dirty white quartz along core of vein. Contacts sharp and slightly irregular. Approximately **61.70** m - Broken quartz + dolomite vein. Appears to have been approximately 2.5 cm thick with ≤0.3 cm ferroan dolomite along contacts. Quartz translucent white to light grey comprised of intergrown crystals. Interval contains approximately 2-3% creamy yellow-medium orange ferroan dolomite + subordinate quartz veinlets, 0.1 - 0.5 cm thick, at shallow to moderate angle to core axis, sub-parallel to parallel to foliation. Sharp, straight to irregular contacts parallel to shallow angle to bedding. Some veinlets show evidence of minor offsets (i.e serrated appearance) across foliation.							

		66.00 67.00	65° 78°	**63.74 - 63.97** m - Milky white to translucent grey quartz vein with 3-5% creamy yellow to medium orange dolomite. Vein has sharp, irregular contact sub-parallel to core axis, high angle to bedding, only 1 margin cored, minimum 4 cm thick. **Structure:** Bedding and penetrative foliation parallel to sub-parallel, so interval largely comprised of elliptical discs between 0.2 - 2.0 cm thick. **60.50** m - Appears to be a facing change, from overturned to right-way-up. **62.75 - 66.74** m - Well developed penetrative foliation results in thin elliptical discs 0.4 - 6 cm thick. **Faults:** **42.62** m - Fault plane with gouge and chips approximately 0.4 cm thick at 55° to core axis. **56.95** m - Glide plane with coating of fault gouge / chips at approximately 45° to core axis. **59.14** m - Fault Zone, approximately 1.0 cm thick with silty gouge and angular milled fragments ≤0.5 cm thick in long dimension at 53° to core axis. Rock incohesive over approximately 4.0 cm to 59.10 m. **60.25 - 60.60** m - Interval broken into thin discs (≤1.0 cm) parallel to foliation. Three fault zones: 60.25 m at approximately 45° to core axis comprised of fault chips with gouge; 60.37 m at approximately 20° to core axis and 60.50 m, approximately 2.0 cm thick gouge zone with clayey gouge and chips at approximately 25° to core axis. **60.60 - 62.00** m - Badly broken core comprised of thin elliptical discs. **63.59 - 63.74** m - Broken core, angular fragments - not sure if it represents core broken above vein or shear partitioned into vein and shattered. **65.10** m - Approximately 3.0 cm thick fault zone comprised of fault gouge / chips at approximately 50° to core axis. **66.20** m - Approximately 0.3 cm fault zone at approximately 80° to core axis. **Sulphides in Sediments:** Minor, fine- to medium-grained , sub-idioblastic to idioblastic, cubic pyrite. Some pyrite has elongated rod-like appearance. Pyrite commonly associated with medium orange ferroan dolomite and quartz (as inclusions and/or possible pressure shadows).							
67.98	81.98	68.00 69.00 70.00 71.00 72.00 73.00 74.00 75.00 76.00 77.00 78.00 79.00 81.00	48° 73° 74° 73° 65° 46° 56° 37° 62° 42° 60° 00° 48°	<u>**Lithology: Siltstone.**</u> Transitional zone from siltstone dominated succession to conglomerate. Multiple FUS, very similar to interval from 31.51 - 40.28 except opposite facing direction - right-way-up. Predominantly FUS units between 4-15 cm thick, having sharp planar bases grading upward from massive bases to thin to thick laminated tops. Host rock for FUS comprised of medium grey siltstone. FUS comaprised of light grey to light orange-brown, fine- to medium-grained sandstone. **Structure:** **74.60 - 75.00, 78.10** and **78.82 - 79.20** m - Parasitic folds evident (from FUS laminae, interpreted to be anticlinal closure with axis at high angle to core axis). Bedding offset across foliation, particularly from 74.00 - 81.98 m. Minor to rare, sub-idioblastic, medium-grained pyrite. Locally abundant fine-grained ankerite porphyroblasts. **81.50 - 81.98** m - Parasitic folds, with reversal in facing direction. Overturned FDS at 81.0 m, right-way-up FUS at 82.20 m. **Faults:** **68.45 - 68.55** m - Interval comprised predominantly of fault gouge / chips, one zone approximately 1.5 cm thick, adjacent to quartz + ferroan (medium orange) dolomite vein, both sub-parallel to core axis. **79.35 - 80.46** m - Broken zone with approximately 65 cm of core loss. Interval comprised of large chips, fragments and partial discs with intervals of gouge / fine chips.							

81.98	124.48	82.00 83.00 84.68 85.34 86.35 87.23 91.31 105.55 119.29 119.41 121.78	52° 70° 71° 22° 60° 60° 65° 34° 26° 50° 67°	**Lithology: Predominantly granule conglomerate.** FUS intervals apparent (i.e. 87.13 - 89.58 m), from matrix-supported , fine-pebble conglomerate to silty argillite caps. Matrix contains up to 35% medium yellow-orange , interstitial material, probably ferroan dolomite. Interval coarsens downward from 2-20 cm, weakly iron-stained, fine-grained sandstone with ≤40% thinly laminated to very thin bedded siltstone and silty argillite (to local argillite) from 81.98 to 83.55 m. Interval has well defined FUS from basal sandstone to upper silty argillite - argillite over 4-25 cm. Granule conglomerate dominated FUS below 83.55 m. Silty argillite to argillite caps to FUS between 4.0 - 25 cm thick, moderately well developed penetrative foliation. **Veins:** Approximately 2% dirty white to light grey quartz + medium yellow (-orange) ferroan dolomite veins from 0.4 - 2.0 cm thick at moderate angle to core axis. Sharp, slightly irregular contacts sub-parallel to S_0 and/or S_1. **81.98 - 101.63** m - Interval contains approximately 1-2% thin (0.4 - 1.5 cm thick), dirty white to light grey quartz ± medium dirty yellow ferroan dolomite veins at moderate angle to core axis. Most have straight, slightly irregular contacts but some have structurally modified contacts. **83.90 - 84.12** m - Dirty white to light grey, fine-grained quartz vein. Upper contact at approximately 10°, lower at approximately 20° to core axis. Upper contact sharp, slightly irregular, lower contact diffuse over 0.1 - 0.2 cm. **84.44 - 84.61** m - Dirty white to light grey, fine-grained quartz veins. Approximately 3-5% medium dirty yellow-orange ferroan dolomite over 3 cm along lower contact. Upper contact diffuse over 0.1-0.2 cm at approximately 25° to core axis. Lower contact sharp at 58° against underlying thin laminated siltstone and silty argillite. **86.29 - 86.31** m - Dirty white to light grey quartz and highly subordinate (7-10%) medium yellow ferroan dolomite vein, 0.1 - 3.0 cm thick, structurally modified by foliation. Sharp, slightly irregular contacts. **86.48 - 86.58** m - Silica flooded granule conglomerate portion of FUS. Multiple thin veins (0.2 - 0.6 cm thick) with variable thickness at variety of orientations. Host comprised of medium grained, granule conglomerate with approximately 40% interstitial, medium yellow ferroan dolomite. **90.18 - 90.48** m - Approximately 2.5 cm thick, dirty white to light grey quartz vein with highly subordinate medium yellow ferroan dolomite at shallow angle to parallel to core axis. Contacts sharp and gently anastomosing. Approximately 2-3% medium yellow ferroan dolomite. **95.84 - 95.88** m - Dirty white to light grey, fine-grained quartz vein with approximately 10-12% medium dirty yellow ferroan dolomite at 46° to core axis, approximately 3.0 cm thick. Both contacts sharp, slightly irregular. **98.03 - 98.17** m - Approximately 9.5 cm thick, dirty white to light grey quartz vein, trace medium dirty yellow ferroan dolomite. Upper and lower contacts broken against sheared host granule conglomerate at approximately 50° to core axis. Approximately 105.0 - 124.48 m - Approximately 2-3% dirty white to light grey quartz and creamy yellow to medium dirty orange ferroan dolomite veins at shallow to high angle to core axis. Dolomite preferentially, but not exclusively, developed along margins of veins. **104.71 - 104.80** m - Two dirty white to translucent grey quartz + medium dirty yellow ferroan dolomite veins at approximately 58°-65° to core axis. Upper vein wedge-shaped 1 cm to 3 cm thick across core, lower vein 3.5 cm thick. Sharp, slightly irregular contacts. **105.54 - 105.81** m - Approximately 35° thin (0.1 - 3.0 cm) dirty white to light grey quartz + medium dirty yellow ferroan dolomite veins. Veins generally at moderate to high angle to core axis but have been structurally modified resulting in marked changes in vein thickness and truncated vein segments. Hosted by silty argillite and argillite with well developed penetrative foliation. **105.81 - 106.04** m - Two well defined, milky white quartz veins with minor medium yellow-orange ferroan dolomite. Upper vein, upper contact at 46° to core axis, lower contact at approximately 45° with opposite sense (i.e. wedge-shaped vein); Lower vein, upper contact at 53°, lower contact at 25°-30°. Contacts diffuse over 0.1 - 0.2 cm. **106.40 - 106.51** m - Dirty white to light grey quartz vein with highly subordinate creamy yellow dolomite (approximately 1-2%). Contacts broken and sheared, minor development of gouge over 0.1 - 0.2 cm at 45° - 55° to core axis.							

Structure:
Bedding structurally modified by S1 in fine-grained sandstone - argillite dominated upper portion of FUS interval.

101.63 - 124.48 m - Granule conglomerate. Bedding appears to be at shallow angle to core axis and folded around broad, open folds having a wavelength of approximately 2-3 m, resulting in episodic reversals of bedding and facing direction. Bedding in argillites and conglomerate / argillite contacts probably structurally modified, much steeper than bedding in conglomerate.

119.29 - 119.41 m - Syncline, FUS grades into fold.

121.78 m - Conglomerate / argillite contact - Fold reversal, weakly defined graded bedding grades out of fold

131.40 - 131.80 m - Low amplitude, 20 cm wavelength open folds

Faults:

82.34 m - Approximately 2.5 cm thick interval of fault gouge at approximately 35° to core axis.

87.28 - 87.32 m - Loss of cohesion, with fault gouge at approximately 60° to core axis.

88.64 - 88.68 m - Interval with loss of cohesion at approximately 68° to core axis.

94.89 - 94.91 m - Fault zone with gouge and milled chips at 70° to core axis. Associated with upper contact of thin 1 cm thick quartz + dolomite vein, truncated by fault.

98.03 - 98.24 m - Upper and lower contacts of quartz vein sheared. Upper contact defined by weak loss of cohesion in granule conglomerate host at approximately 35° to core axis over 4 cm. Lower contact defined by moderate loss of cohesion and development of coarse shear foliation at approximately 35° to core axis over 8 cm.

104.80 m - Thin (≤0.4 cm) fault zone with clayey gouge and chips at 50° to core axis, localized along base of vein.

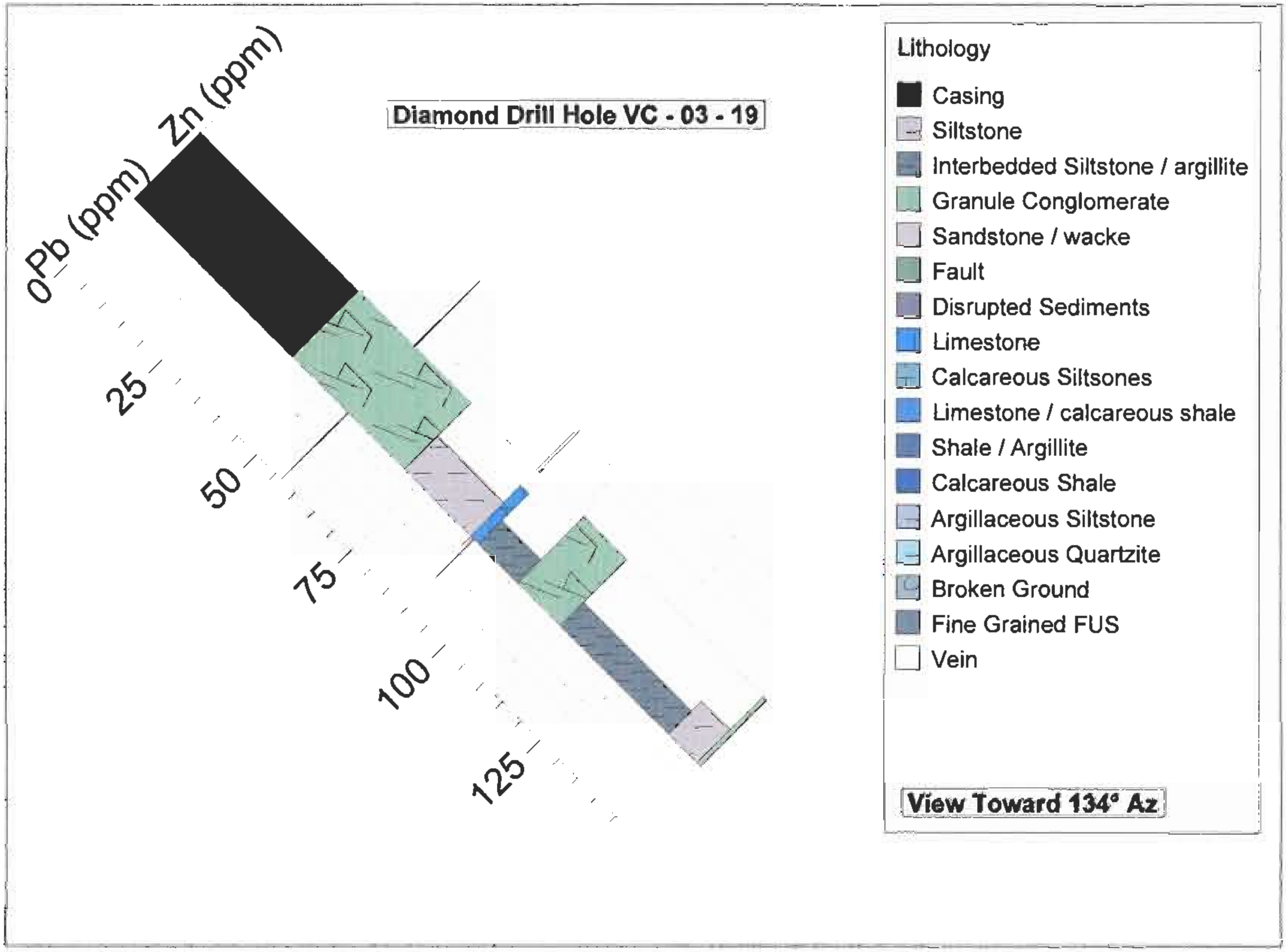
107.43 - 108.20 m - Broken ground comprised of angular fragments broken along coarse foliation over 10-15 cm at top and bottom of interval. Interval has moderately well developed, coarse foliation. Fault zone with clayey gouge, chips and milled coarse grit to fine-grained pebble sized clasts at 107.77m, at approximately 15-20° to core axis.

112.87 - 113.04 m - Fault zone with clayey gouge to coarse, grit-sized, milled clasts with associated coarse foliation.

117.20 - 117.76 m - Interval with two faults at high angle to one another. First extends from 117.20 - 117.56 m at approximately 5° to core axis, defined by fault plane ≤0.2 cm thick with slight loss of cohesion for 2-4 cm on either side, conjugate fractures parallel foliation at 65° to core axis. Second fault zone between 117.71 - 117.76 m, approximately 2 cm thick at 40° to core axis with fault gouge and chips.

118.07 - 118.13 m - Interval of phyllitic sediments with well developed penetrative foliation and ≤1 cm thick fault zone comprised of clayey gouge at approximately 47° to core axis.

124.48	153.30	125.20 126.03 126.15 131.05 138.00 142.46 147.05 148.10	10° 45° 35° 83° 70° 50° 65° 65°	**Lithology: Granule Conglomerate (FUS).** Predominantly granule conglomerate with subordinate 5-80% matrix-supported pebble conglomerate, highly subordinate to minor fine-grained sandstone to argillaceous siltstone. Interstitial medium orange ferroan dolomite decreases in abundance to approximately 128.0 m. Creamy yellow to light orange ferroan dolomite present to 140.50 m. **Veins:** Less than 1% dirty white to light grey quartz ± ferroan dolomite over interval. Veins without dolomite have diffuse contacts with host sediments. **146.60 - 146.77** m - Dirty white to translucent grey quartz vein approximately 14 cm thick. Upper contact diffuse over 0.3 - 0.5 cm, immediately underlies thin dirty white to light grey quartz vein, both at 57° to core axis. Lower contact sharp (against silty sediments) to diffuse over 0.1-0.2 cm at 45° to core axis. **Structure:** Moderately well developed penetrative foliation present in fine-grained lithologies, with poorly developed coarse spaced foliation (wrapping clasts) in coarse-grained lithologies. **Faults:** **132.45 - 132.65** m - Loss of cohesion along coarse spaced foliation over interval, with clayey fault gouge / chips between milled coarse-grained granule to very fine-grained pebble sized clasts. Fault appears to be parallel to foliation at approximately 65° to core axis. **149.26 - 149.53** m - Interval of broken ground between two bounding faults with 2-3 cm of clayey fault gouge / chips **150.96 - 151.30** m - Interval with slight to moderate loss of cohesion along foliation, local fault plane with gouge at approximately 50° to core axis.							
153.3				**End of Hole**							


Diamond Drill Hole VC - 03 - 19
0
Pb (ppm)
Zn (ppm)
25
50
75
100
125
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View Toward 134° Az

DYNAMIC EXPLORATION LTD.

DRILL LOG: DIAMOND DRILL CORE

HOLE NO.	VC - 03 - 19

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:	Lot 15318		
LOCATION - GRID NAME:			
EASTING:	501636	NORTHING:	5644285
SECTION:		ELEV:	1720 m
AZIM:	224°	LENGTH:	149.65
DIP:	-45°	CASING LEFT?:	No
CORE SIZE:		NQ	
CORE STORAGE:		Vermont Creek	

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
0		42.25°	101.49		38.5°

DRILLING CO:	F.B. Drilling
STARTED:	13-Sep-03
COMPLETED:	15-Sep-03
PURPOSE	
CORE RECOVERY:	
LOGGED BY:	Rick Walker
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	A305377,
	A305377r

Drill Hole VC - 03 - 19

From m	To m	Core Angle m	Deg	Description	Sample Number	From m	To m	Gold gms/T	Silver gms/T	Lead ppm	Zinc ppm
0.00	41.77			**Casing**							
41.77	71.45			**Lithology: Granule to fine pebble conglomerate.** Largely broken between base of casing to 60.75 m. Appears to have right-way-up FUS sequences ranging from fine-grained pebble conglomerate to silty argillite. **Veins:** Interval contains approximately 35-40% quartz veins, predominantly to 63.30 m, up to 80 cm thick comprised of milky white to dirty white to light grey quartz veins, locally moderately iron-stained. Minor medium dirty orange dolomite associated with sedimentary screens / inclusions. Minor heavily to completely weathered limonite patches (after pyrite). Vein contacts broken and appear to have fault gouge in many instances, probably locus of strain gradient (i.e. 47.63 - 47.71 m, 51.47, 51.77 m, 51.88 - 51.94, 52.37 - 52.50 m). **61.06 - 61.49** m - Upper and lower contacts at 19° to core axis; milky white to light grey quartz vein comprised of coarse intergrown quartz crystals. Lower contact sheared against host sediments. **61.71 - 61.83** m - Milky white to light grey quartz vein comprised of coarse, Intergrown quartz crystals. Upper contact at approximately 20° to core axis; lower contact at 40°. Minor creamy yellow ferroan dolomite over basal 2 cm of vein. **62.00 - 62.94** m - Milky white to light grey quartz vein comprised of coarse, intergrown quartz crystals. Possible composite vein, series of nested veins or sedimentary screens / inclusions in vein. Fine-grained sedimentary material in vein as angular to irregular masses sub-parallel to foliation in host rocks. Approximately 5-10% pale creamy to medium yellow ferroan dolomite associated with sedimentary material. **63.08 - 63.39** m - Upper contact irregular at approximately 30° to core axis, lower contact at approximately 10° to core axis. Vein comprised of milky white, coarse, intergrown quartz with weak to moderate iron-staining on fracture surfaces. **64.11 - 64.29** m - Milky white quartz vein (as above). Upper contact at 32° to core axis; lower at 22°. Approximately 1% creamy yellow-orange ferroan dolomite associated with wispy sedimentary inclusions. **64.68 - 64.81** m - Milky white quartz vein (as above). Upper contact at 22° to core axis, lower contact at 25°. Approximately 3-5% creamy medium-orange ferroan dolomite. **67.49** m - Approximately 3 cm quartz lense, probably truncated quartz vein, dirty white to light grey, fine-grained quartz with approximately 5-7% creamy yellow ferroan dolomite. **69.60** m - Approximately 3 cm thick, milky white to light grey quartz vein at 40° to core axis. Approximately 25-30%, medium- to coarse-grained, creamy yellow ferroan dolomite over 1.5 cm at each contact and into host sediments. Proportion decreases away from vein into sediments over 4-5 cm to 5-7%. **Structure:** Penetrative foliation well developed in fine-grained units, moderately well developed in coarse units as coarse spaced foliation. **Faults:** **45.89 - 46.12** m - Fault zone with surface clays. 2 cm interval of milled, medium to coarse-grained, granule sized clasts at 45° to core axis. **47.63 - 47.71** m - Interval in which argillaceous conglomerate has lost cohesion at base of 48 cm quartz vein. Shearing appears to be parallel to foliation at 35° to core axis. **51.34 - 51.39** m - Weakly to moderately iron-stained interval with loss of cohesion in granule conglomerate. Pyrite crystals have strongly weathered, limonitic rinds **51.47** m - Approximately 1.5 cm thick, moderately iron-stained interval at top of 35-40 cm thick quartz vein at approximately 55° to core axis. Pyrite completely weathered to limonite.	0319 - 704	56.30	56.37	0.46	20	**0.91%**	**3.9%**
					0319 - 705	56.37	56.47	1.96	545.8	**18.26%**	**5.38%**
					0319 - 706	56.47	56.56	2.08	270.7	**7.94%**	**13.33%**
					0319 - 707	65.51	65.74	0.37	2.562	809.65	747.8

				51.74 - 51.94 m - Broken interval with weakly to moderately iron-stained surfaces locally developed. 51.88 - 51.94 m - zone with loss of cohesion in argillaceous siltstone at top of quartz vein. Medium-grained granule to medium-grained pebble sized, angular clasts. Pyrite within zone has moderate to heavy iron-stained to limonitic rinds. Coarse-grained pyrite (to 1 cm) at lower edge of zone, in contact with vein. **52.37 - 52.50** m - Zone of milled quartz vein material with clasts ranging from medium-grained granule to fine-grained cobble (approximately 4 cm in long dimension), suspended in a fine-grained sandy gouge. **54.02 - 54.16** m - Zone of milled fine- to medium-grained pebble (approximately 1 cm long dimension) sized clasts in a medium grey, fine-grained sandy gouge. Coarser clasts are quartz vein material. Fault zone located between quartz vein and medium- to coarse-grained granule conglomerate. **56.37 - 56.47** m. Fault zone comprised of chips in medium grey sandy gouge above mineralized quartz vein. Mineralization comprised of sheared galena + sphalerite ± arsenopyrite. **Sulphides in Veins:** **56.30 - 56.37** m. Approximately 1.7 cm of high grade mineralization, comprised of two 0.3 cm massive sulphide veins. Veins consist of medium to dark reddish-brown sphalerite with galena and coarse needles of arsenopyrite. **56.47 - 56.56** m. Approximately 6 cm thick quartz vein at 45° to core axis with approximately 30-35% mineralization comprised of galena with sphalerite ± arsenopyrite. Vein consists of ≤3.5 cm of 30-35% semi-massive, medium- to coarse-grained galena, with 10-15% subordinate, medium to dark dirty orange sphalerite with pyrite and minor coarse, acicular arsenopyrite. Upper ≤2.5 cm of vein comprised of 7-10% medium- to coarse-grained, medium orange sphalerite with 7-10% fine-grained galena and 1-2% fine grained arsenopyrite(?). **Sulphides in Sediments:** Minor sub-idioblastic, fine- to medium-grained pyrite disseminated through conglomerate. **65.51 - 65.74** m. Medium-grained granule conglomerate with weakly developed, coarse, penetrative foliation. Approximately 3-5% fine- (to medium-) grained, sub-idioblastic, cubic (to dodecahedral) pyrite. Minor medium-grained, acicular arsenopyrite needles.							
71.45	88.94	73.00 74.00 75.00 76.00 77.00 78.00 79.00 80.00 81.00 82.00 83.00 84.00 85.00 86.00 87.00 88.00	64° 85° 77° 77° 70° 83° 87° 79° 74° 86° 77° 75° 67° 67° 67° 63°	**<u>Lithology: Interbedded argillite and siltstone / sandstone.</u>** Very thin bedded, medium grey, silty argillite with interbedded light grey siltstone to fine-grained sandstone (comprising approximately 25-30% of interval). Hint of graded bedding in some thin siltstones suggests right-way-up. **Veins:** Contact with overlying granule conglomerate disrupted, comprised of sub-equal amounts of fine-grained, dirty white to light grey quartz with medium- to coarse-grained creamy yellow to medium orange dolomite over 8.0 cm. Wispy to angular sedimentary inclusions and tear-outs with veinlet stringers into host silty argillite. Interval contains approximately 5-10% veins, spaced 3.0 to 60 cm, comprised of three types: 1. Thin veinlets comprised of sub-equal amounts of dirty white quartz and creamy yellow to orange ferroan dolomite at moderate angle to both bedding and foliation, at moderate to high angle to core axis, 2. Thin (≤1.0 cm) creamy yellow dolomite ± dirty white, fine-grained quartz veins at shallow to moderate angle to core axis, bedding and foliation. Contacts sharp, straight to slightly irregular, and 3. Thicker (1.0 - 8.0 cm thick), milky white quartz + creamy yellow to medium orange ferroan dolomite veins with ragged, irregular boundaries, typically with sedimentary inclusions. Medium- to coarse-grained, xenoblastic to sub-idioblastic dolomite preferentially localized along vein boundaries. **81.37 - 81.92** m. As above, except with much higher proportion of silty argillite (with accompanying phenocrysts). Four veins in basal 5 cm of interval with earlier ≤0.3 cm dirty yellow to tan coloured dolomite veinlet (irregular sharp boundaries) cross-cut by two ≤1 cm thick dark tan to medium dirty yellow dolomite + dirty white to light grey quartz veins, discontinuous (pinch out toward edge of core). Fourth vein variable thickness (≤2 cm), at high angle to early veinlet, comprised of dirty white to light grey quartz with highly subordinate dolomite (similar to adjacent veins). Contacts of these three sub-parallel veins range from sharp and straight to ragged, with sedimentary inclusions perpendicular to high angle to core axis.	0319 - 708 0319 - 709 0319 - 710 0319 - 711 0319 - 712 0319 - 713	80.94 81.37 81.92 82.01 82.05 88.82	81.37 81.92 82.01 82.05 82.21 88.87	0.00 0.00 0.00 0.04 0.00 0.46	0.91 0.515 0.325 7.621 0.48 68	218.78 26.98 32.96 16.76 52.07 **2.43%**	333.2 122.9 203.7 181.2 102.9 **7.60%**

81.92 - 82.01 m. Silty argillite with well developed penetrative foliation, similar to above. Discontinuous, ragged segments of dolomite and quartz veins, truncated and offset across foliation.

Structure:
Parasitic folds for approximately 40 cm below contact with granule conglomerate. Very well developed penetrative foliation, refracts through different lithologies.

Faults:
71.89 - 72.00 m - Fault chips in clayey gouge
77.67 - 77.77 m - Broken ground (thin discs ≤2.5 cm) with thin fault zone at approximately 40° to core axis at high angle to bedding.
89.56 - 89.66 m - Interval of broken ground comprised of angular pebbles (to 2.0 cm diameter). Pebbles comprised of fault gouge and chips, very friable, above mineralized vein.

Sulphides in Veins:
88.82 - 88.87 m. Approximately 4.5 cm thick, dirty white to light grey quartz vein with highly subordinate creamy yellow to light orange, medium-grained, xenoblastic dolomite. Approximately 15-20%, medium- to coarse-grained, sub-idioblastic to idioblastic, cubic pyrite, 1-2% galena and 1-2% sphalerite as ≤1.5 cm thick band 1 cm below upper contact. Approximately 5-7% fine- to medium-grained, xenoblastic to sub-idioblastic, medium- orange-brown sphalerite as discrete crystals localized along ≤1.3 cm band approximately 0.5 cm above lower contact. Vein at 73° to core axis. Upper contact sheared with ≤0.5 cm clayey fault gouge.

Sulphides in Sediments:
Approximately 3-5% fine- to coarse-grained (≤0.8 cm), sub-idioblastic to idioblastic, cubic pyrite disseminated throughout interval, locally weakly concentrated in preferred horizons. Coarse-grained, sub-idioblastic pyrite localized along vein contacts. Fine- to medium-grained, sub-idioblastic to idioblastic, cubic pyrite enriched (to 5-7%) on either side of some veins for ≤10 cm. Pyrite crystals generally wrapped by foliation and may have quartz pressure shadows.

80.94 - 81.37 m. Very thin-bedded, interbedded, medium grey silty argillite with subordinate light grey siltstone. Well developed penetrative foliation in silty argillite with approximately 2-5% fine-grained ferroan dolomite phenocrysts in siltstone intervals and 20-25% fine-grained, possible chloritoid in silty argillite. Approximately 1-2% (medium- to) coarse-grained, idioblastic pyrite crystals. Phenocrysts and pyrite wrapped by foliation and have pressure shadows, well developed on either side of phenocrysts, parallel to foliation.

82.01 - 82.05 m. Thin (≤0.8 cm), weakly iron-stained, creamy yellow dolomite + dirty white to light grey quartz vein at 60° to core axis. Vein contains very fine- to fine-grained crystals and/or aggregate masses of possible tetrahedrite (0.5%) and one large xenoblastic to sub-idioblastic crystal of chalcopyrite. Also approximately 7-10% sub-idioblastic pyrite.
82.05 - 82.21 m. Thickly laminated, interlaminated silty argillite and highly subordinate siltstone with approximately 3-5% medium-grained, sub-idioblastic pyrite and approximately 40-60% fine-grained phenocrysts as above.

Alteration:
Fine- to medium-grained, elliptical to eye-shaped porphyroblasts variably developed over interval, dolomite rhombs and possibly chloritoid.

88.94	90.98	89.00	77°	**Lithology: Micritic limestone.** Essentially a calcareous sandstone. Variably calcareous interval comprised of thick laminated to very thin bedded (≤10 cm), medium grey "salt and pepper" textured medium, sandstone to micritic limestone, dependent upon calcite content (strong reaction to dilute HCl) with subordinate silty argillite intervals. **Structure:** Well developed, penetrative foliation in argillite, moderately developed in sandstone / limestone. **Faults:** **89.56 - 89.66** m. Fault zone immediately above quartz vein, probably contains fine-grained, sheared sulphides (dark grey in colour). **Sulphides in Veins:** **89.39 - 89.44** m. Thin (≤1.0 cm thick) massive sulphide vein at 32° to core axis, extends approximately 7 cm to lower truncation by foliation. Very fine-grained mineralization comprised predominantly of medium dirty yellow and black sphalerite along core (≤0.6 cm) with very fine-grained black margins (appears to be very fine-grained pyrite with possible highly subordinate arsenopyrite). Sample hosted by fine- to medium-grained argillaceous sandstone. (Note: Streaks of "Copper Coat" from drilling on core surface, wiped off but Cu contamination probable) **89.66 - 89.77** m. Approximately 11.5 cm thick, dirty white to light grey quartz + very coarse-grained, creamy light orange dolomite vein at 60° to core axis. Vug space with coarse quartz and galena crystal faces. Approximately 20% medium- to coarse-grained (0.3-0.6 cm diameter) pyrite, 1-2% fine-grained galena and 1-2% medium-grained, medium orange sphalerite in ≤2.0 cm thick band at base of vein, possibly separate vein as there is a distinct upper boundary with remainder of vein. Very coarse-grained, intermingled 40% galena, 30% medium orange sphalerite and 30% pyrite as large aggregate mass 5 cm x 2.5 cm at top of vein. Upper contact sheared. **Sulphides in Sediments:** Minor medium-grained, sub-idioblastic pyrite.	0319 - 714 0319 - 715 0319 - 716	89.39 89.56 89.66	89.44 89.66 89.77	0.01 0.00 0.21	37 3.138 286	**1.89%** 1049.16 **10.45%**	**8.47%** 1018.6 **1.31%**
90.98	101.33	91.00 92.00 93.00 94.00 101.33	78° 62° 56° 67° 32°	**Lithology: Siltstones to argillaceous siltstones.** Interlaminated to interbedded, thinly laminated to very thinly bedded, medium grey siltstones to argillaceous siltstones with highly subordinate, weakly iron-stained siltstone to fine-grained sandstones. Interval undergoes transition from very thin bedded siltstone and argillaceous siltstone at top of interval to increasingly deformed, thinly laminated to very thin bedded, argillaceous siltstone to fine-grained sandstone intervals down hole. Therefore, coarse FUS sequence. **Veins:** Approximately 1-2% veins as ≤3.5 cm dirty grey to light grey quartz veinlets to veins with highly subordinate medium orange ferroan dolomite. Contacts vary from sharp, straight to ragged and irregular. **Structure:** Moderately well developed penetrative foliation. Locally have nested parallel folds with angular limbs and structural modification of bedding. **95.00 - 97.00** m - Parasitic folds, continue to 101.00 m. **96.00 - 98.00** m - Bedding offset by S_1. **Sulphides in Sediments:** Approximately 1% medium- to very coarse-grained (≤1.5 cm long dimension), idioblastic, cubic pyrite. **Alteration:** Minor development of chloritoid (?) porphyroblasts near top of interval.							

101.33	112.57	105.50 106.53 108.18 109.26 112.57	12° 14° 15° 15° 22°	**Lithology: Granule Conglomerate.** Varies from coarse-grained sand to medium-grained granule in size with ≤35% medium orange, fine-grained, interstitial ferroan dolomite. Two fine-grained intervals less than 15 cm thick. **Veins:** Approximately 3-10% quartz veining, as thin (0.3 cm) veinlets to ≤6 cm veins comprised of milky white to dirty white to light grey quartz with highly subordinate medium orange ferroan dolomite. Dolomite generally localized along vein boundaries, particularly in thin veinlets with a minor proportion internally within veins. Vein contacts diffuse over ≤0.2 cm (where no bounding dolomite) to sharp, generally straight. Interval from 110.30 - 110.84 m dominated by milky white quartz vein. **Structure:** Broad open folds evident between 105.40 to 106.60 m and 108.18 - 109.26 m at contact between granule conglomerate and thinly to thickly laminated siltstone. Due to S_0/S_1 relationships, there must be another fold in the granule conglomerate between 106.60 - 108.18 m. S_1 generally not apparent in this interval. **Sulphides in Sediments:** Approximately 1-3% fine- to medium-grained, sub-idioblastic to idioblastic, cubic pyrite over interval.							
112.57	141.15	113.50 116.30 117.00 118.00 121.98 124.81 127.00 129.00 130.00 131.00 132.00 133.00 134.00 135.00 136.00 138.00 139.00 140.00 141.00	36° 52° 25° 20° 44° 35° 35° 15° 65° 42° 32° 33° 28° 37° 40° 28° 28° 40° 45°	**Lithology: Siltstone to silty argillite.** Sub-equal argillaceous siltstone - silty argillite and thick laminated to very thin bedded siltstone. Probable fining upward sequence from 124.81 to top of interval. Grades upward from light to medium grey, medium-grained sandstone through interbedded / laminated, medium to dark grey siltstone and argillaceous siltstone to predominantly dark grey, argillaceous siltstone to silty argillite with subordinate 3-5 cm thick coarser intervals of siltstone with thin argillaceous siltstone laminae. Remainder of interval to base comprised of sub-equal intervals of thin laminated to very thin bedded, alternating medium and dark grey siltstone and intervals of dark grey silty argillite. Upper contact sharp, possibly scoured by overlying coarse sandstone / granule conglomerate. **122.17 - 122.40** m - Sediments as described above. **Veins:** Veining thicker and more common in upper half of interval, less common and thinner in lower half. **113.68 - 116.17** m - Upper contact at approximately 45° to core axis. Highly angular sedimentary fragments to 114.30 m (in situ breccia) with long dimension of fragments oriented sub-parallel to upper contact / foliation. Vein comprised predominantly of milky white, intergrown quartz with highly subordinate, fine-grained, yellow -light orange dolomite / siderite in linear aggregate masses. Approximately 1-2% sub-idioblastic, cubic pyrite crystals associated with sedimentary fragments / inclusions. Approximately 1-3% veining throughout interval in at least three phases. One phase is synchronous with late development of S_1, comprised of thin, dirty grey to white, predominantly quartz veins which show offset along / across S_1 surfaces. Generally have planar, sub-parallel vein margins and less than 1 cm thick. Another phase has very ragged margins with marked thickness changes, both controlled by lithology (creation of local void spaces) and by deformation. Contacts generally do not correspond from one margin to the other, ranging from planar over short intervals (<3 cm) to highly irregular, with abundant apophyses into host sediments. This generation of veins is probably associated with lenses and short discontinuous quartz fish sub-parallel to, and along, the foliation where S_1 is well developed. Therefore, interpreted to be syn-S_1. The final phase are slightly thicker veins, generally ≤15 cm thick (although may be thicker) with sharp, parallel and planar contacts with host sediments. Comprised predominantly of milky white quartz with subordinate yellow to light orange dolomite (± siderite) to 20%, both as coarse, intergrown crystals. Local void space (open growth filling) indicated by well developed single quartz terminations. Dolomite generally localized along contacts. Veins cross-cut both S_0 and S_1, therefore, interpreted to be post-S_1. This phase may be slightly protracted with slightly to moderately irregular thin, yellow to orange dolomite veinlets representing earlier veins in this phase, possibly occurring late in S_1 and continuing after S_1 complete (leaving open space).	0319 - 717 0319 - 718 0319 - 719	122.12 122.17 122.40	122.17 122.40 122.67				

113.68 - 126.18 m - Veining more abundant, possibly associated with fine-grained, fining upward sequence at top of fine-grained interval with medium-grained sand at base. Veins generally comprised of second type of veins (above) with irregular, ragged margins and foliation parallel lenses and fish, comprising approximately 5-7% of interval, subsequently cross-cut by approximately 5% third (post S_1) veins.

117.25 - 117.29 m - Approximately 3.5 cm vein at approximately 50° to core axis, comprised of 0.5 - 0.75 cm thick, light green to yellow-orange dolomite margins. Margins sub-parallel and curvilinear.

118.16 - 118.29 m - Three stacked quartz veins, 1st - 118.16 - 118.21 m - 3 cm thick at 45° to core axis, 2nd - wedge-shaped from 1-3 cm, probably coalesces with upper vein just beyond core margins, 3rd between 0.5 - 1.5 cm thick. Lower two veins contain up to 20% medium-grained dolomite while upper vein predominantly quartz with ≤5% dolomite. Contacts sharp.

118.50 - 118.61 m - Milky white, predominantly quartz vein with ragged upper margin at approximately 40° to core axis, lower contact broken.

121.79 - 121.82 m - Approximately 2.5 cm quartz vein at approximately 55° to core axis. Cross-cuts S_0 and S_1 at shallow angle, therefore contacts slightly irregular.

122.12 - 122.17 m - 3 cm thick quartz vein at high angle to S_0 and S_1 (as well as vein above). Coarse-grained, intergrown, iron-stained (or orange-coloured quartz - due to impurities) predominates in vein with subordinate dirty white to light grey quartz. Vein contains sub-parallel, slightly irregular. Host sediments comprised of

122.74 - 123.35 m - 50-60% milky white quartz veins. Open space filling white quartz veins with open space filling texture (i.e. large quartz crystals with single terminations) at a variety of angles to S_0, hosted by medium-grained, medium grey sandstone (at base of fining upward succession). May be vein fill of in situ brecciation as more competent interval broke / fractured during deformation. Veins range between 0.5 - 7.0 cm thick, with 3, 3-7 cm thick veins at 30° to core axis, cross-cutting earlier 0.5 - 1.0 cm thick veins at approximately 10°-15° to core axis at high angle to later veins.

123.90 - 124.81 m - Approximately 5-10% veins, with 3.5 cm thick vein at 30° to core axis at top of folded interval of argillaceous medium-grained sandstone. Remainder of vein between 0.2 - 1.0 cm thick, comprised of earlier dolomite dominant veins at shallow to moderate angle to core axis, subsequently cross-cut by later milky white quartz veins. All veins cross-cut both S_0 and S_1, so late- to post S_1 deformation event. Interval also relatively enriched in pyrite, ≤15% over 10 cm, ranging from 0.1 - 0.7 cm diameter, sub-idioblastic crystals to ≤3 cm coarse aggregate masses, associated with medium-grained sandstone with yellow to light orange interstitial material (dolomite and/or iron-staining).

124.94 - 124.98 m - 2.5 cm thick, milky white quartz vein with coarse-grained, light orange dolomite crystals along margin, at 50° to core axis.

125.53 - 126.18 m - Early (syn- to post-S_1), milky white quartz vein with fine- to medium-grained, light orange dolomite crystals within dirty grey quartz zones within milky white quartz veins. Margins slightly irregular, curvilinear to locally ragged. Later milky white quartz veins with subordinate medium yellow, coarse-grained dolomite crystals, generally localized along margins, cross-cut earlier veins and host sediments. Open space-filling texture.

127.66 - 127.72 m - 4 cm thick, dirty to milky white quartz vein with approximately 40-50% coarse-grained, medium yellow to light orange dolomite crystals at approximately 45° to core axis. Sharp planar to slightly ragged margins.

129.87 - 129.92 m - Dirty white quartz vein approximately 5 cm thick at approximately 75° to core axis, cross-cuts folded S_0, and is slightly deformed itself, probably due to late stage compression (tightening of folds). Sharp planar contacts.

130.43 - 130.45 m - 1.5 cm thick, dirty white quartz vein with highly subordinate yellow to light orange dolomite at 63° to core axis. Sharp, essentially planar contacts sub-parallel to S_0.

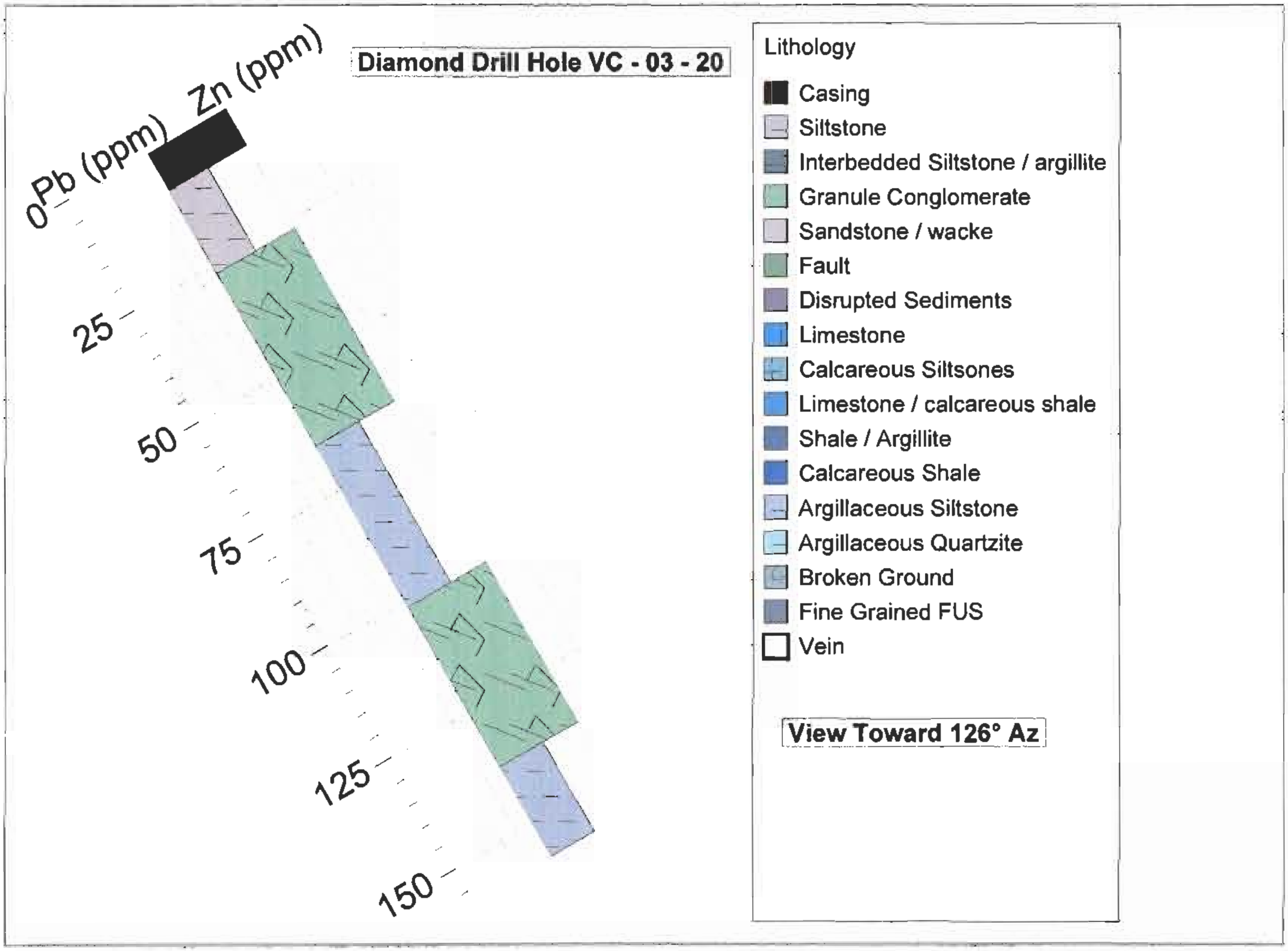
130.70 - 130.82 m - Dirty white quartz vein with upper contact at 55° and lower at approximately 90° to core axis. Comprised of approximately 25% medium- to coarse-grained dolomite crystals localized along contacts (particularly upper contact) and as fine- to medium-grained masses within vein.

131.30 - 131.38 m - Milky white quartz vein comprised of coarse-grained, intergrown quartz crystals with highly subordinate (10-15%) individual, medium- to coarse-grained dolomite crystals disseminated throughout vein. Contacts sharp, curvilinear to planar and cross-cut S_0 and S_1 at high angle. Vein at 35° to core axis.

132.26 - 132.30 m - 3 cm milky white to dirty white quartz vein with approximately 7-10% medium orange, sub-idioblastic, medium-grained dolomite as aggregate masses along contact and as subordinate masses within vein. Vein at 65°-80° to core axis. Boundaries curvilinear to locally ragged.

				135.95 - 136.10 m - Dirty white quartz vein with approximately 25-30% medium dirty orange, sub-idioblastic dolomite as aggregate masses in patches along contact and within vein. Vein thins from 2.5 to 1 cm, at approximately 30° to core axis with curvilinear to irregular margins. **138.92 - 138.96** m - Approximately 3.2 cm thick milky white quartz vein with approximately 7-10% light orange dolomite crystals (sub-idioblastic) disseminated throughout vein and as aggregate patches along contacts. Vein at approximately 55° to core axis. Open space filling textures. **140.81 - 140.87** m - Dirty white quartz vein, comprised of fine- to medium-grained, intergrown quartz crystals and highly subordinate light to medium orange, sub-idioblastic dolomite. Upper contact at 75° to core axis, lower at 35° to core axis. **Structure:** **115.54 - 115.76** m - Folded sediments (argillaceous siltstone). **119.00 - 121.00** m - S_0 strongly overprinted / disrupted by S_1. **123.90 - 124.81** m - Interval folded. Intervals where S_1 is sub-parallel to S_0 are sheared, with S_0 disrupted by, and mobilized into, S_1, relatively common throughout interval. Intervals with interbedded lithologies (different rheology) characterized by refracting foliation. Foliation locally offsets bedding in intervals in which S_1 at high angle to bedding (i.e. 132.58 - 133.0 m), resulting in corrugated appearance. **132.50 - 133.0** m - Cored a series of parasitic folds. Angular, anticlinal closure between 132.50 - 132.63 m with 0.5 - 1.0 cm amplitude parasitic folds developed on lower limb (upper limb sheared off); angular syncline with considerable thickening in hinge zone, upper limb sheared with only low amplitude warps as parasitic folds, lower limb has corrugated appearance with 0.25 - 0.5 cm amplitude parasitic folds. Foliation refracts from lower limb of synclinal closure into lower anticlinal closure which has broad, rounded closure. Foliation at high angle to upper limb of anticlinal closure and at shallow angle to lower limb. Sheared parasitic folds evident elsewhere throughout interval. **Faults:** **128.04** m - Fault at 40° to core axis with powdery gouge. **Sulphides in Veins:** **122.40 - 122.67** m - Sediments as described above, cross-cut by three thin mineralized veins, between 0.3 - 0.6 cm thick. Upper vein at 42° to core axis with parallel margins. Vein has low amplitude, open warps and cross-cuts S_0 and S_1 at high angle. Vein contains approximately 20% sulphides, as medium-grained sphalerite (orange with black speckles), sub-equal, medium-grained, idioblastic, cubic pyrite and subordinate, medium-grained galena. Middle vein at 22° to core axis with elongated, rod-like pyrite and subordinate, medium- to coarse-grained galena. Lower vein at 50° to core axis with opposite sense (i.e. high angle) to upper veins. Approximately 30% sulphides, predominantly as pyrite, highly subordinate galena. Pyrite to 25-30% in zones at high angle to veins (i.e. sub-parallel to S_0 and S_1) and along vein margins (in both vein and sediments). **Sulphides in Sediments:** Fine- to medium-grained pyrite disseminated throughout interval as thin, elongated rods to 0.4 cm in length and sub-idioblastic cubic crystals. **Alteration:** **112.57 - 113.68** m - Fine-grained sediments between coarse-grained interval and top of vein dark grey to black (possibly chloritized).							
141.15	148.70	143.20 144.00 145.00 147.00	45° 40° 65° 60°	**<u>Lithology: Predominantly medium grey siltstone.</u>** Lithology varies from short intervals (≤1 m) of interbedded to interlaminated, thin laminated to very thin bedded, medium and dark grey siltstone with dark grey to black argillite to relatively homogeneous siltstone to fine-grained silty sandstone. Upper 1.7 m weakly to moderately iron-stained, light grey siltstone. Interbedded to interlaminated siltstones and argillite between 146.30 - 148.70 m.							

				Veins: Approximately 25-30% quartz veins and subordinate dolomite veins. Quartz veins predominantly as S_0 and/or S_1 parallel veins, lenses and fish with planar to ragged, locally diffuse margins, between 0.1 - 6 cm thick. Dolomite veins slightly later and cross-cut earlier quartz veins, S_0 and S_1, with sharp, irregular margins. **145.24 - 145.34** m - Two late, milky white quartz veins with highly subordinate, medium-grained dolomite crystals. Upper vein 4 cm thick at approximately 70° to core axis. Lower vein 3.5 cm thick at approximately 65° to core axis. Veins have opposing senses and so either coalesce or cross-cut one another beyond margin of core. Approximately 7-10% pyrite as fine- to medium- (to coarse-) grained (0.05 - 0.5 cm diameter), sub-idioblastic to idioblastic crystals on either side of veins for ≤40 cm. **Structure:** Well developed foliation in argillaceous intervals, moderately well developed in other intervals. **Sulphides In Sediments:** Pyrite (≤2%) present as 0.3 - 2.0 cm, sub-idioblastic to idioblastic crystals and aggregate masses disseminated throughout interval.							
148.70	149.63			Lithology: Pebble Conglomerate. Mottled light grey, matrix-supported pebble (≤1.0 cm diameter) conglomerate comprised of elongated rod-like siltstone fragments up to 1.5 cm in length and ≤0.3 cm thick with rounded ends, decreasing in abundance over upper 50 cm of interval. Highly subordinate angular fragments. Lowermost 40 cm has thin interbeds (1-3 cm thick) of medium grey siltstone. **Veins:** Approximately 15-20%, 0.5 - 7.0 cm thick, dirty white to milky white quartz veins with planar to slightly irregular, diffuse margins.							
149.65				**End of Hole**							


Diamond Drill Hole VC - 03 - 20
Pb (ppm)
Zn (ppm)
0
25
50
75
100
125
150
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View Toward 126° Az

DYNAMIC EXPLORATION LTD.

HOLE NO.	VC - 03 - 20

DRILL LOG: DIAMOND DRILL CORE

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:	AV - 11		
LOCATION - GRID NAME:			
EASTING:	505183	NORTHING:	5640716
SECTION:		ELEV:	
AZIM:	216°	LENGTH:	157.26
DIP:	-60°	CASING LEFT?:	No
CORE SIZE:		NQ	
CORE STORAGE:	Vermont Creek		

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
0		54°	144.77		54°

DRILLING CO:	F.B. Drilling
STARTED:	16-Sep-03
COMPLETED:	18-Sep-03
PURPOSE	
CORE RECOVERY:	
LOGGED BY:	Rick Walker
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	

Drill Hole VC - 03 - 20

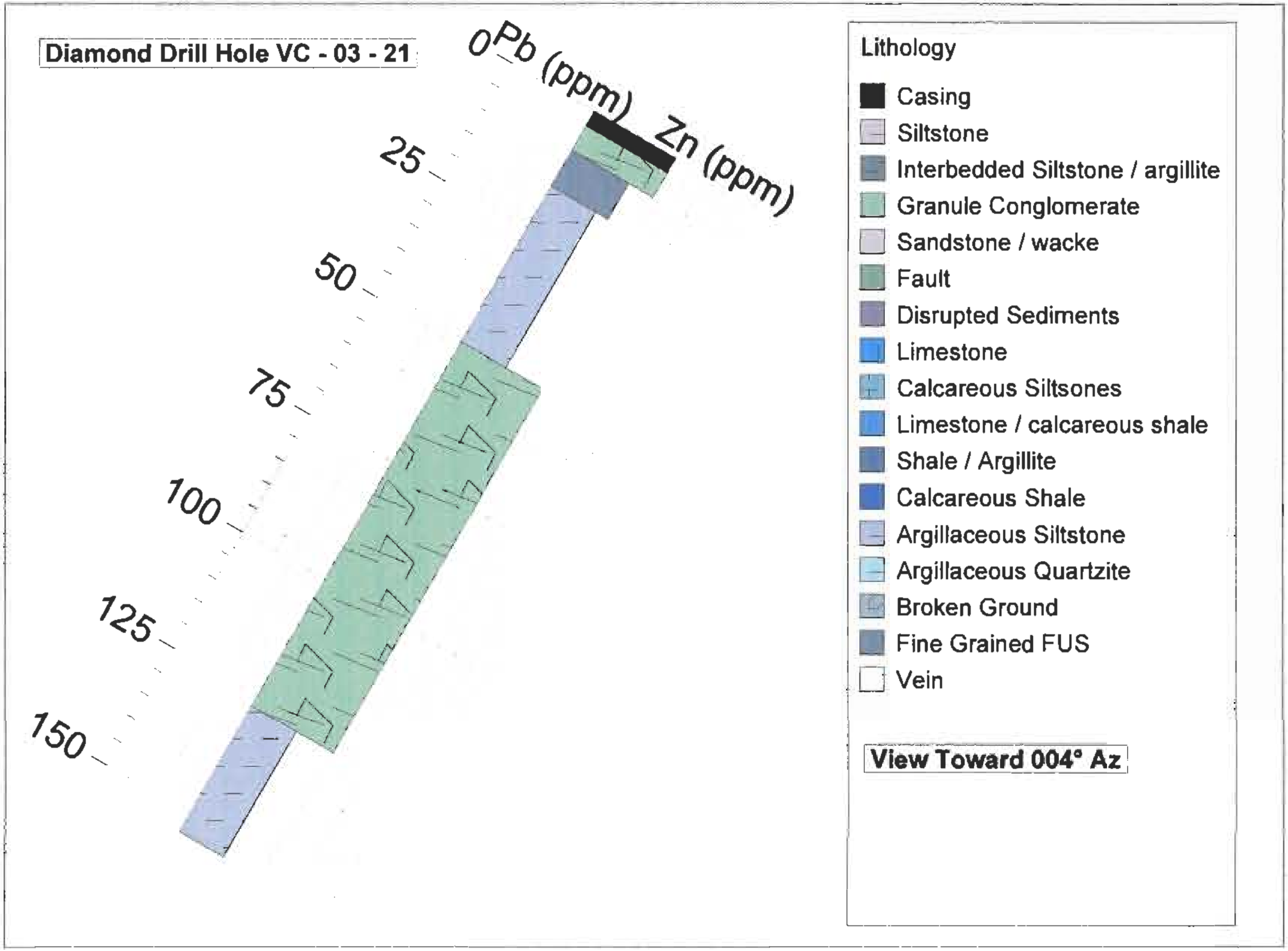
From m	To m	Core Angle m	Deg	Description	Sample Number	From m	To m	Gold gms/T	Silver gms/T	Lead ppm	Zinc ppm
0.00	8.22			<u>Casing</u>							
8.22	26.87	9.00 10.00 11.00 12.00 13.00 14.00 15.00 16.00 17.00 18.00 19.00 20.00 21.00 22.00 23.00 24.00 25.00 26.00	40° 31° 38° 36° 35° 33° 37° 28° 27° 39° 35° 46° 42° 48° 45° 42° 43°	**<u>Lithology: Siltstone to argillaceous siltstone.</u>** Interbedded, very thin laminated to thin bedded, alternating medium and light grey siltstone to argillaceous siltstone. Graded bedding indicates right-way-up. Lower 3-4 m (from approximately 23.0 m to base of interval) shows evidence of fining upward. Thicker intervals of graded bedding together with high proportion of coarse-grained, weakly iron-stained silty wacke to argillaceous sandstone toward base. Base gradational, chosen at fine-grained top of lowermost recognizable FUS above underlying coarse-grained interval. **Veins:** Veins consist predominantly of ≤1.0 cm thick, dirty white to light grey quartz veins with subordinate medium-orange dolomite sub-parallel to shallow angle to S_0 and/or S_1. Contacts planar and irregular to curvilinear with low amplitude and frequency (pinch and swell texture). Between 19.00 and 21.00 m are several ≤2.0 cm thick, fine-grained, medium orange dolomite and dolomite + quartz veins at high angle to S_0 and S_1, moderate angle to core axis (42°). Brittle to brittle - ductile deformation (slight thickening proximal to offset across S_0 / S_1). **Structure:** Foliation weakly to (locally) moderately well developed. S_1 sub-parallel to shallow angle to bedding, locally offsets / modifies S_0 to form composite $S_0 + S_1$ surface. **Faults:** **17.52 - 17.75** m - Intensely foliated interval with dominant to high proportion of clayey gouge. Upper contact at 27° to core axis. Fine-grained ankerite comprises approximately 15-20% of silty argillite interval for approximately 10 cm above fault. Not noted elsewhere in interval. **19.44** m - ≤0.5 cm thick cataclastic zone comprised of chips and powdery gouge at 35° to core axis. **22.00** m - Slip plane with powdery gouge on surfaces, oriented at 43° to core axis. **22.34** m - Crush zone, ≤1.0 cm thick, comprised of clayey gouge, oriented at 35° to core axis. **22.98** m - Crush zone, ≤0.3 cm thick, comprised of clayey gouge, oriented at 50° to core axis. **23.59** m - Crush zone, ≤0.5 cm thick, comprised of clayey gouge, oriented at 50° to core axis. **27.98** m - Slip surfaces covered with powdery, clayey gouge, oriented at 34° to core axis. Slickensides oriented at approximately 20° to long axis of ellipse of core break. **29.07** m - Crush and slip surface in coarse-grained sediments immediately above vein, comprised of flaky chips with highly subordinate powdery gouge, oriented at 20° to core axis. **29.58** m - Crush and slip surface in coarse-grained sediments immediately underlying the vein, comprised of powdery gouge covered surfaces oriented at approximately 45° to core axis. Slickensides approximately sub-parallel to ellipse. **Sulphides in Veins:** Pyrite slightly enriched (to minor amounts) in veins. **Sulphides in Sediments:** Trace xenoblastic (to sub-idioblastic) pyrite disseminated in sediments.							

26.87	65.52	27.00 29.00 32.35 33.00 35.00 35.70 36.54 49.00 50.00 51.10 53.00 54.00 55.70 57.25 58.00 60.00 61.80 65.00	40° 21° 62° 57° 33° 50° 43° 45° 45° 40° 35° 38° 48° 57° 50° 52° 45° 60°	**Lithology: Coarse lithic sandstone to medium-grained granule conglomerate.** Sediments generally coarsen downward through increasing proportion of medium- to coarse-grained lithic sandstone to fine-grained pebble conglomerate, and thicker intervals of FUS. Several pulses of FUS, from approximately 48.74 to top of interval, fining progressively upward from matrix-supported, quartz-rich, coarse-grained granule conglomerate to silty argillites. Many of the shorter intervals with well defined right-way-up, graded beds. This interval is interpreted to have been weakly to moderately silicified. The interval from 48.74 m to the base of the interval comprised of interbedded lithic sandstone to fine-grained granule conglomerate, and interbedded to interlaminated, thin laminated to very thin bedded, alternating light and dark grey siltstone with silty argillite to argillite up to 1.5 m thick. Several right-way-up graded beds were noted, however, with several relatively significant fault and/or shear zones. It could not be determined if there were any facing reversals. **Veins:** In general, interval comprised of 1-3%, predominantly quartz with or without moderately to highly subordinate, light yellow to medium orange dolomite. Veins range from veinlets (0.4 cm) to veins (≤4.0 cm thick) with planar to slightly irregular margins. Where hosted by siltstone to argillaceous sediments, veins less abundant but, where present, have sharp margins. Veins more abundant in coarse-grained, quartz dominant sediments but have more irregular to diffuse margins (except where moderate to high proportion of interstitial dolomite). Veins generally not deformed by foliation but several have localized and/or been incorporated into fault zones, suggesting faulting is late stage or a separate phase of deformation (tightening of earlier folds). **24.08 - 24.30** m - Light grey quartz with highly subordinate, medium orange dolomite lenses and masses. Upper contact sharp at 10°-15° to core axis against coarse lithic sandstone whereas base is diffuse and gradational (over 3.0 cm) into coarse-grained granule to fine-grained quartz pebble dominant conglomerate with dolomite, quartz and sericite in interstices. **37.34 - 37.90** m - Quartz flooding into lithic sandstone. Apparently layered series of dirty grey to milky white quartz with highly subordinate, fine-grained dolomite. Layering may be controlled by S_0 and/or coarse spaced S_1. Fine to medium-grained sericite along layering. Trace medium-grained, xenoblastic to sub-idioblastic pyrite and medium teal green sericite (to fuchsite). Medium yellow (to light orange) dolomite dominant bands ranging between 0.4 - 1.0 cm thick over upper 3.0 cm of quartz vein. **55.57 - 56.24** m - Five separate, moderately well defined, dirty white quartz and highly to moderately subordinate, medium orange dolomite patches to aggregate masses. Boundaries range from planar (at 52° to core axis) to moderately irregular. Patches of medium green chlorite (interpreted to be altered silty argillite to argillite inclusions) comprise approximately 20% of each vein. Definition of quartz veins diminishes toward base of interval, with lowermost 20 cm comprised of ragged quartz lenses and patches with apparent in situ brecciation of host argillites to silty argillite. Thin intervals (≤2.0 cm), patches and fragments weakly to moderately chloritized, together with inclusions within quartz veins. **Structure:** Consistent moderate (locally high) strain gradient, which has been accommodated by locally faulted intervals and re-orientation (dislocation) of S_0 and S_1. **Faults:** **50.23** m - 2.0 cm thick crush zone comprised of clayey gouge and fault chips oriented sub-parallel to S_0 at 50° to core axis. **51.61** m - Approximately 2.0 cm thick friable interval in which phyllitic argillite has lost cohesion; sub-parallel to S_0, sandwiched between two coarse sand to fine-grained granule conglomerate intervals. **56.38 - 56.64** m - Shear Zone. Semi-brittle failure with development of cataclastic clayey gouge and fault chips in siltstone (?) underlying 2.0 cm thick, light grey quartz vein. Fine-grained sediments on either side have moderately to strongly developed foliation, increasing in intensity into interval. Intensely developed foliation / very thin laminated laminae appear to define fault zone at 35° to core axis. **58.0 - 58.17** m - 17 cm thick cataclastic crush zone comprised of angular fault fragments (sand to granule sized) ranging from equidimensional to chip-shaped, suspended in a clayey gouge. Upper contact sharp at 50° to core axis. Lower contact gradational.							

				60.07 - 60.23 m - Cataclastic zone developed within medium- to coarse-grained lithic sandstone, comprised of approximately 3.5 - 4.0 cm thick angular fault fragments and chips (as above) in clayey gouge. Upper contact at 50° to core axis, decreasing strain gradient from base of cataclastic zone to base of interval. **61.65 - 61.71** m - Well defined cataclastic interval, 4.0 cm thick at approximately 55° to core axis. Interval comprised of angular, coarse-grained sand to fine granule sized fragments and chips in clayey gouge. **Sulphides in Sediments:** Pyrite present in trace to minor amounts. **Alteration:** **48.74 - 65.52** m - Interval has been variably chloritized, resulting in a weak to moderate greenish hue in the sediments and moderate to strongly chloritized intervals within, and proximal to, veins (i.e. 50.48 - 50.73 m), as well as in inclusions within veins.							
65.52	101.43	66.00 67.00 68.00 69.00 70.00 71.00 72.00 73.00 74.00 75.00 76.00 77.00 78.00 79.00 80.00 81.00 82.00 83.00 84.00 86.00 87.00 91.00 92.00 93.40 95.00 96.00 97.00 98.00 99.00 100.00 101.00	48° 55° 45° 48° 55° 52° 47° 39° 40° 47° 50° 35° 36° 36° 42° 40° 41° 4520 43° 43° 33° 43° 40° 40° 40° 37° 38° 43° 43° 48° 47°	**<u>Lithology: Medium to dark grey silty argillite to argillaceous siltstone.</u>** Interval darkens downward from upper contact to approximately 82 m, interpreted to arise from a steady decrease in the amount of coarse material (i.e. siltstone) downhole (coarsening upward, culminating in coarse sediments in previous interval). Bedding thickness of the siltstones decreases, from thin bedded downhole to thin laminated, with coincident increase in thickness of fine-grained intervals. Medium to dark grey, fine-grained silty argillite to argillaceous siltstone dominate to approximately 93 m. From approximately 93 m to base of interval, coarser sediments (i.e. siltstone) become progressively more abundant, both as more abundant and thicker intervals of right-way-up, graded sequences, grading from siltstone to silty argillite to argillaceous siltstone. **Veins:** Minor development of veins, both pre- and post- development of foliation. A small proportion of veins have been offset across the foliation and/or have tails originating off vein into foliation, whereas most were post foliation (planar boundaries, not visibly affected by foliation. Late veins comprised of dirty white quartz ± subordinate medium orange dolomite along margins. Minor proportion of veins are mono-mineralic dolomite. Veins have planar margins, ≤1.5 cm thick at high angle to S_0 and S_1. Veins associated with fault zones have trace to minor dolomite. **Structure:** Foliation moderately (to locally well) developed throughout interval. **Faults:** **73.65 - 73.93** m - Interval of broken rock in which foliation is locally well to intensely developed, resulting in a loss of cohesion in the rock at 60° to core axis. Thin quartz vein has been broken and ground into cataclastic fragments. **77.20 - 77.42** m - Several ragged, dirty white quartz veins have been dislocated and offset as a result of strong to intense development of foliation. Veins include medium green, chloritized fragments (inclusions). Base of interval comprised of quartz vein truncated by fault offset with development of sand sized cataclasite. **88.42 - 88.52** m - 10 cm zone of strongly to intensely developed foliation associated with ragged quartz veins, truncated and offset across foliation. Chloritized argillite to silty argillite inclusions within veins and associated with fault (shear) zone at centre of interval. **Sulphides in Sediments:** **65.62 - 73.65** m - Pyrite (≤2%) present as medium-, to locally, very coarse-grained, sub-idioblastic to idioblastic, cubic crystals. Proportion of pyrite decreases downhole over interval, not noted below 73.65 except as localized enrichments (to 5% over 10 cm) and as rare to trace amounts of disseminated crystals.							

101.43	137.25	102.00 103.00 104.00 105.00 106.80 109.50 112.40 114.00 115.00 117.00 118.00 125.00 126.00 129.00 131.00 132.35 135.46	44° 41° 33° 38° 38° 38° 43° 50° 53° 45° 36° 44° 40° 40° 37° 44° 44°	<u>**Lithology: Granule Conglomerate.**</u> Granule conglomerate dominated sequence comprised of fining upward sequences from several cm to ≤2 m thick, ranging from pebble conglomerate at base to argillaceous siltstone at top. Bases generally massive, matrix-supported (to locally clast-supported) with sharp basal scours. Tops range from very thinly bedded to thinly laminated, with thickness of individual layers decreasing upward (i.e. from very thin bedded to thinly laminated). Top of interval picked at top of first thick FUS dominated by granule conglomerate. Transitional contact from previous interval from approximately 98.50 m to 101.43 m. From top of interval downward, thickness and proportion of fine-grained intervals decreases rapidly. Coarse intervals of granule conglomerate have interstitial quartz ± dolomite. Those intervals having a quartz-rich matrix have been variably silicified, resulting in diffuse contacts for the clasts. Intervals having interstitial dolomite (or other iron carbonates) have better defined clast margins relative to the matrix. **Veins:** Approximately 1-2% veining in interval, as thin (≤2 cm, average ≤0.75 cm) quartz dominant (± orange dolomite) at shallow to high angle to bedding (no apparent preferred orientation). Veins generally have parallel planar contacts, subordinate proportion have been pulled apart and offset (with slight rotation). **Structure:** Due to the coarser nature of this interval, foliation poorly developed overall, moderately to well developed in thin, fine-grained intervals sub-parallel to S_0. **Alteration:** **108.80 - 109.50** m - One interval of coarse-grained sand to fine-grained granule conglomerate has medium green colour, possibly due to chloritization of sheet silicates.							
137.25	157.26	137.30 138.00 140.00 141.00 142.00 143.00 144.00 145.00 146.00 147.00 148.00 149.10 150.00 151.00 152.00 153.00 154.00 155.00 156.00 157.00	47° 47° 47° 38° 55° 55° 47° 17° 65° 38° 43° 10° 48° 27° 55° 73° 40° 44° 48° 50°	<u>**Lithology: Thin laminated to very thin bedded siltstone to argillaceous siltstone.**</u> Upper contact sharp, at base of fine-grained pebble conglomerate. Interval comprised of thin platey intervals of predominantly medium grey siltstone with thin to thick laminae of light grey silty wacke to medium-grained sand. **Veins:** Minor veining over interval, ranging between 0.5-8.0 cm, most of which have been broken, offset, rotated and compressed (vein fragments overlap one another). **Structure:** **Faults:** **138.39 - 139.55** m - Cataclastic crush and slip planes comprise 60-70% of interval, with associated gouge and chips, associated with chloritization of sediments. Fault crush and slip zones parallel to sub-parallel to S_0. **142.15 - 142.40** m - Cataclastic crush zone with gouge and chips to 142.35 m. Intensely to strongly foliated to 142.20 m. **147.62 - 147.82** m - Cataclastic crush zone intermixed with intensely developed foliation over interval, parallel to sub-parallel to S_0. **148.70 - 148.80** m - As above, sub-parallel to moderate angle to S_0. **151.10 - 151.80** m - Moderately foliated interval with loss of cohesion in core → friable, at moderate angle to S_0. **152.56 - 153.10** m - Folded sediments at shallow angle to core axis at top (≈15°-20°) and moderate to steep (60°) at base. Crush zone between 152.68 - 152.72 m, associated with abrupt change in bedding orientation. Sediments over interval friable. Vein at 152.77 m associated with offset of 2.0 cm in bedding. Vein broken, rotated and overlaps → compression. **153.34 - 153.37** m - Cataclastic crush zone at approximately 20° to core axis, parallel to S_0 below fault; 40° to S_0 above fault.							

				Sulphides in Sediments: Minor pyrite over interval as fine- to medium-grained, idioblastic, cubic crystals. Local enrichments over 0.5 m of up to 1%, sub-idioblastic to idioblastic, medium- (to coarse-) grained, cubic pyrite. **Alteration:** **137.25 - 140.00, 143.10 - 143.20** and **148.70 - 149.20** m - Moderately chloritized, medium to dark green colour in matrix.								
157.26				**End of Hole**								


Diamond Drill Hole VC - 03 - 21
0
Pb (ppm)
Zn (ppm)
25
50
75
100
125
150
Lithology
Casing
Siltstone
Interbedded Siltstone / argillite
Granule Conglomerate
Sandstone / wacke
Fault
Disrupted Sediments
Limestone
Calcareous Siltsones
Limestone / calcareous shale
Shale / Argillite
Calcareous Shale
Argillaceous Siltstone
Argillaceous Quartzite
Broken Ground
Fine Grained FUS
Vein
View Toward 004° Az

DYNAMIC EXPLORATION LTD.

DRILL LOG: DIAMOND DRILL CORE

HOLE NO.	VC - 03 - 21

CLAIM BLOCK CODE:			
NTS:	82 K15	TRIM Map:	
CLAIM NAME:		DAV - 11	
LOCATION - GRID NAME:			
EASTING:	505605	NORTHING:	5640225
SECTION:		ELEV:	
AZIM:	274°	LENGTH:	153.91
DIP:	-60°	CASING LEFT?:	No
CORE SIZE:		NQ	
CORE STORAGE:		Vermont Creek	

SURVEY

DEPTH	AZIM	DIP	DEPTH	AZIM.	DIP
0		57.25°			

DRILLING CO:	F.B. Drilling
STARTED:	18-Sep-03
COMPLETED:	19-Sep-03
PURPOSE	
CORE RECOVERY:	
LOGGED BY:	Rick Walker
DATE LOGGED:	
ASSAYED BY:	Acme Analytical
LAB REPORT NOS.:	

Drill Hole VC - 03 - 21

From m	To m	Core Angle m	Core Angle Deg	Description	Sample Number	From m	To m	Gold gms/T	Silver gms/T	Lead ppm	Zinc ppm
0.00	3.05			Casing							
3.05	8.40			**Lithology: Coarse-grained sandstone to fine-grained pebble conglomerate.** Broken, oxidized coarse sandstone to fine granule conglomerate. Interval consists of sub-equal proportions of medium grey, coarse-grained sandstone to fine-grained granule conglomerate and probable in situ breccia, comprised of coarse-grained granule to medium-grained pebble sized, angular clasts / fragments (largely flat siltstone chips) in a coarse-grained sandy matrix. Intact intervals range between 2.0 - 30 cm. Fragments oxidized completely (small fragments) or in a rind up to 2 cm in larger fragments. **Sulphides In Sediments:** Pyrite to 3% locally as fine- to medium-grained, cubic crystals.							
8.40	16.05	9.00 10.00 11.00 12.40 14.00 16.00	15° 25° 30° 35° 46° 23°	**Lithology: Sandstone to silty argillite.** Fining Upward Sequence, grading from fine- to medium-grained, medium green-grey sandstone to dark grey silty argillite. Bedding thickness varies from thin bedded in the coarser lithologies to thick laminated to very thin bedded in the silty argillite to siltstone. Note: coarse interval between 11.0 - 16.30 m may correlate to material from 3.05 - ≈8.00 m. **Veins:** Minor quartz veining in silty argillites and siltstones, moderately intense in underlying sandstones. Approximately 30-35% dirty white to light grey, 0.2 - 7.0 cm thick, predominantly quartz veins with subordinate medium orange dolomite. Veins near top of coarse interval disrupted, offset by S_1. **Structure:** The upper portion of the interval to 10.58 m appears to be overturned. A truncated tight fold is evident at 10.58 m in which the lower limb has been truncated across a slip plane at shallow angle to S_0 (sub-parallel to average S_0 orientation) and at moderate angle to S_1. Overturned graded bedding is evident in very thin bedded, alternating light and dark grey siltstones (i.e. 9.00 - 9.17 m). Planar to minor deformation witin coarse interval - function of rheological contrast. **Alteration:** Coarse-grained interval silicified, interpreted due to light green-grey colour (development of chlorite in sheet silicates) and level of quartz ± dolomite veining).							
16.05	49.40	17.00 18.00 19.00 20.00 21.00 22.00 23.00 24.20 25.00 26.00	26° 32° 30° 30° 35° 19° 27° 39° 50° 48°	**Lithology: siltstones to argillaceous siltstones.** Medium-grey coloured, very thin to thin bedded. Upper contact relatively sharp against green-grey sandstone. One thin interval of sandstone within upper 1 cm of interval. Way-up indicators not clear. Slightly thicker intervals of medium- to coarse-grained sandstone evident from 43.60 to base of interval. Becomes slightly more abundant and thicker (to 40 cm) down-hole. Basal 40 cm of interval comprised of dark grey argillaceous siltstone with interbedded medium grey, medium-grained sandstone (wacke). **Veins:** Minor medium to dark orange dolomite ± dirty white quartz veinlets (0.1 - 0.2 cm thick) with both slightly ragged and planar margins between 27.0 - 38.0 m.							

		27.00 28.00 29.00 30.00 31.00 33.00 34.00 35.00 36.00 37.00 38.00 39.00 40.00 41.00 42.00 43.00 44.00 45.00 46.00 47.00 48.00 49.00	40° 42° 47° 45° 36° 33° 33° 40° 37° 40° 35° 35° 39° 27° 17° 00° 05° 55° 47° 38° 42° 41°	**Structure:** Interval appears to be overturned, based on a number of possible overturned, fining downward siltstone intervals, not unambiguous however. Interval appears to be overturned to approximately 41.20 m, with unambiguous right-way-up indicators (graded siltstone beds) evident from 43.15 m to base of interval. Transition from probable overturned sediments to right-way-up probably associated with faults at 40.24 and/or 43.13 m. Fine-grained sediments and thin-bedded intervals moderately sheared towards basal contact with underlying granule conglomerate, associated with thin lenses and fish of quartz and truncated quartz veins offset by foliation. **Faults:** **32.66** - m - Two bedding parallel slip planes ≤0.2 cm thick with gouge at 37° to core axis. **36.00** m - 1 cm thick fault zone with chips and gouge at 34° to core axis. **37.19** m - 1 cm thick fault zone, comprised of gouge and fine chips, at shallow angle to bedding (probably parallel to S_1) at 25° to core axis. **37.52** m - 1 cm thick fault zone, comprised of gouge and chips, parallel to bedding at 25° to core axis. **40.18 - 40.31** m - 5 thin fault planes (≤0.3 cm thick) with powdery gouge. Strain gradient evident in sediments for ≤0.5 cm at 40° to core axis, sub-parallel to S_0. **43.13** m - 1 cm thick fault with friable, dirty white quart and dirty yellow dolomite vein developed within it. Powdery gouge and chips within vein - incohesive at 60° to core axis, sub-parallel to S_0. **51.64** m - 0.4 cm thick fault zone comprised of coarse-grained, granule sized fragments in an olive green clayey gouge at 28° to core axis. **Sulphides In Sediments:** Pyrite to 0.5% disseminated throughout interval as medium (0.3 - 1.0 cm diameter), sub-idioblastic to idioblastic, cubic crystals. Minor enrichment associated with coarser intervals. **Alteration:** **41.31 - 41.72** m - Intervals of highly angular, yellow-green clasts associated with low angle quartz vein. Interval has light green halo (chloritic alteration?) and may represent in situ breccia (hydraulic fracturing?) and alteration Minor interstitial, light to medium orange dolomite in matrix of coarser sediments.							
49.40	127.13	62.40 63.98 77.00 78.45 82.56 86.86 95.41 100.83 107.84 115.34 119.75 122.72 127.13	52° 50° 37° 35° 50° 40° 35° 70° 75° 37° 40° 45° 70°	**Lithology: Granule conglomerate.** Predominantly fine- to coarse-grained granule conglomerate with subordinate intervals of coarse-granule to fine-grained pebble conglomerate and highly subordinate, short intervals of thinly laminated to very thin bedded, alternating light and dark grey siltstone. Below 76.0 m are slightly more abundant and thicker intervals of light and medium grey siltstone to fine-grained sandstone (wacke). Unambiguous FUS become increasingly apparent from approximately 103.0 m to base of interval, right-way-up (i.e. 115.34 - 117.51 m, 117.51 - 119.75 m, 119.75 - 122.00 (complicated by pulse of fine-grained pebble conglomerate between 120.33 - 121.00) and 122.00 - 127.13 m). Granule to pebble-sized clasts range from those having sharp margins to diffuse (over 1.0 cm) contacts, matrix- to locally clast-supported. **Veins:** Dirty white quartz ± medium orange dolomite veins generally comprises 3-5% of any given interval, although locally can comprise up to 60% over ≤40 cm (i.e. uppermost interval below contact with fine-grained sediments, possibly indicative of strain gradient). Veins both irregular to patchy and planar, margins generally diffuse. Dolomite present as rare, thin veinlets; as individual, fine- to medium-grained crystals disseminated in veins and as rinds developed along the margins of some quartz veins. Veins generally at shallow (to moderate) angle to both S_0 and S_1.	0321 - 720 0321 - 721 0321 - 722 0321 - 723 0321 - 724 0321 - 725 0321 - 726	81.70 81.82 81.92 99.12 99.24 99.33 109.42	81.82 81.92 82.03 99.24 99.33 99.62 109.50				

From approximately 111.0 m to base of interval, decrease in proportion of veining (to ≤1%), comprised of thin (≤0.5 cm) dirty white quartz ± orange dolomite veins at approximately 20° to 30° to core axis, with diffuse (over 0.1 cm) contacts. Veins slightly thicker (1-10 cm) from 100.0 - 111.0 m, with open space filling texture (pore spaces with single quartz terminations) and subordinate orange dolomite.

Slight increase in proportion of quartz veining from 123.0 to base of interval to approximately 10% at approximately 30° to core axis, 0.5 - 3 cm thick, comprised of milky white to subordinate dirty white quartz ± dirty yellow dolomite, showing open space filling textures.

Structure:

Below 76.0 mConglomerate sequences also contain slightly more fine-grained silts (as sericite), resulting in the development of a local, coarse spaced foliation (0.5 - 1.0 cm), sub-parallel to a shallow angle to core axis.

Faults:

108.88 m - Thin (0.75 cm) silty argillite in fine-grained granule conglomerate showing evidence of slip (sheared appearance of silty argillite, incohesive gouge and chips)

114.95 m - Thin zone (0.2 cm) of clayey gouge at 50° to core axis.

122.46 m - Thin zone (0.5 cm) of strongly foliated material sandwiched between coarse-grained sandstone to fine-grained granule conglomerate above and coarse-grained granule to fine-grained pebble conglomerate below at 50° to core axis.

Sulphides in Veins:

81.82 - 81.92 m - Arsenopyrite-bearing quartz vein at 30° to core axis. Vein is 0.7 cm thick and comprised of dirty white quartz with approximately 1% sulphides (as fine-grained pyrite). Arsenopyrite localized along margin and appears to be hosted predominantly by host rock. Approximately 90% arsenopyrite and 10% pyrite in discontinuous 0-0.2 cm thick zone at vein margin, preferentially developed along lower contact of vein, with long dimension of arsenopyrite crystals oriented at moderate to high angle to vein margin. Approximately 15-20%, medium- to coarse-grained, sub-idioblastic to idioblastic, cubic pyrite. Interval: 2-3% As

109.42 - 109.50 m - Poorly defined, thin (≤0.4 cm), dirty white quartz vein with diffuse margins at approximately 35° to core axis, cross-cut by light to medium orange dolomite veinlet at 10° to core axis. Vein has medium- to coarse-grained aggregates of both pyrite (15-20%) and fine-felted masses of arsenopyrite (5-7%). Host lithology is medium- to coarse-grained granule conglomerate with approximately 10% medium-grained, disseminated, sub-idioblastic to idioblastic, cubic pyrite.

Sulphides in Sediments:

Pyrite generally ≤1% as fine- to medium-grained, sub-idioblastic crystals disseminated throughout matrix. Local intervals up to 40 cm enriched in medium- to coarse-grained, sub-idioblastic to idioblastic, cubic pyrite.

81.70 - 81.82 m - Approximately 3%, medium-grained, idioblastic (to sub-idioblastic), cubic pyrite in light to medium blue-grey granule conglomerate.

81.92 - 82.03 m - Pyrite-enriched interval below vein. Approximately 15-20% medium- to coarse-grained, sub-idioblastic (to idioblastic), cubic pyrite with approximately 1-2% medium-grained (0.4 cm long dimension) arsenopyrite laths.

99.12 - 99.24 m - Approximately 7-10%, fine-to medium-grained, sub-idioblastic (to idioblastic), cubic to dodecahedral pyrite disseminated throughout matrix-supported pebble conglomerate.

99.24 - 99.33 m - Interval similar to above with approximately 1 cm thick, dirty white quartz vein at 33° to core axis. Vein contains approximately 20-25% sulphides, predominantly pyrite as large aggregate mass with subordinate quartz approximately 2.5 cm long. Arsenopyrite present as fine-grained felted band between 0.1 - 0.2 cm thick along margin of vein. Interval: 1-2% As

From	To	Depth	Angle	Description								
				99.33 - 99.62 m - Pyrite-enriched interval structurally underlying vein as predominantly medium-grained, sub-idioblastic, cubic crystals disseminated throughout interval. Pyrite comprises 15-20% at top and diminishes steadily to approximately 3-5% at base. Pyrite present in trace amounts from approximately 111.0 m to base of interval, interpreted to be associated with decrease in proportion of veining (to ≤1%)								
127.13	153.91	128.00 129.00 129.80 131.00 132.00 133.00 134.00 135.00 136.00 137.00 138.00 139.00 141.00 142.00 143.00 144.00 145.00 146.00 147.00 148.00 149.00 150.00 151.00 152.00 153.00	40° 35° 40° 32° 40° 50° 47° 37° 48° 44° 51° 45° 35° 40° 44° 50° 41° 40° 40° 40° 40° 36° 36° 35° 45°	**Lithology: Argillaceous siltstone to silty argillite.** Mixed interval dominated by silty argillite to argillaceous siltstone, ranging from very thin laminated to very thin bedded. Coarser intervals of light grey siltstone to weakly iron-stained, fine- to medium-grained silty wacke have graded beds indicating right-way-up. **Veins:** Veins consist predominantly of bedding parallel to sub-parallel veins ≤1.5 cm thick, comprised predominantly of quartz ± medium orange dolomite. These veins have sharp but ragged margins, may or may not be attenuated (pinch and swell) to boudinaged. These veins subsequently cross-cut by thin (≤0.4 cm), predominantly medium to dirty orange dolomite veinlets at moderate to high angle. Later veins comprised of highly subordinate, thicker (to 30 cm), dirty white to milky white quartz ± medium yellow-green (minor fine-grained sericite) to medium orange dolomite, having sharp planar to slightly irregular veins. All veins subject to truncation by thin faults (probably due to slip along bedding panes on lower limb of anticline). **Structure:** Foliation moderately to well developed (locally intensely developed, verging toward failure) and generally at shallow to moderate angle to S_0, oriented in the same sense. **Faults:** **127.27** m - Approximately 2.0 cm thick zone of strongly foliated, phyllitic, silty argillite to argillite at 48° to core axis and light grey clayey gouge and chips. **128.30** m - Approximately 3.0 cm thick zone of strongly foliated, phyllitic, light grey-green argillite to silty argillite at approximately 60° to core axis. **128.98** m - Thin slip plane at 50° to core axis with clayey gouge on surface. Upper 3.0 cm of underlying quartz vein has cataclastic textures. **129.19** m - Approximately 3.0 cm thick zone of strongly to intensely foliated, phyllitic argillite with clayey gouge and chips at approximately 55° to core axis. **129.43** m - Thin crush zone (≤0.3 cm thick) at approximately 40° to core axis, comprised of clayey gouge and chips. **130.32** m - Approximately 2.0 cm thick zone of moderately foliated siltstone with chips at approximately 55° to core axis. **134.33** m - Approximately 1.0 cm thick zone of strongly foliated argillaceous siltstone to silty argillite at 45° to core axis, located approximately 1.0 cm above 25 cm thick, weakly iron-stained wacke (medium-grained sandstone) **135.95** m - Approximately 3.0 cm zone of moderately to strongly foliated sandy siltstone at 45° to ocre axis. Central core (0.5 cm thick) comprised of cataclastite (clayey gouge and chips). **139.77 - 139.91** m - Cataclastic zone with fine pebble sized fault clasts suspended within clayey gouge and chips at top and bottom of interval. Central 11 cm comprised of strongly foliated silty argillite. Fault zone at 47° to core axis. Lower cataclastic zone truncates dirty white quartz vein at 27° to core axis, fault at high angle to vein. **140.10** m - Gouge covered slip plane at 45° to core axis. **140.38** m - 1.0 cm thick cataclastic zone at 55° to core axis. Fault zone cross-cuts thin (0.4 cm thick) dolomite ± quartz vein, fragments of vein have been offset and transported approximately 3.0 cm up-hole. **140.53** m - Approximately 0.5 cm clayey gouge and chip zone oriented at 47° to core axis, sub-parallel to S_0. **141.17** m - Approximately 2.0 - 2.5 cm thick zone of clayey gouge and cataclastic fragments at 50° to core axis. Zone of moderately to intensely foliated siltstones extends another 7.0 cm down hole.								

				142.11 m - 1.5 cm thick zone of oriented chips suspended in clayey gouge. Internal fabric parallel to margins of zone, at 51° to core axis, sub-parallel to parallel to S_0. **142.23** m - 1.0 cm thick interval of clayey gouge and fine chips at 50° to core axis. **142.56** m - 1.0 cm thick interval of clayey gouge and flakey chips at 45°-50° to core axis. **145.90** m - Minimum 0.3 cm clayey gouge on surface at break between boxes, at 40° to core axis. **148.87** m - Approximately 3.0 cm disrupted interval characterized by strongly to locally intensely sheared argillite, oriented at approximately 40° to core axis. **150.08** m - 0.4 cm thick interval of clayey gouge at 45° to core axis. **150.71** m - 0.5 cm thick interval of clayey gouge at base of coarser interval (fine- to medium-grained sandstone), oriented at approximately 35° to core axis. **Sulphides in Sediments:** Minor sub-idioblastic, fine- to medium-grained pyrite. Pyrite (particularly medium- to coarse-grained, sub-idioblastic crystals) have quartz filled pressure shadows.							
153.91				**End of Hole.**							

Appendix C

Analytical Results

ACME A… TICAL LABORATORIES LTD. 852 E. HASTINGS ST. …NCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6… 253-1716
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GEOCHEMICAL ANA… …SIS CERTIFICATE

Jasper Mining Corporation File # A302511 Page 1
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
SI	.74	<.01	1.40	.7	9	2.2	.4	3	.11	.1	<.1	.4	<.1	3.4	<.01	.06	<.02	6	.13	<.001	<.5	3.1	.02	4.3	.002	<1	.02	.553	.01	.2	.1	<.02	<.01	<5	.2	<.02	<.1	<2
0301-56	.55	11326.37	24424.13	47365.7	99999	21.4	4.6	57	6.33	1446.4	1.7	899.2	.4	8.1	437.07	6512.96	.69	<2	.01	<.001	<.5	1.7	.01	9.7	.001	<1	.02	.004	<.01	.7	<.1	.11	9.04	275	1.2	.12	1.1	658
0301-57	1.48	3309.20	12549.23	99649.0	82198	26.1	7.6	4648	7.61	872.0	.6	288.7	3.0	131.5	760.84	109.25	.87	4	5.07	.005	.9	6.8	2.05	15.3	<.001	1	.18	013	.12	1.6	1.7	.10	8.51	256	.3	.11	2.9	547
0301-65	.76	2900.06	25070.49	3482.2	99999	32.5	18.1	3464	5.18	4084.3	.8	258.9	3.4	90.6	33.35	1357.42	.71	3	3.01	.006	.9	3.4	1.32	25.9	<.001	1	.19	.012	.12	278.0	1.6	.10	5.23	67	.5	.16	.6	449
0301-66	2.76	13198.56	27547.60	38617.1	99999	37.7	18.4	935	4.45	4364.4	2.3	3384.2	4.4	18.6	405.48	9040.99	3.10	<2	.84	.006	<.5	11.9	.29	23.2	<.001	2	.19	.014	.11	12.4	1.1	.13	7.16	120	.5	.10	1.2	5805
0301-67	.31	192.79	4775.10	5784.6	18695	12.4	5.5	1600	4.32	5911.6	.9	316.6	1.7	376.5	32.67	375.72	.14	2	16.87	.017	1.6	1.8	.48	11.8	<.001	<1	.08	.005	.05	2.5	1.8	.04	2.85	38	2	.07	.3	615
0301-68	1.62	3397.78	6427.36	17856.2	47639	8.3	2.8	1050	1.61	433.3	.6	25.7	.8	339.0	153.81	839.00	<.02	<2	15.21	.086	2.3	6.4	.20	7.5	<.001	<1	.06	.004	.03	5.0	.7	.02	1.78	44	4	.09	.5	117
0301-69	.56	899.57	4016.44	9740.1	30994	19.4	8.3	803	1.95	90.3	.8	8.3	2.8	205.9	81.58	31.85	.22	2	6.85	.028	1.6	3.6	.62	23.4	<.001	2	.18	.010	.12	1.4	1.7	.05	1.39	22	.1	.12	.6	30
0301-70	1.78	1602.02	13773.56	61368.9	56724	27.9	7.0	2116	6.15	6241.9	.8	128.4	2.9	81.6	475.65	28.39	.80	4	3.65	.012	1.7	11.3	1.87	17.9	<.001	2	.18	.012	.10	2.4	2.3	.06	4.98	134	.9	.10	1.4	217
0301-71	.73	374.31	14846.86	35228.2	50870	48.3	20.4	1827	5.58	7050.4	1.3	210.1	7.5	56.7	212.87	92.90	.95	3	3.53	.028	1.3	4.5	1.31	31.7	<.001	1	.26	.014	.16	.9	1.6	.09	4.64	93	.6	.10	1.5	464
0302-1	2.58	31.47	121.84	355.7	1005	71.7	17.8	1245	5.08	176.2	1.0	2.5	6.8	22.1	2.12	3.18	.24	6	1.08	.011	2.5	17.8	1.80	26.4	<.001	2	.37	.030	.20	1.8	2.6	.10	.83	5	.1	<.02	.9	14
0302-2	.87	22.51	169.46	143.1	1235	22.3	10.3	984	2.40	43.5	.6	1.3	4.3	26.6	.90	2.69	.35	2	2.14	.011	1.1	7.0	.95	15.5	<.001	2	.19	.016	.10	1.2	1.7	.04	.40	<5	.2	<.02	.5	2
0302-3	1.21	440.39	88.86	761.8	4993	41.5	7.9	1026	4.86	731.1	.4	187.8	4.3	60.3	6.30	34.00	.81	3	1.55	.055	1.2	8.6	.57	23.4	<.001	2	.32	.017	.17	1.3	1.6	.08	4.32	<5	.2	.03	1.0	291
0302-4	1.66	463.30	3134.72	8754.9	32774	71.2	28.6	1975	4.79	882.4	1.5	99.3	11.2	146.8	66.16	77.32	.47	4	3.00	.022	1.6	9.7	1.41	27.8	<.001	2	.36	.021	.21	1.1	3.3	.11	4.25	34	<.1	.06	1.0	281
0302-5	.98	533.42	4270.24	2109.0	52396	62.4	14.6	1366	4.83	963.5	1.1	118.1	11.4	133.5	18.81	130.67	.33	5	2.07	.026	2.6	10.0	1.07	35.9	<.001	3	.48	.027	.27	.8	3.5	.15	4.04	15	.2	.08	1.2	265
0302-6	1.09	1085.23	10780.10	498.7	99999	58.6	16.2	2159	4.79	726.4	1.3	20.2	10.8	90.3	7.43	384.95	.76	3	3.17	.020	1.5	7.0	1.35	25.8	<.001	2	.33	.018	.18	.6	2.8	.13	3.86	8	.3	.19	.7	123
0302-7	2.16	1171.27	10930.74	9458.5	99999	36.7	10.9	3955	4.61	2401.0	1.0	44.7	7.5	99.4	91.11	421.41	.61	4	4.09	.184	1.4	11.3	1.59	28.3	<.001	3	.38	.019	.20	1.8	2.3	.11	3.43	35	<.1	.19	1.3	145
0302-8	.65	1232.25	16997.28	37281.1	50659	36.5	11.9	2888	5.39	12530.9	1.4	370.4	6.4	73.9	405.99	714.80	1.47	2	3.22	.021	.9	4.5	1.32	21.2	<.001	1	.25	.013	.14	.8	1.5	.11	4.98	102	.4	.12	1.6	1018
RE 0302-8	.65	1284.66	14815.10	38582.7	50384	38.2	13.4	2986	5.54	12648.5	1.4	607.1	6.0	70.1	407.88	703.63	1.49	2	3.07	.020	.9	5.1	1.37	21.6	<.001	1	.25	.014	.14	.9	1.5	.11	5.08	113	.5	.12	1.6	1224
RRE 0302-8	2.50	1261.69	15865.58	37723.0	50174	36.9	12.1	2976	5.46	12334.5	1.4	426.4	5.6	70.0	405.94	659.01	1.44	2	3.08	.021	1.0	11.2	1.36	24.8	<.001	1	.26	.015	.15	2.2	1.6	.11	4.84	102	.7	.14	1.6	2451
0302-9	.70	1214.67	12052.05	39432.2	51194	27.4	8.9	3158	4.45	4163.5	1.2	39.5	5.0	73.3	410.21	261.83	1.67	2	3.06	.013	.8	4.9	1.37	19.8	<.001	2	.23	.013	.13	1.0	1.4	08	3.99	114	.8	.12	1.4	153
0302-10	1.55	1183.22	14689.21	11239.2	35255	50.6	9.4	2955	6.22	28763.5	1.3	1583.2	7.9	68.8	110.17	954.09	.43	2	3.02	.049	1.1	8.0	1.17	24.0	<.001	1	.31	016	.16	1.3	1.9	.12	3.97	31	<.1	.08	1.0	3377
0302-11	.48	35.68	131.26	211.2	1593	56.2	18.5	2208	5.67	14595.5	1.2	375.2	9.7	65.6	2.28	12.00	.56	3	2.85	.036	1.8	6.7	1.13	26.4	<.001	2	.33	.015	.19	.6	2.4	.10	4.54	<5	.2	.04	.8	875
0302-12	3.06	404.44	74.43	129.8	28638	3.3	1.1	4201	4.83	35207.3	<.1	1337.0	.2	73.2	1.44	185.12	.58	<2	4.00	.004	<.5	12.2	1.66	3.6	<.001	<1	.03	.002	.01	3.6	1.6	<.02	2.11	12	.2	.02	.2	1489
0302-13	.61	78.67	26.96	35.8	4370	7.7	2.2	2051	2.80	3284.5	.1	157.2	.8	62.7	.42	20.88	.10	<2	3.75	.014	.6	4.3	1.53	6.3	<.001	<1	.06	.004	.03	1.3	1.1	.02	.81	<5	.1	.02	.2	128
0302-14	6.02	70.55	13878.40	96.9	16558	18.2	3.7	2357	3.09	221.1	.3	11.4	1.9	97.7	1.62	14.35	2.16	<2	3.41	.012	3.8	24.3	1.27	15.4	<.001	1	.20	.011	.10	5.8	3.4	.05	.72	5	.6	.15	.5	32
0302-15	.93	167.44	98.63	91.7	4974	54.3	10.9	1169	4.45	2597.6	2.1	14.6	16.4	35.5	.73	16.33	.28	6	1.70	.035	3.7	11.4	1.36	36.8	<.001	3	.42	.027	.22	.8	2.9	.11	1.36	<5	.2	.02	.9	38
0302-16	.97	30.34	45.68	34.0	360	61.7	13.4	1222	4.57	198.9	1.6	3.4	12.1	25.1	.11	1.34	.10	5	1.04	.034	5.3	12.2	1.52	30.7	<.001	1	.40	.021	.21	.6	2.8	.10	.73	<5	.1	.02	.9	6
0302-17	.46	10.88	19.24	36.0	250	66.9	13.3	1416	3.95	1901.1	1.5	3.9	12.0	33.1	.17	1.29	.12	5	1.37	.034	2.9	10.5	1.17	32.7	<.001	2	.38	.020	.21	.4	3.1	.11	1.52	<5	<.1	<.02	.9	23
0302-18	1.58	9.67	28.43	33.3	206	59.9	20.1	1632	3.63	3795.5	1.4	14.8	11.1	39.5	.24	1.51	.23	5	1.73	.036	2.1	11.1	.87	29.6	<.001	2	.38	.019	.21	1.0	2.4	.10	2.36	<5	.2	.03	.9	62
0302-19	.61	1838.42	12735.96	126.0	49166	53.3	13.4	1652	5.92	13904.6	1.6	140.8	10.0	62.2	2.22	253.43	4.41	3	2.09	.017	1.5	5.4	.86	28.0	<.001	3	.32	.017	.18	.7	2.2	.10	4.96	15	.3	.09	.8	399
0302-20	1.14	36.36	138.94	12.5	1123	65.3	23.5	901	5.19	1295.8	1.3	12.7	9.5	151.0	.12	4.44	.32	4	2.40	.033	2.6	6.0	1.03	28.9	<.001	2	.36	.016	.19	.8	3.9	.10	4.58	<5	.1	.03	.8	50
0302-21	.72	23.72	207.49	18.9	2214	48.0	12.9	3226	5.67	9561.4	1.4	43.7	9.9	75.8	.16	5.56	.19	4	3.15	.023	1.4	6.2	1.25	25.8	<.001	2	.30	.014	.18	.7	2.3	.09	4.06	<5	.2	.03	.8	198
0302-22	2.80	169.89	1392.03	24307.1	5518	10.8	4.3	3842	3.92	533.3	.7	16.9	5.6	83.3	204.80	4.69	.15	2	2.74	.009	.9	11.3	1.00	11.8	<.001	1	.13	.006	.07	5.7	1.6	.03	3.79	61	.1	.05	.7	26
0302-23	.60	62.35	920.64	12327.1	3233	8.3	2.8	3710	5.36	857.6	.3	35.8	2.2	89.1	95.28	2.67	.10	2	2.79	.011	.6	3.6	1.02	11.0	<.001	1	.14	.006	.08	1.2	1.7	.03	5.09	43	<.1	.05	.5	57
STANDARD DS5/AU-R	12.75	144.28	24.72	142.4	297	25.2	12.6	781	3.01	24.2	6.3	43.6	3.0	48.8	5.68	3.68	6.35	62	.77	.098	12.2	183.6	.68	138.3	.097	16	2.09	.035	.14	4.2	3.6	1.05	<.01	167	4.5	.81	6.5	481

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30.0 GM SAMPLES ANALYSIS BY FA/ICP.
- SAMPLE TYPE: CORE R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 9 2003 DATE REPORT MAILED: July 24/03 SIGNED BY. C. L…………D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data L FA ___

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Au**
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb
0302-24	.79	971.77	14509.81	39504.0	99999	36.0	8.2	1989	5.05	1051.5	.8	98.9	3.6	76.1	371.16	320.25	.85	9	2.17	.071	.8	7.3	1.06	19.8	<.001	2	.22	.012	.13	1.9	2.4	.11	6.72	315	<.1	.19	1.4	148
0302-25	.22	38.66	60.00	138.0	1890	53.6	17.1	1540	3.63	3788.3	1.3	23.2	6.8	80.1	.98	4.63	.20	9	2.29	.017	2.5	4.6	1.24	22.3	<.001	2	.25	.014	.17	.3	3.2	.08	2.44	<5	.2	.04	.6	50
0302-26	1.30	195.87	1008.52	13299.2	7286	40.0	19.7	4517	4.40	9264.8	1.1	438.4	4.8	144.8	111.95	12.64	.27	10	4.66	.006	2.0	6.5	2.07	16.8	<.001	1	.16	.009	.12	2.3	1.9	.06	3.56	48	<.1	.06	.7	739
0302-27	.10	45.72	16.00	75.0	5318	2.7	.6	742	.73	132.8	.1	6.0	.3	42.4	.75	16.47	<.02	6	1.04	<.001	<.5	1.4	.47	3.9	<.001	2	.04	.003	.02	<.1	.9	<.02	.07	<5	<.1	<.02	.1	10
0302-28	1.64	433.22	61.83	1019.5	53502	67.8	55.9	2186	4.06	1880.6	1.3	53.5	6.0	100.7	8.10	98.27	.43	7	2.89	.003	2.6	6.6	1.42	19.5	<.001	1	.18	.010	.14	1.4	2.8	.06	3.64	<5	.4	.06	.5	178
0302-29	.51	25.63	16.57	59.3	1722	51.9	28.9	1440	4.03	10455.7	1.4	165.3	7.6	68.8	.46	4.31	.22	8	2.04	.012	3.3	4.5	.94	23.5	<.001	2	.25	.014	.16	.3	2.1	.08	3.61	<5	.2	.05	.6	314
0302-30	1.30	366.87	15261.11	8570.5	87275	32.8	10.1	3342	5.73	25654.3	.9	1374.4	5.1	98.7	75.41	135.69	.67	7	3.29	.008	1.5	6.7	1.52	19.3	.003	1	.15	.009	.11	2.6	1.4	.07	4.95	39	<.1	.06	.7	1833
0302-31	.32	3504.25	18069.67	1542.0	99999	35.7	13.6	4228	10.46	18293.0	.6	575.3	4.5	107.6	38.89	1814.76	2.02	6	3.60	.003	<.5	1.5	1.73	15.2	.001	1	.13	.006	.09	.1	1.1	.11	10.74	32	.7	.07	.5	963
0302-32	2.36	5015.21	16482.64	1845.8	99999	3.9	1.1	1669	7.58	14800.5	<.1	1346.7	.1	37.2	43.80	2791.00	2.65	3	1.23	<.001	<.5	8.8	.54	6.8	<.001	<1	.02	.001	<.01	3.8	<.1	.07	9.93	39	.3	.08	.2	1178
0302-33	.26	3839.49	19661.41	633.2	99999	26.4	9.3	2114	12.87	99999.0	.9	2684.4	4.9	70.8	21.30	1682.00	2.19	6	2.43	.005	.5	3.0	1.24	21.8	.004	1	.19	.010	.12	.2	1.8	.15	11.77	34	.6	.15	.6	3110
0302-34	.92	166.03	460.97	30.0	7419	52.8	24.2	1285	4.19	1029.0	1.3	26.4	7.8	51.4	.32	10.96	.40	3	1.37	.010	1.7	5.9	1.06	21.0	.003	1	.22	.013	.15	1.0	2.6	.07	2.81	<5	.4	.05	.5	24
RE 0302-34	.92	172.44	443.67	25.9	7047	56.4	25.9	1285	4.21	1038.5	1.4	18.1	8.5	51.7	.22	10.80	.43	5	1.37	.010	1.8	6.4	1.06	21.7	<.001	2	.23	.014	.15	1.0	2.5	.07	2.76	<5	.3	.05	.6	27
RRE 0302-34	.45	178.00	542.93	29.2	8975	54.9	22.8	1300	4.15	963.5	1.5	7.2	8.7	52.6	.28	12.16	.39	7	1.37	.011	2.0	5.1	1.08	26.4	<.001	2	.28	.015	.17	.2	2.6	.08	2.88	<5	.3	.05	.7	26
0302-35	.57	8.42	81.37	16.2	791	39.2	12.4	4468	4.78	25154.8	1.1	228.0	7.3	71.3	.11	9.06	.38	5	3.76	.014	1.4	3.8	1.51	17.8	<.001	1	.18	.010	.13	.8	2.0	.06	2.81	<5	.1	.19	.5	348
0302-36	.13	42.93	235.44	16.4	3411	27.2	15.8	4197	16.04	99999.0	.6	1419.3	3.7	68.2	.17	65.00	.59	8	3.71	.008	.8	2.1	1.43	16.4	<.001	<1	.18	.009	.12	.1	1.3	.09	11.24	6	.5	.23	.6	1546
0302-37	1.36	17.88	98.13	22.0	1432	40.6	24.0	4627	11.59	99999.0	.9	479.9	4.6	77.5	.17	22.00	.29	7	4.85	.012	.8	6.1	2.04	14.6	<.001	<1	.15	.008	.10	1.9	1.7	.06	8.11	<5	.3	.11	.5	794
0302-38	.19	140.08	629.99	570.3	14261	31.3	13.7	4669	11.57	99999.0	.5	738.9	4.6	75.1	4.96	60.00	.26	8	3.74	.010	.7	2.2	1.84	14.8	<.001	1	.17	.009	.11	.2	2.2	.06	8.34	<5	.3	.12	.6	970
0302-39	1.38	55.04	8800.56	4776.8	26383	18.2	9.2	4852	4.00	531.4	.7	370.3	2.1	110.0	38.74	30.91	.48	6	5.23	.014	1.0	7.5	1.66	9.3	.004	<1	.09	.005	.06	279.2	1.3	.03	2.20	87	<.1	.25	.4	28
0302-40	.09	9.24	46.00	36.0	538	40.8	11.4	2857	4.46	4389.9	1.0	35.0	5.4	78.7	.21	1.65	.10	7	4.31	.018	1.3	3.4	1.70	19.1	.004	1	.22	.011	.14	1.7	2.1	.06	2.90	5	.1	.03	.6	93
0302-41	.76	25.80	3170.27	3234.3	10004	28.0	14.1	10591	6.81	668.2	1.2	13.0	3.3	101.4	26.76	8.67	.12	8	6.90	.133	1.1	6.9	2.04	16.7	.003	<1	.20	.010	.11	2.9	2.1	.05	4.36	10	.1	.07	.8	70
0302-42	.06	1795.07	17773.13	95558.9	99999	15.4	4.5	11744	3.67	216.4	1.3	17.0	.9	246.1	909.31	239.38	.23	6	8.08	.154	1.0	1.7	1.67	11.6	.003	<1	.12	.005	.06	.2	2.5	.11	7.79	304	.5	.17	1.8	96
0302-43	1.74	1073.97	17170.25	404.3	99999	27.2	14.1	2812	8.59	7442.4	.6	1038.3	2.9	51.0	29.39	624.33	2.12	2	2.16	.007	.5	6.2	.87	11.8	.001	<1	.11	.005	.07	3.2	1.2	.11	10.98	16	.4	.15	.4	1333
0302-44	.34	839.39	17232.33	848.2	99999	33.5	16.8	5126	8.34	7819.2	.8	441.2	4.3	91.6	11.71	152.41	.41	5	3.97	.016	1.2	2.4	1.64	18.6	.005	<1	.19	.009	.13	251.5	2.0	.09	8.74	77	.1	.08	.7	422
0303-113	.63	34.52	547.19	153.0	2866	33.2	7.2	1979	6.21	28639.4	.9	402.6	3.8	92.2	.90	11.62	.67	6	3.73	.006	3.1	6.3	2.09	17.7	.004	<1	.17	.010	.10	2.0	2.5	.06	2.85	5	.1	.12	.4	542
STANDARD DS5/AU-R	12.36	145.00	26.00	139.6	280	24.4	11.8	791	3.04	18.0	6.1	44.0	2.9	49.7	5.80	3.58	6.47	62	.76	.094	12.2	195.7	.69	140.9	.098	16	2.10	.035	.14	4.4	3.4	1.04	.05	184	4.7	.86	6.5	481

Sample type: CORE R150. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Assay recommend for Pb > 5000 ppm

Ag > 30, ppm

As, Zn > 1%

Sb > 1000 ppm

Data ✓ FA ___

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Jasper Mining Corporation File # A302511 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
SI	.74	<.01	1.40	.7	9	2.2	.4	3	.11	.1	<.1	.4	<.1	3.4	<.01	.06	<.02	6	.13	<.001	<.5	3.1	.02	4.3	.002	<1	.02	.553	.01	.2	.1	<.02	<.01	<5	2	<.02	<.1	<2
0301-56	.55	11326.37	24424.13	47365.7	99999	21.4	4.6	57	6.33	1446.4	1.7	899.2	.4	8.1	437.07	6512.96	.69	<2	.01	<.001	<.5	1.7	.01	9.7	.001	<1	.02	.004	<.01	.7	<.1	.11	9.04	275	1.2	.12	1.1	658
0301-57	1.48	3309.20	12549.23	99649.0	82198	26.1	7.6	4648	7.61	872.0	.6	288.7	3.0	131.5	760.84	109.25	.87	4	5.07	.005	.9	6.8	2.05	15.3	<.001	1	.18	.013	.12	1.6	1.7	.10	8.51	256	.3	.11	2.9	547
0301-65	.76	2900.06	25070.49	3482.2	99999	32.5	18.1	3464	5.18	4084.3	.8	258.9	3.4	90.6	33.35	1357.42	.71	3	3.01	.006	.9	3.4	1.32	25.9	<.001	1	.19	.012	.12	278.0	1.6	.10	5.23	67	.5	.16	.6	449
0301-66	2.76	13198.56	27547.60	38617.1	99999	37.7	18.4	935	4.45	4364.4	2.3	3384.2	4.4	18.6	405.48	9040.99	3.10	<2	.84	.006	<.5	11.9	.29	23.2	<.001	2	.19	.014	.11	12.4	1.1	.13	7.16	120	5	.10	1.2	5805
0301-67	.31	192.79	4775.10	5784.6	18695	12.4	5.5	1600	4.32	5911.6	.9	316.6	1.7	376.5	32.67	375.72	.14	2	16.87	.017	1.6	1.8	.48	11.8	<.001	<1	.08	.005	.05	2.5	1.8	.04	2.85	38	2	.07	.3	615
0301-68	1.62	3397.78	6427.36	17856.2	47639	8.3	2.8	1050	1.61	433.3	.6	25.7	.8	339.0	153.81	839.00	<.02	<2	15.21	.086	2.3	6.4	.20	7.5	<.001	<1	.06	.004	.03	5.0	.7	.02	1.78	44	.4	.09	.5	117
0301-69	.56	899.57	4016.44	9740.1	30994	19.4	8.3	803	1.95	90.3	.8	8.3	2.8	205.9	81.58	31.85	.22	2	6.85	.028	1.6	3.6	.62	23.4	<.001	2	.18	.010	.12	1.4	1.7	.05	1.39	22	1	.12	.6	30
0301-70	1.78	1602.02	13773.56	61368.9	56724	27.9	7.0	2116	6.15	6241.9	.8	128.4	2.9	81.6	475.65	28.39	.80	4	3.65	.012	1.7	11.3	1.87	17.9	<.001	2	.18	.012	.10	2.4	2.3	.06	4.98	134	.9	.10	1.4	217
0301-71	.73	374.31	14846.86	35228.2	50870	48.3	20.4	1827	5.58	7050.4	1.3	210.1	7.5	56.7	212.87	92.90	.95	3	3.53	.028	1.3	4.5	1.31	31.7	<.001	1	.26	.014	.16	.9	1.6	.09	4.64	93	.6	.10	1.5	464
0302-1	2.58	31.47	121.84	355.7	1005	71.7	17.8	1245	5.08	176.2	1.0	2.5	6.8	22.1	2.12	3.18	.24	6	1.08	.011	2.5	17.8	1.80	26.4	<.001	2	.37	.030	.20	1.8	2.6	.10	.83	5	.1	<.02	.9	14
0302-2	.87	22.51	169.46	143.1	1235	22.3	10.3	984	2.40	43.5	.6	1.3	4.3	26.6	.90	2.69	.35	2	2.14	.011	1.1	7.0	.95	15.5	<.001	2	.19	.016	.10	1.2	1.7	.04	.40	<5	.2	<.02	.5	2
0302-3	1.21	440.39	88.86	761.8	4993	41.5	7.9	1026	4.86	731.1	.4	187.8	4.3	60.3	6.30	34.00	.81	3	1.55	.055	1.2	8.6	.57	23.4	<.001	2	.32	.017	.17	1.3	1.6	.08	4.32	<5	.2	.03	1.0	291
0302-4	1.66	463.30	3134.72	8754.9	32774	71.2	28.6	1975	4.79	882.4	1.5	99.3	11.2	146.8	66.16	77.32	.47	4	3.00	.022	1.6	9.7	1.41	27.8	<.001	2	.36	.021	.21	1.1	3.3	.11	4.25	34	<.1	.06	1.0	281
0302-5	.98	533.42	4270.24	2109.0	52396	62.4	14.6	1366	4.83	963.5	1.1	118.1	11.4	133.5	18.81	130.67	.33	5	2.07	.026	2.6	10.0	1.07	35.9	<.001	3	.48	.027	.27	.8	3.5	.15	4.04	15	2	.08	1.2	265
0302-6	1.09	1085.23	10780.10	498.7	99999	58.6	16.2	2159	4.79	726.4	1.3	20.2	10.8	90.3	7.43	384.95	.76	3	3.17	.020	1.5	7.0	1.35	25.8	<.001	2	.33	.018	.18	.6	2.8	.13	3.86	8	.3	.19	.7	123
0302-7	2.16	1171.27	10930.74	9458.5	99999	36.7	10.9	3955	4.61	2401.0	1.0	44.7	7.5	99.4	91.11	421.41	.61	4	4.09	.184	1.4	11.3	1.59	28.3	<.001	3	.38	.019	.20	1.8	2.3	.11	3.43	35	<.1	.19	1.3	145
0302-8	.65	1232.25	16997.28	37281.1	50659	36.5	11.9	2888	5.39	12530.9	1.4	370.4	6.4	73.9	405.99	714.80	1.47	2	3.22	.021	.9	4.5	1.32	21.2	<.001	1	.25	.013	.14	.8	1.5	.11	4.98	102	.4	.12	1.6	1018
RE 0302-8	.65	1284.66	14815.10	38582.7	50384	38.2	13.4	2986	5.54	12648.5	1.4	607.1	6.0	70.1	407.88	703.63	1.49	2	3.07	.020	.9	5.1	1.37	21.6	<.001	1	.25	.014	.14	.9	1.5	.11	5.08	113	.5	.12	1.6	1224
RRE 0302-8	2.50	1261.69	15865.58	37723.0	50174	36.9	12.1	2976	5.46	12334.5	1.4	426.4	5.6	70.0	405.94	659.01	1.44	2	3.08	.021	1.0	11.2	1.36	24.8	<.001	1	.26	.015	.15	2.2	1.6	.11	4.84	102	.7	.14	1.6	2451
0302-9	.70	1214.67	12052.05	39432.2	51194	27.4	8.9	3158	4.45	4163.5	1.2	39.5	5.0	73.3	410.21	261.83	1.67	2	3.06	.013	.8	4.9	1.37	19.8	<.001	2	.23	.013	.13	1.0	1.4	.08	3.99	114	.8	.12	1.4	153
0302-10	1.55	1183.22	14689.21	11239.2	35255	50.6	9.4	2955	6.22	28763.5	1.3	1583.2	7.9	68.8	110.17	954.09	.43	2	3.02	.049	1.1	8.0	1.17	24.0	<.001	1	.31	.016	.16	1.3	1.9	.12	3.97	31	<.1	.08	1.0	3377
0302-11	.48	35.68	131.26	211.2	1593	56.2	18.5	2208	5.67	14595.5	1.2	375.2	9.7	65.6	2.28	12.00	.56	3	2.85	.036	1.8	6.7	1.13	26.4	<.001	2	.33	.015	.19	.6	2.4	.10	4.54	<5	.2	.04	.8	875
0302-12	3.06	404.44	74.43	129.8	28638	3.3	1.1	4201	4.83	35207.3	<.1	1337.0	.2	73.2	1.44	185.12	.58	<2	4.00	.004	<.5	12.2	1.66	3.6	<.001	<1	.03	.002	.01	3.6	1.6	<.02	2.11	12	.2	.02	.2	1489
0302-13	.61	78.67	26.96	35.8	4370	7.7	2.2	2051	2.80	3284.5	.1	157.2	.8	62.7	.42	20.88	.10	<2	3.75	.014	.6	4.3	1.53	6.3	<.001	<1	.06	.004	.03	1.3	1.1	.02	.81	<5	.1	.02	.2	128
0302-14	6.02	70.55	13878.40	96.9	16558	18.2	3.7	2357	3.09	221.1	.3	11.4	1.9	97.7	1.62	14.35	2.16	<2	3.41	.012	3.8	24.3	1.27	15.4	<.001	1	.20	.011	.10	5.8	3.4	.05	.72	5	.6	.15	.5	32
0302-15	.93	167.44	98.63	91.7	4974	54.3	10.9	1169	4.45	2597.6	2.1	14.6	16.4	35.5	.73	16.33	.28	6	1.70	.035	3.7	11.4	1.36	36.8	<.001	3	.42	.027	.22	.8	2.9	.11	1.36	<5	.2	.02	.9	38
0302-16	.97	30.34	45.68	34.0	360	61.7	13.4	1222	4.57	198.9	1.6	3.4	12.1	25.1	.11	1.34	.10	5	1.04	.034	5.3	12.2	1.52	30.7	<.001	1	.40	.021	.21	.6	2.8	.10	.73	<5	.1	.02	.9	6
0302-17	.46	10.88	19.24	36.0	250	66.9	13.3	1416	3.95	1901.1	1.5	3.9	12.0	33.1	.17	1.29	.12	5	1.37	.034	2.9	10.5	1.17	32.7	<.001	2	.38	.020	.21	.4	3.1	.11	1.52	<5	<.1	<.02	.9	23
0302-18	1.58	9.67	28.43	33.3	206	59.9	20.1	1632	3.63	3795.5	1.4	14.8	11.1	39.5	.24	1.51	.23	5	1.73	.036	2.1	11.1	.87	29.6	<.001	2	.38	.019	.21	1.0	2.4	.10	2.36	<5	.2	.03	.9	62
0302-19	.61	1838.42	12735.96	126.0	49166	53.3	13.4	1652	5.92	13904.6	1.6	140.8	10.0	62.2	2.22	253.43	4.41	3	2.09	.017	1.5	5.4	.86	28.0	<.001	3	.32	.017	.18	.7	2.2	.10	4.96	15	.3	.09	.8	399
0302-20	1.14	36.36	138.94	12.5	1123	65.3	23.5	901	5.19	1295.8	1.3	12.7	9.5	151.0	.12	4.44	.32	4	2.40	.033	2.6	6.0	1.03	28.9	<.001	2	.36	.016	.19	.8	3.9	.10	4.58	<5	.1	.03	.8	50
0302-21	.72	23.72	207.49	18.9	2214	48.0	12.9	3226	5.67	9561.4	1.4	43.7	9.9	75.8	.16	5.56	.19	4	3.15	.023	1.4	6.2	1.25	25.8	<.001	2	.30	.014	.18	.7	2.3	.09	4.06	<5	.2	.03	.8	198
0302-22	2.80	169.89	1392.03	24307.1	5518	10.8	4.3	3842	3.92	533.3	.7	16.9	5.6	83.3	204.80	4.69	.15	2	2.74	.009	.9	11.3	1.00	11.8	<.001	1	.13	.006	.07	5.7	1.6	.03	3.79	61	.1	.05	.7	26
0302-23	.60	62.35	920.64	12327.1	3233	8.3	2.8	3710	5.36	857.6	.3	35.8	2.2	89.1	95.28	2.67	.10	2	2.79	.011	.6	3.6	1.02	11.0	<.001	1	.14	.006	.08	1.2	1.7	.03	5.09	43	<.1	.05	.5	57
STANDARD DS5/AU-R	12.75	144.28	24.72	142.4	297	25.2	12.6	781	3.01	24.2	6.3	43.6	3.0	48.8	5.68	3.68	6.35	62	.77	.098	12.7	183.6	.68	138.3	.097	16	2.09	.035	.14	4.2	3.6	1.05	<.01	167	4.5	.81	6.5	481

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30.0 GM SAMPLES ANALYSIS BY FA/ICP.
- SAMPLE TYPE: CORE R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 9 2003 DATE REPORT MAILED: July 24/03 SIGNED BY. C. L. ....D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm
0302-24	.79	971.77	14509.81	39504.0	99999	36.0	8.2	1989	5.05	1051.5	.8	98.9	3.6	76.1	371.16	320.25	.85
0302-25	.22	38.66	60.00	138.0	1890	53.6	17.1	1540	3.63	3788.3	1.3	23.2	6.8	80.1	.98	4.63	.20
0302-26	1.30	195.87	1008.52	13299.2	7286	40.0	19.7	4517	4.40	9264.8	1.1	438.4	4.8	144.8	111.95	12.64	.27
0302-27	.10	45.72	16.00	75.0	5318	2.7	.6	742	.73	132.8	.1	6.0	.3	42.4	.75	16.47	<.02
0302-28	1.64	433.22	61.83	1019.5	53502	67.8	55.9	2186	4.06	1880.6	1.3	53.5	6.0	100.7	8.10	98.27	.43
0302-29	.51	25.63	16.57	59.3	1722	51.9	28.9	1440	4.03	10455.7	1.4	165.3	7.6	68.8	.46	4.31	.22
0302-30	1.30	366.87	15261.11	8570.5	87275	32.8	10.1	3342	5.73	25654.3	.9	1374.4	5.1	98.7	75.41	135.69	.67
0302-31	.32	3504.25	18069.67	1542.0	99999	35.7	13.6	4228	10.46	18293.0	.6	575.3	4.5	107.6	38.89	1814.76	2.02
0302-32	2.36	5015.21	16482.64	1845.8	99999	3.9	1.1	1669	7.58	14800.5	<.1	1346.7	.1	37.2	43.80	2791.00	2.65
0302-33	.26	3839.49	19661.41	633.2	99999	26.4	9.3	2114	12.87	99999.0	.9	2684.4	4.9	70.8	21.30	1682.00	2.19
0302-34	.92	166.03	460.97	30.0	7419	52.8	24.2	1285	4.19	1029.0	1.3	26.4	7.8	51.4	.32	10.96	.40
RE 0302-34	.92	172.44	443.67	25.9	7047	56.4	25.9	1285	4.21	1038.5	1.4	18.1	8.5	51.7	.22	10.80	.43
RRE 0302-34	.45	178.00	542.93	29.2	8975	54.9	22.8	1300	4.15	963.5	1.5	7.2	8.7	52.6	.28	12.16	.39
0302-35	.57	8.42	81.37	16.2	791	39.2	12.4	4468	4.78	25154.8	1.1	228.0	7.3	71.3	.11	9.06	.38
0302-36	.13	42.93	235.44	16.4	3411	27.2	15.8	4197	16.04	99999.0	.6	1419.3	3.7	68.2	.17	65.00	.59
0302-37	1.36	17.88	98.13	22.0	1432	40.6	24.0	4627	11.59	99999.0	.9	479.9	4.6	77.5	.17	22.00	.29
0302-38	.19	140.08	629.99	570.3	14261	31.3	13.7	4669	11.57	99999.0	.5	738.9	4.6	75.1	4.96	60.00	.26
0302-39	1.38	55.04	8800.56	4776.8	26383	18.2	9.2	4852	4.00	531.4	.7	370.3	2.1	110.0	38.74	30.91	.48
0302-40	.09	9.24	46.00	36.0	538	40.8	11.4	2857	4.46	4389.9	1.0	35.0	5.4	78.7	.21	1.65	.10
0302-41	.76	25.80	3170.27	3234.3	10004	28.0	14.1	10591	6.81	668.2	1.2	13.0	3.3	101.4	26.76	8.67	.12
0302-42	.06	1795.07	17773.13	95558.9	99999	15.4	4.5	11744	3.67	216.4	1.3	17.0	.9	246.1	909.31	239.38	.23
0302-43	1.74	1073.97	17170.25	404.3	99999	27.2	14.1	2812	8.59	7442.4	.6	1038.3	2.9	51.0	29.39	624.33	2.12
0302-44	.34	839.39	17232.33	848.2	99999	33.5	16.8	5126	8.34	7819.2	.8	441.2	4.3	91.6	11.71	152.41	.41
0303-113	.63	34.52	547.19	153.0	2866	33.2	7.2	1979	6.21	28639.4	.9	402.6	3.8	92.2	.90	11.62	.67
STANDARD DS5/AU-R	12.36	145.00	26.00	139.6	280	24.4	11.8	791	3.04	18.0	6.1	44.0	2.9	49.7	5.80	3.58	6.47

SAMPLE#	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0302-24	9	2.17	.071	.8	7.3	1.06	19.8	<.001	2	.22	.012	.13	1.9	2.4	.11	6.72	315	<.1	19	1.4	148
0302-25	9	2.29	.017	2.5	4.6	1.24	22.3	<.001	2	.25	.014	.17	.3	3.2	.08	2.44	<5	.2	.04	.6	50
0302-26	10	4.66	.006	2.0	6.5	2.07	16.8	<.001	1	.16	.009	.12	2.3	1.9	.06	3.56	48	<.1	.06	.7	739
0302-27	6	1.04	<.001	<.5	1.4	.47	3.9	<.001	2	.04	.003	.02	<.1	9	<.02	.07	<5	<.1	<.02	.1	10
0302-28	7	2.89	.003	2.6	6.6	1.42	19.5	<.001	1	.18	.010	.14	1.4	2.8	.06	3.64	<5	.4	.06	.5	178
0302-29	8	2.04	.012	3.3	4.5	.94	23.5	<.001	2	.25	.014	.16	.3	2.1	.08	3.61	<5	.2	.05	.6	314
0302-30	7	3.29	.008	1.5	6.7	1.52	19.3	.003	1	.15	.009	.11	2.6	1.4	.07	4.95	39	<.1	.06	.7	1833
0302-31	6	3.60	.003	<.5	1.5	1.73	15.2	.001	1	.13	.006	.09	.1	1.1	.11	10.74	32	.7	.07	.5	963
0302-32	3	1.23	<.001	<.5	8.8	.54	6.8	<.001	<1	.02	.001	<.01	3.8	<.1	.07	9.93	39	.3	.08	.2	1178
0302-33	6	2.43	.005	.5	3.0	1.24	21.8	.004	1	.19	.010	.12	.2	1.8	.15	11.77	34	.6	.15	.6	3110
0302-34	3	1.37	.010	1.7	5.9	1.06	21.0	.003	1	.22	.013	.15	1.0	2.6	.07	2.81	<5	.4	.05	.5	24
RE 0302-34	5	1.37	.010	1.8	6.4	1.06	21.7	<.001	2	.23	.014	.15	1.0	2.5	.07	2.76	<5	.3	.05	.6	27
RRE 0302-34	7	1.37	.011	2.0	5.1	1.08	26.4	<.001	2	.28	.015	.17	.2	2.6	.08	2.88	<5	.3	.05	.7	26
0302-35	5	3.76	.014	1.4	3.8	1.51	17.8	<.001	1	.18	.010	.13	.8	2.0	.06	2.81	<5	.1	.19	.5	348
0302-36	8	3.71	.008	.8	2.1	1.43	16.4	<.001	<1	.18	.009	.12	.1	1.3	.09	11.24	6	.5	.23	.6	1546
0302-37	7	4.85	.012	.8	6.1	2.04	14.6	<.001	<1	.15	.008	.10	1.9	1.7	.06	8.11	<5	.3	.11	.5	794
0302-38	8	3.74	.010	.7	2.2	1.84	14.8	<.001	1	.17	.009	.11	.2	2.2	.06	8.34	<5	.3	.12	.6	970
0302-39	6	5.23	.014	1.0	7.5	1.66	9.3	.004	<1	.09	.005	.06	279.2	1.3	.03	2.20	87	<.1	.25	.4	28
0302-40	7	4.31	.018	1.3	3.4	1.70	19.1	.004	1	.22	.011	.14	1.7	2.1	.06	2.90	5	.1	.03	.6	93
0302-41	8	6.90	.133	1.1	6.9	2.04	16.7	.003	<1	.20	.010	.11	2.9	2.1	.05	4.36	10	.1	.07	.8	70
0302-42	6	8.08	.154	1.0	1.7	1.67	11.6	.003	<1	.12	.005	.06	.2	2.5	.11	7.79	304	.5	.17	1.8	96
0302-43	2	2.16	.007	.5	6.2	.87	11.8	.001	<1	.11	.005	.07	3.2	1.2	.11	10.98	16	.4	.15	.4	1333
0302-44	5	3.97	.016	1.2	2.4	1.64	18.6	.005	<1	.19	.009	.13	251.5	2.0	.09	8.74	77	.1	.08	.7	422
0303-113	6	3.73	.006	3.1	6.3	2.09	17.7	.004	<1	.17	.010	.10	2.0	2.5	.06	2.85	5	.1	.12	.4	542
STANDARD DS5/AU-R	62	.76	.094	12.2	195.7	.69	140.9	.098	16	2.10	.035	.14	4.4	3.4	1.04	.05	184	4.7	.86	6.5	481

Sample type: CORE R150. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Assay recommend for Pb > 5000 ppm

Ag > 30, ppm

As, Zn > 1%.

Sb > 1000 ppm

Data FA

ACM ANA TICAL LABORATORIES LTD. 852 E. HASTINGS ST. COUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60 253-1716
(ISO 2 Accredited Co.)

ASSAY CE FICATE

Jasper Mining Corporation File # A302511R Page 1
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Pb %	Zn %	Ag gm/mt	As %	Sb %
0301-56	29.59	4.63	2866.1	.14	.709
0301-57	1.47	10.09	107.5	.08	.019
0301-65	8.19	.21	556.8	.37	.168
0301-66	15.34	3.61	2442.7	.37	.916
0301-68	.60	1.92	62.8	.04	.089
0301-69	.40	1.02	36.9	.01	.010
0301-70	1.28	6.22	68.8	.57	.010
0301-71	1.48	3.75	60.4	.64	.021
0302-4	.28	.87	34.7	.08	.019
0302-5	.40	.21	62.8	.09	.034
0302-6	.99	.05	126.0	.06	.066
0302-7	1.02	.94	139.8	.22	.061
0302-8	2.25	3.70	56.3	1.07	.101
0302-9	1.16	3.73	57.5	.36	.041
0302-10	1.58	1.08	40.7	2.36	.150
RE 0302-10	1.58	1.08	42.6	2.45	.152
0302-11	.01	.02	<.3	1.29	<.001
0302-12	.01	.01	31.8	2.93	.010
0302-14	1.30	<.01	16.6	.03	<.001
0302-19	1.19	.01	53.5	1.19	.044
0302-21	.02	<.01	<.3	.83	.003
0302-22	.15	2.40	8.3	.05	<.001
0302-23	.10	1.25	9.3	.08	<.001
0302-24	2.48	4.61	152.8	.09	.035
0302-26	.11	1.54	11.7	.91	.004
0302-28	.02	.11	64.3	.18	.017
0302-29	<.01	.01	.9	1.04	.001
0302-30	1.65	.89	94.6	2.48	.013
0302-31	12.09	.15	945.8	1.62	.194
0302-32	13.44	.17	1193.3	1.38	.248
0302-33	6.44	.06	789.1	6.96	.170
0302-35	.02	<.01	.8	2.31	.001
0302-36	.03	<.01	8.4	12.40	<.001
0302-37	.01	<.01	2.5	5.00	<.001
STANDARD GC-2	8.81	16.43	1037.6	.15	.770
STANDARD PBC-1	25.92	1.64	1924.0	3.02	.331

GROUP 7AR - .25 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 250 ML, ANALYSED BY ICP-ES.
- SAMPLE TYPE: CORE PULP Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 1 2003 DATE REPORT MAILED: Aug 13/03 SIGNED BY C. L........D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Fire assay for Ag recommend if > 300 g/t

 Data L FA ___

SAMPLE#	Pb %	Zn %	Ag gm/mt	As %	Sb %
0302-38	.05	<.01	12.0	5.57	.003
0302-39	.88	.05	23.3	.06	.001
0302-42	7.58	1.11	269.9	<.01	.018
0302-43	17.23	<.01	581.7	.69	.076
0302-44	2.92	<.01	129.4	.75	.016
0303-113	.06	<.01	1.9	2.52	.004
STANDARD PBC-1	25.51	.16	1918.1	2.99	.339

Sample type: CORE PULP.

Data ✓ FA ___

ACME ANA[illegible]TICAL LABORATORIES LTD. 852 E. HASTINGS ST. [illegible]COUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60[illegible]253-1716
(ISO [illegible]02 Accredited Co.)

ASSAY CE[illegible]FICATE

Jasper Mining Corporation File # A302511R Page 1
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Pb %	Zn %	Ag gm/mt	As %	Sb %
0301-56	29.59	4.63	2866.1	.14	.709
0301-57	1.47	10.09	107.5	.08	.019
0301-65	8.19	.21	556.8	.37	.168
0301-66	15.34	3.61	2442.7	.37	.916
0301-68	.60	1.92	62.8	.04	.089
0301-69	.40	1.02	36.9	.01	.010
0301-70	1.28	6.22	68.8	.57	.010
0301-71	1.48	3.75	60.4	.64	.021
0302-4	.28	.87	34.7	.08	.019
0302-5	.40	.21	62.8	.09	.034
0302-6	.99	.05	126.0	.06	.066
0302-7	1.02	.94	139.8	.22	.061
0302-8	2.25	3.70	56.3	1.07	.101
0302-9	1.16	3.73	57.5	.36	.041
0302-10	1.58	1.08	40.7	2.36	.150
RE 0302-10	1.58	1.08	42.6	2.45	.152
0302-11	.01	.02	<.3	1.29	<.001
0302-12	.01	.01	31.8	2.93	.010
0302-14	1.30	<.01	16.6	.03	<.001
0302-19	1.19	.01	53.5	1.19	.044
0302-21	.02	<.01	<.3	.83	.003
0302-22	.15	2.40	8.3	.05	<.001
0302-23	.10	1.25	9.3	.08	<.001
0302-24	2.48	4.61	152.8	.09	.035
0302-26	.11	1.54	11.7	.91	.004
0302-28	.02	.11	64.3	.18	.017
0302-29	<.01	.01	.9	1.04	.001
0302-30	1.65	.89	94.6	2.48	.013
0302-31	12.09	.15	945.8	1.62	.194
0302-32	13.44	.17	1193.3	1.38	.248
0302-33	6.44	.06	789.1	6.96	.170
0302-35	.02	<.01	.8	2.31	.001
0302-36	.03	<.01	8.4	12.40	<.001
0302-37	.01	<.01	2.5	5.00	<.001
STANDARD GC-2	8.81	16.43	1037.6	.15	.770
STANDARD PBC-1	25.92	1.64	1924.0	3.02	.331

GROUP 7AR - .25 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 250 ML, ANALYSED BY ICP-ES.
- SAMPLE TYPE: CORE PULP <u>Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.</u>

DATE RECEIVED: AUG 1 2003 DATE REPORT MAILED: Aug 13/03 SIGNED BY [signature] D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Fire assay for Ag recommend if 7 300 g/t

Data [initial] FA ____

SAMPLE#	Pb %	Zn %	Ag gm/mt	As %	Sb %
0302-38	.05	<.01	12.0	5.57	.003
0302-39	.88	.05	23.3	.06	.001
0302-42	7.58	1.11	269.9	<.01	.018
0302-43	17.23	<.01	581.7	.69	.076
0302-44	2.92	<.01	129.4	.75	.016
0303-113	.06	<.01	1.9	2.52	.004
STANDARD PBC-1	25.51	.16	1918.1	2.99	.339

Sample type: CORE PULP.

Data ✓ FA

ACME A] YTICAL LABORATORIES LTD. 852 E. HASTINGS ST. NCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6(253-1716
(IS 002 Accredited Co.)

ASSAY CE IFICATE

Jasper Mining Corporation File # A302511R2

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Au** gm/mt
0301-66	9.94
STANDARD AU-1	3.34

GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: CORE PULP

DATE RECEIVED: NOV 7 2003 DATE REPORT MAILED: Nov 17/03 SIGNED BY.......... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME ANA TICAL LABORATORIES LTD. 852 E. HASTINGS ST. COUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60 ?53-1716
(ISO 02 Accredited Co.)

ASSAY CE FICATE

Jasper Mining Corporation File # A302511R2
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Au** gm/mt
0301-66	9.94
STANDARD AU-1	3.34

GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: CORE PULP

DATE RECEIVED: NOV 7 2003 DATE REPORT MAILED: Nov 17/03 SIGNED BY..........D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME ANA TICAL LABORATORIES LTD. 852 E. HASTINGS ST. COUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6C 253-1716
(ISO 02 Accredited Co.)

ASSAY CE. IFICATE

Jasper Mining Corporation File # A302511R2
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Au** gm/mt
0301-66	9.94
STANDARD AU-1	3.34

GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: CORE PULP

DATE RECEIVED: NOV 7 2003 DATE REPORT MAILED: Nov 17/03 SIGNED BY............D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACM. AN. TICAL LABORATORIES LTD. 852 E. HASTINGS ST. ICOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6(253-1716
(ISO 02 Accredited Co.)

GEOCHEMICAL ANA. SIS CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A302740 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb	Sample gm
SI	.15	4.64	28.12	6.9	649	.3	.1	11	.04	13.6	<.1	1.1	<.1	2.1	.05	1.99	<.02	4	.10	<.001	<.5	1.0	.01	1.9	.001	1	.01	.405	<.01	.2	<.1	<.02	.08	<5	.1	<.02	<.1	3	-
0301-58	.53	5875.55	18104.53	99999.0	99999	2.4	1.4	485	4.61	4456.3	.3	620.0	.4	10.7	1365.00	4155.07	.52	<2	.57	.004	<.5	1.7	.17	4.7	<.001	1	.02	.003	.01	.2	.2	.16	11.19	369	6.3	.05	2.9	681	2100
0301-59	.24	5260.77	18689.52	99999.0	99999	23.0	10.7	2514	3.71	2100.4	.8	738.2	3.9	42.2	996.12	4006.85	1.07	3	3.24	.010	<.5	3.4	1.07	18.7	<.001	2	.13	.009	.08	.4	1.4	.11	7.29	1092	4.7	.15	3.1	523	2000
0301-60	.45	122.67	1176.85	3641.0	13111	42.6	15.9	3108	4.51	10731.1	1.1	221.1	6.4	58.8	27.06	68.27	.27	4	3.65	.035	1.1	4.4	1.28	20.2	.002	2	.20	.010	.12	.3	2.2	.06	3.22	21	.2	<.02	.6	273	2000
0301-61	.42	179.22	888.26	9387.8	9957	42.4	14.8	3029	5.94	18847.2	1.1	1002.6	6.5	63.3	64.05	42.35	.43	3	3.46	.010	1.0	3.9	1.28	22.0	<.001	2	.21	.010	.13	.6	1.8	.07	5.44	36	.1	.07	.8	1014	2000
0301-62	.51	19.80	168.99	2850.8	1605	25.1	8.5	4708	3.61	311.9	1.0	14.0	4.9	73.8	22.54	9.68	.09	6	4.96	.030	1.5	6.4	1.72	17.7	<.001	2	.17	.009	.11	.4	2.5	.05	1.46	6	.2	.02	.6	35	1200
0301-63	.46	224.87	5654.45	8931.8	15664	42.9	12.5	3184	11.07	71155.0	1.0	1763.6	1.8	35.6	76.74	102.81	.64	2	2.44	.026	.6	3.0	.79	11.7	.001	2	.11	.005	.07	.6	1.6	.06	10.21	19	.1	.15	.5	1819	500
0301-64	.93	669.63	5293.52	2429.2	53771	25.4	10.3	2646	5.28	1724.8	.7	180.2	3.9	39.2	20.09	550.67	.35	2	2.79	.013	.7	5.5	.90	15.1	<.001	2	.12	.007	.07	.2	1.1	.04	5.30	13	.1	.02	.4	235	1900
0302-44b	.19	2320.39	5900.32	9356.8	99999	27.5	6.4	1760	7.92	2272.5	1.1	362.8	5.5	43.6	76.39	618.66	.14	2	1.63	.026	1.2	2.8	.66	19.5	<.001	2	.19	.008	.11	.4	1.5	.07	8.87	39	<.1	<.02	.7	638	400
0302-45	.36	787.05	14498.28	168.4	99999	40.9	17.6	4204	2.41	337.6	2.0	15.8	7.6	55.2	3.97	253.38	.39	<2	2.40	.026	2.3	2.4	.97	20.7	<.001	2	.21	.010	.13	.3	2.1	.08	1.86	5	<.1	.06	.6	67	700
0302-46	.59	116.80	19494.50	12134.1	72263	25.5	10.2	7563	6.18	462.3	1.2	51.0	4.2	114.4	101.00	57.53	.53	2	6.07	.016	1.0	3.2	2.02	16.7	<.001	1	.14	.007	.09	2.5	1.8	.07	5.40	52	<.1	.20	.7	71	1100
0302-47	.45	93.50	6764.12	6721.9	26810	26.9	10.9	4390	3.71	199.5	1.4	16.5	4.4	210.2	56.18	31.22	.21	<2	10.27	.031	1.1	2.0	1.63	16.9	<.001	2	.13	.007	.08	.6	1.8	.04	2.10	27	.1	.05	.5	24	2000
0302-48	.36	1503.30	21869.37	99999.0	99999	15.0	5.7	3902	9.87	51779.1	.8	2469.6	2.4	37.7	1250.08	501.85	1.06	<2	2.55	.011	<.5	1.6	.92	10.1	<.001	1	.07	.003	.05	55.7	1.6	.08	13.85	461	5.8	.11	3.2	2423	1200
0302-49	.36	2216.55	20685.13	99999.0	99999	10.5	3.5	3449	8.74	13351.2	.7	892.4	1.1	29.0	1608.00	229.17	.15	<2	1.69	.015	<.5	.9	.68	5.1	.002	1	.03	.002	.02	46.2	1.5	.04	13.80	906	9.3	.05	4.5	1246	1300
0302-50	.60	63.12	4365.55	6771.9	17902	39.7	17.5	3776	5.07	564.1	1.6	43.5	7.2	84.2	55.31	18.12	.29	3	4.57	.015	1.2	2.9	1.81	21.3	.003	3	.18	.008	.12	59.0	1.8	05	4.26	28	<.1	.07	.7	87	900
0302-51	.70	723.65	24229.87	40349.1	99999	7.6	3.7	11490	16.23	5293.6	.7	257.5	2.0	113.6	392.00	421.67	.22	<2	6.29	.045	<.5	1.7	2.38	7.4	.004	1	.05	.002	.03	340.0	1.9	.04	23.20	223	1.9	.34	1.1	396	3200
0302-52	.47	167.06	8242.00	8621.6	54981	19.8	8.4	15042	11.79	1999.3	1.4	160.2	3.7	142.8	81.66	107.32	.22	<2	7.53	.014	.9	2.4	2.24	14.8	.002	1	.10	.004	.06	1.4	2.5	.04	12.11	40	<.1	.06	.8	239	1700
0302-53	.65	604.09	18939.28	99999.0	99999	11.5	5.3	10866	11.27	8507.3	1.2	180.4	2.6	110.6	1001.00	219.97	.16	<2	5.78	.023	<.5	1.8	2.03	10.0	.004	1	.06	.003	.04	2.5	1.7	.04	16.97	337	4.5	.06	2.9	305	2700
0302-54	.35	515.25	3099.74	6962.4	52200	5.0	2.7	8933	20.87	67029.0	.8	404.9	1.6	80.9	73.49	230.23	.05	<2	4.39	.018	<.5	1.3	1.65	7.2	.005	<1	.04	.002	.02	4.7	1.3	.02	25.25	24	.5	.03	.6	1173	2900
0302-55	.54	650.89	1570.63	99999.0	11400	10.9	5.4	3723	8.61	4168.7	.9	92.3	2.5	33.9	891.00	46.32	.08	<2	1.98	.025	<.5	2.1	.72	10.0	.003	1	.06	.003	.04	.8	1.2	.03	14.45	214	4.0	.03	2.0	222	2400
RE 0302-55	.53	655.33	1545.32	99999.0	11800	11.2	5.1	3741	8.66	4227.7	.8	79.5	2.3	33.9	943.69	46.12	.06	<2	2.00	.024	<.5	1.7	.73	8.5	.004	1	.05	.003	.04	.8	1.0	02	14.34	211	3.8	<.02	1.9	243	-
RRE 0302-55	.25	715.83	1584.40	99999.0	11800	10.5	5.1	3597	8.67	4553.3	.8	70.0	2.3	34.3	986.36	43.63	.08	<2	2.05	.022	<.5	1.6	.70	10.3	.003	1	.07	.003	.05	.8	1.0	.03	14.86	229	4.5	.03	2.0	247	-
0303-81	.71	23.52	48.15	377.3	2184	93.2	21.2	1394	6.13	1440.3	.5	40.6	6.1	69.1	2.44	9.16	.30	4	1.75	.024	1.5	6.2	.80	15.2	.004	2	.19	.010	.11	.3	3.1	.07	6.96	<5	.4	.02	.6	42	500
0303-82	.52	12.42	60.94	287.3	1157	74.4	20.0	2263	4.47	1304.6	.8	35.4	8.6	59.3	1.47	4.59	.35	2	2.40	.031	2.1	4.0	1.00	18.6	.002	3	.21	.012	.13	.5	3.2	.07	4.28	5	.2	.05	.7	61	400
0303-83	.94	206.09	2867.97	122.2	34820	49.7	14.1	833	6.57	5411.5	.8	311.5	8.0	22.9	1.51	100.89	.19	<2	.81	.027	1.8	4.4	.30	16.2	.003	2	.16	.008	.11	.3	1.4	.07	7.28	<5	.2	.03	.5	386	700
0303-84	.53	1015.99	18388.85	314.4	99999	2.7	1.1	44	1.92	3233.6	1.8	243.9	.1	1.3	8.87	709.25	.48	<2	.02	<.001	<.5	3.1	.01	1.5	<.001	1	.01	.002	<.01	1.4	<.1	.02	2.20	10	.1	.05	.1	268	500
0303-85	1.76	141.53	7563.24	82.8	36166	1.5	.5	36	.96	800.4	.3	117.6	<.1	.5	1.59	87.75	.12	<2	.01	<.001	<.5	5.9	<.01	.7	<.001	1	.01	.002	<.01	.2	<.1	<.02	.96	<5	<.1	.03	.1	114	100
0303-86	.46	425.82	531.22	106.3	54009	4.4	2.7	1027	11.54	97018.6	.9	5774.0	.1	29.3	2.01	359.93	.08	<2	.92	<.001	<.5	3.2	.36	2.0	.004	<1	.01	.002	<.01	1.3	.2	<.02	9.19	5	.2	.03	.2	5741	400
0303-87	1.51	42.64	491.16	39.0	6325	.7	.2	22	.69	656.6	<.1	74.1	<.1	<.5	.42	23.60	.03	<2	<.01	<.001	<.5	5.0	<.01	<.5	.003	<1	<.01	.002	<.01	<.1	<.1	<.02	.46	<5	<.1	.02	.1	73	500
0303-88	.58	37.52	255.39	51.9	5550	32.4	14.0	301	13.27	17631.6	.6	1223.2	3.1	13.6	.53	25.94	.16	<2	.38	.004	.9	3.3	.13	11.4	<.001	2	.13	.007	.08	.9	.6	.05	19.06	<5	.4	.06	.4	1676	800
0303-89	1.12	2400.22	7389.92	397.9	99999	14.8	5.0	69	15.40	99999.0	.5	10265.6	.1	2.7	6.64	1460.90	.46	<2	.03	<.001	<.5	3.1	.01	3.1	.004	1	.01	.001	<.01	<.1	<.1	.02	9.58	16	.3	.07	.1	10180	600
0303-90	.51	23.06	73.08	52.7	1324	53.2	11.6	1464	4.28	3982.3	1.0	151.7	7.3	42.1	.33	8.61	.22	5	1.88	.025	3.8	5.9	1.15	19.8	.004	9	.24	.016	.14	.6	2.9	.06	2.80	<5	.2	.02	.6	292	900
0303-91	.68	28.97	120.94	200.3	1769	55.8	10.3	1633	5.10	1243.7	.9	40.5	5.3	57.7	3.18	13.97	.13	<2	2.10	.007	2.2	4.8	.88	17.4	<.001	1	.20	.011	.13	.3	2.7	.06	5.13	<5	.2	.02	.5	63	200
0303-92	.27	1600.72	15976.46	38573.4	99999	44.5	11.3	1563	6.81	6311.6	1.5	575.7	4.3	54.1	322.84	516.26	2.82	<2	1.84	.007	2.0	3.5	.80	17.9	.003	2	.18	.010	.11	.5	1.8	.09	9.14	134	1.8	.29	1.0	746	800
0303-93	.56	279.39	330.08	1358.7	23846	55.2	30.1	1625	4.90	4259.7	1.1	74.5	5.3	70.5	14.93	103.98	.90	2	2.87	.006	3.1	3.4	1.25	18.7	.002	3	.19	.011	.13	.3	2.4	.06	4.10	7	.3	.04	.5	165	200
STANDARD DS5/AU-R	12.38	136.80	24.20	131.3	271	24.5	11.8	749	2.88	18.0	6.0	43.7	2.8	47.1	5.61	3.89	6.39	57	.71	.093	11.0	182.6	.66	135.9	.092	21	2.02	.030	.13	4.8	3.4	1.05	.03	168	4.9	.87	6.4	494	-

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30.00 GM SAMPLE ANALYSIS BY FA/ICP.
- SAMPLE TYPE: CORE R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 21 2003 DATE REPORT MAILED: Aug 5/03 SIGNED BY. . . . . .D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm
0303-94	.84	1606.97	12610.32	21279.7	99999	40.2	22.1	866	8.09	27300.0	2.1	850.0	4.0	24.7	227.74	887.56	.66
0303-95	.33	2619.13	21230.19	26967.2	99999	3.1	.9	<1	18.84	26536.1	.9	2963.0	<.1	2.0	246.91	1699.53	1.75
0303-96	.52	1967.04	11413.82	14375.0	99999	25.8	4.9	887	14.97	99999.0	1.4	3041.9	2.8	25.1	131.34	593.76	.34
0303-97	.30	410.22	2100.44	33062.1	18280	37.5	6.9	2826	4.35	1901.8	.7	110.1	4.8	67.6	286.90	59.15	.26
0303-98	.59	1048.89	9584.31	1161.9	99999	42.2	7.3	1961	8.75	5553.0	1.0	210.3	4.4	58.9	14.79	464.19	1.03
0303-99	.43	297.87	583.03	1581.7	20029	27.4	7.4	1216	6.23	2827.5	.7	100.9	3.4	46.9	14.88	92.80	.31
0303-100	.69	9195.74	19731.40	99999.0	99999	31.7	14.0	823	7.47	10515.3	1.6	777.2	3.6	21.6	1134.52	4284.00	1.21
0303-101	.31	5221.13	14208.99	99999.0	99999	34.7	7.0	1063	8.00	27570.4	1.4	1214.3	5.7	24.1	1212.98	1706.00	.23
0303-102	.99	1050.59	5116.50	1152.0	99999	39.5	14.2	1657	5.48	1544.9	1.0	128.7	4.6	36.5	11.38	452.33	.24
0303-103	.45	3492.68	23722.75	17235.5	99999	29.0	6.4	924	7.43	31621.9	2.6	1636.7	4.5	19.3	201.26	1679.34	.28
0303-104	.66	389.59	2951.23	12669.1	29844	45.1	8.0	2645	5.72	11468.6	1.2	196.6	6.4	40.7	111.00	62.68	.10
0303-105	.55	149.40	3643.62	2856.5	22278	41.5	13.9	1955	10.40	90500.0	1.1	1768.4	5.0	41.0	22.86	87.36	.23
0303-106	.99	37.50	480.78	166.0	3468	67.5	58.1	3516	5.80	4743.9	1.0	75.2	4.8	70.5	1.16	13.53	.54
0303-107	.44	4044.44	14868.81	99999.0	99999	25.6	11.3	920	17.17	99999.0	.9	3959.6	2.9	22.0	1148.36	1275.23	.27
0303-108	1.02	1807.80	11239.89	47354.7	99999	53.3	25.8	1288	11.98	56310.0	1.2	1132.5	4.9	28.2	490.01	546.29	.37
0303-109	.64	1073.00	15050.73	872.9	99999	48.3	31.1	1366	5.99	2193.4	.8	162.6	3.5	32.6	13.98	581.33	.46
0303-110	.97	779.52	4523.44	25681.0	44435	49.8	37.6	4049	8.27	41933.4	.7	756.9	3.8	73.5	255.60	140.51	.42
RE 0303-110	.73	911.88	6275.23	32035.6	56711	59.0	42.1	3630	8.05	34486.5	.8	577.3	3.9	63.1	331.74	154.46	.49
RRE 0303-110	.68	906.14	5272.23	31842.5	55676	58.3	39.3	3591	8.02	34299.9	.8	647.5	3.8	64.6	328.26	152.48	.49
0303-111	.91	236.54	9581.77	2572.4	26566	18.4	8.4	1468	16.20	99999.0	1.4	3928.8	2.1	42.0	19.93	197.72	.81
0303-112	.31	13.99	200.28	241.4	896	52.0	12.1	2825	5.65	24341.9	1.5	283.4	6.8	62.4	1.28	16.38	.30
0304-114	.81	5.92	56.53	59.7	287	16.7	7.8	1890	2.26	1161.6	.4	34.8	5.0	34.9	.47	1.07	.06
0304-115	.40	29.52	25.14	50.8	305	44.1	12.4	3134	4.63	7932.4	1.0	87.8	7.4	71.5	.26	2.43	.78
0304-116	.96	20.91	30.82	12.9	353	51.3	18.1	1714	5.73	12082.0	1.2	80.4	7.4	45.7	.16	2.53	1.18
0304-117	.34	216.66	6428.84	9458.6	13244	27.8	11.4	2580	2.94	149.8	1.0	3.6	4.4	312.3	87.93	13.48	.32
0305-117	1.15	11.39	135.38	54.2	806	52.1	29.7	87	8.98	2537.1	.9	86.7	6.7	22.9	.46	2.43	1.22
0305-118	.36	27.49	71.72	59.7	838	59.3	16.8	2129	4.51	12504.0	1.0	86.2	10.7	57.2	.60	2.70	.49
0305-119	.51	214.14	3062.25	8592.2	12071	48.7	15.0	4461	2.53	436.5	1.0	44.1	11.8	47.8	82.76	24.03	.36
0305-120	.36	2600.00	15765.81	30443.9	99999	46.4	15.2	3579	2.56	473.6	1.4	115.5	9.9	39.3	285.87	1048.40	.54
0305-121	.89	605.43	24967.63	373.1	99999	23.5	6.5	4298	2.92	655.8	.9	117.4	5.2	69.5	26.79	807.42	20.32
0305-122	.48	2391.84	7351.89	616.3	99999	27.0	9.4	3833	1.81	448.2	.8	37.9	5.7	66.3	9.29	1386.12	1.02
0305-123	1.01	4004.10	15352.68	119.4	99999	29.0	7.9	7261	3.03	301.6	.9	45.5	7.0	90.0	6.89	144.89	2.22
0305-124	.91	5413.89	13438.77	596.6	99999	36.4	11.3	4729	7.63	20868.0	.5	1008.9	1.3	105.9	12.26	2202.23	5.83
0305-125	1.36	102.92	1177.46	4044.5	17263	10.1	2.4	4993	7.88	1667.9	.1	185.1	1.0	141.4	28.93	34.62	.14
STANDARD DS5/AU-R	13.16	146.77	25.00	140.5	270	25.7	12.5	786	3.04	16.0	6.3	46.9	3.1	49.7	5.77	3.98	6.64

SAMPLE#	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb	Sample gm
0303-94	2	.87	.006	1.5	4.3	.33	17.0	<.001	<1	.18	.010	.12	.2	1.2	.07	9.98	78	.3	.08	.7	1038	1200
0303-95	<2	.01	<.001	<.5	1.7	<.01	2.5	<.001	<1	.01	.002	<.01	.9	<.1	.04	22.64	95	.7	.49	.4	2802	800
0303-96	<2	.74	.005	1.0	2.6	.30	15.3	.001	<1	.13	.006	.09	.6	1.0	.11	12.65	66	<.1	.23	.6	2983	700
0303-97	4	2.25	.009	1.6	4.3	1.01	16.9	<.001	2	.20	.009	.14	.6	2.1	.06	5.61	109	.5	.05	1.2	124	600
0303-98	2	2.00	.009	1.6	4.5	.91	14.4	<.001	<1	.17	.007	.12	.2	2.2	.07	9.58	13	.5	.34	.4	218	700
0303-99	<2	1.24	<.001	1.3	3.8	.54	14.2	<.001	1	.16	.008	.11	.9	1.3	.05	6.81	5	.4	.08	.4	160	800
0303-100	<2	.64	.002	<.5	2.5	.25	15.7	<.001	<1	.12	.006	.09	.2	.6	.11	13.02	485	3.2	.58	2.9	673	1500
0303-101	<2	.83	.005	.9	3.1	.30	20.4	.001	<1	.20	.009	.14	.5	1.1	.09	12.29	455	3.2	.36	2.6	1080	1400
0303-102	<2	1.45	.004	1.2	4.5	.58	13.0	<.001	<1	.14	.007	.11	.2	1.4	.05	5.61	18	.3	.05	.4	207	900
0303-103	<2	.62	.005	1.0	3.6	.23	16.7	<.001	<1	.17	.009	.11	.9	.9	.09	8.76	72	<.1	.10	.7	1533	1100
0303-104	<2	1.85	.006	2.1	5.3	.70	19.8	<.001	1	.21	.010	.14	.2	1.5	.07	5.58	36	<.1	<.02	.7	283	800
0303-105	2	1.83	.005	1.9	4.0	.68	20.8	<.001	<1	.20	.010	.13	.8	1.2	.08	8.15	12	.3	.07	.6	2158	700
0303-106	5	3.56	.005	1.7	4.3	1.43	18.3	<.001	<1	.19	.010	.13	.2	2.0	.06	4.82	<5	.6	.10	.5	169	1400
0303-107	2	.79	.002	.6	2.3	.31	16.3	.001	1	.15	.007	.10	.6	.9	.08	14.11	309	2.2	.10	2.1	3769	900
0303-108	<2	1.04	.003	1.7	3.2	.44	16.4	<.001	<1	.16	.007	.11	.2	1.3	.08	13.67	173	.9	.10	1.2	1216	700
0303-109	<2	1.25	.003	1.2	4.0	.50	16.3	<.001	<1	.16	.008	.12	.8	1.3	.08	6.71	14	.4	.09	.4	220	400
0303-110	3	3.28	.003	1.7	3.6	1.38	14.5	<.001	1	.15	.006	.10	.2	1.7	.07	7.56	67	.6	.12	.8	1033	900
RE 0303-110	3	2.86	.004	1.6	3.2	1.26	16.3	<.001	1	.18	.007	.12	.6	1.8	.09	8.38	90	.6	.13	1.0	1216	-
RRE 0303-110	3	2.95	.004	1.6	3.4	1.24	16.4	<.001	1	.17	.008	.12	.6	1.7	.08	8.37	81	.7	.08	1.0	1075	-
0303-111	<2	1.35	.001	.8	3.4	.53	11.6	<.001	<1	.09	.004	.06	.2	.9	.09	9.72	9	.2	.14	.3	3630	2100
0303-112	5	2.63	.005	2.0	4.3	1.04	21.3	<.001	1	.22	.010	.14	.7	2.8	.09	4.07	<5	.4	.08	.6	397	700
0304-114	3	2.47	.005	.6	4.5	.93	7.3	<.001	<1	.10	.009	.06	<.1	1.4	.03	.73	<5	.1	.02	.2	35	600
0304-115	5	3.83	.026	1.5	6.3	2.07	19.6	<.001	<1	.23	.017	.12	.2	2.6	.07	2.28	<5	.3	.08	.6	164	400
0304-116	3	2.26	.021	.9	3.5	.98	18.6	<.001	<1	.20	.013	.12	<.1	1.6	.06	5.13	5	.6	.11	.5	328	1400
0304-117	2	16.64	.045	.8	3.5	.83	13.2	<.001	<1	.14	.011	.08	.3	2.2	.04	1.12	29	.3	.08	.5	37	1100
0305-117	3	.66	.246	1.9	4.8	.02	15.5	.002	11	.22	.009	.11	.2	1.3	.06	9.92	6	.7	.11	.6	243	300
0305-118	4	2.72	.035	2.1	7.7	1.39	20.0	<.001	1	.28	.016	.15	.3	2.9	.10	2.87	<5	.4	.02	.7	134	700
0305-119	4	2.30	.124	2.5	5.3	.91	20.7	<.001	1	.29	.016	.15	.1	2.7	.07	1.36	21	<.1	.05	1.0	34	300
0305-120	2	1.83	.086	1.5	4.6	.66	19.4	<.001	1	.27	.016	.14	.3	2.2	.09	4.18	84	.3	.06	1.2	211	600
0305-121	2	3.03	.081	.7	4.9	1.16	11.8	<.001	2	.15	.008	.08	.1	2.4	.10	4.22	7	.5	.18	.4	186	500
0305-122	3	2.46	.023	.9	3.8	89	15.9	<.001	1	.20	.012	.11	.5	1.7	.06	.76	28	.2	.02	.5	539	400
0305-123	3	3.76	.004	1.2	5.8	1.45	22.2	<.001	1	.24	.017	.14	1	2.4	.07	2.18	6	9	.17	.7	729	100
0305-124	3	4.32	<.001	<.5	4.0	1.96	9.3	<.001	2	.09	.005	.05	1.0	1.3	.06	7.14	58	1.2	.32	.3	1274	100
0305-125	2	5.20	.001	<.5	4.9	2.46	6.3	<.001	<1	.07	.003	.04	<.1	1.4	.03	7.18	11	.1	.03	.3	245	200
STANDARD DS5/AU-R	63	.74	.097	12.3	184.3	.67	146.9	.098	17	2.09	.032	.14	4.4	3.3	1.11	<.01	191	4.8	.83	7.1	486	-

Sample type: CORE R150. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ✓ FA ✓

Jasper Mining Corporation PROJECT Ruth-Vermont FILE # A302740 Page 3

ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm
0305-126	.44	179.52	9869.96	69.5	48350	22.9	6.6	3717	2.04	3275.1	1.0	114.1	5.3	95.3	1.72	99.02	.44
0305-127	.16	17.80	32.39	21.3	1287	43.3	10.1	1531	3.18	1247.0	.9	11.4	5.2	75.1	.16	4.38	.14
0305-128	.32	7.47	31.63	16.8	647	35.9	8.1	3290	3.37	8773.3	.7	84.1	4.8	105.4	.12	2.79	.32
0305-129	.29	882.47	5255.36	56893.7	94346	25.3	10.8	2558	5.90	695.9	.8	35.4	3.3	53.8	427.97	253.20	.30
0305-130	.35	344.13	2529.49	27082.9	23380	34.1	9.0	2609	4.55	606.3	.9	40.6	4.7	57.4	204.72	66.15	.14
0305-131	.29	707.75	26856.04	14350.1	99999	8.3	1.2	2737	2.50	329.7	.3	235.7	1.5	42.9	132.99	1162.76	1.69
0305-132	.41	732.98	1694.64	46821.9	37852	27.4	15.3	5412	4.38	413.6	.7	25.1	3.7	63.1	348.03	148.02	.22
0305-150	.70	514.68	9754.20	29405.7	67673	44.2	13.7	1458	3.89	1383.3	1.0	54.9	6.3	57.5	226.16	196.51	.26
0305-151	.87	92.36	5501.38	5612.1	17196	61.2	26.3	1600	4.13	1409.8	1.0	28.3	6.1	58.1	39.83	38.15	.54
0305-152	.29	6170.48	27991.96	91392.2	99999	3.5	1.0	585	4.58	6696.2	.1	1203.1	.5	13.9	881.00	5067.62	.29
0305-153	.71	1354.15	15203.06	11259.7	99999	36.2	9.1	1763	3.80	10062.0	.9	303.8	5.4	46.7	97.82	1079.84	.19
0305-154	.59	44.59	3264.18	347.5	15000	25.6	8.7	1781	4.85	22005.9	.5	356.4	3.7	28.4	2.85	46.20	.16
RE 0305-154	.65	49.00	3333.43	329.0	15423	29.0	9.3	1776	4.80	21699.5	.5	390.3	4.1	28.4	2.92	50.21	.18
RRE 0305-154	1.05	35.49	2795.65	228.8	11944	29.8	10.7	1844	5.26	26797.0	.5	429.3	4.3	29.6	1.93	45.17	.20
0305-155	.37	2944.62	19909.28	16127.6	99999	6.8	1.6	43	14.20	21676.6	.1	1065.8	.7	2.0	158.00	1923.00	.07
0305-156	.93	1366.22	13044.98	5217.7	99999	40.6	18.0	1681	6.19	9503.6	.7	225.2	4.4	32.8	37.33	807.94	.41
0305-158	.48	64.75	6558.87	11741.7	23190	31.3	12.5	5982	4.58	413.8	.9	35.8	4.1	115.9	90.47	28.26	.49
0305-159	.49	146.18	8808.57	30162.6	58410	9.3	3.5	3951	5.32	1217.5	.9	109.6	1.4	180.0	243.26	72.69	.16
0305-160	.16	4760.15	19558.08	99999.0	99999	18.7	4.5	1704	3.60	2159.7	.5	225.9	3.4	41.1	1022.00	1837.50	1.31
STANDARD DS5/AU-R	12.81	142.95	23.77	133.2	279	24.3	12.1	746	2.99	18.9	5.9	39.5	2.9	49.5	5.66	3.80	5.97

SAMPLE#	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb	Sample gm
0305-126	3	3.30	.012	1.6	3.5	1.35	18.0	<.001	1	.18	.011	.12	.2	1.9	.08	1.04	<5	.2	.07	.4	138	300
0305-127	3	2.23	.014	2.2	3.5	1.09	20.5	<.001	1	.25	.013	.15	.3	2.9	.08	2.21	<5	.1	<.02	.6	16	300
0305-128	3	3.54	.013	2.0	3.3	1.70	16.4	<.001	1	.20	.010	.12	.1	2.2	.07	2.42	<5	.1	.05	.5	109	300
0305-129	2	3.49	.008	.6	2.6	1.25	14.2	<.001	<1	.16	.008	.10	.5	1.2	.05	7.48	182	1.2	.06	1.2	92	500
0305-130	3	3.87	.013	.9	2.9	1.40	17.7	<.001	<1	.17	.009	.11	.2	1.7	.05	4.28	82	.5	.04	1.0	76	400
0305-131	<2	2.30	.001	<.5	1.9	.98	8.5	<.001	<1	.07	.005	.04	.6	1.2	.12	6.01	45	.5	1.16	.5	266	400
0305-132	2	4.71	.018	.6	3.8	1.49	14.3	<.001	<1	.13	.007	.08	17.9	2.0	.04	3.92	144	1.1	.05	1.1	46	500
0305-150	2	2.13	.010	2.6	3.4	.92	20.3	<.001	<1	.22	.012	.13	.4	2.2	.08	4.55	100	.3	.05	.9	99	1400
0305-151	2	2.50	.008	1.8	4.0	1.04	17.3	<.001	1	.18	.010	.11	.3	2.4	.06	3.61	26	.3	.07	.5	70	900
0305-152	<2	.66	<.001	<.5	1.6	.24	6.3	<.001	<1	.03	.002	.02	.6	.3	.16	7.92	275	2.1	.09	1.5	1382	1500
0305-153	2	2.13	.009	1.3	3.3	.89	17.8	<.001	<1	.17	.010	.11	.3	2.1	.09	3.96	40	<.1	.03	.5	580	800
0305-154	<2	1.36	.005	1.1	3.5	.53	14.4	<.001	1	.15	.008	.09	.8	1.2	.05	3.28	<5	.1	<.02	.4	505	1000
RE 0305-154	2	1.36	.006	1.2	4.3	.53	16.0	<.001	2	.17	.009	.10	.9	1.4	.06	3.80	<5	.2	.02	.4	507	-
RRE 0305-154	<2	1.43	.006	1.1	4.6	.56	14.4	<.001	1	.15	.008	.10	.2	1.3	.05	4.00	<5	.2	<.02	.4	565	-
0305-155	<2	.06	<.001	<.5	2.0	.02	5.7	<.001	1	.05	.003	.03	.9	.1	.06	15.40	46	<.1	.03	.3	1538	1400
0305-156	<2	1.48	.005	.8	3.9	.62	16.2	<.001	1	.16	.008	.10	.2	1.3	.06	5.41	22	.2	.05	.4	404	1100
0305-158	2	5.28	.018	1.0	3.5	1.76	18.4	<.001	1	.17	.008	.11	50.3	2.0	.05	2.97	29	<.1	.04	.6	77	1500
0305-159	<2	8.74	.098	.8	2.3	.64	8.0	<.001	1	.09	.003	.05	19.7	1.1	.04	5.67	106	.5	.09	.5	226	1400
0305-160	2	1.98	.006	.6	2.5	.98	14.3	<.001	2	.14	.007	.08	.7	1.1	.07	5.87	540	2.4	.16	3.8	278	300
STANDARD DS5/AU-R	59	.76	.094	11.4	183.5	.68	136.4	.092	16	2.10	.031	.14	4.3	3.4	1.05	.01	183	4.6	.83	6.6	481	-

Sample type: CORE R150. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Assay in progress for Pb > 5000 ppm
As, Zn > 1%
Ag > 30 ppm

Data FA

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A302740 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb	Sample gm
SI	.15	4.64	28.12	6.9	649	.3	.1	11	.04	13.6	<.1	1.1	<.1	2.1	.05	1.99	<.02	4	.10	<.001	<.5	1.0	.01	1.9	.001	1	.01	.405	<.01	.2	<.1	<.02	.08	<5	.1	<.02	<.1	3	-
0301-58	.53	5875.55	18104.53	99999.0	99999	2.4	1.4	485	4.61	4456.3	.3	620.0	.4	10.7	1365.00	4155.07	.52	<2	.57	.004	<.5	1.7	.17	4.7	<.001	1	.02	.003	.01	.2	.2	.16	11.19	369	6.3	.05	2.9	681	2100
0301-59	.24	5260.77	18689.52	99999.0	99999	23.0	10.7	2514	3.71	2100.4	.8	738.2	3.9	42.2	996.12	4006.85	1.07	3	3.24	.010	<.5	3.4	1.07	18.7	<.001	2	.13	.009	.08	.4	1.4	.11	7.29	1092	4.7	.15	3.1	523	2000
0301-60	.45	122.67	1176.85	3641.0	13111	42.6	15.9	3108	4.51	10731.1	1.1	221.1	6.4	58.8	27.06	68.27	.27	4	3.65	.035	1.1	4.4	1.28	20.2	.002	2	.20	.010	.12	.3	2.2	.06	3.22	21	.2	<.02	.6	273	2000
0301-61	.42	179.22	888.26	9387.8	9957	42.4	14.8	3029	5.94	18847.2	1.1	1002.6	6.5	63.3	64.05	42.35	.43	3	3.46	.010	1.0	3.9	1.28	22.0	<.001	2	.21	.010	.13	.6	1.8	.07	5.44	36	.1	.07	.8	1014	2000
0301-62	.51	19.80	168.99	2850.8	1605	25.1	8.5	4708	3.61	311.9	1.0	14.0	4.9	73.8	22.54	9.68	.09	6	4.96	.030	1.5	6.4	1.72	17.7	<.001	2	.17	.009	.11	.4	2.5	.05	1.46	6	.2	.02	.6	35	1200
0301-63	.46	224.87	5654.45	8931.8	15664	42.9	12.5	3184	11.07	71155.0	1.0	1763.6	1.8	35.6	76.74	102.81	.64	2	2.44	.026	.6	3.0	.79	11.7	.001	2	.11	.005	.07	.6	1.6	.06	10.21	19	.1	.15	.5	1819	500
0301-64	.93	669.63	5293.52	2429.2	53771	25.4	10.3	2646	5.28	1724.8	.7	180.2	3.9	39.2	20.09	550.67	.35	2	2.79	.013	.7	5.5	.90	15.1	<.001	2	.12	.007	.07	.2	1.1	.04	5.30	13	.1	.02	.4	235	1900
0302-44b	.19	2320.39	5900.32	9356.8	99999	27.5	6.4	1760	7.92	2272.5	1.1	362.8	5.5	43.6	76.39	618.66	.14	2	1.63	.026	1.2	2.8	.66	19.5	<.001	2	.19	.008	.11	.4	1.5	.07	8.87	39	<.1	<.02	.7	638	400
0302-45	.36	787.05	14498.28	168.4	99999	40.9	17.6	4204	2.41	337.6	2.0	15.8	7.6	55.2	3.97	253.38	.39	<2	2.40	.026	2.3	2.4	.97	20.7	<.001	2	.21	.010	.13	.3	2.1	.08	1.86	5	<.1	.06	.6	67	700
0302-46	.59	116.80	19494.50	12134.1	72263	25.5	10.2	7563	6.18	462.3	1.2	51.0	4.2	114.4	101.00	57.53	.53	2	6.07	.016	1.0	3.2	2.02	16.7	<.001	1	.14	.007	.09	2.5	1.8	.07	5.40	52	<.1	.20	.7	71	1100
0302-47	.45	93.50	6764.12	6721.9	26810	26.9	10.9	4390	3.71	199.5	1.4	16.5	4.4	210.2	56.18	31.22	.21	<2	10.27	.031	1.1	2.0	1.63	16.9	<.001	2	.13	.007	.08	.6	1.8	.04	2.10	27	.1	.05	.5	24	2000
0302-48	.36	1503.30	21869.37	99999.0	99999	15.0	5.7	3902	9.87	51779.1	.8	2469.6	2.4	37.7	1250.08	501.85	1.06	<2	2.55	.011	<.5	1.6	.92	10.1	<.001	1	.07	.003	.05	55.7	1.6	.08	13.85	461	5.8	.11	3.2	2423	1200
0302-49	.36	2216.55	20685.13	99999.0	99999	10.5	3.5	3449	8.74	13351.2	.7	892.4	1.1	29.0	1608.00	229.17	.15	<2	1.69	.015	<.5	.9	.68	5.1	.002	1	.03	.002	.02	46.2	1.5	.04	13.80	906	9.3	.05	4.5	1246	1300
0302-50	.60	63.12	4365.55	6771.9	17902	39.7	17.5	3776	5.07	564.1	1.6	43.5	7.2	84.2	55.31	18.12	.29	3	4.57	.015	1.2	2.9	1.81	21.3	.003	3	.18	.008	.12	59.0	1.8	.05	4.26	28	<.1	.07	.7	87	900
0302-51	.70	723.65	24229.87	40349.1	99999	7.6	3.7	11490	16.23	5293.6	.7	257.5	2.0	113.6	392.00	421.67	.22	<2	6.29	.045	<.5	1.7	2.38	7.4	.004	1	.05	.002	.03	340.0	1.9	.04	23.20	223	1.9	.34	1.1	396	3200
0302-52	.47	167.06	8242.00	8621.6	54981	19.8	8.4	15042	11.79	1999.3	1.4	160.2	3.7	142.8	81.66	107.32	.22	<2	7.53	.014	.9	2.4	2.24	14.8	.002	1	.10	.004	.06	1.4	2.5	.04	12.11	40	<.1	.06	.8	239	1700
0302-53	.65	604.09	18939.28	99999.0	99999	11.5	5.3	10866	11.27	8507.3	1.2	180.4	2.6	110.6	1001.00	219.97	.16	<2	5.78	.023	<.5	1.8	2.03	10.0	.004	1	.06	.003	.04	2.5	1.7	.04	16.97	337	4.5	.06	2.9	305	2700
0302-54	.35	515.25	3099.74	6962.4	52200	5.0	2.7	8933	20.87	67029.0	.8	404.9	1.6	80.9	73.49	230.23	.05	<2	4.39	.018	<.5	1.3	1.65	7.2	.005	<1	.04	.002	.02	4.7	1.3	.02	25.25	24	5	.03	.6	1173	2900
0302-55	.54	650.89	1570.63	99999.0	11400	10.9	5.4	3723	8.61	4168.7	.9	92.3	2.5	33.9	891.00	46.32	.08	<2	1.98	.025	<.5	2.1	.72	10.0	.003	1	.06	.003	.04	.8	1.2	.03	14.45	214	4.0	.03	2.0	222	2400
RE 0302-55	.53	655.33	1545.32	99999.0	11800	11.2	5.1	3741	8.66	4227.7	.8	79.5	2.3	33.9	943.69	46.12	.06	<2	2.00	.024	<.5	1.7	.73	8.5	.004	1	.05	.003	.04	.8	1.0	.02	14.34	211	3.8	<.02	1.9	243	-
RRE 0302-55	.25	715.83	1584.40	99999.0	11800	10.5	5.1	3597	8.67	4553.3	.8	70.0	2.3	34.3	986.36	43.63	.08	<2	2.05	.022	<.5	1.6	.70	10.3	.003	1	.07	.003	.05	.8	1.0	.03	14.86	229	4.5	.03	2.0	247	-
0303-81	.71	23.52	48.15	377.3	2184	93.2	21.2	1394	6.13	1440.3	.5	40.6	6.1	69.1	2.44	9.16	.30	4	1.75	.024	1.5	6.2	.80	15.2	.004	2	.19	.010	.11	.3	3.1	.07	6.96	<5	.4	.02	.6	42	500
0303-82	.52	12.42	60.94	287.3	1157	74.4	20.0	2263	4.47	1304.6	.8	35.4	8.6	59.3	1.47	4.59	.35	2	2.40	.031	2.1	4.0	1.00	18.6	.002	3	.21	.012	.13	.5	3.2	.07	4.28	5	.2	.05	.7	61	400
0303-83	.94	206.09	2867.97	122.2	34820	49.7	14.1	833	6.57	5411.5	.8	311.5	8.0	22.9	1.51	100.89	.19	<2	.81	.027	1.8	4.4	.30	16.2	.003	2	.16	.008	.11	.3	1.4	.07	7.28	<5	.2	.03	.5	386	700
0303-84	.53	1015.99	18388.85	314.4	99999	2.7	1.1	44	1.92	3233.6	1.8	243.9	.1	1.3	8.87	709.25	.48	<2	.02	<.001	<.5	3.1	.01	1.5	<.001	1	.01	.002	<.01	1.4	<.1	.02	2.20	10	.1	.05	.1	268	500
0303-85	1.76	141.53	7563.24	82.8	36166	1.5	.5	36	.96	800.4	.3	117.6	<.1	.5	1.59	87.75	.12	<2	.01	<.001	<.5	5.9	<.01	.7	<.001	1	.01	.002	<.01	.2	<.1	<.02	.96	<5	<.1	.03	.1	114	100
0303-86	.46	425.82	531.22	106.3	54009	4.4	2.7	1027	11.54	97018.6	.9	5774.0	.1	29.3	2.01	359.93	.08	<2	.92	<.001	<.5	3.2	.36	2.0	.004	<1	.01	.002	<.01	1.3	.2	<.02	9.19	5	.2	.03	.2	5741	400 –
0303-87	1.51	42.64	491.16	39.0	6325	.7	.2	22	.69	656.6	<.1	74.1	<.1	<.5	.42	23.60	.03	<2	<.01	<.001	<.5	5.0	<.01	<.5	.003	<1	<.01	.002	<.01	<.1	<.1	<.02	.46	<5	<.1	.02	.1	73	500
0303-88	.58	37.52	255.39	51.9	5550	32.4	14.0	301	13.27	17631.6	.6	1223.2	3.1	13.6	.53	25.94	.16	<2	.38	.004	.9	3.3	.13	11.4	<.001	2	.13	.007	.08	.9	.6	.05	19.06	<5	.4	.06	.4	1676	800
0303-89	1.12	2400.22	7389.92	397.9	99999	14.8	5.0	69	15.40	99999.0	.5	10265.6	.1	2.7	6.64	1460.90	.46	<2	.03	<.001	<.5	3.1	.01	3.1	.004	1	.01	.001	<.01	<.1	<.1	.02	9.58	16	3	.07	.1	10180	600
0303-90	.51	23.06	73.08	52.7	1324	53.2	11.6	1464	4.28	3982.3	1.0	151.7	7.3	42.1	.33	8.61	.22	5	1.88	.025	3.8	5.9	1.15	19.8	.004	9	.24	.016	.14	.6	2.9	.06	2.80	<5	.2	.02	.6	292	900
0303-91	.68	28.97	120.94	200.3	1769	55.8	10.3	1633	5.10	1243.7	.9	40.5	5.3	57.7	3.18	13.97	.13	<2	2.10	.007	2.2	4.8	.88	17.4	<.001	1	.20	.011	.13	.3	2.7	.06	5.13	<5	.2	.02	.5	63	200
0303-92	.27	1600.72	15976.46	38573.4	99999	44.5	11.3	1563	6.81	6311.6	1.5	575.7	4.3	54.1	322.84	516.26	2.82	<2	1.84	.007	2.0	3.5	.80	17.9	.003	2	.18	.010	.11	.5	1.8	.09	9.14	134	1.8	.29	1.0	746	800
0303-93	.56	279.39	330.08	1358.7	23846	55.2	30.1	1625	4.90	4259.7	1.1	74.5	5.3	70.5	14.93	103.98	.90	2	2.87	.006	3.1	3.4	1.25	18.7	.002	3	.19	.011	.13	.3	2.4	.06	4.10	7	.3	.04	.5	165	200
STANDARD DS5/AU-R	12.38	136.80	24.20	131.3	271	24.5	11.8	749	2.88	18.0	6.0	43.7	2.8	47.1	5.61	3.89	6.39	57	.71	.093	11.0	182.6	.66	135.9	.092	21	2.02	.030	.13	4.8	3.4	1.05	.03	168	4.9	.87	6.4	494	-

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30.00 GM SAMPLE ANALYSIS BY FA/ICP.
- SAMPLE TYPE: CORE R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 21 2003 DATE REPORT MAILED: Aug 5/03 SIGNED BY ....D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb	Sample gm
0303-94	.84	1606.97	12610.32	21279.7	99999	40.2	22.1	866	8.09	27300.0	2.1	850.0	4.0	24.7	227.74	887.56	.66	2	.87	.006	1.5	4.3	.33	17.0	<.001	<1	.18	.010	.12	.2	1.2	.07	9.98	78	.3	.08	.7	1038	1200
0303-95	.33	2619.13	21230.19	26967.2	99999	3.1	.9	<1	18.84	26536.1	.9	2963.0	<.1	2.0	246.91	1699.53	1.75	<2	.01	<.001	<.5	1.7	<.01	2.5	<.001	<1	.01	.002	<.01	.9	<.1	.04	22.64	95	.7	.49	.4	2802	800
0303-96	.52	1967.04	11413.82	14375.0	99999	25.8	4.9	887	14.97	99999.0	1.4	3041.9	2.8	25.1	131.34	593.76	.34	<2	.74	.005	1.0	2.6	.30	15.3	.001	<1	.13	.006	.09	.6	1.0	.11	12.65	66	<.1	.23	.6	2983	700
0303-97	.30	410.22	2100.44	33062.1	18280	37.5	6.9	2826	4.35	1901.8	.7	110.1	4.8	67.6	286.90	59.15	.26	4	2.25	.009	1.6	4.3	1.01	16.9	<.001	2	.20	.009	.14	.6	2.1	.06	5.61	109	.5	.05	1.2	124	600
0303-98	.59	1048.89	9584.31	1161.9	99999	42.2	7.3	1961	8.75	5553.0	1.0	210.3	4.4	58.9	14.79	464.19	1.03	2	2.00	.009	1.6	4.5	.91	14.4	<.001	<1	.17	.007	.12	.2	2.2	.07	9.58	13	.5	.34	.4	218	700
0303-99	.43	297.87	583.03	1581.7	20029	27.4	7.4	1216	6.23	2827.5	.7	100.9	3.4	46.9	14.88	92.80	.31	<2	1.24	<.001	1.3	3.8	.54	14.2	<.001	1	.16	.008	.11	.9	1.3	.05	6.81	5	.4	.08	.4	160	800
0303-100	.69	9195.74	19731.40	99999.0	99999	31.7	14.0	823	7.47	10515.3	1.6	777.2	3.6	21.6	1134.52	4284.00	1.21	<2	.64	.002	<.5	2.5	.25	15.7	<.001	<1	.12	.006	.09	.2	.6	.11	13.02	485	3.2	.58	2.9	673	1500
0303-101	.31	5221.13	14208.99	99999.0	99999	34.7	7.0	1063	8.00	27570.4	1.4	1214.3	5.7	24.1	1212.98	1706.00	.23	<2	.83	.005	.9	3.1	.30	20.4	.001	<1	.20	.009	.14	.5	1.1	.09	12.29	455	3.2	.36	2.6	1080	1400
0303-102	.99	1050.59	5116.50	1152.0	99999	39.5	14.2	1657	5.48	1544.9	1.0	128.7	4.6	36.5	11.38	452.33	.24	<2	1.45	.004	1.2	4.5	.58	13.0	<.001	<1	.14	.007	.11	.2	1.4	.05	5.61	18	.3	.05	.4	207	900
0303-103	.45	3492.68	23722.75	17235.5	99999	29.0	6.4	924	7.43	31621.9	2.6	1636.7	4.5	19.3	201.26	1679.34	.28	<2	.62	.005	1.0	3.6	.23	16.7	<.001	<1	.17	.009	.11	.9	.9	.09	8.76	72	<.1	.10	.7	1533	1100
0303-104	.66	389.59	2951.23	12669.1	29844	45.1	8.0	2645	5.72	11468.6	1.2	196.6	6.4	40.7	111.00	62.68	.10	<2	1.85	.006	2.1	5.3	.70	19.8	<.001	1	.21	.010	.14	.2	1.5	.07	5.58	36	<.1	<.02	.7	283	800
0303-105	.55	149.40	3643.62	2856.5	22278	41.5	13.9	1955	10.40	90500.0	1.1	1768.4	5.0	41.0	22.86	87.36	.23	2	1.83	.005	1.9	4.0	.68	20.8	<.001	<1	.20	.010	.13	.8	1.2	.08	8.15	12	.3	.07	.6	2158	700
0303-106	.99	37.50	480.78	166.0	3468	67.5	58.1	3516	5.80	4743.9	1.0	75.2	4.8	70.5	1.16	13.53	.54	5	3.56	.005	1.7	4.3	1.43	18.3	<.001	<1	.19	.010	.13	.2	2.0	.06	4.82	<5	.6	.10	.5	169	1400
0303-107	.44	4044.44	14868.81	99999.0	99999	25.6	11.3	920	17.17	99999.0	.9	3959.6	2.9	22.0	1148.36	1275.23	.27	2	.79	.002	.6	2.3	.31	16.3	.001	1	.15	.007	.10	.6	.9	.08	14.11	309	2.2	.10	2.1	3769	900
0303-108	1.02	1807.80	11239.89	47354.7	99999	53.3	25.8	1288	11.98	56310.0	1.2	1132.5	4.9	28.2	490.01	546.29	.37	<2	1.04	.003	1.7	3.2	.44	16.4	<.001	<1	.16	.007	.11	.2	1.3	.08	13.67	173	.9	.10	1.2	1216	700
0303-109	.64	1073.00	15050.73	872.9	99999	48.3	31.1	1366	5.99	2193.4	.8	162.6	3.5	32.6	13.98	581.33	.46	<2	1.25	.003	1.2	4.0	.50	16.3	<.001	<1	.16	.008	.12	.8	1.3	.08	6.71	14	.4	.09	.4	220	400
0303-110	.97	779.52	4523.44	25681.0	44435	49.8	37.6	4049	8.27	41933.4	.7	756.9	3.8	73.5	255.60	140.51	.42	3	3.28	.003	1.7	3.6	1.38	14.5	<.001	1	.15	.006	.10	.2	1.7	.07	7.56	67	.6	.12	.8	1033	900
RE 0303-110	.73	911.88	6275.23	32035.6	56711	59.0	42.1	3630	8.05	34486.5	.8	577.3	3.9	63.1	331.74	154.46	.49	3	2.86	.004	1.6	3.2	1.26	16.3	<.001	1	.18	.007	.12	.6	1.8	.09	8.38	90	.6	.13	1.0	1216	-
RRE 0303-110	.68	906.14	5272.23	31842.5	55676	58.3	39.3	3591	8.02	34299.9	.8	647.5	3.8	64.6	328.26	152.48	.49	3	2.95	.004	1.6	3.4	1.24	16.4	<.001	1	.17	.008	.12	.6	1.7	.08	8.37	81	.7	.08	1.0	1075	-
0303-111	.91	236.54	9581.77	2572.4	26566	18.4	8.4	1468	16.20	99999.0	1.4	3928.8	2.1	42.0	19.93	197.72	.81	<2	1.35	.001	.8	3.4	.53	11.6	<.001	<1	.09	.004	.06	.2	.9	.09	9.72	9	.2	.14	.3	3630	2100
0303-112	.31	13.99	200.28	241.4	896	52.0	12.1	2825	5.65	24341.9	1.5	283.4	6.8	62.4	1.28	16.38	.30	5	2.63	.005	2.0	4.3	1.04	21.3	<.001	1	.22	.010	.14	.7	2.8	.09	4.07	<5	.4	.08	.6	397	700
0304-114	.81	5.92	56.53	59.7	287	16.7	7.8	1890	2.26	1161.6	.4	34.8	5.0	34.9	.47	1.07	.06	3	2.47	.005	.6	4.5	.93	7.3	<.001	<1	.10	.009	.06	<.1	1.4	.03	.73	<5	.1	.02	.2	35	600
0304-115	.40	29.52	25.14	50.8	305	44.1	12.4	3134	4.63	7932.4	1.0	87.8	7.4	71.5	.26	2.43	.78	5	3.83	.026	1.5	6.3	2.07	19.6	<.001	<1	.23	.017	.12	.2	2.6	.07	2.28	<5	.3	.08	.6	164	400
0304-116	.96	20.91	30.82	12.9	353	51.3	18.1	1714	5.73	12082.0	1.2	80.4	7.4	45.7	.16	2.53	1.18	3	2.26	.021	.9	3.5	.98	18.6	<.001	<1	.20	.013	.12	<.1	1.6	.06	5.13	5	.6	.11	.5	328	1400
0304-117	.34	216.66	6428.84	9458.6	13244	27.8	11.4	2580	2.94	149.8	1.0	3.6	4.4	312.3	87.93	13.48	.32	2	16.64	.045	.8	3.5	.83	13.2	<.001	<1	.14	.011	.08	.3	2.2	.04	1.12	29	.3	.08	.5	37	1100
0305-117	1.15	11.39	135.38	54.2	806	52.1	29.7	87	8.98	2537.1	.9	86.7	6.7	22.9	.46	2.43	1.22	3	.66	.246	1.9	4.8	.02	15.5	.002	11	.22	.009	.11	.2	1.3	.06	9.92	6	.7	.11	.6	243	300
0305-118	.36	27.49	71.72	59.7	838	59.3	16.8	2129	4.51	12504.0	1.0	86.2	10.7	57.2	.60	2.70	.49	4	2.72	.035	2.1	7.7	1.39	20.0	<.001	1	.28	.016	.15	.3	2.9	.10	2.87	<5	.4	.02	.7	134	700
0305-119	.51	214.14	3062.25	8592.2	12071	48.7	15.0	4461	2.53	436.5	1.0	44.1	11.8	47.8	82.76	24.03	.36	4	2.30	.124	2.5	5.3	.91	20.7	<.001	1	.29	.016	.15	.1	2.7	.07	1.36	21	<.1	.05	1.0	34	300
0305-120	.36	2600.00	15765.81	30443.9	99999	46.4	15.2	3579	2.56	473.6	1.4	115.5	9.9	39.3	285.87	1048.40	.54	2	1.83	.086	1.5	4.6	.66	19.4	<.001	1	.27	.016	.14	.3	2.2	.09	4.18	84	.3	.06	1.2	211	600
0305-121	.89	605.43	24967.63	373.1	99999	23.5	6.5	4298	2.92	655.8	.9	117.4	5.2	69.5	26.79	807.42	20.32	2	3.03	.081	.7	4.9	1.16	11.8	<.001	2	.15	.008	.08	.1	2.4	.10	4.22	7	.5	.18	.4	186	500
0305-122	.48	2391.84	7351.89	616.3	99999	27.0	9.4	3833	1.81	448.2	.8	37.9	5.7	66.3	9.29	1386.12	1.02	3	2.46	.023	.9	3.8	.89	15.9	<.001	1	.20	.012	.11	.5	1.7	.06	.76	28	.2	.02	.5	539	400
0305-123	1.01	4004.10	15352.68	119.4	99999	29.0	7.9	7261	3.03	301.6	.9	45.5	7.0	90.0	6.89	144.89	2.22	3	3.76	.004	1.2	5.8	1.45	22.2	<.001	1	.24	.017	.14	.1	2.4	.07	2.18	6	.9	.17	.7	729	100
0305-124	.91	5413.89	13438.77	596.6	99999	36.4	11.3	4729	7.63	20868.0	.5	1008.9	1.3	105.9	12.26	2202.23	5.83	3	4.32	<.001	<.5	4.0	1.96	9.3	<.001	2	.09	.005	.05	1.0	1.3	.06	7.14	58	1.2	.32	.3	1274	100
0305-125	1.36	102.92	1177.46	4044.5	17263	10.1	2.4	4993	7.88	1667.9	.1	185.1	1.0	141.4	28.93	34.62	.14	2	5.20	.001	<.5	4.9	2.46	6.3	<.001	<1	.07	.003	.04	<.1	1.4	.03	7.18	11	.1	.03	.3	245	200
STANDARD DS5/AU-R	13.16	146.77	25.00	140.5	270	25.7	12.5	786	3.04	16.0	6.3	46.9	3.1	49.7	5.77	3.98	6.64	63	.74	.097	12.3	184.3	.67	146.9	.098	17	2.09	.032	.14	4.4	3.3	1.11	<.01	191	4.8	.83	7.1	486	-

Sample type: CORE R150. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ✓ FA ✓

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %
0305-126	.44	179.52	9869.96	69.5	48350	22.9	6.6	3717	2.04	3275.1	1.0	114.1	5.3	95.3	1.72	99.02	.44	3	3.30
0305-127	.16	17.80	32.39	21.3	1287	43.3	10.1	1531	3.18	1247.0	.9	11.4	5.2	75.1	.16	4.38	.14	3	2.23
0305-128	.32	7.47	31.63	16.8	647	35.9	8.1	3290	3.37	8773.3	.7	84.1	4.8	105.4	.12	2.79	.32	3	3.54
0305-129	.29	882.47	5255.36	56893.7	94346	25.3	10.8	2558	5.90	695.9	.8	35.4	3.3	53.8	427.97	253.20	.30	2	3.49
0305-130	.35	344.13	2529.49	27082.9	23380	34.1	9.0	2609	4.55	606.3	.9	40.6	4.7	57.4	204.72	66.15	.14	3	3.87
0305-131	.29	707.75	26856.04	14350.1	99999	8.3	1.2	2737	2.50	329.7	.3	235.7	1.5	42.9	132.99	1162.76	1.69	<2	2.30
0305-132	.41	732.98	1694.64	46821.9	37852	27.4	15.3	5412	4.38	413.6	.7	25.1	3.7	63.1	348.03	148.02	.22	2	4.71
0305-150	.70	514.68	9754.20	29405.7	67673	44.2	13.7	1458	3.89	1383.3	1.0	54.9	6.3	57.5	226.16	196.51	.26	2	2.13
0305-151	.87	92.36	5501.38	5612.1	17196	61.2	26.3	1600	4.13	1409.8	1.0	28.3	6.1	58.1	39.83	38.15	.54	2	2.50
0305-152	.29	6170.48	27991.96	91392.2	99999	3.5	1.0	585	4.58	6696.2	.1	1203.1	.5	13.9	881.00	5067.62	.29	<2	.66
0305-153	.71	1354.15	15203.06	11259.7	99999	36.2	9.1	1763	3.80	10062.0	.9	303.8	5.4	46.7	97.82	1079.84	.19	2	2.13
0305-154	.59	44.59	3264.18	347.5	15000	25.6	8.7	1781	4.85	22005.9	.5	356.4	3.7	28.4	2.85	46.20	.16	<2	1.36
RE 0305-154	.65	49.00	3333.43	329.0	15423	29.0	9.3	1776	4.80	21699.5	.5	390.3	4.1	28.4	2.92	50.21	.18	2	1.36
RRE 0305-154	1.05	35.49	2795.65	228.8	11944	29.8	10.7	1844	5.26	26797.0	.5	429.3	4.3	29.6	1.93	45.17	.20	<2	1.43
0305-155	.37	2944.62	19909.28	16127.6	99999	6.8	1.6	43	14.20	21676.6	.1	1065.8	.7	2.0	158.00	1923.00	.07	<2	.06
0305-156	.93	1366.22	13044.98	5217.7	99999	40.6	18.0	1681	6.19	9503.6	.7	225.2	4.4	32.8	37.33	807.94	.41	<2	1.48
0305-158	.48	64.75	6558.87	11741.7	23190	31.3	12.5	5982	4.58	413.8	.9	35.8	4.1	115.9	90.47	28.26	.49	2	5.28
0305-159	.49	146.18	8808.57	30162.6	58410	9.3	3.5	3951	5.32	1217.5	.9	109.6	1.4	180.0	243.26	72.69	.16	<2	8.74
0305-160	.16	4760.15	19558.08	99999.0	99999	18.7	4.5	1704	3.60	2159.7	.5	225.9	3.4	41.1	1022.00	1837.50	1.31	2	1.98
STANDARD DS5/AU-R	12.81	142.95	23.77	133.2	279	24.3	12.1	746	2.99	18.9	5.9	39.5	2.9	49.5	5.66	3.80	5.97	59	.76

SAMPLE#	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb	Sample gm
0305-126	.012	1.6	3.5	1.35	18.0	<.001	1	.18	.011	.12	.2	1.9	.08	1.04	<5	.2	.07	.4	138	300
0305-127	.014	2.2	3.5	1.09	20.5	<.001	1	.25	.013	.15	.3	2.9	.08	2.21	<5	.1	<.02	.6	16	300
0305-128	.013	2.0	3.3	1.70	16.4	<.001	1	.20	.010	.12	.1	2.2	.07	2.42	<5	.1	.05	.5	109	300
0305-129	.008	.6	2.6	1.25	14.2	<.001	<1	.16	.008	.10	.5	1.2	.05	7.48	182	1.2	.06	1.2	92	500
0305-130	.013	.9	2.9	1.40	17.7	<.001	<1	.17	.009	.11	.2	1.7	.05	4.28	82	.5	.04	1.0	76	400
0305-131	.001	<.5	1.9	.98	8.5	<.001	<1	.07	.005	.04	.6	1.2	.12	6.01	45	.5	1.16	.5	266	400
0305-132	.018	.6	3.8	1.49	14.3	<.001	<1	.13	.007	.08	17.9	2.0	.04	3.92	144	1.1	.05	1.1	46	500
0305-150	.010	2.6	3.4	.92	20.3	<.001	<1	.22	.012	.13	.4	2.2	.08	4.55	100	.3	.05	.9	99	1400
0305-151	.008	1.8	4.0	1.04	17.3	<.001	1	.18	.010	.11	.3	2.4	.06	3.61	26	.3	.07	.5	70	900
0305-152	<.001	<.5	1.6	.24	6.3	<.001	<1	.03	.002	.02	.6	.3	.16	7.92	275	2.1	.09	1.5	1382	1500
0305-153	.009	1.3	3.3	.89	17.8	<.001	<1	.17	.010	.11	.3	2.1	.09	3.96	40	<.1	.03	.5	580	800
0305-154	.005	1.1	3.5	.53	14.4	<.001	1	.15	.008	.09	.8	1.2	.05	3.28	<5	.1	<.02	.4	505	1000
RE 0305-154	.006	1.2	4.3	.53	16.0	<.001	2	.17	.009	.10	.9	1.4	.06	3.80	<5	.2	.02	.4	507	-
RRE 0305-154	.006	1.1	4.6	.56	14.4	<.001	1	.15	.008	.10	.2	1.3	.05	4.00	<5	.2	<.02	.4	565	-
0305-155	<.001	<.5	2.0	.02	5.7	<.001	1	.05	.003	.03	.9	.1	.06	15.40	46	<.1	.03	.3	1538	1400
0305-156	.005	.8	3.9	.62	16.2	<.001	1	.16	.008	.10	.2	1.3	.06	5.41	22	.2	.05	.4	404	1100
0305-158	.018	1.0	3.5	1.76	18.4	<.001	1	.17	.008	.11	50.3	2.0	.05	2.97	29	<.1	.04	.6	77	1500
0305-159	.098	.8	2.3	.64	8.0	<.001	1	.09	.003	.05	19.7	1.1	.04	5.67	106	.5	.09	.5	226	1400
0305-160	.006	.6	2.5	.98	14.3	<.001	2	.14	.007	.08	.7	1.1	.07	5.87	540	2.4	.16	3.8	278	300
STANDARD DS5/AU-R	.094	11.4	183.5	.68	136.4	.092	16	2.10	.031	.14	4.3	3.4	1.05	.01	183	4.6	.83	6.6	481	-

Sample type: CORE R150. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Assay in progress for Pb > 5000 ppm
As, Zn > 1%
Ag > 30 ppm

Data ___ FA ___

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ASSAY CE. IFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont   File # A302740R   Page 1
1020 Canadian Centre, 833, Calgary AB T2P 3T5   Submitted by: Rick Walker

SAMPLE#	Cu %	Pb %	Zn %	As %	Ag** gm/mt	Au** gm/mt
0301-58	.832	24.84	16.85	.74	2013.1	-
0301-59	.586	6.36	11.25	.22	353.8	-
0301-60	.012	.11	.36	1.05	11.9	-
0301-61	.018	.09	1.03	1.91	8.7	.94
0301-63	.021	.52	.94	6.31	13.7	1.76
0302-44b	.245	.59	1.01	.22	289.8	-
0302-45	.079	1.62	.02	.03	149.5	-
0302-46	.012	2.05	1.35	.05	70.8	-
0302-48	.157	8.44	15.45	3.72	357.2	2.28
0302-49	.240	3.19	26.05	2.00	174.1	1.31
0302-51	.073	4.20	4.30	.47	178.1	-
0302-53	.060	2.91	10.55	.82	154.8	-
0302-54	.049	.29	.73	5.18	53.9	1.01
0302-55	.064	.17	10.63	.43	12.0	-
0303-84	.091	3.35	.06	.28	223.7	-
0303-86	.039	.05	.01	8.90	50.7	5.54
0303-88	.003	.03	.01	1.77	5.4	1.71
0303-89	.249	.66	.04	16.23	154.1	10.95
RE 0303-89	.250	.68	.04	16.34	155.3	10.70
0303-92	.164	1.89	4.08	.66	155.7	-
0303-94	.154	3.40	2.14	1.97	246.2	1.21
0303-95	.286	5.08	2.99	2.85	427.6	3.15
0303-96	.191	1.75	1.67	7.37	152.9	3.41
0303-97	.039	.18	2.97	.17	16.0	-
0303-98	.103	1.17	.12	.51	118.8	-
0303-100	.900	6.28	11.25	1.02	1373.2	-
0303-101	.525	4.50	11.22	2.76	507.6	1.34
0303-102	.098	.48	.11	.14	134.8	-
0303-103	.307	11.96	1.68	2.63	739.1	1.54
0303-104	.036	.26	1.18	.97	27.3	-
0303-105	.014	.31	.25	6.30	20.5	2.21
0303-107	.378	2.83	9.46	12.49	282.4	4.06
0303-108	.164	1.60	4.44	3.90	155.0	1.24
0303-109	.095	2.58	.08	.19	183.0	-
STANDARD R-2/AU-1	.562	1.48	4.10	.26	155.9	3.34

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES.
- SAMPLE TYPE: CORE PULP   AG** & AU** BY FIRE ASSAY FROM 1 A.T. SAMPLE.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 8 2003 **DATE REPORT MAILED:** Aug 28/03 **SIGNED BY** .... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ✓ FA Y

SAMPLE#	Cu %	Pb %	Zn %	As %	Ag** gm/mt	Au** gm/mt
0303-110	.075	.44	2.73	3.15	44.9	.95
0303-111	.023	1.02	.25	15.44	27.4	3.72
0303-112	.001	.02	.03	2.30	<.3	-
0304-116	.002	.01	<.01	1.08	<.3	-
0304-117	.021	.65	1.08	.01	14.5	-
0305-118	.003	.01	.01	1.04	<.3	-
0305-120	.274	6.22	3.28	.05	452.2	-
0305-121	.060	18.63	.05	.06	499.2	-
0305-122	.250	.87	.07	.05	237.4	-
0305-123	.397	5.15	.01	.03	167.4	-
0305-124	.547	2.67	.07	1.62	711.2	1.28
0305-126	.018	1.03	.01	.34	52.3	-
0305-129	.086	.53	6.35	.07	123.7	-
0305-130	.032	.24	2.86	.06	21.2	-
0305-131	.072	29.25	1.55	.03	828.5	-
0305-132	.074	.16	5.18	.04	41.2	-
0305-150	.053	1.31	3.22	.14	75.4	-
0305-152	.770	25.52	9.71	.86	2074.8	1.45
RE 0305-152	.767	25.19	9.65	.86	2054.4	1.43
0305-153	.151	5.28	1.35	.89	420.9	-
0305-154	.005	.31	.04	1.98	15.7	-
0305-155	.282	5.36	1.75	2.05	436.7	1.21
0305-156	.134	1.98	.48	.86	289.5	-
0305-159	.016	1.92	3.26	.12	68.1	-
0305-160	.591	6.73	16.74	.25	779.4	-
STANDARD R-2/AU-1	.554	1.51	4.24	.25	155.7	3.43

Sample type: CORE PULP. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ✓ FA ✓

ACME AN. .TICAL LABORATORIES LTD. 852 E. HASTINGS ST. .NCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6(253-1716
(ISO 02 Accredited Co.)

ASSAY CE. .FICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A302740R Page 1
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Cu %	Pb %	Zn %	As %	Ag** gm/mt	Au** gm/mt
0301-58	.832	24.84	16.85	.74	2013.1	-
0301-59	.586	6.36	11.25	.22	353.8	-
0301-60	.012	.11	.36	1.05	11.9	-
0301-61	.018	.09	1.03	1.91	8.7	.94
0301-63	.021	.52	.94	6.31	13.7	1.76
0302-44b	.245	.59	1.01	.22	289.8	-
0302-45	.079	1.62	.02	.03	149.5	-
0302-46	.012	2.05	1.35	.05	70.8	-
0302-48	.157	8.44	15.45	3.72	357.2	2.28
0302-49	.240	3.19	26.05	2.00	174.1	1.31
0302-51	.073	4.20	4.30	.47	178.1	-
0302-53	.060	2.91	10.55	.82	154.8	-
0302-54	.049	.29	.73	5.18	53.9	1.01
0302-55	.064	.17	10.63	.43	12.0	-
0303-84	.091	3.35	.06	.28	223.7	-
0303-86	.039	.05	.01	8.90	50.7	5.54
0303-88	.003	.03	.01	1.77	5.4	1.71
0303-89	.249	.66	.04	16.23	154.1	10.95
RE 0303-89	.250	.68	.04	16.34	155.3	10.70
0303-92	.164	1.89	4.08	.66	155.7	-
0303-94	.154	3.40	2.14	1.97	246.2	1.21
0303-95	.286	5.08	2.99	2.85	427.6	3.15
0303-96	.191	1.75	1.67	7.37	152.9	3.41
0303-97	.039	.18	2.97	.17	16.0	-
0303-98	.103	1.17	.12	.51	118.8	-
0303-100	.900	6.28	11.25	1.02	1373.2	-
0303-101	.525	4.50	11.22	2.76	507.6	1.34
0303-102	.098	.48	.11	.14	134.8	-
0303-103	.307	11.96	1.68	2.63	739.1	1.54
0303-104	.036	.26	1.18	.97	27.3	-
0303-105	.014	.31	.25	6.30	20.5	2.21
0303-107	.378	2.83	9.46	12.49	282.4	4.06
0303-108	.164	1.60	4.44	3.90	155.0	1.24
0303-109	.095	2.58	.08	.19	183.0	-
STANDARD R-2/AU-1	.562	1.48	4.10	.26	155.9	3.34

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES.
- SAMPLE TYPE: CORE PULP AG** & AU** BY FIRE ASSAY FROM 1 A.T. SAMPLE.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 8 2003 **DATE REPORT MAILED:** Aug 28/03 **SIGNED BY** C. L........ D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data N FA Y

SAMPLE#	Cu %	Pb %	Zn %	As %	Ag** gm/mt	Au** gm/mt
0303-110	.075	.44	2.73	3.15	44.9	.95
0303-111	.023	1.02	.25	15.44	27.4	3.72
0303-112	.001	.02	.03	2.30	<.3	-
0304-116	.002	.01	<.01	1.08	<.3	-
0304-117	.021	.65	1.08	.01	14.5	-
0305-118	.003	.01	.01	1.04	<.3	-
0305-120	.274	6.22	3.28	.05	452.2	-
0305-121	.060	18.63	.05	.06	499.2	-
0305-122	.250	.87	.07	.05	237.4	-
0305-123	.397	5.15	.01	.03	167.4	-
0305-124	.547	2.67	.07	1.62	711.2	1.28
0305-126	.018	1.03	.01	.34	52.3	-
0305-129	.086	.53	6.35	.07	123.7	-
0305-130	.032	.24	2.86	.06	21.2	-
0305-131	.072	29.25	1.55	.03	828.5	-
0305-132	.074	.16	5.18	.04	41.2	-
0305-150	.053	1.31	3.22	.14	75.4	-
0305-152	.770	25.52	9.71	.86	2074.8	1.45
RE 0305-152	.767	25.19	9.65	.86	2054.4	1.43
0305-153	.151	5.28	1.35	.89	420.9	-
0305-154	.005	.31	.04	1.98	15.7	-
0305-155	.282	5.36	1.75	2.05	436.7	1.21
0305-156	.134	1.98	.48	.86	289.5	-
0305-159	.016	1.92	3.26	.12	68.1	-
0305-160	.591	6.73	16.74	.25	779.4	-
STANDARD R-2/AU-1	.554	1.51	4.24	.25	155.7	3.43

Sample type: CORE PULP. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

ACME AN YTICAL LABORATORIES LTD. 852 E. HASTINGS ST. NCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60 53-1716
(IS 9002 Accredited Co.)

ASSAY C TIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A302740R2
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Au** gm/mt
0303-86	5.59
0303-89	10.16
STANDARD AU-1	3.31

GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1/2 A.T. SAMPLE, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: CORE PULP

DATE RECEIVED: NOV 7 2003 DATE REPORT MAILED: Nov 17/03 SIGNED BY..........D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME ANI TICAL LABORATORIES LTD. 852 E. HASTINGS ST. 'COUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60 !53-1716
(IS '002 Accredited Co.)

ASSAY C TIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A302740R2
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Au** gm/mt
0303-86	5.59
0303-89	10.16
STANDARD AU-1	3.31

GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1/2 A.T. SAMPLE, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: CORE PULP

DATE RECEIVED: NOV 7 2003 DATE REPORT MAILED: Nov 17/03 SIGNED BY..........D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME ANA..TICAL LABORATORIES LTD. 852 E. HASTINGS ST. ' .COUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60 ,53-1716
(IS '002 Accredited Co.)

ASSAY C. 'IFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A302740R2
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Au** gm/mt
0303-86	5.59
0303-89	10.16
STANDARD AU-1	3.31

GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1/2 A.T. SAMPLE, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: CORE PULP

DATE RECEIVED: NOV 7 2003 DATE REPORT MAILED: Nov 17/03 SIGNED BY.......... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data FA

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A303027 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm
SI	.03	3.91	6.64	4.5	1491	.3	.1	2	.05	.2	<.1	2.1	<.1	2.3	.01
0303-72	.21	7.53	13.97	29.2	1029	30.3	9.7	2585	4.61	2193.6	.6	148.9	4.4	104.4	.15
0303-73	.21	220.85	6615.81	68.7	51820	48.3	11.6	2347	5.77	14056.2	.9	1445.0	4.9	99.8	.93
0303-74	.13	10.69	31.96	38.8	1399	15.3	5.1	3196	5.72	855.9	.3	77.8	1.9	160.5	.21
0303-75	.26	37.40	1244.13	36.0	7273	26.8	7.4	2588	5.23	7283.8	.6	905.7	2.9	127.5	.36
0303-76	.17	10.16	25.64	27.4	1136	26.8	8.7	3197	4.36	3087.5	.5	266.5	3.8	121.4	.15
0303-77	.32	12.18	18.47	8.4	963	62.2	24.0	1398	5.59	13180.3	1.1	105.9	7.1	41.3	.07
0303-78	.35	14.91	25.59	13.3	1117	60.8	20.7	2312	6.89	24821.1	.9	569.7	6.3	72.1	.18
0303-79	.46	16.87	32.90	8.9	1432	64.9	38.0	1679	7.48	37420.6	1.1	1225.9	5.2	47.6	.21
0303-80	.57	30.70	12.19	13.3	1567	67.3	48.6	1821	5.22	9160.1	1.2	45.2	6.9	64.2	.12
0305-133	.27	108.78	17399.74	44409.3	90489	25.0	11.2	14720	7.61	567.8	.5	47.4	2.0	103.7	378.92
0305-134	.13	114.50	23286.87	7793.6	73956	19.2	5.0	7049	3.20	116.7	.8	23.8	8.4	71.5	66.79
0305-135	.07	1705.75	20554.03	95680.7	99999	13.2	6.1	5764	13.92	1855.2	.6	111.5	1.5	53.4	822.00
0305-136	.17	1800.05	22606.55	68648.7	99999	17.0	6.5	9180	5.09	343.0	.9	55.0	5.1	61.9	594.00
0305-137	.22	103.95	6520.23	6062.3	19830	35.2	15.1	6065	4.10	167.2	1.1	8.2	6.0	133.8	44.99
0305-138	.20	31.62	1392.82	2949.3	5346	36.1	21.9	10582	8.74	1008.1	.9	51.4	4.9	101.8	21.20
0305-139	.04	3543.44	24585.76	99999.0	99999	22.3	5.2	4513	5.69	564.6	.6	196.4	3.0	46.2	1462.00
0305-140	.11	76.23	2300.36	8198.3	7425	27.9	8.5	6393	4.62	250.4	.9	11.1	5.9	81.9	72.87
RE 0305-140	.10	72.85	2254.10	8127.6	7572	27.3	7.1	6270	4.51	230.8	.9	10.6	6.0	80.1	68.00
RRE 0305-140	.11	72.78	2501.60	7862.1	7349	26.1	6.8	6004	4.25	231.0	.8	12.0	5.7	75.7	62.14
0305-141	.03	117.60	9017.70	333.7	30685	16.8	4.6	4061	4.14	460.2	.3	24.3	1.6	58.2	3.54
0305-142	.36	119.21	1583.48	13331.4	11503	25.5	15.0	6116	4.19	229.5	1.0	12.2	5.2	82.6	96.31
0305-143	.17	135.28	1515.40	7005.4	15793	17.3	8.2	5108	18.90	49156.7	.6	383.7	2.0	43.4	56.46
0305-144	.01	2425.68	18463.88	11042.9	99999	24.5	9.0	3550	3.30	479.0	.9	83.6	5.6	67.3	86.95
0305-145	.13	155.28	4592.45	3463.7	22246	30.9	8.4	5550	6.59	968.7	.8	37.3	5.8	70.8	29.08
0305-146	.17	35.20	1165.35	1614.0	5239	33.7	13.4	2602	3.07	197.8	1.3	11.7	8.1	58.7	12.87
0305-147	.49	91.58	2790.96	3070.0	10576	30.5	14.5	4954	5.69	833.3	1.1	49.3	3.8	82.8	24.17
0305-148	.39	7.97	272.44	2050.4	878	29.9	11.4	5455	3.95	392.0	1.4	16.1	5.6	84.1	14.70
0305-149	.65	920.94	23460.19	58384.2	52823	57.7	28.1	6164	7.99	22875.5	.5	1680.2	.4	67.9	393.27
0305-157	.27	551.86	8396.06	25426.2	63987	40.1	11.7	1792	5.24	13130.9	.9	152.1	6.1	35.5	244.75
0306-161	.07	14.76	185.52	185.1	1509	58.5	20.9	2261	3.68	5552.7	.9	75.6	6.5	38.6	1.44
0306-162	.05	7.21	61.03	123.7	927	33.1	11.9	344	5.65	1581.0	.4	79.6	2.5	3.2	1.17
0306-163	.27	15.17	53.16	72.8	938	65.2	22.5	1331	12.00	3169.9	.7	131.1	4.6	11.8	.62
0306-164	.26	66.61	17.78	43.5	1158	70.5	28.8	1486	4.87	2651.7	1.2	16.7	7.9	26.5	.27
0306-165	.07	37.23	30.54	32.6	1463	33.5	9.8	5502	9.63	99999.0	.9	1515.6	5.3	195.1	.23
STANDARD DS5/AU-R	12.54	139.10	23.33	131.5	278	24.3	12.5	795	3.02	17.7	6.1	43.0	2.8	49.5	5.71

SAMPLE#	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
SI	3.93	<.02	<2	.10	<.001	<.5	1.0	<.01	2.5	<.001	1	.01	.505	<.01	<.1	.1	<.02	.02	53	<.1	<.02	<.1	<2
0303-72	5.79	.13	<2	6.80	.033	2.1	3.5	2.51	11.3	.001	5	.18	.012	.10	.3	1.8	.05	1.28	34	.1	.02	.3	201
0303-73	140.04	.70	<2	6.00	.017	2.2	4.0	2.06	13.8	<.001	3	.16	.012	.11	.8	2.7	.05	2.61	37	.1	.02	.4	1665
0303-74	7.25	.09	3	9.42	.010	.9	1.7	3.40	5.9	<.001	2	.07	.005	.05	.3	1.7	.02	.96	23	.1	<.02	.2	121
0303-75	31.81	.32	2	7.04	.010	1.7	2.3	2.61	11.8	<.001	1	.11	.007	.08	.2	1.5	.04	1.46	38	<.1	.05	.3	1252
0303-76	6.09	.12	3	6.81	.009	1.8	2.9	2.56	9.8	.001	2	.13	.008	.08	.5	2.2	.04	1.02	6	.1	.04	.3	478
0303-77	2.74	.31	<2	1.62	.033	4.1	4.1	.66	16.4	.001	1	.22	.011	.14	.4	1.9	.06	5.24	10	.1	.02	.4	193
0303-78	9.82	.49	<2	2.57	.015	3.9	4.6	1.08	18.3	.001	2	.20	.011	.14	1.0	2.5	.07	5.81	8	.2	.04	.4	969
0303-79	9.11	.55	<2	1.96	.018	3.4	4.2	.82	16.0	.001	2	.22	.010	.13	.4	1.9	.07	6.38	14	.2	.06	.4	2440
0303-80	12.05	.91	3	2.84	.017	3.5	4.7	1.20	14.9	.001	2	.19	.010	.13	.4	3.1	.07	4.29	<5	.3	.10	.4	145
0305-133	98.97	.34	<2	6.06	.041	.6	2.9	2.02	11.1	.001	1	.15	.006	.08	.6	3.0	.06	8.32	103	.4	.07	.8	118
0305-134	66.91	.11	<2	4.91	.015	1.4	4.2	1.47	20.7	.001	3	.25	.012	.16	.3	2.2	.07	1.85	36	<.1	.02	.6	41
0305-135	266.16	.16	<2	2.68	.173	.5	2.2	.98	4.5	.001	1	.13	.004	.07	<.1	1.6	.07	22.19	193	.5	.09	1.0	277
0305-136	163.34	.22	<2	4.67	.022	.7	4.4	1.42	17.1	.001	2	.19	.009	.13	.2	2.2	.08	7.58	159	.2	.08	1.1	140
0305-137	25.29	.40	2	7.77	.022	1.2	5.5	1.50	14.9	<.001	1	.18	.008	.11	.3	2.6	.05	1.80	27	<.1	.04	.4	21
0305-138	11.71	.19	2	6.94	.027	1.0	5.7	2.22	13.1	<.001	<1	.16	.008	.10	.3	2.6	.05	5.57	<5	<.1	.03	.4	93
0305-139	799.17	1.30	<2	4.04	.009	<.5	3.7	1.37	11.5	.001	1	.12	.006	.09	40.3	1.4	.06	7.38	290	.6	.05	2.3	386
0305-140	8.16	.08	2	5.89	.021	1.3	6.0	1.72	15.9	<.001	2	.17	.009	.12	.9	2.4	.05	2.24	26	<.1	<.02	.5	25
RE 0305-140	11.34	.08	2	5.77	.021	1.4	6.3	1.68	15.4	<.001	2	.18	.008	.11	.7	2.5	.05	2.02	28	<.1	.03	.5	22
RRE 0305-140	11.87	.07	2	5.44	.020	1.2	6.0	1.58	16.4	.001	2	.21	009	.12	.8	2.5	.05	2.10	23	<.1	<.02	.5	22
0305-141	93.72	.49	<2	3.93	.012	1.2	3.7	1.27	9.1	<.001	1	.10	.005	.06	.3	2.0	.03	2.93	12	<.1	.08	.3	58
0305-142	51.17	.14	3	5.84	.025	1.3	7.1	1.79	18.1	.001	1	.17	.008	.11	.6	2.8	.05	1.75	50	<.1	.02	.7	43
0305-143	171.46	.16	<2	2.69	.049	<.5	2.7	1.11	7.6	.001	<1	.10	.004	.06	.4	1.4	.04	23.59	24	.1	.04	.4	966
0305-144	1590.07	1.13	2	4.92	.020	.7	6.8	1.56	18.1	<.001	6	.21	.009	.13	.4	1.9	.07	2.21	45	<.1	.05	.5	204
0305-145	107.38	.18	2	4.54	.013	1.0	5.2	1.49	15.7	.001	<1	.16	.009	.11	.6	2.2	.05	5.71	18	<.1	.02	.4	82
0305-146	21.26	.13	3	4.04	.015	2.0	6.6	1.25	20.3	.001	1	.20	.012	.13	.3	1.8	.06	1.12	5	<.1	.02	.5	28
0305-147	87.64	.19	3	5.62	.060	1.0	6.6	1.75	15.1	.001	<1	.16	.007	.09	.3	2.2	.04	3.72	10	<.1	.02	.4	176
0305-148	14.35	.12	4	5.65	.017	1.4	8.1	1.77	17.7	<.001	1	.19	.009	.13	.3	2.4	.05	1.42	5	<.1	.03	.5	68
0305-149	11564.64	1.97	2	4.93	.008	<.5	5.8	1.79	17.1	<.001	2	.12	.006	.08	.2	2.2	.11	9.17	246	.4	.03	1.4	3700
0305-157	200.58	.18	3	1.76	.011	1.7	3.0	.69	18.0	.001	2	.22	.009	.13	.2	2.3	.06	6.36	49	<.1	.05	.8	300
0306-161	34.51	.07	4	1.48	.010	2.2	7.0	.60	15.9	.001	2	.19	.009	.12	.4	2.9	.06	2.80	6	<.1	.02	.5	96
0306-162	6.93	.06	2	.07	.009	1.1	3.9	.03	11.4	<.001	1	.14	.007	.09	.2	1.2	.05	6.04	10	<.1	.02	.4	92
0306-163	2.66	.48	2	.42	.008	1.7	3.3	.16	10.7	.001	1	.14	.006	.10	.2	1.5	.05	14.89	<5	.1	.06	.4	203
0306-164	4.14	.47	5	1.13	.037	2.7	8.5	1.31	19.4	<.001	1	.26	.012	.16	.2	3.9	.10	2.39	5	.2	.08	.6	30
0306-165	9.32	2.07	4	6.53	.017	2.2	5.2	3.47	22.6	.001	2	.21	.012	.12	.2	2.3	.08	4.01	<5	.1	.23	.5	1607
STANDARD DS5/AU-R	3.65	6.46	61	.76	.100	12.5	190.0	.68	135.1	.098	18	2.10	.032	.15	4.5	3.8	1.04	.05	182	4.7	.89	6.5	488

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30.00 GM SAMPLE ANALYSIS BY FA/ICP.
- SAMPLE TYPE: CORE R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 30 2003 DATE REPORT MAILED: Aug 18/03 SIGNED BY D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data FA

ACME ANALYTICAL

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Au**
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb
0306-166	.81	35.68	18.00	12.8	997	68.3	47.4	1122	5.41	11681.7	1.2	42.9	8.4	37.6	.08	3.35	.98	5	1.34	.010	3.8	5.8	.64	26.7	<.001	1	.28	.021	.19	.3	2.2	.11	5.14	5	.5	.04	.7	94
0306-167	1.62	13.25	17.82	26.9	488	26.2	9.8	9335	8.02	54368.3	.3	1657.4	.7	182.8	.18	12.69	.80	5	11.02	<.001	.8	8.0	5.42	10.1	<.001	1	.09	.022	.05	1.4	4.0	.04	3.34	7	.3	.09	.6	1817
0306-168	1.07	47.02	18.00	13.6	769	68.7	38.7	1129	5.84	13776.5	1.4	55.2	9.2	33.6	.06	2.44	1.14	6	1.39	.013	3.7	6.5	.82	32.1	<.001	2	.37	.024	.24	.3	3.0	.14	4.94	<5	.6	.12	.9	133
0306-169	5.06	8.39	9.31	12.0	297	49.5	13.9	1584	3.06	15902.4	.6	354.8	3.6	45.6	.09	1.56	.77	5	1.94	.009	2.2	24.4	.86	45.9	<.001	12	.37	.028	.22	3.9	1.7	.10	1.81	7	.1	.15	1.0	514
0306-170	.59	33.95	8.59	14.1	1125	52.5	19.8	2650	4.17	11008.6	1.4	59.0	9.1	53.9	.10	5.27	.26	4	2.38	.024	4.1	5.8	1.05	24.6	<.001	1	.32	.023	.19	.4	2.9	.10	3.47	5	.2	.04	.8	113
0306-171	.69	19.76	9.08	18.6	206	70.3	31.3	2088	4.90	10733.6	1.1	123.7	7.0	91.4	.09	3.10	.87	4	4.06	.018	3.7	7.5	1.96	24.3	.001	6	.27	.023	.17	.5	4.0	.09	3.15	<5	.4	.05	.8	395
0306-172	.66	28.19	11.59	37.9	567	13.0	5.5	12275	10.30	89661.2	.3	7594.4	.7	260.4	.26	34.17	1.05	3	11.82	.002	.8	3.2	5.63	8.0	<.001	<1	.07	.007	.04	.7	2.0	.04	3.76	7	.3	.15	.5	7944
0306-173	1.41	23.45	12.05	11.9	318	65.9	41.3	1471	6.34	25232.1	1.3	121.7	8.5	52.1	.09	5.60	1.08	4	1.93	.017	3.6	9.1	.79	24.2	<.001	3	.32	.025	.20	.7	2.6	.10	5.52	7	.5	.10	.7	468
0306-174	.47	21.40	23.22	81.6	520	57.6	13.3	1474	4.88	23263.5	1.2	120.4	9.0	54.0	.49	8.70	.46	5	1.97	.087	3.8	9.0	.97	28.6	<.001	2	.39	.025	.24	.4	3.1	.13	3.56	<5	.2	.09	1.0	302
0306-175	.78	76.11	21.23	36.1	2596	63.4	20.2	2024	4.71	1848.1	1.4	32.4	9.0	81.8	.31	24.65	.22	4	2.91	.052	2.8	7.1	1.23	24.5	<.001	2	.30	.018	.19	.7	4.0	.09	4.00	10	.2	.04	.7	84
0306-176	.47	5181.40	20498.70	19701.6	99999	22.4	6.1	707	15.87	99999.0	1.2	10469.9	3.4	18.4	157.04	3683.65	.89	<2	.67	.016	<.5	5.5	.26	14.7	<.001	1	.15	.009	.10	1.2	.7	.19	12.18	100	.2	.07	.8	8796
0306-177	.88	30.40	105.86	95.0	954	68.5	20.0	1341	5.15	8857.5	1.3	43.4	10.2	34.6	.52	9.84	.46	6	1.32	.043	3.0	12.7	1.09	24.5	<.001	1	.30	.017	.19	.7	3.0	.10	2.91	<5	.3	<.02	.7	74
0306-178	1.06	114.49	3616.36	1397.4	10174	19.1	5.4	2773	7.54	80419.7	.6	1602.7	3.1	59.0	11.15	106.42	.62	2	2.38	.011	.8	7.9	.97	12.3	.001	2	.16	.011	.10	1.9	1.1	.06	4.84	12	.2	.07	.5	1679
0306-179	1.06	27.59	113.50	223.8	935	66.4	17.4	1277	5.26	12812.3	1.3	143.0	9.8	29.7	1.29	9.16	.28	6	1.13	.040	3.0	14.7	1.20	27.5	.003	1	.34	.021	.24	.8	3.1	.11	2.50	8	.2	.03	.9	212
0306-180	.74	15889.32	16283.56	99999.0	99999	38.7	11.0	1840	5.92	4569.7	1.7	4078.5	.4	39.7	1505.13	10442.91	11.78	<2	1.25	.001	<.5	3.4	.51	13.4	<.001	<1	.02	.002	.01	.9	.4	.21	11.83	587	1.6	.40	2.5	3921
RE 0306-180	.81	14666.66	16196.74	99999.0	99999	39.7	11.1	1788	5.89	4151.1	1.6	2532.3	.3	38.2	1427.81	9503.34	10.90	<2	1.21	.001	<.5	3.6	.50	14.5	<.001	<1	.02	.002	.01	.8	.3	.21	10.60	551	1.2	.36	2.4	2617
RRE 0306-180	2.66	15871.76	16193.89	99999.0	99999	34.4	9.7	1779	5.62	3499.6	1.6	2377.9	.4	37.8	1509.34	11344.13	12.42	<2	1.19	<.001	<.5	9.3	.49	15.5	<.001	1	.03	.003	.01	2.3	.4	.21	10.81	601	1.3	.36	2.6	2905
0306-181	1.12	1616.79	16973.75	1703.3	99999	39.3	18.1	1168	9.45	13528.4	.7	373.3	2.6	37.9	18.17	1000.77	8.77	<2	1.02	.004	<.5	6.0	.38	8.4	<.001	1	.08	.009	.05	1.2	.8	.07	10.38	19	.7	.50	.3	446
0306-182	1.09	1809.86	4164.56	99999.0	85433	61.9	11.4	1745	5.23	1224.0	1.1	206.7	7.8	22.5	865.71	340.57	.43	2	1.09	.023	1.7	6.1	.36	22.1	<.001	2	.26	.014	.19	.9	1.4	.09	9.98	200	.6	.04	2.3	359
0306-183	.39	30.83	191.15	675.6	3267	53.0	11.1	2176	4.43	4455.4	1.2	65.5	9.0	50.2	5.16	13.39	.14	4	2.64	.040	1.9	5.8	1.01	21.5	<.001	2	.29	.016	.22	.6	3.2	.09	3.74	9	.1	<.02	.7	152
0306-184	1.24	10612.89	16538.84	99999.0	99999	1.6	.8	1489	6.31	7764.0	1.2	1877.2	.1	34.2	1260.83	8385.10	3.90	<2	1.81	<.001	<.5	4.4	.73	6.2	<.001	<1	.01	.001	.01	1.5	.4	.28	12.07	483	.9	.05	2.9	1929
0306-185	.54	31.42	692.99	418.7	5437	58.6	20.3	1389	7.83	12382.3	1.0	252.7	8.6	37.1	3.26	12.57	.25	3	1.30	.022	2.9	6.1	.49	25.4	<.001	1	.32	.016	.22	.6	2.0	.10	8.36	7	.2	<.02	.8	654
0306-186	1.33	2129.68	15707.21	99999.0	99999	14.6	3.0	2317	2.70	2501.0	1.2	363.1	4.9	69.0	1063.33	262.21	.95	<2	2.52	.007	.6	6.8	1.02	10.1	<.001	<1	.10	.008	.08	1.4	.8	.09	8.35	458	1.6	.34	4.7	360
0306-187	.51	3679.47	15420.27	1389.6	99999	29.8	10.7	2184	2.44	3489.0	3.0	130.0	13.7	42.1	13.98	1905.23	1.08	<2	2.17	.014	2.0	4.6	.81	29.7	<.001	2	.33	.021	.24	.8	1.5	.14	2.67	18	.2	.05	.8	726
0306-188	1.14	5199.98	1914.81	99999.0	96689	19.2	9.4	1440	4.02	1195.0	.4	148.9	3.4	24.9	2700.65	89.90	.26	<2	1.70	.005	<.5	5.1	.57	15.8	<.001	<1	.14	.008	.11	1.7	.8	.04	10.38	566	.9	.15	6.6	278
0306-189	.43	10143.18	16166.80	99999.0	99999	22.0	8.6	2156	3.07	232.6	2.3	12775.7	2.1	42.7	1879.62	13165.00	3.31	<2	2.60	.005	<.5	4.1	.85	23.2	<.001	1	.17	.013	.12	.1	1.1	.16	12.03	374	.5	.02	5.5	23321
0306-190	2.44	3375.55	17276.68	29088.2	99999	8.1	2.2	5023	6.47	15236.4	.2	1063.0	.2	78.4	270.70	2386.77	.55	<2	4.20	<.001	<.5	9.4	1.64	2.0	<.001	<1	.01	.001	<.01	3.2	.3	.05	6.76	102	.1	.16	.7	1167
0306-191	.37	2176.29	16325.25	99999.0	99999	7.0	3.4	2548	5.09	2937.0	.7	583.2	3.5	44.3	1680.23	1486.00	2.55	<2	2.83	.004	<.5	3.4	1.01	6.3	<.001	1	.05	.003	.02	.8	.6	.11	8.82	443	.7	.21	3.0	545
0306-192	1.52	1814.27	20035.06	1329.3	99999	30.3	10.7	2491	13.42	89367.2	.8	2249.3	6.0	59.9	26.34	843.73	4.44	<2	2.02	.005	.8	7.5	.95	19.3	.001	2	.20	.010	.14	1.9	1.5	.20	11.80	22	.4	.10	.6	2519
0306-193	.57	667.57	17859.84	20780.3	99999	30.8	11.2	3060	10.69	14539.6	1.1	474.1	6.1	72.3	173.25	308.32	1.17	<2	2.56	.007	.9	4.2	1.03	21.1	<.001	3	.25	.012	.18	.8	1.9	.13	12.13	85	.2	.05	1.0	756
0306-194	2.02	747.54	21510.86	289.0	99999	27.4	13.8	4320	15.91	99999.0	.8	3052.6	4.1	125.1	16.73	688.15	4.62	<2	4.21	.003	.9	7.7	2.04	22.1	<.001	3	.22	.011	.16	1.9	2.2	.19	11.12	25	.4	.12	.6	2831
0306-195	.40	7105.93	9905.21	57556.5	99999	10.7	3.9	1137	23.45	3783.2	.2	2864.1	.4	8.6	552.40	3567.73	2.48	<2	.72	<.001	<.5	2.6	.30	1.8	.001	1	.03	.002	.01	1.4	.2	.17	26.34	303	.4	.71	1.8	3094
0306-196	2.24	679.20	20055.61	368.7	99999	30.1	11.7	2279	13.07	86363.2	1.0	1550.9	4.6	48.7	10.08	314.68	1.12	<2	1.68	.002	1.0	10.0	1.09	20.7	.002	6	.19	.010	.14	2.5	1.7	.10	10.03	16	.3	.29	.6	1999
0306-197	.63	924.25	16108.52	618.9	96958	34.8	10.2	6697	9.28	56478.4	1.0	1086.4	5.4	112.0	8.05	194.55	.90	2	4.91	.009	1.3	5.8	1.88	23.9	<.001	3	.22	.011	.17	1.3	1.9	.09	6.42	17	.1	.11	.6	1943
STANDARD DS5/AU-R	12.92	137.70	25.49	140.0	280	25.2	12.7	753	2.93	17.2	5.8	42.2	2.6	47.5	5.67	3.75	6.21	59	.73	.098	12.0	182.0	.66	137.3	.096	18	2.03	.030	.14	4.7	3.5	1.03	.05	173	4.8	.82	6.5	498

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ___ FA ___

ACME ANALYTICAL

Jasper Mining Corporation PROJECT Ruth-Vermont FILE # A303027 Page 3

ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0306-198	.32	9.44	132.70	68.4	1026	48.9	10.4	10316	7.27	66308.0	1.1	1338.3	3.4	204.5	.50	20.43	.14	3	7.30	.006	.9	2.5	2.74	15.5	<.001	1	.16	.008	.10	.2	2.3	.06	3.15	10	.1	.07	.6	1723
0306-199	.14	2873.55	18718.13	455.2	99999	12.4	4.3	3552	14.46	99999.0	.6	3885.5	1.8	52.3	11.77	1268.76	.88	<2	2.11	.002	<.5	1.5	.97	10.6	<.001	1	.07	.004	.05	.1	.6	.06	10.62	22	.3	.24	.3	3792
0306-200	.13	925.25	10819.21	602.3	90800	34.7	9.3	3990	16.13	99999.0	.3	1933.6	1.5	77.1	7.87	196.43	.99	<2	2.40	.001	<.5	1.0	1.29	8.0	<.001	1	.07	.004	.04	.2	.9	.04	11.04	93	.2	.11	.4	2374
0306-201	.18	307.28	1127.66	20911.7	12285	12.7	4.1	5090	4.17	1006.6	.4	51.7	1.7	69.4	174.32	34.72	.07	<2	4.03	.004	.5	2.4	1.38	8.7	<.001	1	.07	.005	.06	.4	1.4	.02	3.72	67	<.1	<.02	.7	83
0306-202	.05	626.86	16911.60	42563.4	39200	35.7	14.8	1542	4.07	16.3	.6	1679.1	1.0	45.8	303.96	19546.00	1.81	<2	3.29	.002	<.5	3.0	1.12	15.4	<.001	1	.13	.007	.08	<.1	.3	.15	5.92	194	<.1	<.02	1.3	2970
0307-203	.17	12.89	314.42	220.0	1344	9.9	3.3	579	1.01	438.8	.3	19.9	3.5	4.8	1.56	70.84	.15	<2	.12	.004	1.4	4.1	.02	10.7	<.001	<1	.12	.007	.07	.2	.6	.03	.25	17	<.1	<.02	.3	27
0307-204	.13	5.41	265.05	70.8	424	4.9	1.3	208	.38	93.4	<.1	4.0	.5	.8	.45	84.38	.03	<2	.02	.001	1.0	2.8	.01	2.5	<.001	<1	.02	.002	.01	.4	.2	<.02	.05	8	<.1	<.02	.1	6
0307-205	.13	2.65	29.26	20.0	372	3.4	1.2	149	.44	276.4	<.1	9.5	.1	1.8	.15	3.90	<.02	<2	.07	<.001	<.5	3.8	.02	1.1	<.001	<1	.01	.002	<.01	.3	.2	<.02	.16	5	<.1	<.02	.1	7
0307-206	.11	4.21	23.82	13.9	274	18.3	8.0	385	5.29	5863.6	.2	158.7	2.2	8.1	.08	4.15	.06	<2	.09	.004	.7	3.1	.04	6.4	<.001	1	.09	.005	.05	.4	.5	.04	6.12	8	.1	<.02	.2	166
0307-207	.15	2.36	16.81	15.2	253	13.0	4.9	1195	2.09	1338.0	.2	31.1	2.2	27.7	.11	1.05	.06	<2	1.69	.011	.8	3.2	.67	8.2	<.001	1	.11	.006	.06	.2	1.2	.03	1.37	9	<.1	.03	.3	32
0307-208	.18	3.02	18.20	9.6	301	8.5	3.2	318	1.69	497.0	.1	123.9	1.4	5.2	.05	2.20	.10	<2	.19	.005	.6	2.7	.08	3.3	<.001	1	.03	.003	.02	.3	.2	<.02	1.61	<5	<.1	.03	.1	124
0307-209	.49	19.08	22.30	8.8	724	72.2	25.9	888	4.10	1070.3	1.9	23.2	11.0	30.1	.07	2.11	.18	<2	1.15	.053	5.6	4.1	.40	20.9	<.001	2	.28	.013	.14	.3	1.8	.07	4.44	<5	.1	.02	.7	49
0307-210	.30	5.23	10.37	13.7	279	30.0	12.1	2874	3.42	2156.2	.8	44.3	5.8	64.5	.10	1.22	.12	<2	3.03	.016	2.0	3.9	1.24	11.1	<.001	2	.14	.007	.09	.1	2.3	.05	2.54	<5	<.1	<.02	.4	57
RE 0307-210	.21	5.65	9.23	13.7	266	28.0	11.0	2883	3.45	2470.8	.8	41.6	5.6	64.8	.09	1.29	.10	<2	3.04	.016	2.1	4.0	1.25	12.3	<.001	2	.13	.007	.09	.2	2.3	.05	2.46	5	.1	<.02	.4	62
RRE 0307-210	.24	4.68	10.52	15.6	300	30.8	11.2	2950	3.37	2851.4	.9	42.1	5.8	66.6	.10	.98	.09	2	3.09	.017	2.3	3.9	1.25	13.3	<.001	1	.17	.008	.10	.2	2.4	.06	2.46	11	.1	.02	.5	57
0307-211	.10	171.97	56.15	34.8	1563	26.7	6.5	288	1.64	150.5	.3	62.5	.2	1.1	.26	5.97	.58	<2	.03	.002	<.5	2.2	.02	3.2	<.001	1	.01	.002	.01	.1	.2	<.02	.77	<5	.3	.03	.1	33
0307-212	.43	44.14	154.08	41.5	1573	70.6	30.9	2240	6.58	37125.9	1.6	776.9	8.5	46.4	.35	21.44	.94	2	1.89	.021	5.0	6.1	.75	22.2	<.001	1	.30	.020	.16	.3	2.2	.08	5.77	5	.3	.07	.8	1077
0307-213	.27	20.68	18.99	178.7	796	53.3	17.0	1442	4.22	4630.7	1.7	84.4	8.4	26.7	1.28	5.31	.21	2	.96	.021	5.4	8.2	1.08	21.7	<.001	1	.26	.016	.14	.2	2.9	.07	2.12	<5	.2	.03	.6	127
0307-214	.26	113.39	973.72	7299.0	1806	54.6	16.6	1288	4.91	16864.5	1.7	260.9	8.5	31.0	64.78	66.96	.18	<2	1.17	.020	3.8	4.0	.47	21.0	<.001	2	.27	.015	.15	.3	1.7	.09	5.07	19	.1	.04	.9	477
0307-215	.24	13.96	20.70	252.4	498	53.2	14.8	2592	3.47	3024.7	1.4	40.1	7.2	50.8	1.78	3.27	.19	<2	1.97	.019	4.2	3.7	.88	18.3	<.001	<1	.23	.014	.13	.1	2.5	.06	2.63	<5	.2	.02	.5	78
0307-216	.26	21.54	13.44	35.3	785	59.4	20.5	2275	4.65	19455.7	1.4	327.9	8.0	62.5	.18	5.05	.46	2	2.11	.018	4.3	6.5	1.30	21.4	<.001	1	.26	.015	.16	.2	2.8	.08	3.03	6	.1	.07	.6	459
0307-217	.38	44.29	9.68	61.8	1651	62.6	23.4	1139	5.17	319.6	1.6	18.3	8.6	8.1	.13	8.49	.35	5	.15	.023	6.7	13.3	1.69	23.1	<.001	2	.29	.016	.15	.2	2.9	.08	.78	<5	.1	.03	.7	19
0307-218	.22	1748.17	18072.84	12783.2	16241	35.7	8.8	1079	9.51	74981.2	1.2	4681.2	5.1	25.5	99.35	12118.25	.40	<2	1.12	.013	<.5	3.5	.53	25.1	<.001	1	.20	.011	.11	.3	1.1	.14	8.08	35	<.1	<.02	.7	4854
0307-219	.21	20.95	186.68	92.2	432	54.8	13.0	2097	5.20	26019.7	1.2	437.0	6.4	51.4	.49	23.94	.17	<2	2.20	.014	3.4	4.4	1.01	19.0	<.001	1	.24	.014	.14	.2	2.7	.07	4.30	<5	.2	.03	.6	593
0307-220	.34	1137.16	16758.20	1413.9	25640	47.6	14.8	1757	6.98	28761.1	1.5	4526.5	.1	39.3	11.47	12550.00	.55	<2	1.79	.016	<.5	3.4	.72	23.3	<.001	1	.24	.012	.13	<.1	1.9	.18	7.74	<5	.1	<.02	.5	4004
0307-221	.35	256.26	9087.56	3948.2	6526	55.5	17.2	1455	8.95	67810.4	1.5	5109.2	7.9	29.7	30.41	2517.94	.40	<2	1.40	.018	1.5	5.4	.51	20.9	.001	1	.24	.012	.13	.3	1.4	.11	7.67	17	.2	.07	.6	4398
0307-222	.25	41.05	159.50	974.6	1491	64.1	31.6	2134	6.74	40577.4	1.4	1393.0	7.5	48.6	5.80	34.32	.46	<2	2.23	.045	3.3	5.0	.87	22.8	<.001	2	.29	.015	.16	.3	2.1	.09	5.76	<5	.4	.06	.7	1874
0307-223	.14	1158.82	17515.99	99999.0	70401	13.9	6.4	163	2.38	616.0	.6	2327.5	.2	6.5	2020.86	19067.00	1.15	<2	.13	.003	<.5	1.5	.06	22.8	<.001	<1	.08	.007	.04	<.1	<.1	.09	8.56	1066	<.1	<.02	5.7	2513
0307-224	.36	111.64	3366.48	12660.4	4213	76.2	48.9	1348	7.22	25864.9	1.2	1237.6	6.2	29.9	94.32	1050.78	.74	<2	1.38	.035	3.1	3.7	.51	21.1	<.001	1	.26	.014	.15	.4	1.4	.09	7.57	39	.3	.10	.9	1739
0307-225	.18	1588.71	19508.61	43621.0	57336	35.6	12.4	1604	13.88	71386.4	1.1	4061.7	3.9	43.5	836.11	4121.90	1.14	<2	2.12	.009	<.5	2.2	1.05	13.7	<.001	1	.17	.008	.09	.3	.9	.15	14.03	288	.4	.07	2.1	3578
0307-226	19	45.22	72.68	260.3	1328	55.9	16.6	1660	4.16	4938.9	1.2	62.3	5.8	41.6	1.77	12.83	.33	3	1.83	.020	4.6	6.9	1.27	22.6	<.001	2	.28	.016	.16	.2	2.8	.08	2.19	6	2	.03	.6	116
0307-227	19	21.54	80.60	147.9	684	57.6	15.4	1724	4.22	3792.1	1.3	57.3	6.1	37.0	1.01	8.60	.24	3	1.26	.030	4.7	7.7	1.22	21.2	<.001	1	.27	.016	.14	.2	2.5	.07	2.07	<5	3	.05	.6	133
0307-228	.08	1499.50	18525.91	99999.0	99999	24.3	7.3	3691	4.00	15205.3	3.6	817.6	2.9	64.9	1009.40	244.42	11.83	<2	3.34	.008	.5	2.6	1.69	13.4	<.001	1	.16	.009	.08	.2	1.1	.14	7.25	492	1.6	.52	4.7	805
0307-229	.07	7098.13	17222.50	95130.7	99999	8.1	3.8	1651	2.96	436.7	2.8	653.5	.8	30.5	1610.26	4580.70	3.65	<2	1.16	.001	<.5	8	.49	6.1	<.001	<1	.03	.003	.02	.4	.9	.20	10.74	620	.9	28	2.5	677
STANDARD DS5/AU-R	12.47	144.76	23.37	138.7	266	24.5	11.8	760	2.87	22.1	5.8	43.4	2.7	47.0	5.59	3.54	6.01	58	.73	.095	12.0	182.2	.65	136.0	.093	18	2.01	.031	.14	4.3	3.6	.96	.04	173	4.7	.85	6.6	485

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA ___

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ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0307-230	.10	16769.93	18692.31	99999.0	99999	12.6	3.5	1271	3.49	1602.3	1.5	4018.6	2.2	21.9	2637.00	7121.03	1.88	<2	.99	.001	<.5	1.1	.36	9.9	<.001	2	.05	.004	.03	.5	.4	.10	8.64	766	<.1	.34	5.9	2374
0307-231	.25	214.61	490.90	537.1	5396	22.6	6.7	742	2.22	176.8	.6	9.3	2.7	60.0	4.51	13.62	.10	2	1.88	.027	<.5	2.4	.58	9.5	<.001	2	.11	.009	.05	.6	1.2	.02	.49	12	<.1	<.02	.2	17
0307-232	.40	65.80	940.35	256.4	7439	40.4	10.4	3268	4.56	6901.3	1.0	108.5	6.4	80.0	.60	4.52	.38	3	3.75	.024	1.2	5.3	1.51	16.0	<.001	2	.20	.011	.11	.2	2.5	.06	2.82	<5	.1	.02	.5	211
0307-233	.06	5524.62	20883.13	99999.0	99999	2.0	1.3	190	13.04	31908.9	.6	1902.0	.3	3.6	1327.60	5283.39	1.38	<2	.20	.001	<.5	.8	.07	3.8	<.001	1	.01	.001	.01	.2	<.1	.12	16.68	363	<.1	<.02	2.1	2135
0307-234	.36	28.34	456.95	529.9	3653	47.9	11.0	1252	4.14	3244.2	1.3	66.5	7.1	62.2	2.07	4.60	.16	5	2.60	.029	3.0	7.9	1.31	18.8	<.001	1	.25	.018	.13	.2	3.8	.06	1.55	<5	<.1	<.02	.5	165
0307-235	.33	78.87	1139.26	842.0	8819	52.1	19.2	1332	4.83	5471.8	1.1	176.9	7.7	76.3	5.81	7.13	.81	4	3.02	.036	2.2	8.8	1.73	18.5	<.001	2	.25	.016	.14	.2	3.6	.07	1.39	<5	<.1	.02	.6	416
0307-236	.19	15.34	206.07	188.7	1770	38.5	14.2	1771	4.78	26976.0	.5	889.5	5.6	82.5	.71	5.13	1.57	<2	2.93	.013	1.2	3.2	1.42	16.8	<.001	2	.21	.014	.11	.5	2.5	.05	2.75	7	.1	.15	.5	1102
0306-237	.06	13413.85	18937.29	99999.0	99999	7.3	2.2	76	7.06	1697.3	.5	2560.9	.2	1.2	2018.53	8813.78	1.33	<2	.04	<.001	<.5	<.5	.02	5.1	<.001	<1	.01	.001	<.01	.2	<.1	.12	13.22	499	<.1	.22	4.4	1738
0308-238	.10	32.56	349.62	363.9	5423	19.9	7.6	484	4.91	938.3	.3	31.8	2.9	20.2	.37	1.72	.08	<2	.62	.006	1.1	2.5	.20	8.8	<.001	1	.08	.005	.05	.2	.3	.02	5.33	<5	<.1	<.02	.2	47
0308-239	.78	90.38	511.99	269.9	5891	48.5	18.9	2694	5.83	15425.4	1.5	774.7	5.1	175.4	1.52	13.94	.29	2	4.10	.030	2.4	5.2	2.09	18.2	<.001	1	.19	.009	.11	.2	2.9	.06	3.13	7	<.1	.12	.4	1200
0308-240	.35	113.11	128.95	117.5	1550	81.1	19.9	592	5.92	509.6	2.2	11.6	7.2	150.5	.15	.26	.50	2	1.69	.013	5.0	4.5	1.03	17.0	<.001	2	.20	.008	.13	.3	3.2	.04	4.65	<5	<.1	.03	.5	31
0308-241	.18	48.30	144.67	89.1	1714	32.7	11.2	1071	4.74	425.9	.5	69.9	2.5	181.7	.78	4.18	.23	<2	3.68	.002	1.2	2.7	1.56	9.6	<.001	1	.11	.005	.07	.2	2.2	.04	3.35	<5	<.1	.02	.3	121
0308-242	.18	12.12	344.78	58.0	1545	9.9	2.7	555	1.77	39.7	.4	2.5	2.3	76.9	.45	3.08	1.52	<2	1.52	.012	2.7	4.1	.89	17.6	<.001	1	.11	.006	.07	.3	1.1	.02	.17	9	<.1	.05	.3	7
0308-243	.64	65.50	49.90	46.5	962	75.0	41.0	325	2.55	799.4	2.4	3.5	12.8	43.2	.34	1.95	.15	<2	.70	.024	4.4	3.4	.32	24.4	<.001	2	.24	.014	.16	.3	1.6	.04	1.81	<5	.1	.02	.6	14
0308-244	.72	294.91	25.23	27.6	1140	86.7	18.7	61	1.75	222.9	1.4	1.3	6.6	10.7	.18	1.46	.16	<2	.14	.004	3.1	3.2	.06	18.0	<.001	1	.17	.012	.10	.3	.4	.03	1.60	5	.2	<.02	.4	8
RE 0308-244	.72	289.60	23.56	27.5	985	83.5	20.1	60	1.73	208.9	1.3	4.4	6.8	10.7	.19	1.32	.15	<2	.14	.004	3.2	3.1	.06	17.0	<.001	1	.16	.011	.10	.2	.5	.03	1.45	<5	.3	<.02	.4	18
RRE 0308-244	.72	321.18	80.53	48.7	1800	78.7	28.1	60	1.68	233.7	1.7	2.7	8.3	11.8	.43	2.43	.17	<2	.14	.004	4.7	4.9	.06	25.0	<.001	1	.24	.016	.14	.3	.5	.04	1.49	5	.2	<.02	.5	4
0308-245	.15	7.18	37.89	23.0	367	13.3	2.3	296	2.86	415.4	.1	41.7	.7	47.4	.14	1.97	.10	<2	.94	.001	<.5	2.4	.28	3.0	<.001	<1	.03	.004	.02	.2	.8	<.02	2.11	<5	<.1	<.02	.1	70
0308-246	.17	7.92	106.19	46.9	941	1.5	.7	70	.31	25.9	<.1	2.5	.1	5.7	.40	4.25	<.02	<2	.16	<.001	<.5	2.3	.06	1.1	<.001	<1	.01	.002	<.01	.3	.1	<.02	.07	<5	<.1	<.02	.1	<2
0308-247	.21	9.04	29.36	24.6	324	3.6	2.9	724	4.68	508.0	.1	37.3	1.6	34.5	.20	1.42	.07	<2	.96	.014	.9	2.6	.34	9.1	<.001	<1	.08	.007	.05	.2	.5	.02	4.56	<5	.2	<.02	.2	45
0308-248	.15	3.39	49.36	23.3	453	.7	.4	53	.30	9.3	<.1	2.3	<.1	2.1	.19	2.41	<.02	<2	.07	<.001	<.5	2.2	.03	<.5	<.001	<1	<.01	.002	<.01	<.1	<.1	<.02	.05	<5	<.1	<.02	.1	<2
0308-249	.15	396.09	28.59	27.0	1008	122.3	19.4	114	2.66	464.0	.1	42.0	.7	13.1	.18	2.35	.23	<2	.26	.001	.5	3.2	.09	11.9	<.001	<1	.04	.005	.02	.2	.2	<.02	2.46	<5	.7	<.02	.1	36
0309-250	.18	18.53	21.07	232.2	231	63.9	9.8	1010	7.81	192.8	.3	4.3	2.0	82.1	.31	.82	.11	4	1.76	.072	<.5	3.8	2.18	12.9	.001	1	.43	.009	.08	.1	2.9	.02	1.51	<5	.1	.02	1.2	<2
0309-251	.54	95.91	13.54	589.9	195	57.0	21.2	570	5.05	107.7	1.6	<.2	12.9	8.9	.55	.25	.12	4	.11	.024	5.8	7.1	1.44	20.9	<.001	3	.24	.012	.14	.2	3.9	.05	.07	10	.1	<.02	.6	<2
0309-252	.11	7.57	533.34	27.0	1258	15.3	6.4	673	2.15	1404.9	.5	17.8	5.4	37.0	.17	1.79	.09	<2	1.04	.008	2.6	3.5	.45	8.3	<.001	1	.12	.011	.06	.3	1.0	.03	1.10	<5	<.1	<.02	.3	18
0309-253	.15	3885.04	11906.00	17523.0	45397	15.6	5.2	171	1.33	52.3	.7	22.0	6.6	31.1	116.78	22.01	1.99	<2	.64	.007	3.4	3.4	.24	8.1	<.001	1	.12	.012	.05	.1	.6	.03	.95	51	1.2	1.24	.3	2
0310-254	.18	46.98	43.53	117.2	272	36.5	10.1	550	3.90	34.3	1.1	1.0	7.9	7.1	.08	.26	.11	3	.16	.013	4.8	4.5	1.48	16.8	<.001	<1	.21	.022	.09	<.1	3.1	.03	.19	<5	.1	<.02	.4	<2
0310-255	.91	61.14	48.47	48.5	399	45.2	26.9	736	4.25	94.2	1.1	2.9	6.8	39.1	.12	.60	.69	<2	1.19	.012	2.3	3.8	1.02	20.1	<.001	2	.22	.014	.12	.2	2.8	.05	2.62	<5	.3	.07	.5	4
0310-256	.54	9.08	80.61	30.6	462	32.5	18.7	588	3.17	152.1	2.0	.4	6.6	459.9	.19	2.66	1.65	2	21.67	.069	2.2	1.0	.67	16.3	<.001	1	.12	.011	.06	.2	3.1	.03	1.80	5	.7	.20	.3	17
0310-257	.24	9.87	350.36	46.3	1769	24.7	49.1	618	9.13	841.0	.9	1.8	1.6	483.4	.35	1.58	4.33	<2	20.83	.027	4.6	1.1	.32	7.6	<.001	<1	.04	.006	.02	.5	2.1	<.02	5.11	<5	2.8	.45	.1	38
STANDARD DS5/AU-R	12.50	139.01	24.29	134.1	287	22.9	11.4	776	2.94	17.3	5.8	40.0	2.7	48.8	5.57	3.41	5.95	59	.75	.094	12.1	184.3	.66	135.0	.094	17	2.08	.032	.14	4.2	3.8	.99	.04	172	4.6	.85	6.4	498

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ___ FA ___

ACME ANA TICAL LABORATORIES LTD. 852 E. HASTINGS ST. ICOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6(253-1716
(ISO 02 Accredited Co.)

GEOCHEMICAL ANAL SIS CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A303027 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
SI	.03	3.91	6.64	4.5	1491	.3	.1	2	.05	.2	<.1	2.1	<.1	2.3	.01	3.93	<.02	<2	.10	<.001	<.5	1.0	<.01	2.5	<.001	1	.01	.505	<.01	<.1	.1	<.02	.02	53	<.1	<.02	<.1	<2
0303-72	.21	7.53	13.97	29.2	1029	30.3	9.7	2585	4.61	2193.6	.6	148.9	4.4	104.4	.15	5.79	.13	<2	6.80	.033	2.1	3.5	2.51	11.3	.001	5	.18	.012	.10	.3	1.8	.05	1.28	34	.1	.02	.3	201
0303-73	.21	220.85	6615.81	68.7	51820	48.3	11.6	2347	5.77	14056.2	.9	1445.0	4.9	99.8	.93	140.04	.70	<2	6.00	.017	2.2	4.0	2.06	13.8	<.001	3	.16	.012	.11	.8	2.7	.05	2.61	37	.1	.02	.4	1665
0303-74	.13	10.69	31.96	38.8	1399	15.3	5.1	3196	5.72	855.9	.3	77.8	1.9	160.5	.21	7.25	.09	3	9.42	.010	.9	1.7	3.40	5.9	<.001	2	.07	.005	.05	.3	1.7	.02	.96	23	.1	<.02	.2	121
0303-75	.26	37.40	1244.13	36.0	7273	26.8	7.4	2588	5.23	7283.8	.6	905.7	2.9	127.5	.36	31.81	.32	2	7.04	.010	1.7	2.3	2.61	11.8	<.001	1	.11	.007	.08	.2	1.5	.04	1.46	38	<.1	.05	.3	1252
0303-76	.17	10.16	25.64	27.4	1136	26.8	8.7	3197	4.36	3087.5	.5	266.5	3.8	121.4	.15	6.09	.12	3	6.81	.009	1.8	2.9	2.56	9.8	.001	2	.13	.008	.08	.5	2.2	.04	1.02	6	.1	.04	.3	478
0303-77	.32	12.18	18.47	8.4	963	62.2	24.0	1398	5.59	13180.3	1.1	105.9	7.1	41.3	.07	2.74	.31	<2	1.62	.033	4.1	4.1	.66	16.4	.001	1	.22	.011	.14	.4	1.9	.06	5.24	10	.1	.02	.4	193
0303-78	.35	14.91	25.59	13.3	1117	60.8	20.7	2312	6.89	24821.1	.9	569.7	6.3	72.1	.18	9.82	.49	<2	2.57	.015	3.9	4.6	1.08	18.3	.001	2	.20	.011	.14	1.0	2.5	.07	5.81	8	.2	.04	.4	969
0303-79	.46	16.87	32.90	8.9	1432	64.9	38.0	1679	7.48	37420.6	1.1	1225.9	5.2	47.6	.21	9.11	.55	<2	1.96	.018	3.4	4.2	.82	16.0	.001	2	.22	.010	.13	.4	1.9	.07	6.38	14	.2	.06	.4	2440
0303-80	.57	30.70	12.19	13.3	1567	67.3	48.6	1821	5.22	9160.1	1.2	45.2	6.9	64.2	.12	12.05	.91	3	2.84	.017	3.5	4.7	1.20	14.9	.001	2	.19	.010	.13	.4	3.1	.07	4.29	<5	.3	.10	.4	145
0305-133	.27	108.78	17399.74	44409.3	90489	25.0	11.2	14720	7.61	567.8	.5	47.4	2.0	103.7	378.92	98.97	.34	<2	6.06	.041	.6	2.9	2.02	11.1	.001	1	.15	.006	.08	.6	3.0	.06	8.32	103	.4	.07	.8	118
0305-134	.13	114.50	23286.87	7793.6	73956	19.2	5.0	7049	3.20	116.7	.8	23.8	8.4	71.5	66.79	66.91	.11	<2	4.91	.015	1.4	4.2	1.47	20.7	.001	3	.25	.012	.16	.3	2.2	.07	1.85	36	<.1	.02	.6	41
0305-135	.07	1705.75	20554.03	95680.7	99999	13.2	6.1	5764	13.92	1855.2	.6	111.5	1.5	53.4	822.00	266.16	.16	<2	2.68	.173	.5	2.2	.98	4.5	.001	1	.13	.004	.07	<.1	1.6	.07	22.19	193	.5	.09	1.0	277
0305-136	.17	1800.05	22606.55	68648.7	99999	17.0	6.5	9180	5.09	343.0	.9	55.0	5.1	61.9	594.00	163.34	.22	<2	4.67	.022	.7	4.4	1.42	17.1	.001	2	.19	.009	.13	.2	2.2	.08	7.58	159	.2	.08	1.1	140
0305-137	.22	103.95	6520.23	6062.3	19830	35.2	15.1	6065	4.10	167.2	1.1	8.2	6.0	133.8	44.99	25.29	.40	2	7.77	.022	1.2	5.5	1.50	14.9	<.001	1	.18	.008	.11	.3	2.6	.05	1.80	27	<.1	.04	.4	21
0305-138	.20	31.62	1392.82	2949.3	5346	36.1	21.9	10582	8.74	1008.1	.9	51.4	4.9	101.8	21.20	11.71	.19	2	6.94	.027	1.0	5.7	2.22	13.1	<.001	<1	.16	.008	.10	.3	2.6	.05	5.57	<5	<.1	.03	.4	93
0305-139	.04	3543.44	24585.76	99999.0	99999	22.3	5.2	4513	5.69	564.6	.6	196.4	3.0	46.2	1462.00	799.17	1.30	<2	4.04	.009	<.5	3.7	1.37	11.5	.001	1	.12	.006	.09	40.3	1.4	.06	7.38	290	.6	.05	2.3	386
0305-140	.11	76.23	2300.36	8198.3	7425	27.9	8.5	6393	4.62	250.4	.9	11.1	5.9	81.9	72.87	8.16	.08	2	5.89	.021	1.3	6.0	1.72	15.9	<.001	2	.17	.009	.12	.9	2.4	.05	2.24	26	<.1	<.02	.5	25
RE 0305-140	.10	72.85	2254.10	8127.6	7572	27.3	7.1	6270	4.51	230.8	.9	10.6	6.0	80.1	68.00	11.34	.08	2	5.77	.021	1.4	6.3	1.68	15.4	<.001	2	.18	.008	.11	.7	2.5	.05	2.02	28	<.1	.03	.5	22
RRE 0305-140	.11	72.78	2501.60	7862.1	7349	26.1	6.8	6004	4.25	231.0	.8	12.0	5.7	75.7	62.14	11.87	.07	2	5.44	.020	1.2	6.0	1.58	16.4	.001	2	.21	.009	.12	.8	2.5	.05	2.10	23	<.1	<.02	.5	22
0305-141	.03	117.60	9017.70	333.7	30685	16.8	4.6	4061	4.14	460.2	.3	24.3	1.6	58.2	3.54	93.72	.49	<2	3.93	.012	1.2	3.7	1.27	9.1	<.001	1	.10	.005	.06	.3	2.0	.03	2.93	12	<.1	.08	.3	58
0305-142	.36	119.21	1583.48	13331.4	11503	25.5	15.0	6116	4.19	229.5	1.0	12.2	5.2	82.6	96.31	51.17	.14	3	5.84	.025	1.3	7.1	1.79	18.1	.001	1	.17	.008	.11	.6	2.8	.05	1.75	50	<.1	.02	.7	43
0305-143	.17	135.28	1515.40	7005.4	15793	17.3	8.2	5108	18.90	49156.7	.6	383.7	2.0	43.4	56.46	171.46	.16	<2	2.69	.049	<.5	2.7	1.11	7.6	.001	<1	.10	.004	.06	.4	1.4	.04	23.59	24	.1	.04	.4	966
0305-144	.01	2425.68	18463.88	11042.9	99999	24.5	9.0	3550	3.30	479.0	.9	83.6	5.6	67.3	86.95	1590.07	1.13	2	4.92	.020	.7	6.8	1.56	18.1	<.001	6	.21	.009	.13	.4	1.9	.07	2.21	45	<.1	.05	.5	204
0305-145	.13	155.28	4592.45	3463.7	22246	30.9	8.4	5550	6.59	968.7	.8	37.3	5.8	70.8	29.08	107.38	.18	2	4.54	.013	1.0	5.2	1.49	15.7	.001	<1	.16	.009	.11	.6	2.2	.05	5.71	18	<.1	.02	.4	82
0305-146	.17	35.20	1165.35	1614.0	5239	33.7	13.4	2602	3.07	197.8	1.3	11.7	8.1	58.7	12.87	21.26	.13	3	4.04	.015	2.0	6.6	1.25	20.3	.001	1	.20	.012	.13	.3	1.8	.06	1.12	5	<.1	.02	.5	28
0305-147	.49	91.58	2790.96	3070.0	10576	30.5	14.5	4954	5.69	833.3	1.1	49.3	3.8	82.8	24.17	87.64	.19	3	5.62	.060	1.0	6.6	1.75	15.1	.001	<1	.16	.007	.09	.3	2.2	.04	3.72	10	<.1	.02	.4	176
0305-148	.39	7.97	272.44	2050.4	878	29.9	11.4	5455	3.95	392.0	1.4	16.1	5.6	84.1	14.70	14.35	.12	4	5.65	.017	1.4	8.1	1.77	17.7	<.001	1	.19	.009	.13	.3	2.4	.05	1.42	5	<.1	.03	.5	68
0305-149	.65	920.94	23460.19	58384.2	52823	57.7	28.1	6164	7.99	22875.5	.5	1680.2	.4	67.9	393.27	11564.64	1.97	2	4.93	.008	<.5	5.8	1.79	17.1	<.001	2	.12	.006	.08	.2	2.2	.11	9.17	246	.4	.03	1.4	3700
0305-157	.27	551.86	8396.06	25426.2	63987	40.1	11.7	1792	5.24	13130.9	.9	152.1	6.1	35.5	244.75	200.58	.18	3	1.76	.011	1.7	3.0	.69	18.0	.001	2	.22	.009	.13	.2	2.3	.06	6.36	49	<.1	.05	.8	300
0306-161	.07	14.76	185.52	185.1	1509	58.5	20.9	2261	3.68	5552.7	.9	75.6	6.5	38.6	1.44	34.51	.07	4	1.48	.010	2.2	7.0	.60	15.9	.001	2	.19	.009	.12	.4	2.9	.06	2.80	6	<.1	.02	.5	96
0306-162	.05	7.21	61.03	123.7	927	33.1	11.9	344	5.65	1581.0	.4	79.6	2.5	3.2	1.17	6.93	.06	2	.07	.009	1.1	3.9	.03	11.4	<.001	1	.14	.007	.09	.2	1.2	.05	6.04	10	<.1	.02	.4	92
0306-163	.27	15.17	53.16	72.8	938	65.2	22.5	1331	12.00	3169.9	.7	131.1	4.6	11.8	.62	2.66	.48	2	.42	.008	1.7	3.3	.16	10.7	.001	1	.14	.006	.10	.2	1.5	.05	14.89	<5	.1	.06	.4	203
0306-164	.26	66.61	17.78	43.5	1158	70.5	28.8	1486	4.87	2651.7	1.2	16.7	7.9	26.5	.27	4.14	.47	5	1.13	.037	2.7	8.5	1.31	19.4	<.001	1	.26	.012	.16	.2	3.9	.10	2.39	5	.2	.08	.6	30
0306-165	.07	37.23	30.54	32.6	1463	33.5	9.8	5502	9.63	99999.0	.9	1515.6	5.3	195.1	.23	9.32	2.07	4	6.53	.017	2.2	5.2	3.47	22.6	.001	2	.21	.012	.12	.2	2.3	.08	4.01	<5	.1	.23	.5	1607
STANDARD DS5/AU-R	12.54	139.10	23.33	131.5	278	24.3	12.5	795	3.02	17.7	6.1	43.0	2.8	49.5	5.71	3.65	6.46	61	.76	.100	12.5	190.0	.68	135.1	.098	18	2.10	.032	.15	4.5	3.8	1.04	.05	182	4.7	.89	6.5	488

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30.00 GM SAMPLE ANALYSIS BY FA/ICP.
- SAMPLE TYPE: CORE R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 30 2003 DATE REPORT MAILED: Aug 18/03 SIGNED BY. D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME ANALYTICAL

Jasper Mining Corporation PROJECT Ruth-Vermont FILE # A303027

ACME ANALYTICAL

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Au**
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb
0306-166	.81	35.68	18.00	12.8	997	68.3	47.4	1122	5.41	11681.7	1.2	42.9	8.4	37.6	.08	3.35	.98	5	1.34	.010	3.8	5.8	.64	26.7	<.001	1	.28	.021	.19	.3	2.2	.11	5.14	5	.5	.04	.7	94
0306-167	1.62	13.25	17.82	26.9	488	26.2	9.8	9335	8.02	54368.3	.3	1657.4	.7	182.8	.18	12.69	.80	5	11.02	<.001	.8	8.0	5.42	10.1	<.001	1	.09	.022	.05	1.4	4.0	.04	3.34	7	.3	.09	.6	1817
0306-168	1.07	47.02	18.00	13.6	769	68.7	38.7	1129	5.84	13776.5	1.4	55.2	9.2	33.6	.06	2.44	1.14	6	1.39	.013	3.7	6.5	.82	32.1	<.001	2	.37	.024	.24	.3	3.0	.14	4.94	<5	.6	.12	.9	133
0306-169	5.06	8.39	9.31	12.0	297	49.5	13.9	1584	3.06	15902.4	.6	354.8	3.6	45.6	.09	1.56	.77	5	1.94	.009	2.2	24.4	.86	45.9	<.001	12	.37	.028	.22	3.9	1.7	.10	1.81	7	.1	.15	1.0	514
0306-170	.59	33.95	8.59	14.1	1125	52.5	19.8	2650	4.17	11008.6	1.4	59.0	9.1	53.9	.10	5.27	.26	4	2.38	.024	4.1	5.8	1.05	24.6	<.001	1	.32	.023	.19	.4	2.9	.10	3.47	5	.2	.04	.8	113
0306-171	.69	19.76	9.08	18.6	206	70.3	31.3	2088	4.90	10733.6	1.1	123.7	7.0	91.4	.09	3.10	.87	4	4.06	.018	3.7	7.5	1.96	24.3	.001	6	.27	.023	.17	.5	4.0	.09	3.15	<5	.4	.05	.8	395
0306-172	.66	28.19	11.59	37.9	567	13.0	5.5	12275	10.30	89661.2	.3	7594.4	.7	260.4	.26	34.17	1.05	3	11.82	.002	.8	3.2	5.63	8.0	<.001	<1	.07	.007	.04	.7	2.0	.04	3.76	7	.3	.15	.5	7944
0306-173	1.41	23.45	12.05	11.9	318	65.9	41.3	1471	6.34	25232.1	1.3	121.7	8.5	52.1	.09	5.60	1.08	4	1.93	.017	3.6	9.1	.79	24.2	<.001	3	.32	.025	.20	.7	2.6	.10	5.52	7	.5	.10	.7	468
0306-174	.47	21.40	23.22	81.6	520	57.6	13.3	1474	4.88	23263.5	1.2	120.4	9.0	54.0	.49	8.70	.46	5	1.97	.087	3.8	9.0	.97	28.6	<.001	2	.39	.025	.24	.4	3.1	.13	3.56	<5	.2	.09	1.0	302
0306-175	.78	76.11	21.23	36.1	2596	63.4	20.2	2024	4.71	1848.1	1.4	32.4	9.0	81.8	.31	24.65	.22	4	2.91	.052	2.8	7.1	1.23	24.5	<.001	2	.30	.018	.19	.7	4.0	.09	4.00	10	.2	.04	.7	84
0306-176	.47	5181.40	20498.70	19701.6	99999	22.4	6.1	707	15.87	99999.0	1.2	10469.9	3.4	18.4	157.04	3683.65	.89	<2	.67	.016	<.5	5.5	.26	14.7	<.001	1	.15	.009	.10	1.2	.7	.19	12.18	100	.2	.07	.8	8796
0306-177	.88	30.40	105.86	95.0	954	68.5	20.0	1341	5.15	8857.5	1.3	43.4	10.2	34.6	.52	9.84	.46	6	1.32	.043	3.0	12.7	1.09	24.5	<.001	1	.30	.017	.19	.7	3.0	.10	2.91	<5	.3	<.02	.7	74
0306-178	1.06	114.49	3616.36	1397.4	10174	19.1	5.4	2773	7.54	80419.7	.6	1602.7	3.1	59.0	11.15	106.42	.62	2	2.38	.011	.8	7.9	.97	12.3	.001	2	.16	.011	.10	1.9	1.1	.06	4.84	12	.2	.07	.5	1679
0306-179	1.06	27.59	113.50	223.8	935	66.4	17.4	1277	5.26	12812.3	1.3	143.0	9.8	29.7	1.29	9.16	.28	6	1.13	.040	3.0	14.7	1.20	27.5	.003	1	.34	.021	.24	.8	3.1	.11	2.50	8	.2	.03	.9	212
0306-180	.74	15889.32	16283.56	99999.0	99999	38.7	11.0	1840	5.92	4569.7	1.7	4078.5	.4	39.7	1505.13	10442.91	11.78	<2	1.25	.001	<.5	3.4	.51	13.4	<.001	<1	.02	.002	.01	.9	.4	.21	11.83	587	1.6	.40	2.5	3921
RE 0306-180	.81	14666.66	16196.74	99999.0	99999	39.7	11.1	1788	5.89	4151.1	1.6	2532.3	.3	38.2	1427.81	9503.34	10.90	<2	1.21	.001	<.5	3.6	.50	14.5	<.001	<1	.02	.002	.01	.8	.3	.21	10.60	551	1.2	.36	2.4	2617
RRE 0306-180	2.66	15871.76	16193.89	99999.0	99999	34.4	9.7	1779	5.62	3499.6	1.6	2377.9	.4	37.8	1509.34	11344.13	12.42	<2	1.19	<.001	<.5	9.3	.49	15.5	<.001	1	.03	.003	.01	2.3	.4	.21	10.81	601	1.3	.36	2.6	2905
0306-181	1.12	1616.79	16973.75	1703.3	99999	39.3	18.1	1168	9.45	13528.4	.7	373.3	2.6	37.9	18.17	1000.77	8.77	<2	1.02	.004	<.5	6.0	.38	8.4	<.001	1	.08	.009	.05	1.2	.8	.07	10.38	19	.7	.50	.3	446
0306-182	1.09	1809.86	4164.56	99999.0	85433	61.9	11.4	1745	5.23	1224.0	1.1	206.7	7.8	22.5	865.71	340.57	.43	2	1.09	.023	1.7	6.1	.36	22.1	<.001	2	.26	.014	.19	.9	1.4	.09	9.98	200	.6	.04	2.3	359
0306-183	.39	30.83	191.15	675.6	3267	53.0	11.1	2176	4.43	4455.4	1.2	65.5	9.0	50.2	5.16	13.39	.14	4	2.64	.040	1.9	5.8	1.01	21.5	<.001	2	.29	.016	.22	.6	3.2	.09	3.74	9	.1	<.02	.7	152
0306-184	1.24	10612.89	16538.84	99999.0	99999	1.6	.8	1489	6.31	7764.0	1.2	1877.2	.1	34.2	1260.83	8385.10	3.90	<2	1.81	<.001	<.5	4.4	.73	6.2	<.001	<1	.01	.001	.01	1.5	.4	.28	12.07	483	.9	.05	2.9	1929
0306-185	.54	31.42	692.99	418.7	5437	58.6	20.3	1389	7.83	12382.3	1.0	252.7	8.6	37.1	3.26	12.57	.25	3	1.30	.022	2.9	6.1	.49	25.4	<.001	1	.32	.016	.22	.6	2.0	.10	8.36	7	.2	<.02	.8	654
0306-186	1.33	2129.68	15707.21	99999.0	99999	14.6	3.0	2317	2.70	2501.0	1.2	363.1	4.9	69.0	1063.33	262.21	.95	<2	2.52	.007	.6	6.8	1.02	10.1	<.001	<1	.10	.008	.08	1.4	.8	.09	8.35	458	1.6	.34	4.7	360
0306-187	.51	3679.47	15420.27	1389.6	99999	29.8	10.7	2184	2.44	3489.0	3.0	130.0	13.7	42.1	13.98	1905.23	1.08	<2	2.17	.014	2.0	4.6	.81	29.7	<.001	2	.33	.021	.24	.8	1.5	.14	2.67	18	.2	.05	.8	726
0306-188	1.14	5199.98	1914.81	99999.0	96689	19.2	9.4	1440	4.02	1195.0	.4	148.9	3.4	24.9	2700.65	89.90	.26	<2	1.70	.005	<.5	5.1	.57	15.8	<.001	<1	.14	.008	.11	1.7	.8	.04	10.38	566	.9	.15	6.6	278
0306-189	.43	10143.18	16166.80	99999.0	99999	22.0	8.6	2156	3.07	232.6	2.3	12775.7	2.1	42.7	1879.62	13165.00	3.31	<2	2.60	.005	<.5	4.1	.85	23.2	<.001	1	.17	.013	.12	.1	1.1	.16	12.03	374	.5	.02	5.5	23321
0306-190	2.44	3375.55	17276.68	29088.2	99999	8.1	2.2	5023	6.47	15236.4	.2	1063.0	.2	78.4	270.70	2386.77	.55	<2	4.20	<.001	<.5	9.4	1.64	2.0	<.001	<1	.01	.001	<.01	3.2	.3	.05	6.76	102	.1	.16	.7	1167
0306-191	.37	2176.29	16325.25	99999.0	99999	7.0	3.4	2548	5.09	2937.0	.7	583.2	3.5	44.3	1680.23	1486.00	2.55	<2	2.83	.004	<.5	3.4	1.01	6.3	<.001	1	.05	.003	.02	.8	.6	.11	8.82	443	.7	.21	3.0	545
0306-192	1.52	1814.27	20035.06	1329.3	99999	30.3	10.7	2491	13.42	89367.2	.8	2249.3	6.0	59.9	26.34	843.73	4.44	<2	2.02	.005	.8	7.5	.95	19.3	.001	2	.20	.010	.14	1.9	1.5	.20	11.80	22	.4	.10	.6	2519
0306-193	.57	667.57	17859.84	20780.3	99999	30.8	11.2	3060	10.69	14539.6	1.1	474.1	6.1	72.3	173.25	308.32	1.17	<2	2.56	.007	.9	4.2	1.03	21.1	<.001	3	.25	.012	.18	.8	1.9	.13	12.13	85	.2	.05	1.0	756
0306-194	2.02	747.54	21510.86	289.0	99999	27.4	13.8	4320	15.91	99999.0	.8	3052.6	4.1	125.1	16.73	688.15	4.62	<2	4.21	.003	.9	7.7	2.04	22.1	<.001	3	.22	.011	.16	1.9	2.2	.19	11.12	25	.4	.12	.6	2831
0306-195	.40	7105.93	9905.21	57556.5	99999	10.7	3.9	1137	23.45	3783.2	.2	2864.1	.4	8.6	552.40	3567.73	2.48	<2	.72	<.001	<.5	2.6	.30	1.8	.001	1	.03	.002	.01	1.4	.2	.17	26.34	303	.4	.71	1.8	3094
0306-196	2.24	679.20	20055.61	368.7	99999	30.1	11.7	2279	13.07	86363.2	1.0	1550.9	4.6	48.7	10.08	314.68	1.12	<2	1.68	.002	1.0	10.0	1.09	20.7	.002	6	.19	.010	.14	2.5	1.7	.10	10.03	16	.3	.29	.6	1999
0306-197	.63	924.25	16108.52	618.9	96958	34.8	10.2	6697	9.28	56478.4	1.0	1086.4	5.4	112.0	8.05	194.55	.90	2	4.91	.009	1.3	5.8	1.88	23.9	<.001	3	.22	.011	.17	1.3	1.9	.09	6.42	17	.1	.11	.6	1943
STANDARD DS5/AU-R	12.92	137.70	25.49	140.0	280	25.2	12.7	753	2.93	17.2	5.8	42.2	2.6	47.5	5.67	3.75	6.21	59	.73	.098	12.0	182.0	.66	137.3	.096	18	2.03	.030	.14	4.7	3.5	1.03	.05	173	4.8	.82	6.5	498

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data___FA ___

ACME ANALYTICAL

Jasper Mining Corporation PROJECT Ruth-Vermont FILE # A303027 Page 3

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Au**
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb
0306-198	32	9.44	132.70	68.4	1026	48.9	10.4	10316	7.27	66308.0	1.1	1338.3	3.4	204.5	.50	20.43	.14	3	7.30	.006	.9	2.5	2.74	15.5	<.001	1	.16	.008	.10	.2	2.3	.06	3.15	10	.1	.07	.6	1723
0306-199	.14	2873.55	18718.13	455.2	99999	12.4	4.3	3552	14.46	99999.0	.6	3885.5	1.8	52.3	11.77	1268.76	88	<2	2.11	.002	<.5	1.5	.97	10.6	<.001	1	.07	.004	.05	.1	.6	.06	10.62	22	.3	.24	.3	3792
0306-200	.13	925.25	10819.21	602.3	90800	34.7	9.3	3990	16.13	99999.0	.3	1933.6	1.5	77.1	7.87	196.43	.99	<2	2.40	.001	<.5	1.0	1.29	8.0	<.001	1	.07	.004	.04	.2	.9	.04	11.04	93	.2	.11	.4	2374
0306-201	.18	307.28	1127.66	20911.7	12285	12.7	4.1	5090	4.17	1006.6	.4	51.7	1.7	69.4	174.32	34.72	.07	<2	4.03	.004	.5	2.4	1.38	8.7	<.001	1	.07	.005	.06	.4	1.4	.02	3.72	67	<.1	<.02	.7	83
0306-202	.05	626.86	16911.60	42563.4	39200	35.7	14.8	1542	4.07	16.3	.6	1679.1	1.0	45.8	303.96	19546.00	1.81	<2	3.29	.002	<.5	3.0	1.12	15.4	<.001	1	.13	.007	.08	<.1	.3	.15	5.92	194	<.1	<.02	1.3	2970
0307-203	.17	12.89	314.42	220.0	1344	9.9	3.3	579	1.01	438.8	.3	19.9	3.5	4.8	1.56	70.84	.15	<2	.12	.004	1.4	4.1	.02	10.7	<.001	<1	.12	.007	.07	.2	.6	.03	.25	17	<.1	<.02	.3	27
0307-204	.13	5.41	265.05	70.8	424	4.9	1.3	208	.38	93.4	<.1	4.0	.5	.8	.45	84.38	.03	<2	.02	.001	1.0	2.8	.01	2.5	<.001	<1	.02	.002	.01	.4	.2	<.02	.05	8	<.1	<.02	.1	6
0307-205	.13	2.65	29.26	20.0	372	3.4	1.2	149	.44	276.4	<.1	9.5	.1	1.8	.15	3.90	<.02	<2	.07	<.001	<.5	3.8	.02	1.1	<.001	<1	.01	.002	<.01	.3	.2	<.02	.16	5	<.1	<.02	.1	7
0307-206	.11	4.21	23.82	13.9	274	18.3	8.0	385	5.29	5863.6	.2	158.7	2.2	8.1	.08	4.15	.06	<2	.09	.004	.7	3.1	.04	6.4	<.001	1	.09	.005	.05	.4	.5	.04	6.12	8	.1	<.02	.2	166
0307-207	.15	2.36	16.81	15.2	253	13.0	4.9	1195	2.09	1338.0	.2	31.1	2.2	27.7	.11	1.05	.06	<2	1.69	.011	8	3.2	.67	8.2	<.001	1	.11	.006	.06	.2	1.2	.03	1.37	9	<.1	.03	.3	32
0307-208	.18	3.02	18.20	9.6	301	8.5	3.2	318	1.69	497.0	.1	123.9	1.4	5.2	.05	2.20	.10	<2	.19	.005	.6	2.7	.08	3.3	<.001	1	.03	.003	.02	.3	.2	<.02	1.61	<5	<.1	.03	.1	124
0307-209	.49	19.08	22.30	8.8	724	72.2	25.9	888	4.10	1070.3	1.9	23.2	11.0	30.1	.07	2.11	.18	<2	1.15	.053	5.6	4.1	.40	20.9	<.001	2	.28	.013	.14	.3	1.8	.07	4.44	<5	.1	.02	.7	49
0307-210	.30	5.23	10.37	13.7	279	30.0	12.1	2874	3.42	2156.2	.8	44.3	5.8	64.5	.10	1.22	.12	<2	3.03	.016	2.0	3.9	1.24	11.1	<.001	2	.14	.007	.09	.1	2.3	.05	2.54	<5	<.1	<.02	.4	57
RE 0307-210	.21	5.65	9.23	13.7	266	28.0	11.0	2883	3.45	2470.8	.8	41.6	5.6	64.8	.09	1.29	.10	<2	3.04	.016	2.1	4.0	1.25	12.3	<.001	2	.13	.007	.09	.2	2.3	.05	2.46	5	.1	<.02	.4	62
RRE 0307-210	.24	4.68	10.52	15.6	300	30.8	11.2	2950	3.37	2851.4	.9	42.1	5.8	66.6	.10	.98	.09	2	3.09	.017	2.3	3.9	1.25	13.3	<.001	1	.17	.008	.10	.2	2.4	.06	2.46	11	.1	.02	.5	57
0307-211	.10	171.97	56.15	34.8	1563	26.7	6.5	288	1.64	150.5	.3	62.5	.2	1.1	.26	5.97	.58	<2	.03	.002	<.5	2.2	.02	3.2	<.001	1	.01	.002	.01	.1	.2	<.02	.77	<5	.3	.03	.1	33
0307-212	.43	44.14	154.08	41.5	1573	70.6	30.9	2240	6.58	37125.9	1.6	776.9	8.5	46.4	.35	21.44	.94	2	1.89	.021	5.0	6.1	.75	22.2	<.001	1	.30	.020	.16	.3	2.2	.08	5.77	5	.3	.07	.8	1077
0307-213	.27	20.68	18.99	178.7	796	53.3	17.0	1442	4.22	4630.7	1.7	84.4	8.4	26.7	1.28	5.31	.21	2	.96	.021	5.4	8.2	1.08	21.7	<.001	1	.26	.016	.14	.2	2.9	.07	2.12	<5	.2	.03	.6	127
0307-214	.26	113.39	973.72	7299.0	1806	54.6	16.6	1288	4.91	16864.5	1.7	260.9	8.5	31.0	64.78	66.96	.18	<2	1.17	.020	3.8	4.0	.47	21.0	<.001	2	.27	.015	.15	.3	1.7	.09	5.07	19	.1	.04	.9	477
0307-215	.24	13.96	20.70	252.4	498	53.2	14.8	2592	3.47	3024.7	1.4	40.1	7.2	50.8	1.78	3.27	.19	<2	1.97	.019	4.2	3.7	.88	18.3	<.001	<1	.23	.014	.13	.1	2.5	.06	2.63	<5	.2	.02	.5	78
0307-216	.26	21.54	13.44	35.3	785	59.4	20.5	2275	4.65	19455.7	1.4	327.9	8.0	62.5	.18	5.05	.46	2	2.11	.018	4.3	6.5	1.30	21.4	<.001	1	.26	.015	.16	.2	2.8	.08	3.03	6	.1	.07	.6	459
0307-217	.38	44.29	9.68	61.8	1651	62.6	23.4	1139	5.17	319.6	1.6	18.3	8.6	8.1	.13	8.49	.35	5	.15	.023	6.7	13.3	1.69	23.1	<.001	2	.29	.016	.15	.2	2.9	.08	.78	<5	.1	.03	.7	19
0307-218	.22	1748.17	18072.84	12783.2	16241	35.7	8.8	1079	9.51	74981.2	1.2	4681.2	5.1	25.5	99.35	12118.25	.40	<2	1.12	.013	<.5	3.5	.53	25.1	<.001	1	.20	.011	.11	.3	1.1	.14	8.08	35	<.1	<.02	.7	4854
0307-219	.21	20.95	186.68	92.2	432	54.8	13.0	2097	5.20	26019.7	1.2	437.0	6.4	51.4	.49	23.94	.17	<2	2.20	.014	3.4	4.4	1.01	19.0	<.001	1	.24	.014	.14	.2	2.7	.07	4.30	<5	.2	.03	.6	593
0307-220	.34	1137.16	16758.20	1413.9	25640	47.6	14.8	1757	6.98	28761.1	1.5	4526.5	.1	39.3	11.47	12550.00	.55	<2	1.79	.016	<.5	3.4	.72	23.3	<.001	1	.24	.012	.13	<.1	1.9	.18	7.74	<5	.1	<.02	.5	4004
0307-221	.35	256.26	9087.56	3948.2	6526	55.5	17.2	1455	8.95	67810.4	1.5	5109.2	7.9	29.7	30.41	2517.94	.40	<2	1.40	.018	1.5	5.4	.51	20.9	.001	1	.24	.012	.13	.3	1.4	.11	7.67	17	.2	.07	.6	4398
0307-222	.25	41.05	159.50	974.6	1491	64.1	31.6	2134	6.74	40577.4	1.4	1393.0	7.5	48.6	5.80	34.32	.46	<2	2.23	.045	3.3	5.0	.87	22.8	<.001	2	.29	.015	.16	.3	2.1	.09	5.76	<5	.4	.06	.7	1874
0307-223	.14	1158.82	17515.99	99999.0	70401	13.9	6.4	163	2.38	616.0	.6	2327.5	.2	6.5	2020.86	19067.00	1.15	<2	.13	.003	<.5	1.5	.06	22.8	<.001	<1	.08	.007	.04	<.1	<.1	.09	8.56	1066	<.1	<.02	5.7	2513
0307-224	.36	111.64	3366.48	12660.4	4213	76.2	48.9	1348	7.22	25864.9	1.2	1237.6	6.2	29.9	94.32	1050.78	.74	<2	1.38	.035	3.1	3.7	.51	21.1	<.001	1	.26	.014	.15	.4	1.4	.09	7.57	39	.3	.10	.9	1739
0307-225	.18	1588.71	19508.61	43621.0	57336	35.6	12.4	1604	13.88	71386.4	1.1	4061.7	3.9	43.5	836.11	4121.90	1.14	<2	2.12	.009	<.5	2.2	1.05	13.7	<.001	1	.17	.008	.09	.3	.9	.15	14.03	288	.4	.07	2.1	3578
0307-226	.19	45.22	72.68	260.3	1328	55.9	16.6	1660	4.16	4938.9	1.2	62.3	5.8	41.6	1.77	12.83	.33	3	1.83	.020	4.6	6.9	1.27	22.6	<.001	2	.28	.016	.16	.2	2.8	.08	2.19	6	.2	.03	.6	116
0307-227	.19	21.54	80.60	147.9	684	57.6	15.4	1724	4.22	3792.1	1.3	57.3	6.1	37.0	1.01	8.60	.24	3	1.26	.030	4.7	7.7	1.22	21.2	<.001	1	.27	.016	.14	.2	2.5	.07	2.07	<5	.3	.05	.6	133
0307-228	.08	1499.50	18525.91	99999.0	99999	24.3	7.3	3691	4.00	15205.3	3.6	817.6	2.9	64.9	1009.40	244.42	11.83	<2	3.34	.008	.5	2.6	1.69	13.4	<.001	1	.16	.009	.08	.2	1.1	.14	7.25	492	1.6	.52	4.7	805
0307-229	.07	7098.13	17222.50	95130.7	99999	8.1	3.8	1651	2.96	436.7	2.8	653.5	.8	30.5	1610.26	4580.70	3.65	<2	1.16	.001	<.5	.8	.49	6.1	<.001	<1	.03	.003	.02	.4	.9	.20	10.74	620	.9	.28	2.5	677
STANDARD DS5/AU-R	12.47	144.76	23.37	138.7	266	24.5	11.8	760	2.87	22.1	5.8	43.4	2.7	47.0	5.59	3.54	6.01	58	.73	.095	12.0	182.2	.65	136.0	.093	18	2.01	.031	.14	4.3	3.6	.96	.04	173	4.7	.85	6.6	485

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

ACME ANALYTICAL

Jasper Mining Corporation PROJECT Ruth-Vermont FILE # A303027 Page 4

ACME ANALYTICAL

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Au**
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb
0307-230	.10	16769.93	18692.31	99999.0	99999	12.6	3.5	1271	3.49	1602.3	1.5	4018.6	2.2	21.9	2637.00	7121.03	1.88	<2	.99	.001	<.5	1.1	.36	9.9	<.001	2	.05	.004	.03	.5	.4	.10	8.64	766	<.1	.34	5.9	2374
0307-231	.25	214.61	490.90	537.1	5396	22.6	6.7	742	2.22	176.8	.6	9.3	2.7	60.0	4.51	13.62	.10	2	1.88	.027	<.5	2.4	.58	9.5	<.001	2	.11	.009	.05	.6	1.2	.02	.49	12	<.1	<.02	.2	17
0307-232	.40	65.80	940.35	256.4	7439	40.4	10.4	3268	4.56	6901.3	1.0	108.5	6.4	80.0	.60	4.52	.38	3	3.75	.024	1.2	5.3	1.51	16.0	<.001	2	.20	.011	.11	.2	2.5	.06	2.82	<5	.1	.02	.5	211
0307-233	.06	5524.62	20883.13	99999.0	99999	2.0	1.3	190	13.04	31908.9	.6	1902.0	.3	3.6	1327.60	5283.39	1.38	<2	.20	.001	<.5	.8	.07	3.8	<.001	1	.01	.001	.01	.2	<.1	.12	16.68	363	<.1	<.02	2.1	2135
0307-234	.36	28.34	456.95	529.9	3653	47.9	11.0	1252	4.14	3244.2	1.3	66.5	7.1	62.2	2.07	4.60	.16	5	2.60	.029	3.0	7.9	1.31	18.8	<.001	1	.25	.018	.13	.2	3.8	.06	1.55	<5	<.1	<.02	.5	165
0307-235	.33	78.87	1139.26	842.0	8819	52.1	19.2	1332	4.83	5471.8	1.1	176.9	7.7	76.3	5.81	7.13	.81	4	3.02	.036	2.2	8.8	1.73	18.5	<.001	2	.25	.016	.14	.2	3.6	.07	1.39	<5	<.1	.02	.6	416
0307-236	.19	15.34	206.07	188.7	1770	38.5	14.2	1771	4.78	26976.0	.5	889.5	5.6	82.5	.71	5.13	1.57	<2	2.93	.013	1.2	3.2	1.42	16.8	<.001	2	.21	.014	.11	.5	2.5	.05	2.75	7	.1	.15	.5	1102
0306-237	.06	13413.85	18937.29	99999.0	99999	7.3	2.2	76	7.06	1697.3	.5	2560.9	.2	1.2	2018.53	8813.78	1.33	<2	.04	<.001	<.5	<.5	.02	5.1	<.001	<1	.01	.001	<.01	.2	<.1	.12	13.22	499	<.1	.22	4.4	1738
0308-238	.10	32.56	349.62	363.9	5423	19.9	7.6	484	4.91	938.3	.3	31.8	2.9	20.2	.37	1.72	.08	<2	.62	.006	1.1	2.5	.20	8.8	<.001	1	.08	.005	.05	.2	.3	.02	5.33	<5	<.1	<.02	.2	47
0308-239	.78	90.38	511.99	269.9	5891	48.5	18.9	2694	5.83	15425.4	1.5	774.7	5.1	175.4	1.52	13.94	.29	2	4.10	.030	2.4	5.2	2.09	18.2	<.001	1	.19	.009	.11	.2	2.9	.06	3.13	7	<.1	.12	.4	1200
0308-240	.35	113.11	128.95	117.5	1550	81.1	19.9	592	5.92	509.6	2.2	11.6	7.2	150.5	.15	.26	.50	2	1.69	.013	5.0	4.5	1.03	17.0	<.001	2	.20	.008	.13	.3	3.2	.04	4.65	<5	<.1	.03	.5	31
0308-241	.18	48.30	144.67	89.1	1714	32.7	11.2	1071	4.74	425.9	.5	69.9	2.5	181.7	.78	4.18	.23	<2	3.68	.002	1.2	2.7	1.56	9.6	<.001	1	.11	.005	.07	.2	2.2	.04	3.35	<5	<.1	.02	.3	121
0308-242	.18	12.12	344.78	58.0	1545	9.9	2.7	555	1.77	39.7	.4	2.5	2.3	76.9	.45	3.08	1.52	<2	1.52	.012	2.7	4.1	.89	17.6	<.001	1	.11	.006	.07	.3	1.1	.02	.17	9	<.1	.05	.3	7
0308-243	.64	65.50	49.90	46.5	962	75.0	41.0	325	2.55	799.4	2.4	3.5	12.8	43.2	.34	1.95	.15	<2	.70	.024	4.4	3.4	.32	24.4	<.001	2	.24	.014	.16	.3	1.6	.04	1.81	<5	.1	.02	.6	14
0308-244	.72	294.91	25.23	27.6	1140	86.7	18.7	61	1.75	222.9	1.4	1.3	6.6	10.7	.18	1.46	.16	<2	.14	.004	3.1	3.2	.06	18.0	<.001	1	.17	.012	.10	.3	.4	.03	1.60	5	.2	<.02	.4	8
RE 0308-244	.72	289.60	23.56	27.5	985	83.5	20.1	60	1.73	208.9	1.3	4.4	6.8	10.7	.19	1.32	.15	<2	.14	.004	3.2	3.1	.06	17.0	<.001	1	.16	.011	.10	.2	.5	.03	1.45	<5	.3	<.02	.4	18
RRE 0308-244	.72	321.18	80.53	48.7	1800	78.7	28.1	60	1.68	233.7	1.7	2.7	8.3	11.8	.43	2.43	.17	<2	.14	.004	4.7	4.9	.06	25.0	<.001	1	.24	.016	.14	.3	.5	.04	1.49	5	.2	<.02	.5	4
0308-245	.15	7.18	37.89	23.0	367	13.3	2.3	296	2.86	415.4	.1	41.7	.7	47.4	.14	1.97	.10	<2	.94	.001	<.5	2.4	.28	3.0	<.001	<1	.03	.004	.02	.2	.8	<.02	2.11	<5	<.1	<.02	.1	70
0308-246	.17	7.92	106.19	46.9	941	1.5	.7	70	.31	25.9	<.1	2.5	.1	5.7	.40	4.25	<.02	<2	.16	<.001	<.5	2.3	.06	1.1	<.001	<1	.01	.002	<.01	.3	.1	<.02	.07	<5	<.1	<.02	.1	<2
0308-247	.21	9.04	29.36	24.6	324	3.6	2.9	724	4.68	508.0	.1	37.3	1.6	34.5	.20	1.42	.07	<2	.96	.014	.9	2.6	.34	9.1	<.001	<1	.08	.007	.05	.2	.5	.02	4.56	<5	.2	<.02	.2	45
0308-248	.15	3.39	49.36	23.3	453	.7	.4	53	.30	9.3	<.1	2.3	<.1	2.1	.19	2.41	<.02	<2	.07	<.001	<.5	2.2	.03	<.5	<.001	<1	<.01	.002	<.01	<.1	<.1	<.02	.05	<5	<.1	<.02	.1	<2
0308-249	.15	396.09	28.59	27.0	1008	122.3	19.4	114	2.66	464.0	.1	42.0	.7	13.1	.18	2.35	.23	<2	.26	.001	.5	3.2	.09	11.9	<.001	<1	.04	.005	.02	.2	.2	<.02	2.46	<5	.7	<.02	.1	36
0309-250	.18	18.53	21.07	232.2	231	63.9	9.8	1010	7.81	192.8	.3	4.3	2.0	82.1	.31	.82	.11	4	1.76	.072	<.5	3.8	2.18	12.9	.001	1	.43	.009	.08	.1	2.9	.02	1.51	<5	.1	.02	1.2	<2
0309-251	.54	95.91	13.54	589.9	195	57.0	21.2	570	5.05	107.7	1.6	<.2	12.9	8.9	.55	.25	.12	4	.11	.024	5.8	7.1	1.44	20.9	<.001	3	.24	.012	.14	.2	3.9	.05	.07	10	.1	<.02	.6	<2
0309-252	.11	7.57	533.34	27.0	1258	15.3	6.4	673	2.15	1404.9	.5	17.8	5.4	37.0	.17	1.79	.09	<2	1.04	.008	2.6	3.5	.45	8.3	<.001	1	.12	.011	.06	.3	1.0	.03	1.10	<5	<.1	<.02	.3	18
0309-253	.15	3885.04	11906.00	17523.0	45397	15.6	5.2	171	1.33	52.3	.7	22.0	6.6	31.1	116.78	22.01	1.99	<2	.64	.007	3.4	3.4	.24	8.1	<.001	1	.12	.012	.05	.1	.6	.03	.95	51	1.2	1.24	.3	2
0310-254	.18	46.98	43.53	117.2	272	36.5	10.1	550	3.90	34.3	1.1	1.0	7.9	7.1	.08	.26	.11	3	.16	.013	4.8	4.5	1.48	16.8	<.001	<1	.21	.022	.09	<.1	3.1	.03	.19	<5	.1	<.02	.4	<2
0310-255	.91	61.14	48.47	48.5	399	45.2	26.9	736	4.25	94.2	1.1	2.9	6.8	39.1	.12	.60	.69	<2	1.19	.012	2.3	3.8	1.02	20.1	<.001	2	.22	.014	.12	.2	2.8	.05	2.62	<5	.3	.07	.5	4
0310-256	.54	9.08	80.61	30.6	462	32.5	18.7	588	3.17	152.1	2.0	.4	6.6	459.9	.19	2.66	1.65	2	21.67	.069	2.2	1.0	.67	16.3	<.001	1	.12	.011	.06	.2	3.1	.03	1.80	5	.7	.20	.3	17
0310-257	.24	9.87	350.36	46.3	1769	24.7	49.1	618	9.13	841.0	.9	1.8	1.6	483.4	.35	1.58	4.33	<2	20.83	.027	4.6	1.1	.32	7.6	<.001	<1	.04	.006	.02	.5	2.1	<.02	5.11	<5	2.8	.45	.1	38
STANDARD DS5/AU-R	12.50	139.01	24.29	134.1	287	22.9	11.4	776	2.94	17.3	5.8	40.0	2.7	48.8	5.57	3.41	5.95	59	.75	.094	12.1	184.3	.66	135.0	.094	17	2.08	.032	.14	4.2	3.8	.99	.04	172	4.6	.85	6.4	498

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data___ FA ____

ACME A YTICAL LABORATORIES LTD. 852 E. HASTINGS ST. NCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6 253-1716
(IS 002 Accredited Co.)

ASSAY CE IFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A303027R Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo %	Cu %	Pb %	Zn %	Ag gm/mt	Ni %	Co %	Mn %	Fe %	As %	Sr %	Cd %	Sb %	Bi %	Ca %	P %	Cr %	Mg %	Al %	Na %	K %	W %	Hg %	Ag** gm/mt
0303-73	<.001	.026	.69	<.01	64.0	.005	.001	.22	6.28	1.41	.011	<.001	.019	<.01	6.46	.016	<.001	2.16	.22	.01	.13	<.001	<.001	-
0303-77	<.001	.002	<.01	<.01	1.6	.008	.003	.13	6.27	1.37	.004	<.001	.001	<.01	1.72	.034	.001	.64	.28	.02	.18	<.001	<.001	-
0303-78	<.001	.002	<.01	<.01	.6	.008	.002	.23	7.80	2.62	.008	<.001	.001	<.01	2.75	.013	<.001	1.07	.28	.02	.20	<.001	.001	-
0303-79	<.001	.002	<.01	<.01	1.7	.008	.003	.15	8.13	3.40	.005	<.001	.002	<.01	1.96	.021	<.001	.76	.30	.02	.16	<.001	<.001	-
0303-80	<.001	.003	<.01	<.01	2.1	.009	.005	.17	5.60	.88	.006	<.001	.002	<.01	2.89	.019	<.001	1.13	.25	.02	.16	<.001	<.001	-
0305-133	<.001	.012	2.92	5.00	110.8	.002	.001	1.50	8.02	.05	.011	.036	.010	<.01	6.92	.035	<.001	1.89	.15	.01	.11	.005	<.001	-
0305-134	<.001	.014	2.57	.87	90.6	.002	<.001	.72	3.44	.01	.008	.006	.007	<.01	5.17	.013	.001	1.46	.31	.03	.17	<.001	<.001	-
0305-135	<.001	.172	8.29	9.96	300.9	.001	.001	.52	14.82	.16	.006	.078	.030	<.01	3.25	.178	<.001	.80	.16	.01	.10	.016	<.001	301.0
0305-136	<.001	.187	5.57	7.06	206.0	.002	.001	.91	5.43	.03	.007	.057	.019	<.01	4.93	.022	.001	1.29	.25	.01	.16	.009	<.001	-
0305-137	<.001	.012	.67	.64	24.2	.004	.001	.59	4.40	.02	.014	.005	.003	<.01	8.35	.022	.001	1.49	.22	<.01	.14	<.001	<.001	-
0305-139	<.001	.349	6.23	15.72	381.8	.002	<.001	.39	5.77	.05	.005	.137	.093	<.01	4.24	.010	<.001	1.14	.18	.02	.11	.025	<.001	361.8
0305-141	<.001	.014	.96	.04	37.8	.002	<.001	.41	4.58	.04	.006	<.001	.011	<.01	4.19	.012	<.001	1.27	.13	.02	.07	<.001	<.001	-
0305-142	<.001	.015	.17	1.48	15.0	.002	.001	.62	4.56	.02	.009	.009	.006	<.01	6.32	.024	.001	1.85	.24	.02	.19	.001	<.001	-
0305-143	<.001	.017	.15	.80	19.3	.002	.001	.44	20.32	3.80	.005	.006	.020	<.01	3.13	.048	<.001	.90	.13	.01	.09	<.001	<.001	-
0305-144	<.001	.266	4.44	12.44	437.3	.004	.001	.35	3.71	.05	.007	.009	.190	<.01	5.35	.021	.001	1.60	.25	.02	.17	.001	<.001	469.1
0305-145	<.001	.021	.51	.40	29.2	.003	.001	.58	7.64	.10	.008	.003	.013	<.01	5.21	.013	.001	1.56	.24	.01	.14	<.001	<.001	-
RE 0305-145	<.001	.019	.48	.38	27.7	.004	.001	.57	7.46	.10	.008	.003	.012	<.01	5.07	.013	<.001	1.52	.23	.02	.14	<.001	<.001	-
0305-147	<.001	.011	.29	.33	13.6	.003	.001	.49	6.26	.08	.009	.002	.010	<.01	6.09	.060	<.001	1.81	.20	.01	.14	<.001	<.001	-
0305-149	<.001	.096	5.04	6.31	67.8	.006	.003	.57	8.34	2.24	.007	.041	1.209	<.01	5.36	.011	<.001	1.58	.17	.01	.11	.006	<.001	-
0305-157	<.001	.061	.87	2.93	79.2	.005	.001	.17	5.76	1.38	.004	.024	.026	<.01	1.84	.009	<.001	.66	.27	.01	.19	.002	<.001	-
0306-165	<.001	.004	<.01	<.01	1.0	.004	<.001	.49	9.85	8.20	.019	<.001	.001	<.01	6.56	.016	.001	3.22	.28	.02	.16	<.001	<.001	-
0306-166	<.001	.004	<.01	<.01	.9	.007	.004	.11	5.78	.80	.004	<.001	<.001	<.01	1.40	.008	.001	.62	.42	.02	.25	<.001	<.001	-
0306-167	<.001	.001	<.01	<.01	<.3	.002	.001	.84	7.68	4.20	.017	<.001	<.001	<.01	10.67	.005	.001	4.84	.15	.03	.06	<.001	<.001	-
0306-168	<.001	.005	<.01	<.01	1.5	.008	.003	.10	6.39	.92	.004	<.001	<.001	<.01	1.37	.014	.001	.75	.58	.05	.33	<.001	<.001	-
0306-169	<.001	.001	<.01	<.01	1.0	.005	.001	.15	3.28	1.06	.005	<.001	.001	<.01	1.92	.007	.003	.80	.52	.04	.24	.001	<.001	-
0306-170	<.001	.003	<.01	<.01	1.5	.006	.002	.25	4.47	.73	.005	<.001	.002	<.01	2.38	.022	.001	.97	.47	.01	.26	<.001	<.001	-
0306-171	<.001	.002	<.01	<.01	<.3	.007	.003	.19	5.44	.77	.010	<.001	.001	<.01	4.20	.021	.001	1.94	.42	.05	.22	<.001	<.001	-
0306-172	<.001	.003	<.01	<.01	<.3	.001	<.001	1.08	9.69	7.00	.024	<.001	.002	<.01	11.40	.005	<.001	4.94	.13	.02	.06	<.001	<.001	-
0306-173	<.001	.002	<.01	<.01	<.3	.008	.003	.13	6.88	1.90	.005	<.001	<.001	<.01	1.93	.014	.001	.74	.48	.05	.26	<.001	<.001	-
0306-174	<.001	.002	<.01	<.01	<.3	.006	.001	.13	5.20	1.70	.005	<.001	.001	<.01	1.94	.083	.001	.88	.61	.04	.31	<.001	<.001	-
0306-176	<.001	.479	10.79	1.85	526.2	.002	.001	.05	14.79	13.60	.002	.013	.335	<.01	.56	.012	<.001	.19	.21	.01	.11	.001	<.001	529.7
0306-178	<.001	.010	.30	.12	6.5	.002	.001	.22	7.12	5.80	.005	.001	.010	<.01	1.95	.011	.001	.77	.19	.01	.09	<.001	<.001	-
0306-179	<.001	.002	<.01	.02	1.0	.006	.002	.11	5.26	.87	.003	<.001	.002	<.01	1.08	.041	.002	1.05	.47	.02	.29	<.001	<.001	-
0306-180	<.001	1.719	20.97	16.96	2829.5	.004	.001	.16	6.53	.50	.004	.140	1.144	<.01	1.22	.006	<.001	.46	.05	<.01	.02	.021	<.001	2910.8
STANDARD R-2	.048	.568	1.49	4.29	156.3	.354	.043	.20	22.29	.24	.167	.028	.129	<.01	2.31	.082	.067	1.55	1.36	.19	.50	.065	.173	-

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES.
AG** BY FIRE ASSAY FROM 1 A.T. SAMPLE.
- SAMPLE TYPE: CORE PULP Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 19 2003 **DATE REPORT MAILED:** Sept 8/03 **SIGNED BY**.............D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

SAMPLE#	Mo %	Cu %	Pb %	Zn %	Ag gm/mt	Ni %	Co %	Mn %	Fe %	As %	Sr %	Cd %	Sb %	Bi %	Ca %	P %	Cr %	Mg %	Al %	Na %	K %	W %	Hg %	Ag** gm/mt
0306-181	<.001	.156	3.89	.15	256.4	.005	.002	.10	9.74	1.20	.004	.002	.103	<.01	.96	.005	.001	.35	.13	.02	.11	<.001	<.001	-
0306-182	<.001	.183	.43	11.27	93.4	.008	.001	.17	6.01	.12	.003	.092	.063	<.01	1.21	.025	.001	.36	.42	.01	.28	.026	<.001	-
0306-184	<.001	1.150	28.06	15.64	1677.0	.001	<.001	.14	7.14	.96	.004	.127	.889	<.01	1.87	.004	.001	.67	.03	<.01	.04	.042	<.001	1945.5
0306-185	<.001	.003	.07	.04	4.5	.008	.002	.13	8.39	.98	.004	<.001	.001	<.01	1.33	.018	.001	.46	.48	.02	.30	<.001	<.001	-
0306-186	<.001	.224	9.26	18.25	313.8	.002	<.001	.24	3.22	.26	.008	.106	.042	<.01	2.82	.012	.001	1.01	.20	.01	.14	.046	<.001	623.0
0306-187	<.001	.361	5.46	.12	367.3	.004	.001	.20	2.54	.32	.004	.001	.228	<.01	2.14	.017	.001	.72	.46	.04	.31	<.001	<.001	660.8
0306-188	<.001	.574	.22	30.36	112.4	.003	<.001	.16	5.09	.13	.003	.260	.020	<.01	2.03	.009	.001	.60	.28	.03	.19	.090	<.001	-
0306-189	<.001	1.057	14.52	17.10	491.0	.003	.001	.21	3.48	.05	.005	.175	1.912	<.01	2.78	.008	<.001	.81	.31	.02	.19	.046	<.001	768.9
0306-190	<.001	.355	8.79	3.29	665.3	.001	<.001	.50	7.00	1.40	.008	.027	.237	<.01	4.22	<.001	.001	1.49	.02	<.01	.02	.003	<.001	895.4
0306-191	<.001	.236	11.96	18.20	576.2	.001	<.001	.26	6.11	.36	.005	.164	.169	<.01	3.16	.004	.001	1.00	.10	.01	.07	.050	<.001	854.7
0306-192	<.001	.180	10.00	.11	464.3	.003	.001	.19	12.83	8.06	.006	.002	.087	<.01	1.77	.006	.001	.72	.32	<.01	.22	<.001	<.001	928.3
0306-193	<.001	.066	5.06	2.15	274.4	.003	.001	.27	10.73	1.29	.007	.017	.053	<.01	2.35	.005	<.001	.90	.39	.01	.26	.001	<.001	566.5
0306-194	<.001	.072	8.84	.02	350.7	.002	.001	.34	14.47	13.92	.011	.001	.061	<.01	3.52	.002	.001	1.42	.30	.02	.18	<.001	<.001	613.4
RE 0306-194	<.001	.071	8.93	.02	350.5	.004	<.001	.34	14.64	14.16	.011	.001	.061	<.01	3.55	.001	.001	1.43	.28	.01	.19	<.001	<.001	679.0
0306-195	<.001	.695	21.53	5.94	1293.0	.001	<.001	.09	22.96	.36	.003	.051	.328	<.01	.72	.002	<.001	.25	.07	<.01	.04	.009	<.001	1588.2
0306-196	<.001	.066	4.15	.04	139.0	.003	<.001	.18	12.36	7.83	.005	.001	.034	<.01	1.49	.001	.001	.83	.26	.01	.16	<.001	<.001	-
0306-197	<.001	.089	1.37	.06	88.8	.003	<.001	.57	8.47	4.74	.010	.001	.020	<.01	4.27	.006	.001	1.39	.31	.01	.19	<.001	<.001	-
0306-198	<.001	.001	.02	<.01	<.3	.006	<.001	1.01	7.50	4.73	.021	<.001	.002	<.01	7.41	.004	.001	2.64	.24	.01	.16	<.001	<.001	-
0306-199	<.001	.311	3.71	.05	253.4	.002	<.001	.32	15.97	10.94	.007	.001	.132	<.01	2.48	.002	.001	.83	.13	.02	.10	<.001	<.001	571.3
0306-200	<.001	.102	1.14	.06	95.5	.004	<.001	.37	18.17	10.62	.010	.001	.023	<.01	3.24	.001	<.001	1.13	.14	.02	.10	<.001	.001	-
0306-201	<.001	.035	.11	2.24	13.9	.001	<.001	.51	4.56	.11	.008	.017	.006	<.01	4.31	.001	<.001	1.35	.14	<.01	.10	.001	<.001	-
0306-202	<.001	.068	8.06	4.55	40.0	.004	.001	.14	4.27	.08	.005	.029	3.528	<.01	3.46	.003	<.001	1.00	.20	.02	.15	.005	<.001	-
0307-212	<.001	.004	.02	<.01	1.1	.009	.003	.21	6.96	2.66	.005	<.001	.005	<.01	1.88	.019	.001	.68	.42	.03	.26	<.001	<.001	-
0307-214	<.001	.011	.09	.73	1.7	.006	.002	.12	5.25	1.25	.003	.006	.014	<.01	1.19	.018	.001	.43	.38	.04	.24	<.001	<.001	-
0307-216	<.001	.002	<.01	<.01	.4	.007	.002	.20	4.65	1.31	.006	<.001	.002	<.01	2.01	.014	.001	1.13	.37	.03	.22	<.001	.001	-
0307-218	<.001	.162	2.98	1.20	17.1	.004	.001	.09	9.18	6.23	.002	.009	1.095	<.01	.99	.009	.001	.42	.27	.03	.15	<.001	.001	-
0307-219	<.001	.001	.02	<.01	<.3	.006	.001	.20	5.50	1.88	.005	<.001	.007	<.01	2.24	.010	.001	.91	.35	.03	.21	<.001	<.001	-
0307-220	<.001	.112	4.39	.13	26.0	.005	.001	.15	6.93	2.63	.004	.001	1.337	<.01	1.71	.011	.001	.63	.32	.03	.19	<.001	<.001	-
0307-221	<.001	.026	.86	.37	6.0	.006	.002	.12	9.02	5.45	.003	.003	.260	<.01	1.29	.015	.001	.45	.34	.02	.20	<.001	<.001	-
0307-222	<.001	.003	.02	.09	1.2	.007	.003	.19	7.00	3.04	.005	.001	.006	<.01	2.20	.040	.001	.78	.39	.04	.25	<.001	<.001	-
0307-223	<.001	.115	5.32	16.43	61.0	.002	.001	.01	2.16	.11	.001	.167	1.759	<.01	.11	<.001	<.001	.04	.12	.01	.05	.048	<.001	-
0307-224	<.001	.010	.33	1.26	4.2	.009	.004	.12	7.60	2.21	.003	.009	.132	<.01	1.36	.032	.001	.46	.37	.04	.23	.001	<.001	-
0307-225	<.001	.151	3.67	8.29	52.9	.004	.001	.13	13.74	6.79	.005	.067	.343	<.01	2.26	.010	.001	.80	.21	.01	.14	.019	<.001	-
0307-228	<.001	.145	11.93	14.33	315.6	.002	<.001	.31	3.46	1.07	.008	.092	.041	<.01	3.67	.007	.001	1.37	.22	.04	.13	.037	.001	315.1
STANDARD R-2	.048	.569	1.47	4.28	154.9	.374	.044	.20	22.26	.25	.170	.028	.132	<.01	2.33	.080	.067	1.55	1.34	.18	.52	.074	.172	-

Sample type: CORE PULP. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA ___

ACME ANALYTICAL

Jasper Mining Corporation PROJECT Ruth-Vermont FILE # A303027R

ACME ANALYTICAL

SAMPLE#	Mo %	Cu %	Pb %	Zn %	Ag gm/mt	Ni %	Co %	Mn %	Fe %	As %	Sr %	Cd %	Sb %	Bi %	Ca %	P %	Cr %	Mg %	Al %	Na %	K %	W %	Hg %	Ag** gm/mt
0307-229	<.001	.764	31.29	16.23	1467.8	<.001	<.001	.14	2.60	.05	.003	.139	.390	<.01	1.04	.004	<.001	.40	.06	.01	.03	<.001	<.001	1718.4
0307-230	<.001	1.860	8.45	31.09	1182.3	.001	<.001	.12	3.41	.15	.002	.261	.608	<.01	.94	.007	<.001	.29	.07	<.01	.05	<.001	<.001	1207.2
0307-233	<.001	.636	19.50	14.24	1456.5	<.001	<.001	.01	13.21	4.05	<.001	.118	.479	<.01	.17	<.001	<.001	.06	.03	<.01	.02	<.001	<.001	1495.5
0307-236	<.001	.002	.02	.02	2.0	.004	.001	.17	4.92	2.61	.008	<.001	.001	<.01	3.08	.014	<.001	1.31	.26	.03	.16	.001	<.001	-
0306-237	<.001	1.517	22.03	18.11	2500.0	.001	<.001	.01	6.88	.17	<.001	.179	.924	<.01	.04	.002	<.001	.03	.01	<.01	.02	<.001	<.001	2556.4
0308-239	<.001	.011	.05	.03	5.8	.005	.002	.26	6.11	1.55	.018	<.001	.003	<.01	4.42	.035	.001	2.06	.26	.03	.19	.001	<.001	-
0309-253	<.001	.434	1.30	1.96	56.3	.003	.001	.02	1.39	.01	.003	.012	.003	<.01	.67	.011	<.001	.23	.17	.03	.08	.001	<.001	-
STANDARD R-2	.047	.567	1.49	4.28	156.0	.374	.042	.19	22.30	.25	.169	.029	.128	<.01	2.34	.083	.066	1.52	1.32	.19	.51	.070	.173	-

Sample type: CORE PULP.

Data FA

ACME ANALYTICAL LABORATORIES LTD.   852 E. HASTINGS ST. VANCOUVER BC V6A 1R6   PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

ASSAY CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont   File # A303027R   Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5   Submitted by: Rick Walker

SAMPLE#	Mo %	Cu %	Pb %	Zn %	Ag gm/mt	Ni %	Co %	Mn %	Fe %	As %	Sr %	Cd %	Sb %	Bi %	Ca %	P %	Cr %	Mg %	Al %	Na %	K %	W %	Hg %	Ag** gm/mt
0303-73	<.001	.026	.69	<.01	64.0	.005	.001	.22	6.28	1.41	.011	<.001	.019	<.01	6.46	.016	<.001	2.16	.22	.01	.13	<.001	<.001	-
0303-77	<.001	.002	<.01	<.01	1.6	.008	.003	.13	6.27	1.37	.004	<.001	.001	<.01	1.72	.034	.001	.64	.28	.02	.18	<.001	<.001	-
0303-78	<.001	.002	<.01	<.01	.6	.008	.002	.23	7.80	2.62	.008	<.001	.001	<.01	2.75	.013	<.001	1.07	.28	.02	.20	<.001	.001	-
0303-79	<.001	.002	<.01	<.01	1.7	.008	.003	.15	8.13	3.40	.005	<.001	.002	<.01	1.96	.021	<.001	.76	.30	.02	.16	<.001	<.001	-
0303-80	<.001	.003	<.01	<.01	2.1	.009	.005	.17	5.60	.88	.006	<.001	.002	<.01	2.89	.019	<.001	1.13	.25	.02	.16	<.001	<.001	-
0305-133	<.001	.012	2.92	5.00	110.8	.002	.001	1.50	8.02	.05	.011	.036	.010	<.01	6.92	.035	<.001	1.89	.15	.01	.11	.005	<.001	-
0305-134	<.001	.014	2.57	.87	90.6	.002	<.001	.72	3.44	.01	.008	.006	.007	<.01	5.17	.013	.001	1.46	.31	.03	.17	<.001	<.001	-
0305-135	<.001	.172	8.29	9.96	300.9	.001	.001	.52	14.82	.16	.006	.078	.030	<.01	3.25	.178	<.001	.80	.16	.01	.10	.016	<.001	301.0
0305-136	<.001	.187	5.57	7.06	206.0	.002	.001	.91	5.43	.03	.007	.057	.019	<.01	4.93	.022	.001	1.29	.25	.01	.16	.009	<.001	-
0305-137	<.001	.012	.67	.64	24.2	.004	.001	.59	4.40	.02	.014	.005	.003	<.01	8.35	.022	.001	1.49	.22	<.01	.14	<.001	<.001	-
0305-139	<.001	.349	6.23	15.72	381.8	.002	<.001	.39	5.77	.05	.005	.137	.093	<.01	4.24	.010	<.001	1.14	.18	.02	.11	.025	<.001	361.8
0305-141	<.001	.014	.96	.04	37.8	.002	<.001	.41	4.58	.04	.006	<.001	.011	<.01	4.19	.012	<.001	1.27	.13	.02	.07	<.001	<.001	-
0305-142	<.001	.015	.17	1.48	15.0	.002	.001	.62	4.56	.02	.009	.009	.006	<.01	6.32	.024	.001	1.85	.24	.02	.19	.001	<.001	-
0305-143	<.001	.017	.15	.80	19.3	.002	.001	.44	20.32	3.80	.005	.006	.020	<.01	3.13	.048	<.001	.90	.13	.01	.09	<.001	<.001	-
0305-144	<.001	.266	4.44	12.44	437.3	.004	.001	.35	3.71	.05	.007	.009	.190	<.01	5.35	.021	.001	1.60	.25	.02	.17	.001	<.001	469.1
0305-145	<.001	.021	.51	.40	29.2	.003	.001	.58	7.64	.10	.008	.003	.013	<.01	5.21	.013	.001	1.56	.24	.01	.14	<.001	<.001	-
RE 0305-145	<.001	.019	.48	.38	27.7	.004	.001	.57	7.46	.10	.008	.003	.012	<.01	5.07	.013	<.001	1.52	.23	.02	.14	<.001	<.001	-
0305-147	<.001	.011	.29	.33	13.6	.003	.001	.49	6.26	.08	.009	.002	.010	<.01	6.09	.060	<.001	1.81	.20	.01	.14	<.001	<.001	-
0305-149	<.001	.096	5.04	6.31	67.8	.006	.003	.57	8.34	2.24	.007	.041	1.209	<.01	5.36	.011	<.001	1.58	.17	.01	.11	.006	<.001	-
0305-157	<.001	.061	.87	2.93	79.2	.005	.001	.17	5.76	1.38	.004	.024	.026	<.01	1.84	.009	<.001	.66	.27	.01	.19	.002	<.001	-
0306-165	<.001	.004	<.01	<.01	1.0	.004	<.001	.49	9.85	8.20	.019	<.001	.001	<.01	6.56	.016	.001	3.22	.28	.02	.16	<.001	<.001	-
0306-166	<.001	.004	<.01	<.01	.9	.007	.004	.11	5.78	.80	.004	<.001	<.001	<.01	1.40	.008	.001	.62	.42	.02	.25	<.001	<.001	-
0306-167	<.001	.001	<.01	<.01	<.3	.002	.001	.84	7.68	4.20	.017	<.001	<.001	<.01	10.67	.005	.001	4.84	.15	.03	.06	<.001	<.001	-
0306-168	<.001	.005	<.01	<.01	1.5	.008	.003	.10	6.39	.92	.004	<.001	<.001	<.01	1.37	.014	.001	.75	.58	.05	.33	<.001	<.001	-
0306-169	<.001	.001	<.01	<.01	1.0	.005	.001	.15	3.28	1.06	.005	<.001	.001	<.01	1.92	.007	.003	.80	.52	.04	.24	.001	<.001	-
0306-170	<.001	.003	<.01	<.01	1.5	.006	.002	.25	4.47	.73	.005	<.001	.002	<.01	2.38	.022	.001	.97	.47	.01	.26	<.001	<.001	-
0306-171	<.001	.002	<.01	<.01	<.3	.007	.003	.19	5.44	.77	.010	<.001	.001	<.01	4.20	.021	.001	1.94	.42	.05	.22	<.001	<.001	-
0306-172	<.001	.003	<.01	<.01	<.3	.001	<.001	1.08	9.69	7.00	.024	<.001	.002	<.01	11.40	.005	<.001	4.94	.13	.02	.06	<.001	<.001	-
0306-173	<.001	.002	<.01	<.01	<.3	.008	.003	.13	6.88	1.90	.005	<.001	<.001	<.01	1.93	.014	.001	.74	.48	.05	.26	<.001	<.001	-
0306-174	<.001	.002	<.01	<.01	<.3	.006	.001	.13	5.20	1.70	.005	<.001	.001	<.01	1.94	.083	.001	.88	.61	.04	.31	<.001	<.001	-
0306-176	<.001	.479	10.79	1.85	526.2	.002	.001	.05	14.79	13.60	.002	.013	.335	<.01	.56	.012	<.001	.19	.21	.01	.11	.001	<.001	529.7
0306-178	<.001	.010	.30	.12	6.5	.002	.001	.22	7.12	5.80	.005	.001	.010	<.01	1.95	.011	.001	.77	.19	.01	.09	<.001	<.001	-
0306-179	<.001	.002	<.01	.02	1.0	.006	.002	.11	5.26	.87	.003	<.001	.002	<.01	1.08	.041	.002	1.05	.47	.02	.29	<.001	<.001	-
0306-180	<.001	1.719	20.97	16.96	2829.5	.004	.001	.16	6.53	.50	.004	.140	1.144	<.01	1.22	.006	<.001	.46	.05	<.01	.02	.021	<.001	2910.8
STANDARD R-2	.048	.568	1.49	4.29	156.3	.354	.043	.20	22.29	.24	.167	.028	.129	<.01	2.31	.082	.067	1.55	1.36	.19	.50	.065	.173	-

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES.
AG** BY FIRE ASSAY FROM 1 A.T. SAMPLE.
- SAMPLE TYPE: CORE PULP   Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 19 2003   DATE REPORT MAILED: Sept 8/03   SIGNED BY............D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL

Jasper Mining Corporation PROJECT Ruth-Vermont FILE # A303027R Page 2

SAMPLE#	Mo %	Cu %	Pb %	Zn %	Ag gm/mt	Ni %	Co %	Mn %	Fe %	As %	Sr %	Cd %	Sb %	Bi %	Ca %	P %	Cr %	Mg %	Al %	Na %	K %	W %	Hg %	Ag** gm/mt
0306-181	<.001	.156	3.89	.15	256.4	.005	.002	.10	9.74	1.20	.004	.002	.103	<.01	.96	.005	.001	.35	.13	.02	.11	<.001	<.001	-
0306-182	<.001	.183	.43	11.27	93.4	.008	.001	.17	6.01	.12	.003	.092	.063	<.01	1.21	.025	.001	.36	.42	.01	.28	.026	<.001	-
0306-184	<.001	1.150	28.06	15.64	1677.0	.001	<.001	.14	7.14	.96	.004	.127	.889	<.01	1.87	.004	.001	.67	.03	<.01	.04	.042	<.001	1945.5
0306-185	<.001	.003	.07	.04	4.5	.008	.002	.13	8.39	.98	.004	<.001	.001	<.01	1.33	.018	.001	.46	.48	.02	.30	<.001	<.001	-
0306-186	<.001	.224	9.26	18.25	313.8	.002	<.001	.24	3.22	.26	.008	.106	.042	<.01	2.82	.012	.001	1.01	.20	.01	.14	.046	<.001	623.0
0306-187	<.001	.361	5.46	.12	367.3	.004	.001	.20	2.54	.32	.004	.001	.228	<.01	2.14	.017	.001	.72	.46	.04	.31	<.001	<.001	660.8
0306-188	<.001	.574	.22	30.36	112.4	.003	<.001	.16	5.09	.13	.003	.260	.020	<.01	2.03	.009	.001	.60	.28	.03	.19	.090	<.001	-
0306-189	<.001	1.057	14.52	17.10	491.0	.003	.001	.21	3.48	.05	.005	.175	1.912	<.01	2.78	.008	<.001	.81	.31	.02	.19	.046	<.001	768.9
0306-190	<.001	.355	8.79	3.29	665.3	.001	<.001	.50	7.00	1.40	.008	.027	.237	<.01	4.22	<.001	.001	1.49	.02	<.01	.02	.003	<.001	895.4
0306-191	<.001	.236	11.96	18.20	576.2	.001	<.001	.26	6.11	.36	.005	.164	.169	<.01	3.16	.004	.001	1.00	.10	.01	.07	.050	<.001	854.7
0306-192	<.001	.180	10.00	.11	464.3	.003	.001	.19	12.83	8.06	.006	.002	.087	<.01	1.77	.006	.001	.72	.32	<.01	.22	<.001	<.001	928.3
0306-193	<.001	.066	5.06	2.15	274.4	.003	.001	.27	10.73	1.29	.007	.017	.053	<.01	2.35	.005	<.001	.90	.39	.01	.26	.001	<.001	566.5
0306-194	<.001	.072	8.84	.02	350.7	.002	.001	.34	14.47	13.92	.011	.001	.061	<.01	3.52	.002	.001	1.42	.30	.02	.18	<.001	<.001	613.4
RE 0306-194	<.001	.071	8.93	.02	350.5	.004	<.001	.34	14.64	14.16	.011	.001	.061	<.01	3.55	.001	.001	1.43	.28	.01	.19	<.001	<.001	679.0
0306-195	<.001	.695	21.53	5.94	1293.0	.001	<.001	.09	22.96	.36	.003	.051	.328	<.01	.72	.002	<.001	.25	.07	<.01	.04	.009	<.001	1588.2
0306-196	<.001	.066	4.15	.04	139.0	.003	<.001	.18	12.36	7.83	.005	.001	.034	<.01	1.49	.001	.001	.83	.26	.01	.16	<.001	<.001	-
0306-197	<.001	.089	1.37	.06	88.8	.003	<.001	.57	8.47	4.74	.010	.001	.020	<.01	4.27	.006	.001	1.39	.31	.01	.19	<.001	<.001	-
0306-198	<.001	.001	.02	<.01	<.3	.006	<.001	1.01	7.50	4.73	.021	<.001	.002	<.01	7.41	.004	.001	2.64	.24	.01	.16	<.001	<.001	-
0306-199	<.001	.311	3.71	.05	253.4	.002	<.001	.32	15.97	10.94	.007	.001	.132	<.01	2.48	.002	.001	.83	.13	.02	.10	<.001	<.001	571.3
0306-200	<.001	.102	1.14	.06	95.5	.004	<.001	.37	18.17	10.62	.010	.001	.023	<.01	3.24	.001	<.001	1.13	.14	.02	.10	<.001	.001	-
0306-201	<.001	.035	.11	2.24	13.9	.001	<.001	.51	4.56	.11	.008	.017	.006	<.01	4.31	.001	<.001	1.35	.14	<.01	.10	.001	<.001	-
0306-202	<.001	.068	8.06	4.55	40.0	.004	.001	.14	4.27	.08	.005	.029	3.528	<.01	3.46	.003	<.001	1.00	.20	.02	.15	.005	<.001	-
0307-212	<.001	.004	.02	<.01	1.1	.009	.003	.21	6.96	2.66	.005	<.001	.005	<.01	1.88	.019	.001	.68	.42	.03	.26	<.001	<.001	-
0307-214	<.001	.011	.09	.73	1.7	.006	.002	.12	5.25	1.25	.003	.006	.014	<.01	1.19	.018	.001	.43	.38	.04	.24	<.001	<.001	-
0307-216	<.001	.002	<.01	<.01	.4	.007	.002	.20	4.65	1.31	.006	<.001	.002	<.01	2.01	.014	.001	1.13	.37	.03	.22	<.001	.001	-
0307-218	<.001	.162	2.98	1.20	17.1	.004	.001	.09	9.18	6.23	.002	.009	1.095	<.01	.99	.009	.001	.42	.27	.03	.15	<.001	.001	-
0307-219	<.001	.001	.02	<.01	<.3	.006	.001	.20	5.50	1.88	.005	<.001	.007	<.01	2.24	.010	.001	.91	.35	.03	.21	<.001	<.001	-
0307-220	<.001	.112	4.39	.13	26.0	.005	.001	.15	6.93	2.63	.004	.001	1.337	<.01	1.71	.011	.001	.63	.32	.03	.19	<.001	<.001	-
0307-221	<.001	.026	.86	.37	6.0	.006	.002	.12	9.02	5.45	.003	.003	.260	<.01	1.29	.015	.001	.45	.34	.02	.20	<.001	<.001	-
0307-222	<.001	.003	.02	.09	1.2	.007	.003	.19	7.00	3.04	.005	.001	.006	<.01	2.20	.040	.001	.78	.39	.04	.25	<.001	<.001	-
0307-223	<.001	.115	5.32	16.43	61.0	.002	.001	.01	2.16	.11	.001	.167	1.759	<.01	.11	<.001	<.001	.04	.12	.01	.05	.048	<.001	-
0307-224	<.001	.010	.33	1.26	4.2	.009	.004	.12	7.60	2.21	.003	.009	.132	<.01	1.36	.032	.001	.46	.37	.04	.23	.001	<.001	-
0307-225	<.001	.151	3.67	8.29	52.9	.004	.001	.13	13.74	6.79	.005	.067	.343	<.01	2.26	.010	.001	.80	.21	.01	.14	.019	<.001	-
0307-228	<.001	.145	11.93	14.33	315.6	.002	<.001	.31	3.46	1.07	.008	.092	.041	<.01	3.67	.007	.001	1.37	.22	.04	.13	.037	.001	315.1
STANDARD R-2	.048	.569	1.47	4.28	154.9	.374	.044	.20	22.26	.25	.170	.028	.132	<.01	2.33	.080	.067	1.55	1.34	.18	.52	.074	.172	-

Sample type: CORE PULP. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

SAMPLE#	Mo %	Cu %	Pb %	Zn %	Ag gm/mt	Ni %	Co %	Mn %	Fe %	As %	Sr %	Cd %	Sb %	Bi %	Ca %	P %	Cr %	Mg %	Al %	Na %	K %	W %	Hg %	Ag** gm/mt
0307-229	<.001	.764	31.29	16.23	1467.8	<.001	<.001	.14	2.60	.05	.003	.139	.390	<.01	1.04	.004	<.001	.40	.06	.01	.03	<.001	<.001	1718.4
0307-230	<.001	1.860	8.45	31.09	1182.3	.001	<.001	.12	3.41	.15	.002	.261	.608	<.01	.94	.007	<.001	.29	.07	<.01	.05	<.001	<.001	1207.2
0307-233	<.001	.636	19.50	14.24	1456.5	<.001	<.001	.01	13.21	4.05	<.001	.118	.479	<.01	.17	<.001	<.001	.06	.03	<.01	.02	<.001	<.001	1495.5
0307-236	<.001	.002	.02	.02	2.0	.004	.001	.17	4.92	2.61	.008	<.001	.001	<.01	3.08	.014	<.001	1.31	.26	.03	.16	.001	<.001	-
0306-237	<.001	1.517	22.03	18.11	2500.0	.001	<.001	.01	6.88	.17	<.001	.179	.924	<.01	.04	.002	<.001	.03	.01	<.01	.02	<.001	<.001	2556.4
0308-239	<.001	.011	.05	.03	5.8	.005	.002	.26	6.11	1.55	.018	<.001	.003	<.01	4.42	.035	.001	2.06	.26	.03	.19	.001	<.001	-
0309-253	<.001	.434	1.30	1.96	56.3	.003	.001	.02	1.39	.01	.003	.012	.003	<.01	.67	.011	<.001	.23	.17	.03	.08	.001	<.001	-
STANDARD R-2	.047	.567	1.49	4.28	156.0	.374	.042	.19	22.30	.25	.169	.029	.128	<.01	2.34	.083	.066	1.52	1.32	.19	.51	.070	.173	-

Sample type: CORE PULP.

Data FA

ACME AN TICAL LABORATORIES LTD. 852 E. HASTINGS ST. COUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60 53-1716
(IS 002 Accredited Co.)

ASSAY CE FICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A303027R3

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Au** gm/mt
0306-172	7.90
0306-176	8.86
0306-189	23.65
0307-218	4.98
STANDARD AU-1	3.31

GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1/2 A.T. SAMPLE, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: CORE PULP

DATE RECEIVED: NOV 7 2003 DATE REPORT MAILED: Nov 17/03 SIGNED BY.......... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME AN[illegible] TICAL LABORATORIES LTD. 852 E. HASTINGS ST. [illegible]COUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6[illegible] [illegible]253-1716
(IS[illegible] [illegible]02 Accredited Co.)

ASSAY CE[illegible]IFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A303027R3

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Au** gm/mt
0306-172	7.90
0306-176	8.86
0306-189	23.65
0307-218	4.98
STANDARD AU-1	3.31

GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1/2 A.T. SAMPLE, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: CORE PULP

DATE RECEIVED: NOV 7 2003 DATE REPORT MAILED: Nov 17/03 SIGNED BY.......... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA Y

ACME ANA TICAL LABORATORIES LTD. 852 E. HASTINGS ST. ' COUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60 53-1716
(ISC 102 Accredited Co.)

ASSAY CE. IFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A303027R3
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Au** gm/mt
0306-172	7.90
0306-176	8.86
0306-189	23.65
0307-218	4.98
STANDARD AU-1	3.31

GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1/2 A.T. SAMPLE, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: CORE PULP

DATE RECEIVED: NOV 7 2003 DATE REPORT MAILED: Nov 17/03 SIGNED BY............D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data FA

ACME AN TICAL LABORATORIES LTD. 852 E. HASTINGS ST. ‘COUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6(253-1716
(ISC '02 Accredited Co.)

GEOCHEMICAL ANA. SIS CERTIFICATE

Jasper Mining Corporation File # A303492 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
G-1	1.33	2.33	2.70	38.8	12	4.0	3.6	492	1.79	.6	2.1	.3	4.7	76.9	.02	.03	.11	37	.52	.077	6.8	12.1	.49	200.6	.119	1	.72	.059	.36	1.3	1.7	.28	<.01	<5	<.1	<.02	4.2	<2
T-03-01-01	.45	441.81	7256.21	18999.4	35277	42.1	17.1	3794	14.24	6389.1	1.2	390.7	3.6	69.2	152.44	73.32	.23	2	2.98	.022	.8	5.6	.94	8.4	.003	2	.08	.003	.03	142.5	1.9	.03	13.43	88	.4	.09	.6	564
T-03-01-02	.45	636.75	8313.61	23232.1	44987	45.3	10.6	5218	9.11	5805.8	.8	312.8	2.7	154.5	180.44	120.04	.15	2	6.40	.026	.8	4.4	1.12	5.8	.004	2	.06	.003	.03	72.5	2.2	.03	8.54	78	.6	.05	.7	449
T-03-01-03	.57	384.32	6656.83	14971.3	33728	40.5	10.6	5088	7.83	4749.8	.9	261.2	3.1	196.7	104.89	79.54	.14	<2	8.35	.029	1.2	6.4	1.16	8.2	.002	1	.13	.003	.03	92.1	2.4	.02	7.08	49	.1	.03	.7	358
T-03-02-01	.46	403.03	2573.04	18194.6	19545	59.5	17.3	2559	6.14	3513.0	.9	218.8	4.3	70.3	159.78	61.23	.23	2	2.92	.028	1.2	7.5	.96	5.1	.004	2	.06	.003	.02	69.1	2.1	.02	5.90	83	.1	.06	.6	330
T-03-02-02	.50	327.46	3130.06	12671.5	20356	73.8	14.5	3890	9.75	5268.7	.9	300.1	3.7	83.4	109.42	73.23	.20	<2	3.75	.025	1.0	4.5	1.05	5.0	<.001	1	.05	.002	.02	67.4	1.9	.02	8.77	50	<.1	.05	.5	437
T-03-02-03	.36	275.91	3873.65	6634.6	23355	265.8	19.7	4086	14.94	12360.0	.8	599.7	3.2	85.1	55.78	80.67	.24	<2	4.22	.020	.6	3.1	1.08	3.7	<.001	1	.04	.002	.02	163.8	1.8	<.02	14.37	45	.5	.06	.4	796
T-03-02-04	.33	226.70	4420.76	10921.8	22268	222.0	16.7	4082	13.38	7332.1	.7	351.4	3.2	63.0	93.57	71.27	.18	<2	3.23	.022	.5	3.6	1.12	4.2	.004	2	.04	.002	.02	234.6	1.9	.02	13.41	80	.3	.07	.4	422
T-03-02-05	.26	212.34	2357.04	10592.8	13040	131.6	13.5	3857	8.54	4834.8	.7	190.0	3.3	193.1	78.03	41.95	.15	<2	7.48	.024	1.2	4.1	1.04	5.2	.002	2	.05	.002	.02	101.8	1.9	<.02	7.80	40	.1	.03	.4	321
T-03-02-06	.33	339.66	4137.45	16610.6	23804	67.8	12.9	5025	9.60	4816.2	.7	231.8	3.0	121.7	129.17	60.30	.17	2	5.13	.025	.8	2.8	1.16	4.7	.005	1	.05	.002	.02	51.0	1.9	.02	9.21	62	.3	.06	.5	300
T-03-02-07	.40	739.53	11055.21	45078.2	71139	49.9	13.0	4141	13.19	10248.2	.7	610.3	2.5	93.1	345.83	199.59	.18	<2	4.09	.020	.5	3.0	.91	4.3	.003	1	.05	.002	.02	61.1	1.7	.03	14.22	126	.4	.08	1.0	926
T-03-02-08	.49	533.59	8493.91	25249.1	46900	54.7	10.8	4921	8.43	5565.7	.8	319.5	2.9	166.7	185.46	113.23	.16	2	6.64	.028	1.0	4.1	1.15	6.3	.002	1	.06	.003	.03	51.1	2.1	.03	8.07	70	.5	.07	.7	424
T-03-02-09	.61	491.03	7936.43	22047.1	49164	50.4	13.2	4887	9.87	8023.6	.8	454.8	3.1	137.2	170.87	126.41	.17	2	5.59	.026	.9	4.5	1.09	5.8	.004	2	.06	.003	.03	60.5	2.0	.03	9.87	78	.5	.03	.7	587
T-03-02-10	.42	317.06	3520.19	10229.0	26138	62.9	15.2	4304	11.24	9786.7	.8	589.9	3.2	120.0	88.15	83.45	.19	<2	5.09	.023	.9	2.9	1.01	4.1	.002	<1	.05	.002	.02	110.7	1.8	.02	10.45	37	.1	.05	.5	832
RE T-03-02-10	.43	324.45	3352.09	10320.4	25028	59.8	14.1	4349	11.05	9420.6	.8	571.6	3.1	124.0	86.73	79.09	.19	<2	5.00	.024	.9	3.8	.99	4.0	.002	<1	.05	.002	.02	114.4	1.9	.02	10.45	57	.3	.05	.4	820
T-03-03-01	2.03	503.63	7494.25	24110.3	44179	246.6	60.5	2806	19.34	10764.3	.9	576.1	3.6	36.1	196.49	95.73	.67	<2	1.61	.018	.5	6.8	.73	2.4	.001	<1	.03	.001	.01	245.0	1.4	.02	20.22	142	1.5	.16	.6	1067
T-03-03-02	5.91	607.93	6482.18	38532.5	40077	211.6	52.5	2088	19.38	15833.1	.8	985.3	2.9	37.2	304.35	107.89	.54	<2	1.53	.016	.5	9.8	.61	2.1	.001	<1	.02	.001	.01	203.5	1.2	.02	20.77	172	.7	.16	.8	1370
T-03-03-03	5.78	427.28	9890.34	16632.0	43603	97.7	21.3	3208	11.72	11028.9	.8	587.0	3.1	96.9	137.00	130.20	.29	<2	3.79	.019	.6	9.4	.82	4.0	.004	1	.03	.001	.01	95.9	1.5	.02	10.55	77	.5	.09	.5	901
T-03-03-04	1.71	348.64	5731.36	15116.4	29783	93.3	15.6	3978	9.75	8163.8	.8	454.2	2.8	106.9	125.42	84.86	.20	<2	4.37	.020	.7	4.6	1.01	4.1	.002	2	.04	.002	.02	54.6	1.8	.02	8.70	64	.3	.06	.5	620
T-03-03-05	.82	293.47	5400.60	19207.6	26364	125.5	13.6	5188	10.18	5224.3	.8	298.3	3.2	86.0	154.13	56.06	.14	<2	3.88	.024	.6	5.7	1.19	7.5	.001	1	.07	.003	.03	113.8	2.0	.03	9.55	54	.3	.03	.7	330
T-03-03-06	.85	346.81	5031.76	14798.3	28070	68.2	13.7	3809	9.71	8149.0	.9	403.3	3.0	148.7	115.69	79.60	.14	<2	5.70	.023	.9	5.4	.96	7.7	<.001	<1	.06	.003	.03	98.2	1.8	.03	9.20	68	.2	.07	.5	581
T-03-03-07	.79	429.53	5768.54	20956.7	38171	75.1	16.1	4939	9.67	6950.5	.8	465.7	3.2	170.6	176.57	105.93	.19	2	6.88	.026	.9	4.0	1.18	4.2	.001	1	.04	.002	.02	47.6	2.2	.02	9.85	62	.8	.08	.7	592
T-03-03-08	.91	570.69	7977.73	36280.9	46982	82.8	18.4	4560	12.37	9921.1	.8	530.1	2.6	106.2	268.83	119.14	.19	<2	4.52	.020	.6	3.7	.98	3.6	.004	1	.04	.002	.02	47.4	1.7	.02	12.48	90	.4	.05	.8	809
T-03-03-09	.82	728.20	11418.38	45786.6	78263	58.6	14.7	4158	12.85	9460.2	1.0	488.5	2.3	89.9	346.38	221.81	.22	<2	4.07	.019	.5	3.1	.89	3.1	.002	<1	.03	.002	.01	64.8	1.6	.02	13.53	121	.2	.08	1.0	753
T-03-03-10	1.42	635.36	7917.57	22372.9	80999	51.6	12.9	4350	11.71	11848.8	.7	573.4	2.3	123.7	182.24	277.93	.16	<2	5.34	.023	.6	4.4	.90	3.8	<.001	<1	.04	.002	.02	80.8	1.7	.02	12.00	67	.8	.08	.7	806
T-03-04-01	.47	276.22	3492.93	5983.4	17417	31.7	9.1	4616	8.04	5694.5	.9	304.8	3.3	132.8	58.46	55.61	.12	2	5.43	.026	.9	5.5	1.03	8.4	.004	<1	.07	.003	.03	127.0	2.2	.03	6.85	52	.2	.04	.5	418
T-03-04-02	.29	176.27	3186.94	4161.1	17607	41 5	11.9	4362	9.32	7653.5	.7	431.2	2.8	77.1	38.81	54.64	.13	2	3.71	.022	.5	2.9	1.09	3.8	.001	2	.04	.002	.02	105.4	1.9	.02	8.39	31	.3	.03	.4	509
T-03-04-03	.38	270.49	5608.05	12758.9	27448	101.0	13.0	4777	12.23	5433.8	.8	397.5	3.0	100.5	107.87	66.36	.15	<2	4.61	.023	.6	3.6	1.09	4.1	.003	<1	.04	.002	.02	177.8	1.9	.02	11.96	55	.1	.05	.5	429
T-03-04-04	.35	276.94	4187.46	13726.3	21743	57.6	15.9	4126	11.06	6310.7	.8	316.8	3.2	126.1	115.05	60.30	.16	2	5.35	.022	.8	3.6	1.04	4.5	.001	<1	.04	.002	.02	126.2	1.9	.02	10.74	58	.2	.06	.5	415
T-03-04-05	.46	346.58	4654.71	17954.7	23183	34.3	9.7	5395	7.91	4278.4	.8	207.0	3.0	147.1	140.75	58.92	.11	2	5.97	.026	.9	4.3	1.18	7.0	<.001	<1	.07	.003	.03	76 6	2.2	.02	8.17	62	.3	03	.6	285
T-03-04-06	.49	625.86	9451.65	29135.1	55711	30 5	9.6	4988	9.53	6725.8	8	374.5	2.7	130.6	226.53	157.26	.14	<2	5.55	.022	.6	3.8	1.07	6.4	.001	<1	.06	.003	.03	52.8	2.0	03	9.97	78	.6	05	.8	516
T-03-04-07	.54	311.37	3459.18	10892.4	19915	34.3	12.1	4877	6.05	3610.5	9	232.7	3.4	217.8	84.47	52.19	.14	2	8.90	.028	1.3	3.8	1.25	6.6	<.001	<1	.07	.003	.03	47.3	2.5	.02	5.29	40	.1	.02	5	308
T-03-04-08	.40	200.13	1782.61	7514.0	10352	34.3	11.9	3571	5.34	3341.6	1.0	213.0	3.5	222.1	57.24	37.04	.14	<2	9.10	.024	1.4	2.8	1.16	4.1	.004	<1	.05	.002	.02	32.2	2.3	.02	4.54	34	.2	.06	.4	283
T-03-04-09	.66	630.22	6445.50	19639.2	38408	27.1	7.4	6221	5.75	2447.2	1.3	176.4	3.7	162.0	152.14	62.63	.11	<2	7.00	.029	1.1	5.7	1.38	11.2	.003	<1	.10	.005	.05	84.7	2.4	.04	5.32	61	<.1	.04	.7	248
T-03-04-10	.67	926.91	9820.99	32071.1	64808	20.8	6.9	6447	6.43	3817.5	1.2	171.0	3.6	162.8	218.96	88.83	.13	<2	7.08	.031	1.0	6.5	1.39	11.3	.004	2	.10	.005	.04	81.4	2.3	.05	6.31	94	.3	.05	9	285
STANDARD DS5/AU-S	13.15	145.67	25.40	139.8	290	25.0	12.4	790	2.99	21.0	6.3	44.4	2.7	49.6	5.62	3.75	6.28	61	.77	.092	11.8	188.5	.67	130.6	.099	16	2.12	.034	.13	5.0	3.6	1.03	05	177	4.5	.81	6 8	50

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30.00 GM SAMPLE ANALYSIS BY FA/ICP.
- SAMPLE TYPE: SOIL SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 18 2003 **DATE REPORT MAILED:** Sept 3/03 **SIGNED BY** ....D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ✓ FA ✓

ACME ANALYTICAL

Jasper Mining Corporation FILE # A303492

ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
G-1	1.29	2.56	2.24	38.1	9	4.2	3.6	547	1.99	.6	2.0	<.2	4.5	87.4	.01	.03	.11	39	.57	.076	7.1	12.1	.53	214.9	.121	1	.79	.062	.35	1.1	1.7	.29	<.01	<5	<.1	<.02	4.2	<2
T-03-05-01	.48	337.26	2321.11	12857.1	18337	69.6	18.9	3090	7.19	4737.5	.9	242.8	4.8	76.6	114.13	60.74	.25	<2	3.16	.026	1.2	5.2	1.06	5.0	.006	3	.05	.002	.02	63.7	1.6	.02	5.66	54	<.1	.06	.5	309
T-03-05-02	.74	281.40	2149.59	7758.6	12082	61.2	10.0	3845	6.33	3608.4	1.0	180.7	4.6	136.5	64.00	36.23	.15	2	5.58	.031	1.3	6.2	1.15	9.0	<.001	1	.09	.003	.03	82.3	2.1	.02	4.30	47	<.1	.03	.5	241
T-03-05-03	.35	226.04	3588.25	7226.4	19049	69.7	11.4	4301	9.19	8151.5	.8	380.8	3.3	98.8	63.36	61.27	.15	2	4.48	.024	.8	3.6	1.16	5.5	<.001	2	.05	.002	.02	109.7	1.9	.02	8.84	45	.3	<.02	.4	537
T-03-05-04	.39	233.05	3974.57	10867.2	18645	44.7	11.1	5482	9.29	4637.7	.7	194.7	3.3	104.6	89.48	45.56	.12	2	4.96	.026	.8	5.3	1.28	7.1	.004	1	.07	.002	.03	163.9	1.9	.02	9.19	78	<.1	.04	.5	302
T-03-05-05	.34	218.16	3315.54	6849.1	13669	39.8	9.3	4770	7.17	3797.6	.9	144.9	3.5	197.5	47.69	33.96	.11	<2	8.15	.028	1.2	5.2	1.22	9.2	.003	2	.09	.003	.04	149.6	2.0	.03	6.24	57	.2	.05	.5	228
T-03-05-06	.51	428.33	7609.91	17176.1	34319	27.0	8.0	5488	7.49	4218.6	1.0	174.3	3.9	153.4	139.34	67.38	.13	2	6.53	.030	1.2	7.2	1.26	14.6	<.001	1	.13	.005	.05	120.1	2.2	.04	7.42	86	<.1	.04	.8	274
T-03-05-07	.51	457.77	6171.38	17571.7	35611	36.2	10.5	4648	7.87	7103.2	.9	309.2	3.2	186.4	137.13	102.45	.14	<2	8.16	.028	1.0	4.2	1.18	7.7	<.001	<1	.07	.003	.03	84.1	2.0	.02	7.69	71	<.1	.05	.6	444
T-03-05-08	.55	468.50	7370.46	19916.9	41403	39.4	12.9	5775	8.75	5839.7	1.0	350.6	3.3	155.3	156.31	102.03	.16	2	7.16	.026	1.0	3.7	1.35	6.6	.002	1	.07	.003	.03	73.7	2.1	.03	9.16	53	.2	.09	.7	534
T-03-05-09	.47	563.18	9322.44	38373.6	56270	45.1	11.5	4688	9.27	6831.2	.9	342.8	2.8	114.1	293.46	148.99	.16	2	5.25	.025	.7	2.7	1.06	3.0	.005	<1	.04	.001	.01	34.8	1.6	.02	10.39	101	.2	.06	.9	538
T-03-05-10	.54	423.62	6325.93	25909.7	38173	31.3	8.1	4835	7.31	5416.6	.8	258.8	2.9	132.5	204.62	95.70	.12	2	5.99	.026	.9	3.2	1.09	4.9	<.001	1	.06	.002	.02	43.3	1.9	.02	8.31	55	.4	.04	.7	356
T-03-06-01	.54	334.79	2678.22	13748.1	18050	44.3	15.8	3108	7.04	4450.3	.9	221.3	4.3	76.0	120.04	53.42	.21	2	3.30	.026	1.0	4.9	1.05	6.3	.004	1	.07	.003	.03	132.7	1.8	.03	6.22	94	<.1	.04	.5	240
T-03-06-02	1.09	267.63	2020.01	9497.0	13211	38.3	13.0	2832	5.89	3014.6	.8	151.8	4.9	72.8	86.13	38.44	.17	2	3.23	.028	1.1	6.6	1.06	4.9	.001	<1	.07	.002	.02	49.9	1.9	.02	4.55	46	<.1	.04	.4	231
T-03-06-03	2.23	241.38	2681.29	12519.7	12459	27.2	7.5	2550	4.36	2818.5	.9	134.1	3.8	76.2	107.69	37.50	.11	2	3.34	.024	.9	9.3	86	7.6	.002	1	.08	.003	.03	44.3	1.5	.02	3.32	44	<.1	.03	.5	182
T-03-06-04	2.02	503.24	8551.58	17000.3	32091	42.8	10.1	4258	7.42	5295.5	1.1	214.8	4.2	138.1	136.07	86.30	.17	3	5.80	.025	1.1	10.2	1.13	15.5	<.001	1	.15	.005	.06	103.6	2.1	.04	7.24	72	<.1	.03	.8	347
T-03-06-05	.56	632.29	9957.60	32634.2	65748	67.8	11.9	4945	13.01	12185.4	.8	521.4	2.5	109.6	253.03	203.92	.18	<2	4.89	.020	.6	2.1	1.01	4.3	<.001	1	.05	.002	.02	133.6	1.7	.03	13.94	109	.4	.08	.9	711
T-03-06-06	.43	572.98	9476.03	32361.8	68192	43.9	12.2	4089	10.86	11271.4	.7	590.9	2.5	127.4	255.06	233.12	.17	3	5.66	.023	.6	2.6	.96	3.4	.002	1	.04	.002	.01	84.5	1.7	.02	11.83	112	.5	.06	.8	640
T-03-06-07	.50	417.49	6218.90	23220.9	36512	44.6	13.6	4467	9.52	7868.7	.7	414.6	3.0	126.1	186.29	98.37	.17	2	5.82	.023	.8	3.1	1.13	4.3	.001	1	.05	.002	.02	88.4	1.8	.02	10.03	76	.7	.05	.6	659
T-03-06-08	.72	424.05	6498.26	21777.9	38999	39.9	12.7	4211	9.98	8832.3	.6	386.4	2.5	101.1	166.20	108.10	.14	2	4.60	.022	.7	3.0	.94	3.6	<.001	<1	.05	.002	.02	68.4	1.6	.02	10.91	47	.4	.05	.6	643
T-03-06-09	.87	457.03	8343.97	21284.9	57880	30.6	10.3	5005	10.05	6183.6	.7	302.8	2.4	96.1	164.28	155.49	.14	2	4.85	.019	.5	2.7	1.04	2.9	<.001	<1	.04	.001	.01	38.7	1.6	<.02	10.86	47	.4	.07	.6	583
T-03-06-10	.77	308.33	5582.00	16960.5	33849	31.3	8.9	4983	7.31	4665.5	.8	229.0	2.8	121.4	141.20	95.71	.11	3	5.80	.023	.8	3.2	1.11	4.4	<.001	<1	.05	.002	.02	27.1	1.9	.02	8.32	39	.2	.04	.6	381
RE T-03-06-10	.79	319.09	5865.14	17731.7	35736	32.0	9.5	5178	7.68	4992.9	.7	246.0	2.8	125.5	144.90	99.92	.12	2	6.03	.023	.7	3.4	1.16	4.2	<.001	<1	.05	.002	.02	28.7	2.1	.02	8.92	48	<.1	.03	.6	411
T-03-07-01	.61	371.69	3896.47	11669.8	19879	20.7	6.6	2630	4.08	2334.0	1.0	106.1	4.3	71.9	103.24	48.69	.12	3	3.20	.028	1.4	11.7	1.02	14.3	.001	1	.16	.006	.06	200.1	2.0	.04	2.32	116	<.1	.04	.7	179
T-03-07-02	.76	354.43	4193.00	8147.0	18975	18.0	5.1	3744	5.11	3059.3	1.2	134.3	4.4	127.6	67.38	40.31	.12	2	5.68	.026	1.3	13.3	.99	18.1	<.001	2	.17	.006	.06	101.0	2.0	.05	2.85	56	.1	<.02	.7	200
T-03-07-03	.45	229.12	3513.34	3748.4	14596	18.7	6.4	4266	5.50	3878.6	1.1	189.9	3.9	148.8	29.10	35.92	.10	2	6.63	.026	1.1	7.6	1.10	13.8	<.001	1	.12	.005	.05	101.6	2.0	.03	3.80	35	.2	.02	.5	274
T-03-07-04	.52	325.22	6616.32	10024.9	26922	22.4	7.0	4757	6.43	3199.1	1.1	140.7	4.4	91.3	82.89	42.37	.11	3	4.46	.026	1.1	11.1	1.19	17.8	.004	2	.17	.006	.07	193.0	2.1	.05	6.15	75	<.1	.04	.8	232
T-03-07-05	.39	290.92	5945.79	7780.4	21982	20.5	7.1	3923	5.94	2919.3	1.3	113.0	4.9	77.2	60.98	38.83	.12	3	3.81	.025	1.0	11.1	1.18	19.2	<.001	1	.19	.007	.08	298.2	2.0	.06	5.18	116	<.1	.04	.7	180
T-03-07-06	.69	505.76	9404.70	25198.8	48478	13.2	4.8	4783	5.56	3386.3	1.4	138.2	3.8	102.4	197.58	102.91	.12	2	4.95	.024	.8	7.4	1.14	15.4	.002	2	.14	.005	.06	141.9	1.9	.05	5.34	96	.4	.05	.9	236
T-03-07-07	.47	338.18	6050.52	23361.6	34355	12.4	5.0	6387	7.36	3597.9	.7	177.8	2.3	122.9	197.06	80.14	.09	2	5.48	.026	.6	2.4	1.23	3.9	.002	<1	.04	.002	.02	35.7	2.0	.02	7.94	81	.4	.04	.8	277
T-03-07-08	.68	1007.91	11484.19	26530.2	72042	15.5	4.6	6633	6.68	4938.2	1.1	206.3	3.1	205.5	199.13	180.46	.12	<2	8.59	.028	1.0	5.8	1.26	11.2	<.001	2	.10	.004	.04	93.3	2.2	.04	5.95	91	.2	.03	.8	298
T-03-07-09	.64	1034.69	13658.10	31345.4	88989	18.0	5.3	5876	6.73	5944.8	1.3	241.7	3.2	203.6	228.96	215.11	.12	<2	8.55	.028	1.1	7.3	1.20	12.1	.002	2	.12	.004	.05	124.2	2.1	.05	6.48	103	.5	.06	1.0	338
T-03-07-10	.63	921.23	13667.97	28541.6	87902	17.8	5.5	5180	6.24	5545.4	1.3	249.2	3.7	197.0	214.46	203.12	.15	2	8.32	.030	1.2	7.9	1.17	15.1	.002	2	.15	.005	.06	120.0	2.3	.06	5.71	110	.5	.06	.9	314
T-03-08-01	.84	435.35	3490.34	11715.6	20763	27.4	8.9	2526	4.89	3419.5	1.0	183.6	4.7	73.0	109.36	54.74	.19	3	3.00	.026	1.4	12.6	.99	11.7	<.001	1	.13	.005	.05	92.4	2.0	.04	3.08	64	<.1	.05	.6	207
T-03-08-02	.64	405.70	3983.24	8583.7	19487	23.1	7.0	4104	6.04	3480.1	1.2	152.5	4.4	159.4	66.52	48.29	.13	2	6.36	.028	1.4	11.0	1.09	15.3	<.001	1	.15	.006	.06	147.7	2.1	.05	3.99	76	<.1	.04	.6	201
T-03-08-03	.47	299.68	4276.03	5659.8	18559	21.8	7.5	5375	7.80	5013.8	.9	229.2	3.6	165.8	45.94	53.71	.11	2	6.93	.026	1.1	6.6	1.19	11.6	.002	2	.10	.004	.04	150.3	2.1	.03	6.00	44	.2	.05	.6	311
STANDARD DS5/AU-S	13.12	146.48	25.89	138.0	292	25.5	12.6	796	3.00	18.1	6.3	42.0	2.9	49.1	5.64	4.00	6.26	58	.76	.094	12.3	189.8	.68	139.4	.095	16	2.10	.035	.13	4.4	3.7	1.03	.03	172	4.7	.78	6.9	49

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ✓ FA ✓

ACME ANALYTICAL

Jasper Mining Corporation   FILE # A303492

ACME ANALYTICAL

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Au**
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb
G-1	1.29	2.90	2.24	42.0	11	4.0	4.1	509	1.84	1.3	1.5	.4	3.8	82.4	.01	.05	.11	39	.52	.088	6.9	13.3	.50	212.5	.117	<1	.91	.073	.45	1.1	2.0	.28	.04	<5	.1	.04	4.6	<2
T-03-08-04	.70	618.72	8924.22	22260.2	48174	19.6	6.4	6415	6.84	3832.6	1.2	167.9	4.2	119.7	185.40	64.70	.13	2	5.67	.027	1.0	9.3	1.32	17.5	<.001	<1	.13	.005	.06	174.3	2.3	.05	6.53	137	.3	.06	.7	248
T-03-08-05	.67	692.44	11901.02	30177.2	65796	17.2	5.3	6461	6.82	4245.6	1.1	173.3	4.3	131.2	245.62	103.82	.14	2	6.14	.025	.9	8.3	1.31	15.1	.001	<1	.12	.004	.05	171.3	2.1	.06	6.88	145	.2	.08	.8	243
T-03-08-06	.39	403.11	4258.44	29494.2	27127	17.1	6.2	5579	6.64	4781.1	1.0	164.5	3.5	111.0	252.23	57.61	.10	2	5.40	.024	.8	5.0	1.22	10.2	<.001	<1	.07	.003	.03	100.8	1.8	.04	6.89	67	.1	.05	.6	250
T-03-08-07	.77	486.80	7636.15	27405.4	43442	19.1	5.1	6681	6.85	3793.2	1.0	159.4	3.7	126.4	219.99	62.15	.11	<2	5.98	.025	.9	6.6	1.33	12.5	<.001	<1	.10	.004	.04	149.9	2.1	.04	7.11	85	.4	.06	.7	232
T-03-08-08	.43	972.77	13324.88	31317.5	78311	16.6	4.6	6282	6.24	3672.3	1.1	153.6	4.0	164.4	252.54	114.89	.14	<2	7.04	.027	1.1	7.8	1.27	15.3	.002	<1	.13	.005	.06	150.0	2.1	.05	6.58	79	.3	.05	.8	230
T-03-08-09	.53	1104.10	16115.49	28281.0	98840	15.0	4.5	5421	5.69	4585.4	1.2	190.5	4.1	185.4	228.65	182.17	.14	2	7.95	.025	1.1	8.0	1.17	17.7	<.001	<1	.13	.005	.06	144.8	2.0	.06	5.87	84	.2	.07	.8	264
T-03-08-10	1.39	928.15	13261.48	27336.7	97697	21.6	7.5	4948	9.38	7419.0	1.5	333.9	3.5	142.9	231.37	223.51	.15	<2	6.61	.022	.9	6.0	1.07	12.8	.002	<1	.10	.004	.04	119.0	1.7	.04	10.20	68	.3	.07	.7	471
T-03-09-01	.73	600.80	5157.73	14740.1	29239	21.5	6.3	3360	4.38	2373.5	1.5	99.2	5.4	101.2	122.89	44.90	.17	3	4.33	.027	1.6	15.6	1.04	21.8	<.001	<1	.20	.007	.08	175.6	2.1	.07	2.72	41	<.1	.12	.7	140
T-03-09-02	.32	306.68	3712.33	4079.8	19108	17.5	6.5	5231	6.46	4958.6	.9	236.2	3.6	138.8	40.21	40.98	.10	<2	6.00	.025	.9	6.2	1.19	10.1	.001	<1	.08	.003	.04	147.2	2.0	.03	5.11	<5	<.1	.08	.3	294
T-03-09-03	.36	366.15	5543.97	8442.0	23433	20.2	6.9	5675	6.96	3580.5	1.0	146.8	4.6	119.2	53.44	31.05	.10	<2	5.65	.024	1.0	9.5	1.29	17.5	.002	<1	.14	.005	.06	182.2	2.0	.04	6.04	<5	<.1	.05	.5	235
T-03-09-04	.35	411.99	7064.06	10459.2	28813	22.9	7.2	5334	7.31	3761.2	1.1	136.6	5.0	116.1	73.58	42.01	.13	<2	5.53	.026	1.0	9.2	1.35	16.4	.001	<1	.13	.005	.06	247.9	2.0	.04	6.45	9	<.1	.06	.5	199
RE T-03-09-04	.31	397.25	6945.43	10247.6	28555	22.4	7.0	5195	7.13	3648.2	1.1	134.8	5.0	111.8	73.23	41.56	.12	<2	5.41	.026	1.0	8.6	1.32	16.2	<.001	<1	.14	.005	.06	246.5	2.2	.05	6.28	<5	<.1	.03	.5	204
T-03-09-05	.60	607.24	8118.24	14587.4	39467	18.3	5.9	5108	6.28	3936.5	1.6	148.1	5.1	117.4	109.90	60.37	.12	2	5.39	.025	1.2	10.5	1.28	22.4	<.001	<1	.18	.006	.08	171.7	2.2	.06	5.13	<5	<.1	.06	.6	211
T-03-09-06	.71	959.29	15931.51	34502.0	99999	15.6	4.6	5310	6.60	5814.1	1.9	280.7	4.1	145.0	272.88	189.59	.14	<2	6.63	.026	1.1	8.8	1.14	17.2	.002	<1	.14	.005	.06	156.9	1.9	.07	7.30	41	.1	.03	.8	363
T-03-09-07	.69	1124.02	19886.20	34163.1	99999	15.0	4.4	5059	6.34	5966.4	1.5	279.5	4.0	172.8	263.46	262.20	.16	<2	7.68	.027	1.0	9.2	1.09	17.7	.002	<1	.14	.005	.06	155.4	2.0	.07	6.82	47	.2	.04	.8	376
T-03-09-08	.74	1197.24	16491.62	26672.0	99999	14.6	4.6	5260	5.75	5004.9	1.5	208.2	4.0	201.5	213.64	212.77	.14	<2	8.65	.026	1.3	8.0	1.13	18.9	<.001	<1	.14	.005	.06	129.3	2.0	.06	5.76	18	.1	.06	.7	301
T-03-09-09	1.56	534.16	6205.57	22280.6	53917	25.6	9.7	4448	10.64	7615.0	.7	383.6	2.8	98.2	178.31	179.10	.13	<2	4.90	.020	.6	3.6	.98	5.3	.004	<1	.04	.002	.02	91.1	1.5	.02	10.95	<5	.3	.05	.5	531
T-03-09-10	1.08	426.57	5705.79	17120.6	55149	25.2	8.5	5473	11.71	9323.5	.8	403.9	2.7	94.8	138.99	156.20	.11	<2	4.94	.022	.5	2.9	1.13	4.6	<.001	<1	.04	.001	.01	137.8	1.6	.02	11.96	<5	<.1	.03	.4	571
STANDARD DS5/AU-S	11.94	136.92	26.22	140.0	290	24.5	11.7	742	2.82	18.5	5.9	42.0	2.7	47.4	5.36	3.76	6.13	58	.71	.094	11.3	183.1	.65	136.8	.092	16	2.00	.034	.14	4.8	3.4	1.04	.05	180	4.7	.83	6.4	48

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

ACME AN 'TICAL LABORATORIES LTD. 852 E. HASTINGS ST. 'NCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6' 253-1716
(ISu '02 Accredited Co.)

GEOCHEMICAL ANA. 3IS CERTIFICATE

Jasper Mining Corporation File # A303492 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
G-1	1.33	2.33	2.70	38.8	12	4.0	3.6	492	1.79	.6	2.1	.3	4.7	76.9	.02	.03	.11	37	.52	.077	6.8	12.1	.49	200.6	119	1	.72	.059	.36	1.3	1.7	.28	<.01	<5	<.1	<.02	4.2	<2
T-03-01-01	.45	441.81	7256.21	18999.4	35277	42.1	17.1	3794	14.24	6389.1	1.2	390.7	3.6	69.2	152.44	73.32	.23	2	2.98	.022	.8	5.6	.94	8.4	.003	2	.08	.003	.03	142.5	1.9	.03	13.43	88	.4	.09	.6	564
T-03-01-02	.45	636.75	8313.61	23232.1	44987	45.3	10.6	5218	9.11	5805.8	.8	312.8	2.7	154.5	180.44	120.04	.15	2	6.40	.026	.8	4.4	1.12	5.8	.004	2	.06	.003	.03	72.5	2.2	.03	8.54	78	.6	.05	.7	449
T-03-01-03	.57	384.32	6656.83	14971.3	33728	40.5	10.6	5088	7.83	4749.8	.9	261.2	3.1	196.7	104.89	79.54	.14	<2	8.35	.029	1.2	6.4	1.16	8.2	.002	1	.13	.003	.03	92.1	2.4	.02	7.08	49	.1	.03	.7	358
T-03-02-01	.46	403.03	2573.04	18194.6	19545	59.5	17.3	2559	6.14	3513.0	.9	218.8	4.3	70.3	159.78	61.23	.23	2	2.92	.028	1.2	7.5	.96	5.1	.004	2	.06	.003	.02	69.1	2.1	.02	5.90	83	.1	.06	.6	330
T-03-02-02	.50	327.46	3130.06	12671.5	20356	73.8	14.5	3890	9.75	5268.7	.9	300.1	3.7	83.4	109.42	73.23	.20	<2	3.75	.025	1.0	4.5	1.05	5.0	<.001	1	.05	.002	.02	67.4	1.9	.02	8.77	50	<.1	.05	.5	437
T-03-02-03	.36	275.91	3873.65	6634.6	23355	265.8	19.7	4086	14.94	12360.0	.8	599.7	3.2	85.1	55.78	80.67	.24	<2	4.22	.020	.6	3.1	1.08	3.7	<.001	1	.04	.002	.02	163.8	1.8	<.02	14.37	45	.5	.06	.4	796
T-03-02-04	.33	226.70	4420.76	10921.8	22268	222.0	16.7	4082	13.38	7332.1	.7	351.4	3.2	63.0	93.57	71.27	.18	<2	3.23	.022	.5	3.6	1.12	4.2	.004	2	.04	.002	.02	234.6	1.9	.02	13.41	80	.3	.07	.4	422
T-03-02-05	.26	212.34	2357.04	10592.8	13040	131.6	13.5	3857	8.54	4834.8	.7	190.0	3.3	193.1	78.03	41.95	.15	<2	7.48	.024	1.2	4.1	1.04	5.2	.002	2	.05	.002	.02	101.8	1.9	<.02	7.80	40	.1	.03	.4	321
T-03-02-06	.33	339.66	4137.45	16610.6	23804	67.8	12.9	5025	9.60	4816.2	.7	231.8	3.0	121.7	129.17	60.30	.17	2	5.13	.025	.8	2.8	1.16	4.7	.005	1	.05	.002	.02	51.0	1.9	.02	9.21	62	.3	.06	.5	300
T-03-02-07	.40	739.53	11055.21	45078.2	71139	49.9	13.0	4141	13.19	10248.2	.7	610.3	2.5	93.1	345.83	199.59	.18	<2	4.09	.020	.5	3.0	.91	4.3	.003	1	.05	.002	.02	61.1	1.7	.03	14.22	126	.4	.08	1.0	926
T-03-02-08	.49	533.59	8493.91	25249.1	46900	54.7	10.8	4921	8.43	5565.7	.8	319.5	2.9	166.7	185.46	113.23	.16	2	6.64	.028	1.0	4.1	1.15	6.3	.002	1	.06	.003	.03	51.1	2.1	.03	8.07	70	.5	.07	.7	424
T-03-02-09	.61	491.03	7936.43	22047.1	49164	50.4	13.2	4887	9.87	8023.6	.8	454.8	3.1	137.2	170.87	126.41	.17	2	5.59	.026	.9	4.5	1.09	5.8	.004	2	.06	.003	.03	60.5	2.0	.03	9.87	78	.5	.03	.7	587
T-03-02-10	.42	317.06	3520.19	10229.0	26138	62.9	15.2	4304	11.24	9786.7	.8	589.9	3.2	120.0	88.15	83.45	.19	<2	5.09	.023	.9	2.9	1.01	4.1	.002	<1	.05	.002	.02	110.7	1.8	.02	10.45	37	.1	.05	.5	832
RE T-03-02-10	.43	324.45	3352.09	10320.4	25028	59.8	14.1	4349	11.05	9420.6	.8	571.6	3.1	124.0	86.73	79.09	.19	<2	5.00	.024	.9	3.8	.99	4.0	.002	<1	.05	.002	.02	114.4	1.9	.02	10.45	57	.3	.05	.4	820
T-03-03-01	2.03	503.63	7494.25	24110.3	44179	246.6	60.5	2806	19.34	10764.3	.9	576.1	3.6	36.1	196.49	95.73	.67	<2	1.61	.018	.5	6.8	.73	2.4	.001	<1	.03	.001	.01	245.0	1.4	.02	20.22	142	1.5	.16	.6	1067
T-03-03-02	5.91	607.93	6482.18	38532.5	40077	211.6	52.5	2088	19.38	15833.1	.8	985.3	2.9	37.2	304.35	107.89	.54	<2	1.53	.016	.5	9.8	.61	2.1	.001	<1	.02	.001	.01	203.5	1.2	.02	20.77	172	.7	.16	.8	1370
T-03-03-03	5.78	427.28	9890.34	16632.0	43603	97.7	21.3	3208	11.72	11028.9	.8	587.0	3.1	96.9	137.00	130.20	.29	<2	3.79	.019	.6	9.4	.82	4.0	.004	1	.03	.001	.01	95.9	1.5	.02	10.55	77	.5	.09	.5	901
T-03-03-04	1.71	348.64	5731.36	15116.4	29783	93.3	15.6	3978	9.75	8163.8	.8	454.2	2.8	106.9	125.42	84.86	.20	<2	4.37	.020	.7	4.6	1.01	4.1	.002	2	.04	.002	.02	54.6	1.8	.02	8.70	64	.3	.06	.5	620
T-03-03-05	.82	293.47	5400.60	19207.6	26364	125.5	13.6	5188	10.18	5224.3	.8	298.3	3.2	86.0	154.13	56.06	.14	<2	3.88	.024	.6	5.7	1.19	7.5	.001	1	.07	.003	.03	113.8	2.0	.03	9.55	54	.3	.03	.7	330
T-03-03-06	.85	346.81	5031.76	14798.3	28070	68.2	13.7	3809	9.71	8149.0	.9	403.3	3.0	148.7	115.69	79.60	.14	<2	5.70	.023	.9	5.4	.96	7.7	<.001	<1	.06	.003	.03	98.2	1.8	.03	9.20	68	.2	.07	.5	581
T-03-03-07	.79	429.53	5768.54	20956.7	38171	75.1	16.1	4939	9.67	6950.5	.8	465.7	3.2	170.6	176.57	105.93	.19	2	6.88	.026	.9	4.0	1.18	4.2	.001	1	.04	.002	.02	47.6	2.2	.02	9.85	62	.8	.08	.7	592
T-03-03-08	.91	570.69	7977.73	36280.9	46982	82.8	18.4	4560	12.37	9921.1	.8	530.1	2.6	106.2	268.83	119.14	.19	<2	4.52	.020	.6	3.7	.98	3.6	.004	1	.04	.002	.02	47.4	1.7	.02	12.48	90	.4	.05	.8	809
T-03-03-09	.82	728.20	11418.38	45786.6	78263	58.6	14.7	4158	12.85	9460.2	1.0	488.5	2.3	89.9	346.38	221.81	.22	<2	4.07	.019	.5	3.1	.89	3.1	.002	<1	.03	.002	.01	64.8	1.6	.02	13.53	121	.2	.08	1.0	753
T-03-03-10	1.42	635.36	7917.57	22372.9	80999	51.6	12.9	4350	11.71	11848.8	.7	573.4	2.3	123.7	182.24	277.93	.16	<2	5.34	.023	.6	4.4	.90	3.8	<.001	<1	.04	.002	.02	80.8	1.7	.02	12.00	67	.8	.08	.7	806
T-03-04-01	.47	276.22	3492.93	5983.4	17417	31.7	9.1	4616	8.04	5694.5	.9	304.8	3.3	132.8	58.46	55.61	.12	2	5.43	.026	.9	5.5	1.03	8.4	.004	<1	.07	.003	.03	127.0	2.2	.03	6.85	52	.2	.04	.5	418
T-03-04-02	.29	176.27	3186.94	4161.1	17607	41.5	11.9	4362	9.32	7653.5	.7	431.2	2.8	77.1	38.81	54.64	.13	2	3.71	.022	.5	2.9	1.09	3.8	.001	2	.04	.002	.02	105.4	1.9	.02	8.39	31	.3	.03	.4	509
T-03-04-03	.38	270.49	5608.05	12758.9	27448	101.0	13.0	4777	12.23	5433.8	.8	397.5	3.0	100.5	107.87	66.36	.15	<2	4.61	.023	.6	3.6	1.09	4.1	.003	<1	.04	.002	.02	177.8	1.9	.02	11.96	55	.1	.05	.5	429
T-03-04-04	.35	276.94	4187.46	13726.3	21743	57.6	15.9	4126	11.06	6310.7	.8	316.8	3.2	126.1	115.05	60.30	.16	2	5.35	.022	.8	3.6	1.04	4.5	.001	<1	.04	.002	.02	126.2	1.9	.02	10.74	58	.2	.06	.5	415
T-03-04-05	.46	346.58	4654.71	17954.7	23183	34.3	9.7	5395	7.91	4278.4	.8	207.0	3.0	147.1	140.75	58.92	.11	2	5.97	.026	.9	4.3	1.18	7.0	<.001	<1	.07	.003	.03	76.6	2.2	.02	8.17	62	.3	.03	.6	285
T-03-04-06	.49	625.86	9451.65	29135.1	55711	30.5	9.6	4988	9.53	6725.8	.8	374.5	2.7	130.6	226.53	157.26	.14	<2	5.55	.022	.6	3.8	1.07	6.4	.001	<1	.06	.003	.03	52.8	2.0	.03	9.97	78	.6	.05	.8	516
T-03-04-07	.54	311.37	3459.18	10892.4	19915	34.3	12.1	4877	6.05	3610.5	.9	232.7	3.4	217.8	84.47	52.19	.14	2	8.90	.028	1.3	3.8	1.25	6.6	<.001	<1	.07	.003	.03	47.3	2.5	.02	5.29	40	.1	.02	.5	308
T-03-04-08	.40	200.13	1782.61	7514.0	10352	34.3	11.9	3571	5.34	3341.6	1.0	213.0	3.5	222.1	57.24	37.04	.14	<2	9.10	.024	1.4	2.8	1.16	4.1	.004	<1	.05	.002	.02	32.2	2.3	.02	4.54	34	.2	.06	.4	283
T-03-04-09	.66	630.22	6445.50	19639.2	38408	27.1	7.4	6221	5.75	2447.2	1.3	176.4	3.7	162.0	152.14	62.63	.11	<2	7.00	.029	1.1	5.7	1.38	11.2	.003	<1	.10	.005	.05	84.7	2.4	.04	5.32	61	<.1	.04	.7	248
T-03-04-10	.67	926.91	9820.99	32071.1	64808	20.8	6.9	6447	6.43	3817.5	1.2	171.0	3.6	162.8	218.96	88.83	.13	<2	7.08	.031	1.0	6.5	1.39	11.3	.004	2	.10	.005	.04	81.4	2.3	.05	6.31	94	.3	.05	.9	285
STANDARD DS5/AU-S	13.15	145.67	25.40	139.8	290	25.0	12.4	790	2.99	21.0	6.3	44.4	2.7	49.6	5.62	3.75	6.28	61	.77	.092	11.8	188.5	.67	130.6	.099	16	2.12	.034	.13	5.0	3.6	1.03	.05	177	4.5	.81	6.8	50

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30.00 GM SAMPLE ANALYSIS BY FA/ICP.
- SAMPLE TYPE: SOIL SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 18 2003 DATE REPORT MAILED: Sept 3/03 SIGNED BY..........D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ✓ FA ✓

ACME ANALYTICAL

Jasper Mining Corporation FILE # A303492

ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm
G-1	1.29	2.56	2.24	38.1	9	4.2	3.6	547	1.99	.6	2.0	<.2	4.5	87.4	.01	.03	.11	39
T-03-05-01	.48	337.26	2321.11	12857.1	18337	69.6	18.9	3090	7.19	4737.5	.9	242.8	4.8	76.6	114.13	60.74	.25	<2
T-03-05-02	.74	281.40	2149.59	7758.6	12082	61.2	10.0	3845	6.33	3608.4	1.0	180.7	4.6	136.5	64.00	36.23	.15	2
T-03-05-03	.35	226.04	3588.25	7226.4	19049	69.7	11.4	4301	9.19	8151.5	.8	380.8	3.3	98.8	63.36	61.27	.15	2
T-03-05-04	.39	233.05	3974.57	10867.2	18645	44.7	11.1	5482	9.29	4637.7	.7	194.7	3.3	104.6	89.48	45.56	.12	2
T-03-05-05	.34	218.16	3315.54	6849.1	13669	39.8	9.3	4770	7.17	3797.6	.9	144.9	3.5	197.5	47.69	33.96	.11	<2
T-03-05-06	.51	428.33	7609.91	17176.1	34319	27.0	8.0	5488	7.49	4218.6	1.0	174.3	3.9	153.4	139.34	67.38	.13	2
T-03-05-07	.51	457.77	6171.38	17571.7	35611	36.2	10.5	4648	7.87	7103.2	.9	309.2	3.2	186.4	137.13	102.45	.14	<2
T-03-05-08	.55	468.50	7370.46	19916.9	41403	39.4	12.9	5775	8.75	5839.7	1.0	350.6	3.3	155.3	156.31	102.03	.16	2
T-03-05-09	.47	563.18	9322.44	38373.6	56270	45.1	11.5	4688	9.27	6831.2	.9	342.8	2.8	114.1	293.46	148.99	.16	2
T-03-05-10	.54	423.62	6325.93	25909.7	38173	31.3	8.1	4835	7.31	5416.6	.8	258.8	2.9	132.5	204.62	95.70	.12	2
T-03-06-01	.54	334.79	2678.22	13748.1	18050	44.3	15.8	3108	7.04	4450.3	.9	221.3	4.3	76.0	120.04	53.42	.21	2
T-03-06-02	1.09	267.63	2020.01	9497.0	13211	38.3	13.0	2832	5.89	3014.6	.8	151.8	4.9	72.8	86.13	38.44	.17	2
T-03-06-03	2.23	241.38	2681.29	12519.7	12459	27.2	7.5	2550	4.36	2818.5	.9	134.1	3.8	76.2	107.69	37.50	.11	2
T-03-06-04	2.02	503.24	8551.58	17000.3	32091	42.8	10.1	4258	7.42	5295.5	1.1	214.8	4.2	138.1	136.07	86.30	.17	3
T-03-06-05	.56	632.29	9957.60	32634.2	65748	67.8	11.9	4945	13.01	12185.4	.8	521.4	2.5	109.6	253.03	203.92	.18	<2
T-03-06-06	.43	572.98	9476.03	32361.8	68192	43.9	12.2	4089	10.86	11271.4	.7	590.9	2.5	127.4	255.06	233.12	.17	3
T-03-06-07	.50	417.49	6218.90	23220.9	36512	44.6	13.6	4467	9.52	7868.7	.7	414.6	3.0	126.1	186.29	98.37	.17	2
T-03-06-08	.72	424.05	6498.26	21777.9	38999	39.9	12.7	4211	9.98	8832.3	.6	386.4	2.5	101.1	166.20	108.10	.14	2
T-03-06-09	.87	457.03	8343.97	21284.9	57880	30.6	10.3	5005	10.05	6183.6	.7	302.8	2.4	96.1	164.28	155.49	.14	2
T-03-06-10	.77	308.33	5582.00	16960.5	33849	31.3	8.9	4983	7.31	4665.5	.8	229.0	2.8	121.4	141.20	95.71	.11	3
RE T-03-06-10	.79	319.09	5865.14	17731.7	35736	32.0	9.5	5178	7.68	4992.9	.7	246.0	2.8	125.5	144.90	99.92	.12	2
T-03-07-01	.61	371.69	3896.47	11669.8	19879	20.7	6.6	2630	4.08	2334.0	1.0	106.1	4.3	71.9	103.24	48.69	.12	3
T-03-07-02	.76	354.43	4193.00	8147.0	18975	18.0	5.1	3744	5.11	3059.3	1.2	134.3	4.4	127.6	67.38	40.31	.12	2
T-03-07-03	.45	229.12	3513.34	3748.4	14596	18.7	6.4	4266	5.50	3878.6	1.1	189.9	3.9	148.8	29.10	35.92	.10	2
T-03-07-04	.52	325.22	6616.32	10024.9	26922	22.4	7.0	4757	6.43	3199.1	1.1	140.7	4.4	91.3	82.89	42.37	.11	3
T-03-07-05	.39	290.92	5945.79	7780.4	21982	20.5	7.1	3923	5.94	2919.3	1.3	113.0	4.9	77.2	60.98	38.83	.12	3
T-03-07-06	.69	505.76	9404.70	25198.8	48478	13.2	4.8	4783	5.56	3386.3	1.4	138.2	3.8	102.4	197.58	102.91	.12	2
T-03-07-07	.47	338.18	6050.52	23361.6	34355	12.4	5.0	6387	7.36	3597.9	.7	177.8	2.3	122.9	197.06	80.14	.09	2
T-03-07-08	.68	1007.91	11484.19	26530.2	72042	15.5	4.6	6633	6.68	4938.2	1.1	206.3	3.1	205.5	199.13	180.46	.12	<2
T-03-07-09	.64	1034.69	13658.10	31345.4	88989	18.0	5.3	5876	6.73	5944.8	1.3	241.7	3.2	203.6	228.96	215.11	.12	<2
T-03-07-10	.63	921.23	13667.97	28541.6	87902	17.8	5.5	5180	6.24	5545.4	1.3	249.2	3.7	197.0	214.46	203.12	.15	2
T-03-08-01	.84	435.35	3490.34	11715.6	20763	27.4	8.9	2526	4.89	3419.5	1.0	183.6	4.7	73.0	109.36	54.74	.19	3
T-03-08-02	.64	405.70	3983.24	8583.7	19487	23.1	7.0	4104	6.04	3480.1	1.2	152.5	4.4	159.4	66.52	48.29	.13	2
T-03-08-03	.47	299.68	4276.03	5659.8	18559	21.8	7.5	5375	7.80	5013.8	.9	229.2	3.6	165.8	45.94	53.71	.11	2
STANDARD DS5/AU-S	13.12	146.48	25.89	138.0	292	25.5	12.6	796	3.00	18.1	6.3	42.0	2.9	49.1	5.64	4.00	6.26	58

SAMPLE#	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
G-1	.57	.076	7.1	12.1	.53	214.9	.121	1	.79	.062	.35	1.1	1.7	.29	<.01	<5	<.1	<.02	4.2	<2
T-03-05-01	3.16	.026	1.2	5.2	1.06	5.0	.006	3	.05	.002	.02	63.7	1.6	.02	5.66	54	<.1	.06	.5	309
T-03-05-02	5.58	.031	1.3	6.2	1.15	9.0	<.001	1	.09	.003	.03	82.3	2.1	.02	4.30	47	<.1	.03	.5	241
T-03-05-03	4.48	.024	.8	3.6	1.16	5.5	<.001	2	.05	.002	.02	109.7	1.9	.02	8.84	45	.3	<.02	.4	537
T-03-05-04	4.96	.026	.8	5.3	1.28	7.1	.004	1	.07	.002	.03	163.9	1.9	.02	9.19	78	<.1	.04	.5	302
T-03-05-05	8.15	.028	1.2	5.2	1.22	9.2	.003	2	.09	.003	.04	149.6	2.0	.03	6.24	57	.2	.05	.5	228
T-03-05-06	6.53	.030	1.2	7.2	1.26	14.6	<.001	1	.13	.005	.05	120.1	2.2	.04	7.42	86	<.1	.04	.8	274
T-03-05-07	8.16	.028	1.0	4.2	1.18	7.7	<.001	<1	.07	.003	.03	84.1	2.0	.02	7.69	71	<.1	.05	.6	444
T-03-05-08	7.16	.026	1.0	3.7	1.35	6.6	.002	1	.07	.003	.03	73.7	2.1	.03	9.16	53	.2	.09	.7	534
T-03-05-09	5.25	.025	.7	2.7	1.06	3.0	.005	<1	.04	.001	.01	34.8	1.6	.02	10.39	101	.2	.06	.9	538
T-03-05-10	5.99	.026	.9	3.2	1.09	4.9	<.001	1	.06	.002	.02	43.3	1.9	.02	8.31	55	.4	.04	.7	356
T-03-06-01	3.30	.026	1.0	4.9	1.05	6.3	.004	1	.07	.003	.03	132.7	1.8	.03	6.22	94	<.1	.04	.5	240
T-03-06-02	3.23	.028	1.1	6.6	1.06	4.9	.001	<1	.07	.002	.02	49.9	1.9	.02	4.55	46	<.1	.04	.4	231
T-03-06-03	3.34	.024	.9	9.3	.86	7.6	.002	1	.08	.003	.03	44.3	1.5	.02	3.32	44	<.1	.03	.5	182
T-03-06-04	5.80	.025	1.1	10.2	1.13	15.5	<.001	1	.15	.005	.06	103.6	2.1	.04	7.24	72	<.1	.03	.8	347
T-03-06-05	4.89	.020	.6	2.1	1.01	4.3	<.001	1	.05	.002	.02	133.6	1.7	.03	13.94	109	.4	08	.9	711
T-03-06-06	5.66	.023	.6	2.6	.96	3.4	.002	1	.04	.002	.01	84.5	1.7	.02	11.83	112	.5	.06	.8	640
T-03-06-07	5.82	.023	.8	3.1	1.13	4.3	.001	1	.05	.002	.02	88.4	1.8	.02	10.03	76	.7	.05	.6	659
T-03-06-08	4.60	.022	.7	3.0	.94	3.6	<.001	<1	.05	.002	.02	68.4	1.6	.02	10.91	47	.4	.05	.6	643
T-03-06-09	4.85	.019	.5	2.7	1.04	2.9	<.001	<1	.04	.001	.01	38.7	1.6	<.02	10.86	47	.4	.07	.6	583
T-03-06-10	5.80	.023	.8	3.2	1.11	4.4	<.001	<1	.05	.002	.02	27.1	1.9	.02	8.32	39	.2	.04	.6	381
RE T-03-06-10	6.03	.023	.7	3.4	1.16	4.2	<.001	<1	.05	.002	.02	28.7	2.1	.02	8.92	48	<.1	.03	.6	411
T-03-07-01	3.20	.028	1.4	11.7	1.02	14.3	.001	1	.16	.006	.06	200.1	2.0	.04	2.32	116	<.1	.04	.7	179
T-03-07-02	5.68	.026	1.3	13.3	.99	18.1	<.001	2	.17	.006	.06	101.0	2.0	.05	2.85	56	.1	<.02	.7	200
T-03-07-03	6.63	.026	1.1	7.6	1.10	13.8	<.001	1	.12	.005	.05	101.6	2.0	.03	3.80	35	.2	.02	.5	274
T-03-07-04	4.46	.026	1.1	11.1	1.19	17.8	.004	2	.17	.006	.07	193.0	2.1	.05	6.15	75	<.1	.04	.8	232
T-03-07-05	3.81	.025	1.0	11.1	1.18	19.2	<.001	1	.19	.007	.08	298.2	2.0	.06	5.18	116	<.1	.04	.7	180
T-03-07-06	4.95	.024	.8	7.4	1.14	15.4	.002	2	.14	.005	.06	141.9	1.9	.05	5.34	96	.4	.05	.9	236
T-03-07-07	5.48	.026	.6	2.4	1.23	3.9	.002	<1	.04	.002	.02	35.7	2.0	.02	7.94	81	.4	.04	.8	277
T-03-07-08	8.59	.028	1.0	5.8	1.26	11.2	<.001	2	.10	.004	.04	93.3	2.2	.04	5.95	91	.2	.03	.8	298
T-03-07-09	8.55	.028	1.1	7.3	1.20	12.1	.002	2	.12	.004	.05	124.2	2.1	.05	6.48	103	.5	.06	1.0	338
T-03-07-10	8.32	.030	1.2	7.9	1.17	15.1	.002	2	.15	.005	.06	120.0	2.3	.06	5.71	110	.5	.06	.9	314
T-03-08-01	3.00	.026	1.4	12.6	.99	11.7	<.001	1	.13	.005	.05	92.4	2.0	.04	3.08	64	<.1	.05	.6	207
T-03-08-02	6.36	.028	1.4	11.0	1.09	15.3	<.001	1	.15	.006	.06	147.7	2.1	.05	3.99	76	<.1	.04	.6	201
T-03-08-03	6.93	.026	1.1	6.6	1.19	11.6	.002	2	.10	.004	.04	150.3	2.1	.03	6.00	44	.2	.05	.6	311
STANDARD DS5/AU-S	.76	.094	12.3	189.8	.68	139.4	.095	16	2.10	.035	.13	4.4	3.7	1.03	.03	172	4.7	.78	6.9	49

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ✓ FA ✓

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Au**
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb
G-1	1.29	2.90	2.24	42.0	11	4.0	4.1	509	1.84	1.3	1.5	.4	3.8	82.4	.01	.05	.11	39	.52	.088	6.9	13.3	.50	212.5	.117	<1	.91	.073	.45	1.1	2.0	.28	.04	<5	.1	.04	4.6	<2
T-03-08-04	.70	618.72	8924.22	22260.2	48174	19.6	6.4	6415	6.84	3832.6	1.2	167.9	4.2	119.7	185.40	64.70	.13	2	5.67	.027	1.0	9.3	1.32	17.5	<.001	<1	.13	.005	.06	174.3	2.3	.05	6.53	137	.3	.06	.7	248
T-03-08-05	.67	692.44	11901.02	30177.2	65796	17.2	5.3	6461	6.82	4245.6	1.1	173.3	4.3	131.2	245.62	103.82	.14	2	6.14	.025	.9	8.3	1.31	15.1	.001	<1	.12	.004	.05	171.3	2.1	.06	6.88	145	.2	.08	.8	243
T-03-08-06	.39	403.11	4258.44	29494.2	27127	17.1	6.2	5579	6.64	4781.1	1.0	164.5	3.5	111.0	252.23	57.61	.10	2	5.40	.024	.8	5.0	1.22	10.2	<.001	<1	.07	.003	.03	100.8	1.8	.04	6.89	67	.1	.05	.6	250
T-03-08-07	.77	486.80	7636.15	27405.4	43442	19.1	5.1	6681	6.85	3793.2	1.0	159.4	3.7	126.4	219.99	62.15	.11	<2	5.98	.025	.9	6.6	1.33	12.5	<.001	<1	.10	.004	.04	149.9	2.1	.04	7.11	85	.4	.06	.7	232
T-03-08-08	.43	972.77	13324.88	31317.5	78311	16.6	4.6	6282	6.24	3672.3	1.1	153.6	4.0	164.4	252.54	114.89	.14	<2	7.04	.027	1.1	7.8	1.27	15.3	.002	<1	.13	.005	.06	150.0	2.1	.05	6.58	79	.3	.05	.8	230
T-03-08-09	.53	1104.10	16115.49	28281.0	98840	15.0	4.5	5421	5.69	4585.4	1.2	190.5	4.1	185.4	228.65	182.17	.14	2	7.95	.025	1.1	8.0	1.17	17.7	<.001	<1	.13	.005	.06	144.8	2.0	.06	5.87	84	.2	.07	.8	264
T-03-08-10	1.39	928.15	13261.48	27336.7	97697	21.6	7.5	4948	9.38	7419.0	1.5	333.9	3.5	142.9	231.37	223.51	.15	<2	6.61	.022	.9	6.0	1.07	12.8	.002	<1	.10	.004	.04	119.0	1.7	.04	10.20	68	.3	.07	.7	471
T-03-09-01	.73	600.80	5157.73	14740.1	29239	21.5	6.3	3360	4.38	2373.5	1.5	99.2	5.4	101.2	122.89	44.90	.17	3	4.33	.027	1.6	15.6	1.04	21.8	<.001	<1	.20	.007	.08	175.6	2.1	.07	2.72	41	<.1	.12	.7	140
T-03-09-02	.32	306.68	3712.33	4079.8	19108	17.5	6.5	5231	6.46	4958.6	.9	236.2	3.6	138.8	40.21	40.98	.10	<2	6.00	.025	.9	6.2	1.19	10.1	.001	<1	.08	.003	.04	147.2	2.0	.03	5.11	<5	<.1	.08	.3	294
T-03-09-03	.36	366.15	5543.97	8442.0	23433	20.2	6.9	5675	6.96	3580.5	1.0	146.8	4.6	119.2	53.44	31.05	.10	<2	5.65	.024	1.0	9.5	1.29	17.5	.002	<1	.14	.005	.06	182.2	2.0	.04	6.04	<5	<.1	.05	.5	235
T-03-09-04	.35	411.99	7064.06	10459.2	28813	22.9	7.2	5334	7.31	3761.2	1.1	136.6	5.0	116.1	73.58	42.01	.13	<2	5.53	.026	1.0	9.2	1.35	16.4	.001	<1	.13	.005	.06	247.9	2.0	.04	6.45	9	<.1	.06	.5	199
RE T-03-09-04	.31	397.25	6945.43	10247.6	28555	22.4	7.0	5195	7.13	3648.2	1.1	134.8	5.0	111.8	73.23	41.56	.12	<2	5.41	.026	1.0	8.6	1.32	16.2	<.001	<1	.14	.005	.06	246.5	2.2	.05	6.28	<5	<.1	.03	.5	204
T-03-09-05	.60	607.24	8118.24	14587.4	39467	18.3	5.9	5108	6.28	3936.5	1.6	148.1	5.1	117.4	109.90	60.37	.12	2	5.39	.025	1.2	10.5	1.28	22.4	<.001	<1	.18	.006	.08	171.7	2.2	.06	5.13	<5	<.1	.06	.6	211
T-03-09-06	.71	959.29	15931.51	34502.0	99999	15.6	4.6	5310	6.60	5814.1	1.9	280.7	4.1	145.0	272.88	189.59	.14	<2	6.63	.026	1.1	8.8	1.14	17.2	.002	<1	.14	.005	.06	156.9	1.9	.07	7.30	41	.1	.03	.8	363
T-03-09-07	.69	1124.02	19886.20	34163.1	99999	15.0	4.4	5059	6.34	5966.4	1.5	279.5	4.0	172.8	263.46	262.20	.16	<2	7.68	.027	1.0	9.2	1.09	17.7	.002	<1	.14	.005	.06	155.4	2.0	.07	6.82	47	.2	.04	.8	376
T-03-09-08	.74	1197.24	16491.62	26672.0	99999	14.6	4.6	5260	5.75	5004.9	1.5	208.2	4.0	201.5	213.64	212.77	.14	<2	8.65	.026	1.3	8.0	1.13	18.9	<.001	<1	.14	.005	.06	129.3	2.0	.06	5.76	18	.1	.06	.7	301
T-03-09-09	1.56	534.16	6205.57	22280.6	53917	25.6	9.7	4448	10.64	7615.0	.7	383.6	2.8	98.2	178.31	179.10	.13	<2	4.90	.020	.6	3.6	.98	5.3	.004	<1	.04	.002	.02	91.1	1.5	.02	10.95	<5	.3	.05	.5	531
T-03-09-10	1.08	426.57	5705.79	17120.6	55149	25.2	8.5	5473	11.71	9323.5	.8	403.9	2.7	94.8	138.99	156.20	.11	<2	4.94	.022	.5	2.9	1.13	4.6	<.001	<1	.04	.001	.01	137.8	1.6	.02	11.96	<5	<.1	.03	.4	571
STANDARD DS5/AU-S	11.94	136.92	26.22	140.0	290	24.5	11.7	742	2.82	18.5	5.9	42.0	2.7	47.4	5.36	3.76	6.13	58	.71	.094	11.3	183.1	.65	136.8	.092	16	2.00	.034	.14	4.8	3.4	1.04	.05	180	4.7	.83	6.4	48

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

ACME AN ICAL LABORATORIES LTD. 852 E. HASTINGS ST. OUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6 53-1716
(ISO 02 Accredited Co.)

ASSAY CERTIFICATE

Jasper Mining Corporation File # A303492R Page 1
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Pb %	Zn %	Ag gm/mt	As %	Au** gm/mt
T-03-01-01	.81	2.03	48.9	.90	-
T-03-01-02	.92	2.67	59.6	.71	-
T-03-01-03	.71	1.59	41.2	.51	-
T-03-02-01	.28	1.95	20.8	.51	-
T-03-02-02	.34	1.35	24.3	.65	-
T-03-02-03	.38	.64	22.8	1.25	-
T-03-02-04	.48	1.12	25.1	.81	-
T-03-02-05	.25	1.04	18.7	.50	-
T-03-02-06	.45	1.77	29.1	.53	-
T-03-02-07	1.32	4.73	80.5	1.28	1.42
T-03-02-08	.87	2.54	52.3	.57	-
T-03-02-09	.83	2.22	58.1	.84	-
T-03-02-10	.37	1.03	26.6	1.04	-
RE T-03-02-10	.37	1.03	29.1	1.08	-
T-03-03-01	.80	2.61	50.5	1.34	.89
T-03-03-02	.68	3.99	45.2	2.31	.17
T-03-03-03	1.08	1.74	55.4	1.43	.85
T-03-03-04	.64	1.62	29.8	.91	-
T-03-03-05	.60	1.99	30.1	.55	-
T-03-03-06	.52	1.46	30.8	.84	-
T-03-03-07	.59	2.09	41.1	.73	-
T-03-03-08	.86	3.70	54.9	1.14	-
T-03-03-09	1.36	4.59	94.5	1.17	-
T-03-03-10	.81	2.21	78.6	1.27	-
T-03-04-03	.63	1.40	31.5	.62	-
T-03-04-04	.46	1.42	23.2	.69	-
T-03-04-05	.52	1.95	27.8	.46	-
T-03-04-06	1.06	3.13	69.2	.81	-
T-03-04-07	.39	1.15	25.0	.39	-
T-03-04-09	.73	2.16	45.3	.27	-
T-03-04-10	1.34	3.16	80.2	.39	-
STANDARD R-2/AU-1	8.83	16.37	1036.2	.16	3.39

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 250 ML, ANALYSED BY ICP-ES.
- SAMPLE TYPE: SOIL PULP AU** BY FIRE ASSAY FROM 1 A.T. SAMPLE.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 9 2003 **DATE REPORT MAILED:** Oct 20/2003 **SIGNED BY** ....D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data FA

SAMPLE#	Pb %	Zn %	Ag gm/mt	As %
T-03-05-01	.24	1.34	19.4	.46
T-03-05-04	.45	1.19	19.1	.49
T-03-05-06	.81	1.79	34.1	.41
T-03-05-07	.62	1.81	41.0	.66
T-03-05-08	.75	2.03	40.4	.55
T-03-05-09	.98	3.90	56.2	.71
T-03-05-10	.63	2.64	39.1	.52
T-03-06-01	.27	1.33	22.7	.43
T-03-06-03	.27	1.24	13.1	.27
T-03-06-04	.85	1.64	32.1	.49
T-03-06-05	1.00	3.23	73.4	1.12
T-03-06-06	.93	3.05	68.4	1.03
T-03-06-07	.64	2.31	39.4	.77
T-03-06-08	.70	2.27	41.7	.90
T-03-06-09	.96	2.32	66.6	.68
T-03-06-10	.58	1.81	38.4	.48
RE T-03-06-10	.55	1.75	34.6	.46
T-03-07-01	.39	1.17	23.2	.23
T-03-07-04	.72	1.06	34.2	.34
T-03-07-06	1.03	2.53	56.1	.36
T-03-07-07	.61	2.35	33.4	.34
T-03-07-08	1.05	2.29	71.9	.39
T-03-07-09	1.41	2.93	97.2	.50
T-03-07-10	1.38	2.71	97.8	.47
T-03-08-01	.37	1.20	25.0	.34
STANDARD GC-2	8.81	16.37	1034.4	.16

Sample type: SOIL PULP. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

SAMPLE#	Pb %	Zn %	Ag gm/mt	As %
T-03-08-04	.96	2.62	53.3	.38
T-03-08-05	1.24	3.37	69.3	.41
T-03-08-06	.45	3.49	27.7	.50
T-03-08-07	.80	3.12	45.5	.37
T-03-08-08	1.44	3.49	79.3	.35
T-03-08-09	1.66	3.12	103.2	.44
T-03-08-10	1.40	3.10	106.4	.74
T-03-09-01	.59	1.62	28.2	.25
T-03-09-04	.71	1.04	28.3	.36
RE T-03-09-04	.72	1.04	28.6	.36
T-03-09-05	.83	1.48	44.0	.38
T-03-09-06	1.88	3.79	105.8	.57
T-03-09-07	2.29	3.63	130.3	.57
T-03-09-08	1.72	2.92	108.9	.48
T-03-09-09	.66	2.39	61.5	.79
T-03-09-10	.59	1.84	58.1	.94
STANDARD R-2	8.77	17.29	1032.7	.17

Sample type: SOIL PULP. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ___ FA ___

ACME AN 'ICAL LABORATORIES LTD. 852 E. HASTINGS ST. 'OUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6(53-1716
(ISC J02 Accredited Co.)

ASSAY CERTIFICATE

Jasper Mining Corporation File # A303492R Page 1
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Pb %	Zn %	Ag gm/mt	As %	Au** gm/mt
T-03-01-01	.81	2.03	48.9	.90	-
T-03-01-02	.92	2.67	59.6	.71	-
T-03-01-03	.71	1.59	41.2	.51	-
T-03-02-01	.28	1.95	20.8	.51	-
T-03-02-02	.34	1.35	24.3	.65	-
T-03-02-03	.38	.64	22.8	1.25	-
T-03-02-04	.48	1.12	25.1	.81	-
T-03-02-05	.25	1.04	18.7	.50	-
T-03-02-06	.45	1.77	29.1	.53	-
T-03-02-07	1.32	4.73	80.5	1.28	1.42
T-03-02-08	.87	2.54	52.3	.57	-
T-03-02-09	.83	2.22	58.1	.84	-
T-03-02-10	.37	1.03	26.6	1.04	-
RE T-03-02-10	.37	1.03	29.1	1.08	-
T-03-03-01	.80	2.61	50.5	1.34	.89
T-03-03-02	.68	3.99	45.2	2.31	.17
T-03-03-03	1.08	1.74	55.4	1.43	.85
T-03-03-04	.64	1.62	29.8	.91	-
T-03-03-05	.60	1.99	30.1	.55	-
T-03-03-06	.52	1.46	30.8	.84	-
T-03-03-07	.59	2.09	41.1	.73	-
T-03-03-08	.86	3.70	54.9	1.14	-
T-03-03-09	1.36	4.59	94.5	1.17	-
T-03-03-10	.81	2.21	78.6	1.27	-
T-03-04-03	.63	1.40	31.5	.62	-
T-03-04-04	.46	1.42	23.2	.69	-
T-03-04-05	.52	1.95	27.8	.46	-
T-03-04-06	1.06	3.13	69.2	.81	-
T-03-04-07	.39	1.15	25.0	.39	-
T-03-04-09	.73	2.16	45.3	.27	-
T-03-04-10	1.34	3.16	80.2	.39	-
STANDARD R-2/AU-1	8.83	16.37	1036.2	.16	3.39

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 250 ML, ANALYSED BY ICP-ES.
- SAMPLE TYPE: SOIL PULP AU** BY FIRE ASSAY FROM 1 A.T. SAMPLE.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 9 2003 DATE REPORT MAILED: Oct 20/2003 SIGNED BY ....D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data FA

SAMPLE#	Pb %	Zn %	Ag gm/mt	As %
T-03-05-01	.24	1.34	19.4	.46
T-03-05-04	.45	1.19	19.1	.49
T-03-05-06	.81	1.79	34.1	.41
T-03-05-07	.62	1.81	41.0	.66
T-03-05-08	.75	2.03	40.4	.55
T-03-05-09	.98	3.90	56.2	.71
T-03-05-10	.63	2.64	39.1	.52
T-03-06-01	.27	1.33	22.7	.43
T-03-06-03	.27	1.24	13.1	.27
T-03-06-04	.85	1.64	32.1	.49
T-03-06-05	1.00	3.23	73.4	1.12
T-03-06-06	.93	3.05	68.4	1.03
T-03-06-07	.64	2.31	39.4	.77
T-03-06-08	.70	2.27	41.7	.90
T-03-06-09	.96	2.32	66.6	.68
T-03-06-10	.58	1.81	38.4	.48
RE T-03-06-10	.55	1.75	34.6	.46
T-03-07-01	.39	1.17	23.2	.23
T-03-07-04	.72	1.06	34.2	.34
T-03-07-06	1.03	2.53	56.1	.36
T-03-07-07	.61	2.35	33.4	.34
T-03-07-08	1.05	2.29	71.9	.39
T-03-07-09	1.41	2.93	97.2	.50
T-03-07-10	1.38	2.71	97.8	.47
T-03-08-01	.37	1.20	25.0	.34
STANDARD GC-2	8.81	16.37	1034.4	.16

Sample type: SOIL PULP. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ✓ FA ___

SAMPLE#	Pb %	Zn %	Ag gm/mt	As %
T-03-08-04	.96	2.62	53.3	.38
T-03-08-05	1.24	3.37	69.3	.41
T-03-08-06	.45	3.49	27.7	.50
T-03-08-07	.80	3.12	45.5	.37
T-03-08-08	1.44	3.49	79.3	.35
T-03-08-09	1.66	3.12	103.2	.44
T-03-08-10	1.40	3.10	106.4	.74
T-03-09-01	.59	1.62	28.2	.25
T-03-09-04	.71	1.04	28.3	.36
RE T-03-09-04	.72	1.04	28.6	.36
T-03-09-05	.83	1.48	44.0	.38
T-03-09-06	1.88	3.79	105.8	.57
T-03-09-07	2.29	3.63	130.3	.57
T-03-09-08	1.72	2.92	108.9	.48
T-03-09-09	.66	2.39	61.5	.79
T-03-09-10	.59	1.84	58.1	.94
STANDARD R-2	8.77	17.29	1032.7	.17

Sample type: SOIL PULP. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

ACME AN TICAL LABORATORIES LTD. 852 E. HASTINGS ST. ICOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6C 253-1716
(ISO 02 Accredited Co.)

GEOCHEMICAL ANAL SIS CERTIFICATE

Jasper Mining Corporation File # A303493 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Au**
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb
SI	.10	.88	1.21	7.6	8	.7	.1	6	.07	.2	<.1	<.2	<.1	2.6	.04	.27	<.02	<2	.11	.001	<.5	.6	.01	4.6	<.001	2	.02	.477	.01	<.1	<.1	<.02	<.01	8	<.1	<.02	<.1	<2
0311-258	.75	24.05	18.96	83.1	507	17.1	6.5	2275	6.17	27.6	.4	.6	2.5	425.7	.49	5.24	.35	2	16.86	.037	2.1	1.2	3.33	13.9	.004	1	.10	.012	.05	.1	3.6	.02	.52	7	.1	.06	.3	3
0311-259	.95	5.77	102.97	22.3	713	34.3	16.6	2207	5.66	1081.7	.9	201.7	3.1	79.2	.13	1.22	.15	2	3.81	.006	.8	1.9	1.39	18.8	.002	1	.14	.015	.08	.3	1.9	.04	4.52	<5	.1	.04	.4	430
0311-260	2.64	16.35	66.81	35.9	905	56.2	26.4	1627	4.84	462.8	1.1	11.2	4.9	144.1	.27	2.84	.51	<2	5.59	.020	1.2	2.2	1.10	19.1	.001	1	.17	.014	.09	.3	2.1	.04	3.52	8	.5	.06	.4	152
0311-261	1.55	31.89	23.56	30.4	482	33.3	18.3	995	2.49	74.6	1.1	.9	4.5	162.2	.22	3.02	.31	<2	6.42	.021	1.5	2.1	.96	15.4	<.001	1	.12	.011	.07	.2	1.7	.03	.90	<5	.2	.05	.3	13
0311-262	2.69	38.67	25.75	55.6	348	57.1	30.0	2135	4.87	122.3	1.1	<.2	4.3	200.6	.32	2.42	.44	2	8.67	.011	.9	1.9	2.44	18.5	<.001	1	.14	.012	.08	.2	2.4	.03	1.00	<5	.3	.06	.3	9
0311-263	.38	49.08	12.78	92.8	76	60.7	22.9	381	4.83	31.6	1.8	.2	11.3	8.4	.03	.22	.17	5	.18	.036	9.3	11.8	1.44	27.1	<.001	1	.21	.015	.11	<.1	3.9	.05	.07	<5	<.1	.03	.5	3
0311-264	.21	26.42	49.23	101.9	216	28.8	10.4	665	4.57	13.6	.9	<.2	6.0	4.9	.03	.45	.46	4	.14	.025	1.4	5.1	1.51	14.9	<.001	1	.11	.009	.06	<.1	2.4	.03	.03	<5	<.1	.02	.3	2
0311-265	.31	43.67	5.48	97.6	38	66.4	22.5	414	5.34	42.6	2.4	<.2	13.0	14.0	.02	.43	.07	6	.32	.128	7.4	12.5	1.56	24.2	.002	2	.22	.013	.10	<.1	4.4	.06	.05	7	<.1	<.02	.6	5
0311-266	.28	35.15	9.83	75.7	58	58.8	16.7	441	5.30	29.6	1.6	<.2	11.4	6.8	.02	.25	.13	5	.12	.035	8.9	10.3	1.54	25.2	<.001	<1	.18	.011	.09	<.1	4.4	.05	.03	<5	<.1	<.02	.4	5
0311-267	.32	16.02	2.87	93.1	24	66.7	21.9	459	5.62	43.3	2.0	<.2	12.0	7.3	.02	.36	.04	6	.11	.037	9.0	11.3	1.62	31.0	.001	1	.22	.013	.12	.1	4.7	.07	.04	<5	<.1	<.02	.5	<2
0311-268	.17	43.33	33.60	70.9	184	20.7	11.1	2097	2.11	16.8	.5	.6	1.8	1236.2	.33	3.75	.19	<2	21.80	.003	6.9	.6	.67	8.4	<.001	<1	.06	.008	.03	<.1	1.9	<.02	.40	<5	.3	.13	.2	2
0311-269	.43	55.35	33.73	33.6	102	62.6	20.6	319	4.47	60.9	2.0	.2	10.2	14.6	.04	.30	.34	3	.36	.015	3.0	6.0	.88	28.8	<.001	<1	.23	.028	.11	.1	2.2	.04	1.64	<5	.2	.03	.5	5
0311-270	.43	85.88	94.56	60.2	279	86.8	36.2	640	6.19	61.6	1.9	1.2	9.5	15.0	.06	.85	1.04	2	.56	.019	2.2	5.0	1.07	24.4	<.001	<1	.19	.025	.09	.2	2.3	.04	3.17	<5	.3	.10	.5	8
0311-271	.32	38.54	31.57	12.0	1226	63.4	19.5	573	4.75	707.0	2.0	22.1	9.6	102.9	.07	7.59	.14	3	2.10	.037	2.3	3.7	.75	19.5	.003	3	.21	.008	.12	.4	3.3	.11	4.22	5	.1	<.02	.5	49
0311-272	.40	61.00	7.22	131.7	73	87.4	49.8	164	5.16	197.3	1.9	<.2	16.7	8.1	.03	.55	.09	4	.12	.034	21.5	11.2	1.33	20.1	.001	1	.21	.015	.12	.3	3.7	.06	.01	<5	<.1	<.02	.6	<2
0312-273	.56	71.20	34.10	67.9	670	60.0	47.8	618	5.06	350.1	.8	2.7	6.6	120.2	.27	2.26	1.10	2	2.38	.010	1.6	3.1	1.06	17.1	<.001	1	.20	.011	.12	.3	3.4	.06	4.47	<5	.7	.11	.5	22
0312-274	.83	39.36	12.09	81.6	170	47.3	20.4	765	3.76	151.7	1.4	1.7	9.2	61.2	.24	1.03	.33	2	1.38	.013	2.1	4.0	1.43	18.4	<.001	1	.22	.013	.13	.3	3.6	.06	1.33	<5	.2	.03	.5	19
0312-275	1.01	56.26	22.40	50.8	1400	58.6	29.9	620	4.81	432.9	1.3	3.6	8.8	133.7	.23	5.37	.74	3	2.19	.009	1.6	3.2	.99	18.9	.002	2	.25	.014	.15	.3	3.8	.06	4.49	5	.5	.10	.5	19
RE 0312-275	1.08	59.30	22.45	49.2	1462	59.8	30.9	615	4.77	428.4	1.3	3.8	8.9	134.0	.21	5.69	.76	3	2.19	.009	1.7	3.3	.99	19.5	.001	3	.25	.014	.15	.3	3.9	.07	4.51	<5	.5	.09	.6	25
RRE 0312-275	1.06	59.69	21.19	48.3	1378	57.1	31.4	598	4.33	373.8	1.2	3.9	8.6	132.2	.21	5.52	.69	2	2.16	.010	1.6	2.7	.98	18.9	.001	1	.24	.013	.14	.3	3.6	.06	4.00	<5	.5	.08	.6	22
0312-276	.26	5.67	6.48	21.8	246	5.7	2.0	1903	1.83	26.6	.2	2.4	.3	184.7	.14	3.60	<.02	<2	4.40	<.001	<.5	2.0	1.67	3.1	.003	1	.03	.003	.01	.2	2.6	<.02	.08	<5	.1	.02	.2	<2
0312-277	.63	60.13	20.10	39.9	1863	58.4	26.5	627	4.55	473.5	1.2	4.5	9.2	158.7	.21	7.74	.52	2	2.32	.006	1.7	2.9	1.06	16.7	.001	1	.22	.012	.13	.2	4.0	.06	4.37	5	.5	.06	.5	24
0312-278	.43	64.08	21.91	39.3	1887	57.7	23.8	767	4.42	547.3	1.3	6.6	10.0	149.3	.19	8.10	.54	2	2.52	.011	1.7	3.5	1.10	18.1	.002	<1	.23	.012	.14	.4	4.1	.06	3.82	<5	.2	.06	.5	35
0312-279	.09	6.13	34.98	6.0	231	2.1	1.1	50	.26	7.6	<.1	1.1	.1	1.5	.03	.63	.10	<2	.02	<.001	<.5	1.8	.01	1.7	.001	<1	.02	.002	.01	<.1	.1	<.02	.04	<5	<.1	<.02	<.1	13
0312-280	.61	37.16	16.97	41.0	709	47.8	16.8	645	3.90	338.1	1.4	5.7	9.5	109.7	.20	3.37	.43	2	1.89	.014	1.8	3.4	1.01	19.4	.002	1	.25	.014	.14	.3	3.8	.06	3.23	8	.2	.04	.6	24
0312-281	3.72	321.55	297.48	52.9	752	104.1	74.6	740	6.72	57.0	1.4	6.1	7.3	7.4	.02	1.06	6.44	6	.12	.009	1.2	8.8	.85	15.1	<.001	<1	.54	.021	.07	.1	2.4	.04	3.99	<5	1.4	.76	1.5	58
0312-282	6.71	300.88	188.85	117.9	579	156.8	194.1	725	7.99	189.3	1.9	5.7	10.3	8.5	.02	1.18	6.52	14	.07	.014	1.8	27.3	1.63	18.2	<.001	<1	1.87	.028	.09	.3	3.4	.06	4.01	<5	1.3	.76	5.6	92
0312-283	.98	49.70	11.18	120.8	46	56.6	24.5	449	4.18	34.1	1.7	.4	11.7	9.6	.06	.23	.39	4	.19	.011	5.3	4.4	1.38	19.8	.003	<1	.24	.028	.10	<.1	3.6	.04	.58	<5	.1	.06	.5	10
0312-284	.53	26.23	15.92	16.6	183	24.8	15.2	1037	3.51	68.1	2.4	9.7	10.1	54.5	.06	.12	.61	2	2.47	.017	1.5	2.8	.85	25.1	.003	1	.28	.026	.13	.3	1.6	.05	2.39	<5	.3	.06	.6	25
0312-285	.32	58.78	16.92	40.3	690	54.0	19.0	1011	4.31	231.9	1.6	3.5	7.0	94.2	.12	7.20	1.33	2	2.75	.019	1.4	1.8	1.02	20.8	<.001	1	.24	.015	.13	.3	3.2	.06	3.43	<5	.2	.11	.5	10
0312-286	.19	6.32	6.11	13.7	74	3.1	1.0	831	1.51	40.9	.1	10.1	.5	102.1	.06	.94	.05	<2	2.48	.006	.5	2.5	.91	3.0	<.001	1	.05	.004	.02	.2	1.2	<.02	.28	<5	<.1	<.02	.1	12
0312-287	.31	70.04	21.35	22.3	385	74.0	22.6	803	4.72	358.1	2.0	4.9	8.6	70.1	.07	4.10	.82	2	2.26	.014	2.9	2.9	.80	23.3	.002	2	.27	.017	.15	.3	2.3	.06	4.00	<5	.3	.09	.6	19
0312-288	.37	83.54	18.57	20.6	664	70.9	17.2	805	3.93	357.2	2.1	5.1	9.0	94.0	.06	9.99	.82	2	2.55	.015	1.6	2.4	.95	18.6	.004	1	.23	.016	.12	.3	2.8	.06	2.94	5	.3	.07	.5	23
0312-289	.40	83.62	14.73	58.1	376	48.4	21.0	784	4.53	147.7	1.9	3.0	8.8	67.4	.09	3.44	1.22	2	2.39	.019	1.7	3.1	1.07	24.1	.003	1	.27	.021	.14	.2	3.1	.06	2.80	<5	.3	.09	.6	9
STANDARD DS5/AU-R	12.41	138.08	24.18	129.9	275	23.7	11.7	746	2.86	16.4	6.2	40.0	2.7	46.8	5.61	3.40	6.03	58	.76	.090	11.8	186.8	.64	142.4	.090	16	1.98	.034	.13	4.6	3.3	.97	.04	174	4.7	.83	6.5	492

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30.00 GRAM SAMPLE ANALYSIS BY FA/ICP.
- SAMPLE TYPE: CORE R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 18 2003 DATE REPORT MAILED: Sept 2/03 SIGNED BY.........D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data___ FA ____

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0312-290	.40	30.69	6.31	13.2	118	59.6	19.0	273	3.72	292.2	2.4	4.5	11.6	65.3	.02	.47	.24	<2	.86	.021	3.1	3.9	.62	24.8	.001	5	.25	.019	.15	.3	2.7	.07	2.96	<5	.1	.04	.6	18
0312-291	.10	85.92	51.18	45.4	1420	12.1	4.6	1600	8.07	1453.3	.1	754.9	.2	333.1	.30	2.87	2.80	<2	5.59	.001	<.5	1.2	2.84	1.4	.003	1	.02	.002	.01	<.1	2.4	<.02	6.60	<5	.1	.19	.2	803
STANDARD DS5/AU-R	13.01	145.33	25.54	139.5	290	24.8	12.6	767	2.91	17.2	6.3	40.9	2.7	49.4	5.67	3.60	6.38	59	.71	.090	12.2	189.0	.67	137.2	.095	17	2.05	.032	.13	4.9	3.3	1.03	.05	171	4.5	.86	6.3	495

Sample type: CORE R150 60C.

Data ___ FA ___

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Jasper Mining Corporation File # A303493 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Au**
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb
S1	.10	.88	1.21	7.6	8	.7	.1	6	.07	.2	<.1	<.2	<.1	2.6	.04	.27	<.02	<2	.11	.001	<.5	.6	.01	4.6	<.001	2	.02	.477	.01	<.1	<.1	<.02	<.01	8	<.1	<.02	<.1	<2
0311-258	.75	24.05	18.96	83.1	507	17.1	6.5	2275	6.17	27.6	.4	.6	2.5	425.7	.49	5.24	.35	2	16.86	.037	2.1	1.2	3.33	13.9	.004	1	.10	.012	.05	.1	3.6	.02	.52	7	.1	.06	.3	3
0311-259	.95	5.77	102.97	22.3	713	34.3	16.6	2207	5.66	1081.7	.9	201.7	3.1	79.2	.13	1.22	.15	2	3.81	.006	.8	1.9	1.39	18.8	.002	1	.14	.015	.08	.3	1.9	.04	4.52	<5	.1	.04	.4	430
0311-260	2.64	16.35	66.81	35.9	905	56.2	26.4	1627	4.84	462.8	1.1	11.2	4.9	144.1	.27	2.84	.51	<2	5.59	.020	1.2	2.2	1.10	19.1	.001	1	.17	.014	.09	.3	2.1	.04	3.52	8	.5	.06	.4	152
0311-261	1.55	31.89	23.56	30.4	482	33.3	18.3	995	2.49	74.6	1.1	.9	4.5	162.2	.22	3.02	.31	<2	6.42	.021	1.5	2.1	.96	15.4	<.001	1	.12	.011	.07	.2	1.7	.03	.90	<5	.2	.05	.3	13
0311-262	2.69	38.67	25.75	55.6	348	57.1	30.0	2135	4.87	122.3	1.1	<.2	4.3	200.6	.32	2.42	.44	2	8.67	.011	.9	1.9	2.44	18.5	<.001	1	.14	.012	.08	.2	2.4	.03	1.00	<5	.3	.06	.3	9
0311-263	.38	49.08	12.78	92.8	76	60.7	22.9	381	4.83	31.6	1.8	.2	11.3	8.4	.03	.22	.17	5	.18	.036	9.3	11.8	1.44	27.1	<.001	1	.21	.015	.11	<.1	3.9	.05	.07	<5	<.1	.03	.5	3
0311-264	.21	26.42	49.23	101.9	216	28.8	10.4	665	4.57	13.6	.9	<.2	6.0	4.9	.03	.45	.46	4	.14	.025	1.4	5.1	1.51	14.9	<.001	1	.11	.009	.06	<.1	2.4	.03	.03	<5	<.1	.02	.3	2
0311-265	.31	43.67	5.48	97.6	38	66.4	22.5	414	5.34	42.6	2.4	<.2	13.0	14.0	.02	.43	.07	6	.32	.128	7.4	12.5	1.56	24.2	.002	2	.22	.013	.10	<.1	4.4	.06	.05	7	<.1	<.02	.6	5
0311-266	.28	35.15	9.83	75.7	58	58.8	16.7	441	5.30	29.6	1.6	<.2	11.4	6.8	.02	.25	.13	5	.12	.035	8.9	10.3	1.54	25.2	<.001	<1	.18	.011	.09	<.1	4.4	.05	.03	<5	<.1	<.02	.4	5
0311-267	.32	16.02	2.87	93.1	24	66.7	21.9	459	5.62	43.3	2.0	<.2	12.0	7.3	.02	.36	.04	6	.11	.037	9.0	11.3	1.62	31.0	.001	1	.22	.013	.12	.1	4.7	.07	.04	<5	<.1	<.02	.5	<2
0311-268	.17	43.33	33.60	70.9	184	20.7	11.1	2097	2.11	16.8	.5	.6	1.8	1236.2	.33	3.75	.19	<2	21.80	003	6.9	.6	.67	8.4	<.001	<1	.06	.008	.03	<.1	1.9	<.02	.40	<5	.3	.13	.2	2
0311-269	.43	55.35	33.73	33.6	102	62.6	20.6	319	4.47	60.9	2.0	.2	10.2	14.6	.04	.30	.34	3	.36	.015	3.0	6.0	.88	28.8	<.001	<1	.23	.028	.11	.1	2.2	.04	1.64	<5	.2	.03	.5	5
0311-270	.43	85.88	94.56	60.2	279	86.8	36.2	640	6.19	61.6	1.9	1.2	9.5	15.0	.06	.85	1.04	2	.56	.019	2.2	5.0	1.07	24.4	<.001	<1	.19	.025	.09	.2	2.3	.04	3.17	<5	.3	.10	.5	8
0311-271	.32	38.54	31.57	12.0	1226	63.4	19.5	573	4.75	707.0	2.0	22.1	9.6	102.9	.07	7.59	.14	3	2.10	037	2.3	3.7	.75	19.5	.003	3	.21	.008	.12	.4	3.3	.11	4.22	5	.1	<.02	.5	49
0311-272	.40	61.00	7.22	131.7	73	87.4	49.8	164	5.16	197.3	1.9	<.2	16.7	8.1	.03	.55	.09	4	.12	.034	21.5	11.2	1.33	20.1	.001	1	.21	.015	.12	.3	3.7	.06	.01	<5	<.1	<.02	.6	<2
0312-273	.56	71.20	34.10	67.9	670	60.0	47.8	618	5.06	350.1	.8	2.7	6.6	120.2	.27	2.26	1.10	2	2.38	.010	1.6	3.1	1.06	17.1	<.001	1	.20	.011	.12	.3	3.4	.06	4.47	<5	.7	.11	.5	22
0312-274	.83	39.36	12.09	81.6	170	47.3	20.4	765	3.76	151.7	1.4	1.7	9.2	61.2	.24	1.03	.33	2	1.38	.013	2.1	4.0	1.43	18.4	<.001	1	.22	.013	.13	.3	3.6	.06	1.33	<5	.2	.03	.5	19
0312-275	1.01	56.26	22.40	50.8	1400	58.6	29.9	620	4.81	432.9	1.3	3.6	8.8	133.7	.23	5.37	.74	3	2.19	.009	1.6	3.2	.99	18.9	.002	2	.25	.014	.15	.3	3.8	.06	4.49	5	.5	.10	.5	19
RE 0312-275	1.08	59.30	22.45	49.2	1462	59.8	30.9	615	4.77	428.4	1.3	3.8	8.9	134.0	.21	5.69	.76	3	2.19	.009	1.7	3.3	.99	19.5	.001	3	.25	.014	.15	.3	3.9	.07	4.51	<5	.5	.09	.6	25
RRE 0312-275	1.06	59.69	21.19	48.3	1378	57.1	31.4	598	4.33	373.8	1.2	3.9	8.6	132.2	.21	5.52	.69	2	2.16	010	1.6	2.7	.98	18.9	.001	1	.24	.013	.14	.3	3.6	06	4.00	<5	.5	.08	.6	22
0312-276	.26	5.67	6.48	21.8	246	5.7	2.0	1903	1.83	26.6	.2	2.4	.3	184.7	.14	3.60	<.02	<2	4.40	<.001	<.5	2.0	1.67	3.1	.003	1	.03	.003	.01	.2	2.6	<.02	.08	<5	.1	.02	.2	<2
0312-277	.63	60.13	20.10	39.9	1863	58.4	26.5	627	4.55	473.5	1.2	4.5	9.2	158.7	.21	7.74	.52	2	2.32	.006	1.7	2.9	1.06	16.7	.001	1	.22	.012	.13	.2	4.0	.06	4.37	5	.5	.06	.5	24
0312-278	.43	64.08	21.91	39.3	1887	57.7	23.8	767	4.42	547.3	1.3	6.6	10.0	149.3	.19	8.10	.54	2	2.52	.011	1.7	3.5	1.10	18.1	.002	<1	.23	.012	.14	.4	4.1	.06	3.82	<5	.2	.06	.5	35
0312-279	.09	6.13	34.98	6.0	231	2.1	1.1	50	.26	7.6	<.1	1.1	.1	1.5	.03	.63	.10	<2	.02	<.001	<.5	1.8	.01	1.7	.001	<1	.02	.002	.01	<.1	.1	<.02	.04	<5	<.1	<.02	<.1	13
0312-280	.61	37.16	16.97	41.0	709	47.8	16.8	645	3.90	338.1	1.4	5.7	9.5	109.7	.20	3.37	.43	2	1.89	.014	1.8	3.4	1.01	19.4	.002	1	.25	.014	.14	.3	3.8	.06	3.23	8	.2	.04	.6	24
0312-281	3.72	321.55	297.48	52.9	752	104.1	74.6	740	6.72	57.0	1.4	6.1	7.3	7.4	.02	1.06	6.44	6	.12	.009	1.2	8.8	.85	15.1	<.001	<1	.54	.021	.07	.1	2.4	.04	3.99	<5	1.4	.76	1.5	58
0312-282	6.71	300.88	188.85	117.9	579	156.8	194.1	725	7.99	189.3	1.9	5.7	10.3	8.5	.02	1.18	6.52	14	.07	.014	1.8	27.3	1.63	18.2	<.001	<1	1.87	.028	.09	.3	3.4	.06	4.01	<5	1.3	.76	5.6	92
0312-283	.98	49.70	11.18	120.8	46	56.6	24.5	449	4.18	34.1	1.7	.4	11.7	9.6	.06	.23	.39	4	.19	.011	5.3	4.4	1.38	19.8	.003	<1	.24	.028	.10	<.1	3.6	.04	.58	<5	.1	.06	.5	10
0312-284	.53	26.23	15.92	16.6	183	24.8	15.2	1037	3.51	68.1	2.4	9.7	10.1	54.5	.06	.12	.61	2	2.47	.017	1.5	2.8	.85	25.1	.003	1	.28	.026	.13	.3	1.6	.05	2.39	<5	.3	.06	.6	25
0312-285	.32	58.78	16.92	40.3	690	54.0	19.0	1011	4.31	231.9	1.6	3.5	7.0	94.2	.12	7.20	1.33	2	2.75	.019	1.4	1.8	1.02	20.8	<.001	1	.24	.015	.13	.3	3.2	.06	3.43	<5	.2	.11	.5	10
0312-286	.19	6.32	6.11	13.7	74	3.1	1.0	831	1.51	40.9	.1	10.1	.5	102.1	.06	.94	.05	<2	2.48	.006	.5	2.5	.91	3.0	<.001	1	.05	.004	.02	.2	1.2	<.02	.28	<5	<.1	<.02	.1	12
0312-287	.31	70.04	21.35	22.3	385	74.0	22.6	803	4.72	358.1	2.0	4.9	8.6	70.1	.07	4.10	.82	2	2.26	.014	2.9	2.9	.80	23.3	.002	2	.27	.017	.15	.3	2.3	.06	4.00	<5	.3	.09	.6	19
0312-288	.37	83.54	18.57	20.6	664	70.9	17.2	805	3.93	357.2	2.1	5.1	9.0	94.0	.06	9.99	.82	2	2.55	.015	1.6	2.4	.95	18.6	.004	1	.23	.016	.12	.3	2.8	.06	2.94	5	.3	.07	.5	23
0312-289	.40	83.62	14.73	58.1	376	48.4	21.0	784	4.53	147.7	1.9	3.0	8.8	67.4	.09	3.44	1.22	2	2.39	.019	1.7	3.1	1.07	24.1	.003	1	.27	.021	.14	.2	3.1	.06	2.80	<5	.3	.09	.6	9
STANDARD DS5/AU-R	12.41	138.08	24.18	129.9	275	23.7	11.7	746	2.86	16.4	6.2	40.0	2.7	46.8	5.61	3.40	6.03	58	.76	.090	11.8	186.8	.64	142.4	.090	16	1.98	.034	.13	4.6	3.3	.97	.04	174	4.7	.83	6.5	492

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30.00 GRAM SAMPLE ANALYSIS BY FA/ICP.
- SAMPLE TYPE: CORE R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 18 2003 DATE REPORT MAILED: Sept 2/03 SIGNED BY..........D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ___ FA ___

ACME ANALYTICAL

Jasper Mining Corporation FILE # A303493

ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm
0312-290	.40	30.69	6.31	13.2	118	59.6	19.0	273	3.72	292.2	2.4	4.5	11.6	65.3	.02	.47	.24	<2
0312-291	.10	85.92	51.18	45.4	1420	12.1	4.6	1600	8.07	1453.3	.1	754.9	.2	333.1	.30	2.87	2.80	<2
STANDARD DS5/AU-R	13.01	145.33	25.54	139.5	290	24.8	12.6	767	2.91	17.2	6.3	40.9	2.7	49.4	5.67	3.60	6.38	59

SAMPLE#	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0312-290	.86	.021	3.1	3.9	.62	24.8	.001	5	.25	.019	.15	.3	2.7	.07	2.96	<5	.1	.04	.6	18
0312-291	5.59	.001	<.5	1.2	2.84	1.4	.003	1	.02	.002	.01	<.1	2.4	<.02	6.60	<5	.1	.19	.2	803
STANDARD DS5/AU-R	.71	.090	12.2	189.0	.67	137.2	.095	17	2.05	.032	.13	4.9	3.3	1.03	.05	171	4.5	.86	6.3	495

Sample type: CORE R150 60C.

Data ___ FA ___

ACME AN 'TICAL LABORATORIES LTD. 852 E. HASTINGS ST. NCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6 253-1716
(ISC '02 Accredited Co.)

GEOCHEMICAL ANA 3IS CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A303783 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm
S1	.07	.65	.56	1.3	18	1.0	.1	3	.08	.2	<.1	.6	<.1	2.7	<.01	.11	<.02
0312-292	.42	53.92	4.46	39.2	175	71.8	20.8	417	4.55	236.1	1.9	2.3	9.9	39.0	.03	.29	.27
0312-293	.34	11.07	4.19	23.2	74	57.2	14.4	388	3.99	187.7	2.6	2.5	11.0	16.3	.02	.25	.32
0312-294	.25	1.81	2.75	23.3	47	3.1	.8	978	4.50	6.6	.1	.9	.8	248.7	.07	.23	.02
0312-295	.38	3.05	7.98	11.4	73	87.3	25.2	242	4.97	616.0	4.2	11.5	12.2	48.6	.05	.39	1.05
0312-296	.40	41.37	2.59	44.8	75	105.5	33.3	1011	6.97	225.1	2.1	.2	12.0	15.6	.02	.15	.16
0312-297	.33	56.82	6.12	39.2	177	69.6	21.9	384	4.92	169.3	1.8	.8	9.5	12.0	.02	.28	.52
0312-298	.19	2.27	1.63	82.7	39	25.4	3.9	1817	10.55	2.5	<.1	.5	.3	4.7	.03	.55	.04
0312-299	.33	10.16	2.10	53.1	66	38.7	14.1	885	5.51	59.8	1.7	<.2	10.4	14.2	.02	.32	.16
0312-300	.38	12.20	1.48	44.9	46	40.5	13.2	664	4.46	75.8	1.4	.5	8.4	14.5	.02	.12	.07
0312-301	.28	22.39	4.79	26.1	454	46.4	18.0	554	4.59	155.5	1.7	1.3	9.6	21.6	.02	1.27	1.44
0312-302	.33	30.86	3.20	123.4	191	44.9	16.5	377	4.13	116.9	1.8	.8	9.5	18.8	.15	5.94	.38
0312-303	.32	24.53	4.05	53.1	154	48.9	14.9	502	3.78	155.4	1.9	.9	10.8	61.4	.06	2.98	.19
0312-304	.38	25.44	4.40	33.8	147	50.7	15.7	727	4.70	124.9	1.7	1.2	10.5	43.3	.02	2.60	.20
0312-305	.16	8.84	1.24	15.3	328	9.6	4.7	559	1.90	106.2	.5	24.4	3.8	94.4	.04	2.67	<.02
0312-306	.44	10.07	3.12	26.9	173	45.8	17.0	948	4.04	254.7	2.6	3.5	14.2	83.5	.06	1.02	.21
0312-307	.41	25.68	13.30	37.1	738	70.3	20.9	998	5.46	478.2	2.2	9.6	11.1	121.1	.09	4.21	.50
0312-308	.30	9.63	3.19	28.4	50	52.3	18.0	1036	3.72	126.2	2.7	.8	15.0	61.8	.05	.75	.17
0312-309	.20	2.72	2.51	12.6	30	30.3	2.6	677	1.68	62.0	1.6	.2	8.9	66.2	.06	.27	.10
0312-310	.51	17.58	3.76	13.1	158	54.0	14.0	600	3.01	250.3	3.1	2.6	15.6	89.8	.05	1.81	.09
RE 0312-310	.55	17.87	3.88	11.9	160	53.7	14.6	597	2.98	251.0	3.1	2.5	15.8	89.0	.06	1.75	.09
RRE 0312-310	.51	17.67	3.67	12.1	155	55.7	14.9	609	2.96	251.5	3.3	1.5	16.3	91.1	.05	1.61	.08
0312-311	.30	3.98	4.96	6.5	117	13.0	6.9	35	1.77	241.3	.1	50.2	1.2	6.1	.05	.37	.16
0312-312	.46	22.24	9.44	14.5	361	48.6	17.4	528	3.23	252.1	2.9	7.2	15.7	113.6	.05	2.40	.33
0312-313	.25	8.69	17.98	17.6	212	35.5	11.0	731	4.00	158.1	2.4	2.8	13.6	127.3	.06	1.16	.42
0312-314	.13	2.15	5.85	6.4	64	22.3	2.6	360	1.92	93.8	.1	12.6	.4	53.9	.02	.83	.18
0312-315	.42	34.92	15.21	43.8	244	70.3	22.6	854	4.81	265.6	2.7	1.6	13.7	62.9	.09	2.54	.38
0312-316	.36	76.88	5.24	91.2	563	64.3	20.2	309	4.45	261.2	2.4	2.5	12.9	52.0	.23	8.97	.34
0312-317	.38	66.60	2.03	36.9	2173	9.8	2.1	621	2.12	145.4	<.1	21.7	.3	205.1	.30	34.74	.04
0312-318	.35	85.50	4.27	65.5	1225	46.6	14.5	543	4.21	269.8	2.4	3.2	11.9	92.2	.18	10.40	.27
0312-319	.35	41.10	3.73	96.2	222	60.8	18.3	548	5.27	139.4	1.8	.6	10.9	13.9	.14	.91	.34
0312-320	.09	4.96	1.03	121.1	57	19.0	4.6	861	11.21	26.9	<.1	1.7	.4	34.5	.03	.47	.06
0312-321	.65	54.61	4.31	36.5	364	59.1	25.2	731	5.09	306.6	1.4	2.3	10.6	84.5	.06	3.05	.25
0312-322	.41	29.49	2.03	19.1	90	55.4	19.5	681	3.84	158.2	1.3	.6	11.6	60.2	.03	.94	.16
0312-323	.35	56.87	3.03	27.8	156	64.6	20.0	777	4.83	262.1	2.0	16.9	12.7	63.4	.04	.32	.29
STANDARD DS5/AU-R	12.82	139.41	23.87	130.6	279	24.6	12.4	774	2.88	18.3	6.0	39.7	2.5	47.4	5.61	3.41	6.38

SAMPLE#	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
S1	<2	.11	<.001	<.5	1.3	.01	5.0	<.001	<1	.01	.492	.01	<.1	.1	<.02	.03	<5	.1	<.02	<.1	2
0312-292	4	.71	.034	3.6	7.4	1.22	24.4	<.001	3	.26	.025	.15	.2	3.7	.07	1.44	<5	.1	.02	.6	8
0312-293	3	.18	.021	2.6	6.0	.98	21.4	<.001	3	.25	.031	.13	.2	2.5	.05	1.05	<5	.2	.04	.6	9
0312-294	3	5.50	.003	.7	2.7	2.64	4.8	<.001	4	.05	.006	.02	.2	6.6	<.02	.02	5	<.1	.02	.1	2
0312-295	2	.62	.055	1.6	3.0	.51	20.5	<.001	11	.23	.018	.12	.3	2.3	.06	3.84	<5	.3	.08	.6	31
0312-296	4	.19	.059	3.3	10.8	2.05	22.5	<.001	3	.29	.033	.15	.2	4.6	.06	.19	<5	.1	.02	.7	2
0312-297	3	.11	.032	4.7	7.7	1.19	21.0	<.001	4	.24	.033	.13	.2	2.9	.04	1.19	5	.3	.03	.6	2
0312-298	5	.21	.031	<.5	2.5	3.17	2.5	<.001	<1	.02	.005	.01	.3	2.9	<.02	<.01	<5	<.1	<.02	.1	<2
0312-299	4	.11	.024	1.0	4.0	1.63	21.4	<.001	1	.21	.040	.09	.1	3.1	.03	<.01	<5	<.1	<.02	.5	<2
0312-300	3	.11	.017	2.0	4.8	1.26	23.2	<.001	3	.20	.032	.11	.1	3.2	.04	.03	<5	<.1	<.02	.5	3
0312-301	4	.23	.032	1.3	4.3	1.19	24.0	<.001	6	.26	.027	.14	.2	2.9	.07	.67	6	<.1	.06	.6	9
0312-302	3	.14	.040	4.4	5.4	1.12	22.3	<.001	4	.24	.024	.13	.2	3.0	.06	.34	7	.1	.06	.6	6
0312-303	3	.67	.033	2.1	4.8	1.01	24.4	<.001	3	.25	.029	.14	.3	3.1	.05	.89	5	<.1	.02	.6	5
0312-304	3	.82	.043	1.9	4.9	1.30	22.0	<.001	2	.24	.034	.12	.2	3.2	.04	.41	<5	.1	.03	.6	8
0312-305	2	2.10	.007	<.5	2.1	.91	10.9	<.001	3	.11	.012	.06	.1	1.8	.02	.24	<5	<.1	.02	.3	47
0312-306	3	1.97	.044	1.3	3.6	1.10	27.0	<.001	3	.27	.030	.15	.3	3.1	.06	1.64	<5	.1	.03	.7	22
0312-307	3	2.13	.090	1.8	4.2	1.03	24.8	<.001	1	.28	.026	.15	.3	3.6	.08	4.09	<5	.2	.04	.7	46
0312-308	3	1.75	.043	1.8	3.7	1.20	29.3	<.001	2	.29	.033	.16	.3	3.4	.06	.36	<5	.1	<.02	.7	2
0312-309	2	2.30	.045	7.7	3.2	.78	23.4	<.001	1	.23	.022	.12	.2	2.1	.04	.09	<5	<.1	<.02	.5	<2
0312-310	2	1.29	.042	2.7	3.2	.59	28.5	<.001	4	.27	.028	.15	.4	2.7	.05	2.03	<5	<.1	.02	.7	15
RE 0312-310	3	1.28	.043	2.7	3.5	.58	28.4	<.001	2	.28	.029	.16	.4	2.9	.06	2.13	<5	.1	.02	.7	15
RRE 0312-310	3	1.30	.043	2.8	3.4	.60	29.3	<.001	4	.28	.031	.16	.4	2.8	.06	2.12	<5	<.1	.02	.7	13
0312-311	<2	.06	.001	<.5	3.6	.03	4.4	<.001	9	.05	.005	.02	<.1	.3	<.02	1.61	<5	.1	.03	.2	58
0312-312	2	2.25	.027	1.8	3.3	.91	26.9	<.001	4	.26	.031	.13	.4	3.0	.06	2.22	<5	.2	.04	.6	25
0312-313	2	3.74	.039	.7	2.6	1.35	23.8	<.001	3	.24	.034	.13	.4	3.4	.06	2.01	<5	.2	.02	.6	18
0312-314	<2	1.58	.004	<.5	1.9	.57	4.1	<.001	2	.04	.005	.02	<.1	1.0	<.02	.75	<5	.1	<.02	.1	21
0312-315	2	1.29	.089	3.1	4.3	1.13	31.4	<.001	3	.33	.034	.16	.4	2.8	.06	1.74	<5	<.1	<.02	.8	22
0312-316	3	.51	.028	2.9	4.9	.82	24.7	<.001	3	.25	.020	.16	.3	3.7	.07	2.24	<5	.2	.07	.6	13
0312-317	<2	2.09	<.001	<.5	3.3	.93	2.3	<.001	1	.03	.003	.01	.1	1.5	<.02	1.13	<5	<.1	.03	.1	26
0312-318	2	1.05	.028	2.2	4.0	.91	22.8	<.001	2	.23	.017	.15	.3	3.9	.06	2.06	<5	.1	.04	.6	16
0312-319	3	.12	.033	3.4	6.0	1.33	23.6	<.001	2	.28	.030	.15	.2	3.7	.06	.73	<5	<.1	.02	.7	4
0312-320	3	.61	.009	<.5	1.8	3.98	2.7	<.001	1	.02	.003	.01	<.1	4.6	<.02	.15	<5	<.1	<.02	.1	2
0312-321	3	1.10	.118	2.2	5.3	1.07	29.8	<.001	4	.34	.028	.17	.3	3.7	.07	2.53	<5	<.1	.03	.8	17
0312-322	3	1.08	.067	1.7	4.5	.96	27.1	<.001	3	.29	.031	.15	.3	3.1	.06	1.14	<5	.1	<.02	.8	6
0312-323	4	1.13	.045	3.3	6.1	1.23	29.2	<.001	3	.30	.031	.16	.3	3.7	.06	1.21	<5	.1	.03	.8	62
STANDARD DS5/AU-R	58	.72	.091	11.6	187.8	.65	136.5	.091	15	2.05	.034	.13	4.7	3.3	1.02	.03	185	5.0	.79	6.3	485

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30 GM SAMPLE ANALYSIS BY FA/ICP.
- SAMPLE TYPE: CORE R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 25 2003 DATE REPORT MAILED: Sept 15/03 SIGNED BY........D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data FA

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Au**
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb
0312-324	.20	27.76	3.72	39.2	118	52.5	18.1	504	4.29	150.7	1.7	.8	11.0	35.8	.04	.79	.17	4	.91	.036	3.5	5.4	1.17	21.2	.001	2	.26	.027	.13	.2	3.8	.05	.32	9	.1	<.02	.6	4
0312-325	.41	22.69	2.95	14.7	114	27.7	6.6	489	2.48	100.0	.7	1.9	5.4	60.9	.04	.88	.15	3	1.62	.018	1.5	3.8	.69	19.4	<.001	2	.21	.020	.11	.2	2.0	.04	.80	<5	.1	.02	.5	6
0312-326	.28	16.08	3.70	14.9	137	24.2	2.5	395	1.83	41.9	.9	.7	6.0	55.9	.04	1.36	.09	2	1.93	.007	1.4	3.7	.69	18.2	<.001	2	.19	.017	.10	.1	2.0	.03	.13	<5	<.1	<.02	.4	<2
0312-327	.17	25.74	13.33	64.0	1687	9.4	2.7	3915	11.68	925.9	.3	103.7	1.5	276.9	.23	10.35	.27	3	11.63	.049	.5	3.0	4.81	8.9	<.001	1	.11	.007	.05	.2	10.9	.02	4.50	<5	.2	.08	.3	201
0312-328	.10	28.33	5.63	160.0	1753	8.7	1.8	4343	11.72	698.9	.1	105.5	.6	343.9	.70	14.66	.09	4	14.80	.008	<.5	2.0	5.75	3.9	<.001	<1	.04	.004	.02	.1	10.8	<.02	3.44	<5	<.1	.04	.1	149
0312-329	.34	4.07	1.49	5.2	177	11.4	5.8	366	1.21	137.7	2.4	3.5	13.0	44.6	.02	.78	.03	3	1.03	.014	<.5	2.2	.40	29.2	<.001	3	.34	.024	.17	.3	2.4	.06	.72	<5	<.1	<.02	.6	24
0312-330	.22	81.23	30.41	23.5	4176	13.7	4.7	1195	3.26	258.7	.5	16.5	3.8	118.3	.19	20.61	.34	2	3.25	.006	1.2	3.7	1.42	14.8	<.001	3	.18	.013	.09	.2	3.1	.04	1.77	<5	.1	.02	.4	29
0312-331	.41	4.37	3.94	9.6	184	32.6	10.9	994	3.50	353.9	3.7	3.6	17.3	91.2	.04	.86	.17	3	2.38	.034	<.5	2.5	1.04	27.0	<.001	2	.33	.018	.15	.3	3.7	.06	2.52	<5	<.1	<.02	.6	33
0312-332	.43	54.31	7.57	38.7	616	65.8	18.3	799	4.72	233.5	2.0	2.5	10.7	55.6	.08	9.04	.37	2	1.23	.035	4.3	3.3	1.14	27.2	<.001	2	.30	.021	.16	.3	3.0	.06	1.54	<5	.1	.03	.7	13
0312-333	.58	88.19	21.78	50.6	3879	62.7	18.7	730	3.36	233.2	2.7	2.7	15.3	59.6	.25	22.45	.27	2	1.72	.046	2.3	3.3	.85	29.6	<.001	2	.34	.026	.16	.4	2.5	.06	1.18	5	<.1	<.02	.7	14
0312-334	.10	385.09	8.42	110.0	16023	17.0	3.6	4624	12.90	1070.4	.2	53.4	.8	403.7	.84	178.36	.21	2	12.87	.002	<.5	1.8	5.61	5.5	<.001	<1	.06	.004	.03	.1	9.7	.02	6.29	16	.1	.08	.2	108
0312-335	.53	77.35	2.93	16.7	3599	44.0	12.8	157	.96	190.8	2.7	2.0	17.5	35.5	.14	20.22	.25	2	.68	.086	2.2	3.4	.16	36.8	<.001	3	.40	.023	.21	.4	1.2	.08	.57	<5	<.1	<.02	.8	10
0312-336	.29	19.77	6.00	54.5	151	41.6	9.1	1048	4.66	145.2	.8	1.3	4.8	275.3	.16	.29	.25	<2	6.11	.037	1.1	2.2	2.45	22.8	<.001	1	.25	.020	.12	.2	3.3	.04	1.14	<5	.2	.04	.5	13
0312-337	.34	41.86	2.67	39.1	175	61.8	19.4	769	4.41	214.0	2.3	1.3	11.9	55.8	.06	.21	.11	2	.82	.054	4.5	3.8	1.13	29.0	<.001	2	.35	.031	.16	.3	2.5	.05	.84	<5	.1	.02	.8	12
0312-338	.27	61.48	5.59	66.2	129	53.4	18.0	510	4.38	98.7	2.6	.6	13.8	24.8	.02	.14	.21	4	.43	.038	3.6	9.0	1.25	23.6	<.001	<1	.43	.036	.11	.1	3.2	.04	.25	<5	.1	<.02	1.1	3
0312-339	.23	118.84	7.98	13.2	1185	24.5	24.0	464	1.59	38.3	.2	6.3	1.8	20.0	.03	13.55	4.84	<2	.89	.010	16.4	3.1	.49	4.9	<.001	<1	.04	.005	.02	<.1	.9	<.02	.44	<5	.4	.22	.1	9
0312-340	.34	54.71	5.61	135.5	121	69.1	21.1	246	5.44	89.2	2.0	.9	12.7	16.9	.02	.19	.18	9	.15	.037	8.4	20.2	1.55	21.8	<.001	1	.78	.034	.10	.1	4.1	.05	.07	<5	<.1	.02	2.3	4
RE 0312-340	.33	53.05	5.91	138.7	114	70.7	22.2	238	5.30	88.5	2.0	.8	12.6	16.2	.02	.19	.18	9	.14	.038	7.7	20.1	1.50	21.7	<.001	<1	.74	.034	.10	.1	4.0	.05	.08	<5	<.1	.02	2.2	3
RRE 0312-340	.41	54.97	6.24	145.8	100	70.9	22.6	241	5.39	88.6	2.1	.6	13.4	16.9	.02	.20	.17	10	.14	.040	8.6	20.3	1.50	23.2	<.001	1	.76	.037	.11	.2	4.1	.05	.12	<5	<.1	<.02	2.4	8
0312-341	.31	53.46	6.38	37.8	120	25.8	7.2	723	5.89	216.0	.5	34.7	3.9	112.4	.05	.31	.10	3	1.82	.006	.8	3.5	2.15	11.1	<.001	1	.14	.010	.06	.1	3.2	.03	1.17	<5	.1	.02	.3	70
0312-342	.35	28.63	23.13	70.8	116	44.0	12.7	456	3.65	30.6	1.4	1.1	7.8	18.0	.02	.32	.29	12	.27	.032	9.2	34.8	1.11	18.0	.001	<1	1.70	.027	.08	<.1	2.3	.02	.06	5	.1	.03	4.8	<2
0312-343	.35	34.97	8.65	135.7	38	79.9	25.6	451	6.31	52.5	1.7	<.2	15.8	16.9	.01	.15	.11	23	.19	.059	5.6	69.0	2.00	21.9	.001	<1	3.34	.033	.09	.1	3.1	.02	.03	<5	<.1	<.02	9.7	2
0312-344	.30	281.38	11.06	5.3	164	61.6	8.2	492	1.03	87.6	.4	4.5	1.6	19.0	.02	3.57	.19	<2	.35	.003	16.4	3.5	.22	2.5	<.001	1	.08	.005	.01	<.1	.4	<.02	.19	5	.2	.03	.2	8
0312-345	.28	72.34	9.15	114.5	72	84.3	23.7	343	5.18	62.9	2.0	1.7	11.4	17.5	.01	.50	.12	19	.16	.048	13.4	55.7	1.59	20.8	.001	<1	2.68	.033	.09	<.1	2.8	.02	.15	<5	<.1	<.02	8.0	3
0312-346	.37	39.38	41.43	111.3	125	65.9	20.2	493	5.46	44.4	1.9	.2	10.3	22.5	.02	.25	.54	19	.35	.072	15.0	47.2	1.77	20.2	.001	<1	2.56	.035	.10	<.1	2.9	.02	.05	<5	.1	.02	7.8	3
0312-347	.25	27.74	15.52	86.8	65	52.9	14.6	376	4.09	28.4	1.5	<.2	10.1	17.5	.02	.14	.18	15	.23	.039	8.4	41.9	1.27	17.3	.001	<1	2.11	.030	.08	<.1	2.5	.02	.02	8	<.1	<.02	6.4	3
0312-348	.35	23.53	22.22	92.7	90	56.5	15.9	414	4.57	31.0	1.6	.6	9.7	19.7	.02	.13	.30	17	.27	.052	6.2	44.6	1.42	19.9	.001	<1	2.33	.034	.09	.1	2.8	.02	.09	<5	.1	<.02	6.8	3
0312-349	.17	1.98	1.87	82.3	11	31.6	8.2	2543	10.39	10.1	.5	.3	2.8	15.3	.05	.09	.04	5	.29	.023	1.2	7.0	3.00	10.0	.001	<1	.36	.020	.04	<.1	5.6	.02	.04	5	<.1	<.02	1.1	4
0312-350	.55	95.42	7.71	131.8	65	82.2	22.7	389	5.40	58.3	2.4	<.2	12.8	31.9	.02	.13	.23	21	.37	.087	5.4	43.4	1.66	22.4	.001	<1	2.77	.043	.09	<.1	3.0	.02	.30	<5	.1	.02	8.6	5
0312-351	.26	38.89	14.78	100.9	120	58.2	16.9	466	4.75	36.8	1.5	.6	8.1	24.4	.02	.20	.35	15	.33	.064	5.2	35.9	1.45	18.3	.001	<1	2.13	.029	.08	.1	2.5	.02	.12	<5	<.1	.02	6.3	<2
0312-352	.47	55.38	7.81	140.8	52	82.6	23.6	215	5.45	59.0	3.0	.2	15.4	23.3	.01	.15	.12	22	.20	.067	8.2	62.8	1.70	24.8	.001	1	2.96	.043	.11	<.1	2.9	.03	.06	6	<.1	.02	8.9	3
0312-353	.30	54.01	21.47	93.1	115	61.4	22.3	326	4.01	61.1	1.8	.4	9.1	30.8	.02	.47	.86	15	.42	.061	5.3	39.6	1.19	20.5	.001	<1	2.02	.038	.09	<.1	2.3	.02	.21	<5	.1	.07	5.9	3
0312-354	.46	41.40	12.75	90.9	71	39.7	11.8	1001	4.05	29.3	1.6	.5	8.1	61.8	.17	.14	.22	11	1.41	.024	1.9	30.0	1.38	18.8	.001	<1	1.56	.030	.08	<.1	2.5	.02	.28	<5	.1	.02	4.7	4
0312-355	.36	19.66	10.64	131.6	51	55.5	15.5	1378	6.60	28.0	1.5	.2	8.1	69.5	.04	.04	.18	17	.94	.048	1.5	26.3	2.18	17.1	.001	<1	2.33	.022	.08	<.1	5.8	.02	.02	<5	<.1	.04	7.0	2
STANDARD DS5/AU-R	12.53	139.11	24.89	130.0	274	24.4	11.8	771	2.93	17.8	5.8	44.0	2.6	48.1	5.42	3.56	6.24	58	.74	.091	12.2	186.4	.66	135.0	.093	16	2.08	.034	.13	4.7	3.4	1.03	.03	183	4.9	.83	6.3	495

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ___ FA ___

ACME ANALYTICAL

Jasper Mining Corporation PROJECT Ruth-Vermont FILE # A303783

ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0312-356	.34	87.51	26.93	91.1	191	52.3	17.2	591	4.06	43.2	1.9	<.2	9.6	47.1	.03	.12	.52	11	.57	.037	2.1	29.6	1.30	17.4	.001	1	1.59	.026	.08	<.1	3.2	.03	.13	<5	.1	.06	4.7	<2
0312-357	.39	32.60	52.62	192.2	254	57.2	20.0	570	5.16	63.9	1.8	.2	7.7	18.1	.28	.07	.82	6	.15	.048	4.6	9.8	1.54	21.0	<.001	1	.36	.039	.10	<.1	4.0	.03	.09	<5	.2	.04	1.0	3
0312-358	.19	3.00	.59	17.7	18	8.1	1.6	357	1.84	3.9	.2	.3	.7	4.7	<.01	.11	<.02	<2	.05	.012	<.5	2.7	.68	4.9	<.001	1	.07	.009	.02	<.1	1.2	<.02	.02	<5	<.1	<.02	.2	<2
0312-359	.58	32.25	9.30	85.9	107	71.5	25.1	448	4.72	125.4	2.4	2.3	10.8	21.1	.01	.25	.33	5	.13	.049	4.9	10.0	1.34	29.7	<.001	1	.49	.041	.14	.1	4.5	.04	.19	<5	.1	.05	1.4	15
0312-360	.44	30.25	33.82	114.8	262	62.8	20.5	438	5.42	85.7	1.6	.4	9.4	35.5	.01	.18	.90	7	.33	.115	3.4	10.2	1.56	23.5	<.001	1	.40	.035	.11	.1	4.0	.04	.07	<5	.2	.06	1.0	<2
0312-361	.59	67.90	1.59	69.6	83	65.9	24.2	602	5.03	119.4	1.5	.3	8.8	68.1	.01	.80	.06	6	.94	.400	10.8	10.2	1.43	35.9	<.001	2	.53	.047	.17	.2	4.6	.05	.01	<5	.1	.02	1.3	2
0312-362	.14	8.83	1.07	38.3	24	10.0	2.3	1748	3.41	4.0	.1	<.2	.5	61.3	.03	.54	.02	2	1.58	.055	<.5	2.4	1.40	3.8	<.001	1	.06	.008	.02	<.1	2.9	<.02	.01	<5	<.1	<.02	.2	<2
0312-363	.43	75.66	3.16	89.9	98	62.5	22.5	553	4.51	92.8	2.2	.3	10.8	38.5	.01	.08	.14	6	.46	.089	4.3	11.7	1.27	26.0	<.001	1	.55	.037	.12	.1	3.6	.04	.26	<5	.1	.02	1.6	3
0312-364	.36	49.44	4.50	115.4	115	60.4	19.1	478	5.07	94.2	1.8	.4	9.1	19.5	.02	.21	.13	6	.13	.030	3.3	7.2	1.42	22.3	<.001	1	.52	.034	.10	.1	3.8	.03	.20	<5	.1	.02	1.5	4
0312-365	.46	45.09	3.03	74.6	78	64.4	24.5	302	3.86	130.1	2.2	<.2	10.9	21.1	.01	.09	.11	3	.08	.022	4.8	5.7	1.08	28.1	<.001	1	.33	.046	.13	.1	3.7	.04	.18	<5	<.1	<.02	.8	<2
0312-366	.30	15.43	3.26	32.0	43	21.0	9.0	805	3.20	39.3	1.9	.2	6.9	18.9	.01	.06	.06	3	.24	.055	1.0	4.9	.90	17.8	<.001	1	.20	.026	.09	<.1	2.2	.03	.15	<5	<.1	.02	.5	3
0312-367	.47	56.57	1.24	89.3	76	77.7	27.1	250	3.72	145.5	2.9	.2	13.5	20.0	.02	.28	.04	4	.05	.015	7.7	8.2	1.02	32.1	<.001	1	.37	.049	.14	.1	3.7	.04	.03	<5	<.1	.02	.9	<2
0312-368	.22	5.70	4.10	30.1	29	22.8	6.1	493	3.19	44.7	.8	.5	4.2	14.0	.01	.05	.04	2	.18	.009	.8	4.2	.86	13.1	<.001	5	.16	.021	.07	<.1	2.5	.02	.19	<5	<.1	<.02	.4	<2
0312-369	.40	62.69	14.59	95.0	222	65.9	25.6	367	4.86	323.0	2.7	45.7	12.8	22.8	.05	.07	.43	3	.16	.055	3.0	5.4	1.09	27.1	<.001	4	.29	.037	.13	.2	3.9	.04	1.06	<5	.1	.03	.8	184
0312-370	.32	36.32	11.57	100.3	144	58.0	20.2	580	4.82	122.8	2.2	1.0	11.0	22.9	.02	.08	.31	3	.24	.026	4.3	6.2	1.41	26.2	<.001	1	.25	.032	.12	.1	4.2	.04	.23	<5	.1	<.02	.6	<2
RE 0312-370	.35	35.21	8.26	103.2	112	55.0	22.4	580	4.83	126.5	2.1	.2	10.7	22.8	.02	.09	.22	3	.25	.026	4.3	6.1	1.41	25.8	<.001	1	.26	.030	.13	.1	4.4	.04	.23	<5	.1	.03	.6	<2
RRE 0312-370	.40	45.76	5.78	95.8	106	59.0	20.1	600	4.85	122.1	2.3	.3	11.3	23.9	.02	.10	.19	4	.24	.027	4.5	6.6	1.42	28.9	<.001	2	.31	.036	.15	.1	4.5	.05	.23	<5	.1	.02	.7	2
0312-371	.30	44.09	26.46	82.3	472	18.2	6.8	2783	8.03	69.8	2.1	.6	6.2	126.3	.15	.04	1.88	3	4.19	.008	1.5	3.7	2.67	16.9	<.001	1	.18	.036	.07	.1	6.5	.02	2.25	<5	.6	.10	.5	7
0312-372	.48	11.60	12.65	79.4	155	40.3	13.9	2433	5.04	82.5	1.3	.4	6.7	153.3	.08	.07	.32	4	2.20	.020	2.9	6.9	1.87	21.1	<.001	1	.20	.021	.11	<.1	6.2	.04	.18	<5	.1	.03	.5	5
0312-373	.43	20.65	7.31	100.4	129	68.2	24.0	501	5.24	145.3	2.1	<.2	10.4	21.6	.07	.07	.24	4	.19	.030	5.6	8.1	1.44	29.4	<.001	2	.28	.029	.15	.2	3.5	.05	.44	<5	.1	<.02	.7	<2
0312-374	.38	23.45	17.82	214.2	223	22.6	7.7	798	3.03	291.1	.8	74.8	4.4	96.6	.31	.76	.19	2	1.49	.019	1.5	3.8	.79	15.4	<.001	7	.16	.014	.08	<.1	2.8	.03	1.56	<5	.1	.03	.5	127
0312-375	.42	69.54	6.54	53.0	150	72.6	15.7	292	4.90	243.1	2.4	3.3	11.2	27.4	.03	.12	.26	3	.27	.028	3.7	6.7	.96	27.0	<.001	4	.26	.024	.16	.2	3.1	.06	2.10	<5	.2	.02	.7	7
0312-376	.43	41.37	6.31	131.6	102	66.8	22.8	403	5.67	140.1	2.4	.6	11.5	26.2	.09	.13	.09	5	.23	.064	5.7	8.3	1.56	30.2	<.001	2	.32	.032	.17	.1	3.4	.06	.27	<5	<.1	<.02	.8	3
STANDARD DS5/AU-R	12.75	142.35	23.77	138.8	278	25.0	12.4	773	2.92	19.4	6.0	39.8	2.7	47.7	5.43	3.77	6.05	58	.72	.093	12.0	183.6	.66	132.6	.092	19	2.06	.034	.13	4.6	3.5	1.04	.03	181	4.7	.88	6.6	478

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

ACME AN TICAL LABORATORIES LTD. 852 E. HASTINGS ST. NCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6 253-1716
(IS 002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A303783 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
S1	.07	.65	.56	1.3	18	1.0	.1	3	.08	2	<.1	.6	<.1	2.7	<.01	.11	<.02	<2	.11	<.001	<.5	1.3	.01	5.0	<.001	<1	.01	.492	.01	<.1	.1	<.02	.03	<5	.1	<.02	<.1	2
0312-292	.42	53.92	4.46	39.2	175	71.8	20.8	417	4.55	236.1	1.9	2.3	9.9	39.0	.03	.29	.27	4	.71	.034	3.6	7.4	1.22	24.4	<.001	3	.26	.025	.15	.2	3.7	.07	1.44	<5	.1	.02	.6	8
0312-293	.34	11.07	4.19	23.2	74	57.2	14.4	388	3.99	187.7	2.6	2.5	11.0	16.3	.02	.25	.32	3	.18	.021	2.6	6.0	.98	21.4	<.001	3	.25	.031	.13	.2	2.5	.05	1.05	<5	.2	.04	.6	9
0312-294	.25	1.81	2.75	23.3	47	3.1	.8	978	4.50	6.6	.1	.9	.8	248.7	.07	.23	.02	3	5.50	.003	.7	2.7	2.64	4.8	<.001	4	.05	.006	.02	.2	6.6	<.02	.02	5	<.1	.02	.1	2
0312-295	.38	3.05	7.98	11.4	73	87.3	25.2	242	4.97	616.0	4.2	11.5	12.2	48.6	.05	.39	1.05	2	.62	.055	1.6	3.0	.51	20.5	<.001	11	.23	.018	.12	.3	2.3	.06	3.84	<5	.3	.08	.6	31
0312-296	.40	41.37	2.59	44.8	75	105.5	33.3	1011	6.97	225.1	2.1	.2	12.0	15.6	.02	.15	.16	4	.19	.059	3.3	10.8	2.05	22.5	<.001	3	.29	.033	.15	.2	4.6	.06	.19	<5	.1	.02	.7	2
0312-297	.33	56.82	6.12	39.2	177	69.6	21.9	384	4.92	169.3	1.8	.8	9.5	12.0	.02	.28	.52	3	.11	.032	4.7	7.7	1.19	21.0	<.001	4	.24	.033	.13	.2	2.9	.04	1.19	5	.3	.03	.6	2
0312-298	.19	2.27	1.63	82.7	39	25.4	3.9	1817	10.55	2.5	<.1	.5	.3	4.7	.03	.55	.04	5	.21	.031	<.5	2.5	3.17	2.5	<.001	<1	.02	.005	.01	.3	2.9	<.02	<.01	<5	<.1	<.02	.1	<2
0312-299	.33	10.16	2.10	53.1	66	38.7	14.1	885	5.51	59.8	1.7	<.2	10.4	14.2	.02	.32	.16	4	.11	.024	1.0	4.0	1.63	21.4	<.001	1	.21	.040	.09	.1	3.1	.03	<.01	<5	<.1	<.02	.5	<2
0312-300	.38	12.20	1.48	44.9	46	40.5	13.2	664	4.46	75.8	1.4	.5	8.4	14.5	.02	.12	.07	3	.11	.017	2.0	4.8	1.26	23.2	<.001	3	.20	.032	.11	.1	3.2	.04	.03	<5	<.1	<.02	.5	3
0312-301	.28	22.39	4.79	26.1	454	46.4	18.0	554	4.59	155.5	1.7	1.3	9.6	21.6	.02	1.27	1.44	4	.23	.032	1.3	4.3	1.19	24.0	<.001	6	.26	.027	.14	.2	2.9	.07	.67	6	<.1	.06	.6	9
0312-302	.33	30.86	3.20	123.4	191	44.9	16.5	377	4.13	116.9	1.8	.8	9.5	18.8	.15	5.94	.38	3	.14	.040	4.4	5.4	1.12	22.3	<.001	4	.24	.024	.13	.2	3.0	.06	.34	7	.1	.06	.6	6
0312-303	.32	24.53	4.05	53.1	154	48.9	14.9	502	3.78	155.4	1.9	.9	10.8	61.4	.06	2.98	.19	3	.67	.033	2.1	4.8	1.01	24.4	<.001	3	.25	.029	.14	.3	3.1	.05	.89	5	<.1	.02	.6	5
0312-304	.38	25.44	4.40	33.8	147	50.7	15.7	727	4.70	124.9	1.7	1.2	10.5	43.3	.02	2.60	.20	3	.82	.043	1.9	4.9	1.30	22.0	<.001	2	.24	.034	.12	.2	3.2	.04	.41	<5	.1	.03	.6	8
0312-305	.16	8.84	1.24	15.3	328	9.6	4.7	559	1.90	106.2	.5	24.4	3.8	94.4	.04	2.67	<.02	2	2.10	.007	<.5	2.1	.91	10.9	<.001	3	.11	.012	.06	.1	1.8	.02	.24	<5	<.1	.02	.3	47
0312-306	.44	10.07	3.12	26.9	173	45.8	17.0	948	4.04	254.7	2.6	3.5	14.2	83.5	.06	1.02	.21	3	1.97	.044	1.3	3.6	1.10	27.0	<.001	3	.27	.030	.15	.3	3.1	.06	1.64	<5	.1	.03	.7	22
0312-307	.41	25.68	13.30	37.1	738	70.3	20.9	998	5.46	478.2	2.2	9.6	11.1	121.1	.09	4.21	.50	3	2.13	.090	1.8	4.2	1.03	24.8	<.001	1	.28	.026	.15	.3	3.6	.08	4.09	<5	.2	.04	.7	46
0312-308	.30	9.63	3.19	28.4	50	52.3	18.0	1036	3.72	126.2	2.7	.8	15.0	61.8	.05	.75	.17	3	1.75	.043	1.8	3.7	1.20	29.3	<.001	2	.29	.033	.16	.3	3.4	.06	.36	<5	.1	<.02	.7	2
0312-309	.20	2.72	2.51	12.6	30	30.3	2.6	677	1.68	62.0	1.6	.2	8.9	66.2	.06	.27	.10	2	2.30	.045	7.7	3.2	.78	23.4	<.001	1	.23	.022	.12	.2	2.1	.04	.09	<5	<.1	<.02	.5	<2
0312-310	.51	17.58	3.76	13.1	158	54.0	14.0	600	3.01	250.3	3.1	2.6	15.6	89.8	.05	1.81	.09	2	1.29	.042	2.7	3.2	.59	28.5	<.001	4	.27	.028	.15	.4	2.7	.05	2.03	<5	<.1	.02	.7	15
RE 0312-310	.55	17.87	3.88	11.9	160	53.7	14.6	597	2.98	251.0	3.1	2.5	15.8	89.0	.06	1.75	.09	3	1.28	.043	2.7	3.5	.58	28.4	<.001	2	.28	.029	.16	.4	2.9	.06	2.13	<5	.1	.02	.7	15
RRE 0312-310	.51	17.67	3.67	12.1	155	55.7	14.9	609	2.96	251.5	3.3	1.5	16.3	91.1	.05	1.61	.08	3	1.30	.043	2.8	3.4	.60	29.3	<.001	4	.28	.031	.16	.4	2.8	.06	2.12	<5	<.1	.02	.7	13
0312-311	.30	3.98	4.96	6.5	117	13.0	6.9	35	1.77	241.3	.1	50.2	1.2	6.1	.05	.37	.16	<2	.06	.001	<.5	3.6	.03	4.4	<.001	9	.05	.005	.02	<.1	.3	<.02	1.61	<5	.1	.03	.2	58
0312-312	.46	22.24	9.44	14.5	361	48.6	17.4	528	3.23	252.1	2.9	7.2	15.7	113.6	.05	2.40	.33	2	2.25	.027	1.8	3.3	.91	26.9	<.001	4	.26	.031	.13	.4	3.0	.06	2.22	<5	.2	.04	.6	25
0312-313	.25	8.69	17.98	17.6	212	35.5	11.0	731	4.00	158.1	2.4	2.8	13.6	127.3	.06	1.16	.42	2	3.74	.039	.7	2.6	1.35	23.8	<.001	3	.24	.034	.13	.4	3.4	.06	2.01	<5	.2	.02	.6	18
0312-314	.13	2.15	5.85	6.4	64	22.3	2.6	360	1.92	93.8	.1	12.6	.4	53.9	.02	.83	.18	<2	1.58	.004	<.5	1.9	.57	4.1	<.001	2	.04	.005	.02	<.1	1.0	<.02	.75	<5	.1	<.02	1	21
0312-315	.42	34.92	15.21	43.8	244	70.3	22.6	854	4.81	265.6	2.7	1.6	13.7	62.9	.09	2.54	.38	2	1.29	.089	3.1	4.3	1.13	31.4	<.001	3	.33	.034	.16	.4	2.8	.06	1.74	<5	<.1	<.02	.8	22
0312-316	.36	76.88	5.24	91.2	563	64.3	20.2	309	4.45	261.2	2.4	2.5	12.9	52.0	.23	8.97	.34	3	.51	.028	2.9	4.9	.82	24.7	<.001	3	.25	.020	.16	.3	3.7	.07	2.24	<5	.2	.07	.6	13
0312-317	.38	66.60	2.03	36.9	2173	9.8	2.1	621	2.12	145.4	<.1	21.7	.3	205.1	.30	34.74	.04	<2	2.09	<.001	<.5	3.3	.93	2.3	<.001	1	.03	.003	.01	.1	1.5	<.02	1.13	<5	<.1	.03	.1	26
0312-318	.35	85.50	4.27	65.5	1225	46.6	14.5	543	4.21	269.8	2.4	3.2	11.9	92.2	.18	10.40	.27	2	1.05	.028	2.2	4.0	.91	22.8	<.001	2	.23	.017	.15	.3	3.9	.06	2.06	<5	.1	.04	.6	16
0312-319	.35	41.10	3.73	96.2	222	60.8	18.3	548	5.27	139.4	1.8	.6	10.9	13.9	.14	.91	.31	3	.12	.033	3.4	6.0	1.33	23.6	<.001	2	.28	.030	.15	.2	3.7	.06	.73	<5	<.1	.02	.7	4
0312-320	.09	4.96	1.03	121.1	57	19.0	4.6	861	11.21	26.9	<.1	1.7	.4	34.5	.03	.47	.06	3	.61	.009	<.5	1.8	3.98	2.7	<.001	1	.02	.003	.01	<.1	4.6	<.02	.15	<5	<.1	<.02	.1	2
0312-321	.65	54.61	4.31	36.5	364	59.1	25.2	731	5.09	306.6	1.4	2.3	10.6	84.5	.06	3.05	.25	3	1.10	.118	2.2	5.3	1.07	29.8	<.001	4	.34	.028	.17	.3	3.7	.07	2.53	<5	<.1	.03	.8	17
0312-322	.41	29.49	2.03	19.1	90	55.4	19.5	681	3.84	158.2	1.3	.6	11.6	60.2	.03	.94	.16	3	1.08	.067	1.7	4.5	.96	27.1	<.001	3	.29	.031	.15	.3	3.1	.06	1.14	<5	.1	<.02	.8	6
0312-323	.35	56.87	3.03	27.8	156	64.6	20.0	777	4.83	262.1	2.0	16.9	12.7	63.4	.04	.32	.29	4	1.13	.045	3.3	6.1	1.23	29.2	<.001	3	.30	.031	.16	.3	3.7	.06	1.21	<5	.1	.03	.8	62
STANDARD DS5/AU-R	12.82	139.41	23.87	130.6	279	24.6	12.4	774	2.88	18.3	6.0	39.7	2.5	47.4	5.61	3.41	6.39	58	.72	.091	11.6	187.8	.65	136.5	.091	15	2.05	.034	.13	4.7	3.3	1.02	.03	185	5.0	.79	6.3	485

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30 GM SAMPLE ANALYSIS BY FA/ICP.
- SAMPLE TYPE: CORE R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 25 2003 DATE REPORT MAILED: Sept 15/03 SIGNED BY.......... .D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data ✓ FA

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0312-324	.20	27.76	3.72	39.2	118	52.5	18.1	504	4.29	150.7	1.7	.8	11.0	35.8	.04	.79	.17	4	.91	.036	3.5	5.4	1.17	21.2	.001	2	.26	.027	.13	.2	3.8	.05	.32	9	.1	<.02	.6	4
0312-325	.41	22.69	2.95	14.7	114	27.7	6.6	489	2.48	100.0	.7	1.9	5.4	60.9	.04	.88	.15	3	1.62	.018	1.5	3.8	.69	19.4	<.001	2	.21	.020	.11	.2	2.0	.04	.80	<5	.1	.02	.5	6
0312-326	.28	16.08	3.70	14.9	137	24.2	2.5	395	1.83	41.9	.9	.7	6.0	55.9	.04	1.36	.09	2	1.93	.007	1.4	3.7	.69	18.2	<.001	2	.19	.017	.10	.1	2.0	.03	.13	<5	<.1	<.02	.4	<2
0312-327	.17	25.74	13.33	64.0	1687	9.4	2.7	3915	11.68	925.9	.3	103.7	1.5	276.9	.23	10.35	.27	3	11.63	.049	.5	3.0	4.81	8.9	<.001	1	.11	.007	.05	.2	10.9	.02	4.50	<5	.2	.08	.3	201
0312-328	.10	28.33	5.63	160.0	1753	8.7	1.8	4343	11.72	698.9	.1	105.5	.6	343.9	.70	14.66	.09	4	14.80	.008	<.5	2.0	5.75	3.9	<.001	<1	.04	.004	.02	.1	10.8	<.02	3.44	<5	<.1	.04	.1	149
0312-329	.34	4.07	1.49	5.2	177	11.4	5.8	366	1.21	137.7	2.4	3.5	13.0	44.6	.02	.78	.03	3	1.03	.014	<.5	2.2	.40	29.2	<.001	3	.34	.024	.17	.3	2.4	.06	.72	<5	<.1	<.02	.6	24
0312-330	.22	81.23	30.41	23.5	4176	13.7	4.7	1195	3.26	258.7	.5	16.5	3.8	118.3	.19	20.61	.34	2	3.25	.006	1.2	3.7	1.42	14.8	<.001	3	.18	.013	.09	.2	3.1	.04	1.77	<5	.1	.02	.4	29
0312-331	.41	4.37	3.94	9.6	184	32.6	10.9	994	3.50	353.9	3.7	3.6	17.3	91.2	.04	.86	.17	3	2.38	.034	<.5	2.5	1.04	27.0	<.001	2	.33	.018	.15	.3	3.7	.06	2.52	<5	<.1	<.02	.6	33
0312-332	.43	54.31	7.57	38.7	616	65.8	18.3	799	4.72	233.5	2.0	2.5	10.7	55.6	.08	9.04	.37	2	1.23	.035	4.3	3.3	1.14	27.2	<.001	2	.30	.021	.16	.3	3.0	.06	1.54	<5	.1	.03	.7	13
0312-333	.58	88.19	21.78	50.6	3879	62.7	18.7	730	3.36	233.2	2.7	2.7	15.3	59.6	.25	22.45	.27	2	1.72	.046	2.3	3.3	.85	29.6	<.001	2	.34	.026	.16	.4	2.5	.06	1.18	5	<.1	<.02	.7	14
0312-334	.10	385.09	8.42	110.0	16023	17.0	3.6	4624	12.90	1070.4	.2	53.4	.8	403.7	.84	178.36	.21	2	12.87	.002	<.5	1.8	5.61	5.5	<.001	<1	.06	.004	.03	.1	9.7	.02	6.29	16	.1	.08	.2	108
0312-335	.53	77.35	2.93	16.7	3599	44.0	12.8	157	.96	190.8	2.7	2.0	17.5	35.5	.14	20.22	.25	2	.68	.086	2.2	3.4	.16	36.8	<.001	3	.40	.023	.21	.4	1.2	.08	.57	<5	<.1	<.02	.8	10
0312-336	.29	19.77	6.00	54.5	151	41.6	9.1	1048	4.66	145.2	.8	1.3	4.8	275.3	.16	.29	.25	<2	6.11	.037	1.1	2.2	2.45	22.8	<.001	1	.25	.020	.12	.2	3.3	.04	1.14	<5	.2	.04	.5	13
0312-337	.34	41.86	2.67	39.1	175	61.8	19.4	769	4.41	214.0	2.3	1.3	11.9	55.8	.06	.21	.11	2	.82	.054	4.5	3.8	1.13	29.0	<.001	2	.35	.031	.16	.3	2.5	.05	.84	<5	.1	.02	.8	12
0312-338	.27	61.48	5.59	66.2	129	53.4	18.0	510	4.38	98.7	2.6	.6	13.8	24.8	.02	.14	.21	4	.43	.038	3.6	9.0	1.25	23.6	<.001	<1	.43	.036	.11	.1	3.2	.04	.25	<5	.1	<.02	1.1	3
0312-339	.23	118.84	7.98	13.2	1185	24.5	24.0	464	1.59	38.3	.2	6.3	1.8	20.0	.03	13.55	4.84	<2	.89	.010	16.4	3.1	.49	4.9	<.001	<1	.04	.005	.02	<.1	.9	<.02	.44	<5	.4	.22	.1	9
0312-340	.34	54.71	5.61	135.5	121	69.1	21.1	246	5.44	89.2	2.0	.9	12.7	16.9	.02	.19	.18	9	.15	.037	8.4	20.2	1.55	21.8	<.001	1	.78	.034	.10	.1	4.1	.05	.07	<5	<.1	.02	2.3	4
RE 0312-340	.33	53.05	5.91	138.7	114	70.7	22.2	238	5.30	88.5	2.0	.8	12.6	16.2	.02	.19	.18	9	.14	.038	7.7	20.1	1.50	21.7	<.001	<1	.74	.034	.10	.1	4.0	.05	.08	<5	<.1	.02	2.2	3
RRE 0312-340	.41	54.97	6.24	145.8	100	70.9	22.6	241	5.39	88.6	2.1	.6	13.4	16.9	.02	.20	.17	10	.14	.040	8.6	20.3	1.50	23.2	<.001	1	.76	.037	.11	.2	4.1	.05	.12	<5	<.1	<.02	2.4	8
0312-341	.31	53.46	6.38	37.8	120	25.8	7.2	723	5.89	216.0	.5	34.7	3.9	112.4	.05	.31	.10	3	1.82	.006	.8	3.5	2.15	11.1	<.001	1	.14	.010	.06	.1	3.2	.03	1.17	<5	.1	.02	.3	70
0312-342	.35	28.63	23.13	70.8	116	44.0	12.7	456	3.65	30.6	1.4	1.1	7.8	18.0	.02	.32	.29	12	.27	.032	9.2	34.8	1.11	18.0	.001	<1	1.70	.027	.08	<.1	2.3	.02	.06	5	.1	.03	4.8	<2
0312-343	.35	34.97	8.65	135.7	38	79.9	25.6	451	6.31	52.5	1.7	<.2	15.8	16.9	.01	.15	.11	23	.19	.059	5.6	69.0	2.00	21.9	.001	<1	3.34	.033	.09	.1	3.1	.02	.03	<5	<.1	<.02	9.7	2
0312-344	.30	281.38	11.06	5.3	164	61.6	8.2	492	1.03	87.6	.4	4.5	1.6	19.0	.02	3.57	.19	<2	.35	.003	16.4	3.5	.22	2.5	<.001	1	.08	.005	.01	<.1	.4	<.02	.19	5	.2	.03	.2	8
0312-345	.28	72.34	9.15	114.5	72	84.3	23.7	343	5.18	62.9	2.0	1.7	11.4	17.5	.01	.50	.12	19	.16	.048	13.4	55.7	1.59	20.8	.001	<1	2.68	.033	.09	<.1	2.8	.02	.15	<5	<.1	<.02	8.0	3
0312-346	.37	39.38	41.43	111.3	125	65.9	20.2	493	5.46	44.4	1.9	.2	10.3	22.5	.02	.25	.54	19	.35	.072	15.0	47.2	1.77	20.2	.001	<1	2.56	.035	.10	<.1	2.9	.02	.05	<5	.1	.02	7.8	3
0312-347	.25	27.74	15.52	86.8	65	52.9	14.6	376	4.09	28.4	1.5	<.2	10.1	17.5	.02	.14	.18	15	.23	.039	8.4	41.9	1.27	17.3	.001	<1	2.11	.030	.08	<.1	2.5	.02	.02	8	<.1	<.02	6.4	3
0312-348	.35	23.53	22.22	92.7	90	56.5	15.9	414	4.57	31.0	1.6	.6	9.7	19.7	.02	.13	.30	17	.27	.052	6.2	44.6	1.42	19.9	.001	<1	2.33	.034	.09	.1	2.8	.02	.09	<5	.1	<.02	6.8	3
0312-349	.17	1.98	1.87	82.3	11	31.6	8.2	2543	10.39	10.1	.5	.3	2.8	15.3	.05	.09	.04	5	.29	.023	1.2	7.0	3.00	10.0	.001	<1	.36	.020	.04	<.1	5.6	.02	.04	5	<.1	<.02	1.1	4
0312-350	.55	95.42	7.71	131.8	65	82.2	22.7	389	5.40	58.3	2.4	<.2	12.8	31.9	.02	.13	.23	21	.37	.087	5.4	43.4	1.66	22.4	.001	<1	2.77	.043	.09	<.1	3.0	.02	.30	<5	.1	.02	8.6	5
0312-351	.26	38.89	14.78	100.9	120	58.2	16.9	466	4.75	36.8	1.5	.6	8.1	24.4	.02	.20	.35	15	.33	.064	5.2	35.9	1.45	18.3	.001	<1	2.13	.029	.08	.1	2.5	.02	.12	<5	<.1	.02	6.3	<2
0312-352	.47	55.38	7.81	140.8	52	82.6	23.6	215	5.45	59.0	3.0	.2	15.4	23.3	.01	.15	.12	22	.20	.067	8.2	62.8	1.70	24.8	.001	1	2.96	.043	.11	<.1	2.9	.03	.06	6	<.1	.02	8.9	3
0312-353	.30	54.01	21.47	93.1	115	61.4	22.3	326	4.01	61.1	1.8	.4	9.1	30.8	.02	.47	.86	15	.42	.061	5.3	39.6	1.19	20.5	.001	<1	2.02	.038	.09	<.1	2.3	.02	.21	<5	.1	.07	5.9	3
0312-354	.46	41.40	12.75	90.9	71	39.7	11.8	1001	4.05	29.3	1.6	.5	8.1	61.8	.17	.14	.22	11	1.41	.024	1.9	39.0	1.38	18.8	.001	<1	1.56	.030	.08	<.1	2.5	.02	.28	<5	.1	.02	4.7	4
0312-355	.36	19.66	10.64	131.6	51	55.5	15.5	1378	6.60	28.0	1.5	.2	8.1	69.5	.04	.04	.18	17	.94	.048	1.5	26.3	2.18	17.1	.001	<1	2.33	.022	.08	<.1	5.8	.02	.02	<5	<.1	.04	7.0	2
STANDARD DS5/AU-R	12.53	139.11	24.89	130.0	274	24.4	11.8	771	2.93	17.8	5.8	44.0	2.6	48.1	5.42	3.56	6.24	58	.74	.091	12.2	186.4	.66	135.0	.093	16	2.08	.034	.13	4.7	3.4	1.03	.03	183	4.9	.83	6.3	495

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm
0312-356	.34	87.51	26.93	91.1	191	52.3	17.2	591	4.06	43.2	1.9	<.2	9.6	47.1	.03	.12	.52	11
0312-357	.39	32.60	52.62	192.2	254	57.2	20.0	570	5.16	63.9	1.8	.2	7.7	18.1	.28	.07	.82	6
0312-358	.19	3.00	.59	17.7	18	8.1	1.6	357	1.84	3.9	.2	.3	.7	4.7	<.01	.11	<.02	<2
0312-359	.58	32.25	9.30	85.9	107	71.5	25.1	448	4.72	125.4	2.4	2.3	10.8	21.1	.01	.25	.33	5
0312-360	.44	30.25	33.82	114.8	262	62.8	20.5	438	5.42	85.7	1.6	.4	9.4	35.5	.01	.18	.90	7
0312-361	.59	67.90	1.59	69.6	83	65.9	24.2	602	5.03	119.4	1.5	.3	8.8	68.1	.01	.80	.06	6
0312-362	.14	8.83	1.07	38.3	24	10.0	2.3	1748	3.41	4.0	.1	<.2	.5	61.3	.03	.54	.02	2
0312-363	.43	75.66	3.16	89.9	98	62.5	22.5	553	4.51	92.8	2.2	.3	10.8	38.5	.01	.08	.14	6
0312-364	.36	49.44	4.50	115.4	115	60.4	19.1	478	5.07	94.2	1.8	.4	9.1	19.5	.02	.21	.13	6
0312-365	.46	45.09	3.03	74.6	78	64.4	24.5	302	3.86	130.1	2.2	<.2	10.9	21.1	.01	.09	.11	3
0312-366	.30	15.43	3.26	32.0	43	21.0	9.0	805	3.20	39.3	1.9	.2	6.9	18.9	.01	.06	.06	3
0312-367	.47	56.57	1.24	89.3	76	77.7	27.1	250	3.72	145.5	2.9	.2	13.5	20.0	.02	.28	.04	4
0312-368	.22	5.70	4.10	30.1	29	22.8	6.1	493	3.19	44.7	.8	.5	4.2	14.0	.01	.05	.04	2
0312-369	.40	62.69	14.59	95.0	222	65.9	25.6	367	4.86	323.0	2.7	45.7	12.8	22.8	.05	.07	.43	3
0312-370	.32	36.32	11.57	100.3	144	58.0	20.2	580	4.82	122.8	2.2	1.0	11.0	22.9	.02	.08	.31	3
RE 0312-370	.35	35.21	8.26	103.2	112	55.0	22.4	580	4.83	126.5	2.1	.2	10.7	22.8	.02	.09	.22	3
RRE 0312-370	.40	45.76	5.78	95.8	106	59.0	20.1	600	4.85	122.1	2.3	.3	11.3	23.9	.02	.10	.19	4
0312-371	.30	44.09	26.46	82.3	472	18.2	6.8	2783	8.03	69.8	2.1	.6	6.2	126.3	.15	.04	1.88	3
0312-372	.48	11.60	12.65	79.4	155	40.3	13.9	2433	5.04	82.5	1.3	.4	6.7	153.3	.08	.07	.32	4
0312-373	.43	20.65	7.31	100.4	129	68.2	24.0	501	5.24	145.3	2.1	<.2	10.4	21.6	.07	.07	.24	4
0312-374	.38	23.45	17.82	214.2	223	22.6	7.7	798	3.03	291.1	.8	74.8	4.4	96.6	.31	.76	.19	2
0312-375	.42	69.54	6.54	53.0	150	72.6	15.7	292	4.90	243.1	2.4	3.3	11.2	27.4	.03	.12	.26	3
0312-376	.43	41.37	6.31	131.6	102	66.8	22.8	403	5.67	140.1	2.4	.6	11.5	26.2	.09	.13	.09	5
STANDARD DS5/AU-R	12.75	142.35	23.77	138.8	278	25.0	12.4	773	2.92	19.4	6.0	39.8	2.7	47.7	5.43	3.77	6.05	58

SAMPLE#	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0312-356	.57	.037	2.1	29.6	1.30	17.4	.001	1	1.59	.026	.08	<.1	3.2	.03	.13	<5	.1	.06	4.7	<2
0312-357	.15	.048	4.6	9.8	1.54	21.0	<.001	1	.36	.039	.10	<.1	4.0	.03	.09	<5	.2	.04	1.0	3
0312-358	.05	.012	<.5	2.7	.68	4.9	<.001	1	.07	.009	.02	<.1	1.2	<.02	.02	<5	<.1	<.02	.2	<2
0312-359	.13	.049	4.9	10.0	1.34	29.7	<.001	1	.49	.041	.14	.1	4.5	.04	.19	<5	.1	.05	1.4	15
0312-360	.33	.115	3.4	10.2	1.56	23.5	<.001	1	.40	.035	.11	.1	4.0	.04	.07	<5	.2	.06	1.0	<2
0312-361	.94	.400	10.8	10.2	1.43	35.9	<.001	2	.53	.047	.17	.2	4.6	.05	.01	<5	.1	.02	1.3	2
0312-362	1.58	.055	<.5	2.4	1.40	3.8	<.001	1	.06	.008	.02	<.1	2.9	<.02	.01	<5	<.1	<.02	.2	<2
0312-363	.46	.089	4.3	11.7	1.27	26.0	<.001	1	.55	.037	.12	.1	3.6	.04	.26	<5	.1	.02	1.6	3
0312-364	.13	.030	3.3	7.2	1.42	22.3	<.001	1	.52	.034	.10	.1	3.8	.03	.20	<5	.1	.02	1.5	4
0312-365	.08	.022	4.8	5.7	1.08	28.1	<.001	1	.33	.046	.13	.1	3.7	.04	.18	<5	<.1	<.02	.8	<2
0312-366	.24	.055	1.0	4.9	.90	17.8	<.001	1	.20	.026	.09	<.1	2.2	.03	.15	<5	<.1	.02	.5	3
0312-367	.05	.015	7.7	8.2	1.02	32.1	<.001	1	.37	.049	.14	.1	3.7	.04	.03	<5	<.1	.02	.9	<2
0312-368	.18	.009	.8	4.2	.86	13.1	<.001	5	.16	.021	.07	<.1	2.5	.02	.19	<5	<.1	<.02	.4	<2
0312-369	.16	.055	3.0	5.4	1.09	27.1	<.001	4	.29	.037	.13	.2	3.9	.04	1.06	<5	.1	.03	.8	184
0312-370	.24	.026	4.3	6.2	1.41	26.2	<.001	1	.25	.032	.12	.1	4.2	.04	.23	<5	.1	<.02	.6	<2
RE 0312-370	.25	.026	4.3	6.1	1.41	25.8	<.001	1	.26	.030	.13	.1	4.4	.04	.23	<5	.1	.03	.6	<2
RRE 0312-370	.24	.027	4.5	6.6	1.42	28.9	<.001	2	.31	.036	.15	.1	4.5	.05	.23	<5	.1	.02	.7	2
0312-371	4.19	.008	1.5	3.7	2.67	16.9	<.001	1	.18	.036	.07	.1	6.5	.02	2.25	<5	.6	.10	.5	7
0312-372	2.20	.020	2.9	6.9	1.87	21.1	<.001	1	.20	.021	.11	<.1	6.2	.04	.18	<5	.1	.03	.5	5
0312-373	.19	.030	5.6	8.1	1.44	29.4	<.001	2	.28	.029	.15	.2	3.5	.05	.44	<5	.1	<.02	.7	<2
0312-374	1.49	.019	1.5	3.8	.79	15.4	<.001	7	.16	.014	.08	<.1	2.8	.03	1.56	<5	.1	.03	.5	127
0312-375	.27	.028	3.7	6.7	.96	27.0	<.001	4	.26	.024	.16	.2	3.1	.06	2.10	<5	.2	.02	.7	7
0312-376	.23	.064	5.7	8.3	1.56	30.2	<.001	2	.32	.032	.17	.1	3.4	.06	.27	<5	<.1	<.02	.8	3
STANDARD DS5/AU-R	.72	.093	12.0	183.6	.66	132.6	.092	19	2.06	.034	.13	4.6	3.5	1.04	.03	181	4.7	.88	6.6	478

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

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(IS. 002 Accredited Co.)

GEOCHEMICAL ANA 3IS CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A303921 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0312-377	.29	4.83	5.38	64.3	49	33.4	12.4	1657	4.31	58.3	1.1	.6	6.4	178.6	.11	.12	.07	3	3.00	.039	2.6	4.9	1.80	16.1	.002	2	.16	.016	.08	.2	5.8	.03	.11	<5	<.1	.02	.4	<2
0312-378	.35	27.65	15.90	123.8	180	42.4	17.1	1007	4.85	77.4	.8	.2	5.4	67.0	.07	.17	.18	2	1.06	.024	2.6	5.9	1.57	17.4	<.001	1	.18	.023	.08	.1	3.9	.04	.03	<5	<.1	.03	.5	5
0312-379	.42	33.08	11.62	200.4	114	37.6	19.7	656	4.30	47.3	1.9	<.2	9.4	16.9	.17	.17	.12	3	.15	.017	3.8	4.3	1.25	21.0	<.001	1	.22	.027	.09	.2	3.5	.03	.10	<5	<.1	.02	.5	5
0312-380	.29	14.06	19.89	111.2	146	46.8	16.1	641	4.86	48.5	1.0	.5	5.7	16.5	.07	.17	.22	4	.18	.022	2.7	5.7	1.50	15.9	<.001	2	.17	.022	.07	.2	3.0	.02	.09	<5	<.1	<.02	.4	2
0312-381	.30	89.01	17.74	98.7	248	60.0	19.9	708	4.49	108.2	1.7	<.2	9.0	28.4	.04	.33	.38	2	.53	.042	7.8	5.8	1.43	19.4	<.001	1	.22	.018	.10	.2	3.1	.03	.08	<5	.1	.04	.6	<2
0312-383	.48	32.95	15.80	20.1	311	65.3	32.1	1006	5.87	358.0	2.3	2.7	10.4	82.5	.09	2.17	.56	3	2.54	.073	1.4	3.6	.99	24.2	<.001	2	.22	.011	.12	.5	3.0	.04	4.87	<5	.4	.05	.6	29
0313-384	1.12	59.80	46.74	117.6	342	73.1	31.3	236	4.99	125.5	1.2	<.2	7.8	11.7	.32	2.11	.77	3	.34	.013	1.7	5.5	.86	22.1	.001	1	.23	.074	.12	.2	2.6	.04	2.08	<5	.7	.06	.5	12
0313-385	.39	46.05	5.07	45.5	1413	36.2	15.1	779	2.86	155.4	.8	2.6	9.9	34.8	.12	7.34	.11	4	.94	.041	9.5	8.2	.81	22.5	<.001	2	.29	.024	.14	.3	2.7	.05	.40	<5	<.1	.08	.6	13
0313-386	.24	4.87	7.68	30.2	112	5.3	1.8	1865	1.60	94.6	.1	2.2	.3	23.4	.10	2.91	.02	<2	1.05	.002	<.5	3.1	.46	2.5	<.001	<1	.02	.003	.01	<.1	1.0	<.02	.33	<5	<.1	<.02	.2	8
0313-387	.22	6.62	16.41	33.3	425	33.8	11.2	1374	5.11	5534.6	.5	53.4	5.3	43.8	.27	2.72	.06	2	2.14	.010	1.8	3.8	.68	9.7	<.001	2	.14	.011	.07	.1	1.5	.03	3.81	<5	.2	.04	.4	79
0313-388	.29	5.23	10.47	2155.1	199	13.3	4.8	901	2.33	513.5	.2	7.2	5.2	37.5	15.45	1.17	.02	<2	1.95	.007	1.2	4.2	.52	8.0	.001	1	.11	.010	.06	.1	1.0	.02	1.13	7	<.1	<.02	.3	22
0313-389	.16	2.37	183.89	542.9	466	6.9	3.1	847	1.44	148.2	.1	4.8	2.8	21.4	3.28	1.12	.02	<2	1.06	.006	1.1	5.3	.32	7.0	<.001	1	.08	.007	.04	.2	.6	.03	.47	<5	<.1	<.02	.2	4
0313-390	.23	2.32	5.18	33.8	67	10.2	3.6	534	1.41	169.0	.4	7.1	6.2	27.4	.13	.46	<.02	<2	1.31	.010	2.5	5.2	.37	9.4	.001	1	.13	.011	.07	.1	.9	.03	.41	<5	<.1	.02	.2	12
RE 0313-390	.22	2.17	5.46	35.2	71	9.4	3.3	539	1.44	162.2	.4	6.3	6.1	27.8	.14	.41	<.02	<2	1.32	.010	2.5	6.6	.37	9.0	.001	1	.12	.010	.07	.2	.9	.03	.45	<5	<.1	<.02	.3	8
RRE 0313-390	.21	1.97	5.70	28.7	76	9.3	3.5	516	1.38	166.4	.4	6.7	6.7	27.0	.11	.49	<.02	<2	1.27	.010	2.7	5.6	.36	10.5	.001	1	.14	.011	.07	.2	.9	.03	.42	<5	<.1	<.02	.3	6
0313-391	.20	3.35	6.37	28.2	108	6.7	2.6	604	1.23	62.2	.3	6.2	5.4	28.0	.12	.42	.07	<2	1.36	.010	2.5	6.1	.37	8.4	.002	1	.11	.009	.06	.2	.9	.02	.23	<5	<.1	<.02	.3	8
0313-392	.12	.71	2.67	12.1	25	.8	.3	85	.31	1.0	<.1	.5	.4	5.3	.08	.24	<.02	<2	.22	.001	.5	6.6	.06	2.2	.001	1	.02	.003	.01	.2	.1	<.02	<.01	<5	<.1	<.02	.1	<2
0313-393	.25	3.57	5.11	115.0	118	9.6	3.8	332	1.24	203.3	.3	5.7	6.5	20.7	.98	.87	<.02	<2	.91	.018	3.0	4.1	.23	10.4	<.001	1	.14	.011	.07	.2	.6	.03	.56	<5	<.1	<.02	.3	7
0313-394	.18	9.11	1144.28	3057.9	2341	10.1	3.8	465	1.44	668.7	.4	10.4	4.7	20.9	21.58	2.60	.08	<2	.92	.012	2.2	5.4	.27	8.1	.002	1	.11	.008	.06	.2	.8	.03	.90	23	<.1	<.02	.3	15
0313-395	.24	5.03	234.50	1197.5	885	16.9	6.0	799	1.94	2346.6	.7	14.4	8.1	10.1	8.10	1.86	.08	<2	.43	.008	2.9	4.8	.15	11.2	<.001	1	.15	.011	.08	.2	.8	.03	1.46	5	.1	<.02	.4	14
0313-396	.20	16.25	1868.50	4931.5	4930	20.3	6.6	397	1.89	1667.6	.5	23.5	5.4	14.3	34.88	8.31	.54	2	.53	.008	2.8	5.2	.17	8.7	.001	1	.13	.010	.07	.2	.8	.05	1.65	31	.3	.04	.4	36
0313-397	.22	6.14	29.69	238.0	453	12.5	3.8	408	1.39	784.0	.4	6.8	4.8	29.5	1.06	5.41	.12	<2	1.13	.008	2.5	4.9	.33	8.1	.001	1	.12	.010	.06	.2	.9	.02	.55	<5	.1	<.02	.3	7
0313-398	.17	3.38	313.04	198.3	992	9.4	3.0	768	1.58	357.7	.2	8.3	2.7	43.8	1.47	3.26	.80	<2	1.69	.009	1.9	4.5	.52	7.2	<.001	1	.10	.008	.05	.3	1.2	.03	.47	<5	.3	.05	.3	11
0313-399	.21	3.48	72.74	417.4	293	14.1	5.6	491	1.78	1360.2	.5	35.6	4.4	23.8	2.98	1.09	.06	<2	1.02	.010	2.8	4.9	.31	9.0	<.001	1	.12	.009	.07	.2	.7	.03	1.18	<5	<.1	<.02	.3	45
0313-400	.16	5.19	58.10	49.6	320	24.6	8.7	234	3.92	5068.6	.7	247.6	5.5	6.7	.40	2.13	.04	<2	.24	.005	2.9	4.3	.07	10.6	<.001	1	.14	.009	.08	.2	.4	.03	3.53	<5	.1	.02	.3	304
0313-401	.21	3.72	40.89	440.1	280	21.1	3.6	461	1.58	880.0	.2	53.2	1.5	9.0	4.01	2.98	.03	<2	.49	.001	<.5	7.0	.18	2.9	.005	<1	.03	.003	.02	.2	.7	<.02	1.23	<5	<.1	<.02	.1	61
0313-402	.19	6.62	98.83	4875.8	482	26.3	11.7	1167	4.54	4113.2	.9	63.9	8.2	19.8	32.57	1.65	.03	<2	1.00	.006	2.0	4.4	.35	11.3	.001	1	.16	.010	.08	.2	1.6	.04	4.24	16	.1	<.02	.4	75
0313-403	.26	2.53	17.24	153.5	131	12.0	3.9	767	1.83	155.6	.3	16.1	5.0	58.3	1.08	2.20	.02	<2	1.95	.009	2.1	6.1	.65	9.1	.003	1	.10	.008	.06	.3	2.1	.02	.38	<5	.1	<.02	.3	22
0313-404	.20	6.69	22.13	3252.0	252	5.6	2.0	331	.94	71.8	.1	9.6	.9	24.6	24.30	1.78	<.02	<2	.77	.005	<.5	15.6	.24	3.5	.003	1	.04	.004	.02	.6	1.0	<.02	.45	12	<.1	<.02	.1	8
0313-405	.29	2.92	52.40	456.8	238	11.4	4.5	462	1.74	1469.5	.2	61.3	3.2	20.3	2.97	3.55	.02	<2	.71	.005	2.1	7.5	.23	6.3	<.001	1	.07	.006	.05	.4	.6	.02	1.04	5	<.1	<.02	.2	79
0313-406	.18	2.68	10.18	63.6	134	15.4	5.9	337	1.65	2237.1	.6	43.9	4.8	24.1	.33	2.19	.02	<2	.86	.006	3.4	5.1	.26	10.9	.003	<1	.12	.009	.07	.3	.8	.02	.85	<5	.1	<.02	.2	56
0313-407	.22	1.59	7.07	220.6	58	4.8	2.4	346	1.18	213.2	<.1	12.2	.5	21.4	1.38	2.06	.02	<2	1.00	.004	.6	5.2	.29	2.9	.001	1	.03	.006	.02	.3	.7	<.02	.36	<5	.1	.02	.1	16
0313-408	.26	2.70	26.99	350.1	277	19.5	6.6	156	2.87	5065.6	.6	92.7	7.3	10.4	2.42	2.19	.05	<2	.33	.006	3.8	6.1	.11	10.6	<.001	1	.13	.010	.08	.5	.5	.03	2.46	<5	.1	<.02	.3	131
0313-409	.23	2.91	4.28	20.3	85	21.4	7.6	243	2.42	4288.5	.4	59.4	5.0	16.9	.05	2.04	.04	<2	.60	.009	3.0	4.7	.20	9.1	.003	1	.12	.010	.06	.2	.7	.03	1.72	<5	.1	<.02	.3	86
STANDARD DS5/AU-R	13.32	141.64	24.53	139.1	278	24.7	12.5	733	2.87	18.9	5.8	42.0	2.6	46.9	5.67	3.51	6.20	59	.73	.094	12.1	182.3	.64	137.6	.092	17	1.99	.032	.14	4.7	3.6	1.00	.04	182	4.5	.86	6.8	493

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30.00 GM SAMPLE ANALYSIS BY FA/ICP.
- SAMPLE TYPE: CORE R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 2 2003 **DATE REPORT MAILED:** Sept 19/03 **SIGNED BY**.......... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA ___

ACME ANALYTICAL

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Au**
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb
0313-410	.23	3.74	9.55	16.1	237	27.0	9.6	627	4.22	35153.7	.4	904.0	4.5	19.3	.08	5.44	.02	2	.86	.010	2.7	4.7	.34	12.3	<.001	1	.15	.012	.08	.3	.9	.05	3.36	<5	.2	.02	.4	1056
0313-411	.29	4.28	9.97	60.5	196	28.4	9.9	438	2.46	5798.6	.8	41.7	7.0	17.0	.12	2.25	.02	2	.62	.012	4.3	4.9	.22	14.0	<.001	3	.17	.014	.09	.2	1.0	.05	2.11	<5	.1	<.02	.4	57
0313-412	.19	4.38	109.48	248.2	519	25.6	9.6	198	4.11	16449.2	.7	212.2	5.7	6.4	3.64	4.95	<.02	2	.23	.011	3.4	5.4	.07	13.8	.002	2	.18	.011	.10	.2	.6	.06	3.59	<5	<.1	<.02	.4	283
0313-413	.16	119.81	14825.33	30581.4	46730	19.5	6.3	174	3.74	2674.0	1.4	126.4	6.2	7.6	223.47	73.66	.82	<2	.25	.008	2.9	4.2	.10	8.1	.002	2	.10	.006	.06	.2	.5	.13	4.60	121	.1	.07	.5	171
0313-414	.20	2.47	63.01	259.4	298	24.7	8.5	477	3.58	6871.2	.7	35.6	4.9	7.4	3.48	2.46	<.02	<2	.32	.012	3.1	4.4	.11	11.1	<.001	2	.16	.010	.08	.2	.7	.05	3.03	<5	<.1	<.02	.4	57
0313-415	.24	3.07	74.51	211.1	356	42.0	15.5	381	7.89	6906.5	.7	83.2	4.6	5.5	3.90	2.17	.02	<2	.26	.013	2.2	5.2	.08	9.6	.001	1	.13	.008	.08	.2	.7	.04	9.25	<5	<.1	<.02	.4	113
0313-416	.41	4.75	95.83	1670.9	487	37.6	13.0	438	3.12	1327.5	1.1	2.6	8.3	30.1	8.58	1.93	.05	2	1.04	.205	5.9	5.3	.20	20.8	.001	3	.31	.022	.14	.3	1.5	.06	2.85	<5	<.1	<.02	.9	34
0313-417	.25	3.12	39.21	336.3	179	30.5	10.2	954	2.84	3503.6	.6	44.1	4.2	28.4	1.60	1.41	.03	2	1.33	.026	2.5	4.0	.44	10.8	.003	1	.14	.010	.08	.2	1.2	.03	1.91	<5	<.1	<.02	.4	60
0313-418	.13	3.93	21.09	216.6	303	28.5	10.6	386	5.80	99999.0	.4	6926.4	3.1	16.7	.11	15.95	.23	3	.85	.010	2.0	3.9	.27	11.3	.004	2	.13	.010	.07	.1	.9	.05	3.41	<5	.2	.15	.3	7032
0313-419	.21	2.14	5.79	49.5	71	9.8	3.0	421	1.27	693.7	.5	36.2	3.6	25.4	.06	.62	.04	2	1.15	.009	2.9	3.8	.34	9.8	.003	1	.14	.011	.07	.1	.9	.04	.39	<5	<.1	.02	.3	47
0313-420	.16	6.94	7.17	80.8	157	12.7	4.6	343	1.46	104.1	.4	6.7	4.1	16.7	.07	1.66	.05	<2	.61	.009	3.4	6.0	.34	10.3	.001	1	.14	.012	.07	.2	.7	.03	.17	<5	<.1	<.02	.3	9
RE 0313-420	.17	7.45	7.26	75.7	175	11.9	4.5	326	1.42	96.4	.4	5.3	4.2	16.2	.07	1.82	.06	<2	.59	.009	3.6	5.1	.33	10.5	<.001	1	.14	.012	.07	.2	.7	.03	.20	<5	<.1	<.02	.3	10
RRE 0313-420	.16	7.32	6.69	78.2	156	12.8	4.7	336	1.45	56.9	.4	1.9	4.4	16.7	.05	1.63	.05	<2	.61	.009	3.8	6.0	.34	11.2	.002	2	.15	.013	.07	.2	.8	.03	.20	<5	<.1	<.02	.3	5
0313-421	.16	19.74	2.18	13.3	1211	.7	.2	74	.22	10.9	<.1	.7	.4	3.0	.08	12.60	.05	<2	.12	<.001	1.2	5.9	.04	.9	<.001	<1	.01	.001	<.01	.2	<.1	<.02	.01	<5	<.1	<.02	<.1	2
0313-422	.23	2.21	10.81	232.1	87	12.5	3.7	369	1.52	210.4	.3	7.8	4.7	15.7	1.44	2.80	.05	<2	.67	.009	3.0	6.0	.33	9.6	.002	1	.12	.011	.06	.4	.7	.03	.26	<5	<.1	<.02	.3	13
0313-423	.21	4.27	6.88	53.1	198	18.5	4.9	326	1.58	1015.9	.6	35.9	9.2	21.7	.39	2.49	.03	<2	.95	.008	4.2	5.1	.28	13.6	.004	1	.17	.018	.09	.4	.8	.03	.80	<5	.1	<.02	.4	59
0313-424	.32	2.06	3.63	30.8	41	2.9	.9	170	.60	14.6	<.1	1.8	.3	10.1	.13	1.24	<.02	<2	.46	.001	.5	6.2	.14	2.4	<.001	<1	.02	.003	.01	.2	.2	<.02	.04	<5	<.1	<.02	.1	<2
0313-425	.18	3.77	7.30	41.2	171	9.8	2.7	488	1.18	166.2	.4	5.1	4.8	23.0	.34	2.26	.08	<2	1.21	.009	2.8	4.9	.31	8.5	<.001	1	.12	.014	.06	.2	.8	.02	.25	<5	.1	<.02	.3	8
0313-426	.24	3.24	138.23	2141.8	527	12.1	4.8	192	1.27	1160.1	.4	126.6	3.6	9.1	16.84	2.23	.05	<2	.40	.008	2.1	5.3	.10	8.3	.002	1	.12	.010	.06	.2	.4	.03	1.11	14	<.1	<.02	.3	138
0313-427	.15	1.82	5.89	26.1	83	9.4	3.3	329	1.13	343.7	.5	35.7	3.8	17.3	.34	1.47	.02	<2	.80	.009	2.1	5.0	.21	8.6	.002	1	.12	.012	.06	.2	.4	.02	.41	<5	<.1	<.02	.3	45
0313-428	.20	2.12	14.10	76.9	103	13.4	6.2	985	3.04	8259.6	.3	718.5	2.4	24.3	.88	7.62	.13	<2	1.41	.012	1.0	3.4	.45	7.0	.003	1	.08	.007	.05	.7	1.0	.02	1.99	<5	.1	.07	.2	964
0313-429	.17	3.67	10.90	84.0	120	32.8	10.1	796	1.68	653.5	.2	59.2	.9	31.4	.43	7.79	.05	<2	1.42	.012	.6	7.6	.46	4.1	.001	<1	.05	.005	.03	.7	.9	<.02	.71	<5	.1	<.02	.2	77
STANDARD DS5/AU-R	13.27	135.13	23.30	131.8	261	24.4	11.9	741	2.86	19.0	5.5	38.7	2.6	46.4	5.32	3.51	5.80	58	.72	.092	11.4	184.4	.64	133.4	.092	19	2.02	.030	.13	4.4	3.3	.96	.04	164	4.4	.87	6.5	491

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

ACME AN TICAL LABORATORIES LTD. 852 E. HASTINGS ST. ICOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6(253-1716
(ISO 02 Accredited Co.)

GEOCHEMICAL ANA SIS CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A303921 Page 1
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %
0312-377	.29	4.83	5.38	64.3	49	33.4	12.4	1657	4.31	58.3	1.1	.6	6.4	178.6	.11	.12	.07	3	3.00
0312-378	.35	27.65	15.90	123.8	180	42.4	17.1	1007	4.85	77.4	.8	.2	5.4	67.0	.07	.17	.18	2	1.06
0312-379	.42	33.08	11.62	200.4	114	37.6	19.7	656	4.30	47.3	1.9	<.2	9.4	16.9	.17	.17	.12	3	.15
0312-380	.29	14.06	19.89	111.2	146	46.8	16.1	641	4.86	48.5	1.0	.5	5.7	16.5	.07	.17	.22	4	.18
0312-381	.30	89.01	17.74	98.7	248	60.0	19.9	708	4.49	108.2	1.7	<.2	9.0	28.4	.04	.33	.38	2	.53
0312-383	.48	32.95	15.80	20.1	311	65.3	32.1	1006	5.87	358.0	2.3	2.7	10.4	82.5	.09	2.17	.56	3	2.54
0313-384	1.12	59.80	46.74	117.6	342	73.1	31.3	236	4.99	125.5	1.2	<.2	7.8	11.7	.32	2.11	.77	3	.34
0313-385	.39	46.05	5.07	45.5	1413	36.2	15.1	779	2.86	155.4	.8	2.6	9.9	34.8	.12	7.34	.11	4	.94
0313-386	.24	4.87	7.68	30.2	112	5.3	1.8	1865	1.60	94.6	.1	2.2	.3	23.4	.10	2.91	.02	<2	1.05
0313-387	.22	6.62	16.41	33.3	425	33.8	11.2	1374	5.11	5534.6	.5	53.4	5.3	43.8	.27	2.72	.06	2	2.14
0313-388	.29	5.23	10.47	2155.1	199	13.3	4.8	901	2.33	513.5	.2	7.2	5.2	37.5	15.45	1.17	.02	<2	1.95
0313-389	.16	2.37	183.89	542.9	466	6.9	3.1	847	1.44	148.2	.1	4.8	2.8	21.4	3.28	1.12	.02	<2	1.06
0313-390	.23	2.32	5.18	33.8	67	10.2	3.6	534	1.41	169.0	.4	7.1	6.2	27.4	.13	.46	<.02	<2	1.31
RE 0313-390	.22	2.17	5.46	35.2	71	9.4	3.3	539	1.44	162.2	.4	6.3	6.1	27.8	.14	.41	<.02	<2	1.32
RRE 0313-390	.21	1.97	5.70	28.7	76	9.3	3.5	516	1.38	166.4	.4	6.7	6.7	27.0	.11	.49	<.02	<2	1.27
0313-391	.20	3.35	6.37	28.2	108	6.7	2.6	604	1.23	62.2	.3	6.2	5.4	28.0	.12	.42	.07	<2	1.36
0313-392	.12	.71	2.67	12.1	25	.8	.3	85	.31	1.0	<.1	.5	.4	5.3	.08	.24	<.02	<2	.22
0313-393	.25	3.57	5.11	115.0	118	9.6	3.8	332	1.24	203.3	.3	5.7	6.5	20.7	.98	.87	<.02	<2	.91
0313-394	.18	9.11	1144.28	3057.9	2341	10.1	3.8	465	1.44	668.7	.4	10.4	4.7	20.9	21.58	2.60	.08	<2	.92
0313-395	.24	5.03	234.50	1197.5	885	16.9	6.0	799	1.94	2346.6	.7	14.4	8.1	10.1	8.10	1.86	.08	<2	.43
0313-396	.20	16.25	1868.50	4931.5	4930	20.3	6.6	397	1.89	1667.6	.5	23.5	5.4	14.3	34.88	8.31	.54	2	.53
0313-397	.22	6.14	29.69	238.0	453	12.5	3.8	408	1.39	784.0	.4	6.8	4.8	29.5	1.06	5.41	.12	<2	1.13
0313-398	.17	3.38	313.04	198.3	992	9.4	3.0	768	1.58	357.7	.2	8.3	2.7	43.8	1.47	3.26	.80	<2	1.69
0313-399	.21	3.48	72.74	417.4	293	14.1	5.6	491	1.78	1360.2	.5	35.6	4.4	23.8	2.98	1.09	.06	<2	1.02
0313-400	.16	5.19	58.10	49.6	320	24.6	8.7	234	3.92	5068.6	.7	247.6	5.5	6.7	.40	2.13	.04	<2	.24
0313-401	.21	3.72	40.89	440.1	280	21.1	3.6	461	1.58	880.0	.2	53.2	1.5	9.0	4.01	2.98	.03	<2	.49
0313-402	.19	6.62	98.83	4875.8	482	26.3	11.7	1167	4.54	4113.2	.9	63.9	8.2	19.8	32.57	1.65	.03	<2	1.00
0313-403	.26	2.53	17.24	153.5	131	12.0	3.9	767	1.83	155.6	.3	16.1	5.0	58.3	1.08	2.20	.02	<2	1.95
0313-404	.20	6.69	22.13	3252.0	252	5.6	2.0	331	.94	71.8	.1	9.6	.9	24.6	24.30	1.78	<.02	<2	.77
0313-405	.29	2.92	52.40	456.8	238	11.4	4.5	462	1.74	1469.5	.2	61.3	3.2	20.3	2.97	3.55	.02	<2	.71
0313-406	.18	2.68	10.18	63.6	134	15.4	5.9	337	1.65	[illegible]	.6	43.9	4.8	24.1	.33	2.19	.02	<2	.86
0313-407	.22	1.59	7.07	220.6	58	4.8	2.4	346	1.18	213.2	<.1	12.2	.5	21.4	1.38	2.06	.02	<2	1.00
0313-408	.26	2.70	26.99	350.1	277	19.5	6.6	156	2.87	5065.6	.6	92.7	7.3	10.4	2.42	2.19	.05	<2	.33
0313-409	.23	2.91	4.28	20.3	85	21.4	7.6	243	2.42	4288.5	.4	59.4	5.0	16.9	.05	2.04	.04	<2	.60
STANDARD DS5/AU-R	13.32	141.64	24.53	139.1	278	24.7	12.5	733	2.87	18.9	5.8	42.0	2.6	46.9	5.67	3.51	6.20	59	.73

SAMPLE#	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0312-377	.039	2.6	4.9	1.80	16.1	.002	2	.16	.016	.08	.2	5.8	.03	.11	<5	<.1	.02	.4	<2
0312-378	.024	2.6	5.9	1.57	17.4	<.001	1	.18	.023	.08	.1	3.9	.04	.03	<5	<.1	.03	.5	5
0312-379	.017	3.8	4.3	1.25	21.0	<.001	1	.22	.027	.09	.2	3.5	.03	.10	<5	<.1	.02	.5	5
0312-380	.022	2.7	5.7	1.50	15.9	<.001	2	.17	.022	.07	.2	3.0	.02	.09	<5	<.1	<.02	.4	2
0312-381	.042	7.8	5.8	1.43	19.4	<.001	1	.22	.018	.10	.2	3.1	.03	.08	<5	.1	.04	.6	<2
0312-383	.073	1.4	3.6	.99	24.2	<.001	2	.22	.011	.12	.5	3.0	.04	4.87	<5	.4	.05	.6	29
0313-384	.013	1.7	5.5	.86	22.1	.001	1	.23	.074	.12	.2	2.6	.04	2.08	<5	.7	.06	.5	12
0313-385	.041	9.5	8.2	.81	22.5	<.001	2	.29	.024	.14	.3	2.7	.05	.40	<5	<.1	.08	.6	13
0313-386	.002	<.5	3.1	.46	2.5	<.001	<1	.02	.003	.01	<.1	1.0	<.02	.33	<5	<.1	<.02	.2	8
0313-387	.010	1.8	3.8	.68	9.7	<.001	2	.14	.011	.07	.1	1.5	.03	3.81	<5	.2	.04	.4	79
0313-388	.007	1.2	4.2	.52	8.0	.001	1	.11	.010	.06	.1	1.0	.02	1.13	7	<.1	<.02	.3	22
0313-389	.006	1.1	5.3	.32	7.0	<.001	1	.08	.007	.04	.2	.6	.03	.47	<5	<.1	<.02	.2	4
0313-390	.010	2.5	5.2	.37	9.4	.001	1	.13	.011	.07	.1	.9	.03	.41	<5	<.1	.02	.2	12
RE 0313-390	.010	2.5	6.6	.37	9.0	.001	1	.12	.010	.07	.2	.9	.03	.45	<5	<.1	<.02	.3	8
RRE 0313-390	.010	2.7	5.6	.36	10.5	.001	1	.14	.011	.07	.2	.9	.03	.42	<5	<.1	<.02	.3	6
0313-391	.010	2.5	6.1	.37	8.4	.002	1	.11	.009	.06	.2	.9	.02	.23	<5	<.1	<.02	.3	8
0313-392	.001	.5	6.6	.06	2.2	.001	1	.02	.003	.01	.2	.1	<.02	<.01	<5	<.1	<.02	.1	<2
0313-393	.018	3.0	4.1	.23	10.4	<.001	1	.14	.011	.07	.2	.6	.03	.56	<5	<.1	<.02	.3	7
0313-394	.012	2.2	5.4	.27	8.1	.002	1	.11	.008	.06	.2	.8	.03	.90	23	<.1	<.02	.3	15
0313-395	.008	2.9	4.8	.15	11.2	<.001	1	.15	.011	.08	.2	.8	.03	1.46	5	.1	<.02	.4	14
0313-396	.008	2.8	5.2	.17	8.7	.001	1	.13	.010	.07	.2	.8	.05	1.65	31	.3	.04	.4	36
0313-397	.008	2.5	4.9	.33	8.1	.001	1	.12	.010	.06	.2	.9	.02	.55	<5	.1	<.02	.3	7
0313-398	.009	1.9	4.5	.52	7.2	<.001	1	.10	.008	.05	.3	1.2	.03	.47	<5	.3	.05	.3	11
0313-399	.010	2.8	4.9	.31	9.0	<.001	1	.12	.009	.07	.2	.7	.03	1.18	<5	<.1	<.02	.3	45
0313-400	.005	2.9	4.3	.07	10.6	<.001	1	.14	.009	.08	.2	.4	.03	3.53	<5	.1	.02	.3	304
0313-401	.001	<.5	7.0	.18	2.9	.005	<1	.03	.003	.02	.2	.7	<.02	1.23	<5	<.1	<.02	.1	61
0313-402	.006	2.0	4.4	.35	11.3	.001	1	.16	.010	.08	.2	1.6	.04	4.24	16	.1	<.02	.4	75
0313-403	.009	2.1	6.1	.65	9.1	.003	1	.10	.008	.06	.3	2.1	.02	.38	<5	.1	<.02	.3	22
0313-404	.005	<.5	15.6	.24	3.5	.003	1	.04	.004	.02	.6	1.0	<.02	.45	12	<.1	<.02	.1	8
0313-405	.005	2.1	7.5	.23	6.3	<.001	1	.07	.006	.05	.4	.6	.02	1.04	5	<.1	<.02	.2	79
0313-406	.006	3.4	5.1	.26	10.9	.003	<1	.12	.009	.07	.3	.8	.02	.85	<5	.1	<.02	.2	56
0313-407	.004	.6	5.2	.29	2.9	.001	1	.03	.006	.02	.3	.7	<.02	.36	<5	.1	.02	.1	16
0313-408	.006	3.8	6.1	.11	10.6	<.001	1	.13	.010	.08	.5	.5	.03	2.46	<5	.1	<.02	.3	131
0313-409	.009	3.0	4.7	.20	9.1	.003	1	.12	.010	.06	.2	.7	.03	1.72	<5	.1	<.02	.3	86
STANDARD DS5/AU-R	.094	12.1	182.3	.64	137.6	.092	17	1.99	.032	.14	4.7	3.6	1.00	.04	182	4.5	.86	6.8	493

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30.00 GM SAMPLE ANALYSIS BY FA/ICP.
- SAMPLE TYPE: CORE R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 2 2003 **DATE REPORT MAILED:** Sept 19/03 **SIGNED BY**..........D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %
0313-410	.23	3.74	9.55	16.1	237	27.0	9.6	627	4.22	35153.7	.4	904.0	4.5	19.3	.08	5.44	.02	2	.86
0313-411	.29	4.28	9.97	60.5	196	28.4	9.9	438	2.46	5798.6	.8	41.7	7.0	17.0	.12	2.25	.02	2	.62
0313-412	.19	4.38	109.48	248.2	519	25.6	9.6	198	4.11	16449.2	.7	212.2	5.7	6.4	3.64	4.95	<.02	2	.23
0313-413	.16	119.81	14825.33	30581.4	46730	19.5	6.3	174	3.74	2674.0	1.4	126.4	6.2	7.6	223.47	73.66	.82	<2	.25
0313-414	.20	2.47	63.01	259.4	298	24.7	8.5	477	3.58	6871.2	.7	35.6	4.9	7.4	3.48	2.46	<.02	<2	.32
0313-415	.24	3.07	74.51	211.1	356	42.0	15.5	381	7.89	6906.5	.7	83.2	4.6	5.5	3.90	2.17	.02	<2	.26
0313-416	.41	4.75	95.83	1670.9	487	37.6	13.0	438	3.12	1327.5	1.1	2.6	8.3	30.1	8.58	1.93	.05	2	1.04
0313-417	.25	3.12	39.21	336.3	179	30.5	10.2	954	2.84	3503.6	.6	44.1	4.2	28.4	1.60	1.41	.03	2	1.33
0313-418	.13	3.93	21.09	216.6	303	28.5	10.6	386	5.80	99999.0	.4	6926.4	3.1	16.7	.11	15.95	.23	3	.85
0313-419	.21	2.14	5.79	49.5	71	9.8	3.0	421	1.27	693.7	.5	36.2	3.6	25.4	.06	.62	.04	2	1.15
0313-420	.16	6.94	7.17	80.8	157	12.7	4.6	343	1.46	104.1	.4	6.7	4.1	16.7	.07	1.66	.05	<2	.61
RE 0313-420	.17	7.45	7.26	75.7	175	11.9	4.5	326	1.42	96.4	.4	5.3	4.2	16.2	.07	1.82	.06	<2	.59
RRE 0313-420	.16	7.32	6.69	78.2	156	12.8	4.7	336	1.45	56.9	.4	1.9	4.4	16.7	.05	1.63	.05	<2	.61
0313-421	.16	19.74	2.18	13.3	1211	.7	.2	74	.22	10.9	<.1	.7	.4	3.0	.08	12.60	.05	<2	.12
0313-422	.23	2.21	10.81	232.1	87	12.5	3.7	369	1.52	210.4	.3	7.8	4.7	15.7	1.44	2.80	.05	<2	.67
0313-423	.21	4.27	6.88	53.1	198	18.5	4.9	326	1.58	1015.9	.6	35.9	9.2	21.7	.39	2.49	.03	<2	.95
0313-424	.32	2.06	3.63	30.8	41	2.9	.9	170	.60	14.6	<.1	1.8	.3	10.1	.13	1.24	<.02	<2	.46
0313-425	.18	3.77	7.30	41.2	171	9.8	2.7	488	1.18	166.2	.4	5.1	4.8	23.0	.34	2.26	.08	<2	1.21
0313-426	.24	3.24	138.23	2141.8	527	12.1	4.8	192	1.27	1160.1	.4	126.6	3.6	9.1	16.84	2.23	.05	<2	.40
0313-427	.15	1.82	5.89	26.1	83	9.4	3.3	329	1.13	343.7	.5	35.7	3.8	17.3	.34	1.47	.02	<2	.80
0313-428	.20	2.12	14.10	76.9	103	13.4	6.2	985	3.04	8259.6	.3	718.5	2.4	24.3	.88	7.62	.13	<2	1.41
0313-429	.17	3.67	10.90	84.0	120	32.8	10.1	796	1.68	653.5	.2	59.2	.9	31.4	.43	7.79	.05	<2	1.42
STANDARD DS5/AU-R	13.27	135.13	23.30	131.8	261	24.4	11.9	741	2.86	19.0	5.5	38.7	2.6	46.4	5.32	3.51	5.80	58	.72

SAMPLE#	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0313-410	.010	2.7	4.7	.34	12.3	<.001	1	.15	.012	.08	.3	.9	.05	3.36	<5	.2	.02	.4	1056
0313-411	.012	4.3	4.9	.22	14.0	<.001	3	.17	.014	.09	.2	1.0	.05	2.11	<5	.1	<.02	.4	57
0313-412	.011	3.4	5.4	.07	13.8	.002	2	.18	.011	.10	.2	.6	.06	3.59	<5	<.1	<.02	.4	283
0313-413	.008	2.9	4.2	.10	8.1	.002	2	.10	.006	.06	.2	.5	.13	4.60	121	.1	.07	.5	171
0313-414	.012	3.1	4.4	.11	11.1	<.001	2	.16	.010	.08	.2	.7	.05	3.03	<5	<.1	<.02	.4	57
0313-415	.013	2.2	5.2	.08	9.6	.001	1	.13	.008	.08	.2	.7	.04	9.25	<5	<.1	<.02	.4	113
0313-416	.205	5.9	5.3	.20	20.8	.001	3	.31	.022	.14	.3	1.5	.06	2.85	<5	<.1	<.02	.9	34
0313-417	.026	2.5	4.0	.44	10.8	.003	1	.14	.010	.08	.2	1.2	.03	1.91	<5	<.1	<.02	.4	60
0313-418	.010	2.0	3.9	.27	11.3	.004	2	.13	.010	.07	.1	.9	.05	3.41	<5	.2	.15	.3	7032
0313-419	.009	2.9	3.8	.34	9.8	.003	1	.14	.011	.07	.1	.9	.04	.39	<5	<.1	.02	.3	47
0313-420	.009	3.4	6.0	.34	10.3	.001	1	.14	.012	.07	.2	.7	.03	.17	<5	<.1	<.02	.3	9
RE 0313-420	.009	3.6	5.1	.33	10.5	<.001	1	.14	.012	.07	.2	.7	.03	.20	<5	<.1	<.02	.3	10
RRE 0313-420	.009	3.8	6.0	.34	11.2	.002	2	.15	.013	.07	.2	.8	.03	.20	<5	<.1	<.02	.3	5
0313-421	<.001	1.2	5.9	.04	.9	<.001	<1	.01	.001	<.01	.2	<.1	<.02	.01	<5	<.1	<.02	<.1	2
0313-422	.009	3.0	6.0	.33	9.6	.002	1	.12	.011	.06	.4	.7	.03	.26	<5	<.1	<.02	.3	13
0313-423	.008	4.2	5.1	.28	13.6	.004	1	.17	.018	.09	.4	.8	.03	.80	<5	.1	<.02	.4	59
0313-424	.001	.5	6.2	.14	2.4	<.001	<1	.02	.003	.01	.2	.2	<.02	.04	<5	<.1	<.02	.1	<2
0313-425	.009	2.8	4.9	.31	8.5	<.001	1	.12	.014	.06	.2	.8	.02	.25	<5	.1	<.02	.3	8
0313-426	.008	2.1	5.3	.10	8.3	.002	1	.12	.010	.06	.2	.4	.03	1.11	14	<.1	<.02	.3	138
0313-427	.009	2.1	5.0	.21	8.6	.002	1	.12	.012	.06	.2	.4	.02	.41	<5	<.1	<.02	.3	45
0313-428	.012	1.0	3.4	.45	7.0	003	1	.08	.007	.05	.7	1.0	.02	1.99	<5	.1	.07	.2	964
0313-429	.012	.6	7.6	.46	4.1	.001	<1	.05	.005	.03	.7	.9	<.02	.71	<5	.1	<.02	.2	77
STANDARD DS5/AU-R	.092	11.4	184.4	.64	133.4	.092	19	2.02	.030	.13	4.4	3.3	.96	.04	164	4.4	.87	6.5	491

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ___ FA ___

ACME AN. ICAL LABORATORIES LTD. 852 E. HASTINGS ST. 'OUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60 53-1716
(ISO 9002 Accredited Co.)

ASSAY CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A303921R
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Pb %	Zn %	As %	Ag** gm/mt	Au** gm/mt
0313-413	1.56	3.40	.36	56.7	-
0313-418	<.01	.02	5.14	-	7.68
STANDARD GC-2	8.90	17.04	.17	-	-

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 250 ML, ANALYSED BY ICP-ES.
- SAMPLE TYPE: CORE PULP AG** & AU** BY FIRE ASSAY FROM 1 A.T. SAMPLE.

DATE RECEIVED: OCT 9 2003 **DATE REPORT MAILED:** Oct 15/2003 **SIGNED BY.** ....D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME AN   ICAL LABORATORIES LTD.   852 E. HASTINGS ST.   OUVER BC   V6A 1R6   PHONE(604)253-3158 FAX(6C   53-1716
(ISO 002 Accredited Co.)

ASSAY CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont   File # A303921R

1020 Canadian Centre, 833, Calgary AB T2P 3T5   Submitted by: Rick Walker

SAMPLE#	Pb %	Zn %	As %	Ag** gm/mt	Au** gm/mt
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0313-418	<.01	.02	5.14	-	7.68
STANDARD GC-2	8.90	17.04	.17	-	-

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 250 ML, ANALYSED BY ICP-ES.
- SAMPLE TYPE: CORE PULP   AG** & AU** BY FIRE ASSAY FROM 1 A.T. SAMPLE.

DATE RECEIVED: OCT 9 2003   DATE REPORT MAILED: Oct 15/2003   SIGNED BY. [signature] D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data L FA Y

ACME AN ICAL LABORATORIES LTD. 852 E. HASTINGS ST. OUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60 3-1716
(IS 02 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A304019 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %
0312-382	.40	47.10	13.74	111.2	303	38.3	7.1	570	3.58	37.3	.4	<.2	2.7	8.4	.02	5.67	.18	4	.05
0313-430	.23	5.30	14.36	43.1	132	9.8	2.8	443	1.15	168.2	.4	21.5	4.0	20.5	.37	1.52	.08	<2	.88
0313-431	.43	49.22	2146.93	2153.9	8686	33.0	9.0	274	6.18	13077.2	1.0	746.6	2.8	9.1	14.48	22.79	.05	2	.41
0313-432	.26	17.68	1364.72	991.1	4639	5.1	1.6	301	.89	341.7	.2	23.3	.6	7.3	6.55	11.00	.03	<2	.38
0313-433	.40	7.72	47.33	104.2	431	8.5	3.0	711	1.30	82.6	.4	5.2	4.6	23.4	.57	2.19	.28	<2	1.22
0313-434	.26	4.00	22.08	1478.0	128	8.6	2.7	440	1.30	420.9	.5	30.2	5.3	21.9	9.76	.56	.09	<2	.97
0313-435	.40	4.70	88.91	62.1	672	9.0	2.2	409	.90	427.4	.1	32.1	1.3	15.3	.27	2.02	1.26	<2	.70
0313-436	.25	6.89	17.10	79.1	206	15.4	5.6	630	4.36	3091.9	.4	483.4	3.5	22.7	.20	3.77	.06	2	1.10
0313-437	.35	5.58	5.17	66.3	173	12.7	3.8	371	1.43	668.0	.3	13.8	3.5	24.7	.27	2.11	.04	2	.97
0313-438	.25	3.62	6.68	236.2	81	20.8	6.0	538	1.61	1138.7	.5	197.6	3.6	27.5	.09	1.20	.03	3	1.12
0313-439	.39	3.07	2.02	22.5	38	3.7	1.4	473	.80	154.2	.1	20.7	.6	15.3	.04	.36	<.02	<2	.70
0313-440	.28	3.39	4.98	40.0	87	15.9	6.1	328	2.02	2314.6	.4	295.3	3.5	22.7	.05	.67	.03	2	.85
0313-441	.32	3.45	4.23	97.2	80	19.0	7.0	448	1.60	1047.6	.5	83.5	2.7	30.4	.08	.72	.05	3	1.01
0313-442	.37	20.20	11.32	247.5	1030	48.5	16.6	620	3.15	150.4	.6	7.6	4.4	14.0	.06	4.27	.06	6	.30
0313-443	1.00	30.41	13.15	307.0	1894	67.3	20.6	927	4.11	326.8	1.1	40.8	5.7	37.4	.35	4.20	.11	8	.86
0313-444	.39	125.37	3845.35	3367.6	8438	29.9	12.1	1806	4.54	83.7	.5	4.7	8.3	70.7	23.86	17.16	.37	4	4.56
0313-445	.37	28.66	22.05	100.6	1179	72.9	23.9	507	6.37	431.9	.9	37.0	6.0	13.7	.33	4.30	1.00	6	.22
0313-446	.54	2319.21	21358.49	3557.5	66272	38.6	12.4	15148	12.45	16519.9	1.9	1072.6	.9	23.1	21.77	4917.00	1.16	7	2.94
0314-447	.61	206.13	23165.38	99999.0	99999	17.1	5.8	11401	6.63	136.4	.9	16.8	2.0	100.2	825.96	298.00	.34	6	5.38
0314-448	.46	55.41	604.65	5685.8	4279	32.0	13.1	874	3.63	100.3	.6	1.7	9.7	27.1	77.00	16.66	.21	6	1.67
RE 0314-448	.45	52.46	580.59	5505.5	4138	30.5	12.4	843	3.52	96.0	.5	1.1	9.4	26.3	77.12	16.17	.20	5	1.62
RRE 0314-448	.47	44.65	568.24	5849.7	4504	29.5	12.1	871	3.52	77.7	.5	1.4	9.9	25.8	80.62	11.47	.21	5	1.62
0314-464	.36	39.30	33.55	141.7	185	50.3	15.1	557	4.23	79.3	.7	9.8	7.4	45.6	.55	1.15	.31	4	3.02
0314-465	.35	43.54	48.59	127.9	343	36.7	14.5	532	3.88	57.0	.8	20.8	9.3	45.5	.67	1.32	.30	4	3.05
0314-466	.28	47.32	25.51	123.9	198	47.6	18.4	447	4.38	55.6	.9	1.2	9.4	38.6	.59	.97	.41	4	2.48
0314-467	.36	42.31	37.29	86.6	148	47.6	15.5	828	4.16	54.2	.9	.8	11.1	56.3	.25	.60	.33	4	4.02
0314-468	.37	23.35	15.48	47.0	46	46.0	12.5	1268	4.79	58.8	1.1	.4	10.1	82.5	.10	.98	.26	4	6.31
0314-469	.47	44.29	17.22	36.6	[illegible]	54.9	20.1	467	4.02	50.5	1.3	1.6	11.6	40.8	.07	.85	.54	4	2.66
0314-470	.39	34.94	16.17	315.9	69	45.1	21.0	855	4.72	50.6	1.2	.6	10.3	54.4	.28	.48	.59	4	4.69
0314-471	.51	43.83	12.08	38.5	62	38.8	14.3	446	3.90	48.8	1.6	1.4	12.6	32.6	.05	.66	.50	3	2.83
0315-472	.43	65.66	10.69	124.3	96	58.3	19.9	277	4.35	69.5	1.2	.2	11.1	13.1	.11	.58	.40	4	.53
0314-473	.46	61.66	7.55	66.0	104	61.6	22.8	1029	5.82	70.6	1.2	<.2	6.6	52.4	.07	1.43	.74	6	3.57
0314-474	.44	52.02	14.10	47.5	100	56.8	22.7	327	4.74	48.9	1.0	.2	10.3	14.0	.06	.60	.67	3	.57
0314-475	.53	46.39	14.48	41.8	83	58.4	25.0	1040	6.09	66.3	1.5	.4	7.6	53.2	.07	.55	.61	4	3.71
STANDARD DS5/AU-R	12.35	141.70	23.32	136.5	268	24.8	12.3	760	2.87	20.0	5.8	43.1	2.6	49.0	5.52	3.44	6.11	59	.72

SAMPLE#	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0312-382	.016	2.1	6.1	1.24	14.6	<.001	1	.24	.019	.09	.1	2.0	.04	.04	<5	.1	<.02	.6	<2
0313-430	.011	2.4	2.8	.27	10.4	<.001	1	.20	.020	.08	.2	.6	.05	.30	<5	.1	.02	.4	31
0313-431	.010	1.8	3.3	.16	8.3	<.001	1	.16	.011	.07	.7	.8	.05	5.01	25	.4	.04	.4	741
0313-432	.001	1.0	2.3	.15	2.4	<.001	1	.04	.006	.02	.2	.3	<.02	.37	10	.1	.02	.1	35
0313-433	.015	2.9	3.0	.35	9.3	<.001	1	.19	.017	.07	.2	.8	.04	.20	<5	.1	.02	.4	7
0313-434	.014	3.1	3.2	.29	10.9	<.001	1	.21	.016	.09	.1	.7	.05	.46	6	<.1	<.02	.4	58
0313-435	.009	1.2	2.6	.21	4.9	<.001	<1	.08	.007	.03	.3	.7	.02	.16	<5	.2	.09	.2	38
0313-436	.010	2.5	3.0	.38	10.9	<.001	1	.19	.013	.08	.3	1.0	.05	3.53	<5	.3	<.02	.4	549
0313-437	.007	2.7	3.4	.30	10.1	<.001	1	.17	.014	.07	.3	.9	.04	.49	<5	.1	<.02	.4	14
0313-438	.010	2.8	3.8	.37	11.2	<.001	<1	.24	.014	.08	.2	1.5	.05	.43	<5	<.1	<.02	.5	213
0313-439	.003	.6	2.0	.26	2.8	.001	<1	.06	.004	.02	.1	.9	.02	.07	<5	.1	<.02	.1	24
0313-440	.007	2.5	3.1	.28	11.7	<.001	1	.21	.015	.09	.2	.9	.06	1.19	<5	.1	<.02	.4	340
0313-441	.006	2.4	3.9	.35	21.6	<.001	<1	.19	.009	.05	.1	1.6	.03	.60	<5	.1	<.02	.4	100
0313-442	.030	3.4	8.7	.72	15.0	<.001	1	.32	.017	.10	.2	2.1	.05	.29	<5	<.1	<.02	.7	11
0313-443	.036	4.1	14.1	.97	25.5	<.001	1	.50	.026	.17	2.4	3.3	.08	.81	<5	<.1	<.02	1.1	94
0313-444	.066	1.2	5.2	1.25	27.2	.002	1	.52	.023	.16	.4	3.7	.07	1.15	21	.2	.07	.9	33
0313-445	.056	7.5	8.9	1.03	26.1	.001	3	.42	.022	.18	.3	3.0	.08	3.15	<5	.5	.06	.9	214
0313-446	.016	<.5	3.7	2.86	16.6	<.001	1	.22	.021	.08	.1	4.6	.05	3.63	36	.3	.07	.9	1496
0314-447	.061	<.5	3.6	1.55	12.6	<.001	<1	.16	.008	.08	14.2	3.6	.08	4.98	1020	4.2	.26	1.6	226
0314-448	.016	2.7	5.2	.33	33.6	.003	2	.53	.023	.20	1.0	3.5	.07	.39	8	<.1	.03	.9	11
RE 0314-448	.016	2.6	5.0	.32	33.3	.003	1	.52	.023	.20	1.0	3.4	.07	.37	7	.1	.03	.9	7
RRE 0314-448	.016	2.6	4.4	.32	31.7	.003	1	.47	.021	.18	1.0	3.3	.07	.37	10	<.1	.03	.7	14
0314-464	.011	1.2	4.5	1.20	30.5	<.001	<1	.37	.033	.16	.1	3.2	.05	1.60	<5	.2	.05	.7	37
0314-465	.019	1.4	4.3	1.15	30.4	<.001	1	.36	.031	.16	.2	3.3	.05	1.51	<5	.1	.05	.7	27
0314-466	.017	1.3	4.4	1.05	31.4	<.001	<1	.37	.032	.15	.1	3.0	.06	2.00	<5	.2	.05	.7	19
0314-467	.030	2.0	5.3	1.28	36.9	.001	<1	.45	.041	.17	<.1	3.2	.06	1.74	<5	.1	.04	.9	12
0314-468	.024	1.9	4.9	1.96	26.1	.001	<1	.31	.027	.12	<.1	3.4	.04	1.12	<5	.1	.03	.6	9
0314-469	.163	1.8	3.6	.77	30.4	.001	<1	.39	.036	.14	<.1	2.7	.05	2.47	<5	.2	.06	.8	9
0314-470	.021	1.5	3.5	1.47	25.2	<.001	<1	.28	.031	.11	<.1	2.8	.04	2.07	6	.1	.05	.6	4
0314-471	.022	1.5	3.2	.95	23.6	<.001	<1	.25	.027	.10	<.1	2.6	.04	1.83	<5	.1	.05	.5	6
0315-472	.023	2.9	5.9	1.26	23.9	<.001	<1	.30	.037	.11	<.1	3.3	.04	.82	<5	.1	.05	.6	3
0314-473	.149	3.6	7.3	2.23	26.7	.001	<1	.41	.042	.13	<.1	4.2	.05	1.11	<5	.2	.07	.8	3
0314-474	.013	3.1	5.1	1.11	22.9	<.001	<1	.26	.032	.11	<.1	2.9	.04	1.75	<5	.3	.06	.5	7
0314-475	.032	2.2	4.5	1.79	24.1	<.001	<1	.30	.034	.11	<.1	3.7	.04	2.80	<5	.5	.08	.6	6
STANDARD DS5/AU-R	.091	12.2	186.3	.64	133.2	.097	17	2.12	.034	.13	4.5	3.6	1.03	.01	171	4.6	.85	6.8	484

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30.00 GM SAMPLE ANALYSIS BY FA/ICP.
- SAMPLE TYPE: CORE R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 5 2003 **DATE REPORT MAILED:** Sep 26/2003 **SIGNED BY** ......D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0314-476	.41	34.89	17.27	63.2	79	39.3	21.3	2320	6.13	24.7	1.1	.8	5.8	65.5	.08	.33	.53	5	3.68	.029	1.9	5.9	2.20	32.3	.002	<1	.32	.045	.13	<.1	3.8	.05	1.85	<5	.2	.08	.8	13
0314-477	.79	61.96	22.43	127.4	95	72.0	30.0	641	5.81	16.2	1.3	1.5	7.8	14.0	.03	.39	.70	5	.38	.013	2.5	8.2	1.39	47.0	.002	1	.35	.049	.14	<.1	3.2	.06	1.94	6	.4	.07	.8	30
0314-478	.57	46.61	5.67	100.4	156	54.5	15.9	848	4.93	62.5	1.1	.8	6.3	26.9	.20	5.32	.23	5	.91	.029	4.3	9.1	1.66	31.9	<.001	1	.37	.045	.16	<.1	4.2	.07	.14	<5	.1	<.02	.8	4
0314-503	.20	2.70	8.11	33.3	45	3.7	1.3	527	1.05	5.8	.1	.4	.9	15.0	.08	.59	.07	<2	1.24	.006	.8	1.6	.43	6.3	.002	<1	.09	.015	.03	<.1	.6	<.02	.02	<5	<.1	<.02	.2	6
0314-599	.50	2.04	4.05	6.0	30	18.1	6.3	470	1.83	2889.0	1.8	25.0	10.4	21.5	.03	.54	.02	4	.93	.010	2.3	5.6	.35	23.2	.006	1	.36	.045	.14	<.1	1.2	.06	1.18	<5	.1	<.02	.8	509
0314-600	.23	.93	3.78	5.0	17	2.7	1.2	183	.64	46.8	.1	.8	2.0	10.5	.03	.45	<.02	<2	.48	.004	3.0	2.0	.16	14.1	.005	1	.11	.019	.04	<.1	.5	.02	.02	<5	<.1	<.02	.3	8
0314-601	.49	6.93	7.00	19.6	334	7.2	3.3	1515	3.02	227.3	.2	3.7	3.3	60.2	.19	1.57	.03	2	3.92	.064	4.5	4.9	1.21	18.0	.002	1	.23	.030	.09	<.1	2.9	.03	.22	<5	.2	<.02	.6	13
0314-602	.15	19.27	4.99	12.2	862	22.0	8.4	859	2.55	1828.7	.9	50.1	7.4	43.9	.11	3.20	.09	3	2.29	.020	3.7	3.9	.73	17.0	.003	<1	.28	.042	.09	<.1	2.0	.04	.82	<5	.1	.02	.6	64
0314-603	.62	10.82	2.88	15.3	582	8.2	3.5	1269	1.69	28.5	.4	.8	4.6	24.2	.06	3.16	.04	2	2.15	.029	4.5	4.0	.61	9.2	.003	<1	.15	.024	.05	.2	1.3	.03	<.01	<5	.1	.03	.4	10
0314-604	.33	9.58	3.89	12.9	391	9.1	3.3	1237	2.55	1365.5	.6	24.5	4.9	40.5	.09	1.51	.06	2	2.68	.012	2.0	2.7	.93	11.5	.003	1	.18	.029	.06	.1	1.6	.02	.67	<5	<.1	<.02	.4	37
0314-605	.57	3.43	3.94	10.3	55	11.8	4.1	425	1.40	33.2	.8	.7	6.2	28.6	.04	.23	.02	2	1.40	.009	3.4	4.4	.37	14.8	.001	1	.26	.042	.08	<.1	1.0	.03	.10	<5	.1	<.02	.5	8
0314-606	.19	3.39	5.53	14.2	111	16.4	8.0	1138	3.08	710.8	.7	56.8	4.9	49.2	.09	.39	.11	2	2.87	.027	2.2	3.1	1.01	15.1	.001	1	.23	.034	.09	<.1	2.3	.03	1.25	<5	.2	.02	.5	66
RE 0314-606	.24	3.22	5.52	15.1	113	17.9	8.4	1182	3.17	750.0	.8	38.3	5.3	51.0	.11	.42	.11	2	2.96	.027	2.4	3.6	1.04	15.7	.002	1	.25	.036	.09	<.1	2.4	.04	1.29	<5	.1	.02	.5	57
RRE 0314-606	.24	3.47	5.60	12.8	97	16.8	8.3	1124	3.06	719.6	.8	40.9	5.5	48.9	.13	.32	.12	2	2.85	.026	2.3	3.1	.99	15.3	.006	1	.23	.033	.08	<.1	2.3	.03	1.24	<5	.1	.03	.5	65
0314-607	.62	7.62	6.82	28.9	412	40.8	13.5	2886	8.26	2718.7	.7	218.6	5.3	26.3	.05	1.36	.32	4	1.28	.123	3.6	5.1	1.24	28.7	.004	4	.39	.047	.14	.1	2.9	.07	4.31	<5	.3	.08	1.1	475
0314-608	.59	6.64	5.44	14.4	299	31.1	10.2	1161	3.28	1209.2	1.2	123.4	10.2	34.7	.09	.88	.09	3	2.05	.012	3.6	5.1	.83	17.3	.001	1	.27	.032	.11	.1	2.2	.05	1.57	<5	.1	.02	.6	59
0314-609	.62	9.29	7.98	26.0	441	59.5	25.4	1530	5.18	1040.0	3.0	95.2	9.5	36.5	.09	1.73	.25	6	1.81	.095	8.8	6.8	1.10	31.1	.005	8	.39	.043	.16	.3	4.3	.08	2.34	<5	.2	.03	1.0	112
0314-610	.60	6.76	3.71	15.1	74	10.4	6.2	664	2.32	28.2	.3	1.4	2.4	41.7	.06	1.00	.12	2	1.99	.004	1.1	3.4	.72	10.8	.004	1	.11	.016	.05	<.1	1.3	.02	.35	<5	.1	.02	.3	3
RW-2000-001 ROCK	.09	10718.69	19362.11	99999.0	99999	3.1	1.3	35	4.60	11662.3	.3	10944.3	<.1	<.5	1264.10	8808.36	9.23	<2	.01	<.001	<.5	<.5	<.01	6.2	.005	<1	.01	.002	<.01	<.1	<.1	.41	10.71	682	1.4	.04	3.0	12716
STANDARD DS5/AU-R	12.04	137.45	24.15	131.5	265	23.7	11.9	745	2.86	18.0	5.6	40.0	2.5	46.4	5.33	2.63	5.79	58	.70	.093	11.4	179.6	.66	138.4	.091	15	2.04	.032	.13	4.4	3.4	.97	.03	166	4.6	.80	6.4	496

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A304019 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm
0312-382	.40	47.10	13.74	111.2	303	38.3	7.1	570	3.58	37.3	.4	<.2	2.7	8.4	.02
0313-430	.23	5.30	14.36	43.1	132	9.8	2.8	443	1.15	168.2	.4	21.5	4.0	20.5	.37
0313-431	.43	49.22	2146.93	2153.9	8686	33.0	9.0	274	6.18	13077.2	1.0	746.6	2.8	9.1	14.48
0313-432	.26	17.68	1364.72	991.1	4639	5.1	1.6	301	.89	341.7	.2	23.3	.6	7.3	6.55
0313-433	.40	7.72	47.33	104.2	431	8.5	3.0	711	1.30	82.6	.4	5.2	4.5	23.4	.57
0313-434	.26	4.00	22.08	1478.0	128	8.6	2.7	440	1.30	420.9	.5	30.2	5.3	21.9	9.76
0313-435	.40	4.70	88.91	62.1	672	9.0	2.2	409	.90	427.4	.1	32.1	1.3	15.3	.27
0313-436	.25	6.89	17.10	79.1	206	15.4	5.6	630	4.36	3091.9	.4	483.4	3.5	22.7	.20
0313-437	.35	5.58	5.17	66.3	173	12.7	3.8	371	1.43	668.0	.3	13.8	3.5	24.7	.27
0313-438	.25	3.62	6.68	236.2	81	20.8	6.0	538	1.61	1138.7	.5	197.6	3.6	27.5	.09
0313-439	.39	3.07	2.02	22.5	38	3.7	1.4	473	.80	154.2	.1	20.7	.6	15.3	.04
0313-440	.28	3.39	4.98	40.0	87	15.9	6.1	328	2.02	2314.6	.4	295.3	3.5	22.7	.05
0313-441	.32	3.45	4.23	97.2	80	19.0	7.0	448	1.60	1047.6	.5	83.5	2.7	30.4	.08
0313-442	.37	20.20	11.32	247.5	1030	48.5	16.6	620	3.15	150.4	.6	7.6	4.4	14.0	.06
0313-443	1.00	30.41	13.15	307.0	1894	67.3	20.6	927	4.11	326.8	1.1	40.8	5.7	37.4	.35
0313-444	.39	125.37	3845.35	3367.6	8438	29.9	12.1	1806	4.54	83.7	.5	4.7	8.3	70.7	23.86
0313-445	.37	28.66	22.05	100.6	1179	72.9	23.9	507	6.37	431.9	.9	37.0	6.0	13.7	.33
0313-446	.54	2319.21	21358.49	3557.5	66272	38.6	12.4	15148	12.45	16619.9	1.9	1072.6	.9	23.1	21.77
0314-447	.61	206.13	23165.38	99999.0	99999	17.1	5.8	11401	6.63	136.4	.9	16.8	2.0	100.2	825.96
0314-448	.46	55.41	604.65	5685.8	4279	32.0	13.1	874	3.63	100.3	.6	1.7	9.7	27.1	77.00
RE 0314-448	.45	52.46	580.59	5505.5	4138	30.5	12.4	843	3.52	96.0	.5	1.1	9.4	26.3	77.12
RRE 0314-448	.47	44.65	568.24	5849.7	4504	29.5	12.1	871	3.52	77.7	.5	1.4	9.9	25.8	80.62
0314-464	.36	39.30	33.55	141.7	185	50.3	15.1	557	4.23	79.3	.7	9.8	7.4	45.6	.55
0314-465	.35	43.54	48.59	127.9	343	36.7	14.5	532	3.88	57.0	.8	20.8	9.3	45.5	.67
0314-466	.28	47.32	25.51	123.9	198	47.6	18.4	447	4.38	55.6	.9	1.2	9.4	38.6	.59
0314-467	.36	42.31	37.29	86.6	148	47.6	15.5	828	4.16	54.2	.9	.8	11.1	56.3	.25
0314-468	.37	23.35	15.48	47.0	46	46.0	12.5	1268	4.79	58.8	1.1	.4	10.1	82.5	.10
0314-469	.47	44.29	17.22	36.6	77	54.9	20.1	467	4.02	50.5	1.3	1.6	11.6	40.8	.07
0314-470	.39	34.94	16.17	315.9	69	45.1	21.0	855	4.72	50.6	1.2	.6	10.3	54.4	.28
0314-471	.51	43.83	12.08	38.5	62	38.8	14.3	446	3.90	48.8	1.6	1.4	12.6	32.6	.05
0315-472	.43	65.66	10.69	124.3	96	58.3	19.9	277	4.35	69.5	1.2	.2	11.1	13.1	.11
0314-473	.46	61.66	7.56	66.0	104	61.6	22.8	1029	5.82	70.6	1.2	<.2	6.6	52.4	.07
0314-474	.44	52.02	14.10	47.5	100	56.8	22.7	327	4.74	48.9	1.0	.2	10.3	14.0	.06
0314-475	.53	46.39	14.48	41.8	83	58.4	25.0	1040	6.09	66.3	1.5	.4	7.6	53.2	.07
STANDARD DS5/AU-R	12.35	141.70	23.32	136.5	268	24.8	12.3	760	2.87	20.0	5.8	43.1	2.6	49.0	5.52

SAMPLE#	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0312-382	5.67	.18	4	.05	.016	2.1	6.1	1.24	14.6	<.001	1	.24	.019	.09	.1	2.0	.04	.04	<5	.1	<.02	.6	<2
0313-430	1.52	.08	<2	.88	.011	2.4	2.8	.27	10.4	<.001	1	.20	.020	.08	.2	.6	.05	.30	<5	.1	.02	.4	31
0313-431	22.79	.05	2	.41	.010	1.8	3.3	.16	8.3	<.001	1	.15	.011	.07	.7	.8	.05	5.01	25	.4	.04	.4	741
0313-432	11.00	.03	<2	.38	.001	1.0	2.3	.15	2.4	<.001	1	.04	.006	.02	.2	.3	<.02	.37	10	.1	.02	.1	35
0313-433	2.19	.28	<2	1.22	.015	2.9	3.0	.35	9.3	<.001	1	.19	.017	.07	.2	.8	.04	.20	<5	.1	.02	.4	7
0313-434	.56	.09	<2	.97	.014	3.1	3.2	.29	10.9	<.001	1	.21	.016	.09	.1	.7	.05	.46	6	<.1	<.02	.4	58
0313-435	2.02	1.26	<2	.70	.009	1.2	2.6	.21	4.9	<.001	<1	.08	.007	.03	.3	.7	.02	.16	<5	.2	.09	.2	38
0313-436	3.77	.06	2	1.10	.010	2.5	3.0	.38	10.9	<.001	1	.19	.013	.08	.3	1.0	.05	3.53	<5	.3	<.02	.4	549
0313-437	2.11	.04	2	.97	.007	2.7	3.4	.30	10.1	<.001	1	.17	.014	.07	.3	.9	.04	.49	<5	.1	<.02	.4	14
0313-438	1.20	.03	3	1.12	.010	2.8	3.8	.37	11.2	<.001	<1	.24	.014	.08	.2	1.5	.05	.43	<5	<.1	<.02	.5	213
0313-439	.36	<.02	<2	.70	.003	.6	2.0	.26	2.8	.001	<1	.06	.004	.02	.1	.9	.02	.07	<5	.1	<.02	.1	24
0313-440	.67	.03	2	.85	.007	2.5	3.1	.28	11.7	<.001	1	.21	.015	.09	.2	.9	.06	1.19	<5	.1	<.02	.4	340
0313-441	.72	.05	3	1.01	.006	2.4	3.9	.35	21.6	<.001	<1	.19	.009	.05	.1	1.6	.03	.60	<5	.1	<.02	.4	100
0313-442	4.27	.06	6	.30	.030	3.4	8.7	.72	15.0	<.001	1	.32	.017	.10	.2	2.1	.05	.29	<5	<.1	<.02	.7	11
0313-443	4.20	.11	8	.86	.036	4.1	14.1	.97	25.5	<.001	1	.50	.026	.17	2.4	3.3	.08	.81	<5	<.1	<.02	1.1	94
0313-444	17.16	.37	4	4.56	.066	1.2	5.2	1.25	27.2	.002	1	.52	.023	.16	.4	3.7	.07	1.15	21	.2	.07	.9	33
0313-445	4.30	1.00	6	.22	.056	7.5	8.9	1.03	26.1	.001	3	.42	.022	.18	.3	3.0	.08	3.15	<5	.5	.06	.9	214
0313-446	4917.00	1.16	7	2.94	.016	<.5	3.7	2.86	16.6	<.001	1	.22	.021	.08	.1	4.6	.05	3.63	36	.3	.07	.9	1496
0314-447	298.00	.34	6	5.38	.061	<.5	3.6	1.55	12.6	<.001	<1	.16	.008	.08	14.2	3.6	.08	4.98	1020	4.2	.26	1.6	226
0314-448	16.66	.21	6	1.67	.016	2.7	5.2	.33	33.6	.003	2	.53	.023	.20	1.0	3.5	.07	.39	8	<.1	.03	.9	11
RE 0314-448	16.17	.20	5	1.62	.016	2.6	5.0	.32	33.3	.003	1	.52	.023	.20	1.0	3.4	.07	.37	7	.1	.03	.9	7
RRE 0314-448	11.47	.21	5	1.62	.016	2.6	4.4	.32	31.7	.003	1	.47	.021	.18	1.0	3.3	.07	.37	10	<.1	.03	.7	14
0314-464	1.15	.31	4	3.02	.011	1.2	4.5	1.20	30.5	<.001	<1	.37	.033	.16	.1	3.2	.05	1.60	<5	.2	.05	.7	37
0314-465	1.32	.30	4	3.05	.019	1.4	4.3	1.15	30.4	<.001	1	.36	.031	.16	.2	3.3	.05	1.51	<5	.1	.05	.7	27
0314-466	.97	.41	4	2.48	.017	1.3	4.4	1.05	31.4	<.001	<1	.37	.032	.15	.1	3.0	.06	2.08	<5	.2	.05	.7	19
0314-467	.60	.33	4	4.02	.030	2.0	5.3	1.28	36.9	.001	<1	.45	.041	.17	<.1	3.2	.06	1.74	<5	.1	.04	.9	12
0314-468	.98	.26	4	6.31	.024	1.9	4.9	1.96	26.1	.001	<1	.31	.027	.12	<.1	3.4	.04	1.12	<5	.1	.03	.6	9
0314-469	.85	.54	4	2.66	.163	1.8	3.6	.77	30.4	.001	<1	.39	.036	.14	<.1	2.7	.05	2.47	<5	.2	.06	.8	9
0314-470	.48	.59	4	4.69	.021	1.5	3.6	1.47	25.2	<.001	<1	.28	.031	.11	<.1	2.8	.04	2.07	6	.1	.05	.6	4
0314-471	.66	.50	3	2.83	.022	1.5	3.2	.95	23.6	<.001	<1	.25	.027	.10	<.1	2.6	.04	1.83	<5	.1	.05	.5	6
0315-472	.58	.40	4	.53	.023	2.9	5.9	1.26	23.9	<.001	<1	.30	.037	.11	<.1	3.3	.04	.82	<5	.1	.05	.6	3
0314-473	1.43	.74	6	3.67	.149	3.6	7.3	2.23	26.7	.001	<1	.41	.042	.13	<.1	4.2	.05	1.11	<5	.2	.07	.8	3
0314-474	.60	.67	3	.57	.013	3.1	5.1	1.11	22.9	<.001	<1	.26	.032	.11	<.1	2.9	.04	1.75	<5	.3	.06	.5	7
0314-475	.55	.61	4	3.71	.032	2.2	4.5	1.79	24.1	<.001	<1	.30	.034	.11	<.1	3.7	.04	2.80	<5	.5	.08	.6	6
STANDARD DS5/AU-R	3.44	6.11	59	.72	.091	12.2	186.3	.64	133.2	.097	17	2.12	.034	.13	4.5	3.6	1.03	.01	171	4.6	.85	6.8	484

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30.00 GM SAMPLE ANALYSIS BY FA/ICP.
- SAMPLE TYPE: CORE R150 60C   Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 5 2003 **DATE REPORT MAILED:** Sep 26/2003 **SIGNED BY** ....D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME ANALYTICAL

Jasper Mining Corporation PROJECT kuth-Vermont FILE # A304019 Page 2

ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm
0314-476	.41	34.89	17.27	63.2	79	39.3	21.3	2320	6.13	24.7	1.1	.8	5.8	65.5	.08
0314-477	.79	61.96	22.43	127.4	95	72.0	30.0	641	5.81	16.2	1.3	1.5	7.8	14.0	.03
0314-478	.57	46.61	5.67	100.4	156	54.5	15.9	848	4.93	62.5	1.1	.8	6.3	26.9	.20
0314-503	.20	2.70	8.11	33.3	45	3.7	1.3	527	1.05	5.8	.1	.4	.9	15.0	.08
0314-599	.50	2.04	4.05	6.0	30	18.1	6.3	470	1.83	2889.0	1.8	25.0	10.4	21.5	.03
0314-600	.23	.93	3.78	5.0	17	2.7	1.2	183	.64	46.8	.1	.8	2.0	10.5	.03
0314-601	.49	6.93	7.00	19.6	334	7.2	3.3	1515	3.02	227.3	.2	3.7	3.3	60.2	.19
0314-602	.15	19.27	4.99	12.2	862	22.0	8.4	859	2.55	1828.7	.9	50.1	7.4	43.9	.11
0314-603	.62	10.82	2.88	15.3	582	8.2	3.5	1269	1.69	28.5	.4	.8	4.6	24.2	.06
0314-604	.33	9.58	3.89	12.9	391	9.1	3.3	1237	2.55	1365.5	.6	24.5	4.9	40.5	.09
0314-605	.57	3.43	3.94	10.3	55	11.8	4.1	425	1.40	33.2	.8	.7	6.2	28.6	.04
0314-606	.19	3.39	5.53	14.2	111	16.4	8.0	1138	3.08	710.8	.7	56.8	4.9	49.2	.09
RE 0314-606	.24	3.22	5.52	15 1	113	17.9	8.4	1182	3.17	750.0	.8	38.3	5.3	51.0	.11
RRE 0314-606	.24	3.47	5.60	12.8	97	16.8	8.3	1124	3.06	719.6	.8	40.9	5.5	48.9	.13
0314-607	.62	7.62	6.82	28.9	412	40.8	13.5	2886	8.26	2718.7	.7	218.6	5.3	26.3	05
0314-608	.59	6.64	5.44	14.4	299	31.1	10.2	1161	3.28	1209.2	1.2	123.4	10.2	34.7	.09
0314-609	.62	9.29	7.98	26.0	441	59.5	25.4	1530	5.18	1040.0	3.0	95.2	9.5	36.5	09
0314-610	.60	6.76	3.71	15.1	74	10.4	6.2	664	2.32	28.2	.3	1.4	2.4	41.7	.06
RW-2000-001 ROCK	.09	10718.69	19362.11	99999.0	99999	3.1	1.3	35	4.60	11662.3	.3	10944.3	<.1	<.5	1264.10
STANDARD DS5/AU-R	12.04	137.45	24.15	131.5	265	23.7	11.9	745	2.86	18.0	5.6	40.0	2.5	46.4	5.33

SAMPLE#	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0314-476	.33	.53	5	3.68	.029	1.9	5.9	2.20	32.3	.002	<1	.32	.045	.13	<.1	3.8	.05	1.85	<5	.2	.08	.8	13
0314-477	.39	.70	5	.38	.013	2.5	8 2	1.39	47.0	.002	1	35	.049	.14	<.1	3.2	.06	1.94	6	.4	.07	.8	30
0314-478	5.32	.23	5	.91	.029	4.3	9.1	1.66	31.9	<.001	1	.37	.045	.16	<.1	4.2	.07	.14	<5	.1	<.02	.8	4
0314-503	.59	.07	<2	1.24	.006	.8	1.6	.43	6.3	.002	<1	09	.015	.03	<.1	.6	<.02	.02	<5	<.1	<.02	.2	6
0314-599	.54	.02	4	.93	.010	2.3	5 6	.35	23.2	.006	1	36	.045	.14	<.1	1.2	.06	1.18	<5	.1	<.02	.8	509
0314-600	.45	<.02	<2	.48	.004	3.0	2 0	.16	14.1	.005	1	11	.019	.04	<.1	.5	.02	.02	<5	<.1	<.02	.3	8
0314-601	1.57	.03	2	3.92	.064	4.5	4.9	1.21	18.0	.002	1	.23	.030	.09	<.1	2.9	.03	.22	<5	.2	<.02	.6	13
0314-602	3.20	.09	3	2.29	.020	3.7	3 9	.73	17.0	.003	<1	28	.042	.09	<.1	2.0	.04	.82	<5	.1	.02	.6	64
0314-603	3.16	.04	2	2.15	.029	4.5	4.0	.61	9.2	.003	<1	.15	.024	.05	.2	1.3	.03	<.01	<5	.1	.03	.4	10
0314-604	1.51	.06	2	2.68	.012	2.0	2 7	.93	11.5	.003	1	18	.029	.06	.1	1.6	.02	.67	<5	<.1	<.02	.4	37
0314-605	.23	.02	2	1.40	.009	3.4	4.4	.37	14.8	.001	1	26	.042	.08	<.1	1.0	.03	.10	<5	.1	<.02	.5	8
0314-606	.39	.11	2	2.87	.027	2.2	3.1	1.01	15.1	.001	1	.23	.034	.09	<.1	2.3	.03	1.25	<5	.2	.02	.5	66
RE 0314-606	.47	.11	2	2.96	.027	2.4	3.6	1.04	15.7	.002	1	.25	.036	.09	<.1	2.4	.04	1.29	<5	.1	.02	.5	57
RRE 0314-606	.32	.12	2	2.85	.026	2.3	3.1	.99	15.3	.006	1	.23	.033	.08	<.1	2.3	.03	1.24	<5	.1	.03	.5	65
0314-607	1.35	.32	4	1.28	.123	3.6	5.1	1.24	28.7	.004	4	.39	.047	.14	.1	2.9	.07	4.31	<5	.3	.08	1.1	475
0314-608	.88	.09	3	2.05	.012	3.6	5.1	.83	17.3	.001	1	.27	.032	.11	.1	2.2	.05	1.57	<5	.1	.02	.6	59
0314-609	1.73	.25	6	1.81	.095	8.8	6.8	1.10	31.1	.005	8	.39	.043	.16	.3	4.3	.08	2.34	<5	.2	.03	1.0	112
0314-610	1.00	.12	2	1.99	.004	1.1	3.4	.72	10.8	.004	1	.11	.016	.05	<.1	1.3	.02	.35	<5	.1	.02	.3	3
RW-2000-001 ROCK	8808.36	9.23	<2	.01	<.001	< 5	< 5	<.01	6.2	.005	<1	.01	.002	<.01	<.1	<.1	.41	10.71	682	1.4	.04	3 0	12716
STANDARD DS5/AU-R	2.63	5.79	58	.70	.093	11.4	179 6	.66	138.4	.091	15	2.04	.032	.13	4.4	3.4	.97	.03	166	4.6	.80	6.4	496

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

ACME AN ICAL LABORATORIES LTD. 852 E. HASTINGS ST. 'OUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6(53-1716
(IS. 02 Accredited Co.)

ASSAY CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A304019R
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo %	Cu %	Pb %	Zn %	Ag gm/mt	Ni %	Co %	Mn %	Fe %	As %	Sr %	Cd %	Sb %	Bi %	Ca %	P %	Cr %	Mg %	Al %	Na %	K %	W %	Hg %	Au** gm/mt
0313-446	.001	.236	4.16	.38	91.5	.005	.001	1.53	13.37	1.91	.003	.002	.489	<.01	2.75	.022	.005	2.82	.43	.06	.21	.001	<.001	1.58
0314-447	.007	.019	9.99	12.82	399.8	.003	.001	1.16	6.71	.02	.009	.089	.034	<.01	5.07	.062	.009	1.43	.18	.04	.17	<.001	<.001	-
RW-2000-001 ROCK	.009	1.169	34.35	15.55	318.4	<.001	<.001	.01	6.05	4.73	<.001	.148	10.699	<.01	.04	.002	.004	.01	.09	.02	.06	<.001	<.001	12.08
STANDARD GC-2/AU-1	.018	.925	8.85	16.92	1044.3	.009	.001	.20	10.90	.16	.014	.096	.750	<.01	5.29	.267	.005	2.49	.51	.02	.10	<.001	.006	3.26

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 250 ML, ANALYSED BY ICP-ES.
- SAMPLE TYPE: CORE PULP AU** BY FIRE ASSAY FROM 1 A.T. SAMPLE.

DATE RECEIVED: OCT 1 2003 **DATE REPORT MAILED:** Oct 16/2003 **SIGNED BY** ...D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data (FA ___

ACME AN ICAL LABORATORIES LTD. 852 E. HASTINGS ST. OUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6C 53-1716
(ISC 02 Accredited Co.)

ASSAY CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A304019R

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo %	Cu %	Pb %	Zn %	Ag gm/mt	Ni %	Co %	Mn %	Fe %	As %	Sr %	Cd %	Sb %	Bi %	Ca %	P %	Cr %	Mg %	Al %	Na %	K %	W %	Hg %	Au** gm/mt
0313-446	.001	.236	4.16	.38	91.5	.005	.001	1.53	13.37	1.91	.003	.002	.489	<.01	2.75	.022	.005	2.82	.43	.06	.21	.001	<.001	1.58
0314-447	.007	.019	9.99	12.82	399.8	.003	.001	1.16	6.71	.02	.009	.089	.034	<.01	5.07	.062	.009	1.43	.18	.04	.17	<.001	<.001	-
RW-2000-001 ROCK	.009	1.169	34.35	15.55	318.4	<.001	<.001	.01	6.05	4.73	<.001	.148	10.699	<.01	.04	.002	.004	.01	.09	.02	.06	<.001	<.001	12.08
STANDARD GC-2/AU-1	.018	.925	8.85	16.92	1044.3	.009	.001	.20	10.90	.16	.014	.096	.750	<.01	5.29	.267	.005	2.49	.51	.02	.10	<.001	.006	3.26

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 250 ML, ANALYSED BY ICP-ES.
- SAMPLE TYPE: CORE PULP AU** BY FIRE ASSAY FROM 1 A.T. SAMPLE.

DATE RECEIVED: OCT 1 2003 **DATE REPORT MAILED:** Oct 16/2003 **SIGNED BY**......D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ___ FA ___

ACME AN 'ICAL LABORATORIES LTD. 852 E. HASTINGS ST. 'OUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6(53-1716
(ISC 902 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A304551 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm
S1	.12	1.17	1.21	1.7	22	6	.1	4	.06	.6	<.1	.7	<.1	2.4	<.01
0314-456	.54	42.70	1148.13	1054.4	9626	27.4	15.5	1027	4.31	99.1	.7	3.0	9.6	69.7	6.45
0314-457	.30	49.92	4026.50	2633.5	17168	24.3	11.9	1712	4.09	120.6	.7	13.7	6.8	85.8	16.73
0314-458	.35	51.10	6977.74	8564.0	21598	11.6	5.4	3912	4.59	48.7	.5	2.0	2.8	178.4	52.51
0314-459	.37	42.90	8257.60	14938.7	21123	11.6	4.2	2278	2.91	25.1	.4	1.2	2.9	122.2	93.43
0314-460	.29	23.08	5054.46	4823.8	10805	11.0	4.1	2787	3.33	24.3	.5	1.1	2.7	160.0	31.47
0314-461	.56	22.03	4411.71	3959.0	8319	19.7	5.6	3077	4.17	53.8	.5	<.2	3.1	163.4	27.24
0314-462	.54	17.87	1306.51	1956.6	4787	29.8	11.3	1538	4.28	68.0	.6	1.1	6.1	93.0	10.77
0314-463	.43	30.02	113.55	145.0	2316	41.0	18.9	551	4.65	137.1	.8	2.4	9.3	48.0	.68
0314-487	.41	836.64	13830.51	168.2	40119	72.9	28.1	950	4.70	2425.4	1.5	336.5	7.3	26.3	3.15
0314-488	.73	9388.18	18688.89	21463.2	99999	15.6	3.2	5539	4.88	2934.1	.3	13864.6	.1	30.3	138.06
0314-489	.40	19.53	582.38	61.5	809	74.0	21.1	273	4.89	7396.4	1.9	60.0	7.6	7.9	.33
0314-490	.97	29.46	513.07	10267.1	838	39.7	12.2	3190	5.12	380.3	1.0	23.0	4.9	22.2	64.18
0314-491	.50	15.87	58.34	61.7	708	78.2	26.2	778	4.92	288.6	2.2	3.0	11.6	38.3	.21
0314-492	.71	10.27	81.82	36.6	309	21.5	8.3	1021	2.95	1512.4	1.0	51.2	3.0	57.4	.21
0314-493	.18	2.38	21.81	21.5	90	7.7	3.4	818	1.84	857.9	3	49.0	1.7	30.8	.14
RE 0314-493	.19	2.34	20.99	21.7	88	8.1	3.5	811	1.82	852.4	.3	46.3	1.7	30.5	.10
RRE 0314-493	1.01	5.45	43.47	20.1	103	10.2	4.1	862	2.04	1063.6	.2	55.8	1.4	31.5	.11
0314-494	.21	1.79	8.04	6.0	44	1.9	.8	252	.79	14.4	<.1	1.0	.3	12.4	.03
0314-504	.79	4.35	19.89	17.9	80	14.7	5.8	987	1.89	1442.8	.8	42.4	3.2	26.7	.10
0314-505	.75	3.67	16.18	11.8	71	16.7	6.5	577	2.75	4055.0	.8	101.9	5.7	20.5	.05
0314-506	.22	3.58	12.65	19.9	63	10.5	4.0	1174	1.75	929.6	.7	19.0	3.2	25.4	.11
0314-507	.67	16156.97	6758.59	2650.1	99999	23.0	8.1	2418	6.05	3493.6	.8	4467.6	1.4	40.8	29.27
0314-508	.18	33.76	73.37	81.1	1193	11.3	4.2	782	2.05	2071.8	.7	37.0	3.4	19.2	.51
0314-509	1.47	1872.13	17193.55	280.4	99999	23.9	8.0	78	4.28	5339.4	.4	1223.7	1.6	4.4	11.22
0314-510	.19	9.79	264.01	139.2	1208	13.1	4.6	398	3.40	19503.0	.4	790.6	3.3	18.2	.74
0314-512	.93	40.29	237.50	19.1	1932	28.7	9.5	313	1.87	2771.3	1.2	51.9	7.3	16.7	.11
0314-513	.28	3.36	9.86	5.6	108	33.7	11.9	316	1.83	3027.1	1.4	29.5	8.7	19.5	.02
0314-514	.63	9.76	31.76	8.3	336	22.9	6.8	466	2.31	3713.7	.6	29.4	3.6	19.3	.03
0314-515	.19	3.07	7.11	8.3	82	9.8	4.3	609	1.37	936.2	.6	16.0	3.9	18.5	.04
0314-516	.75	7.01	38.51	5.5	289	8.7	3.3	158	4.23	18521.7	.4	644.6	1.7	5.7	.19
0314-517	.21	3.10	7.76	7.5	68	10.9	4.5	593	1.66	1489.7	.5	39.6	3.2	19.6	.18
0314-518	.89	13.03	23.54	7.8	705	13.6	5.0	723	3.04	3490.9	.6	80.7	3.6	16.9	.18
0314-519	.19	3.22	10.80	11.7	98	12.3	5.5	447	1.57	639.2	.7	11.5	6.1	19.7	.05
0314-520	.82	5.05	14.57	7.6	127	13.8	5.3	357	2.67	4423.7	.5	135.7	3.6	12.7	.04
STANDARD DS5/AU-R	13.22	137.11	25.35	137.7	293	24.5	11.7	770	2.90	19.4	5.8	40.0	2.6	47.5	5.60

SAMPLE#	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
S1	.09	<.02	<2	.11	<.001	<.5	1.8	<.01	3.1	<.001	1	.01	.390	.01	<.1	<.1	<.02	.04	<5	1	<.02	<1	<2
0314-456	12.37	.35	4	4.25	.024	.8	5.8	1.33	45.5	.006	1	.41	.029	.23	113.4	3.0	.09	2.47	58	.5	.03	1.0	30
0314-457	25.15	.32	3	4.75	.018	.5	4.0	1.70	31.1	.003	2	.26	.017	.16	8.2	3.1	.07	1.95	60	.5	.06	.7	70
0314-458	21.84	.27	3	7.81	.022	<.5	3.4	2.77	24.3	<.001	1	.21	.013	.12	154.1	3.4	.07	.98	277	.2	.09	.7	30
0314-459	15.56	.28	4	5.02	.048	<.5	4.0	1.86	24.6	<.001	2	.24	.013	.13	1.0	3.3	.08	1.04	346	<.1	.14	.8	22
0314-460	6.44	.20	4	6.22	.102	.5	4.1	2.25	24.7	<.001	1	.25	.013	.13	.4	3.5	.06	.41	113	.2	.08	.7	25
0314-461	7.73	.47	4	6.91	.045	.5	4.7	2.50	20.7	<.001	2	.20	.012	.11	.8	3.9	.05	.30	112	.2	.07	.6	12
0314-462	6.23	.24	3	5.20	.021	.7	4.1	1.85	29.9	<.001	1	.26	.019	.16	.5	3.7	.05	.85	30	.3	.05	.7	10
0314-463	5.81	.34	4	2.97	.010	.9	4.6	1.01	37.1	<.001	1	.36	.029	.19	.4	2.4	.07	3.55	<5	.4	.03	.8	4
0314-487	1046.57	1.33	5	.74	.027	3.8	6.6	.53	37.7	.004	2	.41	.030	.22	.3	2.8	.16	4.55	<5	.2	.04	1.0	1394
0314-488	16776.14	28.14	<2	1.45	.004	<.5	2.7	1.15	20.7	.003	1	.07	.005	.03	<.1	3.0	.24	8.38	102	.4	.02	.5	17974
0314-489	12.33	.15	5	.08	.032	4.2	7.1	.22	35.4	<.001	2	.47	.033	.24	.3	1.5	.13	3.93	<5	.1	<.02	1.1	145
0314-490	16.31	.23	6	.94	.061	3.8	10.3	1.18	26.9	<.001	5	.34	.025	.18	.3	4.3	.09	2.13	31	<.1	.04	1.0	64
0314-491	4.43	.07	10	1.15	.034	6.3	17.2	1.26	39.4	.005	<1	.46	.057	.22	.3	4.0	.11	.50	<5	.1	<.02	1.1	16
0314-492	4.68	.06	3	2.62	.016	2.0	6.2	.88	16.0	.001	1	.24	.027	.10	.2	1.4	.06	1.05	<5	.1	<.02	.6	61
0314-493	1.33	.04	2	1.58	.007	.7	7.6	.58	9.1	<.001	1	.11	.013	.05	.3	1.2	.03	.76	<5	.1	.02	.3	61
RE 0314-493	1.38	.04	<2	1.57	.006	.6	8.2	.58	9.1	.005	<1	.11	.013	.05	.2	1.2	.02	.75	<5	.1	.02	.3	63
RRE 0314-493	2.61	.05	2	1.61	.005	.7	10.3	.60	10.1	<.001	1	.13	.015	.06	.2	1.2	.03	.85	<5	.1	.02	.4	69
0314-494	.54	<.02	<2	.51	.001	<.5	10.0	.17	2.4	.002	<1	.03	.004	.01	.2	.4	<.02	.01	<5	.1	<.02	.1	<2
0314-504	1.00	.12	2	1.66	.017	2.5	9.5	.52	14.6	<.001	1	.26	.032	.10	.2	1.3	.05	.62	<5	<.1	<.02	.7	52
0314-505	1.42	.08	2	1.16	.016	3.4	7.3	.35	14.6	.001	1	.24	.026	.10	.2	.9	.05	1.80	<5	.1	<.02	.6	129
0314-506	1.66	.04	2	1.74	.011	2.3	5.4	.56	13.7	.001	1	.22	.027	.09	<.1	1.3	.04	.40	<5	<.1	<.02	.6	23
0314-507	11704.17	30.76	3	3.42	.005	<.5	4.0	1.27	18.4	<.001	<1	.12	.013	.05	<.1	1.2	.06	4.66	260	1.8	.15	.4	7890
0314-508	14.78	.10	2	1.26	.010	1.9	4.9	.42	14.8	<.001	1	.21	.017	.07	.2	1.2	.04	1.14	<5	<.1	<.02	.5	46
0314-509	1372.80	3.43	<2	.07	.004	1.2	8.4	.03	14.8	.001	3	.20	.018	.08	.1	.3	.11	4.97	39	10.2	.29	.5	1392
0314-510	9.90	.08	2	.89	.009	2.2	6.2	.27	16.3	<.001	1	.27	.028	.11	.1	.8	.06	2.00	<5	.1	<.02	.7	884
0314-512	27.60	.38	4	.57	.009	3.9	10.9	.24	24.3	.005	<1	.36	.041	.16	.2	1.5	.07	1.05	<5	<.1	<.02	.9	57
0314-513	1.16	.05	4	.54	.011	5.6	8.4	.21	24.6	.003	<1	.36	.040	.16	.2	1.5	.08	1.34	<5	.1	<.02	.9	36
0314-514	2.84	.07	2	.82	.012	2.9	7.1	.37	14.4	.002	<1	.24	.028	.10	<.1	.9	.05	1.27	<5	.1	<.02	.6	43
0314-515	.75	.04	<2	1.22	.012	2.6	6.5	.35	12.9	.002	<1	.22	.026	.09	<.1	.8	.04	.34	<5	<.1	<.02	.5	17
0314-516	11.56	.32	<2	.27	.005	1.4	6.7	.09	9.8	.001	1	.14	.014	.06	<.1	4	.04	3.47	<5	.1	.03	.4	798
0314-517	1.26	.03	2	1.19	.008	2.3	6.7	.39	11.6	.003	1	.21	.023	.09	<.1	.8	.04	.69	<5	<.1	<.02	.5	43
0314-518	5.25	.04	2	.99	.006	2.2	8.2	.39	13.2	.001	<1	.22	.023	.09	<.1	.8	.05	2.38	<5	.1	<.02	.5	100
0314-519	1.04	.03	2	1.18	.009	3.3	8.4	.34	15.8	<.001	<1	.23	.026	.10	.2	.8	.05	.52	<5	<.1	<.02	.6	14
0314-520	2.30	.08	2	.76	.007	2.2	8.6	.24	12.6	.003	1	.20	.018	.09	.2	.7	.04	1.88	<5	.1	.02	.5	139
STANDARD DS5/AU-R	3.65	6.09	59	.72	.095	11.4	183.2	.66	138.8	.094	16	2.04	.032	.14	4.7	3.6	.97	.02	161	4.9	.86	6.5	479

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30.0 GM SAMPLE ANALYSIS BY FA/ICP.
- SAMPLE TYPE: CORE R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 26 2003 **DATE REPORT MAILED:** Oct 16/2003 **SIGNED BY.** ...D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME ANALYTICAL

Jasper Mining Corporation PROJECT Ruth-Vermont FILE # A304551 Page 2

ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0314-521	.67	3.19	6.61	9.7	48	12.6	4.8	443	1.54	1392.8	.9	12.0	5.6	19.5	.04	.55	.02	2	1.05	010	3.1	8.9	.34	13.3	.005	1	23	.025	.09	1	.8	.06	.59	<5	<.1	<.02	5	27
0314-522	.23	1.28	9.64	31.4	39	29.7	13.0	901	3.14	94.6	.6	.8	4.9	31.0	.07	.24	<.02	3	1.93	.032	2.5	9.6	.86	43.5	.004	1	.33	.044	.12	.1	1.9	.07	.14	<5	.1	<.02	.7	9
0314-523	.70	8.10	8.40	21.2	336	23.8	9.5	460	2.24	41.6	1.2	.7	10.8	15.3	.03	1.34	.02	5	.66	.010	7.9	15.9	.53	21.3	<.001	1	.34	.046	.13	<.1	1.4	.06	.05	7	<.1	<.02	.8	8
0314-524	.23	8.74	5.04	22.0	451	31.9	10.8	299	2.28	77.6	1.3	.5	10.1	22.9	.02	1.80	.05	7	.66	.214	6.8	14.8	.48	25.4	<.001	1	.46	.054	.15	.1	1.4	.06	.18	<5	.1	<.02	1.1	9
0314-525	.70	54.77	8.19	34.8	4450	44.8	14.4	386	2.82	418.4	2.0	1.4	13.8	17.8	.11	9.27	.10	9	.16	.021	8.5	20.2	.56	37.6	<.001	1	.61	.081	.22	.1	2.0	.10	.44	<5	.1	<.02	1.5	14
0314-526	.16	3.27	5.45	12.0	111	23.7	8.4	540	2.27	3236.7	.6	20.5	5.0	22.1	.04	1.17	.02	2	1.15	.008	2.6	7.0	.43	14.1	<.001	1	.24	.025	.10	<.1	1.2	.05	1.10	<5	.1	<.02	5	44
0314-527	.44	6.47	6.95	21.8	201	23.4	8.8	471	2.07	113.7	.6	1.9	5.3	15.9	.03	1.20	.03	3	.69	.011	3.8	9.7	.49	15.5	<.001	1	.26	.029	.10	<.1	1.2	.05	.15	<5	<.1	<.02	.6	2
0314-528	.17	5.26	7.76	17.0	141	20.4	7.2	663	1.91	890.9	.7	12.2	5.0	21.2	.05	1.36	.03	2	1.09	.010	2.9	6.9	.48	14.5	<.001	1	.24	.026	.10	.1	1.2	.05	.52	<5	<.1	<.02	.6	33
0314-529	.59	6.60	6.49	18.3	133	25.4	9.0	481	2.22	1840.9	1.2	18.6	8.3	14.8	.02	1.01	.02	4	.50	.011	3.5	11.0	.42	19.0	<.001	1	.30	.032	.13	.1	1.3	.06	.74	<5	<.1	<.02	.8	27
0314-530	.16	5.41	5.85	9.4	141	20.2	8.1	505	2.52	4412.2	.7	58.8	3.8	19.4	.03	1.54	.04	2	.88	.007	2.5	6.3	.32	12.5	<.001	1	.21	.020	.09	<.1	1.0	.05	1.65	<5	.2	<.02	.5	84
0314-531	.91	8.16	36.56	24.7	409	33.6	11.5	873	8.89	99999.0	1.0	1529.0	6.1	26.1	.10	11.43	.39	4	1.48	.025	3.5	11.3	.49	27.4	<.001	2	.44	.035	.18	.2	2.4	.12	7.22	<5	.4	.06	1.1	1466
0314-532	.17	3.70	4.66	13.7	68	23.0	8.8	498	2.23	4031.8	.9	28.0	4.0	20.9	.04	1.21	.02	2	.93	.011	2.7	6.7	.39	15.1	<.001	1	.23	.022	.10	.1	1.1	.05	1.06	<5	<.1	<.02	.5	52
0314-533	.65	5.09	4.94	9.5	64	20.6	7.0	408	1.82	3098.5	.8	25.2	5.1	19.0	.02	1.03	.03	3	.78	.009	4.3	9.8	.27	17.1	.004	1	.30	.029	.13	.1	1.0	.06	.98	<5	<.1	<.02	.7	51
0314-534	.30	2.54	3.97	6.1	40	22.2	8.2	293	2.58	4172.4	1.5	51.8	9.9	17.2	<.01	1.00	.02	3	.61	.008	6.0	9.1	.20	18.9	<.001	1	.31	.031	.13	.1	1.0	.06	2.03	<5	.1	<.02	.7	65
0314-535	.75	4.18	4.66	5.6	35	16.8	5.8	289	1.87	2972.0	.8	62.6	4.7	17.8	<.01	.71	.02	3	.69	.008	3.3	9.4	.23	16.8	<.001	1	.31	.034	.12	.1	.8	.05	1.06	<5	.1	<.02	.7	86
0314-536	.24	2.30	4.37	6.7	37	19.7	7.2	419	2.45	4273.3	1.7	96.1	11.2	20.6	.02	1.04	.03	3	.82	.009	5.0	7.4	.29	16.3	<.001	1	.26	.028	.11	.2	1.1	.05	1.74	<5	.1	<.02	.6	128
0314-537	.55	4.91	6.48	8.0	63	14.0	5.6	380	1.42	1526.8	.8	18.6	3.8	22.1	<.01	.70	.05	<2	1.04	.007	2.6	7.7	.32	13.0	<.001	1	.25	.029	.09	<.1	.8	.04	.48	<5	<.1	<.02	.5	15
0314-538	.20	3.35	4.79	9.7	44	12.5	5.3	513	1.60	625.1	.8	10.6	3.8	25.6	.02	.54	.03	<2	1.45	.007	3.3	7.0	.41	13.8	<.001	1	.23	.027	.09	.1	1.1	.04	.37	<5	.1	<.02	.5	8
0314-549	.49	5.54	5.89	11.4	102	17.4	6.8	344	1.65	1129.9	.9	23.9	6.9	16.8	.01	.83	.04	2	.68	.008	4.9	9.5	.36	14.1	.002	1	.23	.027	.09	.1	1.0	.04	.44	<5	.1	<.02	.6	29
RE 0314-549	.50	5.54	6.16	11.5	103	18.1	7.1	354	1.63	1148.1	.9	24.4	7.1	16.8	.01	.79	.04	3	.67	.008	5.0	11.0	.36	14.0	<.001	1	.24	.029	.09	.1	1.0	.04	.44	<5	<.1	<.02	.5	35
RRE 0314-549	.20	4.92	7.10	11.8	108	17.3	7.0	346	1.76	1175.5	.9	29.0	7.2	17.7	.01	.91	.06	2	.73	.008	5.1	10.5	.37	15.6	<.001	1	.25	.028	.10	.1	1.0	.04	.54	<5	<.1	<.02	.6	36
0314-550	.67	5.16	10.36	9.4	74	16.6	6.2	325	1.85	1507.6	.9	59.0	4.6	14.7	.02	.56	.07	3	.60	.010	4.1	10.3	.30	15.5	.001	1	.28	.028	.11	<.1	.9	.05	.66	<5	.1	<.02	.7	82
0314-551	.73	5.42	6.57	26.5	59	17.4	6.7	401	1.61	593.7	1.1	8.8	5.2	16.5	.02	.77	.03	4	.63	.008	4.8	11.2	.35	19.9	.001	1	.31	.037	.12	.1	.9	.05	.23	<5	<.1	<.02	8	11
0314-552	.20	1.73	4.12	8.3	31	22.6	8.8	604	2.59	3663.1	1.8	33.0	9.2	25.7	.02	.68	.03	2	1.28	.012	3.2	7.2	.44	19.5	<.001	1	.31	.035	.13	.1	1.2	.06	1.66	<5	<.1	<.02	.7	58
0314-553	.75	3.95	6.66	10.0	54	22.1	9.9	456	2.54	2112.5	.7	31.6	4.6	21.6	.03	.71	.03	3	1.08	.008	2.9	10.0	.37	16.5	<.001	1	.28	.025	.12	.2	1.0	.06	1.66	<5	.1	<.02	.6	40
0314-567	.16	1.21	6.65	22.5	41	13.4	5.1	219	1.59	1609.5	1.0	12.5	4.6	14.7	.10	.41	<.02	2	.57	.011	2.5	5.4	.16	15.3	.001	<1	.23	.023	.10	<.1	.6	.04	.95	<5	<.1	<.02	.5	19
0314-568	1.04	7.56	333.00	1235.0	961	19.9	9.4	2539	5.66	3829.4	.5	238.5	1.9	14.2	7.54	15.82	.30	2	.70	.008	2.1	9.2	.57	12.3	<.001	2	.19	.023	.07	.1	1.5	.04	4.35	<5	.1	.03	.6	411
0314-569	.20	4.81	51.46	16.1	416	11.9	5.6	609	1.65	774.3	.6	17.1	5.3	27.9	.07	1.77	.74	2	1.36	.019	2.6	7.1	.37	20.0	<.001	1	.28	.043	.09	.2	.9	.04	.49	<5	.1	.05	.6	24
0314-570	.74	3.08	3.63	19.5	33	15.7	5.5	285	1.52	1707.1	1.6	6.8	5.7	16.9	.08	.43	<.02	2	.67	.009	3.0	9.1	.24	18.0	.003	1	.30	.034	.12	<.1	.7	.04	.52	<5	<.1	<.02	.7	25
0314-571	.21	5.30	41.50	5008.7	193	12.5	4.5	349	1.71	4156.3	.7	178.5	4.0	16.8	29.27	1.73	.07	2	.87	.017	1.2	6.2	.23	18.0	<.001	1	.28	.028	.11	.1	.8	.06	.98	12	<.1	.02	.7	252
0314-572	.61	3.82	24.23	2045.9	91	15.0	5.7	1706	2.25	143.8	.7	14.0	4.3	40.8	12.50	1.47	.02	2	3.09	.032	1.8	6.8	.81	22.9	<.001	2	.36	.044	.15	.1	1.9	.08	.32	9	<.1	<.02	.8	16
0314-573	.24	5.33	18.21	56.0	517	17.4	3.5	814	1.75	115.8	.2	4.3	2.6	29.4	.30	1.93	.04	<2	1.87	.029	1.4	7.4	.47	12.8	<.001	2	.19	.023	.07	<.1	1.3	.03	.13	<5	<.1	<.02	.4	<2
0314-575	.46	2.38	7.75	17.0	57	26.6	10.7	234	2.08	2135.9	1.5	9.4	9.6	14.9	.06	.55	.02	2	.64	.013	2.9	7.2	.22	16.9	.002	1	.23	.026	.10	.2	.8	.03	1.15	<5	.1	<.02	.5	25
0314-576	.27	3.67	5.20	13.5	187	9.0	3.6	601	1.27	30.1	.5	2.5	4.4	24.0	.07	1.27	.02	<2	1.62	.016	1.4	3.5	.41	5.5	.001	1	.08	.010	.03	<.1	.8	.02	.05	<5	.1	<.02	.2	2
STANDARD DS5/AU-R	12.23	139.53	23.60	139.8	277	24.4	11.9	748	2.84	18.9	5.7	43.0	2.6	46.9	5.08	3.40	5.34	58	.73	.090	12.0	187.1	.65	136.0	.089	17	2.06	.031	.13	4.2	3.4	.96	.03	189	4.9	.80	6.4	484

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

ACME ANALYTICAL

Jasper Mining Corporation PROJECT Ruth-Vermont FILE # A304551 Page 3

ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0314-577	.77	3.47	228.33	354.2	687	6.0	2.0	615	1.07	14.9	.5	1.2	3.9	18.5	2.21	1.05	.03	<2	1.39	.010	5.5	8.3	.23	9.4	<.001	1	.17	.022	.06	<.1	.7	.04	.03	6	<.1	<.02	.4	<2
0314-578	.23	5.09	363.32	604.7	1066	7.4	3.1	1247	1.40	273.6	.8	6.4	4.6	23.8	4.25	2.56	.05	<2	1.78	.009	1.9	6.1	.41	12.6	.001	1	.22	.029	.09	.1	1.0	.06	.12	6	<.1	<.02	.5	6
0314-579	.82	62.31	284.96	1306.7	411	12.9	5.1	398	1.68	1819.8	1.1	84.2	3.5	19.7	9.08	68.45	.14	<2	.88	.010	2.8	7.9	.28	15.8	.002	1	.27	.033	.11	.1	.7	.05	1.08	12	.1	.02	.6	91
0314-580	.27	3.97	99.10	3842.1	374	12.7	4.8	983	2.09	3114.3	.6	173.8	3.8	9.1	24.30	1.94	.06	<2	.26	.006	2.9	6.2	.16	14.2	<.001	1	.21	.024	.10	.1	.6	.04	1.49	18	<.1	.02	.5	201
0314-581	1.13	4.16	5.06	345.2	23	2.5	.4	93	.67	116.3	<.1	3.4	.2	1.6	2.21	.99	<.02	<2	.07	<.001	1.2	12.2	.03	1.5	.004	1	.03	.005	.01	<.1	.1	<.02	.06	<5	<.1	<.02	.1	4
0314-582	.27	1.62	5.53	245.2	42	8.4	3.1	1596	2.03	540.3	.9	22.5	5.3	17.6	1.64	.47	.02	<2	.78	.012	2.3	7.8	.40	15.8	<.001	1	.26	.030	.11	<.1	1.0	.05	.46	<5	<.1	<.02	.6	22
0314-583	1.06	5.53	134.48	2234.2	404	9.6	3.3	2081	2.92	1782.3	.5	52.8	3.5	12.8	14.16	1.15	.03	2	.40	.011	2.1	9.3	.36	15.3	.002	1	.26	.029	.11	.1	.9	.05	1.40	13	.1	<.02	.7	58
0314-584	.31	271.00	101.95	1042.5	6553	31.7	10.9	1044	10.67	6988.4	.6	6441.4	3.7	22.2	7.21	48.96	1.02	<2	.93	.011	3.2	6.0	.36	16.2	.003	1	.23	.029	.09	.1	1.3	.04	10.78	7	.5	.03	.7	8179
0314-585	.98	4.07	2.89	25.6	27	3.4	.9	187	.72	70.8	.1	9.7	.9	9.0	.12	.54	<.02	<2	.34	.002	<.5	11.3	.10	5.5	<.001	1	.08	.010	.04	<.1	.3	.02	.21	<5	<.1	<.02	.2	7
0314-586	.22	6.20	4.26	11.0	205	11.6	4.2	401	1.30	483.6	.8	82.3	3.8	28.3	.07	2.19	.03	<2	1.16	.007	3.2	7.7	.33	14.2	<.001	<1	.21	.023	.10	<.1	.8	.05	.34	<5	.1	<.02	.5	72
0314-587	1.05	17.51	4.66	8.2	679	5.2	.6	162	.76	14.3	.1	9.3	.7	11.0	.06	8.67	.02	<2	.44	.001	.7	12.9	.12	5.0	<.001	<1	.07	.009	.03	<.1	.4	<.02	.05	7	<.1	<.02	.2	2
0314-588	.21	9.26	3.39	10.6	397	9.1	4.3	632	1.74	131.2	.7	25.2	4.1	43.9	.06	3.84	.03	<2	1.97	.008	3.1	6.2	.55	13.6	<.001	<1	.18	.023	.08	<.1	1.4	.03	.23	5	.1	<.02	.4	21
0314-589	1.07	55.94	3.54	18.7	1768	9.0	3.4	563	1.53	454.5	.2	12.3	2.2	23.7	.14	22.56	.12	<2	1.37	.005	3.0	9.6	.38	11.4	<.001	<1	.20	.028	.07	.5	1.3	.03	.17	6	<.1	<.02	.5	15
0314-590	.28	13.45	2.51	19.7	282	30.8	10.4	266	2.64	220.8	1.2	2.7	7.4	14.4	.02	2.67	.03	6	.26	.017	2.8	14.9	.56	26.2	<.001	1	.39	.055	.16	<.1	1.7	.06	.22	<5	.1	<.02	1.0	9
0314-591	1.16	22.36	3.00	34.3	443	63.0	23.0	284	4.35	108.4	2.7	3.4	17.0	21.5	.04	3.80	.04	13	.24	.028	5.9	34.0	.86	37.7	.001	<1	.63	.105	.21	.1	2.9	.08	.14	<5	<.1	<.02	1.7	2
0314-592	.17	4.58	1.90	7.6	60	4.7	1.8	459	1.14	10.0	.4	.5	4.0	22.7	.05	1.30	<.02	<2	1.15	.010	16.0	7.5	.31	9.2	<.001	<1	.14	.019	.06	<.1	.7	.02	.09	<5	<.1	<.02	.4	<2
0314-593	.70	10.30	3.06	7.8	79	6.7	3.0	341	1.13	12.6	.5	1.3	3.5	21.3	.05	2.40	.02	<2	1.06	.008	3.6	11.0	.28	11.8	.004	<1	.19	.027	.07	<.1	.7	.02	.10	<5	<.1	<.02	.5	2
0314-594	.24	12.59	2.83	9.9	186	12.3	5.2	569	1.78	38.1	1.1	4.0	6.4	33.6	.07	2.64	.04	2	1.88	.009	4.9	6.1	.49	15.6	.003	<1	.25	.037	.10	<.1	1.1	.04	.24	<5	<.1	<.02	.6	6
0314-595	.65	20.92	7.34	13.3	1083	12.6	6.6	1231	2.28	1815.6	.8	19.1	4.3	32.5	.04	6.00	.24	<2	2.60	.023	1.6	6.6	.98	14.6	.001	1	.23	.032	.08	<.1	1.5	.03	1.06	<5	.1	.02	.6	22
0314-596	.22	3.86	2.74	8.7	58	18.7	6.9	202	1.68	1486.6	.8	7.6	5.4	15.1	.01	.82	.08	3	.43	.014	3.5	7.2	.26	20.6	<.001	1	.27	.037	.11	<.1	.8	.05	.54	<5	<.1	<.02	.6	7
0314-597	.65	20.65	2.80	7.8	503	14.5	5.5	324	1.62	1591.5	.8	19.4	4.7	25.0	.04	5.83	.12	2	1.01	.006	2.6	8.7	.31	17.3	<.001	<1	.27	.037	.10	<.1	.9	.04	.80	<5	.1	<.02	.6	16
RE 0314-597	.76	20.63	2.60	8.1	521	15.4	5.4	334	1.63	1622.9	.8	20.5	4.9	25.1	.05	6.02	.11	2	1.03	.006	2.6	8.9	.32	18.1	<.001	<1	.27	.037	.11	<.1	.9	.04	.84	<5	.1	<.02	.6	25
RRE 0314-597	.24	21.24	2.24	9.3	540	13.3	4.8	318	1.53	1329.7	.8	20.8	4.8	24.0	.05	6.88	.11	2	.99	.006	2.5	7.9	.31	15.9	.005	<1	.23	.032	.09	.1	.8	.03	.71	<5	.1	<.02	.5	33
0314-598	.80	25.83	2.57	9.7	564	23.9	4.5	604	2.19	1021.4	.6	13.4	4.2	38.8	.07	6.14	.08	2	1.80	.005	2.4	8.6	.56	17.8	.001	<1	.29	.036	.11	<.1	1.3	.03	.79	<5	.1	<.02	.7	23
0314-611	.77	12.00	4.66	49.4	26	29.7	16.2	1015	3.17	68.3	1.0	1.4	10.8	69.4	.22	.38	.14	3	3.26	.017	3.8	7.0	1.06	22.0	<.001	<1	.29	.042	.12	<.1	3.2	.04	.27	5	.1	.02	.7	<2
0314-612	.70	8.27	2.49	19.3	30	17.9	6.9	869	2.84	31.3	.8	1.0	5.8	60.1	.11	1.38	.04	2	3.08	.005	1.4	8.6	.98	17.0	<.001	<1	.23	.035	.09	<.1	2.4	.03	.09	<5	.1	<.02	.6	<2
0314-613	.25	8.03	2.29	11.4	12	22.1	7.5	322	1.86	29.1	.8	.4	8.0	21.4	.02	.36	.03	3	.93	.009	3.0	6.6	.43	19.6	.001	<1	.29	.041	.11	<.1	1.3	.04	.05	<5	<.1	<.02	.7	3
0314-614	.91	5.06	2.91	11.4	40	16.5	5.3	566	2.02	23.9	.4	<.2	4.0	36.5	.04	.36	.04	2	1.75	.009	1.8	9.6	.58	15.2	<.001	<1	.23	.034	.09	<.1	1.4	.03	.05	<5	.1	<.02	.6	2
0314-615	.25	2.64	433.96	756.4	1187	11.7	4.8	1582	1.78	189.9	.9	4.0	6.1	23.8	4.82	1.17	.04	2	2.16	.009	2.4	7.6	.48	12.5	.002	<1	.21	.034	.07	<.1	1.1	.03	.10	5	.1	<.02	.5	4
0315-617	.42	16.36	9.56	588.2	735	36.7	12.0	1025	4.58	13740.0	.6	124.0	5.1	15.7	4.55	9.25	.14	4	.27	.023	5.5	9.2	.09	21.1	<.001	2	.25	.018	.14	.3	3.0	.08	1.43	5	<.1	.09	.6	179
0315-618	.66	171.40	4730.50	33416.1	4935	11.8	5.0	581	2.25	8979.4	1.8	369.2	3.1	19.7	198.80	82.76	.37	2	.79	.013	2.4	13.8	.26	13.1	<.001	1	.19	.015	.09	.4	1.0	.09	2.09	292	<.1	.03	1.7	420
0315-619	.23	5.14	44.79	1948.6	144	19.9	8.6	288	3.03	12837.3	.5	191.9	4.0	17.6	10.42	8.13	.02	3	.36	.008	3.6	7.2	.12	16.5	<.001	<1	.24	.020	.12	.2	1.0	.07	1.43	13	<.1	<.02	.6	245
0315-620	.80	82.08	14030.69	6248.9	19749	15.0	6.1	40	6.38	99999.0	2.4	3620.8	1.8	5.2	36.94	9706.15	2.80	2	.03	.003	<.5	12.0	.01	19.5	<.001	1	.16	.011	.08	.2	.3	.12	5.03	40	.1	.04	.6	4340
0315-621	.20	5.32	162.33	739.3	255	31.9	10.3	248	4.72	43790.2	.7	1128.1	3.0	14.4	15.49	36.14	.05	2	.16	.012	3.0	16.9	.04	17.7	<.001	1	.24	.016	.13	.3	1.0	.08	2.63	<5	.1	.02	.6	947
STANDARD DS5/AU-R	13.48	142.77	25.76	136.4	290	24.6	11.8	770	2.95	18.7	5.7	43.0	2.7	48.6	5.69	3.59	6.32	58	.75	.093	11.9	187.8	.67	137.6	.094	17	2.10	.032	.14	4.8	3.6	.98	.02	171	5.0	.85	6.5	491

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm
0315-622	1.30	20.62	105.19	1060.6	156	18.9	3.1	642	1.62	557.1	.6	8.9	5.0	11.6	24.36	19.23
0315-623	.18	9.09	8.58	1164.5	93	14.3	2.5	536	1.42	1018.5	.4	15.7	3.3	8.4	12.55	4.27
0315-624	.90	7.50	13.93	841.4	170	29.0	10.6	451	2.08	1786.0	1.2	25.5	9.7	21.8	1.65	3.49
0315-625	.20	2.21	4.88	291.0	41	10.4	3.3	380	1.27	1643.1	.5	19.0	5.7	20.8	.52	1.71
0315-626	.85	12.17	11.37	571.9	480	25.0	8.4	994	2.87	835.3	.4	8.6	4.9	34.2	.48	4.94
0315-627	.41	7.43	398.97	1049.1	1456	52.4	19.4	4941	5.53	401.8	1.8	5.8	6.8	34.3	6.49	3.52
0315-628	.46	6.09	159.67	78.3	555	69.3	21.2	3389	5.94	937.5	1.3	10.2	6.7	28.6	.39	4.60
0315-629	.21	1109.67	3744.49	547.7	20170	61.9	15.7	419	4.97	2421.0	1.5	167.2	6.1	16.3	4.68	484.75
0315-630	.34	19.30	246.22	48.1	614	71.6	18.0	777	4.73	4599.8	1.6	58.2	10.3	18.0	.26	10.75
0315-631	.29	35.22	24.16	57.0	1142	52.9	14.9	805	4.28	129.4	.8	8.0	9.5	14.2	.14	8.77
0315-632	.48	259.14	2148.32	7858.5	4996	53.2	14.5	2554	7.33	20662.5	1.2	528.7	6.0	77.4	66.92	122.50
RE 0315-632	.48	268.40	2239.34	8161.2	5136	56.4	15.5	2646	7.59	21504.5	1.3	596.0	6.2	80.3	69.72	127.54
RRE 0315-632	.33	277.04	2230.38	7910.1	5250	53.0	14.3	2567	7.12	20593.7	1.3	618.0	5.9	75.5	67.48	155.51
0315-633	.51	51.97	62.78	474.2	1580	55.9	17.7	1224	4.64	10336.6	1.1	161.2	8.4	33.9	3.56	14.90
0315-634	1.18	84.56	71.31	73.1	5291	77.1	48.1	781	4.41	4894.2	1.1	29.1	9.1	49.1	.69	19.29
0315-635	.62	2418.91	14836.14	11950.8	81249	30.7	12.9	563	8.27	46567.8	4.0	2663.6	3.8	27.2	101.73	4160.22
0315-636	.65	49.18	161.39	79.2	3058	68.7	20.2	836	4.72	1955.0	1.2	31.7	9.5	68.8	.53	11.34
STANDARD DS5/AU-R	12.32	141.09	23.73	131.5	270	24.4	11.9	723	2.95	19.1	5.7	43.0	2.6	48.3	5.43	2.97

SAMPLE#	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0315-622	.03	2	.33	.008	4.5	12.0	.11	23.1	.003	2	.30	.029	.12	.2	.9	.09	.20	<5	<.1	<.02	.7	14
0315-623	.07	<2	.25	.011	3.1	7.7	.07	18.4	.003	1	.18	.018	.08	.2	1.0	.05	.19	<5	<.1	<.02	.4	26
0315-624	.03	3	.53	.066	5.0	11.7	.20	31.9	<.001	1	.40	.037	.17	.3	1.7	.08	1.04	<5	<.1	<.02	.9	62
0315-625	.02	<2	.71	.008	4.0	7.8	.23	14.7	<.001	1	.22	.017	.10	.2	.8	.05	.58	<5	<.1	<.02	.4	26
0315-626	.04	2	1.20	.012	2.9	11.1	.64	17.1	.001	1	.25	.019	.11	.2	1.3	.05	.76	<5	<.1	<.02	.6	12
0315-627	.41	3	2.15	.045	3.0	7.6	1.22	32.1	<.001	1	.38	.029	.18	.2	3.9	.09	2.68	8	.2	.03	1.0	24
0315-628	.42	3	1.68	.087	4.1	7.2	.75	39.2	<.001	2	.49	.035	.22	.2	3.2	.11	4.81	<5	.2	.05	1.2	67
0315-629	3.38	2	.54	.029	3.4	6.4	.17	34.4	<.001	3	.45	.034	.22	.2	1.4	.14	5.69	28	.2	.10	1.0	328
0315-630	.48	6	.36	.048	3.3	11.7	.55	48.8	.001	2	.68	.055	.31	.3	2.6	.18	3.14	<5	.1	<.02	1.6	183
0315-631	.16	7	.31	.048	4.5	15.3	1.15	38.9	.002	1	.49	.046	.23	.2	3.2	.11	.39	<5	.1	<.02	1.1	14
0315-632	.89	6	3.60	.030	3.4	10.9	2.00	41.6	.004	1	.50	.042	.22	.2	3.6	.17	5.08	37	<.1	.03	1.6	995
RE 0315-632	.94	7	3.70	.032	3.5	11.8	2.06	42.8	<.001	1	.54	.048	.23	.2	3.9	.19	5.35	50	<.1	.05	1.7	964
RRE 0315-632	.92	6	3.61	.031	3.2	8.8	2.01	31.4	<.001	1	.36	.031	.17	.3	3.6	.14	4.88	43	<.1	.03	1.3	970
0315-633	.56	5	1.55	.033	2.8	10.9	.99	39.8	<.001	1	.49	.039	.22	.2	3.2	.14	2.28	6	.1	.05	1.2	325
0315-634	.60	5	2.19	.044	1.7	9.5	.82	46.5	<.001	1	.60	.049	.28	.2	3.9	.15	3.39	<5	.2	.09	1.4	58
0315-635	1.82	2	1.32	.016	<.5	8.4	.45	41.9	.004	2	.49	.032	.21	.3	1.5	.29	8.22	78	<.1	.07	1.6	2638
0315-636	.64	7	2.63	.042	2.0	15.8	1.34	54.4	<.001	2	.74	.061	.32	.2	4.7	.16	1.82	<5	.2	.05	1.8	27
STANDARD DS5/AU-R	6.01	59	.75	.093	11.9	185.6	.64	140.3	.090	16	2.01	.032	.13	4.4	3.4	.98	.03	164	4.7	.85	6.4	477

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

ACME AN 'ICAL LABORATORIES LTD. 852 E. HASTINGS ST. 'OUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6(53-1716
(ISC J02 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A304551 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
SI	.12	1.17	1.21	1.7	22	.6	.1	4	.06	.6	<.1	.7	<.1	2.4	<.01	.09	<.02	<2	.11	<.001	<.5	1.8	<.01	3.1	<.001	1	.01	.380	.01	<.1	<.1	<.02	.04	<5	.1	<.02	<1	<2
0314-456	.54	42.70	1148.13	1054.4	9626	27.4	15.5	1027	4.31	99.1	.7	3.0	9.6	69.7	6.45	12.37	.35	4	4.25	.024	.8	5.8	1.33	45.5	.006	1	.41	.029	.23	113.4	3.0	.09	2.47	58	.5	.03	1.0	30
0314-457	.30	49.92	4026.50	2633.5	17168	24.3	11.9	1712	4.09	120.6	.7	13.7	6.8	85.8	16.73	25.15	.32	3	4.75	.018	.5	4.0	1.70	31.1	.003	2	.26	.017	.16	8.2	3.1	.07	1.95	60	.5	.06	.7	70
0314-458	.35	51.10	6977.74	8564.0	21598	11.6	5.4	3912	4.59	48.7	.5	2.0	2.8	178.4	52.51	21.84	.27	3	7.81	.022	<.5	3.4	2.77	24.3	<.001	1	.21	.013	.12	154.1	3.4	.07	.98	277	.2	.09	.7	30
0314-459	.37	42.90	8257.60	14938.7	21123	11.6	4.2	2278	2.91	25.1	.4	1.2	2.9	122.2	93.43	15.56	.28	4	5.02	.048	<.5	4.0	1.86	24.6	<.001	2	.24	.013	.13	1.0	3.3	.08	1.04	346	<.1	.14	.8	22
0314-460	.29	23.08	5054.46	4823.8	10805	11.0	4.1	2787	3.33	24.3	.5	1.1	2.7	160.0	31.47	6.44	.20	4	6.22	.102	.5	4.1	2.25	24.7	<.001	1	.25	.013	.13	.4	3.5	.06	.41	113	.2	.08	.7	25
0314-461	.56	22.03	4411.71	3959.0	8319	19.7	5.6	3077	4.17	53.8	.5	<.2	3.1	163.4	27.24	7.73	.47	4	6.91	.045	.5	4.7	2.50	20.7	<.001	2	.20	.012	.11	.8	3.9	.05	.30	112	.2	.07	.6	12
0314-462	.54	17.87	1306.51	1956.6	4787	29.8	11.3	1538	4.28	68.0	.6	1.1	6.1	93.0	10.77	6.23	.24	3	5.20	.021	.7	4.1	1.85	29.9	<.001	1	.26	.019	.16	.5	3.7	.05	.85	30	.3	.05	.7	10
0314-463	.43	30.02	113.55	145.0	2316	41.0	18.9	551	4.65	137.1	.8	2.4	9.3	48.0	.68	5.81	.34	4	2.97	.010	.9	4.6	1.01	37.1	<.001	1	.36	.029	.19	.4	2.4	.07	3.55	<5	.4	.03	.8	4
0314-487	.41	836.64	13830.51	168.2	40119	72.9	28.1	950	4.70	2425.4	1.5	336.5	7.3	26.3	3.15	1046.57	1.33	5	.74	.027	3.8	6.6	.53	37.7	.004	2	.41	.030	.22	.3	2.8	.16	4.55	<5	.2	.04	1.0	1394
0314-488	.73	9388.18	18688.89	21463.2	99999	15.6	3.2	5539	4.88	2934.1	.3	13864.6	.1	30.3	138.06	16776.14	28.14	<2	1.45	.004	<.5	2.7	1.15	20.7	.003	1	.07	.005	.03	<.1	3.0	.24	8.38	102	.4	.02	.5	17974
0314-489	.40	19.53	582.38	61.5	809	74.0	21.1	273	4.89	7396.4	1.9	60.0	7.6	7.9	.33	12.33	.15	5	.08	.032	4.2	7.1	.22	35.4	<.001	2	.47	.033	.24	.3	1.5	.13	3.93	<5	.1	<.02	1.1	145
0314-490	.97	29.46	513.07	10267.1	838	39.7	12.2	3190	5.12	380.3	1.0	23.0	4.9	22.2	64.18	16.31	.23	6	.94	.061	3.8	10.3	1.18	26.9	<.001	5	.34	.025	.18	.3	4.3	.09	2.13	31	<.1	.04	1.0	64
0314-491	.50	15.87	58.34	61.7	708	78.2	26.2	778	4.92	288.6	2.2	3.0	11.6	38.3	.21	4.43	.07	10	1.15	.034	6.3	17.2	1.26	39.4	.005	<1	.46	.057	.22	.3	4.0	.11	.50	<5	.1	<.02	1.1	16
0314-492	.71	10.27	81.82	36.6	309	21.5	8.3	1021	2.95	1512.4	1.0	51.2	3.0	57.4	.21	4.68	.06	3	2.62	.016	2.0	6.2	.88	16.0	.001	1	.24	.027	.10	.2	1.4	.06	1.05	<5	.1	<.02	.6	61
0314-493	.18	2.38	21.81	21.5	90	7.7	3.4	818	1.84	857.9	.3	49.0	1.7	30.8	.14	1.33	.04	2	1.58	.007	.7	7.6	.58	9.1	<.001	1	.11	.013	.05	.3	1.2	.03	.76	<5	.1	.02	.3	61
RE 0314-493	.19	2.34	20.99	21.7	88	8.1	3.5	811	1.82	852.4	.3	46.3	1.7	30.5	.10	1.38	.04	<2	1.57	.006	.6	8.2	.58	9.1	.005	<1	.11	.013	.05	.2	1.2	.02	.75	<5	.1	.02	.3	63
RRE 0314-493	1.01	5.45	43.47	20.1	103	10.2	4.1	862	2.04	1063.6	.2	55.8	1.4	31.5	.11	2.61	.05	2	1.61	.005	.7	10.3	.60	10.1	<.001	1	.13	.015	.06	.2	1.2	.03	.85	<5	.1	.02	.4	69
0314-494	.21	1.79	8.04	6.0	44	1.9	.8	252	.79	14.4	<.1	1.0	.3	12.4	.03	.54	<.02	<2	.51	.001	<.5	10.0	.17	2.4	.002	<1	.03	.004	.01	.2	.4	<.02	.01	<5	.1	<.02	.1	<2
0314-504	.79	4.35	19.89	17.9	80	14.7	5.8	987	1.89	1442.8	.8	42.4	3.2	26.7	.10	1.00	.12	2	1.66	.017	2.5	9.5	.52	14.6	<.001	1	.26	.032	.10	.2	1.3	.05	.62	<5	<.1	<.02	.7	52
0314-505	.75	3.67	16.18	11.8	71	16.7	6.5	577	2.75	4055.0	.8	101.9	5.7	20.5	.05	1.42	.08	2	1.16	.016	3.4	7.3	.35	14.6	.001	1	.24	.026	.10	.2	.9	.05	1.80	<5	.1	<.02	.6	129
0314-506	.22	3.58	12.65	19.9	63	10.5	4.0	1174	1.75	929.6	.7	19.0	3.2	25.4	.11	1.66	.04	2	1.74	.011	2.3	5.4	.56	13.7	.001	1	.22	.027	.09	<.1	1.3	.04	.40	<5	<.1	<.02	.6	23
0314-507	.67	16156.97	6758.59	2650.1	99999	23.0	8.1	2418	6.05	3493.6	.8	4467.6	1.4	40.8	29.27	11704.17	30.76	3	3.42	.005	<.5	4.0	1.27	18.4	<.001	<1	.12	.013	.05	<.1	1.2	.06	4.66	260	1.8	.15	.4	7890
0314-508	.18	33.76	73.37	81.1	1193	11.3	4.2	782	2.05	2071.8	.7	37.0	3.4	19.2	.51	14.78	.10	2	1.26	.010	1.9	4.9	.42	14.8	<.001	1	.21	.017	.07	.2	1.2	.04	1.14	<5	<.1	<.02	.5	46
0314-509	1.47	1872.13	17193.55	280.4	99999	23.9	8.0	78	4.28	5339.4	.4	1223.7	1.6	4.4	11.22	1372.80	3.43	<2	.07	.004	1.2	8.4	.03	14.8	.001	3	.20	.018	.08	.1	.3	.11	4.97	39	10.2	.29	.5	1392
0314-510	.19	9.79	264.01	139.2	1208	13.1	4.6	398	3.40	19503.0	.4	790.6	3.3	18.2	.74	9.90	.08	2	.89	.009	2.2	6.2	.27	16.3	<.001	1	.27	.028	.11	.1	.8	.06	2.00	<5	.1	<.02	.7	884
0314-512	.93	40.29	237.50	19.1	1932	28.7	9.5	313	1.87	2771.3	1.2	51.9	7.3	16.7	.11	27.60	.38	4	.57	.009	3.9	10.9	.24	24.3	.005	<1	.36	.041	.16	.2	1.5	.07	1.05	<5	<.1	<.02	.9	57
0314-513	.28	3.36	9.86	5.6	108	33.7	11.9	316	1.83	3027.1	1.4	29.5	8.7	19.5	.02	1.16	.05	4	.54	.011	5.6	8.4	.21	24.6	.003	<1	.36	.040	.16	.2	1.5	.08	1.34	<5	.1	<.02	.9	36
0314-514	.63	9.76	31.76	8.3	336	22.9	6.8	466	2.31	3713.7	.6	29.4	3.6	19.3	.03	2.84	.07	2	.82	.012	2.9	7.1	.37	14.4	.002	<1	.24	.028	.10	<.1	.9	.05	1.27	<5	.1	<.02	.6	43
0314-515	.19	3.07	7.11	8.3	82	9.8	4.3	609	1.37	936.2	.6	16.0	3.9	18.5	.04	.75	.04	<2	1.22	.012	2.6	6.5	.35	12.9	.002	<1	.22	.026	.09	<.1	.8	.04	.34	<5	<.1	<.02	.5	17
0314-516	.75	7.01	38.51	5.5	289	8.7	3.3	158	4.23	18521.7	.4	644.6	1.7	5.7	.19	11.56	.32	<2	.27	.005	1.4	6.7	.09	9.8	.001	1	.14	.014	.06	<.1	.4	.04	3.47	<5	.1	.03	.4	798
0314-517	.21	3.10	7.76	7.5	68	10.9	4.5	593	1.66	1489.7	.5	39.6	3.2	19.6	.18	1.26	.03	2	1.19	.008	2.3	6.7	.39	11.6	.003	1	.21	.023	.09	<.1	.8	.04	.69	<5	<.1	<.02	.5	43
0314-518	.89	13.03	23.54	7.8	705	13.6	5.0	723	3.04	3490.9	.6	80.7	3.6	16.9	.18	5.25	.04	2	.99	.006	2.2	8.2	.39	13.2	.001	<1	.22	.023	.09	<.1	.8	.05	2.38	<5	.1	<.02	.5	100
0314-519	.19	3.22	10.80	11.7	98	12.3	5.5	447	1.57	639.2	.7	11.5	6.1	19.7	.05	1.04	.03	2	1.18	.009	3.3	8.4	.34	15.8	<.001	<1	.23	.026	.10	.2	.8	.05	.52	<5	<.1	<.02	.6	14
0314-520	.82	5.05	14.57	7.6	127	13.8	5.3	357	2.67	4423.7	.5	135.7	3.6	12.7	.04	2.30	.08	2	.76	.007	2.2	8.6	.24	12.6	.003	1	.20	.018	.09	.2	.7	.04	1.88	<5	.1	.02	.5	139
STANDARD DS5/AU-R	13.22	137.11	25.35	137.7	293	24.5	11.7	770	2.90	19.4	5.8	40.0	2.6	47.5	5.60	3.65	6.09	59	.72	.095	11.4	183.2	.66	138.8	.094	16	2.04	.032	.14	4.7	3.6	.97	.02	161	4.9	.86	6.5	479

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30.0 GM SAMPLE ANALYSIS BY FA/ICP.
- SAMPLE TYPE: CORE R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 26 2003 DATE REPORT MAILED: Oct 16/2003 SIGNED BY. ..D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0314-521	.67	3.19	6.61	9.7	48	12.6	4.8	443	1.54	1392.8	.9	12.0	5.6	19.5	.04	.55	.02	2	1.05	.010	3.1	8.9	.34	13.3	.005	1	.23	.025	.09	.1	.8	.06	.59	<5	<.1	<.02	.5	27
0314-522	.23	1.28	9.64	31.4	39	29.7	13.0	901	3.14	94.6	.6	.8	4.9	31.0	.07	.24	<.02	3	1.93	.032	2.5	9.6	.86	43.5	.004	1	.33	.044	.12	.1	1.9	.07	.14	<5	.1	<.02	.7	9
0314-523	.70	8.10	8.40	21.2	336	23.8	9.5	460	2.24	41.6	1.2	.7	10.8	15.3	.03	1.34	.02	5	.66	.010	7.9	15.9	.53	21.3	<.001	1	.34	.046	.13	<.1	1.4	.06	.05	7	<.1	<.02	.8	8
0314-524	.23	8.74	5.04	22.0	451	31.9	10.8	299	2.28	77.6	1.3	.5	10.1	22.9	.02	1.80	.05	7	.66	.214	6.8	14.8	.48	25.4	<.001	1	.46	.054	.15	.1	1.4	.06	.18	<5	.1	<.02	1.1	9
0314-525	.70	54.77	8.19	34.8	4450	44.8	14.4	386	2.82	418.4	2.0	1.4	13.8	17.8	.11	9.27	.10	9	.16	.021	8.5	20.2	.56	37.6	<.001	1	.61	.081	.22	.1	2.0	.10	.44	<5	.1	<.02	1.5	14
0314-526	.16	3.27	5.45	12.0	111	23.7	8.4	540	2.27	3236.7	.6	20.5	5.0	22.1	.04	1.17	.02	2	1.15	.008	2.6	7.0	.43	14.1	<.001	1	.24	.025	.10	<.1	1.2	.05	1.10	<5	.1	<.02	.5	44
0314-527	.44	6.47	6.95	21.8	201	23.4	8.8	471	2.07	113.7	.6	1.9	5.3	15.9	.03	1.20	.03	3	.69	.011	3.8	9.7	.49	15.5	<.001	1	.26	.029	.10	<.1	1.2	.05	.15	<5	<.1	<.02	.6	2
0314-528	.17	5.26	7.76	17.0	141	20.4	7.2	663	1.91	890.9	.7	12.2	5.0	21.2	.05	1.36	.03	2	1.09	.010	2.9	6.9	.48	14.5	<.001	1	.24	.026	.10	.1	1.2	.05	.52	<5	<.1	<.02	.6	33
0314-529	.59	6.60	6.49	18.3	133	25.4	9.0	481	2.22	1840.9	1.2	18.6	8.3	14.8	.02	1.01	.02	4	.50	.011	3.5	11.0	.42	19.0	<.001	1	.30	.032	.13	.1	1.3	.06	.74	<5	<.1	<.02	.8	27
0314-530	.16	5.41	5.85	9.4	141	20.2	8.1	505	2.52	4412.2	.7	59.8	3.8	19.4	.03	1.54	.04	2	.88	.007	2.5	6.3	.32	12.5	<.001	1	.21	.020	.09	<.1	1.0	.05	1.65	<5	.2	<.02	.5	84
0314-531	.91	8.16	36.56	24.7	409	33.6	11.5	873	8.89	99999.0	1.0	1529.0	6.1	26.1	.10	11.43	.39	4	1.48	.025	3.5	11.3	.49	27.4	<.001	2	.44	.035	.18	.2	2.4	.12	7.22	<5	.4	.06	1.1	1466
0314-532	.17	3.70	4.66	13.7	68	23.0	8.8	498	2.23	4031.8	.9	28.0	4.0	20.9	.04	1.21	.02	2	.93	.011	2.7	6.7	.39	15.1	<.001	1	.23	.022	.10	.1	1.1	.05	1.06	<5	<.1	<.02	.5	52
0314-533	.65	5.09	4.94	9.5	64	20.6	7.0	408	1.82	3098.5	.8	25.2	5.1	19.0	.02	1.03	.03	3	.78	.009	4.3	9.8	.27	17.1	.004	1	.30	.029	.13	.1	1.0	.06	.98	<5	<.1	<.02	.7	51
0314-534	.30	2.54	3.97	6.1	40	22.2	8.2	293	2.58	4172.4	1.5	51.8	9.9	17.2	<.01	1.00	.02	3	.61	.008	6.0	9.1	.20	18.9	<.001	1	.31	.031	.13	.1	1.0	.06	2.03	<5	.1	<.02	.7	65
0314-535	.75	4.18	4.66	5.6	35	16.8	5.8	289	1.87	2972.0	.8	62.6	4.7	17.8	<.01	.71	.02	3	.69	.008	3.3	9.4	.23	16.8	<.001	1	.31	.034	.12	.1	.8	.05	1.06	<5	.1	<.02	.7	86
0314-536	.24	2.30	4.37	6.7	37	19.7	7.2	419	2.45	4273.3	1.7	96.1	11.2	20.6	.02	1.04	.03	3	.82	.009	5.0	7.4	.29	16.3	<.001	1	.26	.028	.11	.2	1.1	.05	1.74	<5	.1	<.02	.6	128
0314-537	.55	4.91	6.48	8.0	63	14.0	5.6	380	1.42	1526.8	.8	18.6	3.8	22.1	<.01	.70	.05	<2	1.04	.007	2.6	7.7	.32	13.0	<.001	1	.25	.029	.09	<.1	.8	.04	.48	<5	<.1	<.02	.5	15
0314-538	.20	3.35	4.79	9.7	44	12.5	5.3	513	1.60	625.1	.8	10.6	3.8	25.6	.02	.54	.03	<2	1.45	.007	3.3	7.0	.41	13.8	<.001	1	.23	.027	.09	.1	1.1	.04	.37	<5	.1	<.02	.5	8
0314-549	.49	5.54	5.89	11.4	102	17.4	6.8	344	1.65	1129.9	.9	23.9	6.9	16.8	.01	.83	.04	2	.68	.008	4.9	9.5	.36	14.1	.002	1	.23	.027	.09	.1	1.0	.04	.44	<5	.1	<.02	.6	29
RE 0314-549	.50	5.54	6.16	11.5	103	18.1	7.1	354	1.63	1148.1	.9	24.4	7.1	16.8	.01	.79	.04	3	.67	.008	5.0	11.0	.36	14.0	<.001	1	.24	.029	.09	.1	1.0	.04	.44	<5	<.1	<.02	.5	35
RRE 0314-549	.20	4.92	7.10	11.8	108	17.3	7.0	346	1.76	1175.5	.9	29.0	7.2	17.7	.01	.91	.06	2	.73	.008	5.1	10.5	.37	15.6	<.001	1	.25	.028	.10	.1	1.0	.04	.54	<5	<.1	<.02	.6	36
0314-550	.67	5.16	10.36	9.4	74	16.6	6.2	325	1.85	1507.6	.9	59.0	4.6	14.7	.02	.56	.07	3	.60	.010	4.1	10.3	.30	15.5	.001	1	.28	.028	.11	<.1	.9	.05	.66	<5	.1	<.02	.7	82
0314-551	.73	5.42	6.57	26.5	59	17.4	6.7	401	1.61	593.7	1.1	8.8	5.2	16.5	.02	.77	.03	4	.63	.008	4.8	11.2	.35	19.9	.001	1	.31	.037	.12	.1	.9	.05	.23	<5	<.1	<.02	.8	11
0314-552	.20	1.73	4.12	8.3	31	22.6	8.8	604	2.59	3663.1	1.8	33.0	9.2	25.7	.02	.68	.03	2	1.28	.012	3.2	7.2	.44	19.5	<.001	1	.31	.035	.13	.1	1.2	.06	1.66	<5	<.1	<.02	.7	58
0314-553	.75	3.95	6.66	10.0	54	22.1	9.9	456	2.54	2112.5	.7	31.6	4.6	21.6	.03	.71	.03	3	1.08	.008	2.9	10.0	.37	16.5	<.001	1	.28	.025	.12	.2	1.0	.06	1.66	<5	.1	<.02	.6	40
0314-567	.16	1.21	6.65	22.5	41	13.4	5.1	219	1.59	1609.5	1.0	12.5	4.6	14.7	.10	.41	<.02	2	.57	.011	2.5	5.4	.16	15.3	.001	<1	.23	.023	.10	<.1	.6	.04	.95	<5	<.1	<.02	.5	19
0314-568	1.04	7.56	333.00	1235.0	961	19.9	9.4	2539	5.66	3829.4	.5	238.5	1.9	14.2	7.54	15.82	.30	2	.70	.008	2.1	9.2	.57	12.3	<.001	2	.19	.023	.07	.1	1.5	.04	4.35	<5	.1	.03	.6	411
0314-569	.20	4.81	51.46	16.1	416	11.9	5.6	609	1.65	774.3	.6	17.1	5.3	27.9	.07	1.77	.74	2	1.36	.019	2.6	7.1	.37	20.0	<.001	1	.28	.043	.09	.2	.9	.04	.49	<5	.1	.05	.6	24
0314-570	.74	3.08	3.63	19.5	33	15.7	5.5	285	1.52	1707.1	1.6	6.8	5.7	16.9	.08	.43	<.02	2	.67	.009	3.0	9.1	.24	18.0	.003	1	.30	.034	.12	<.1	.7	.04	.52	<5	<.1	<.02	.7	25
0314-571	.21	5.30	41.50	5008.7	193	12.5	4.5	349	1.71	4156.3	.7	178.5	4.0	16.8	29.27	1.73	.07	2	.87	.017	1.2	6.2	.23	18.0	<.001	1	.28	.028	.11	.1	.8	.06	.98	12	<.1	.02	.7	252
0314-572	.61	3.82	24.23	2045.9	91	15.0	5.7	1706	2.25	143.8	.7	14.0	4.3	40.8	12.50	1.47	.02	2	3.09	.032	1.8	6.8	.81	22.9	<.001	2	.36	.044	.15	.1	1.9	.08	.32	9	<.1	<.02	.8	16
0314-573	.24	5.33	18.21	56.0	517	17.4	3.5	814	1.75	115.8	2	4.3	2.6	29.4	30	1.93	.04	<2	1.87	.029	1.4	7.4	.47	12.8	<.001	2	.19	.023	.07	<.1	1.3	.03	.13	<5	<.1	<.02	4	<2
0314-575	.46	2.38	7.75	17.0	57	26.6	10.7	234	2.08	2135.9	1.5	9.4	9.6	14.9	.06	.55	.02	2	.64	.013	2.9	7.2	.22	16.9	.002	1	.23	.026	.10	.2	.8	.03	1.15	<5	.1	<.02	.5	25
0314-576	.27	3.67	5.20	13.5	187	9.0	3.6	601	1.27	30.1	.5	2.5	4.4	24.0	.07	1.27	.02	<2	1.62	.016	1.4	3.5	.41	5.5	.001	1	.08	.010	.03	<.1	.8	.02	.05	<5	.1	<.02	.2	2
STANDARD DS5/AU-R	12.23	139.53	23.60	139.8	277	24.4	11.9	748	2.84	18.9	5.7	43.0	2.6	46.9	5.08	3.40	5.34	58	.73	.090	12.0	187.1	.65	136.0	.089	17	2.06	.031	.13	4.2	3.4	.96	.03	189	4.9	.80	6.4	484

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0314-577	.77	3.47	228.33	354.2	687	6.0	2.0	615	1.07	14.9	.5	1.2	3.9	18.5	2.21	1.05	.03	<2	1.39	.010	5.5	8.3	.23	9.4	<.001	1	.17	.022	.06	<.1	.7	.04	.03	6	<.1	<.02	.4	<2
0314-578	.23	5.09	363.32	604.7	1066	7.4	3.1	1247	1.40	273.6	.8	6.4	4.6	23.8	4.25	2.56	.05	<2	1.78	.009	1.9	6.1	.41	12.6	.001	1	.22	.029	.09	.1	1.0	.06	.12	6	<.1	<.02	.5	6
0314-579	.82	62.31	284.96	1306.7	411	12.9	5.1	398	1.68	1819.8	1.1	84.2	3.5	19.7	9.08	68.45	.14	<2	.88	.010	2.8	7.9	28	15.8	.002	1	.27	.033	.11	.1	.7	.05	1.08	12	.1	.02	.6	91
0314-580	.27	3.97	99.10	3842.1	374	12.7	4.8	983	2.09	3114.3	.6	173.8	3.8	9.1	24.30	1.94	.06	<2	.26	.006	2.9	6.2	.16	14.2	<.001	1	.21	.024	10	<.1	.6	.04	1.49	18	<.1	.02	.5	201
0314-581	1.13	4.16	5.06	345.2	23	2.5	.4	93	.67	116.3	<.1	3.4	.2	1.6	2.21	.99	<.02	<2	.07	<.001	1.2	12.2	.03	1.5	.004	1	.03	.005	.01	<.1	.1	<.02	.06	<5	<.1	<.02	.1	4
0314-582	.27	1.62	5.53	245.2	42	8.4	3.1	1596	2.03	540.3	.9	22.5	5.3	17.6	1.64	.47	.02	<2	.78	.012	2.3	7.8	.40	15.8	<.001	1	.26	.030	.11	<.1	1.0	.05	.46	<5	<.1	<.02	.6	22
0314-583	1.06	5.53	134.48	2234.2	404	9.6	3.3	2081	2.92	1782.3	.5	52.8	3.5	12.8	14.16	1.15	.03	2	.40	.011	2.1	9.3	.36	15.3	.002	1	.26	.029	.11	.1	.9	.05	1.40	13	.1	<.02	.7	58
0314-584	.31	271.00	101.95	1042.5	6553	31.7	10.9	1044	10.67	6988.4	.6	6441.4	3.7	22.2	7.21	48.96	1.02	<2	.93	.011	3.2	6.0	.36	16.2	.003	1	.23	.029	.09	.1	1.3	.04	10.78	7	.5	.03	.7	8179
0314-585	.98	4.07	2.89	25.6	27	3.4	.9	187	.72	70.8	.1	9.7	.9	9.0	.12	.54	<.02	<2	.34	.002	<.5	11.3	.10	5.5	<.001	1	.08	.010	.04	<.1	.3	.02	.21	<5	<.1	<.02	.2	7
0314-586	.22	6.20	4.26	11.0	205	11.6	4.2	401	1.30	483.6	.8	82.3	3.8	28.3	.07	2.19	.03	<2	1.16	.007	3.2	7.7	.33	14.2	<.001	<1	.21	.023	.10	<.1	.8	.05	.34	<5	.1	<.02	.5	72
0314-587	1.05	17.51	4.66	8.2	679	5.2	.6	162	.76	14.3	.1	9.3	.7	11.0	.06	8.67	.02	<2	.44	.001	.7	12.9	.12	5.0	<.001	<1	.07	.009	.03	<.1	.4	<.02	.05	7	<.1	<.02	.2	2
0314-588	.21	9.26	3.39	10.6	397	9.1	4.3	632	1.74	131.2	.7	25.2	4.1	43.9	.06	3.84	.03	<2	1.97	.008	3.1	6.2	.55	13.6	<.001	<1	.18	.023	.08	<.1	1.4	.03	.23	5	.1	<.02	.4	21
0314-589	1.07	55.94	3.54	18.7	1768	9.0	3.4	563	1.53	454.5	.2	12.3	2.2	23.7	.14	22.56	.12	<2	1.37	.005	3.0	9.6	.38	11.4	<.001	<1	.20	.028	.07	.5	1.3	.03	.17	6	<.1	<.02	.5	15
0314-590	.28	13.45	2.51	19.7	282	30.8	10.4	266	2.64	220.8	1.2	2.7	7.4	14.4	.02	2.67	.03	6	.26	.017	2.8	14.9	.56	26.2	<.001	1	.39	.055	.16	<.1	1.7	.06	.22	<5	.1	<.02	1.0	9
0314-591	1.16	22.36	3.00	34.3	443	63.0	23.0	284	4.35	108.4	2.7	3.4	17.0	21.5	.04	3.80	.04	13	.24	.028	5.9	34.0	.86	37.7	.001	<1	.63	.105	.21	.1	2.9	.08	.14	<5	<.1	<.02	1.7	2
0314-592	.17	4.58	1.90	7.6	60	4.7	1.8	459	1.14	10.0	.4	.5	4.0	22.7	.05	1.30	<.02	<2	1.15	.010	16.0	7.5	.31	9.2	<.001	<1	.14	.019	.06	<.1	.7	.02	.09	<5	<.1	<.02	.4	<2
0314-593	.70	10.30	3.06	7.8	79	6.7	3.0	341	1.13	12.6	.5	1.3	3.5	21.3	.05	2.40	.02	<2	1.06	.008	3.6	11.0	.28	11.8	.004	<1	.19	.027	.07	<.1	.7	.02	.10	<5	<.1	<.02	.5	2
0314-594	.24	12.59	2.83	9.9	186	12.3	5.2	569	1.78	38.1	1.1	4.0	6.4	33.6	.07	2.64	.04	2	1.88	.009	4.9	6.1	.49	15.6	.003	<1	.25	.037	.10	<.1	1.1	.04	.24	<5	<.1	<.02	.6	6
0314-595	.65	20.92	7.34	13.3	1083	12.6	6.6	1231	2.28	1815.6	.8	19.1	4.3	32.5	.04	6.00	.24	<2	2.60	.023	1.6	6.6	.98	14.6	.001	1	.23	.032	.08	<.1	1.5	.03	1.06	<5	.1	.02	.6	22
0314-596	.22	3.86	2.74	8.7	58	18.7	6.9	202	1.68	1486.6	.8	7.6	5.4	15.1	.01	.82	.08	3	.43	.014	3.5	7.2	.26	20.6	<.001	1	.27	.037	.11	<.1	.8	.05	.54	<5	<.1	<.02	.6	7
0314-597	.65	20.65	2.80	7.8	503	14.5	5.5	324	1.62	1591.5	.8	19.4	4.7	25.0	.04	5.83	.12	2	1.01	.006	2.6	8.7	.31	17.3	<.001	<1	.27	.037	.10	<.1	.9	.04	.80	<5	.1	<.02	.6	16
RE 0314-597	.76	20.63	2.60	8.1	521	15.4	5.4	334	1.63	1622.9	.8	20.5	4.9	25.1	.05	6.02	.11	2	1.03	.006	2.6	8.9	.32	18.1	<.001	<1	.27	.037	.11	<.1	.9	.04	.84	<5	.1	<.02	.6	25
RRE 0314-597	.24	21.24	2.24	9.3	540	13.3	4.8	318	1.53	1329.7	.8	20.8	4.8	24.0	.05	6.88	.11	2	.99	.006	2.5	7.9	.31	15.9	.005	<1	.23	.032	.09	.1	.8	.03	.71	<5	.1	<.02	.5	33
0314-598	.80	25.83	2.57	9.7	564	23.9	4.5	604	2.19	1021.4	.6	13.4	4.2	38.8	.07	6.14	.08	2	1.80	.005	2.4	8.6	.56	17.8	.001	<1	.29	.036	.11	<.1	1.3	.03	.79	<5	.1	<.02	.7	23
0314-611	.77	12.00	4.66	49.4	26	29.7	16.2	1015	3.17	68.3	1.0	1.4	10.8	69.4	.22	.38	.14	3	3.26	.017	3.8	7.0	1.06	22.0	<.001	<1	.29	.042	.12	<.1	3.2	.04	.27	5	.1	.02	.7	<2
0314-612	70	8.27	2.49	19.3	30	17.9	6.9	869	2.84	31.3	.8	1.0	5.8	60.1	.11	1.38	.04	2	3.08	.005	1.4	8.6	98	17.0	<.001	<1	.23	.035	.09	<.1	2.4	.03	.09	<5	.1	<.02	.6	<2
0314-613	.25	8.03	2.29	11.4	12	22.1	7.5	322	1.86	29.1	.8	.4	8.0	21.4	.02	.36	.03	3	.93	.009	3.0	6.6	.43	19.6	.001	<1	.29	.041	.11	<.1	1.3	.04	.05	<5	<.1	<.02	.7	3
0314-614	.91	5.06	2.91	11.4	40	16.5	5.3	566	2.02	23.9	.4	<.2	4.0	36.5	.04	.36	.04	2	1.75	.009	1.8	9.6	.58	15.2	<.001	<1	.23	.034	.09	<.1	1.4	.03	.05	<5	.1	<.02	.6	2
0314-615	.25	2.64	433.96	756.4	1187	11.7	4.8	1582	1.78	189.9	.9	4.0	6.1	23.8	4.82	1.17	.04	2	2.16	.009	2.4	7.6	.48	12.5	.002	<1	.21	.034	.07	<.1	1.1	.03	.10	5	.1	<.02	.5	4
0315-617	.42	16.36	9.56	588.2	735	36.7	12.0	1025	4.58	13740.0	.6	124.0	5.1	15.7	4.55	9.25	.14	4	.27	.023	5.5	9.2	.09	21.1	<.001	2	.25	.018	.14	.3	3.0	.08	1.43	5	<.1	.09	.6	179
0315-618	.66	171.40	4730.50	33416.1	4935	11.8	5.0	581	2.25	8979.4	1.8	369.2	3.1	19.7	198.80	82.76	.37	2	.79	.013	2.4	13.8	26	13.1	<.001	1	.19	.015	.09	.4	1.0	.09	2.09	292	<.1	.03	1.7	420
0315-619	23	5.14	44.79	1948.6	144	19.9	8.6	288	3.03	12837.3	.5	191.9	4.0	17.6	10.42	8.13	.02	3	.36	.008	3.6	7.2	12	16.5	<.001	<1	.24	.020	.12	.2	1.0	.07	1.43	13	<.1	<.02	.6	245
0315-620	80	82.08	14030.69	6248.9	19749	15.0	6.1	40	6.38	99999.0	2.4	3620.8	1.8	5.2	36.94	9706.15	2.80	2	.03	.003	<.5	12.0	.01	19.5	<.001	1	.16	.011	.08	.2	.3	.12	5.03	40	.1	.04	.6	4340
0315-621	.20	5.32	162.33	739.3	255	31.9	10.3	248	4.72	43790.2	.7	1128.1	3.0	14.4	15.49	36.14	.05	2	.16	.012	3.0	16.9	.04	17.7	<.001	1	.24	.016	.13	.3	1.0	.08	2.63	<5	.1	.02	.6	947
STANDARD DS5/AU-R	13.48	142.77	25.76	136.4	290	24.6	11.8	770	2.95	18.7	5.7	43.0	2.7	48.6	5.69	3.59	6.32	58	.75	.093	11.9	187.8	67	137.6	.094	17	2.10	.032	.14	4.8	3.6	.98	.02	171	5.0	.85	6.5	491

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm
0315-622	1.30	20.62	105.19	1060.6	156	18.9	3.1	642	1.62	557.1	.6	8.9	5.0	11.6	24.36	19.23
0315-623	.18	9.09	8.58	1164.5	93	14.3	2.5	536	1.42	1018.5	.4	15.7	3.3	8.4	12.55	4.27
0315-624	.90	7.50	13.93	841.4	170	29.0	10.6	451	2.08	1786.0	1.2	25.5	9.7	21.8	1.65	3.49
0315-625	.20	2.21	4.88	291.0	41	10.4	3.3	380	1.27	1643.1	.5	19.0	5.7	20.8	.52	1.71
0315-626	.85	12.17	11.37	571.9	480	25.0	8.4	994	2.87	835.3	.4	8.6	4.9	34.2	.48	4.94
0315-627	.41	7.43	398.97	1049.1	1456	52.4	19.4	4941	5.53	401.8	1.8	5.8	6.8	34.3	6.49	3.52
0315-628	.46	6.09	159.67	78.3	555	69.3	21.2	3389	5.94	937.5	1.3	10.2	6.7	28.6	.39	4.60
0315-629	.21	1109.67	3744.49	547.7	20170	61.9	15.7	419	4.97	2421.0	1.5	167.2	6.1	16.3	4.68	484.75
0315-630	.34	19.30	246.22	48.1	614	71.6	18.0	777	4.73	4599.8	1.6	58.2	10.3	18.0	.26	10.75
0315-631	.29	35.22	24.16	57.0	1142	52.9	14.9	805	4.28	129.4	.8	8.0	9.5	14.2	.14	8.77
0315-632	.48	259.14	2148.32	7858.5	4996	53.2	14.5	2554	7.33	20662.5	1.2	528.7	6.0	77.4	66.92	122.50
RE 0315-632	.48	268.40	2239.34	8161.2	5136	56.4	15.5	2646	7.59	21504.5	1.3	596.0	6.2	80.3	69.72	127.54
RRE 0315-632	.33	277.04	2230.38	7910.1	5250	53.0	14.3	2567	7.12	20593.7	1.3	618.0	5.9	75.5	67.48	155.51
0315-633	.51	51.97	62.78	474.2	1580	55.9	17.7	1224	4.64	10336.6	1.1	161.2	8.4	33.9	3.56	14.90
0315-634	1.18	84.56	71.31	73.1	5291	77.1	48.1	781	4.41	4894.2	1.1	29.1	9.1	49.1	.69	19.29
0315-635	.62	2418.91	14836.14	11950.8	81249	30.7	12.9	563	8.27	46567.8	4.0	2663.6	3.8	27.2	101.73	4160.22
0315-636	.65	49.18	161.39	79.2	3058	68.7	20.2	836	4.72	1955.0	1.2	31.7	9.5	68.8	.53	11.34
STANDARD DS5/AU-R	12.32	141.09	23.73	131.5	270	24.4	11.9	723	2.95	19.1	5.7	43.0	2.6	48.3	5.43	2.97

SAMPLE#	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0315-622	.03	2	.33	.008	4.5	12.0	.11	23.1	.003	2	.30	.029	.12	.2	.9	.09	.20	<5	<.1	<.02	.7	14
0315-623	.07	<2	.25	.011	3.1	7.7	.07	18.4	.003	1	.18	.018	.08	.2	1.0	.05	.19	<5	<.1	<.02	.4	26
0315-624	.03	3	.53	.066	5.0	11.7	.20	31.9	<.001	1	.40	.037	.17	.3	1.7	.08	1.04	<5	<.1	<.02	.9	62
0315-625	.02	<2	.71	.008	4.0	7.8	.23	14.7	<.001	1	.22	.017	.10	.2	.8	.05	.58	<5	<.1	<.02	.4	26
0315-626	.04	2	1.20	.012	2.9	11.1	.64	17.1	.001	1	.25	.019	.11	.2	1.3	.05	.76	<5	<.1	<.02	.6	12
0315-627	.41	3	2.15	.045	3.0	7.6	1.22	32.1	<.001	1	.38	.029	.18	.2	3.9	.09	2.68	8	.2	.03	1.0	24
0315-628	.42	3	1.68	.087	4.1	7.2	.75	39.2	<.001	2	.49	.035	.22	.2	3.2	.11	4.81	<5	.2	.05	1.2	67
0315-629	3.38	2	.54	.029	3.4	6.4	.17	34.4	<.001	3	.45	.034	.22	.2	1.4	.14	5.69	28	.2	.10	1.0	328
0315-630	.48	6	.36	.048	3.3	11.7	.55	48.8	.001	2	.68	.055	.31	.3	2.6	.18	3.14	<5	.1	<.02	1.6	183
0315-631	.16	7	.31	.048	4.5	15.3	1.15	38.9	.002	1	.49	.046	.23	.2	3.2	.11	.39	<5	.1	<.02	1.1	14
0315-632	.89	6	3.60	.030	3.4	10.9	2.00	41.6	.004	1	.50	.042	.22	.2	3.6	.17	5.08	37	<.1	.03	1.6	995
RE 0315-632	.94	7	3.70	.032	3.5	11.8	2.06	42.8	<.001	1	.54	.048	.23	.2	3.9	.19	5.35	50	<.1	.05	1.7	964
RRE 0315-632	.92	6	3.61	.031	3.2	8.8	2.01	31.4	<.001	1	.36	.031	.17	.3	3.6	.14	4.88	43	<.1	.03	1.3	970
0315-633	.56	5	1.55	.033	2.8	10.9	.99	39.8	<.001	1	.49	.039	.22	.2	3.2	.14	2.28	6	.1	.05	1.2	325
0315-634	.60	5	2.19	.044	1.7	9.5	.82	46.5	<.001	1	.60	.049	.28	.2	3.9	.15	3.39	<5	.2	.09	1.4	58
0315-635	1.82	2	1.32	.016	<.5	8.4	.45	41.9	.004	2	.49	.032	.21	.3	1.5	.29	8.22	78	<.1	.07	1.6	2638
0315-636	.64	7	2.63	.042	2.0	15.8	1.34	54.4	<.001	2	.74	.061	.32	.2	4.7	.16	1.82	<5	.2	.05	1.8	27
STANDARD DS5/AU-R	6.01	59	.75	.093	11.9	185.6	.64	140.3	.090	16	2.01	.032	.13	4.4	3.4	.98	.03	164	4.7	.85	6.4	477

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

ACME AN' 'TICAL LABORATORIES LTD. 852 E. HASTINGS ST. ' 'COUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60 53-1716
(IS· '002 Accredited Co.)

ASSAY CE IFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A304551R
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Au** gm/mt
0314-488	20.13
0314-507	4.85
0314-584	8.82
STANDARD AU-1	3.45

GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1/2 A.T. SAMPLE, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: CORE PULP

DATE RECEIVED: NOV 7 2003 **DATE REPORT MAILED:** Nov 13/03 **SIGNED BY**............D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data ___ FA

ACME ANA[illegible]TICAL LABORATORIES LTD. 852 E. HASTINGS ST. [illegible]COUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60[illegible]53-1716
(IS[illegible]02 Accredited Co.)

ASSAY CE[illegible]IFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A304551R
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Au** gm/mt
0314-488	20.13
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 Data FA

ACME ANA TICAL LABORATORIES LTD. 852 E. HASTINGS ST. ' 'COUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60' 253-1716
(ISC)02 Accredited Co.)

ASSAY CE IFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A304551R
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Au** gm/mt
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GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1/2 A.T. SAMPLE, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: CORE PULP

DATE RECEIVED: NOV 7 2003 DATE REPORT MAILED: Nov 13/03 SIGNED BY..........D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data FA

ACME AN TICAL LABORATORIES LTD. 852 E. HASTINGS ST. NCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6(253-1716
(I 002 Accredited Co.)

GEOCHEMICAL AN YSIS CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A304993 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Au**
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb
SI	.22	1.77	2.45	3.9	19	.6	.1	4	.07	.3	<.1	.2	<.1	2.3	.03	.04	<.02	<2	.09	.001	<.5	3.5	<.01	2.5	<.001	<1	.01	.384	<.01	.2	<.1	.10	.02	<5	<.1	<.02	<.1	2
0314-449	.97	223.86	5813.14	16246.9	21405	48.9	11.5	3499	4.77	151.3	.7	11.4	3.5	30.3	101.91	58.79	.31	5	1.80	.031	.7	7.4	.35	21.7	<.001	2	.21	.013	.12	5.2	4.4	.22	.52	160	.4	.13	.8	43
0314-450	.51	32.33	2279.60	5854.9	4495	25.5	11.0	2358	4.67	62.2	.4	2.1	4.5	66.1	52.57	10.32	.38	7	4.77	.024	.6	6.7	1.04	29.9	.004	1	.29	.020	.16	1.5	5.0	.13	.67	74	.4	.09	.7	16
0314-451	.88	171.94	6673.88	13452.2	35468	47.3	14.4	2757	4.56	155.8	1.0	18.9	7.2	51.5	89.38	54.93	.30	7	2.79	.084	.8	9.2	.75	27.3	.002	2	.37	.015	.15	147.1	4.7	.12	1.04	187	.5	.11	1.0	73
0314-452	.38	134.07	9802.67	17877.3	34647	19.0	5.1	6002	5.88	33.7	.5	4.5	.9	195.1	126.87	57.46	.23	4	9.11	.108	.6	3.1	2.04	12.9	<.001	1	.14	.009	.06	320.8	3.4	.05	.64	411	.7	.09	.7	16
0314-453	.43	47.22	7966.85	14211.3	16702	12.2	3.1	4907	5.13	9.4	.4	1.1	1.2	177.4	90.20	13.64	.15	5	9.12	.173	.6	5.4	2.36	13.0	.003	1	.15	.008	.07	33.6	3.2	.06	.54	246	.6	.07	.7	11
0314-454	.64	31.76	2191.19	8151.7	5864	31.5	10.9	2750	4.65	71.3	.6	4.4	7.2	49.2	58.09	19.41	.19	4	3.69	.069	.8	5.8	.64	28.5	<.001	1	.26	.016	.15	107.0	4.3	.08	.46	83	.4	.04	.7	34
0314-455	.69	45.67	1227.22	2744.8	9787	35.8	15.5	1461	4.18	104.0	.5	2.9	8.5	54.2	16.55	17.21	.28	4	4.12	.022	.7	6.2	.95	33.9	.003	1	.32	.021	.18	48.0	3.7	.08	1.55	44	.4	.03	.8	45
0314-479	.37	48.51	22.06	98.7	846	37.8	11.4	1052	5.24	37.7	.4	2.9	3.4	19.1	.38	17.43	.36	7	.60	.035	2.5	13.4	1.61	19.1	.003	1	.23	.021	.12	4.7	3.7	.06	.12	<5	<.1	.02	.6	9
0314-480	1.56	27.04	37.59	118.8	475	17.1	3.8	1122	4.77	9.9	.2	.8	2.0	21.5	.47	9.24	.16	7	.68	.036	1.0	19.0	1.49	16.8	.003	1	.21	.017	.09	13.0	2.7	.07	.07	10	<.1	<.02	.6	5
0314-481	.70	129.42	12.95	82.8	2430	8.6	1.7	1521	5.02	7.9	.1	5.9	.4	19.9	.38	76.43	.74	4	.72	.022	<.5	12.4	1.64	3.2	.001	<1	.04	.006	.01	38.3	3.4	.02	.03	13	.1	.02	.2	21
0314-482	.51	5.93	9.44	22.7	144	45.9	17.1	1856	2.41	219.5	1.6	61.2	7.1	49.2	.13	1.43	.09	6	2.65	.044	5.0	8.8	.85	33.2	<.001	2	.39	.029	.21	6.3	3.3	.11	.86	<5	.2	.02	1.0	55
0314-483	.65	6.67	41.68	33.2	363	97.6	30.4	2028	5.00	766.1	1.2	196.3	7.8	53.7	.18	2.38	.12	6	2.86	.036	6.5	6.3	1.02	34.0	<.001	4	.42	.029	.22	3.3	2.5	.13	3.62	<5	.1	.02	1.1	414
0314-484	.96	106.27	10645.01	3781.9	19500	93.4	26.9	237	6.10	5537.5	3.2	343.3	6.8	15.1	20.34	48.56	2.65	8	.42	.046	4.9	14.2	.14	41.2	<.001	7	.80	.043	.33	1.9	1.8	.20	6.57	23	.5	.11	1.8	656
0314-485	.54	10.63	680.58	3341.0	1720	85.5	26.1	689	6.82	7882.2	1.4	84.3	9.1	14.2	20.71	4.03	.46	8	.33	.055	5.1	10.9	.23	47.6	.005	3	.74	.050	.36	11.6	2.1	.22	6.92	22	.5	.04	1.7	286
0314-486	.48	40.21	43.02	71.5	1704	68.0	21.9	1491	5.19	199.5	1.6	8.4	9.1	17.6	.21	11.09	.29	9	.62	.030	4.7	16.4	1.43	31.8	.002	1	.39	.030	.19	6.9	3.7	.11	.85	6	.1	.02	1.0	27
RE 0314-486	.49	38.31	41.01	62.8	1680	59.6	19.0	1445	5.03	177.8	1.5	9.3	8.7	17.3	.22	12.06	.27	9	.60	.029	4.7	15.4	1.35	30.9	<.001	2	.37	.029	.19	7.5	3.5	.11	.83	<5	.1	.02	.9	24
RRE 0314-486	.39	42.62	17.48	74.6	1925	60.6	19.0	1485	5.07	196.7	1.4	12.2	8.1	17.9	.28	14.15	.33	8	.64	.029	4.3	14.9	1.36	31.1	<.001	1	.37	.029	.19	7.1	3.4	.12	.87	5	.1	.03	.9	30
0314-495	.97	7.62	206.72	218.9	577	16.7	5.9	674	2.18	1491.2	.5	30.9	2.9	21.3	1.20	2.84	.12	3	.81	.010	1.9	12.0	.29	17.0	.003	1	.22	.022	.09	14.1	.9	.06	1.36	7	.1	<.02	.5	21
0314-496	.58	13.55	910.28	406.2	2590	7.7	2.7	1765	2.12	657.8	.2	42.1	1.0	5.9	2.62	12.06	.14	2	.25	.004	.9	12.3	.24	6.0	<.001	1	.09	.011	.04	2.7	.7	.03	.73	<5	.1	<.02	.3	102
0314-497	.74	4.51	51.36	50.5	196	9.4	3.7	405	1.36	154.3	.7	3.4	3.7	15.1	.28	.62	.02	2	.60	.009	2.4	11.4	.31	11.6	<.001	1	.16	.022	.06	2.4	.5	.04	.11	<5	<.1	<.02	.4	6
0314-498	.42	10.19	7.22	13.0	497	9.2	3.7	357	1.29	24.5	.4	.7	3.1	15.7	.06	3.36	.04	2	.60	.007	2.8	10.3	.29	12.1	.005	1	.17	.020	.07	1.5	.6	.04	.07	<5	<.1	<.02	.4	<2
0314-499	.94	9.04	5.08	14.2	190	13.2	4.5	443	1.74	58.1	.6	3.9	4.0	23.0	.05	1.99	.03	3	.95	.009	2.3	13.9	.42	15.9	<.001	<1	.25	.034	.09	1.8	.9	.05	.17	<5	<.1	.02	.5	6
0314-500	.43	37.29	5.56	19.2	519	21.7	8.0	348	2.22	504.3	1.1	14.9	5.7	16.2	.07	12.45	.17	2	.58	.029	3.0	10.0	.42	16.8	.001	1	.25	.032	.10	1.3	1.0	.05	.46	<5	.1	.02	.5	212
0314-501	.70	176.35	12.84	37.7	1847	47.0	16.9	931	3.77	174.9	1.3	10.8	8.8	50.6	.27	45.34	.48	5	1.99	.018	4.2	10.0	.70	29.5	.007	1	.39	.059	.14	1.9	2.1	.05	1.71	7	.5	.04	1.0	27
0314-502	.49	68.89	7.13	24.2	798	43.9	13.3	520	2.71	116.0	1.2	3.6	6.5	37.9	.11	16.11	.17	4	1.41	.031	2.7	11.6	.60	28.6	.002	1	.41	.061	.15	1.2	1.8	.06	.48	<5	.2	.02	1.0	9
0314-539	.87	7.74	16.68	10.0	151	29.6	11.7	401	4.47	8082.9	1.1	405.3	4.9	13.0	.04	3.78	.08	4	.58	.009	3.4	14.2	.18	18.1	.001	2	.29	.028	.12	2.1	.8	.09	3.58	<5	.3	.03	.8	494
0314-540	.45	3.56	4.78	11.5	63	14.4	5.6	444	1.84	1241.1	1.2	122.1	4.5	22.3	.05	1.01	.02	3	1.16	.008	2.7	8.2	.33	13.3	.001	1	.22	.031	.08	1.3	.9	.05	.85	<5	<.1	<.02	.5	78
0314-541	.90	6.53	6.88	7.3	112	15.2	5.1	456	2.51	723.5	.6	85.4	4.2	19.3	.04	1.39	.15	3	1.01	.007	2.6	13.3	.29	14.7	.003	<1	.23	.026	.09	2.3	.8	.05	1.69	<5	.1	.02	.6	95
0314-542	.40	6.76	5.46	10.8	202	14.4	5.4	949	2.61	1888.5	1.6	135.5	7.8	35.1	.09	2.46	.05	2	1.92	.006	4.5	7.4	.60	14.7	.007	<1	.20	.025	.09	1.1	1.1	.04	1.42	<5	.1	.02	.5	127
0314-543	1.01	3.61	4.22	5.0	34	3.2	.5	212	.74	21.4	<.1	1.2	.2	11.5	.04	.27	<.02	<2	.54	.004	<.5	15.7	.15	1.5	.003	<1	.02	.005	.01	2.7	.3	<.02	.07	<5	.1	<.02	.1	2
0314-544	.58	17.98	6.14	14.7	324	10.5	5.7	892	2.38	34.7	.5	4.3	4.0	66.8	.11	6.51	.10	2	2.65	.002	.8	10.3	.72	10.0	.001	1	.13	.018	.06	1.6	1.4	.03	.19	<5	.1	<.02	.4	10
0314-545	1.11	39.75	4.63	67.6	793	15.6	6.1	248	1.27	451.5	.9	16.8	5.4	22.2	.34	12.32	.05	3	.73	.007	3.6	14.9	.20	19.0	<.001	1	.29	.042	.10	2.4	.7	.04	.37	<5	.1	<.02	.7	14
0314-546	.47	18.58	3.50	7.7	318	22.6	10.1	313	1.60	815.7	1.1	118.7	6.5	22.4	.04	5.95	.04	3	.90	.008	5.7	9.7	.24	20.6	.004	<1	.28	.038	.11	1.3	.7	.05	.77	<5	.1	<.02	.7	117
0314-547	.72	12.49	10.37	12.0	209	18.0	7.4	322	1.72	76.0	.9	10.5	6.1	23.7	.04	3.01	.33	3	.93	.012	5.9	12.0	.37	15.8	.004	<1	.25	.037	.08	1.4	1.0	.04	.11	<5	.1	.03	.6	11
STANDARD DS5/AU-R	11.96	138.67	24.05	132.2	268	24.2	11.8	750	3.02	18.6	6.0	40.0	2.7	48.8	5.31	3.45	6.25	58	.76	.093	11.5	189.3	.66	137.3	.090	15	1.99	.034	.14	4.6	3.4	1.00	.03	169	4.8	.83	6.4	484

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30.00 GM SAMPLE ANALYSIS BY FA/ICP.
- SAMPLE TYPE: CORE R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 14 2003 **DATE REPORT MAILED:** Oct 27/03 **SIGNED BY** .... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data FA

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Au**
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb
0314-548	.61	9.86	5.76	13.9	108	15.6	6.3	257	1.77	34.4	.8	1.7	5.8	19.0	.03	2.21	.07	2	.77	.010	5.7	9.5	.41	11.6	<.001	<1	.19	.032	.07	1.0	.9	.05	.05	<5	.1	<.02	.5	2
0314-554	.32	2.98	4.35	8.0	59	13.5	5.1	418	1.53	2026.9	1.0	13.9	5.1	19.7	.03	.90	.03	<2	.96	.007	2.9	7.8	.31	10.8	.001	<1	.16	.023	.08	.8	.8	.05	.72	<5	<.1	<.02	.4	14
0314-555	.70	11.06	3849.53	12.5	5231	18.2	6.1	500	2.36	2702.5	1.6	148.1	8.3	19.9	.34	27.98	.28	2	.85	.012	4.6	10.3	.29	15.6	.004	2	.24	.026	.11	3.2	1.2	.07	1.79	<5	.1	<.02	.6	217
0314-556	.33	4.48	12.22	10.0	101	16.5	5.9	367	1.48	1465.3	1.1	10.3	4.9	15.3	.05	1.68	.03	<2	.65	.010	3.3	8.8	.25	12.3	.001	1	.19	.023	.09	1.7	.8	.06	.73	<5	<.1	<.02	.5	21
0314-557	.68	5.18	25.83	20.8	160	16.0	6.0	375	1.69	2411.5	.7	18.3	3.9	18.5	.12	2.09	.05	<2	.81	.010	2.9	10.0	.27	12.3	<.001	1	.21	.022	.09	5.3	.9	.06	.97	5	<.1	<.02	.4	19
0314-558	.42	11103.44	16063.05	36.7	99999	9.2	3.4	193	2.72	2228.6	1.8	4229.7	.1	9.1	9.01	17063.75	4.54	<2	.41	.006	<.5	8.2	.12	24.9	.006	1	.15	.016	.06	.2	.3	.09	4.87	11	.8	<.02	.3	5999
0314-559	.54	10.05	38.16	23.2	154	16.4	6.2	345	1.70	2505.7	1.9	35.8	4.4	17.9	.15	5.52	.07	3	.74	.009	3.4	9.7	.25	11.5	.002	<1	.19	.020	.08	1.9	.7	.06	1.10	<5	.2	<.02	.4	39
0314-560	.40	47.27	537.14	143.2	774	16.3	6.5	377	4.02	6457.6	.6	312.4	3.7	15.8	.87	56.00	.08	2	.73	.008	2.1	6.6	.24	10.5	<.001	1	.16	.017	.07	2.5	.6	.05	3.22	5	.2	<.02	.4	386
0314-561	.68	5.81	15.94	7.9	66	18.8	6.0	281	1.63	2266.4	1.1	25.1	6.0	17.5	.04	2.54	.03	3	.67	.010	3.8	9.9	.22	17.6	.004	<1	.24	.025	.11	2.7	.8	.06	1.12	<5	.1	.02	.6	37
0314-562	.42	9.02	57.04	9.4	141	16.5	5.9	286	1.52	3614.6	1.5	170.4	7.8	13.0	.06	7.46	.02	2	.46	.008	5.0	8.4	.15	13.5	<.001	<1	.19	.019	.10	1.4	.7	.05	.93	<5	.1	.02	.4	178
0314-563	.67	5.82	15.19	9.7	107	17.9	6.0	313	1.54	2810.7	1.3	73.9	6.1	16.8	.05	2.00	.04	3	67	.008	4.1	9.9	.22	14.8	<.001	<1	.25	.026	.11	1.8	.8	.06	.93	5	.1	<.02	.5	80
0314-564	.39	4.99	51.75	7.7	127	16.1	5.8	349	1.60	3323.7	.7	182.1	4.7	15.1	.04	3.45	.03	2	.74	.009	2.3	8.9	.24	11.2	<.001	1	.18	.018	.08	1.9	.7	.05	.94	<5	.1	<.02	.4	207
0314-565	.60	5.18	8.00	5.8	61	16.9	6.1	322	1.44	2456.4	1.1	51.2	6.1	18.1	.03	2.07	.03	<2	.75	.008	4.4	8.6	.25	15.2	<.001	1	.20	.023	.09	2.2	.7	.06	.75	<5	.1	<.02	.5	59
0314-566	.34	3.16	13.92	12.3	44	7.7	3.2	907	1.69	765.8	.6	30.2	5.1	25.6	.04	1.79	<.02	<2	1.64	.005	3.9	9.2	.59	9.5	<.001	<1	.15	.016	.06	1.1	1.2	.04	.36	<5	.1	<.02	.4	39
0314-567	.66	4.49	7.19	11.0	74	23.2	8.8	347	1.70	1941.9	1.8	74.8	8.7	21.0	.04	1.39	.03	3	.72	.010	6.1	11.6	.31	17.8	<.001	1	.29	.032	.13	1.2	1.1	.06	.78	<5	.1	<.02	.7	84
RE 0314-567	.70	4.84	7.76	10.9	79	23.7	8.8	355	1.74	1997.2	2.1	80.1	9.7	21.4	.04	1.46	.03	3	.73	.010	6.3	12.1	.32	19.2	.005	1	.33	.037	.13	1.4	1.2	.07	.84	<5	.1	.02	.8	83
RRE 0314-567	.46	5.59	16.10	12.4	104	22.2	8.8	349	1.79	1765.7	1.7	56.9	8.6	19.5	.04	2.29	.05	3	.69	.010	5.8	10.0	.32	19.3	<.001	<1	.28	.033	.12	1.2	1.1	.06	.82	<5	.1	<.02	.6	62
0315-646	.65	25.62	3.92	12.8	262	17.6	4.6	1297	2.33	182.8	.2	53.1	1.3	53.0	.05	7.44	.05	2	2.31	.011	.5	8.5	.89	5.9	.003	<1	.09	.009	.04	1.6	2.0	.02	.91	<5	.1	<.02	.3	66
0315-647	.45	385.96	59.94	80.3	330	48.5	14.5	637	4.13	90.8	1.1	.9	7.1	15.7	.03	2.18	.82	4	.27	.027	1.4	11.7	1.16	20.1	.002	<1	.23	.025	.11	.7	3.6	.06	.07	<5	.3	.03	.6	2
0315-648	.66	7.11	5.76	42.1	52	23.1	5.3	960	3.13	50.9	.3	6.5	2.3	76.0	.05	.74	.06	4	1.70	.028	.6	11.6	1.17	14.5	<.001	<1	.14	.018	.05	1.3	2.6	.02	.14	<5	.2	<.02	.4	10
0315-649	.40	25.76	5.64	91.1	24	36.2	10.8	507	3.22	30.3	.9	.8	5.9	11.2	.04	.59	.06	4	.24	.023	2.2	11.8	.94	14.6	<.001	<1	.18	.020	.06	.8	2.2	.03	.07	5	<.1	<.02	.5	<2
0315-650	.54	54.17	7.93	40.1	340	64.6	24.1	1016	5.34	234.6	1.1	15.6	11.2	23.3	.06	8.20	.51	7	1.08	.040	2.1	13.9	1.52	28.0	<.001	1	.43	.038	.19	.7	4.3	.08	1.11	<5	.1	.03	1.1	29
0315-651	.21	1558.45	3192.53	288.0	63100	12.7	3.3	3886	12.98	2106.6	1.3	7589.4	.7	208.3	2.03	908.91	39.74	4	8.91	.005	<.5	2.5	4.28	4.9	<.001	<1	.05	.005	.02	.9	2.1	.03	6.81	68	1.7	.41	.3	10730
0315-652	.47	89.30	21.06	22.1	642	65.9	22.1	1057	5.09	750.5	2.0	88.3	12.1	89.7	.24	5.85	.81	8	3.10	.039	1.6	9.7	1.43	28.3	.002	1	.40	.038	.18	.6	4.6	.08	3.22	7	.2	.04	1.0	154
0315-656	.64	4.40	1.24	4.8	28	2.3	.7	179	.74	16.1	.1	3.1	.4	15.0	.01	.32	<.02	<2	.65	.001	<.5	12.2	.24	3.3	.001	<1	.04	.005	.02	1.5	.3	<.02	.12	<5	<.1	<.02	.1	6
0315-657	.38	11.15	13.80	4.1	273	2.0	.3	97	.81	55.8	<.1	23.3	<.1	9.6	.02	5.88	.17	<2	.43	<.001	<.5	13.2	.16	1.4	<.001	1	.01	.006	<.01	1.4	.1	<.02	.40	<5	<.1	<.02	<.1	23
0315-658	.81	4.38	2.25	1.4	55	3.2	.6	57	.60	18.2	.1	13.5	.1	4.0	<.01	.24	.27	<2	.11	.001	<.5	13.5	.10	2.5	.002	<1	.01	.002	<.01	1.9	.1	<.02	.19	5	<.1	.02	<.1	8
0315-659	.35	98.13	4.52	35.5	74	34.5	11.1	1006	5.02	69.4	.8	3.8	5.6	134.2	.04	1.02	.05	4	3.93	.020	1.0	7.8	1.82	17.9	<.001	<1	.19	.027	.09	.7	2.5	.03	.39	<5	.2	.02	.5	14
0315-660	.69	48.40	4.89	30.0	47	35.9	11.1	571	2.35	64.6	.6	27.0	5.2	103.1	.04	1.25	.14	2	2.38	.007	.8	8.0	.93	26.0	<.001	<1	.18	.015	.10	1.0	1.5	.03	.29	<5	.1	.02	.4	29
0315-666	.36	4.56	7.56	38.5	66	15.4	7.8	568	3.30	707.8	.7	66.8	4.0	78.1	.11	.65	.18	<2	2.94	.014	2.0	7.5	.85	8.2	.001	<1	.09	.012	.04	.9	1.7	.02	1.03	<5	.3	.03	.2	173
0315-670	.70	9.84	4.42	29.2	38	21.7	9.6	296	2.31	47.9	1.1	.2	5.9	53.7	.04	.19	.08	3	1.42	.096	6.3	10.8	.67	25.6	.003	1	.33	.037	.13	1.1	1.4	.04	.07	<5	.1	.02	.8	38
0315-674	.34	4.13	4.47	11.7	70	16.3	6.2	780	1.73	131.1	1.0	13.5	7.2	38.6	.05	.53	.04	2	1.30	.011	3.4	8.4	.51	22.9	<.001	1	.26	.016	.14	.8	1.2	.06	69	<5	<.1	<.02	6	7
0315-675	.50	9.09	5.06	26.0	402	61.2	21.7	1200	3.90	381.6	1.6	30.4	10.3	65.1	.07	1.95	.09	3	1.77	.052	3.0	8.1	.85	32.3	.003	1	.30	.020	.15	.8	2.3	.06	2.17	<5	.1	.02	.8	29
0315-676	.26	6.91	7.10	26.8	55	8.5	3.9	1734	1.37	42.1	1.1	2.9	8.0	46.4	.16	.72	.05	2	1.76	.014	3.1	6.2	.62	12.8	<.001	1	.14	.007	.08	.6	1.5	.04	.31	<5	<.1	<.02	.4	<2
STANDARD DS5/AU-R	12.03	143.45	23.88	137.2	261	24.5	12.0	761	2.95	18.2	5.8	40.5	2.6	47.1	5.30	3.47	5.97	59	.72	.091	12.0	183.9	.66	131.7	.094	17	2.04	.033	.14	4.3	3.4	.98	.02	164	4.6	.83	6.5	490

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm
0315-677	.31	43.57	24.83	106.7	62	63.4	23.8	853	4.99	8.1	1.5	1.4	8.9	16.1	.05	.37	.50	17
0315-678	.19	41.24	15.63	95.8	34	55.6	17.7	889	4.70	3.5	1.4	1.1	8.3	19.5	.12	.33	.35	15
0315-679	.41	47.28	25.88	92.9	64	57.9	19.5	540	4.49	6.9	1.2	1.4	8.7	10.8	.06	.28	.48	15
0315-680	.78	80.51	23.91	105.1	176	71.6	37.0	905	5.29	71.0	1.7	1.4	10.3	12.7	.07	.88	.51	15
0315-681	.60	53.47	9.13	97.9	78	63.0	18.7	786	4.80	48.4	1.7	.7	10.5	15.4	.04	.78	.26	13
0315-682	1.52	125.68	19.26	105.3	171	79.8	59.6	1268	5.66	122.1	1.5	1.0	9.1	18.3	.06	.99	.75	11
0315-683	.68	104.19	55.10	101.0	198	80.3	57.8	530	5.07	115.2	1.4	.8	10.0	8.4	.07	.95	.93	15
0315-684	.71	107.25	36.38	88.5	226	90.3	34.9	862	5.68	104.4	1.6	.9	8.7	15.2	.04	1.21	.88	13
0315-685	.64	82.11	29.05	93.6	162	79.1	28.7	720	5.41	78.9	1.4	.8	9.1	12.8	.04	.93	.68	14
STANDARD	12.41	141.18	24.55	137.9	281	24.5	11.7	749	2.88	18.8	5.8	39.6	2.8	44.8	5.63	3.76	6.27	58

SAMPLE#	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0315-677	.61	.011	3.8	47.3	1.93	39.0	.002	<1	2.75	.026	.16	<.1	2.4	.04	.73	5	.2	.05	6.6	<2
0315-678	.83	.086	3.5	39.2	1.85	32.3	.004	<1	2.52	.021	.13	<.1	2.2	.03	.70	5	.2	.05	6.2	12
0315-679	.28	.014	5.5	38.6	1.75	38.9	.004	<1	2.58	.025	.16	<.1	2.1	.04	.53	<5	.1	.05	6.1	2
0315-680	.46	.031	4.0	42.3	1.95	29.6	.004	<1	2.04	.033	.12	<.1	3.4	.03	.33	5	.2	.05	5.4	<2
0315-681	.49	.092	5.3	31.7	1.80	33.5	<.001	<1	1.59	.041	.14	<.1	3.3	.04	.21	<5	.1	.03	4.1	<2
0315-682	.73	.019	2.8	24.3	1.97	35.3	<.001	<1	1.19	.046	.15	.1	3.7	.04	.52	<5	.2	.07	3.0	2
0315-683	.13	.013	2.6	41.9	1.71	27.2	.001	<1	2.05	.032	.12	<.1	2.7	.03	.67	<5	.3	.06	5.5	4
0315-684	.47	.028	2.1	36.3	1.73	29.4	<.001	<1	1.72	.034	.13	<.1	3.1	.04	1.48	5	.6	.07	4.6	6
0315-685	.35	.021	2.4	40.0	1.77	31.0	<.001	<1	2.03	.032	.13	<.1	2.9	.04	1.00	<5	.4	.06	5.3	4
STANDARD	.71	.094	12.0	180.7	.67	133.4	.089	16	2.06	.034	.14	4.5	3.4	1.01	.03	172	4.5	.80	6.4	495

Standard is STANDARD DS5/AU-R.

Data ___ FA ___

ACME AN 'TICAL LABORATORIES LTD. 852 E. HASTINGS ST. 'ICOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60 !53-1716
(IS 002 Accredited Co.)

GEOCHEMICAL ANA_ /SIS CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A304993 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
SI	.22	1.77	2.45	3.9	19	.6	.1	4	.07	.3	<.1	.2	<.1	2.3	.03	.04	<.02	<2	.09	.001	<.5	3.5	<.01	2.5	<.001	<1	.01	.384	<.01	.2	<.1	.10	.02	<5	<.1	<.02	<.1	2
0314-449	.97	223.86	5813.14	16246.9	21405	48.9	11.5	3499	4.77	151.3	.7	11.4	3.5	30.3	101.91	58.79	.31	5	1.80	.031	.7	7.4	.35	21.7	<.001	2	.21	.013	.12	5.2	4.4	.22	.52	160	.4	.13	.8	43
0314-450	.51	32.33	2279.60	5854.9	4495	25.5	11.0	2358	4.67	62.2	.4	2.1	4.5	66.1	52.57	10.32	.38	7	4.77	.024	.6	6.7	1.04	29.9	.004	1	.29	.020	.16	1.5	5.0	.13	.67	74	.4	.09	.7	16
0314-451	.88	171.94	6673.88	13452.2	35468	47.3	14.4	2757	4.56	155.8	1.0	18.9	7.2	51.5	89.38	54.93	.30	7	2.79	.084	.8	9.2	.75	27.3	.002	2	.37	.015	.15	147.1	4.7	.12	1.04	187	.5	.11	1.0	73
0314-452	.38	134.07	9802.67	17877.3	34647	19.0	5.1	6002	5.88	33.7	.5	4.5	.9	195.1	126.87	57.46	.23	4	9.11	.108	.6	3.1	2.04	12.9	<.001	1	.14	.009	.06	320.8	3.4	.05	.64	411	.7	.09	.7	16
0314-453	.43	47.22	7966.85	14211.3	16702	12.2	3.1	4907	5.13	9.4	.4	1.1	1.2	177.4	90.20	13.64	.15	5	9.12	.173	.6	5.4	2.36	13.0	.003	1	.15	.008	.07	33.6	3.2	.06	.54	246	.6	.07	.7	11
0314-454	.64	31.76	2191.19	8151.7	5864	31.5	10.9	2750	4.65	71.3	.6	4.4	7.2	49.2	58.09	19.41	.19	4	3.69	.069	.8	5.8	.64	28.5	<.001	1	.26	.016	.15	107.0	4.3	.08	.46	83	.4	.04	.7	34
0314-455	.69	45.67	1227.22	2744.8	9787	35.8	15.5	1461	4.18	104.0	.5	2.9	8.5	54.2	16.55	17.21	.28	4	4.12	.022	.7	6.2	.95	33.9	.003	1	.32	.021	.18	48.0	3.7	.08	1.55	44	.4	.03	.8	45
0314-479	.37	48.51	22.06	98.7	846	37.8	11.4	1052	5.24	37.7	.4	2.9	3.4	19.1	.38	17.43	.36	7	.60	.035	2.5	13.4	1.61	19.1	.003	1	.23	.021	.12	4.7	3.7	.06	.12	<5	<.1	.02	.6	9
0314-480	1.56	27.04	37.59	118.8	475	17.1	3.8	1122	4.77	9.9	.2	.8	2.0	21.5	.47	9.24	.16	7	.68	.036	1.0	19.0	1.49	16.8	.003	1	.21	.017	.09	13.0	2.7	.07	.07	10	<.1	<.02	.6	5
0314-481	.70	129.42	12.95	82.8	2430	8.6	1.7	1521	5.02	7.9	.1	5.9	.4	19.9	.38	76.43	.74	4	.72	.022	<.5	12.4	1.64	3.2	.001	<1	.04	.006	.01	38.3	3.4	.02	.03	13	.1	.02	.2	21
0314-482	.51	5.93	9.44	22.7	144	45.9	17.1	1856	2.41	219.5	1.6	61.2	7.1	49.2	.13	1.43	.09	6	2.65	.044	5.0	8.8	.85	33.2	<.001	2	.39	.029	.21	6.3	3.3	.11	.86	<5	.2	.02	1.0	55
0314-483	.65	6.67	41.68	33.2	363	97.6	30.4	2028	5.00	766.1	1.2	196.3	7.8	53.7	.18	2.38	.12	6	2.86	.036	6.5	6.3	1.02	34.0	<.001	4	.42	.029	.22	3.3	2.5	.13	3.62	<5	.1	.02	1.1	414
0314-484	.96	106.27	10645.01	3781.9	19500	93.4	26.9	237	6.10	5537.5	3.2	343.3	6.8	15.1	20.34	48.56	2.65	8	.42	.046	4.9	14.2	.14	41.2	<.001	7	.80	.043	.33	1.9	1.8	.20	6.57	23	.5	.11	1.8	656
0314-485	.54	10.63	680.58	3341.0	1720	85.5	26.1	689	6.82	7882.2	1.4	84.3	9.1	14.2	20.71	4.03	.46	8	.33	.055	5.1	10.9	.23	47.6	.005	3	.74	.050	.36	11.6	2.1	.22	6.92	22	.5	.04	1.7	286
0314-486	.48	40.21	43.02	71.5	1704	68.0	21.9	1491	5.19	199.5	1.6	8.4	9.1	17.6	.21	11.09	.29	9	.62	.030	4.7	16.4	1.43	31.8	.002	1	.39	.030	.19	6.9	3.7	.11	.85	6	.1	.02	1.0	27
RE 0314-486	.49	38.31	41.01	62.8	1680	59.6	19.0	1445	5.03	177.8	1.5	9.3	8.7	17.3	.22	12.06	.27	9	.60	.029	4.7	15.4	1.35	30.9	<.001	2	.37	.029	.19	7.5	3.5	.11	.83	<5	.1	.02	.9	24
RRE 0314-486	.39	42.62	17.48	74.6	1925	60.6	19.0	1485	5.07	196.7	1.4	12.2	8.1	17.9	.28	14.15	.33	8	.64	.029	4.3	14.9	1.36	31.1	<.001	1	.37	.029	.19	7.1	3.4	.12	.87	5	.1	.03	.9	30
0314-495	.97	7.62	206.72	218.9	577	16.7	5.9	674	2.18	1491.2	.5	30.9	2.9	21.3	1.20	2.84	.12	3	.81	.010	1.9	12.0	.29	17.0	.003	1	.22	.022	.09	14.1	.9	.06	1.36	7	.1	<.02	.5	21
0314-496	.58	13.55	910.28	406.2	2590	7.7	2.7	1765	2.12	657.8	.2	42.1	1.0	5.9	2.62	12.06	.14	2	.25	.004	.9	12.3	.24	6.0	<.001	1	.09	.011	.04	2.7	.7	.03	.73	<5	.1	<.02	.3	102
0314-497	.74	4.51	51.36	50.5	196	9.4	3.7	405	1.36	154.3	.7	3.4	3.7	15.1	.28	.62	.02	2	.60	.009	2.4	11.4	.31	11.6	<.001	1	.16	.022	.06	2.4	.5	.04	.11	<5	<.1	<.02	.4	6
0314-498	.42	10.19	7.22	13.0	497	9.2	3.7	357	1.29	24.5	.4	.7	3.1	15.7	.06	3.36	.04	2	.60	.007	2.8	10.3	.29	12.1	.005	1	.17	.020	.07	1.5	.6	.04	.07	<5	<.1	<.02	.4	<2
0314-499	.94	9.04	5.08	14.2	190	13.2	4.5	443	1.74	58.1	.6	3.9	4.0	23.0	.05	1.99	.03	3	.95	.009	2.3	13.9	.42	15.9	<.001	<1	.25	.034	.09	1.8	.9	.05	.17	<5	<.1	.02	.5	6
0314-500	.43	37.29	5.56	19.2	519	21.7	8.0	348	2.22	504.3	1.1	14.9	5.7	16.2	.07	12.45	.17	2	.58	.029	3.0	10.0	.42	16.8	.001	1	.25	.032	.10	1.3	1.0	.05	.46	<5	.1	.02	.5	212
0314-501	.70	176.35	12.84	37.7	1847	47.0	16.9	931	3.77	174.9	1.3	10.8	8.8	50.6	.27	45.34	.48	5	1.99	.018	4.2	10.0	.70	29.5	.007	1	.39	.059	.14	1.9	2.1	.05	1.71	7	.5	.04	1.0	27
0314-502	.49	68.89	7.13	24.2	798	43.9	13.3	520	2.71	116.0	1.2	3.6	6.5	37.9	.11	16.11	.17	4	1.41	.031	2.7	11.6	.60	28.6	.002	1	.41	.061	.15	1.2	1.8	.06	.48	<5	.2	.02	1.0	9
0314-539	.87	7.74	16.68	10.0	151	29.6	11.7	401	4.47	8082.9	1.1	405.3	4.9	13.0	.04	3.78	.08	4	.58	.009	3.4	14.2	.18	18.1	.001	2	.29	.028	.12	2.1	.8	.09	3.58	<5	.3	.03	.8	494
0314-540	.45	3.56	4.78	11.5	63	14.4	5.6	444	1.84	1241.1	1.2	122.1	4.5	22.3	.05	1.01	.02	3	1.16	.008	2.7	8.2	.33	13.3	.001	1	.22	.031	.08	1.3	.9	.05	.85	<5	<.1	<.02	.5	78
0314-541	.90	6.53	6.88	7.3	112	15.2	5.1	456	2.51	723.5	.6	85.4	4.2	19.3	.04	1.39	.15	3	1.01	.007	2.6	13.3	.29	14.7	.003	<1	.23	.026	.09	2.3	.8	.05	1.69	<5	.1	.02	.6	95
0314-542	.40	6.76	5.46	10.8	202	14.4	5.4	949	2.61	1888.5	1.6	135.5	7.8	35.1	.09	2.46	.05	2	1.92	.006	4.5	7.4	.60	14.7	.007	<1	.20	.025	.09	1.1	1.1	.04	1.42	<5	.1	.02	.5	127
0314-543	1.01	3.61	4.22	5.0	34	3.2	.5	212	.74	21.4	<.1	1.2	.2	11.5	.04	.27	<.02	<2	.54	.004	<.5	15.7	.15	1.5	.003	<1	.02	.005	.01	2.7	.3	<.02	.07	<5	.1	<.02	.1	2
0314-544	.58	17.98	6.14	14.7	324	10.5	5.7	892	2.38	34.7	.5	4.3	4.0	66.8	.11	6.51	.10	2	2.65	.002	.8	10.3	.72	10.0	.001	1	.13	.018	.06	1.6	1.4	.03	.19	<5	.1	<.02	.4	10
0314-545	1.11	39.75	4.63	67.6	793	15.6	6.1	248	1.27	451.5	.9	16.8	5.4	22.2	.34	12.32	.05	3	.73	.007	3.6	14.9	.20	19.0	<.001	1	.29	.042	.10	2.4	.7	.04	.37	<5	.1	<.02	.7	14
0314-546	.47	18.58	3.50	7.7	318	22.6	10.1	313	1.60	815.7	1.1	118.7	6.5	22.4	.04	5.95	.04	3	.90	.008	5.7	9.7	.24	20.6	.004	<1	.28	.038	.11	1.3	.7	.05	.77	<5	.1	<.02	.7	117
0314-547	.72	12.49	10.37	12.0	209	18.0	7.4	322	1.72	76.0	.9	10.5	6.1	23.7	.04	3.01	.33	3	.93	.012	5.9	12.0	.37	15.8	.004	<1	.25	.037	.08	1.4	1.0	.04	.11	<5	.1	.03	.6	11
STANDARD DS5/AU-R	11.96	138.67	24.05	132.2	268	24.2	11.8	750	3.02	18.6	6.0	40.0	2.7	48.8	5.31	3.45	6.25	58	.76	.093	11.5	189.3	.66	137.3	.090	15	1.99	.034	.14	4.6	3.4	1.00	.03	169	4.8	.83	6.4	484

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
AU** GROUP 3B - 30.00 GM SAMPLE ANALYSIS BY FA/ICP.
- SAMPLE TYPE: CORE R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 14 2003 DATE REPORT MAILED: Oct 27/03 SIGNED BY.........D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME ANALYTICAL

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ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm
0314-548	.61	9.86	5.76	13.9	108	15.6	6.3	257	1.77	34.4	.8	1.7	5.8	19.0	.03
0314-554	.32	2.98	4.35	8.0	59	13.5	5.1	418	1.53	2026.9	1.0	13.9	5.1	19.7	.03
0314-555	.70	11.06	3849.53	12.5	5231	18.2	6.1	500	2.36	2702.5	1.6	148.1	8.3	19.9	.34
0314-556	.33	4.48	12.22	10.0	101	16.5	5.9	367	1.48	1465.3	1.1	10.3	4.9	15.3	.05
0314-557	.68	5.18	25.83	20.8	160	16.0	6.0	375	1.69	2411.5	.7	18.3	3.9	18.5	.12
0314-558	.42	11103.44	16063.05	36.7	99999	9.2	3.4	193	2.72	2228.6	1.8	4229.7	.1	9.1	9.01
0314-559	.54	10.05	38.16	23.2	154	16.4	6.2	345	1.70	2505.7	1.9	35.8	4.4	17.9	.15
0314-560	.40	47.27	537.14	143.2	774	16.3	6.5	377	4.02	6457.6	.6	312.4	3.7	15.8	.87
0314-561	.68	5.81	15.94	7.9	66	18.8	6.0	281	1.63	2266.4	1.1	25.1	6.0	17.5	.04
0314-562	.42	9.02	57.04	9.4	141	16.5	5.9	286	1.52	3614.6	1.5	170.4	7.8	13.0	.06
0314-563	.67	5.82	15.19	9.7	107	17.9	6.0	313	1.54	2810.7	1.3	73.9	6.1	16.8	.05
0314-564	.39	4.99	51.75	7.7	127	16.1	5.8	349	1.60	3323.7	.7	182.1	4.7	15.1	.04
0314-565	.60	5.18	8.00	5.8	61	16.9	6.1	322	1.44	2456.4	1.1	51.2	6.1	18.1	.03
0314-566	.34	3.16	13.92	12.3	44	7.7	3.2	907	1.69	765.8	.6	30.2	5.1	25.6	.04
0314-567	.66	4.49	7.19	11.0	74	23.2	8.8	347	1.70	1941.9	1.8	74.8	8.7	21.0	.04
RE 0314-567	.70	4.84	7.76	10.9	79	23.7	8.8	355	1.74	1997.2	2.1	80.1	9.7	21.4	.04
RRE 0314-567	.46	5.59	16.10	12.4	104	22.2	8.8	349	1.79	1765.7	1.7	56.9	8.6	19.5	.04
0315-646	.65	25.62	3.92	12.8	262	17.6	4.6	1297	2.33	182.8	.2	53.1	1.3	53.0	.05
0315-647	.45	385.96	59.94	80.3	330	48.5	14.5	637	4.13	90.8	1.1	.9	7.1	15.7	.03
0315-648	.66	7.11	5.76	42.1	52	23.1	5.3	960	3.13	50.9	.3	6.5	2.3	76.0	.05
0315-649	.40	25.76	5.64	91.1	24	36.2	10.8	507	3.22	30.3	.9	.8	5.9	11.2	.04
0315-650	.54	54.17	7.93	40.1	340	64.6	24.1	1016	5.34	234.6	1.1	15.6	11.2	23.3	.06
0315-651	.21	1558.45	3192.53	288.0	63100	12.7	3.3	3886	12.98	2106.6	1.3	7589.4	.7	208.3	2.03
0315-652	.47	89.30	21.06	22.1	642	65.9	22.1	1057	5.09	750.5	2.0	88.3	12.1	89.7	.24
0315-656	.64	4.40	1.24	4.8	28	2.3	.7	179	.74	16.1	.1	3.1	.4	15.0	.01
0315-657	.38	11.15	13.80	4.1	273	2.0	.3	97	.81	55.8	<.1	23.3	<.1	9.6	.02
0315-658	.81	4.38	2.25	1.4	55	3.2	.6	57	.60	18.2	.1	13.5	.1	4.0	<.01
0315-659	.35	98.13	4.52	35.5	74	34.5	11.1	1006	5.02	69.4	.8	3.8	5.6	134.2	.04
0315-660	.69	48.40	4.89	30.0	47	35.9	11.1	571	2.35	64.6	.6	27.0	5.2	103.1	.04
0315-666	.36	4.56	7.56	38.5	66	15.4	7.8	568	3.30	707.8	.7	66.8	4.0	78.1	.11
0315-670	.70	9.84	4.42	29.2	38	21.7	9.6	296	2.31	47.9	1.1	.2	5.9	53.7	.04
0315-674	.34	4.13	4.47	11.7	70	16.3	6.2	780	1.73	131.1	1.0	13.5	7.2	38.6	.05
0315-675	.50	9.09	5.06	26.0	402	61.2	21.7	1200	3.90	381.6	1.6	30.4	10.3	65.1	.07
0315-676	.26	6.91	7.10	26.8	55	8.5	3.9	1734	1.37	42.1	1.1	2.9	8.0	46.4	.16
STANDARD DS5/AU-R	12.03	143.45	23.88	137.2	261	24.5	12.0	761	2.95	18.2	5.8	40.5	2.6	47.1	5.30

SAMPLE#	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0314-548	2.21	.07	2	.77	.010	5.7	9.5	.41	11.6	<.001	<1	.19	.032	.07	1.0	.9	.05	.05	<5	.1	<.02	.5	2
0314-554	.90	.03	<2	.96	.007	2.9	7.8	.31	10.8	.001	<1	.16	.023	.08	.8	.8	.05	.72	<5	<.1	<.02	.4	14
0314-555	27.98	.28	2	.85	.012	4.6	10.3	.29	15.6	.004	2	.24	.026	.11	3.2	1.2	.07	1.79	<5	.1	<.02	.6	217
0314-556	1.68	.03	<2	.65	.010	3.3	8.8	.25	12.3	.001	1	.19	.023	.09	1.7	.8	.06	.73	<5	<.1	<.02	.5	21
0314-557	2.09	.05	<2	.81	.010	2.9	10.0	.27	12.3	<.001	1	.21	.022	.09	5.3	.9	.06	.97	5	<.1	<.02	.4	19
0314-558	17063.75	4.54	<2	.41	.006	<.5	8.2	.12	24.9	.006	1	.15	.016	.06	.2	.3	.09	4.87	11	.8	<.02	.3	5999
0314-559	5.52	.07	3	.74	.009	3.4	9.7	.25	11.5	.002	<1	.19	.020	.08	1.9	.7	.06	1.10	<5	.2	<.02	.4	39
0314-560	56.00	.08	2	.73	.008	2.1	6.6	.24	10.5	<.001	1	.16	.017	.07	2.5	.6	.05	3.22	5	.2	<.02	.4	386
0314-561	2.54	.03	3	.67	.010	3.8	9.9	.22	17.6	.004	<1	.24	.025	.11	2.7	.8	.06	1.12	<5	.1	.02	.6	37
0314-562	7.46	.02	2	.46	.008	5.0	8.4	.15	13.5	<.001	<1	.19	.019	.10	1.4	.7	.05	.93	<5	.1	.02	.4	178
0314-563	2.00	.04	3	.67	.008	4.1	9.9	.22	14.8	<.001	<1	.25	.026	.11	1.8	.8	.06	.93	5	.1	<.02	.5	80
0314-564	3.45	.03	2	.74	.009	2.3	8.9	.24	11.2	<.001	1	.18	.018	.08	1.9	.7	.05	.94	<5	.1	<.02	.4	207
0314-565	2.07	.03	<2	.75	.008	4.4	8.6	.25	15.2	<.001	1	.20	.023	.09	2.2	.7	.06	.75	<5	.1	<.02	.5	59
0314-566	1.79	<.02	<2	1.64	.005	3.9	9.2	.59	9.5	<.001	<1	.15	.016	.06	1.1	1.2	.04	.36	<5	.1	<.02	.4	39
0314-567	1.39	.03	3	.72	.010	6.1	11.6	.31	17.8	<.001	1	.29	.032	.13	1.2	1.1	.06	.78	<5	.1	<.02	.7	84
RE 0314-567	1.46	.03	3	.73	.010	6.3	12.1	.32	19.2	.005	1	.33	.037	.13	1.4	1.2	.07	.84	<5	.1	.02	.8	83
RRE 0314-567	2.29	.05	3	.69	.010	5.8	10.0	.32	19.3	<.001	<1	.28	.033	.12	1.2	1.1	.06	.82	<5	.1	<.02	.6	62
0315-646	7.44	.05	2	2.31	.011	.5	8.5	.89	5.9	.003	<1	.09	.009	.04	1.6	2.0	.02	.91	<5	.1	<.02	.3	66
0315-647	2.18	.82	4	.27	.027	1.4	11.7	1.16	20.1	.002	<1	.23	.025	.11	.7	3.6	.06	.07	<5	.3	.03	.6	2
0315-648	.74	.06	4	1.70	.028	.6	11.6	1.17	14.5	<.001	<1	.14	.018	.05	1.3	2.6	.02	.14	<5	.2	<.02	.4	10
0315-649	.59	.06	4	.24	.023	2.2	11.8	.94	14.6	<.001	<1	.18	.020	.06	.8	2.2	.03	.07	5	<.1	<.02	.5	<2
0315-650	8.20	.51	7	1.08	.040	2.1	13.9	1.52	28.0	<.001	1	.43	.038	.19	.7	4.3	.08	1.11	<5	.1	.03	1.1	29
0315-651	908.91	39.74	4	8.91	.005	<.5	2.5	4.28	4.9	<.001	<1	.05	.005	.02	.9	2.1	.03	6.81	68	1.7	.41	.3	10730
0315-652	5.85	.81	8	3.10	.039	1.6	9.7	1.43	28.3	.002	1	.40	.038	.18	.6	4.6	.08	3.22	7	.2	.04	1.0	154
0315-656	.32	<.02	<2	.65	.001	<.5	12.2	.24	3.3	.001	<1	.04	.005	.02	1.5	.3	<.02	.12	<5	<.1	<.02	.1	6
0315-657	5.88	.17	<2	.43	<.001	<.5	13.2	.16	1.4	<.001	1	.01	.006	<.01	1.4	.1	<.02	.40	<5	<.1	<.02	<.1	23
0315-658	.24	.27	<2	.11	.001	<.5	13.5	.10	2.5	.002	<1	.01	.002	<.01	1.9	.1	<.02	.19	5	<.1	.02	<.1	8
0315-659	1.02	.05	4	3.93	.020	1.0	7.8	1.82	17.9	<.001	<1	.19	.027	.09	.7	2.5	.03	.39	<5	.2	.02	.5	14
0315-660	1.25	.14	2	2.38	.007	.8	8.0	.93	26.0	<.001	<1	.18	.015	.10	1.0	1.5	.03	.29	<5	.1	.02	.4	29
0315-666	.65	.18	<2	2.94	.014	2.0	7.5	.85	8.2	.001	<1	.09	.012	.04	.9	1.7	.02	1.03	<5	.3	.03	.2	173
0315-670	.19	.08	3	1.42	.096	6.3	10.8	.67	25.6	.003	1	.33	.037	.13	1.1	1.4	.04	.07	<5	.1	.02	.8	38
0315-674	.53	.04	2	1.30	.011	3.4	8.4	.51	22.9	<.001	1	.26	.016	.14	.8	1.2	.06	.69	<5	<.1	<.02	.6	7
0315-675	1.95	.09	3	1.77	.052	3.0	8.1	.85	32.3	.003	1	.30	.020	.15	.8	2.3	.06	2.17	<5	.1	.02	.8	29
0315-676	.72	.05	2	1.76	.014	3.1	6.2	.62	12.8	<.001	1	.14	.007	.08	.6	1.5	.04	.31	<5	<.1	<.02	.4	<2
STANDARD DS5/AU-R	3.47	5.97	59	.72	.091	12.0	183.9	.66	131.7	.094	17	2.04	.033	.14	4.3	3.4	.98	.02	164	4.6	.83	6.5	490

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

ACME ANALYTICAL

Jasper Mining Corporation PROJECT Ruth-Vermont FILE # A304993 Page 3

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Au** ppb
0315-677	.31	43.57	24.83	106.7	62	63.4	23.8	853	4.99	8.1	1.5	1.4	8.9	16.1	.05	.37	.50	17	.61	.011	3.8	47.3	1.93	39.0	.002	<1	2.75	.026	.16	<.1	2.4	.04	.73	5	.2	.05	6.6	<2
0315-678	.19	41.24	15.63	95.8	34	55.6	17.7	889	4.70	3.5	1.4	1.1	8.3	19.5	.12	.33	.35	15	.83	.086	3.5	39.2	1.85	32.3	.004	<1	2.52	.021	.13	<.1	2.2	.03	.70	5	.2	.05	6.2	12
0315-679	.41	47.28	25.88	92.9	64	57.9	19.5	540	4.49	6.9	1.2	1.4	8.7	10.8	.06	.28	.48	15	.28	.014	5.5	38.6	1.75	38.9	.004	<1	2.58	.025	.16	<.1	2.1	.04	.53	<5	.1	.05	6.1	2
0315-680	.78	80.51	23.91	105.1	176	71.6	37.0	905	5.29	71.0	1.7	1.4	10.3	12.7	.07	.88	.51	15	.46	.031	4.0	42.3	1.95	29.6	.004	<1	2.04	.033	.12	<.1	3.4	.03	.33	5	.2	.05	5.4	<2
0315-681	.60	53.47	9.13	97.9	78	63.0	18.7	786	4.80	48.4	1.7	.7	10.5	15.4	.04	.78	.26	13	.49	.092	5.3	31.7	1.80	33.5	<.001	<1	1.59	.041	.14	<.1	3.3	.04	.21	<5	.1	.03	4.1	<2
0315-682	1.52	125.68	19.26	105.3	171	79.8	59.6	1268	5.66	122.1	1.5	1.0	9.1	18.3	.06	.99	.75	11	.73	.019	2.8	24.3	1.97	35.3	<.001	<1	1.19	.046	.15	.1	3.7	.04	.52	<5	.2	.07	3.0	2
0315-683	.68	104.19	55.10	101.0	198	80.3	57.8	530	5.07	115.2	1.4	.8	10.0	8.4	.07	.95	.93	15	.13	.013	2.6	41.9	1.71	27.2	.001	<1	2.05	.032	.12	<.1	2.7	.03	.67	<5	.3	.06	5.5	4
0315-684	.71	107.25	36.38	88.5	226	90.3	34.9	862	5.68	104.4	1.6	.9	8.7	15.2	.04	1.21	.88	13	.47	.028	2.1	36.3	1.73	29.4	<.001	<1	1.72	.034	.13	<.1	3.1	.04	1.48	5	.6	.07	4.6	6
0315-685	.64	82.11	29.05	93.6	162	79.1	28.7	720	5.41	78.9	1.4	.8	9.1	12.8	.04	.93	.68	14	.35	.021	2.4	40.0	1.77	31.0	<.001	<1	2.03	.032	.13	<.1	2.9	.04	1.00	<5	.4	.06	5.3	4
STANDARD	12.41	141.18	24.55	137.9	281	24.5	11.7	749	2.88	18.8	5.8	39.6	2.8	44.8	5.63	3.76	6.27	58	.71	.094	12.0	180.7	.67	133.4	.089	16	2.06	.034	.14	4.5	3.4	1.01	.03	172	4.5	.80	6.4	495

Standard is STANDARD DS5/AU-R.

Data ___ FA ___

ACME ANA CAL LABORATORIES LTD.   852 E. HASTINGS ST. \ )UVER BC V6A 1R6   PHONE(604)253-3158 FAX(60 3-1716
(ISO 02 Accredited Co.)

ASSAY CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont   File # A304993R
1020 Canadian Centre, 833, Calgary AB T2P 3T5   Submitted by: Rick Walker

SAMPLE#	Cu %	Pb %	Zn %	Ag gm/mt	As %	Sb %	Au** gm/mt
0314-449	.027	.61	1.83	25	.02	.011	-
0314-451	.020	.74	1.45	42	.02	.012	-
0314-452	.015	1.09	2.06	40	<.01	.009	-
0314-453	.004	.87	1.55	20	<.01	.002	-
0314-455	.004	.12	.29	11	.01	.005	-
0314-484	.010	1.13	.39	22	.55	.014	-
0314-558	1.166	14.14	<.01	219	.22	2.019	4.52
0315-651	.171	.34	.03	67	.20	.104	9.56
STANDARD GC-2/AU-1	.932	8.90	17.09	1050	.16	.762	3.32

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 250 ML, ANALYSED BY ICP-ES.
- SAMPLE TYPE: CORE PULP   AU** BY FIRE ASSAY FROM 1 A.T. SAMPLE.

DATE RECEIVED: OCT 29 2003 **DATE REPORT MAILED:** Nov 6/03   **SIGNED BY**.........D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA ___

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(ISO 02 Accredited Co.)

ASSAY CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A304993R
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Cu %	Pb %	Zn %	Ag gm/mt	As %	Sb %	Au** gm/mt
0314-449	.027	.61	1.83	25	.02	.011	-
0314-451	.020	.74	1.45	42	.02	.012	-
0314-452	.015	1.09	2.06	40	<.01	.009	-
0314-453	.004	.87	1.55	20	<.01	.002	-
0314-455	.004	.12	.29	11	.01	.005	-
0314-484	.010	1.13	.39	22	.55	.014	-
0314-558	1.166	14.14	<.01	219	.22	2.019	4.52
0315-651	.171	.34	.03	67	.20	.104	9.56
STANDARD GC-2/AU-1	.932	8.90	17.09	1050	.16	.762	3.32

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 250 ML, ANALYSED BY ICP-ES.
- SAMPLE TYPE: CORE PULP AU** BY FIRE ASSAY FROM 1 A.T. SAMPLE.

DATE RECEIVED: OCT 29 2003 **DATE REPORT MAILED:** Nov 6/03 **SIGNED BY** C. L........D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA ___

ACME ANA. CICAL LABORATORIES LTD. 852 E. HASTINGS ST. \ COUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60 53-1716
(ISC 02 Accredited Co.)

ASSAY CE. IFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A304993R2
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Au** gm/mt
0314-558	4.48
0315-651	10.31
STANDARD AU-1	3.31

GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: CORE PULP

DATE RECEIVED: NOV 7 2003 DATE REPORT MAILED: Nov 25/03 SIGNED BY.......... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data FA √

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(ISO 02 Accredited Co.)

ASSAY CE. .FICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A304993R2

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Au** gm/mt
0314-558	4.48
0315-651	10.31
STANDARD AU-1	3.31

GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: CORE PULP

DATE RECEIVED: NOV 7 2003 DATE REPORT MAILED: Nov 25/03 SIGNED BY............D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ✓ FA ✓

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(ISO 02 Accredited Co.)

ASSAY CE. FICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A304993R2
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Au** gm/mt
0314-558	4.48
0315-651	10.31
STANDARD AU-1	3.31

GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: CORE PULP

DATE RECEIVED: NOV 7 2003 DATE REPORT MAILED: Nov 25/03 SIGNED BY............D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ✓ FA ✓

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(IS( )02 Accredited Co.)

GEOCHEMICAL ANA SIS CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A305377 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %
SI	.08	.74	.44	1.1	5	.2	<.1	2	.04	.2	<.1	<.2	<.1	2.4	.01	.04	<.02	<2	.11
0314-619	1.17	3.48	10.58	31.9	108	33.7	10.6	530	1.77	2012.2	4.5	18.9	37.5	20.5	.13	.91	.04	2	1.29
0315-637	.35	82.43	5.82	20.1	2858	64.4	23.2	516	3.24	475.3	2.6	27.3	11.5	62.7	.13	27.76	.25	3	1.75
0315-638	.75	21.61	6.57	20.3	692	21.3	6.5	1602	4.12	395.6	.6	147.9	3.0	133.0	.09	7.63	.61	2	4.35
0315-639	.32	37.03	4.69	41.1	178	63.8	19.8	805	5.79	160.8	2.1	3.5	11.7	15.0	.03	5.39	.29	3	.40
0315-640	.32	44.44	5.47	54.7	95	61.7	20.1	874	5.90	110.2	1.4	.3	11.4	9.9	.03	1.23	.44	4	.18
0315-641	.34	52.80	8.75	97.6	93	59.0	19.6	609	4.61	107.6	2.3	<.2	12.7	10.1	.06	1.12	.46	3	.10
0315-642	.34	44.49	2.04	101.0	40	57.0	16.2	568	4.84	96.6	1.4	<.2	11.0	11.5	.03	.64	.17	4	.21
0315-643	.40	32.84	4.31	180.7	85	61.3	21.1	354	4.55	108.3	1.8	.3	12.7	9.2	.74	2.02	.25	3	.08
0315-644	.42	89.89	13.58	133.7	130	78.9	28.8	643	5.91	143.1	4.0	1.9	12.6	10.1	.03	2.04	.91	4	.16
0315-645	.30	45.30	3.50	86.4	41	60.9	18.8	513	4.78	95.8	2.0	.5	13.0	11.3	.01	1.13	.22	3	.15
0315-653	.96	9.51	15.54	76.2	435	14.5	4.6	6714	3.98	24.7	.4	.4	.9	100.1	.45	5.95	.11	<2	5.89
0315-654	.60	279.36	13608.29	1782.2	35751	12.0	3.5	1120	4.18	682.0	.4	94.4	1.8	22.6	14.68	789.24	.35	<2	1.25
0315-655	1.70	178.47	6888.21	1246.5	16667	10.2	2.1	90	3.65	651.7	.1	308.6	.2	2.7	10.49	535.70	.31	<2	.11
0315-661	.27	46.12	54.26	109.2	200	36.8	8.3	216	1.95	79.8	1.8	197.6	11.1	40.2	.20	3.63	.12	<2	1.29
0315-662	.84	61.28	26.92	187.0	105	26.9	8.5	191	1.60	74.3	1.1	59.9	6.4	34.1	.35	2.42	.12	<2	.87
0315-663	.37	36.14	96.30	59.7	215	9.8	2.6	166	.84	45.7	.3	1.2	2.5	22.8	.33	1.01	.07	<2	.78
0315-664	1.44	2.52	32.42	19.1	109	3.0	.6	134	.62	8.0	<.1	5.5	.5	17.9	.09	.54	.17	<2	.58
0315-665	.32	10.51	13.77	49.1	71	11.9	4.4	327	1.60	69.5	.5	1.4	4.7	52.9	.25	.44	.06	<2	1.79
RE 0315-665	.31	9.12	14.17	52.7	77	10.7	4.0	319	1.59	64.9	.5	21.4	4.4	51.9	.27	.41	.05	<2	1.77
RRE 0315-665	1.55	9.25	25.31	49.0	91	11.4	4.3	333	1.66	70.7	.5	1.1	4.4	54.2	.25	.36	.08	<2	1.80
0318-667	.32	2.71	8.46	19.4	45	.9	.2	94	.58	1.1	<.1	<.2	.4	11.1	.13	.48	.02	<2	.46
0318-668	1.08	11.07	6.22	12.8	58	13.9	4.5	234	1.33	40.3	1.1	.7	6.2	32.7	.04	.25	.06	<2	1.10
0318-669	.28	3.66	9.52	13.8	56	16.2	6.2	246	1.80	55.7	.5	1.0	4.9	38.1	.04	.22	.10	<2	1.85
0315-671	.91	69.68	4.78	35.6	70	32.6	11.1	290	2.77	69.0	.8	1.0	6.3	59.1	.04	.38	.17	2	1.39
0315-672	.30	1.95	24.70	7.0	108	2.1	1.0	353	.56	12.4	.3	.7	.7	102.8	.05	.40	<.02	<2	2.92
0315-673	.81	25.79	5708.52	11343.4	17126	9.9	3.8	3750	1.71	43.7	1.8	5.8	7.4	34.5	93.41	17.15	.15	<2	2.18
0317-686	.32	36.60	15.21	126.1	79	38.3	17.6	710	4.46	37.4	1.4	.6	7.5	23.7	.26	1.54	.33	5	.54
0317-687	.69	54.52	15436.32	12224.6	23152	7.7	5.7	1563	2.89	19.6	.9	56.9	2.0	135.6	44.60	27.74	11.71	3	6.90
0317-688	.21	25.26	25.23	35.9	598	29.1	14.7	2919	2.60	47.6	1.5	1.0	5.1	276.7	.11	6.46	.25	<2	15.66
0317-689	.30	34.68	104.35	108.3	194	41.8	17.5	1755	3.79	71.9	1.5	1.0	7.3	92.2	.29	2.79	.44	<2	6.30
0317-690	.64	63.16	62.64	99.8	213	55.4	44.1	1840	4.87	90.6	1.8	.9	6.6	68.7	.08	4.26	.83	3	5.66
0317-691	.35	47.64	17.90	73.1	59	47.9	23.1	789	3.78	34.5	1.3	.6	8.4	41.9	.05	.42	.48	3	1.82
0317-692	.77	16.06	23.20	31.6	102	29.9	12.8	331	2.52	40.4	1.5	2.4	6.7	365.7	.06	2.67	.25	<2	14.14
0317-693	1.22	37.05	20.35	61.3	180	35.1	17.0	419	3.30	41.8	1.8	3.0	8.1	174.7	.07	6.56	.44	3	6.96
STANDARD DS5/AU-R	12.49	145.35	25.29	139.2	278	24.1	12.5	789	3.02	19.3	6.1	39.3	2.8	47.6	5.69	3.87	6.17	61	.76

SAMPLE#	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm
SI	<.001	<.5	1.6	<.01	3.5	<.001	1	.01	.537	<.01	<.1	<.1	<.02	.03	<5	.1	<.02	<.1
0314-619	.006	1.5	8.1	.33	20.2	<.001	<1	.30	.043	.14	.8	1.2	.06	.67	<5	<.1	.02	.7
0315-637	.029	3.4	4.5	.68	27.3	<.001	1	.26	.023	.16	.3	3.8	.07	2.53	<5	.2	.03	.6
0315-638	.019	.7	5.2	2.20	9.0	<.001	1	.12	.009	.07	1.1	2.2	.03	2.09	5	.2	.06	.3
0315-639	.047	2.5	11.3	1.75	23.6	<.001	<1	.27	.022	.13	.3	3.9	.06	.41	<5	.1	.03	.6
0315-640	.064	4.0	9.2	1.69	25.5	.001	1	.37	.030	.15	.3	4.1	.07	.11	<5	<.1	.06	.8
0315-641	.032	2.2	6.9	1.45	20.4	.001	<1	.29	.031	.12	.2	3.3	.05	.17	<5	.1	.03	.6
0315-642	.086	4.2	7.7	1.44	21.6	.001	<1	.33	.028	.14	.2	3.5	.06	.06	<5	<.1	.02	.8
0315-643	.024	2.1	8.6	1.31	20.5	.001	<1	.30	.025	.13	.1	3.3	.07	.21	<5	<.1	.03	.6
0315-644	.064	2.4	8.3	1.62	21.6	<.001	<1	.32	.031	.14	.2	4.6	.07	.57	5	.1	.10	.7
0315-645	.056	3.7	7.4	1.38	21.1	.001	<1	.29	.028	.13	<.1	3.6	.06	.18	<5	<.1	.04	.7
0315-653	.003	<.5	4.6	1.86	14.8	<.001	<1	.07	.006	.04	1.1	2.2	<.02	.48	<5	.2	.03	.3
0315-654	.002	<.5	3.4	.44	8.2	<.001	<1	.10	.008	.05	.2	.6	.03	3.86	8	.1	.03	.3
0315-655	<.001	<.5	10.4	.03	1.6	<.001	<1	.02	.003	.01	3.2	.1	<.02	4.07	7	<.1	.02	.1
0315-661	.007	1.0	4.1	.54	37.9	<.001	<1	.24	.018	.13	.2	1.6	.04	.61	<5	.1	.02	.5
0315-662	.009	1.0	7.6	.34	21.6	<.001	<1	.18	.012	.10	1.0	1.0	.02	.77	<5	<.1	.02	.4
0315-663	.004	3.6	7.4	.20	6.9	<.001	<1	.09	.009	.04	<.1	.4	.02	.07	<5	<.1	<.02	.2
0315-664	.002	<.5	12.7	.16	2.6	<.001	2	.04	.004	.02	2.3	.3	<.02	.02	<5	.1	<.02	.1
0315-665	.010	2.1	5.6	.48	8.3	<.001	1	.10	.009	.05	<.1	1.0	.02	.09	<5	.1	<.02	.2
RE 0315-665	.009	1.8	6.0	.47	7.2	<.001	<1	.09	.009	.05	.1	.9	.02	.08	<5	<.1	<.02	.2
RRE 0315-665	.011	2.1	11.2	.48	10.6	<.001	<1	.16	.015	.07	2.0	1.1	.03	.09	<5	<.1	<.02	.3
0318-667	.001	1.5	6.8	.12	.9	<.001	1	.01	.002	<.01	<.1	.2	<.02	.02	<5	<.1	<.02	<.1
0318-668	.010	5.6	8.7	.33	13.7	<.001	1	.18	.022	.07	1.5	.6	.03	.19	<5	.1	<.02	.4
0318-669	.007	4.3	6.6	.49	10.2	<.001	1	.12	.020	.05	<.1	1.0	.02	.20	<5	.1	<.02	.3
0315-671	.154	9.0	9.2	.77	28.7	<.001	2	.26	.024	.11	1.2	1.1	.04	.17	<5	.2	.04	.7
0315-672	.013	.7	5.8	.10	2.9	<.001	<1	.03	.003	.01	.2	.6	<.02	<.01	<5	.1	<.02	.1
0315-673	.006	2.5	6.7	.54	10.3	<.001	1	.12	.007	.07	1.1	1.1	.04	.77	56	.2	<.02	.4
0317-686	.016	4.8	8.4	1.64	23.9	<.001	2	.32	.025	.10	<.1	2.5	.04	.63	<5	.2	.04	.8
0317-687	.030	.6	5.1	1.19	16.8	<.001	1	.16	.012	.06	.9	1.9	.03	.96	440	1.9	.62	.6
0317-688	.113	1.1	4.0	.82	22.7	<.001	<1	.21	.025	.08	.1	2.8	.02	.38	<5	.3	.07	.5
0317-689	.037	1.4	4.6	1.51	22.1	<.001	<1	.21	.030	.08	.1	2.6	.03	.54	7	.2	.06	.5
0317-690	.011	1.1	5.6	1.72	25.8	<.001	<1	.26	.040	.09	<.1	3.0	.03	1.31	<5	.3	.14	.7
0317-691	.014	2.2	6.6	1.12	39.7	.001	1	.40	.033	.11	.1	2.1	.04	1.03	<5	.2	.07	1.0
0317-692	.013	1.8	3.3	1.01	27.4	<.001	1	.27	.033	.10	<.1	2.8	.05	1.29	9	.5	.12	.6
0317-693	.016	2.0	4.3	1.44	40.7	.001	1	.42	.045	.18	.1	2.7	.07	1.50	9	.4	.09	.9
STANDARD DS5/AU-R	.095	12.6	190.1	.68	135.4	.093	18	2.14	.035	.15	4.4	3.4	1.05	.03	184	4.7	.83	6.8

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: CORE R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 30 2003 DATE REPORT MAILED: Nov 14/03 SIGNED BY C.L....D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data ✓ FA ____

Jasper Mining Corporation PROJECT Ruth-Vermont FILE # A305377 Page 2

ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm
0318-694	.27	27.37	13.61	66.6	39	41.6	13.8	476	2.96	15.9	1.3	.9	8.8	15.0	.03	13.04	.12	3	1.13	.024	8.0	8.3	.84	12.1	.001	<1	.25	.027	.06	.3	2.5	.02	.05	<5	<.1	.02	.7
0318-695	.70	33.02	12.63	77.2	39	49.0	17.0	248	3.50	14.6	1.1	.5	9.3	7.4	.03	10.55	.08	6	.28	.024	10.7	14.6	.97	18.3	.001	<1	.44	.042	.09	.6	2.5	.03	.02	5	<.1	<.02	1.1
0318-696	.25	10.02	20.12	47.1	52	18.7	7.9	696	2.06	24.1	.7	.6	6.5	21.9	.09	.71	.09	<2	2.12	.025	8.0	6.8	.56	10.0	<.001	<1	.21	.027	.05	.1	1.7	<.02	.03	<5	<.1	<.02	.5
0318-697	.80	10.37	10.42	18.7	41	18.6	5.5	265	1.60	22.1	.9	1.2	6.5	10.5	.03	.40	.06	<2	.61	.011	3.1	8.1	.43	10.4	<.001	2	.18	.023	.05	1.0	.9	.02	.04	<5	<.1	<.02	.5
0318-698	.21	9.83	8.71	30.3	34	17.9	6.7	427	2.01	18.4	.9	.5	6.0	13.8	.04	.47	.07	<2	1.04	.014	3.5	6.4	.61	7.7	<.001	1	.16	.025	.03	.1	1.2	<.02	.02	<5	<.1	.02	.4
0318-699	.76	6.81	11.17	22.6	41	16.0	5.9	320	1.66	21.0	.6	1.1	5.7	13.2	.03	.30	.06	<2	.81	.010	3.5	8.4	.46	10.3	<.001	<1	.22	.026	.06	.9	1.2	.02	.04	<5	<.1	<.02	.6
0318-700	.33	26.53	8.13	42.5	51	37.4	13.3	392	2.89	56.9	1.0	.3	10.3	16.6	.04	.61	.10	2	.91	.053	5.1	9.8	.74	19.8	<.001	<1	.34	.044	.09	<.1	2.0	.03	.03	<5	<.1	.02	.8
0318-701	.29	12.89	10.33	26.3	55	23.1	8.2	625	2.46	18.8	.7	.2	6.7	16.6	.04	.51	.10	<2	1.40	.014	2.5	9.1	.75	14.2	.001	1	.20	.029	.05	.1	1.6	.02	.06	<5	<.1	.02	.5
0318-702	.47	40.71	3.13	83.2	61	59.7	20.9	446	4.45	49.4	1.4	.9	8.7	10.5	.08	.78	.18	4	.55	.055	5.9	13.0	1.29	25.5	<.001	<1	.30	.038	.09	.3	2.5	.03	.14	<5	.1	.02	.8
0318-703	.29	26.90	7.53	41.1	80	42.4	11.9	525	3.94	30.4	1.1	.6	5.8	9.0	.04	.88	.14	3	.54	.015	2.3	9.4	1.11	16.2	<.001	<1	.19	.028	.04	<.1	2.0	<.02	.03	<5	<.1	.02	.5
RE 0318-703	.25	25.42	7.99	39.1	85	39.9	11.2	519	3.89	28.6	1.1	.8	5.8	8.1	.04	.74	.15	2	.54	.015	2.1	8.1	1.09	15.9	<.001	<1	.19	.027	.04	<.1	1.7	<.02	.04	<5	<.1	.02	.5
RRE 0318-703	.74	27.88	10.09	41.4	93	43.0	13.0	518	3.86	30.2	1.2	.7	6.4	9.3	.05	.76	.18	2	.54	.017	2.4	10.9	1.09	18.5	<.001	<1	.23	.039	.05	.8	2.1	.02	.03	<5	<.1	.02	.6
0319-704	.32	206.01	9409.29	40939.3	18116	18.3	7.7	482	4.35	10410.2	1.4	455.5	8.1	32.5	271.96	94.79	.11	<2	1.26	.012	2.8	4.7	.38	12.3	<.001	<1	.17	.012	.08	.4	.7	.08	3.86	94	.3	.02	.8
0319-705	.98	5257.97	17132.91	56827.7	99999	12.3	4.9	84	4.94	13234.6	68.3	1302.2	22.2	6.9	356.59	4016.68	.59	<2	.18	.003	.5	7.2	.05	18.8	<.001	<1	.20	.010	.08	3.1	.3	.31	6.79	162	1.0	.03	.9
0319-706	.30	2972.01	19315.38	99999.0	99999	3.5	1.6	133	6.43	15484.7	1.6	1352.3	1.7	6.0	894.45	1908.23	.21	<2	.29	.002	<.5	3.0	.07	6.1	<.001	<1	.07	.004	.03	.2	.1	.12	6.80	297	.5	.04	1.5
0319-707	.76	37.79	809.65	747.8	2562	18.3	7.5	275	1.84	3006.5	1.5	372.3	5.7	46.4	6.21	20.66	.06	<2	1.36	.006	2.8	7.8	.44	14.5	<.001	<1	.17	.014	.09	1.2	1.1	.04	.83	<5	<.1	<.02	.4
0319-708	.43	61.08	218.78	333.2	910	61.3	17.9	523	5.14	162.0	2.1	1.5	10.9	10.8	2.22	14.14	.37	<2	.15	.059	6.3	6.4	1.37	28.2	.001	<1	.33	.015	.17	.3	2.5	.06	.56	<5	<.1	.02	.7
0319-709	.57	55.15	26.98	122.9	515	72.9	25.4	566	5.35	200.9	2.0	.9	11.0	16.4	.34	12.60	.25	<2	.21	.054	3.7	6.0	1.40	32.2	.001	<1	.34	.016	.18	.4	2.6	.05	.77	<5	.1	.02	.7
0319-710	.48	18.79	32.96	203.7	325	86.8	26.3	684	4.89	248.1	2.1	1.2	12.5	52.6	.78	5.08	.15	<2	.86	.035	1.5	3.5	1.37	27.5	.001	<1	.29	.016	.14	.3	2.6	.05	.89	5	<.1	.02	.6
0319-711	.48	906.10	16.76	181.2	7621	61.2	19.3	1694	6.22	356.2	1.5	38.5	7.9	175.1	.91	206.33	.08	<2	3.30	.015	1.0	5.3	2.20	33.0	.001	<1	.35	.016	.16	.5	3.0	.06	1.81	26	<.1	.03	.8
0319-712	.38	42.69	52.07	102.9	480	71.3	19.8	956	5.97	246.6	2.2	2.0	11.7	86.4	.36	7.21	.08	<2	1.38	.092	2.4	4.8	1.63	31.6	.001	1	.36	.015	.17	.3	2.8	.05	1.19	<5	<.1	.02	.8
0319-713	1.28	449.73	12004.22	82312.0	62191	20.9	5.5	665	12.14	1871.8	.5	463.6	1.6	65.1	488.51	106.83	.59	<2	1.23	.027	<.5	6.3	.44	8.3	<.001	<1	.10	.004	.05	179.7	.9	.05	17.35	445	1.4	.48	1.2
0319-714	.57	585.32	14592.86	92127.2	34679	13.3	5.4	2035	5.71	349.3	.6	14.9	2.8	199.8	557.30	245.51	16.68	<2	6.23	.058	.7	4.4	1.25	16.5	<.001	<1	.18	.007	.10	1.0	2.8	.08	7.56	1483	2.2	.47	1.4
0319-715	1.34	31.79	1049.16	1018.6	3138	31.3	8.3	769	2.53	83.4	1.5	1.5	5.4	99.0	6.59	8.33	.38	<2	3.57	.030	4.3	8.6	1.13	58.6	<.001	2	.43	.019	.24	2.1	3.6	.08	.53	5	.2	.06	1.0
0319-716	.54	396.41	17813.78	14667.0	99999	25.2	7.6	1856	8.78	1115.1	.3	209.5	.5	114.5	95.16	490.08	8.08	<2	2.73	.076	<.5	4.7	1.11	7.6	<.001	<1	.08	.003	.04	5.7	2.1	.11	9.64	152	2.7	3.89	.5
STANDARD DS5/AU-R	12.41	143.14	24.27	137.7	279	24.6	12.0	758	2.99	18.7	6.0	40.8	2.8	46.0	5.49	3.75	6.00	58	.71	.095	12.1	182.5	.69	135.0	.089	19	2.10	.034	.13	4.1	3.5	1.02	<.01	170	4.5	.79	6.5

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA ___

ACME AN. .TICAL LABORATORIES LTD. 852 E. HASTINGS ST. ICOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(6(253-1716
(IS( )02 Accredited Co.)

GEOCHEMICAL ANA SIS CERTIFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A305377 Page 1

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm
SI	.08	.74	.44	1.1	5	.2	<.1	2	.04	.2	<.1	<.2	<.1	2.4	.01	.04	<.02	<2	.11	<.001	<.5	1.6	<.01	3.5	<.001	1	.01	.537	<.01	<.1	<.1	<.02	.03	<5	.1	<.02	<.1
0314-619	1.17	3.48	10.58	31.9	108	33.7	10.6	530	1.77	2012.2	4.5	18.9	37.5	20.5	.13	.91	.04	2	1.29	.006	1.5	8.1	.33	20.2	<.001	<1	.30	.043	.14	.8	1.2	.06	.67	<5	<.1	.02	.7
0315-637	.35	82.43	5.82	20.1	2858	64.4	23.2	516	3.24	475.3	2.6	27.3	11.5	62.7	.13	27.76	.25	3	1.75	.029	3.4	4.5	.68	27.3	<.001	1	.26	.023	.16	.3	3.8	.07	2.53	<5	.2	.03	.6
0315-638	.75	21.61	6.57	20.3	692	21.3	6.5	1602	4.12	395.6	.6	147.9	3.0	133.0	.09	7.63	.61	2	4.35	.019	.7	5.2	2.20	9.0	<.001	1	.12	.009	.07	1.1	2.2	.03	2.09	5	.2	.06	.3
0315-639	.32	37.03	4.69	41.1	178	63.8	19.8	805	5.79	160.8	2.1	3.5	11.7	15.0	.03	5.39	.29	3	.40	.047	2.5	11.3	1.75	23.6	<.001	<1	.27	.022	.13	.3	3.9	.06	.41	<5	.1	.03	.6
0315-640	.32	44.44	5.47	54.7	95	61.7	20.1	874	5.90	110.2	1.4	.3	11.4	9.9	.03	1.23	.44	4	.18	.064	4.0	9.2	1.69	25.5	.001	1	.37	.030	.15	.3	4.1	.07	.11	<5	<.1	.06	.8
0315-641	.34	52.80	8.75	97.6	93	59.0	19.6	609	4.61	107.6	2.3	<.2	12.7	10.1	.06	1.12	.46	3	.10	.032	2.2	6.9	1.45	20.4	.001	<1	.29	.031	.12	.2	3.3	.05	.17	<5	.1	.03	.6
0315-642	.34	44.49	2.04	101.0	40	57.0	16.2	568	4.84	96.6	1.4	<.2	11.0	11.5	.03	.64	.17	4	.21	.086	4.2	7.7	1.44	21.6	.001	<1	.33	.028	.14	.2	3.5	.06	.06	<5	<.1	.02	.8
0315-643	.40	32.84	4.31	180.7	85	61.3	21.1	354	4.55	108.3	1.8	.3	12.7	9.2	.74	2.02	.25	3	.08	.024	2.1	8.6	1.31	20.5	.001	<1	.30	.025	.13	.1	3.3	.07	.21	<5	<.1	.03	.6
0315-644	.42	89.89	13.58	133.7	130	78.9	28.8	643	5.91	143.1	4.0	1.9	12.6	10.1	.03	2.04	.91	4	.16	.064	2.4	8.3	1.62	21.6	<.001	<1	.32	.031	.14	.2	4.6	.07	.57	5	.1	.10	.7
0315-645	.30	45.30	3.50	86.4	41	60.9	18.8	513	4.78	95.8	2.0	.5	13.0	11.3	.01	1.13	.22	3	.15	.056	3.7	7.4	1.38	21.1	.001	<1	.29	.028	.13	<.1	3.6	.06	.18	<5	<.1	.04	.7
0315-653	.96	9.51	15.54	76.2	435	14.5	4.6	6714	3.98	24.7	.4	.4	.9	100.1	.45	5.95	.11	<2	5.89	.003	<.5	4.6	1.86	14.8	<.001	<1	.07	.006	.04	1.1	2.2	<.02	.48	<5	.2	.03	.3
0315-654	.60	279.36	13608 29	1782.2	35751	12.0	3.5	1120	4.18	682.0	.4	94.4	1.8	22.6	14.68	789.24	.35	<2	1.25	.002	<.5	3.4	.44	8.2	<.001	<1	.10	.008	.05	.2	.6	.03	3.86	8	.1	.03	.3
0315-655	1.70	178.47	6888.21	1246.5	16667	10.2	2.1	90	3.65	651.7	.1	308.6	.2	2.7	10.49	535.70	.31	<2	.11	<.001	<.5	10.4	.03	1.6	<.001	<1	.02	.003	.01	3.2	.1	<.02	4.07	7	<.1	.02	.1
0315-661	.27	46.12	54.26	109.2	200	36.8	8.3	216	1.95	79.8	1.8	197.6	11.1	40.2	.20	3.63	.12	<2	1.29	.007	1.0	4.1	.54	37.9	<.001	<1	.24	.018	.13	.2	1.6	.04	.61	<5	.1	.02	.5
0315-662	.84	61.28	26.92	187.0	105	26.9	8.5	191	1.60	74.3	1.1	59.9	6.4	34.1	.35	2.42	.12	<2	.87	.009	1.0	7.6	.34	21.6	<.001	<1	.18	.012	.10	1.0	1.0	.02	.77	<5	<.1	.02	.4
0315-663	.37	36.14	96.30	59.7	215	9.8	2.6	166	.84	45.7	.3	1.2	2.5	22.8	.33	1.01	.07	<2	.78	.004	3.6	7.4	.20	6.9	<.001	<1	.09	.009	.04	<.1	.4	.02	.07	<5	<.1	<.02	.2
0315-664	1.44	2.52	32.42	19.1	109	3.0	.6	134	.62	8.0	<.1	5.5	.5	17.9	.09	.54	.17	<2	.58	.002	<.5	12.7	.16	2.6	<.001	2	.04	.004	.02	2.3	.3	<.02	.02	<5	.1	<.02	.1
0315-665	.32	10.51	13.77	49.1	71	11.9	4.4	327	1.60	69.5	.5	1.4	4.7	52.9	.25	.44	.06	<2	1.79	.010	2.1	5.6	.48	8.3	<.001	1	.10	.009	.05	<.1	1.0	.02	.09	<5	.1	<.02	.2
RE 0315-665	.31	9.12	14.17	52.7	77	10.7	4.0	319	1.59	64.9	.5	21.4	4.4	51.9	.27	.41	.05	<2	1.77	.009	1.8	6.0	.47	7.2	<.001	<1	.09	.009	.05	.1	.9	.02	.08	<5	<.1	<.02	.2
RRE 0315-665	1.55	9.25	25.31	49.0	91	11.4	4.3	333	1.66	70.7	.5	1.1	4.4	54.2	.25	.36	.08	<2	1.80	.011	2.1	11.2	.48	10.6	<.001	<1	.16	.015	.07	2.0	1.1	.03	.09	<5	<.1	<.02	.3
0318-667	.32	2.71	8.46	19.4	45	.9	.2	94	.58	1.1	<.1	<.2	.4	11.1	.13	.48	.02	<2	.46	.001	1.5	6.8	.12	.9	<.001	1	.01	.002	<.01	<.1	.2	<.02	.02	<5	<.1	<.02	<.1
0318-668	1.08	11.07	6.22	12.8	58	13.9	4.5	234	1.33	40.3	1.1	.7	6.2	32.7	.04	.25	.06	<2	1.10	.010	5.6	8.7	.33	13.7	<.001	1	.18	.022	.07	1.5	.6	.03	.19	<5	.1	<.02	.4
0318-669	.28	3.66	9.52	13.8	56	16.2	6.2	246	1.80	55.7	.5	1.0	4.9	38.1	.04	.22	.10	<2	1.85	.007	4.3	6.6	.49	10.2	<.001	1	.12	.020	.05	<.1	1.0	.02	.20	<5	.1	<.02	.3
0315-671	.91	69.68	4.78	35.6	70	32.6	11.1	290	2.77	69.0	.8	1.0	6.3	59.1	.04	.38	.17	2	1.39	.154	9.0	9.2	.77	28.7	<.001	2	.26	.024	.11	1.2	1.1	.04	.17	<5	.2	.04	.7
0315-672	.30	1.95	24.70	7.0	108	2.1	1.0	353	.56	12.4	.3	.7	.7	102.8	.05	.40	<.02	<2	2.92	.013	.7	5.8	.10	2.9	<.001	<1	.03	.003	.01	.2	.6	<.02	<.01	<5	.1	<.02	.1
0315-673	.81	25.79	5708.52	11343.4	17126	9.9	3.8	3750	1.71	43.7	1.8	5.8	7.4	34.5	93.41	17.15	.15	<2	2.18	.006	2.5	6.7	.54	10.3	<.001	1	.12	.007	.07	1.1	1.1	.04	.77	56	.2	<.02	.4
0317-686	.32	36.60	15.21	126.1	79	38.3	17.6	710	4.46	37.4	1.4	.6	7.5	23.7	.26	1.54	.33	5	.54	.016	4.8	8.4	1.64	23.9	<.001	2	.32	.025	.10	<.1	2.5	.04	.63	<5	.2	.04	.8
0317-687	.69	54.52	15436.32	12224.6	23152	7.7	5.7	1563	2.89	19.6	.9	56.9	2.0	135.6	44.60	27.74	11.71	3	6.90	.030	.6	5.1	1.19	16.8	<.001	1	.16	.012	.06	.9	1.9	.03	.96	440	1.9	.62	.6
0317-688	.21	25.26	25.23	35.9	598	29.1	14.7	2919	2.60	47.6	1.5	1.0	5.1	276.7	.11	6.46	.25	<2	15.66	.113	1.1	4.0	.82	22.7	<.001	<1	.21	.025	.08	.1	2.8	.02	.38	<5	.3	.07	.5
0317-689	.30	34.68	104.35	108.3	194	41.8	17.5	1755	3.79	71.9	1.5	1.0	7.3	92.2	.29	2.79	.44	<2	6.30	.037	1.4	4.6	1.51	22.1	<.001	<1	.21	.030	.08	.1	2.6	.03	.54	7	.2	.06	.5
0317-690	.64	63.16	62.64	99.8	213	55.4	44.1	1840	4.87	90.6	1.8	.9	6.6	68.7	.08	4.26	.83	3	5.66	.011	1.1	5.6	1.72	25.8	<.001	<1	.26	.040	.09	<.1	3.0	.03	1.31	<5	.3	.14	.7
0317-691	.35	47.64	17.90	73.1	59	47.9	23.1	789	3.78	34.5	1.3	.6	8.4	41.9	.05	.42	.48	3	1.82	.014	2.2	6.6	1.12	39.7	.001	1	.40	.033	.11	.1	2.1	.04	1.03	<5	.2	.07	1.0
0317-692	.77	16.06	23.20	31.6	102	29.9	12.8	331	2.52	40.4	1.5	2.4	6.7	365.7	.06	2.67	.25	<2	14.14	.013	1.8	3.3	1.01	27.4	<.001	1	.27	.033	.10	<.1	2.8	.05	1.29	9	.5	.12	.6
0317-693	1.22	37.05	20.35	61.3	180	35.1	17.0	419	3.30	41.8	1.8	3.0	8.1	174.7	.07	6.56	.44	3	6.96	.016	2.0	4.3	1.44	40.7	.001	1	.42	.045	.18	.1	2.7	.07	1.50	9	.4	.09	.9
STANDARD DS5/AU-R	12.49	145.35	25.29	139.2	278	24.1	12.5	789	3.02	19.3	6.1	39.3	2.8	47.6	5.69	3.87	6.17	61	.76	.095	12.6	190.1	.68	135.4	.093	18	2.14	.035	.15	4.4	3.4	1.05	.03	184	4.7	.83	6 8

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: CORE R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 30 2003 DATE REPORT MAILED: Nov 14/03 SIGNED BY .D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data FA

Jasper Mining Corporation PROJECT Ruth-Vermont FILE # A305377

ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm
0318-694	.27	27.37	13.61	66.6	39	41.6	13.8	476	2.96	15.9	1.3	.9	8.8	15.0	.03	13.04
0318-695	.70	33.02	12.63	77.2	39	49.0	17.0	248	3.50	14.6	1.1	.5	9.3	7.4	.03	10.55
0318-696	.25	10.02	20.12	47.1	52	18.7	7.9	696	2.06	24.1	.7	.6	6.5	21.9	.09	.71
0318-697	.80	10.37	10.42	18.7	41	18.6	5.5	265	1.60	22.1	.9	1.2	6.5	10.5	.03	.40
0318-698	.21	9.83	8.71	30.3	34	17.9	6.7	427	2.01	18.4	.9	.5	6.0	13.8	.04	.47
0318-699	.76	6.81	11.17	22.6	41	16.0	5.9	320	1.66	21.0	.6	1.1	5.7	13.2	.03	.30
0318-700	.33	26.53	8.13	42.5	51	37.4	13.3	392	2.89	56.9	1.0	.3	10.3	16.6	.04	.61
0318-701	.29	12.89	10.33	26.3	55	23.1	8.2	625	2.46	18.8	.7	.2	6.7	16.6	.04	.51
0318-702	.47	40.71	3.13	83.2	61	59.7	20.9	446	4.45	49.4	1.4	.9	8.7	10.5	.08	.78
0318-703	.29	26.90	7.53	41.1	80	42.4	11.9	525	3.94	30.4	1.1	.6	5.8	9.0	.04	.88
RE 0318-703	.25	25.42	7.99	39.1	85	39.9	11.2	519	3.89	28.6	1.1	.8	5.8	8.1	.04	.74
RRE 0318-703	.74	27.88	10.09	41.4	93	43.0	13.0	518	3.86	30.2	1.2	.7	6.4	9.3	.05	.76
0319-704	.32	206.01	9409.29	40939.3	18116	18.3	7.7	482	4.35	10410.2	1.4	455.5	8.1	32.5	271.96	94.79
0319-705	.98	5257.97	17132.91	56827.7	99999	12.3	4.9	84	4.94	13234.6	68.3	1302.2	22.2	6.9	356.59	4016.68
0319-706	.30	2972.01	19315.38	99999.0	99999	3.5	1.6	133	6.43	15484.7	1.6	1352.3	1.7	6.0	894.45	1908.23
0319-707	.76	37.79	809.65	747.8	2562	18.3	7.5	275	1.84	3006.5	1.5	372.3	5.7	46.4	6.21	20.66
0319-708	.43	61.08	218.78	333.2	910	61.3	17.9	523	5.14	162.0	2.1	1.5	10.9	10.8	2.22	14.14
0319-709	.57	55.15	26.98	122.9	515	72.9	25.4	566	5.35	200.9	2.0	.9	11.0	16.4	.34	12.60
0319-710	.48	18.79	32.96	203.7	325	86.8	26.3	684	4.89	248.1	2.1	1.2	12.5	52.6	.78	5.08
0319-711	.48	906.10	16.76	181.2	7621	61.2	19.3	1694	6.22	356.2	1.5	38.5	7.9	175.1	.91	206.33
0319-712	.38	42.69	52.07	102.9	480	71.3	19.8	956	5.97	246.6	2.2	2.0	11.7	86.4	.36	7.21
0319-713	1.28	449.73	12004.22	82312.0	62191	20.9	5.5	665	12.14	1871.8	.5	463.6	1.6	65.1	488.51	106.83
0319-714	.57	585.32	14592.86	92127.2	34679	13.3	5.4	2035	5.71	349.3	.6	14.9	2.8	199.8	557.30	245.51
0319-715	1.34	31.79	1049.16	1018.6	3138	31.3	8.3	769	2.53	83.4	1.5	1.5	5.4	99.0	6.59	8.33
0319-716	.54	396.41	17813.78	14667.0	99999	25.2	7.6	1856	8.78	1115.1	.3	209.5	.5	114.5	95.16	490.08
STANDARD DS5/AU-R	12.41	143.14	24.27	137.7	279	24.6	12.0	758	2.99	18.7	6.0	40.8	2.8	46.0	5.49	3.75

SAMPLE#	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm
0318-694	.12	3	1.13	.024	8.0	8.3	.84	12.1	.001	<1	.25	.027	.06	.3	2.5	.02	.05	<5	<.1	.02	.7
0318-695	.08	6	.28	.024	10.7	14.6	.97	18.3	.001	<1	.44	.042	.09	.6	2.5	.03	.02	5	<.1	<.02	1.1
0318-696	.09	<2	2.12	.025	8.0	6.8	.56	10.0	<.001	<1	.21	.027	.05	.1	1.7	<.02	.03	<5	<.1	<.02	.5
0318-697	.06	<2	.61	.011	3.1	8.1	.43	10.4	<.001	2	.18	.023	.05	1.0	.9	.02	.04	<5	<.1	<.02	.5
0318-698	.07	<2	1.04	.014	3.5	6.4	.61	7.7	<.001	1	.16	.025	.03	.1	1.2	<.02	.02	<5	<.1	.02	.4
0318-699	.06	<2	.81	.010	3.5	8.4	.46	10.3	<.001	<1	.22	.026	.06	.9	1.2	.02	.04	<5	<.1	<.02	.6
0318-700	.10	2	.91	.053	5.1	9.8	.74	19.8	<.001	<1	.34	.044	.09	<.1	2.0	.03	.03	<5	<.1	.02	.8
0318-701	.10	<2	1.40	.014	2.5	9.1	.75	14.2	.001	1	.20	.029	.05	.1	1.6	.02	.06	<5	<.1	.02	.5
0318-702	.18	4	.55	.055	5.9	13.0	1.29	25.5	<.001	<1	.30	.038	.09	.3	2.5	.03	.14	<5	.1	.02	.8
0318-703	.14	3	.54	.015	2.3	9.4	1.11	16.2	<.001	<1	.19	.028	.04	<.1	2.0	<.02	.03	<5	<.1	.02	.5
RE 0318-703	.15	2	.54	.015	2.1	8.1	1.09	15.9	<.001	<1	.19	.027	.04	<.1	1.7	<.02	.04	<5	<.1	.02	.5
RRE 0318-703	.18	2	.54	.017	2.4	10.9	1.09	18.5	<.001	<1	.23	.039	.05	.8	2.1	.02	.03	<5	<.1	.02	.6
0319-704	.11	<2	1.26	.012	2.8	4.7	.38	12.3	<.001	<1	.17	.012	.08	.4	.7	.08	3.86	94	.3	.02	.8
0319-705	.59	<2	.18	.003	.5	7.2	.05	18.8	<.001	<1	.20	.010	.08	3.1	.3	.31	6.79	162	1.0	.03	.9
0319-706	.21	<2	.29	.002	<.5	3.0	.07	6.1	<.001	<1	.07	.004	.03	.2	.1	.12	6.80	297	.5	.04	1.5
0319-707	.06	<2	1.36	.006	2.8	7.8	.44	14.5	<.001	<1	.17	.014	.09	1.2	1.1	.04	.83	<5	<.1	<.02	.4
0319-708	.37	<2	.15	.059	6.3	6.4	1.37	28.2	.001	<1	.33	.015	.17	.3	2.5	.06	.56	<5	<.1	.02	.7
0319-709	.25	<2	.21	.054	3.7	6.0	1.40	32.2	.001	<1	.34	.016	.18	.4	2.6	.05	.77	<5	.1	.02	.7
0319-710	.15	<2	.86	.035	1.5	3.5	1.37	27.5	.001	<1	.29	.016	.14	.3	2.6	.05	.89	5	<.1	.02	.6
0319-711	.08	<2	3.30	.015	1.0	5.3	2.20	33.0	.001	<1	.35	.016	.16	.5	3.0	.06	1.81	26	<.1	.03	.8
0319-712	.08	<2	1.38	.092	2.4	4.8	1.63	31.6	.001	1	.36	.015	.17	.3	2.8	.05	1.19	<5	<.1	.02	.8
0319-713	.59	<2	1.23	.027	<.5	6.3	.44	8.3	<.001	<1	.10	.004	.05	179.7	.9	.05	17.35	445	1.4	.48	1.2
0319-714	16.68	<2	6.23	.058	.7	4.4	1.25	16.5	<.001	<1	.18	.007	.10	1.0	2.8	.08	7.56	1483	2.2	.47	1.4
0319-715	.38	<2	3.57	.030	4.3	8.6	1.13	58.6	<.001	2	.43	.019	.24	2.1	3.6	.08	.53	5	.2	.06	1.0
0319-716	8.08	<2	2.73	.076	<.5	4.7	1.11	7.6	<.001	<1	.08	.003	.04	5.7	2.1	.11	9.64	152	2.7	3.89	.5
STANDARD DS5/AU-R	6.00	58	.71	.095	12.1	182.5	.69	135.0	.089	19	2.10	.034	.13	4.1	3.5	1.02	<.01	170	4.5	.79	6.5

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

ACME ANA TICAL LABORATORIES LTD. 852 E. HASTINGS ST. COUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60 53-1716
(ISC 02 Accredited Co.)

ASSAY CE. IFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A305377R
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Pb %	Zn %	Ag gm/mt	As %	Sb %	Ag** gm/mt	Au** gm/mt
0315-654	1.24	.17	37	.06	.076	-	-
0315-673	.59	1.15	19	<.01	.003	-	-
0317-687	1.96	1.10	28	<.01	.003	-	-
0319-704	.91	3.90	20	1.14	.011	-	-
0319-705	18.26	5.38	-	1.49	.482	545.8	1.96
0319-706	7.94	13.33	-	1.61	.216	270.7	2.08
0319-713	2.43	7.60	68	.17	.012	-	-
0319-714	1.89	8.47	37	.03	.028	-	-
0319-716	10.29	1.30	283	.11	.046	-	-
RE 0319-716	10.45	1.31	286	.11	.047	-	-
STANDARD GC-2	8.90	17.18	1057	.16	.767	-	-

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 250 ML, ANALYSED BY ICP-ES.
- SAMPLE TYPE: CORE PULP AG** & AU** BY FIRE ASSAY FROM 1/2 A.T. SAMPLE.

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: NOV 18 2003 **DATE REPORT MAILED:** Nov 25/2003 **SIGNED BY** .... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME ANA[illegible] TICAL LABORATORIES LTD. 852 E. HASTINGS ST. \ COUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60 53-1716
(ISC 02 Accredited Co.)

ASSAY CE[illegible] FICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A305377R

1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Pb %	Zn %	Ag gm/mt	As %	Sb %	Ag** gm/mt	Au** gm/mt
0315-654	1.24	.17	37	.06	.076	-	-
0315-673	.59	1.15	19	<.01	.003	-	-
0317-687	1.96	1.10	28	<.01	.003	-	-
0319-704	.91	3.90	20	1.14	.011	-	-
0319-705	18.26	5.38	-	1.49	.482	545.8	1.96
0319-706	7.94	13.33	-	1.61	.216	270.7	2.08
0319-713	2.43	7.60	68	.17	.012	-	-
0319-714	1.89	8.47	37	.03	.028	-	-
0319-716	10.29	1.30	283	.11	.046	-	-
RE 0319-716	10.45	1.31	286	.11	.047	-	-
STANDARD GC-2	8.90	17.18	1057	.16	.767	-	-

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 250 ML, ANALYSED BY ICP-ES.
- SAMPLE TYPE: CORE PULP AG** & AU** BY FIRE ASSAY FROM 1/2 A.T. SAMPLE.

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: NOV 18 2003 **DATE REPORT MAILED:** Nov 25/2003 **SIGNED BY**..........D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ___ FA ___

ACME ANA TICAL LABORATORIES LTD. 852 E. HASTINGS ST. V COUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60 53-1716
(ISC 02 Accredited Co.)

ASSAY CE. IFICATE

Jasper Mining Corporation PROJECT Ruth-Vermont File # A305377R
1020 Canadian Centre, 833, Calgary AB T2P 3T5 Submitted by: Rick Walker

SAMPLE#	Pb %	Zn %	Ag gm/mt	As %	Sb %	Ag** gm/mt	Au** gm/mt
0315-654	1.24	.17	37	.06	.076	-	-
0315-673	.59	1.15	19	<.01	.003	-	-
0317-687	1.96	1.10	28	<.01	.003	-	-
0319-704	.91	3.90	20	1.14	.011	-	-
0319-705	18.26	5.38	-	1.49	.482	545.8	1.96
0319-706	7.94	13.33	-	1.61	.216	270.7	2.08
0319-713	2.43	7.60	68	.17	.012	-	-
0319-714	1.89	8.47	37	.03	.028	-	-
0319-716	10.29	1.30	283	.11	.046	-	-
RE 0319-716	10.45	1.31	286	.11	.047	-	-
STANDARD GC-2	8.90	17.18	1057	.16	.767	-	-

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 250 ML, ANALYSED BY ICP-ES.
- SAMPLE TYPE: CORE PULP AG** & AU** BY FIRE ASSAY FROM 1/2 A.T. SAMPLE.

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: NOV 18 2003 **DATE REPORT MAILED:** Nov 25/2003 **SIGNED BY**..........D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data FA ___

Appendix D

Statement of Expenditures

STATEMENT OF EXPENDITURES

The following expenses were incurred on the Vowell Creek Project between July 7th and October 6th, 2003.

Field - August 13th - October 6th

PERSONNEL	
R. Walker (Geologist):	$ 52,529.00
Geologist:	$ 9,000.00
E. Walker (Administration):	$ 2,000.00
Assistant:	$ 19,275.00
EQUIPMENT	
All Terrain Vehicles (1):	$ 3,450.00
4WD Vehicle:	$ 6,187.50
- mileage - $0.40 / km:	$ 2,500.00
- fuel:	$ 2,640.71
Field Supplies:	$ 1,410.00
Food / Accommodation:	$ 13,607.09
Generator:	$ 1,420.00
GPS (hand-held and differential):	$ 300.00
Radios:	$ 555.00
DIAMOND DRILLING	$212,480.00
ANALYSES	$ 22,314.00
HELICOPTER	$ 36,908.00
MISCELLANEOUS	$ 1,892.44
PERMITTING	$ 2,000.00
PHOTOFINISHING	$ 76.77
ROCK SAW	$ 632.50
REPRODUCTION	$ 323.50
SATELLITE PHONE AND CHARGES	$ 4,509.33
SHIPPING	$ 756.01
TELEPHONE	$ 52.80

Post - Field October 7th, 2003 - September 30th, 2004

REPORT / REPRODUCTION	
R.T. Walker, P.Geo.:	$ 4,000.00
Drafting:	$ 203.30
Reproduction:	$ 200.00
Total	**$401,222.95**